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Agency Organizational Overview

MISSION: The Massachusetts Department of Agricultural Resources’ (MDAR) mission is to help keep the Massachusetts’ food supply safe and secure, and to work to keep Massachusetts agriculture economically and environmentally sound.

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 Agriculture and the Massachusetts Department of Agricultural Resources within the Executive Office of Energy and Environmental Affairs.
Commissioner’s Letter

John Lebeaux, Commissioner

Any review of the years 2020 and 2021 must first acknowledge that from March 2020 onward, all activities of the Massachusetts Department of Agricultural Resources, and the State Reclamation and Mosquito Control Board and the regional Mosquito Control Projects, like those of the world at large, were profoundly affected by the Coronavirus pandemic. Any report of the activities of this agency during that time period must first profoundly acknowledge and thank the entire MDAR team which had to make many totally unexpected, on-the-fly changes to continue business operations. I particularly acknowledge my extreme gratitude for the leadership, and extremely hard and thoughtful work of Deputy Commissioner for Administration and Operations Alisha Bouchard, Deputy Commissioner for Policy and Legislative Affairs Ashley Sears Randle, General Counsel Margaret Callanan, Chief Fiscal Officer Cullen Roberts, Division Directors Michael Cahill (Animal Health), Mary Jordan (Agricultural Markets), Gerard Kennedy (Agricultural Conservation and Technical Assistance), Taryn LaScola-Miner (Crop and Pest Services), Produce Safety, Market Access and Certification Director Michael Botelho, Executive Office of Energy and Environmental Affairs Deputy Human Resources Director Johanna Zabriskie, and the superintendents of the regional Mosquito Control Projects who over and over and over found solutions to a seemingly infinite number of challenges to provide services during such unsettled times.

On March 13, 2020, most of the executive branch workforce (including MDAR) was directed to stop reporting to normal work locations and shift to a remote working model. Though there has been some modification to a more hybrid work model, through 2021 staff continued to work remotely as part of their schedules.

Though MDAR has long been deeply involved in issues and programs relative to food security, food access, emergency food assistance, and the food system in general, it was catapulted much more deeply into that discussion as a result of the pandemic. As a result of that prior engagement, while the Baker-Polito Administration was establishing the Covid-19 Response Command Center, MDAR flagged the need to better ensure sure all residents of the Commonwealth had access to healthy, nutritious food and suggested a body be convened to examine the issues and recommend solutions. This led the Command Center to establish in April 2020 the Covid-19 Food Security Task Force which in less than a month brought forth over 80 recommendations.

MDAR led the Task Force’s work group that examined how to Reinforce and Redeploy MA Food System Infrastructure. As part of that work, MDAR introduced the concepts of providing state funding to fill gaps
in the food system infrastructure and to bolster business to business connections. Those suggestions became reality in two extremely successful resulting programs: the Food Security Infrastructure Grant Program and the MassGrown Exchange.

The pandemic provided one challenge after another to both agency operations and those of our stakeholders. MDAR developed and published over 20 guidance documents to ensure that farms, farmers markets, and food system businesses could continue to operate during the COVID-19 pandemic. It also reinvented as necessary onsite field inspections, and licensing examinations so stakeholders could continue their business operations as “normally” as possible.

I direct your attention to the reports of the various public bodies, divisions and programs contained within this Report for further details into how MDAR continued to fulfill its mission “to help keep the Massachusetts’ food supply safe and secure, and to work to keep Massachusetts agriculture economically and environmentally sound” during this extremely unprecedented time.

Respectfully submitted,

John Lebeaux
Commissioner
Snapshot of Massachusetts Agriculture

Senior Economist, Myron Inglis

Massachusetts has 7,241 farms on 491,653 acres.¹ The agricultural industry provides employment to 25,920 farm employees and produces an annual market value of over $475 million dollars in agricultural goods. Most farms are individually, or family owned (95%) and fall into the category of “small farms” (94%).² The average farm produces $65,624 in annual agricultural sales on 68 acres.

The economic impact of agriculture extends beyond the farm gate. Massachusetts farms support a variety of ancillary businesses, including feed and equipment dealers and agricultural processing businesses. Agriculture in Massachusetts is estimated to have an economic impact of approximately $10 billion and create approximately 45,000 additional jobs in Massachusetts.³

Massachusetts’ farmers face several challenges. Developmental pressure is one challenge. Massachusetts is the third most densely populated state in the U.S with 883 individuals per square land mile⁴, and is ranked the 4th highest state for average farmland value at $11,100 per acre.⁵ Massachusetts experienced a strong economy in both 2018 and 2019. State unemployment rates in Massachusetts have consistently been lower than national unemployment rates, and as of December 2019, the Massachusetts unemployment rate was 2.8%.⁶ These factors contribute to high developmental pressure from the non-agricultural sector on agricultural land.

However, farmers have demonstrated great entrepreneurial skills and have taken advantage of high population density and a strong economy by marketing directly to consumers. Direct market sales is a

---

¹ All statistics are from the 2017 USDA Census of Agriculture unless noted otherwise.
² The United States Department of Agriculture defines small farms as farms with sales below $250,000.
³ Farm Credit East. (2015). Northeast economic engine: Agriculture, forest products and commercial fishing. Retrieved from https://www.farmcrediteast.com/knowledge-exchange/Reports/northeast-economic-engine-agriculture-forest-products-and-commercial-fishing [Accessed May, 2018]. Note that Farm Credit East uses an IMPLAN model for their study which relies on several assumptions. Commercial fishing activities are originally included in the IMPLAN model, but the above numbers do not include the economic impact of commercial fishing activities.
key feature of Massachusetts agriculture. Massachusetts ranks 5th in the nation for direct market sales with over $100 million, and ranks 3rd in the nation for direct market sales per farm at $55,384. Direct market sales account for 21% of the state’s total sales of agricultural products; that is the highest proportion in the country. Additionally, Massachusetts ranks 8th in the nation for direct sales per capita.

High costs are another challenge to Massachusetts farming, particularly labor costs. Farmers on average spent 32% of their expense budget on hired labor costs. As a point of reference, the next highest expense on average is feed costs, and feed costs account for 8% of total expenses.

A third challenge to Massachusetts’ farmers is the current federal administration’s trade policies. Ongoing trade negotiations and disputes with several foreign nations leave farmers with a large degree of uncertainty about their market opportunities.

Greenhouse & Nursery
The greenhouse and nursery industry is Massachusetts’ largest agricultural sector. It has a market value of over $139 million, and accounts for approximately 29% of the state’s agricultural economy. There are 867 commercial greenhouse and nursery businesses that on average produce $161,176 in sales annually.

Produce
The produce sector has an annual market value of over $161 million, and accounts for 34% of the agricultural economy. There are 1,402 vegetable farms who contribute over $102 million to the Massachusetts agricultural economy, and 1,178 fruit farms who contribute over $88 million.

Cranberries
Massachusetts is the second largest cranberry producing state in the U.S. The cranberry industry is the third largest agricultural sector in Massachusetts with approximately 375 growers on approximately 13,250 bogs. Massachusetts cranberry growers contributed over $59 million in 2017. However, cranberry agricultural value was over $72 million and 65 million in 2020 and 2021,

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7 All numbers in the produce section includes cranberries.
respectively. The cranberry industry has struggled in recent years as the industry contributed as much as $103 million to the Massachusetts agricultural economy in 2011.

A challenge to Massachusetts cranberry producers is the large growing world supply of cranberries. This contributes to declining prices. Foreign producer growth, especially in Quebec, Canada, contributes to increased competition and the supply in the cranberry market.

**Livestock & Poultry**

The livestock associated businesses account for over $36 million in sales for the Massachusetts agricultural economy with poultry and egg farms accounting for over $12 million.

**Aquaculture**

The aquaculture industry in Massachusetts has 201 farms and is responsible for an annual market value of over $29 million.

**Dairy**

Massachusetts had 118 dairy farms in 2022 that produced 197 million pounds of milk. Dairy farmers have struggled with low milk prices set by the Federal Milk Marketing Order and a high cost of production that can exceed milk prices for many producers in the state. Berkshire County is the largest milk producing county in Massachusetts.

**Dairy Farmer Tax Credit Program**

In 2020 and 2021, Massachusetts Department of Agricultural Resources (MDAR) continued to administer the Massachusetts Dairy Farmer Tax Credit Program. This program was established in 2008 to offset cyclical downturns in milk prices by providing financial assistance to dairy farmers in the form of a tax credit. The state budget for the program was increased from $4 million to its current $6 million in 2018. For each month that the average cost of production exceeds milk prices, the dairy tax credit is triggered for the given month(s). In 2020 and 2021, the average cost of production exceeded the price of milk for all 12 months in both years which triggered the tax credit for every month. This means that the full $6 million was distributed to dairy farmers each year for 2020 and 2021. The resulting tax credit payment to Massachusetts dairy farmers was $3.06 per hundredweight of milk and $3.10 per hundredweight of milk in 2020 and 2021, respectively. Anecdotally, the tax credit helps dairy farmers to qualify for loans, pay for feed, and undertake new projects.

**Retail Coupon for Fluid Milk Program**

This program was established to allow for the use of fluid milk coupons in promotional and marketing

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12 Internal MDAR Animal Health records
14 Average cost of production for milk is determined by UMASS Amherst studies
campaigns to benefit businesses and consumers. The goal of the program is to increase fluid milk consumption, and promotional coupons provide consumers discounts of milk. The program is regulated to uphold [M.G.L. Chapter 94A](#) which ensures that a competitive milk market will exist. According to MDAR regulations, milk coupon promotions must not result in a sale of milk that is below the cost of production, nor appear to be predatory towards any Massachusetts dairy farm that directly markets and sells its own fluid milk to consumers.

**COVID**

In 2020, MDAR administered a survey to explore COVID-19 impacts on the agricultural community. There were 311 total respondents which represents 4.29% of farms in Massachusetts. The survey has been used by MDAR to develop guidelines and regulations to assist various agricultural sectors, and it has been used to inform Food Security Task Force discussions which resulted in the Baker-Polito Administration investing $56 million for the Food Insecurity Infrastructure Grant Program.
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 (ANF).

### MDPB Board Members (appointed by the Commissioner of the MDAR):

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Lebeaux</td>
<td>Chairman</td>
<td>MDAR</td>
</tr>
<tr>
<td>Ashley Randle</td>
<td>Designee for Chair</td>
<td>MDAR</td>
</tr>
<tr>
<td>David Hanson</td>
<td>Vice-Chair</td>
<td>Agri-Mark</td>
</tr>
<tr>
<td>Darryl Williams</td>
<td>Treasurer</td>
<td>MA Association of Dairy Farmers</td>
</tr>
<tr>
<td>Melissa Griffin</td>
<td>Secretary</td>
<td>Agri-Mark</td>
</tr>
<tr>
<td>Lynne Bohan</td>
<td>Board Member</td>
<td>Massachusetts Food Association</td>
</tr>
<tr>
<td>Jessica Dizek</td>
<td>Board Member</td>
<td>New England Producer Handler Association</td>
</tr>
<tr>
<td>Kathleen Herrick</td>
<td>Board Member</td>
<td>MA Association of Dairy Farmers</td>
</tr>
<tr>
<td>Krisanne Koebke</td>
<td>Board Member</td>
<td>Massachusetts Cooperative of Milk Producers Federation</td>
</tr>
<tr>
<td>Brian McKeon</td>
<td>Appointed</td>
<td>ANF</td>
</tr>
</tbody>
</table>

### Massachusetts Dairy Farm Revitalization Task Force

On May 10, 2007, 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, 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 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, but not limited to, fuel prices, healthcare, and insurance; promoting locally produced milk; and promoting alternative and renewable energy uses for farmers.”
On November 9, 2007, a report to the Legislature was filed. 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 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.

** Adopted Motions for FY20 MDPB Grant**

The following grants were approved in 2019 to be completed during FY2020.

- Approved allocation of $60,000 for the NE Dairy & Food Council to provide sub-grants to schools in Massachusetts in connection with the Fuel Up to Play 60 initiative, to increase milk sales and implement dairy-focused healthy eating strategies with an emphasis on increasing school breakfast participation.
- Approved allocation of $60,000 for the NE Dairy Promotion Board to advance the image of MA dairy farmers through the use of FOX 25 Zip Trips segments and promotion at large-scale events, including the Kiss 108 summer concert. ** The Massachusetts Dairy Promotion Board votes to fund the NEDPB proposal fully with $42,000 being available as of July 1, 2019, and the remaining $18,000 to be available January 1, 2020, so long as there are funds available.
- Approved allocation of $30,750 to CISA to perform dairy economic research, social media campaigns and video production, and staff support for project oversight which would include synthesizing economic research data and creating an economic report as well as coordination with partners and contractors regarding statewide promotion.
- Approved allocation of $24,550 to the Massachusetts Association of Dairy Farmers to build brand awareness including strategies for dairy farmers to utilize the “A Splash of Mass in Every Glass” for their value-added success and to showcase the value and viability of dairy farms across Massachusetts.
- Approved allocation of $20,000 to Eastern State Exposition for hosting “Chocolate Milk Day” on September 22, 2019, during the Big E and providing fairgoers the opportunity to sample chocolate milk and learn more about the nutritional benefits of consuming milk.
- Approved allocation of $12,000 to the Northeast Organic Farming Association to provide consumer education focusing on the positive contributions that Massachusetts Dairy Farms provide to the environment that improve ecosystem services and mitigate climate change.
- Approved allocation of $20,059 to Essex Agricultural Society DBA Northeast Harvest/Topsfield Fair to educate community members in Essex and Middlesex counties, and attendees at the Topsfield fair where dairy comes from and the installation of (2) milk dispensers to distribute milk during the duration of the 11-day fair.
Adopted Motions for FY21 MDPB Grant & FY21-22 MDPB Grant

Please note that these grants were approved in 2020 to be completed during FY2021 however the onset of COVID-19 canceled many of the grants, due to school closures and fair cancelations, as noted below:

- Approved allocation of $1,000 to Massachusetts Agriculture in the Classroom to fund the creation of one virtual dairy farm field trip which will be accessible for any Massachusetts school to use.
- Approved allocation of $59,340 to the New England Dairy & Food Council to provide sub-grants to schools in Massachusetts in connection with the Fuel Up to Play 60 initiative, to conduct a live virtual farm tour to be accessible to all New England schools and to work with high school athletic directors, coaches, and health professionals to promote the science-based benefits of milk, and other dairy, in fueling athletes of all sorts through Fueling Up with Dairy initiative.
- Approved allocation of $59,340 to the New England Dairy Promotion Board to promote the image of Massachusetts dairy products through the use of a Mobile Dairy Bar, which will act as an experiential and educational tool that will provide information about local dairy, connect the public with Massachusetts dairy farmers and sample dairy products including fluid milk. This mobile dairy bar will be showcased and used at events throughout the Commonwealth including road races, local fairs, farmers’ markets, and other retail settings, per approval from Grant Manager (due to COVID-19).
- Approved allocation of $4,300 for the Bedford Public Schools to fund a pilot program to install and implement the use of a bulk milk dispenser with fluid milk and reusable cups in the 2020/2021 school year at John Glenn Middle School. CANCELED DUE TO COVID-19
- Approved allocation of $14,250 to Eastern State Exposition to promote in partnership with the Big E, the advancement of the image and sales of Massachusetts dairy products by declaring Sunday, September 27, 2020, as "Chocolate Milk Day" and providing fairgoers an opportunity to learn about the nutritional benefits of flavored milk by distributing Commonwealth chocolate milk to attendees on that day. CANCELED DUE TO COVID-19
- Approved allocation of $10,000 to the Essex County Agricultural Society dba Topsfield Fair to promote the image of dairy products by distributing fluid milk from local dairies during the 10-day 2020 Topsfield Fair and placing signage throughout the fair to encourage attendees to consume Massachusetts dairy products. CANCELED DUE TO COVID-19
- Approved allocation of $14,000 to the Massachusetts Association of Dairy Farmers to promote the consumption of Massachusetts dairy products through the sale of Commonwealth dairy including fluid milk, ice cream and shakes in the Massachusetts State Building during the 2020 Big E. CANCELED DUE TO COVID-19
- Approved allocation of $7,770 to the Hampshire, Franklin & Hampden Agricultural Society dba Three County Fair to promote the consumption of Massachusetts dairy products by distributing Commonwealth dairy products including fluid milk and ice cream at the 2020 Three County Fair. CANCELED DUE TO COVID-19

Adopted Motions for FY21-22 MDPB Grant

Due to the FY21 grant cancelations, the board decided to go back out to bid with remaining FY21 monies in the fall of 2020, where one grant was received and awarded as seen below for the FY21-2 grant.
• Approved allocation for $50,000 to New England Dairy & Food Council: to fund the following two projects: the first, Raising Gallons for MA Communities, will implement an integrated campaign to increase milk donations to local food banks who are serving an influx of people as a result of COVID-19. Through the outreach provided, this campaign will also educate consumers about dairy and MA dairy farmers’ role in hunger relief efforts and provide sound nutrition education and food preparation tips to help people make the most of their dairy. The second project, Supporting MA School Meals, includes a social media campaign to promote school meals and expand grant support in MA schools as they focus on evolving feeding models, which include serving dairy to students, during COVID-19. The goals of this project are to increase participation in school meals and increase dairy sales in school meals.

**FY20 Finances: Revenue vs. Expenses**

<table>
<thead>
<tr>
<th>FY 20 Revenue</th>
<th>$360,927.00</th>
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<tbody>
<tr>
<td>Beg. Balance ($140,604.00) + Earned Revenue ($220,323.00)</td>
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<tr>
<td>FY20 Expenditures</td>
<td>$232,719.00</td>
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<td>Balance</td>
<td>$128,208.00</td>
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**FY21 Finances: Revenue vs. Expenses**

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<thead>
<tr>
<th>FY 21 Revenue</th>
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<tr>
<td>Beg. Balance ($128,208.35) + Earned Revenue ($187,927.20)</td>
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<td>FY21 Expenditures</td>
<td>$162,093.50</td>
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<td>Balance</td>
<td>$154,042.11</td>
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Massachusetts Food Policy Council (M.G.L. Chapter 20 § 6c)

Bonita Oehlke, Staff Liaison

Jan 28, 2021
Governor Charles Baker
Massachusetts State House, Room 280
Boston, MA 02133

Dear Governor Baker,

On behalf of the Massachusetts Food Policy Council (“Council”), I am pleased to provide this Annual Report pursuant to M.G.L. Chapter 20, Section 6C(e) on the Council’s ongoing work related to the Massachusetts Local Food Action Plan (“Plan”) (http://mafoodsystem.org/plan/).

Please accept this letter as the Council’s 2020 Annual Report. 2020 is the ten-year anniversary of the Council, and the five-year anniversary of the acceptance of the Plan. Throughout the year, Council members continued to review the priorities and goals from the Plan. With the Plan’s recommendations continuing to be very relevant, the 2019 coronavirus outbreak challenged the Council and partners to support the Massachusetts food system during wide disruptions. Topics focused on reducing hunger, food insecurity, agricultural sector support, and programs to offset the wide challenges within the food system.

With the Commonwealth legislation allowing public meetings to be conducted through virtual means to allow real-time public access, the meetings had 2 – 3 times the usual attendance. The cooperative opportunity for the Council to work with the MA Legislature’s Food System Caucus, the MA Food System Collaborative and local food policy councils has been an asset to develop and support policy and program recommendations. The Council’s wide stakeholder group complemented the wide partnership representation on the Governor’s Food Security Task Force. Having communications and relationships in place from the Council was an asset for efficiency in the development of Task Force.

The Council respectfully requests that the Administration and the General Court continue to support the Plan’s broad goals and their underlying programs and link them to larger policy discussions. In addition, the Council appreciates the Administration’s and the General Court’s past support of the Plan’s vision of a sustainable and equitable food system. We ask that you give continued support as relevant legislative and regulatory actions are developed. As always, members of the Council would be happy to meet with you or your staff to offer further detail on support for the Massachusetts food system or our work to implement it. Electronic versions of this Report and its attachments will also be provided to you forthwith.

Sincerely,

John Lebeaux, Commissioner
Chair, Massachusetts Food Policy Council
Massachusetts Food Policy Council 2020 Annual Report

An Act Establishing the Massachusetts Food Policy Council was signed into law on November 7, 2010, which created the 17-member Council that was tasked with developing recommendations for food system goals for the Commonwealth. Pursuant to Section 6C(e) of Chapter 277 of the Acts of 2010, the Council must submit an annual report outlining its findings, conclusions, proposals, recommendations, and progress towards reaching the goals that have been set forth. In 2019, the MA Food Policy Council (FPC) focused on six topics from the MA Local Food Action Plan, forming the meeting themes for the year. The MA Local Food Action Plan was accepted by the FPC on December 10, 2015, and was designed to increase MA-grown food; create jobs and improve wages in food and farming; protect the land and water needed to produce food; ensure food safety, reduce waste, hunger, and food insecurity while making fresh and healthy food more accessible for the residents of the Commonwealth. Detailed minutes of all meetings throughout the year are available at: https://www.mass.gov/massachusetts-food-policycouncil

State Agency Members:

John Lebeaux, Commissioner, MDAR
Michael Kennealy, Secretary, Designee: Helena Fruscio, MEOHED
Dr. Monica Bharel, Commissioner, Designee: Lea Susan Ojamaa, MPH
Martin Suuberg, Commissioner, MDEP, Designee: Danah Tench
Jeff Riley, Commissioner, Designee: Robert Leshin, MESE
Amy Kershaw, Commissioner, MDTA

Legislative members:
Senator Joanne Comerford
Senator Ryan Fattman
Representative Hannah Kane
Representative Dan Donahue

Industry Members (appointed by the Governor):

Anna Goldenheim, MD, MPH, Community based nutrition and public health
Mackenzie May, Direct to consumer
Eric Stocker, Food processor and distributor
Samuel S. Wong, Ph.D., REHS/RS, Local health department representative
John Lee, Allandale Farm, Farmer
Amanda Kinchla, M.S., Food Safety Extension Specialist, UMASS Amherst
John Waite, Food processor and handler

Contact: Bonita Oehlke, MDAR
**Introduction**

The Massachusetts Local Food Action Plan (Plan) was designed to increase production, sales, and consumption of Massachusetts-grown food; create jobs and improve wages in food and farming; protect the land and water needed to produce food; ensure food safety; and reduce waste, hunger, and food insecurity, while making fresh, healthy food available to all Massachusetts residents. The Plan offers recommendations for the public and private sectors to see these goals through to fruition.

2020 is the ten-year anniversary of the Massachusetts Food Policy Council (Council), and the five-year anniversary of the acceptance of the Plan. Throughout the year, Council members continued to review the priorities and goals from the Plan. With the Plan’s recommendations continuing to be very relevant, the 2019 coronavirus outbreak challenged the Council and partners to support the Massachusetts food system during wide disruptions. Topics focused on reducing hunger, food insecurity, agricultural sector support, and programs to offset the wide challenges within the food system.

The cooperative opportunity for the Council to work with the MA Legislature’s Food System Caucus, the MA Food System Collaborative and local food policy councils has been an asset to develop and support policy and program recommendations. The Council’s wide stakeholder group complemented the wide partnership representation on the Task Force. Having communications and relationships in place from the Council was an asset for efficiency in the development of Task Force.

Meeting locations are typically identified to support statewide access, however after the first meeting in Worcester and the following outbreak of the pandemic, the meetings were held remotely. On March 10, 2020, Governor Baker, acting pursuant to the power provided by Chapter 639 of the Acts of 1950 and Section 2A of Chapter 17 of the Massachusetts General Laws, declared a State of Emergency due to the outbreak of the 2019 coronavirus (“COVID-19”), allowing public meetings to be conducted through virtual means to allow real-time public access. With easy access to attend via on-line platforms, the meetings had two-three times the usual attendance.

**Meeting Summaries 2020**

January 31, 2020, Blackstone River Valley Heritage Corridor Visitor Center

The new DTA Commissioner, Amy Kershaw, was welcomed. The new direct to consumer representative, Mackenzie May was introduced. The MA Food System Collaborative had the largest attendance so far at their annual forum. They have a new report “Reducing Food Waste in Massachusetts: Local Successes Informing Statewide Solutions:” [https://mafoodsystem.org/media/resources/pdfs/foodwaste2019.pdf](https://mafoodsystem.org/media/resources/pdfs/foodwaste2019.pdf).

Their legislative focus is funding for the supplemental budget for HIP. The one-year-old MA Legislature’s Food System Caucus has strong bipartisan membership and is focusing on food access, insecurity, and farmland protection. The Cambridge Local Food Policy Council addressed initiatives and outcomes relating to climate change, since one of the biggest levers for climate change is food. School food and a wellness policy also has been a priority. The Metropolitan Area Planning Council (MAPC) reviewed their farming and climate change report: [https://www.mapc.org/resource-library/climate-perspectives/](https://www.mapc.org/resource-library/climate-perspectives/)

Farmer Dave Dumaresq explained that growers are experiencing more unpredictability in temperatures, with significant impacts. He also noted federal and state programs to support climate resiliency. The MAPC artist in residence shared project data findings. A policy update was provided on a healthy beverage campaign implemented in a Cambridge hospital, with success in reducing the consumption of
sugary beverages. A tax on these beverages was reviewed as means to make the healthy choice the easy choice and improve public health.

Due to the pandemic issues, the March 2020 meeting was postponed to May.

*May 8, 2020*

Commissioner Lebeaux described the new 30-member Food Security Task Force working to improve access to food and resiliency of food supply chain as a result of the pandemic. The state legislature added funding for HIP. The MA Legislature’s Food System Caucus worked closely with the Task Force. Legislative priorities were identified including the Massachusetts Emergency Food Assistance Program. The Food Trust was also elevated as an important vehicle for strategic food system support. Legislation was discussed: HB 2697: An Act establishing the Executive Office of Food Resources and Security. The MA Food System Collaborative work continues with a focus on food waste, HIP, local food policy councils, and a regional food resiliency plan. The work of Buy Local organizations across the state was discussed, with growers pivoting to market their products directly to consumers. Consumers have shown a strong response to supporting local. It was recognized that the Plan has been a tremendous platform during the pandemic. Council members shared their COVID-19 resources.

*July 24, 2020*

Council updates included the latest on DEP’s Solid Waste Master Plan. ESE shared guidance for the reopening of schools. DPH convened a Health Equity Advisor Group: https://www.mass.gov/orgs/covid-19-health-equity-advisory-group. The MA Legislature’s Food System Caucus has been active in all food topics. On May 17, the Baker/Polito Administration announced an investment of $56M, including $36M for the MA Food Security Infrastructure Grant Program (FSIG) to strengthen the long-term resiliency of the food system https://www.mass.gov/news/baker-polito-administration-invests-56-million-to-combat-food-insecurity-in-massachusetts. The rolling application process continued through September 15, 2020. Close to $3M in a first round of grants was announced on July 22, 2020. Separately, 30 vendor applications were approved to deliver food in communities greatly impacted by COVID-19, supported by $5M for HIP. MDAR reported on the MassGrown Exchange, an on-line platform to connect food and fisher products with buyers and related services as a market development tool now and into the future. DMF reported on the significant losses in the seafood sector, with oyster farmers being affected the most. The MA Food System Collaborative is working with food system networks to review the Plan and identify priorities to support a resilient food system.

*September 18, 2020*

The Marion Institute and South Coast Food Policy Council reported on their work with local restaurants to bring over 91,000 meals to at risk populations. The MA Legislature’s Food System Caucus reported that fifty-one members signed a letter to prioritize programs relating to food insecurity. An update on the work of the Food Security Task Force and HIP focused on immediate relief while building long term sustainability and providing good nutrition. DPH reported on their COVID-19 Community Impact Survey to address impacts from this pandemic. ESE shared that USDA is allowing schools and community organizations to offer free meals at open sites across the state, and a new Meal Finder service: https://www.fns.usda.gov/meals4kids. For the seafood sector, the pandemic impacts have been very substantial. Some of the biggest losses were to products mainly consumed in restaurants. There has
been a great response to local seafood during the pandemic. The FSIG was one of the recommendations of the Task Force, for long term solutions for a more resilient food supply.

Commissioner Lebeaux shared his pride in this Grant which started out as a small idea at MDAR. MassGrown Exchange: https://www.mass.gov/service-details/massgrown-exchange was recently launched to assist farmers, fishers, food buyers, and ag-related businesses to connect, exchange, and find products and services, building the marketplace for local products. The MA Food System Collaborative focused on their work to update priorities for the Plan and interviewed stakeholders about food system stresses due to the pandemic as well as their vision of a healthy food system. Brandeis graduate students shared their work to strengthen the food system collaboration based on surveys, interviews, mapping, and benchmarking.

* November 12, 2020-Annual Meeting

Commissioner Lebeaux highlighted anniversaries: five-years for the Plan and ten-years for the Council. It was a privilege to have EEA Secretary Kathleen Theoharides attend, who commented that the pandemic continues to highlight the importance of the food system, public health, green spaces, and the need to invest in the local food system and support underserved communities. Secretary Theoharides serves as co-chair of the Food Security Task Force and thanked Council members, legislators and the community for their work and support. The FSIG process and timeline was summarized, and presentations from several awardees followed. Hannah Spare and Rumbila Abdullahi, All Farmers, West Springfield, shared the important impact of the FSIG program in Springfield area communities with improved food access through farmers markets. ESE reported that school nutrition directors distributed over 30M meals, with over half as free or reduced, maximizing the reach of local foods during the pandemic. Rob Shaheen, New Bedford Public Schools’ grant supports a redesigned facility with new mobile serving, scratch cooking equipment, and increased refrigeration capacity. DMF noted that seafood sales have suffered from restaurant closures. The FSIG has provided important and unpredicted support for this sector. Heightened interest in cooking seafood at home was noted. Jared Auerbach, Red’s Best, Boston, works with over 800 small fishermen. The FSIG supported their business pivot to retail sales with new equipment for efficient vacuum packing processing and freezer storage. DPH noted appreciation for work at the local and state level to increase access to healthy food and address food insecurity. Paul Mina, United Way of Tri County, Framingham, has three food pantries, including one of the largest in MA. Their FSIG will build transportation and freezer infrastructure. Ben Clark, Clarkdale Fruit Farms, Deerfield has a retail farm stand and changed their focus to direct delivery. A refrigerated truck purchased with support from the FSIG supports food safety and greater distribution. DMF reported that oyster farmers have been devasted by the pandemic. Dan Ward, Ward Aquafarm, Falmouth will have more flexibility to sell directly to consumers with the FSIG supporting his move to be a licensed dealer. The MA Legislature’s Food System Caucus focus has been on pandemic and related food system issues with recommendations to increase investment in MEFAP and HIP, among others. MA Food System Collaborative shared highlights from their Perspectives on Resilience and Recovery report: https://mafoodsystem.org/media/projects/pdfs/MALocalFoodPerspectives.pdf DEP shared examples of progress in reducing food waste and the 2020-2030 master plan.

*On March 10, 2020, Governor Baker, acting pursuant to the power provided by Chapter 639 of the Acts of 1950 and Section 2A of Chapter 17 of the Massachusetts General Laws, declared a State of Emergency due to the outbreak of the 2019 coronavirus (“COVID-19”). In accordance with the State of Emergency,
the Massachusetts Food Policy Council ("MFPC") meetings are being conducted through virtual means to allow real-time public access.

2021 Massachusetts Food Policy Council Annual Report Summary

Meetings continued to be held remotely. On March 10, 2020, Governor Baker, acting pursuant to the authority provided by Chapter 639 of the Acts of 1950 and Section 2A of Chapter 17 of the Massachusetts General Laws, declared a State of Emergency due to the outbreak of the 2019 coronavirus ("COVID-19"), allowing public meetings to be conducted through virtual means to allow real-time public access. This was updated pursuant to the provisions for adequate alternative public access to agency hearings, set forth in Section 20 of Chapter 20 of the Acts of 2021 and Governor Charles D. Baker’s COVID Executive Order No. 1 Suspending Certain Provisions of the Open Meeting Law, G.L. c. 30A, s. 20, dated March 12, 2020, which was extended by COVID Executive Order No. 69, Massachusetts Food Policy Council ("FPC") meetings continue to be conducted through virtual means to allow real-time public access.

Six meetings were held virtually in 2021 and included updates from the Massachusetts Legislature’s Food System Caucus, presented by the Legislative Council members, and the Massachusetts Food System Collaborative.

JANUARY 29, 2021

Program: Massachusetts technical assistance resources. Organizations have been successful receiving USDA funding. Strategies for greatest impact were discussed. Presenters: New Entry Sustainable Farming Project: Promoting year-round Distribution of Local Produce from Small, Beginning, and Socially Disadvantaged Farmers through New Product Lines and Distribution Strategies; Sustainable Business Network: Adding Value to MA Farmer and Fisher Wholesale Viability; Community Involved in Sustaining Agriculture: technical assistance including beginning farmer grant projects, farmers markets, value-added production, small-scale aggregation, targeted efforts for wholesale producers, and assessing farm COVID responses; The Carrot Project: The Agricultural Viability Alliance’s federal grant is supporting consistent and equal access to business technical assistance to farm and food businesses; Franklin County CDC/Western MA Food Processing Center’s MA Ag Innovation Center for technical assistance for value-added products; Vermont Agency of AG’s Northeast Dairy Business Innovation Center for regional dairy projects; and UMASS Extension grower support during COVID-19. Community Servings: MA Food is Medicine Consumer Advocacy Toolkit. Officers Reports: Two retiring FPC members were recognized, Sam Wong and Eric Stoker. Updates were provided by the MA Legislature’s Food Caucus and the MA Food System Collaborative. Council updates: The Bylaws and Structure Committee, recommended time for more discussion/dialogue in future meetings.

MARCH 26, 2021

Officer Reports: The Council has three open positions: distributor, public health, and local board of health. A new Council position has been created re: healthy soils, appointed by the EEA Secretary. Bylaws and Structure committee: With six agencies represented, each has their own path to share food system topics up through their secretariat. Can the Council track incremental progress towards the MA Food Action Plan? Identifying joint priorities can be galvanizing. The Council can draft letters with a recommendation, though agency members typically need to abstain. MA Legislature’s Food Caucus:
legislative priorities include the Healthy Incentives Program (HIP), MA Emergency Food Assistance Program, and support for UMASS Extension. **MA Food System Collaborative**: Increased funding was a focus for several MDAR programs that are oversubscribed. The Collaborative supports new positions for UMASS Extension, and an earmark for MA in Motion to be able reach more municipalities across. Other items support partner organizations including an increased budget for Buy Locals. The Food Security Infrastructure Grant (FSIG) program was and continues to be an important investment in the MA food system: [https://mafoodsystem.org/media/resources/pdfs/fsigsummary.pdf](https://mafoodsystem.org/media/resources/pdfs/fsigsummary.pdf) The Commonwealth made a remarkable pivot during this difficult period. The innovative FSIG program, born out of necessity, will boost the food system now and in the future. With additional resources, program operationalization and capitalization could be better supported. **Council updates**: UMASS continues to develop educational programs for growers and entrepreneurs to add value to their products, and food safety grants for small entrepreneurs. The Federation of Massachusetts Farmers Markets saw multiple markets closing due to pandemic protocols that strain their finances. DEP has a new Director of Clean Energy and Climate Resilient Programs. The DTA finder for SNAP clients to find where HIP funds can be used had over 100,000 views. Early outcomes from DPH’s COVID IMPACT Community survey was shared.

**MAY 7, 2021**

**Officer Reports**: Open positions on the Council were reviewed and next steps. Distributor candidates have been forwarded. Community Health candidates have been interviewed. Candidates for the EEA appointed Healthy Soils position are moving forward. **Bylaws and Structure committee**: It’s difficult to choose priorities however, racial equity, climate change and support for UMASS Extension are issues which could use more attention and where the Council could be helpful. The Council can focus on topics that cut across multiple agencies and industries. Letters of support could be impactful from this diverse body of representatives, signed by the Council’s Chair but from the body with member follow-up. Council letterhead could be developed, with minutes attached including a record of the vote. Agencies can abstain if needed. Considering committees, is there a need for an Advisory Committee? It hasn’t been active since 2015. **Public Comment**: The Council is not very diverse. Could small farmers and people of color be included? The Advisory Committee would help to engage a broader group of people. The Committee could be a part of the lens for racial equity but not a substitute for diversity on the Council. **MA Legislature’s Food Caucus**: Without an increase for UMASS Extension on the House side, there are efforts to get it into the Senate budget, and to maintain numbers on the House side. The Senate is overflowing with legislation that supports the food system. The MA HIP program is a national model. **MA Food System Collaborative**: The Collaborative has worked to support HIP, UMASS Extension, UMASS in Motion and the FSIG program. They are offering training on legislative topics such as crafting language and speaking to legislators. **Council updates**: A provision in state law that prohibited growing hemp on the 70,000 acres of protected land has been changed. Hemp may now be grown on any protected land in MA. Marijuana can be grown on protected land that received no federal funding. The MA Food Trust Program which has provided more grants than loans this year, including support for the FSIG program.

**JULY 30, 2021**

**Program**: **Oyster market challenges during the pandemic**: helping growers and processors explore oyster value-added products while providing opportunities to address food security, Barnstable Cooperative Extension. When restaurants closed after the start of the COVID 19 pandemic, sales of oysters plummeted. A National Sea Grant supported a successful pilot for value-added oysters as a high protein product to food banks, where they were well received. A retail project demonstrated consumer
interest in locally shucked pints of oysters. **Officers Reports:** Recommendations for the open Council seats have been advanced to the Boards and Commissions. **MA Legislature’s Food Caucus:** Next year’s budget includes many Caucus recommendations. A survey on American Rescue Plan Act (ARPA) priorities showed support for areas including UMASS Extension and agriculture worker housing and training, food insecurity issues and increasing access to nutritious food options. FSIG support is also strong. Funds were secured for the MA Food Trust Program. **MA Food System Collaborative:** Positive news in the state budget was reported, supporting many food system topics. The Collaborative is supporting classroom food literacy programs, local food policy councils on structural/policy issues, and exploring a supply chain map. HIP is running very well. NE feeding NE is a six-state partnership funded by USDA, to research increasing food production for a secure supply in the face of climate change. The new Equity Policy Network Manager was introduced. **Bylaws and Structure Committee:** Based on public comment, the advisory committee will be revived, and can add diversity and new voices to the Council. Priorities will focus on racial equity, climate change and UMASS extension support with HIP and FSIG as food insecurity and infrastructure strategies. Climate change and equity are broad goals. Establishing tangible strategic priorities can be used to measure progress. The Council can incorporate food into larger conversations such as climate change, equity, and housing. **Council updates:** The FSIG program has been important to bring healthy meals to kids during the summer when school’s not in session. MassDEP will have a stakeholder meeting regarding draft solid waste regulations.

**SEPTEMBER 10, 2021**

**Program:** **BIPOC Farmers & Farmland in MA, history of ownership and loss.** Tufts Friedman School of Nutrition Science & Policy: [https://tufts.box.com/s/n8vbrg57736fwjtjfi8sk9ve5v2olyek](https://tufts.box.com/s/n8vbrg57736fwjtjfi8sk9ve5v2olyek). **Creating equity in land access:** Mentor Flats, a program of World Farmers, Lancaster, representing over 350 farmers, asked that policy makers include them in decision making. Land access is critical. **MDAR’s environmental justice work,** MDAR Environmental Justice Task Force. [https://www.mass.gov/environmental-justice](https://www.mass.gov/environmental-justice). **MA Legislature’s Food Caucus:** Members are elevating hunger issues that persist, while advocating funds from ARPA for a more resilient food system. A bill to promote equity in agriculture will have a briefing. Council written testimony can be significant even with agency members abstaining. **MA Food System Collaborative:** The Collaborative is helping to develop a farmland action plan. They are advocating for ARPA funds to support the FSIG, and other food system agricultural issues. New staff has been hired whose priority is agricultural equity. **Bylaws and Structure Committee:** The advisory committee will be revived. Roles will be updated with priorities of racial equity and climate change in the food system. **Council updates:** The Western Mass Food Processing Center was awarded manufacturer of the year. A hearing to add a fisheries seat to the Council is scheduled.

**NOVEMBER 5, 2021, annual meeting**

**Program:** **Focus on racial equity and climate change and key takeaways:** 2021 Food System Assessment of Southeastern MA: [https://www.marioninstitute.org/programs/sfpc/food-system-assessment](https://www.marioninstitute.org/programs/sfpc/food-system-assessment). Marion Institute, with the Southeast Food Policy Council. **Officers Reports:** Vacant Council seats will be filled. Legislation may add a fisheries seat. The annual report will include an optional addendum to describe member challenges and successes. Officer nominations were made. Four nominations for new Nominating Committee members were made. Three Council members were appointed to the Bylaws and Structure Committee. Nominations will be solicited for the Advisory Committee. **MA Legislature’s Food Caucus:** ARPA includes priorities such as resiliency in the food system and support for the FSIG. Over thirty legislative members or their staff were in attendance.
They shared comments and expressed gratitude for the work of Caucus, for ARPA support, and partnerships to support food system work and legislation. **MA Food System Collaborative:** Appreciation was shared for funding including FSIG, conservation regarding urban agriculture and working lands, and food system workers for premium pay during the pandemic. Farm tours were reported as important to connect legislators with farmers. **Council updates:** DEP described the Solid Waste Master Plan engagement which will connect the twin benefits of environment and savings with clean energy. The Western MA Food Processing Center celebrated 20 years. Considering supply issues, local has an important role in distribution challenges.

The **Bylaws and Structure Committee** met six times: January 20, March 9, June 16, August 27, October 7, and December 10, 2021. All meetings were held remotely. Discussions were mainly on setting Council priorities, and the revival of the Council’s Advisory Committee.

**Addendums: 2021 Massachusetts Food Policy Council annual report**

- **I. COVID-19 Command Center Food Security Task Force**
- **II. Massachusetts Legislature’s Food System Caucus**
- **III. Massachusetts Department of Environment Protection**

**COVID-19 Command Center Food Security Task Force**

**Summary provided for the 2021 Massachusetts Food Policy Annual Report -- Addendum**

The Baker-Polito Administration COVID-19 Command Center convened a Food Security Task Force on April 22, 2020, in response to increased demands for food assistance. The task force was comprised of a broad group of public and private members charged with ensuring food insecurity and food supply needs were addressed during the COVID-19 public health emergency.

A cross-Secretariat team of state agencies with responsibility for food security, agriculture and emergency response, in partnership with the Shah Foundation, was charged with overseeing ongoing implementation of recommendations and tracking and reporting on progress, chaired by Energy and Environmental Affairs Secretary Kathleen Theoharides, former Director of the Massachusetts Emergency Management Agency (MEMA) Samantha Phillips, Department of Transitional Assistance Commissioner Amy Kershaw, and President of the Shah Family Foundation, Jill Shah.

The Food Security Task Force synthesized and prioritized more than 80 recommendations into the following four key actionable categories:

- Develop and implement an emergency food program,
- Fortify the food bank system,
- Maximize federal resources for food and nutrition, and
- Reinforce and redeploy the food system infrastructure.

To-date, the Administration has invested nearly $100 million to support resident food security and build a more just and equitable food system, including:

- $51 million for a **Food Security Infrastructure Grant Program** with a goal of ensuring that individuals and families have access to food. Eligible services include:
Increasing capacity for food direct delivery;
Increasing capacity of food banks and food pantries;
Increasing capacity of local food distribution partners;
Innovative solutions to enable those receiving SNAP and WIC benefits to receive food more easily;
Innovative solutions for urban farming; and
Farms, retailers, fisheries, and other food system businesses to help them adapt to the disruptions and to allow them to provide greater access to local food.

360+ projects funded in FY2021.

- $12 million for the provision of family food boxes through a regional food supply system.
  - MEMA delivered a total of 277,000 boxes (over ~4.6M meals) to food banks and community organizations.

- $5 million increase for the Healthy Incentives Program (HIP) to meet increased demand for local produce and to increase access points that process SNAP and HIP benefits.
  - Administration enrolled 39 new HIP farm vendors, creating 81 new access points across the Commonwealth, 16 in Gateway Cities, and 11 in new cities not previously served by the program. The majority of new vendors are local, small-scale farmers who live in or have close ties to the communities and populations they intend to serve.

- $3 million in funding as an immediate relief valve to food banks.
- $1.2 million for a Quarantine and Isolation Food Program to support isolating and quarantining individuals and families.
  - Through this program, over 15,000 food boxes and 1,800 grocery gift cards were disseminated in 100+ cities and towns across the Commonwealth.
- $27.1 million in federal Community Development Block Grant (CDBG) funds to 13 community foundations and the Massachusetts Association for Community Action (MASSCAP) to address local food insecurity for families and individuals impacted by the COVID-19 pandemic and its economic fallout.

In addition, the Administration worked to address the Task Force recommendations through:

**Fortify the food bank system**
- Proactive data collection, tracking and ongoing planning between the Administration, Food Banks and food pantries on food supply and ability to respond to increases in demand.
- Distribution of funding for capacity building within the local food pantry networks.

**Maximize federal resources for food and nutrition**
- Perused all federal Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants and Children (WIC) waivers to make it easier to apply for and maintain benefits.
- Launched SNAP online purchasing program; as of November 28, 2021, $105 million has been spent on SNAP online purchases.
- Provide SNAP Emergency Allotments since March 2020 to increase household’s SNAP benefits to at least the max monthly amount; over $1 billion brought into the state.
- Direct/targeted outreach between state agencies to reach out/enroll those potentially eligible for federal nutrition benefits.
- Selected the state option to access ARPA funds to triple WIC fruit and vegetable cash benefits from June 2021 through September 2021; approximately $7.6 million dollars (~175% increase)
have been spent to date by WIC participants on fruits and vegetables in September since the increase was implemented.

- Was a national leader in establishing and maintaining Pandemic EBT, which supported over 550,000 students and brought more than $1 billion into the Commonwealth’s economy.
- Pursued all federally available child nutrition waivers to support safe and convenient food access while families learned remotely.
- Established over 1,000 grab and go school meal sites across the state.
  - School and community-based summer meals sites partnered with local food pantries to collaboratively expand free food access points and family-friendly activities for students and all members of their households in high-need areas.
- Implemented universal free school meals for all K-12 MA students through the 2021-22 school year.

**Expanding access to local food to meet local need**

- Launched DTAFinder.com to connect SNAP clients directly with HIP vendors.
- Launched SNAP an equipment grant to support new and existing farm vendors at mobile locations throughout Massachusetts.
- MassGrown Exchange platform launched to connect farmers, fishers, food buyers, and agricultural related bussinesses to buy, sell, exchange. And/or find products and services. WIC farmers’ market coupons increased to $30 during the summer 2021 season for purchasing fruits and vegetables at participating farmers’ markets and farm stands.

2021 Massachusetts Food Policy Council Annual Report Food System Caucus

https://www.mafoodsystemcaucus.com/

**Overview**: The Massachusetts Legislature’s Food System Caucus (FSC) is bicameral, bipartisan, and currently has 144 members. In 2021, the Co-Chairs were Senator Jo Comerford, Senator Anne Gobi, Senator Eric Lesser, Representative Daniel Donahue, Representative Hannah Kane, and Representative Paul Schmid, . The FSC’s mission is to support and grow the local food system in the Commonwealth through three focus areas: food access/insecurity, farmland, and economic development.

**Issue(s)**: In 2021, the main issue the FSC focused on was disruption to the food system caused by the COVID-19 pandemic, which included a critical rise in food insecurity and detrimental impacts to farms and fisheries. The Caucus supported and advanced a range of tactics to combat these disruptions. In January 2021, the Caucus created and distributed a survey to members of the Legislature to gauge what legislators were seeing in-district in terms of issues related to food insecurity, farmland, and economic development in the food/agricultural/seafood industries. Results were compiled and shared with the Governor’s Food Security Task Force. The start of 2021 also represented the start of a new two-year legislative session. The Food System Caucus began the session recruiting new members, reviewing legislation that had been filed on the Caucus’ focus issues, and developing a list of priority and endorsed legislation. That list can be viewed in full here.
Legislative Briefings & Events

**February:** The Caucus hosted a briefing for legislators during which Caucus Chairs, the Food System Collaborative, Project Bread, the Southeastern MA Agricultural Partnership, and other stakeholders presented. The briefing covered actions taken during the pandemic to reduce food insecurity, the work of the Food Security Task Force, and the Caucus’ priorities for the legislative session.

**March:** The Caucus held its Annual Meeting for Caucus members. The slides from both the February briefing and March’s annual meeting can be viewed here.

**May:** The Greater Boston Food Bank (GBFB) joined the FSC to host a legislative briefing on the results of the GBFB’s report on the state of food insecurity in the Commonwealth. From October 2020 to January 2021, the GBFB surveyed over 3,000 MA adults to obtain timely data on food access and the prevalence of food insecurity during the COVID-19 pandemic. The Boston Globe published an article on the report, highlighting how 1.6 million adults in MA have been struggling to find enough to eat.

**September:** FSC members joined a Western Mass Farm Tour, organized by Senator Comerford and Representative Blais. The tour included five stops and gave legislators insight into the issues farmers face in Massachusetts.

**September:** EEA Secretary Theoharides and MDAR Commissioner Lebeaux briefed the FSC on food system resiliency and insecurity programs such as HIP and FSIG and also led a discussion on long-term priorities for the food system.

**FY22 Budget Advocacy**

The Food System Caucus engaged in advocacy for the FY22 budget, advocating for priorities including $30 million in funding for the Massachusetts Emergency Food Assistance Program (MEFAP), $13 million for the Healthy Incentives Program (HIP) and $1,046,400 for the UMass Extension program to hire additional staff. While MEFAP and HIP were funded in the final FY22 budget at the requested levels, the UMass Extension program was not. Funding UMass Extension continues to be a priority. Additional legislative wins in the FY22 budget include $750K for Buy-Locals, $300K for the MA Food Trust, $120K for the MA Farm to School project, and $100K for slaughterhouses.

**FSIG**

The Baker-Polito Administration launched the Food Security Task Force (FSTF) in spring 2020 in response to the COVID-19 pandemic, and FSC Co-Chairs Representative Hannah Kane and Senator Jo Comerford were appointed as legislative delegates. The Food Security Infrastructure Grant (FSIG) program came out of the work of the FSTF, and $45M for FSIG was included by the Baker-Polito Administration in its FY22 Capital Plan, released in June, including $30M allocated for the previous initial FSIG round, and the additional $15M for a 2nd round of FSIG applications which opened in September 2021. The FSIG program became a priority for the Food System Caucus throughout 2021, as local businesses applied for grants, legislators wrote letters of support, and multiple rounds of grants were awarded. Subsequent to these grant awards, the Food System Caucus advocated for the recapitalization of this successful grant program, as well as pushed to make the temporary program annual and permanent.
Healthy Incentives Program (HIP)

The Healthy Incentives Program (HIP) has been a priority for the FSC since its launch over four years ago. HIP provides $1 back to SNAP recipients for every $1 spent on eligible produce at MA farms and farmers markets. HIP celebrated its first $1M month in July, meaning that $1M worth of fresh, local produce was accessed by SNAP recipients in just one month.

ARPA Advocacy

In October, the Food System Caucus weighed in with its ARPA priorities, which included reducing food insecurity, bolstering the food system workforce, building a more resilient food system, and recapitalizing FSIG. The final ARPA bill had a $44.8M investment in the FSIG Program, which included $17M for the Greater Boston Food Bank for regional food security network infrastructure investments; $5M for the Food Bank of Western Mass to build a food distribution center and HQ in Chicopee; $2.7M to establish a MA community college campus hunger pilot program to address student hunger and food insecurity as an obstacle to degree attainment; $2M for the MA Food Trust to provide loans, grants, and technical assistance in a regionally equitable manner with a focus on communities disproportionally impacted by COVID; $1.92M to Project Bread to better connect eligible and unenrolled Massachusetts residents with federal nutrition programs, including the Supplemental Nutrition Assistance Program, through statewide expanded outreach, increased community engagement, marketing and promotion campaigns; $1.5M to Community Servings for a 1-time investment to support integrations necessary to provide state-wide medically tailored meals to persons battling chronic illnesses; $1.5M for the MA Military Support Foundation for capacity-building at its HQ in Worcester to support the operation of empowerment centers and the distribution of food to veterans in need; $1M for a farm-to-school grant program administered by DESE in consultation with DEEC; $1M for the distribution of college food security grants through the Hunger-Free Campus Initiative, to be administered by the Dept. of Higher Ed; $500K to the Gloucester Marine Genomics Institute for a research program to examine the impact of climate change on food resources, in conjunction with Northeastern University marine lab, the Tufts University school of nutrition, the Tufts Veterinary School and the UMass Amherst school of sustainability; An additional $14M was allocated in line item 1599-2044 for a reserve to support the Commonwealth’s agricultural, commercial fishing, and cranberry-growing industries, including $5M for the Agricultural Innovation Fund and $4M for an agricultural fair economic recovery grant program. Finally, $100K for the New England Farm Workers’ Council was included in line item 1599-2043 for education, employment, training, and community networking opportunities for individuals and young adults.

Massachusetts Department of Environmental Protection

Addendum to the 2021 Massachusetts Food Policy Council Annual Report

Danah Tench, Director of Clean Energy and Climate Resilience, Designee for Commissioner Martin Suuberg

The Massachusetts Department of Environmental Protection (MassDEP) is pleased to provide this report to supplement the Massachusetts Food Policy Council’s (Council) Annual Report pursuant to M.G.L. Massachusetts Department of Agricultural Resources Annual Report 2020-2021
Chapter 20, Section 6C(e). MassDEP is one of six state agencies that sits on the Council pursuant to M.G.L., Chapter 6C(a) and actively works toward meeting its agency’s goals under the Massachusetts Local Food Action Plan, one of which is to reduce food waste. Inputs Goals 1.

In October 2021, MassDEP published the Final 2030 Solid Waste Master Plan, titled, Working Together Toward Zero Waste (Master Plan). This plan aligns with the Clean Energy and Climate Plan and the 2050 Decarbonization Roadmap signed into law on March 28, 2021.

The 2030 Solid Waste Master Plan aggressively sets solid waste reduction goals of 1.7 million tons by 2030 (30% reduction), and a 5.1 million tons reduction by 2050 (90% reduction). The Master Plan emphasizes reduction and reuse of materials, as well as efforts to reduce the state’s greenhouse gas emissions reductions. The Master Plan also continues Massachusetts’s focus on food waste reduction as a priority material for waste reduction in the Commonwealth. The Master Plan establishes a new goal to reduce disposal of food and other organic materials by an additional 500,000 tons annually by 2030, based off a 2018 baseline of 280,000 tons of food waste reduction. The Master Plan also commits to establishing and updating more detailed Action Plans for priority program areas, including Reduction & Reuse, Recycling Market Development, Construction Materials Waste Reduction, and Organics Waste Reduction. This Organics Action Plan provides a working plan for how MassDEP will work with a diverse set of stakeholders to achieve our food waste reduction goal.

MassDEP’s work in this area is supported by the goals in the Massachusetts Local Food Action Plan (Local Food Plan). Key points in the 2030 Master Plan include recommendations identified in the Local Food Plan, Inputs Goal 1, the Massachusetts Waste Bans, which implement bans on the disposal of certain materials in trash,\(^\text{15}\) and the Recycling Business Development Grants (RBDG) Program, which provides grants to businesses that accept and process recyclable or compostable materials through this program. While these grants are limited to specified target materials, food waste has often been a target material in RBDG grant awards. The Master Plan proposes the following major short- and long-term initiatives that are relevant to the Local Food Plan:

- **2025 Program Review**
  - Midway check in with stakeholders to assess progress, review programs and policies, and consider adjustments, including considering a disposal ban on all food waste by 2030

- **The Master Plan will increase engagement with Environmental Justice communities, including:**
  - Prioritize EJ communities for grant awards
  - Deliver assistance for composting at community gardens
  - Leverage MassDEP’s Illegal Disposal Surveillance Program
  - Promote use of hybrid/electric trash & recycling collection trucks
  - Improve notice for facility permits in EJ communities

Other related efforts include:

- **Implement New Waste Disposal Bans** – including reducing the threshold for commercial organic material from 1 ton to \(\frac{1}{2}\) ton per week, beginning in November 2022

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\(^{15}\) Commercial organic material, and food material from businesses and institutions that dispose of one ton or more per week, was banned in 2014. In October 2021, MassDEP finalized regulations to reduce the threshold for this ban from one ton to \(\frac{1}{2}\) ton per week effective November 2022.
- Update Organics Action Plan working with MassDEP’s Organics Subcommittee
- Issue next round of Recycling Business Development Grants
- Launch a Recycling Market Development Workgroup, which will include markets for compost
- Launch a State Agency Recycling Market Development Council, including state agency purchasing of compost
- Develop and implement a new Recycling and Waste Reduction Innovations Grant Program

MassDEP will continue to gather and utilize several sources of data to evaluate progress towards state waste reduction goals, including annual reports from facilities that accept materials for composting, anaerobic digestion, animal feed, donation, hauler data on the number of food waste collection customers, and food waste reduction data from food waste production system providers. The Master Plan also includes a framework for updating the Organics Action Plan, including strategies to reduce food waste from large businesses, small businesses, and restaurants.

In addition to the Master Plan and the final Waste Ban regulations, MassDEP’s Clean Energy Results Program has been approved to extend its successful Gap Energy Grant in 2022 to support nonprofit agricultural and food related entities as well as agricultural small business, consistent with Input Goal 5 of the Local Food Plan. The Gap Grant will be another tool used to support sustainable management practices such as energy efficiency and the use of renewable energy generation, while reducing energy costs.
Financial Report

Cullen Roberts, Chief Financial Officer

MDAR’s expenditures grew to $46.4M in FY20 and to $72.2M in FY21 which represented an increase over FY19 by $6.5M and $32.3M respectively. The primary driver for the $6.5M increase in spending from FY19 to FY20 was due to an outbreak of the potentially fatal Eastern Equine Encephalitis virus (EEEv) in the summer of 2019. In consultation with the MA Department of Public Health and based on heightened risk level for human exposure, a decision was made to proceed with aerial spraying managed by MDAR as a necessary intervention to help reduce the risk of human exposure to EEEv. Spraying took place for twenty-six nights over two million acres in nine of the Commonwealth’s fourteen counties at a cost of nearly $5.1M. The remaining increase from FY19 to FY20 was largely driven by an increase in funding, from $18.4M to $20.3M, to the Massachusetts Emergency Food Assistance Program (MEFAP). The additional increase ($25.8M) from FY20 to FY21 was driven by investments into the local food system to address food insecurity, a need particularly magnified by the COVID-19 pandemic. While the MEFAP appropriation (2511-0105) increased from $20.3M to $30.2M, funding was also authorized which established the Food Security Infrastructure Grant (FSIG) program (of which $3.3M was spent in FY21) as well as a COVID Relief bill in Chapter 124 of the Acts of 2020 which appropriated $10.6M to food banks and pantries.

The charts below depict MDAR expenditures, in FY20 and FY21, by funding source:

**Figures in Millions**

**FY20 Agency Expenditures by Funding Source**

- 1. State $33.3
- 2. Capital $7.7
- 3. Trust $1.0
- 4. Federal $4.4

$46.4

**FY21 Agency Expenditures by Funding Source**

- 1. State $49.0
- 2. Capital $17.4
- 3. Trust $0.9
- 4. Federal $4.9

$72.2
Budgetary Appropriations

Administration Appropriation (2511-0100)
The Administration appropriation funds the day-to-day operations of the agency. The General Appropriations Act (GAA) appropriated funding of $6.829M and $8.534M in FY20 and FY21 respectively. Additional funding of $5.1M was received through the FY19 closeout supplemental budget and transferred into FY20 to support the aerial spraying for EEEv.

Administration appropriation spending by category includes:

- Employee salaries and benefits were $5.4M and $5.3M in FY20 and FY21 respectively.
- Earmarks accounted for $1.48M and $1.335M in FY20 and FY21 respectively.
- Aerial spraying for EEEv accounted for $5.1M and $517K in FY20 and FY21 respectively.

Cannabis and Hemp Agricultural Oversight Appropriation (2511-0103)
The Cannabis and Hemp Agricultural Oversight appropriation was established in FY19, and funds costs associated with agricultural oversight of hemp and cannabis. The appropriation is funded 100% from the Marijuana Regulation Fund. The GAA appropriated funding of $1.244M and $1.092M in FY20 and FY21 respectively. Unspent funding in FY20 and FY21, totaling approximately $1.6M was carried forward into FY22 through a legislative PAC (prior appropriation continued) to support the purchase of lab equipment at the Massachusetts Pesticide Analytics Lab on the campus of UMass to support testing required by the program.

Supplemental Food Appropriation (2511-0105)
The Supplemental Food appropriation provides for the purchase of supplemental foods for the Massachusetts Emergency Food Assistance Program (MEFAP). FY20 funding of $20.3M comprised 71% of the agency’s state appropriated budgetary funding and provided 23.2 million meals. In FY21, funding was increased in response to COVID-19 to $30.4M which comprised 76% of the agency’s state appropriated budgetary funding and provided 29.3 million meals. The agency utilizes 2% of the Supplemental Food funding to administer the program. MDAR contracts with the Greater Boston Food Bank, which is responsible for the distribution of a percentage of funds earmarked for other Massachusetts food banks under a contractual agreement.

Integrated Pest Management Appropriation (2511-3002)
The Integrated Pest Management (IPM) program was funded at $63,791 and $67,392 in the FY20 and FY21 respectively.

Capital Accounts
MDAR had a capital (bond) allocation of $8.4M and $11.7M in FY20 and FY21 respectively. In addition, the department received an additional $1M each fiscal year from the Executive Office of Housing and Economic Development to support the Massachusetts Food Trust. Due to the impact of COVID-19, particularly the challenge of completing projects by the end of the fiscal year (6/30/20), a one-time exception was approved allowing the carry forward of $1.5M from the FY20 allocation into FY21.

Driving the increase in funding from FY20 to FY21 was a $2.875M payment to the UMass Cranberry Research Station which was authorized in the 2018 Environmental bond bill. Capital funded programs
include the Agricultural Environmental Enhancement Program (AEEP), Agricultural Preservation Restriction (APR) Program, Farm Viability Enhancement Program (FVEP), Agricultural Climate Resilience Enhancement (ACRE) Program, Urban Agriculture, Agricultural Food Safety Improvement (AFSIP) Program, the Massachusetts Food Venture Program, and the Cranberry Bog Renovation Program.

Federal Funds
MDAR expended $9.341M in federal grant funds collectively in FY20 and FY21. The federal Farm and Ranch Lands Protection grant was the largest component of the agency’s federal funding, comprising 34% of the total. This grant is utilized to fund a variety of MDAR programs, including the APR program, the APR Improvement Program, Ag Business Training, the Agricultural Energy program, and the Matching Enterprise Grant Program. Other large federal grants include the Farmers Market (Senior) Coupon Program and Food (Produce) Safety which had collective expenditures in FY20 and FY21 of $1.9M and $1.6M respectively.

Trust Funds
Trust funds totaled less than 2% of agency spending over the two-year fiscal period totaling $1.8M. The primary trust accounts from which spending occurred were the Homeless Animal Prevention and Care Fund (38%), the Dairy Promotion Trust Fund (24%), and the Regional Greenhouse Gas Initiative Auction Trust Fund (18%).

Revenue
MDAR collects 29 different fees, ranging from pesticide applicator and milk dealer licenses to nursery and greenhouse inspection fees. The decline in revenue seen in FY19 (in the table below) is due to a new online renewal and product registration portal that was introduced in 2019. Applicants were granted an extension due to the complexities of the new system and the shortfall of revenue in FY19 was offset with an increase in revenue in FY20.

<table>
<thead>
<tr>
<th>Year</th>
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<tr>
<td>2015</td>
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<tr>
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</tr>
<tr>
<td>2021</td>
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</table>
Produce Safety Division

Michael Botelho

The goal of the Produce Safety Program is to assist in the prevention of produce related food-borne illness in Massachusetts while increasing market opportunities for growers. The Produce Safety Program provides grower education, on-farm technical assistance, and conducts regulatory inspections and voluntary third-party audits.

Produce Safety Inspection Program

In July 2021, the U.S. Food and Drug Administration (FDA) awarded 47 grantees a total of $30.9 million for a second Cooperative Agreement Program (CAP) for States and Territories to continue in the implementation and management of a National Produce Safety Program.

The Massachusetts Department of Agricultural Resources is one of the awardees that is continuing its successful partnership with FDA for another five years. The funds of this CAP will be used for the further development and expansion of the Produce Safety Inspection Program.

In the past few years, MDAR has formally adopted the Produce Safety Rule (PSR) in its entirety as state statute and obtained the regulatory authority to deploy a produce inspection program. 2021 served as the fourth year of compliance for eligible farms and the third year of PSR inspections in Massachusetts. The Program continues to utilize an "educate before and while we regulate" approach, incorporating rule and practice clarification during the inspection process.

2019 to date, the Produce Safety Division has successfully completed a total of 119 inspections on 80 farms throughout the Commonwealth in Massachusetts on farms of all varying sizes, types, crops, and methods of growing.

For more information about the Food Safety Modernization Act and the Produce Safety Rule:

The FDA Food Safety Modernization Act (FSMA), signed into law by President Obama on January 4, 2011, enables FDA to better protect public health by strengthening the food safety system. It enables FDA to focus more on preventing food safety problems rather than relying primarily on reacting to problems after they occur. The law also provides FDA with new enforcement authorities designed to achieve higher rates of compliance with prevention and risk-based food safety standards and to better respond to and contain problems when they do occur. The law also gives FDA important new tools to hold imported foods to the same standards as domestic foods and directs FDA to build an integrated national food safety system in partnership with state and local authorities.

FDA has finalized seven major rules to implement FSMA, recognizing that ensuring the safety of the food supply is a shared responsibility among many different points in the global supply chain for both human and animal food. The FSMA rules are designed to make clear specific actions that must be taken at each of these points to prevent contamination.

The PSR is one of these seven rules to implement FSMA, and establishes, for the first time, science based minimum standards for the safe growing, harvesting, packing, and holding of fruits and vegetables for
human consumption. The standards apply to fruits and vegetables normally consumed raw (“covered produce”), such as apples, carrots, lettuce, onions, and tomatoes. The PSR does not apply to produce rarely consumed raw (such as winter squash or potatoes) or produce grown for personal consumption. Overall, the Rule establishes standards for Agricultural Water, Biological Soil Amendments of Animal Origin, Health, and Hygiene, Domesticated and Wild Animals, Equipment/Tools/Buildings, Training, and Sprouts.

Commonwealth Quality Program
The Commonwealth Quality Program (CQP) continues to serve an important role in promoting the safe growing, harvesting, packing, and holding of Massachusetts local produce as well as ensuring that fruit and vegetable growers have access to the proper market channels. In addition to produce, the Commonwealth quality Program is also available to cranberry growers and maple syrup producers.

In the past three years, the Produce Safety Division has successfully finalized the integration of Produce Safety Rule requirements into the CQP Produce audit standard to ensure that farms who receive audit support are also in compliance with requirements under the rule. For those farms that have not been inspected or are not yet eligible for an inspection, audits serve as a necessary tool to provide technical assistance and prepare farms anticipating future compliance. Audits are conducted utilizing a program checklist, and both an audit report and certificate are supplied to the farm upon the completion of the audit process.

As word spread and the Program continues to grow, CQP has seen a continual increase in demand and interest. The Commonwealth Quality Program currently has a count of 130 produce farms, 25 cranberry bogs, and 6 maple sugar houses as active members. 2021 saw a grand total of 95 successful CQP audits spread out on 90 produce farms, 4 cranberry bogs, and 1 maple sugar house.

For more information about the Commonwealth Quality Program and its three sectors:

Commonwealth Quality, a program designed by the Massachusetts Department of Agricultural Resources, serves to identify locally sourced products that are grown, harvested, and processed in Massachusetts using practices that are safe, sustainable, and environmentally friendly. Commonwealth Quality-certified growers, producers, harvesters, and processors not only meet stringent federal, state, and local regulatory requirements, but also employ best management practices and production standards that ensure consumers receive the most safe and wholesome products available. Upon completion of a successful audit, the farm will receive a certificate verifying compliance with best management practices and good agricultural practices based on the standards of the Commonwealth Quality Program. This certificate can be presented to wholesale buyers and customers as proof of meeting third-party audit requirements for ensuring safe and sustainable products. CQP is currently offered for three sectors:

- **Produce**: Commonwealth Quality for fresh produce requires that farmers employ food safety standards that minimize the risk of microbial contamination and food-borne illnesses for fruits and vegetables grown, harvested, and packed in Massachusetts. This is accomplished through adherence to food safety requirements laid out in the Food Safety Modernization Act’s Produce Safety Rule and regional good agricultural practices. Farms that wish to join CQP must comply
with strict requirements regarding employee training and hygiene practices and responsibly manage their facilities, agricultural water, soil amendments, and wildlife to ensure only the safest products are available to consumers.

- **Cranberries:** Commonwealth Quality for cranberries serves to certify locally sourced fruit that is grown, harvested, and packed in Massachusetts. To qualify for CQP certification, Massachusetts cranberry growers must adopt and maintain program requirements that include practices specific to the safe production, harvest, storage, and marketing of fresh fruit from bogs and screen houses in Massachusetts. Program requirements for cranberries include farm food safety practices and standards as well as practices designed to reduce the environmental impact of cranberry production.

- **Maple:** Commonwealth Quality certified sugar-makers follow the strictest food safety standards and take steps to ensure that their work in the sugarbush ensures the long-term sustainability of the forests they steward and trees they tap here in Massachusetts. Participation in CQP ensures that sugar-makers are using high-quality equipment that is designed to process, handle, and store their products safely. Maple producers follow best management practices to ensure that only pure maple syrup goes into their jugs, and they routinely test their water, equipment, and products for any contaminants. Sugar-makers follow the most stringent standards in every step of production in order to minimize the risk of food borne illness and to provide the highest quality products.

**Farm Registration**

The MDAR Produce Safety Program is actively building an inventory of farms that grow, harvest, pack, or hold fruits & vegetables. Farms are required to register their farm in order to determine coverage status under the Produce Safety Rule. Registering also helps farms access resources on grant programs, receive news updates, request a pre-inspection visit, and engage in more training opportunities. Registration also serves as the first step for produce farms interested in joining the Commonwealth Quality Program.

**Produce Safety Education and Technical Assistance**

The Produce Safety Program offers education and technical assistance for produce farms to help prepare for inspections and compliance with the PSR as well as general farm food safety training.

In 2021, the Program conducted technical assistance and educational visits on 100% of requesting farms in the jurisdiction. The division successfully executed an ISA agreement with the UMass Agricultural Extension for the delivery of Produce Safety Alliance Grower Training courses, technical assistance, and educational support for farms in Massachusetts. MDAR and UMass are also jointly participating in a USDA Specialty Crop Block Grant for educating farms the importance of on-farm water quality and a cost-share reimbursement for agricultural water testing.

The Produce Safety Program also supported state and regional partners, including the Northeast Center to Advance Food Safety, Produce Safety Alliance, National Association of State Departments of Agriculture, and the Association of Food and Drug Officials, through participation and leadership at conferences, meetings, and workshops. Program staff also attended state and regional annual meetings.
for commodity groups, Farm Bureau, buy-local organizations as well as beginning farmer groups to support education and outreach objectives.
Division of Agricultural Markets
Mary Jordan, Division Director

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 broad breadth of local, state, and federal level entities.

Agricultural Event Certification Program
Katie Rozenas, Coordinator

On August 5, 2010, Governor Patrick signed S 2582: An Act Relative to Economic Development Reorganization that provides for the sale of wine from a licensed farm winery at approved agricultural events in Massachusetts. According to the legislation, agricultural events such as Farmers’ Markets, fairs and festivals must be approved and certified by the Department of Agricultural Resources before a winery can apply for the appropriate license from the local licensing authority.

In 2020, MDAR processed 78 applications for certified agricultural events. In 2021, MDAR processed 135 applications for certified agricultural events. Due to the COVID-19 pandemic, more annual events and farmers markets were canceled, resulting in less application than previous years.

Farmers’ Market Nutrition Program
Rebecca Davidson

In 2020 the USDA FNS awarded Massachusetts with $483,379.00 in federal food dollars to distribute to low-income elders along with $53,709.00 to use to administer the program state-wide. In 2020, 22,456 Massachusetts seniors and disabled individuals participated in the program compared with 24,231 in 2019. Participating elders received a benefit of $25 per person for the 2020 growing season. 70.5% of issued coupons were redeemed at Massachusetts farmers markets and farmstands. This figure is slightly lower than the 76.2% redemption rate in 2019. In 2020, the program utilized 88.3% of the USDA 2020 Food Allocation, as compared to 100% of the 2019 Food Allocation. The Senior FMNP home bound delivery program served 4,126 seniors in 2020 throughout the Commonwealth of Massachusetts. 25 Elder Nutrition Programs distributed coupons and produce to seniors and disabled individuals across the state of Massachusetts. To adapt to the COVID-19 pandemic, MDAR developed a Bulk Purchase Produce Pick-up Program, for participating seniors and disabled individuals to safely pick-up a $25 allocation of produce from participating agencies. In addition, MDAR distributed a flyer with COVID-19 shopping safety tips and a regional list of farmers’ markets and farm stands.

In 2020, the USDA FNS awarded Massachusetts with $485,219.63 in federal food dollars to distribute to participants in the WIC (Women, Infants and Children) program. The 2020 WIC Farmers’ Market
Nutrition Program (FMNP) served 27,567 women, children, and infants over 4 months with coupons to buy fresh produce at farmers markets, which is a decrease from the 35,843 served in 2020. The decrease in benefit distribution is due to an increase in the benefit from $25 to $30. 37.5% of WIC FMNP coupons were spent at farmers’ markets and farm stand vendors. The WIC FMNP redemption figure is down by 18% when compared to last year’s 55.8%. MDAR stipulates that the decrease is due to the impacts of COVID-19 on farmers’ market shopping trends in 2020, and is a trend seen nationally in WIC FMNPs. The program utilized 53.3% of the USDA FNS 2020 allocated food dollars, which is a significant decrease from the 100% utilization rate of the USDA FNS 2019 allocated food dollars. Participants received a benefit of $30 per person for the 2020 growing season.

The program certified 170 farmers’ markets, 118 farm stands, and 339 growers to serve the recipients of the Senior and WIC Farmers Market Nutrition Programs.

Overall, these funds successfully allowed for the purchase of $685,395.00 worth of fresh, local produce, which represents a 30% decrease from 2019. To address the decrease in spending, MDAR increased the number of coupons distributed in 2021 and the WIC program used enhanced outreach strategies.

In 2021 the USDA FNS awarded Massachusetts with $528,379.00 in federal food dollars to distribute to low-income elders along with $58,709.00 to use to administer the program state-wide. In 2021, 24,780 Massachusetts seniors and disabled individuals participated in the program compared with 22,456 in 2020. Participating elders received a benefit of $25 per person for the 2021 growing season. 70.9% of issued coupons were redeemed at Massachusetts farmers markets and farmstands. This figure is similar to the 70.5% redemption rate in 2020. In 2020, the program utilized 88.7% of the USDA 2021 Food Allocation, as compared to 88.3% of the 2020 Food Allocation. The Senior FMNP home bound delivery program served 4,096 seniors in 2021 throughout the Commonwealth of Massachusetts. 25 Elder Nutrition Programs distributed coupons and produce to seniors and disabled individuals across the state of Massachusetts.

In 2021, The USDA FNS awarded Massachusetts with $662,272 in federal food dollars to distribute to participants in the WIC (Women, Infants and Children) program. The 2021 WIC Farmers’ Market Nutrition Program (FMNP) served 33,847 women, children, and infants over 4 months with coupons to buy fresh produce at farmers markets, which is an increase from the 27,567 served in 2020. 33.2% of WIC FMNP coupons were spent at farmers’ markets and farmstand vendors. That figure is down 4% when compared to last year’s 37.5%. In addition, the program utilized 51% of the USDA FNS 2021 allocated food dollars, which is a slight decrease from the 53.3% utilization rate of the USDA FNS 2020 allocated food dollars. Participants received a benefit of $30 per person for the 2021 growing season.

The program certified 205 farmers’ markets, 110 farmstands, and 399 growers to serve the recipients of the Senior and WIC Farmers Market Nutrition Programs.

Overall, these funds successfully allowed for the purchase of $805,390.00 worth of fresh, local produce, which represents a 14% increase from 2020.
Export Market Development 2020-2021
Bonita Oehlke

MDAR’s export assets include a concentration of seafood processors with a well-managed scallop industry, a growing shellfish aquaculture farming sector, fresh and processed cranberries, and small–medium sized value-added and specialty food producers. These businesses are supported with counseling and technical assistance, trade events, buyer missions, focused trade missions, market research and cost share programs at U.S. and international trade shows.

Major support is provided through membership in Food Export USA Northeast, a Cooperator funded through the USDA Farm Bill Market Access Program (MAP). Commissioner Lebeaux is a board member, leveraging connections to programs and services for Massachusetts food, seafood, and agricultural businesses. Small and medium size businesses can receive 50% reimbursement though the Branded Program for eligible expenses such international marketing and promotion support, trade events and label modification. MDAR has been working with seafood export marketing since 2004.

The 2020 Massachusetts total value of Ag & Related products including seafood was valued at $662.4 M, down 14% from the previous year. Seafood dropped $78M since most products are consumed in restaurants. The processed food category decreased 16%, and totaled $429, representing 65% of the Ag and Related products total, with prepared/preserved seafood representing 42% of the total.

In 2021, the Ag & Related products including seafood totaled $798.2 million, up 20% from the previous year. Seafood exports increased 19% as the foodservice category revived. The processed food category increased 29%, and totaled $551.4 M, representing 69% of the Ag and Related products total. Prepared/preserved seafood exports went up 30%. Source: USDA/FAS/GATS.

Matching grant awards to Massachusetts companies through the Branded program in 2020 totaled $1,264,303, 13% lower than the year before, and in 2021, $1,165,251. With trade shows shuttered, food and seafood company marketing plans had fewer expense categories for booth space, booth design, and travel. MDAR promoted and worked with Food Export USA Northeast on virtual buyer missions, trade missions and consultations, to facilitate supplier/buyer connections and support market research. Many companies pivoted to use Branded funds for international website development, Search Engine Optimization, updates to marketing materials and label changes, for example.

Agricultural Trade Promotion Program (ATP) funds continued to available from the 2019 retaliatory trade tariffs. Considering expectations for the European Union/United States shellfish trade to resume, continued oyster production growth in Massachusetts and the region, and the importance of market options, ATP funds were used to develop an international oyster buyer toolkit. Funds were also used for international marketing of scallops, Jonah Crab, and lobster.

MDAR’s plans with the Division of Marine Fisheries for a Massachusetts Avenue at Seafood Expo North America, Boston, was not held since the event was cancelled in 2020 and 2021.

Besides international trade shows, major U.S. trade events that host international buyers are also eligible for USDA Branded funds, which were on hold during this time. MDAR participated in the virtual Export Expo, coordinated by the MA Export Center. Other partners include the Cranberry Marketing Committee, National Confectioners Association, and the Specialty Foods Association. To participate, products promoted must have at least 50% ingredients grown from the U.S.
Value-Added Technical Assistance 2020-2021

Bonita Oehlke

In 2020 when restaurants closed due to COVID-19, the market for oysters on the half-shell disappeared. Shellfish farmers had a glut of oysters and with many growing to be too large for retail sales. At the same time, the Massachusetts shellfish sector has been expanding quickly: $5M in 2005 to $29M in 2019 (MA Division of Marine Fisheries). There is more supply than demand every autumn. In addition, irregular shaped or large oysters aren’t a good match for the half-shell market. Exploring shucked oyster processing has been considered in the past, but the pandemic made it a priority.

A pilot program led by Barnstable Cooperative Extension, Woods Hole Sea Grant, the Greater Boston Food Bank, and MDAR explored value-added shucked oysters. Several shellfish processing businesses worked to expand their oyster processing capabilities. Pints of value-added frozen shucked oysters were distributed to food banks and pantries, with high acceptance from the recipients. A follow-up retail trial with support from the Massachusetts Aquaculture Association, Barnstable Cooperative Extension, Center Marketing and MDAR showed positive customer responses to pint sized samples of frozen shucked oysters offered at independent seafood retail businesses. The project demonstrated that there is retail demand for this value-added product.

The Massachusetts Food Processors Resource Manual (GUIDE) https://www.mass.gov/forms/the-massachusetts-food-processors-resource-guide, an on-demand tool, was launched in December 2021. Growers looking to add value to their harvest for season extension and diversification, and food entrepreneurs with new products accessed the newly developed GUIDE, funded with a USDA Specialty Crops Block Grant award. The GUIDE provides development technical assistance including food safety training for value-added products. Food safety video topics developed in partnership with UMASS Amherst’s Food Science Department were embedded into the on-line manual, promoting a culture of including food safety in product development from the start. Partners included Kate Minifie, the Western MA Food Processing Center; Kim Concora, Cape Cod Cooperative Extension; Carol Courtrier, Massachusetts Specialty Food Association; Jen Faigel, CommonWealth Kitchen; Chris Laughton, Farm Credit East; Elizabeth Newbold, Northeast Center to Advance Food Safety; Stevie Schafenacker, Community Involvement.

Value added research was a part of a USDA funded Federal-State Marketing Improvement Program grant to explore co-packing opportunities for dairy farmers. Interviews with copackers identified potential partners as well as barriers and opportunities for fluid milk producers with interest in developing products including cheese, ice cream, butter, and yogurt. Working with a co-packing facility can strengthen local processing options for dairy farmers. MDAR has launched a webpage where farmers and service providers can explore resources and find potential co-packers.

Value added food producers and entrepreneurs have access to inspected non-profit shared-use kitchens across the state, including the Dartmouth Grange Kitchen, Commonwealth Kitchen (CWK) in Boston, and the Western MA Food Processing Center in Greenfield. MDAR shared resources with growers and food businesses in response to inquiries relating to product development, processing, copacker contacts,
public health guidelines and business and marketing opportunities. A shared-use kitchen and copacker list is a resource on MDAR’s website.

Marketing beyond the region is typically supported through an MDAR organized MA Pavilion at the Summer Fancy Food Show, however the event wasn’t held in 2020 or 2021. These entrepreneurial small to medium-sized food businesses, an important component of job creation in the state’s food system, worked to develop on-line commerce platforms and join local and regional delivery programs. With schools being closed, food businesses that relied on foodservice sales pivoted to focus on retail venues as well.

Farmer’s Market Program
David Webber

There were 195 farmers markets in 2020, a decrease of 32 markets from 2018. Forty-six winter farmers markets were open during the 2019 - 2020 winter season, down from 53 winter markets in 2018. Although most farmers markets stayed open throughout 2020 and 2021, much of the decrease was due to markets not opening because of the Covid-19 Pandemic.

In the late winter of 2020, Farmers Markets were deemed “essential” by Governor Baker and with guidance issued by MDAR and the Massachusetts Department of Public Health most farmers markets opened for the 2020 season with some modifications from their pre-pandemic format. Modifications implemented by market managers included providing on-line shopping options and pre-order and pick-up, special shopping hours for immunocompromised customers, and reimagined market layouts with 1 entrance/exit, increased spacing between vendors and one-way flow of traffic. Most farmers markets eliminated optional activities such as cooking demos, product sampling, children’s’ activities and music to manage crowds and focus customers on completing their shopping as quick as possible. As the situation improved in 2021, some markets brought back these pre-pandemic activities.

In 2021, market numbers increased to 212 with 36 winter markets open during the 2020 - 2021 winter season. Massachusetts Farmers’ Market Week was held the week first week of August in conjunction with National Farmers Market Week.

Ashland Farmers Market
New Bedford Brooklawn Park Farmers Market
Farmers’ Market Resources

MDAR maintains a comprehensive library of farmers’ market resources on its website for market managers and farmers, including development, regulatory and promotional materials. 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 on the Department’s consumer website, mass.gov/massgrown.

A Farmers’ Market Managers Workshop was held on-line on February 22 and 23, 2021 in conjunction with the Virtual Harvest New England Agricultural Marketing Conference and Trade Show. The planning committee included farmers market partners and organizers from across New England and attracted over 100 market managers from across the region.
SNAP/EBT Use at Farmers’ Markets/Direct Marketing Farmers – Healthy Incentives Program

For federal FY2020, USDA listed 384 Massachusetts farmers and farmers markets as authorized to process SNAP and $5,544,790 in transactions. This is the second highest amount of SNAP benefits redeemed with farmers and markets in the country (after California).

MDAR continues to collaborate with the Department of Transitional Assistance on the Healthy Incentives Program (HIP). HIP matches SNAP recipients purchase of fruits and vegetables from farmers markets, farm stands, CSA’s and mobile markets and instantly applies a credit on the participants’ EBT card, up to $40, $60 or $80 month. HIP rebates earned in State FY2020 totaled $6,957,948 and $8,222,727 in 2021.

Annual Tomato Contest

The 36th Massachusetts Tomato Contest returned on Tuesday, August 24, 2021, after a hiatus in 2020 due to the Covid-19 pandemic. The friendly contest, open to commercial tomato growers, is coordinated by the Massachusetts Department of Agricultural Resources and sponsored by the New England Vegetable and Berry Growers Association in cooperation with Mass Farmers’ Markets and hosted by the Boston Public Market. It is designed to increase awareness of local agriculture.

Seventy-seven entries were received. The tomatoes were judges on flavor, firmness/slicing quality, exterior color, and shape by a panel of judges, including media, chefs, and government officials. First, second, and third place tomato trophies were awarded in all four categories: heaviest, slicing, cherry, and heirloom. The top five in each category were given certificates.

Farm to School Program

David Webber

The Massachusetts Farm to School Project, (MFTS) of which MDAR is a primary sponsor through a budgetary earmark of $120,000, provides technical assistance to Massachusetts farmers and schools and helps to connect Massachusetts farmers with school districts looking for locally grown foods.

Interest in Farm to School activities is strong in Massachusetts. Of the respondents in the latest USDA Farm to School Census, 81.2% of the school food authorities serve local food, 48.5% edible gardens and 23.1% host student field trips to local farms.

In 2020, MDAR partnered with Mass Farm to School to submit a proposal to the USDA Farm to School Grant Program to develop scale appropriate school garden food safety audit tools and provide technical support and training to school garden staff, boards of health and farmers interested in school food sales. Program planning and development of materials started in early 2021 with trainings planned for 2022.
The Boston Public Market officially opened to the public on July 30, 2015. Located at 100 Hanover Street in Boston, in a building owned by the Department of Transportation, the market includes permanent and seasonal vendors which feature foods grown and produced from Massachusetts and New England. Prior to the pandemic, the market was averaging 2.5 million visitors a year.

The Public Market’s Commission’s role is to: Define the mission and vision of a public market in downtown Boston; Confer with participants and parties from the public and private sector involved with the planning, financing, design, and construction of said public market; Work with relevant public and private sector parties to write guidelines for an eventual market operator; Work with the appropriate state agencies to advertise for, and select, a market operator; Define the terms of a lease between the Massachusetts Department of Transportation (MassDOT) and the operator, subject to approval of MassDOT; and Receive and review quarterly updates from the operator on the financial health of the market, its adherence to the mission and other issues as necessary.

The Commission met on the following dates in 2020 and 2021: October 6, 2020, February 9, 2021, and October 25, 2021. Due to the pandemic, meetings were held virtually pursuant to Chapter 639 of the Acts of 1950 and Section 2A of Chapter 17 of the Massachusetts General Laws. The Public Market Commission is chaired by MDAR Commissioner John Lebeaux with 8 members from the following agencies and organizations: Executive Office for Administration and Finance; Executive Office of Energy and Environmental Affairs; The Department of Transportation; State Senate member; State House member; City of Boston Appointee, Boston Planning and Development Agency and Rose Kennedy Greenway Conservancy. During the meetings, the Commission heard updates from Public Market staff, including safety measures implanted in 2020 in response to the Covid 19 pandemic.

The Farm and Market Report

The Farm and Market Report continues to be the Department’s tool to disseminate MDAR information and updates throughout the year. It includes the Commissioner’s Column, program and grant updates, workshop and educational updates, USDA News, along with a Calendar and Classified section. It is distributed via email to the agricultural community in Massachusetts and has over 8000 email subscribers. This outreach list became vital with the impacts of COVID. This Report, as well as timely eblasts, kept the ag industry informed with up to date with information and resources to assist farmers during the shutdowns. We encourage anyone looking for Massachusetts news related to agriculture, to subscribe by sending a request to Rick LeBlanc at Richard.LeBlanc@mass.gov.
The Massachusetts Grown & Fresher Program
Rick LeBlanc

The MassGrown Exchange – This online platform was developed in response to the impacts of Covid shutdowns, which caused interruptions of food supply chains. It allows Massachusetts businesses to post available crops, value added products, and services to connect with potential buyers in the region. Initiated and developed by MDAR and its staff, it was unveiled and launched with Lt. Governor Polito 8/10/20. It connects a range of businesses, not limited to farms, fisheries, food buyers, service providers, schools, supermarkets, and food banks. In 2021, 148 businesses registered, for a total of 370 businesses (67% growth) by year end. There were also 226 products & services listed, with 12,721 email notifications sent, with 30,426 pageviews to the site.

We continue to brand and offer the “MassGrown & Fresher” logo to farms across the Commonwealth. We offer posters, stickers, and price cards. Details and order info here. The logo identifies and promotes crops and products grown in Massachusetts.

“MassGrown & Fresher” webpage: www.Mass.gov/Massgrown. This portal website continues to be a great source of information for the public to learn more about local agriculture, and where to find farms and markets in Massachusetts. It includes timely links, updates, and a Culinary and Ag-tivities Calendar.

The featured MassGrown Map continues to be the most visited webpage with MDAR with over 200,000 queries/searches each year. It maps over 1500 locations of farms, as well as farmers markets and agricultural fairs. The Map is now location specific and mobile-friendly, as it defaults to locations in a 3-mile radius to the user, with options to expand the search. It allows the user to search general categories, or specific crops or products. We continue to promote it thru social media, eblasts, and at a booth in the Massachusetts Building at the annual Big E.
In 2020, MDAR contracted with Outfront Media to produce liveboards throughout the Boston area MBTA train stations. This was funded as part of a Specialty Crop Block Grant award. The liveboards were 10 second ads that ran through 75 screens from 7/20/20 – 9/13/20. The goal to was to promote and raise awareness of specialty crops. It featured the the MassGrown website, [www.Mass.gov/Massgrown](http://www.Mass.gov/Massgrown) as your local Farmers Markets locator.

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2020 /2021 Massachusetts Fairs Annual Report

Fran Pearson, Agricultural Fairs Coordinator

From the Berkshires to Cape Cod, Massachusetts boasts 39 agricultural fairs that offer exceptional local products, farm animal exhibits, horse shows, artisan crafts, fruit & vegetable displays, 4H competitions, children’s activities, and lots of fun for the whole family!

Unfortunately, due to the COVID-19 pandemic, all were cancelled in 2020 and 12 fairs cancelled in 2021.

Commissioner Lebeaux, Deputy Commissioner Ashley Randle along with staff traveled throughout the commonwealth to visit approximately 90% of the states remaining 2021 agricultural fairs. MDAR staff worked closely with the officers of the Massachusetts Agricultural Fairs Association (MAFA) by attending Board meetings as well as assisting with program ideas.

MDAR Marketing staff published a comprehensive list of agricultural fairs that was promoted on the Massachusetts Grown & Fresher website (mass.gov/massgrown). State Rosettes were given to fairs upon request and used to recognize excellence for “Best in Show.”

When funding is available, MDAR allots monies to agricultural fairs and supports 4-H activities at National Competitions.
Eastern States Exposition (The Big E) is an annual event that takes place in West Springfield, MA for 17 days and draws over 1.4 million people. The Massachusetts Building located on the Avenue of States, provides Massachusetts businesses, non-profits, and other entities an opportunity to showcase their products and services through an annual application process.

Unfortunately, due to the COVID-19 pandemic the 2020 Big E fair was cancelled. In order to continue support for the Exhibitors, MDAR staff created a virtual marketplace which encouraged consumers to purchase directly from Exhibitors websites.

Despite the 2020 cancellation and a delayed announcement that the 2021 fair was on and an indoor mask mandate, we were able to pull together a wonderful representation of Massachusetts.

In 2021, we had a total of 36 Exhibitors, which breakdown as follows:

- 6 Informational Government Agencies
- 1 Non-food Government Agency- Lottery
- 6 Food Non-profit/Commodity Groups
- 14 Food For-Profit Vendors
- 9 Non-Food for Profit Vendors

New exhibitors included:

- Macken’s Sliders- Southwick, MA
- Sub Zero Nitrogen Ice Cream- Worcester, MA
- Worcester Woo Sox Baseball- Worcester, MA
- Wagga Tail Boutique- South Hadley, MA

All four new exhibitors were positive additions to the building and were well received by the public. Although many exhibitors return annually and are fairgoer favorites, introducing a few new exhibitors every year keeps the building relevant and exciting.

**2021 Attendance total: 1,498,774**
Capitalizing on the energy of the fair, the Massachusetts Building participated in three special event days: Military Appreciation Day, Massachusetts Day and Harvest New England Day.

Military Day

As in past years, on Military Day two fire trucks from the Holyoke and Springfield Fire Departments suspended a large American Flag over the front lawn in celebration of Massachusetts’ veterans. Several agencies representing veteran services set up under tents on the front lawn for the opportunity to connect with veterans and their families.

Massachusetts Day

Massachusetts Day featured a short speaking program in the morning; Commissioner John Lebeaux took the opportunity to welcome state agencies and government officials. At that time, the 2020 recipient of the Massachusetts Building Wall of Fame award was pothumously in honor of Judy Leabe for her many years of dedication to farming, agriculture and Massachusetts Board of Agriculture. The 2021 Massachusetts Ag Calendar was unveiled, and the photo winners were recognized.

Nine exhibitors set up on the front and side lawns to sample products, sell goods and conduct outreach.

Harvest New England Day

Massachusetts celebrated Harvest New England Day again this year by inviting food and fiber exhibitors to set up on the front lawn and encouraging fairgoers to participate in the passport program. Fairgoers could earn a Harvest New England tote bag by visiting each state and grange building and answering a series of agriculture related quiz questions.

A special thank you to Executive Office of Energy & Environmental Affairs (EEA), Massachusetts Clean Energy Center (CEC), Massachusetts Emergency Management Agency (MEMA), Massachusetts Office of Tourism and Travel (MOTT), Massachusetts State Lottery and MDAR staff Mary Jordan, Deputy Commissioner Ashley Randle, Rick Leblanc, Laurie Rocco, Katie Rozenas Hanson, Phu Mai, Bonita Oehlke, Barbara Hobson for all their assistance in a variety of ways to make the 2021 fair a success.

The Big E Fair continues to be an excellent venue to showcase New England’s heritage, agriculture, industry, education, and family entertainment.

Agricultural Tourism Report 2020/2021

Phu Mai

Like in many other sectors, COVID presented the agritourism industry in Massachusetts with challenges for farms that engage in agritourism programming. At the same time, some agritourism activities like pick-your-own berries and apples provided an opportunity for the public to take part in an outdoor activity with safe social distancing and other safety measures in place (like hand-washing stations, touchless credit card payments, and an online reservation system for crowd control). A September 2020 online article references some of the ways that agritourism farms in Massachusetts were able to adapt...
during the height of the pandemic. In the true spirit of the resilient Massachusetts farmer, they were able to pivot rather quickly to follow new public safety guidelines and allow their operations to remain open for business. As the pandemic hopefully enters a new less severe phase, the public will feel safer to return in bigger numbers in 2022 as the growing season ramps up at agritourism farms across the Commonwealth.

MDAR has done its part in promoting agritourism through its social media channels. As COVID shut down in-person events and trade shows, our public outreach had to adapt, transitioning from face-to-face interactions to virtual advocacy of buying local. Beginning in March 2020, we ramped up our social media content creation, posting multiple times every week on Facebook, Twitter, and Instagram. Over the past two years, our followers, engagement, and impressions online have steadily grown, and staff look forward to continuing to grow our followers participation.

In the Fall of 2020, the Agritourism Study Commission convened with the objective of reviewing national best practices relative to agritourism to apply to Massachusetts and reviewing state and municipal laws and regulations relative to agricultural zoning, policies and grant programs offered by various state agencies including MDAR and the Massachusetts Office of Travel and Tourism. Created by an act of the Massachusetts General Court, the Commission, comprised of and state officials, legislators, and agricultural industry representatives, met over the course of 2021, submitting a final report to the Legislature in early 2022. Recommendations in the final report include adding agritourism language to Massachusetts General Law Chapter 40A, Section 3 (c.40A § 3) and defining the term agritourism which is currently in progress with legislation that was introduced by State Senator Edward Kennedy’s office.
As always, MDAR will continue to be supportive of agritourism initiatives and programming and recognizes its economic benefit to Massachusetts farmers.

Agritourism Study Commission Members and MDAR Staff visit Bradstreet Farm during the summer of 2021 to learn first-hand about the challenges that our farmers faced when implementing agritourism programming on their properties. From L to R: Chris Chisholm (MDAR Staff), Erin Williams (Bogside Acres), Derek Dunlea (Office of State Representative Carole Fiola), Phu Mai (MDAR Staff), Brad Mitchell (MA Farm Bureau), Ashley Randle (MDAR Deputy Commissioner), State Senator Bruce Tarr, Michael Sabatini (Owner), State Senator Edward Kennedy, Tiffany Learned (Events Manager at Bradstreet)

The latest agritourism figures come from the 2017 United States Department of Agriculture Census of Agriculture that was released in 2019:
Agritourism Snapshot from 2017 Ag Census

National Level

1. U.S. agri-tourism had 28,575 farms in 2017 -> down from 33,161 farms in 2012 (-14%)
2. U.S. agri-tourism was valued at $949,323,000 in 2017 -> up from $704,038,000 in 2012 (+35%)
3. U.S. agri-tourism: average farm value in 2017 among participating farms in agri-tourism was $33,222 -> up from 2012 which was $21,231 among participating farms (+56%)

State Level

1. In 2012, MA was the 5th highest state in the U.S. for agri-tourism value per farm among participating farms (#1 New England state)
2. In 2017, MA was the 8th highest state in the U.S. for agri-tourism value per farm among participating farms (#2 New England state behind CT. CT has made big strides and is #2 overall in the nation now, so perhaps there are lessons to be learned from them)
3. MA dropped in this per farm stat national ranking but still gained 34% in average per farm value among participating farms, so this overall positive.
4. Number of farms participating in agri-tourism: 240 farms (287 farms participated in 2012 -> decrease 16.27%)
5. Total MA income from agri-tourism: $13,476,000 ($12,034 income in 2012 -> 11.89%)
6. Average per farm income from agri-tourism among farms who participated in agri-tourism: $56,150 ($41,929 income in 2012 -> increase 33.91%)

Agricultural Education Report 2020/2021

Phu Mai

Interest in agricultural education continues to be strong with student enrollment at the four Agricultural High Schools in the Commonwealth increasing year over year for the past two academic years (except for one where enrollment has stayed the same). These highly specialized public secondary schools provide the future generations with the knowledge and skillset they will need in order to be successful in the agricultural sector, whether it’s learning about farm machinery to animal husbandry.

Student Enrollment at the four Agricultural High Schools

<table>
<thead>
<tr>
<th>Agricultural High School</th>
<th>2020-2021</th>
<th>2021-2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>448</td>
<td>499</td>
</tr>
<tr>
<td>Norfolk</td>
<td>588</td>
<td>588</td>
</tr>
<tr>
<td>Essex</td>
<td>1564</td>
<td>1654</td>
</tr>
<tr>
<td>Smith</td>
<td>528</td>
<td>547</td>
</tr>
</tbody>
</table>

In the Spring of 2021, an MDAR intern was tasked with conducting a feasibility study on an agricultural education conference in Massachusetts. She facilitated meetings with agricultural education stakeholders and led those meetings in gathering information on the state of ag education in the commonwealth. The consensus among those interviewed was that while the idea for a conference
seemed interesting, there was no bandwidth at that current time to participate in a conference with the challenges of hybrid/remote learning and other pandemic-related pressures taking up a lot of time and resources from school districts.

With the onset of COVID, in-person Agricultural Education Youth Organization programming had to be temporarily suspended so annual meetings like the Massachusetts FFA Convention were cancelled in 2020 and 2021. Additionally, Agriculture Day at the State House was cancelled in 2020, 2021, and 2022 so FFA and the 4-H groups have not had the opportunity to work with other agricultural commodity and organizations during their state-awareness day in Boston. Nevertheless, both groups not only emphasize the agricultural heritage of our past but also look to the future and impart relevant real-life skills that will serve members well as they come of age and enter society as prepared young adults. With the return of some in-person programming in 2022, FFA were able to have their annual convention and 4-H recently travelled to their national summit held in Bethesda, MD and are hosting and participating in events across the Commonwealth continuing their involvement in their respective communities.

Furthering Agricultural Education in the Elementary and Secondary Schools.
Massachusetts Agriculture in the Classroom (MAC) is another organization that has worked with MDAR in furthering agricultural education in elementary and secondary schools. In addition to providing grants to teachers, MAC has partnered with MDAR for the past 20 years in producing a hard copy calendar filled with Massachusetts farming landscape photos - all selected via an annual public photography contest. The annual Calendar includes Fun Facts and Teaching Tips for teachers to utilize. Each month is sponsored by a specific Massachusetts agricultural organization including the MA Grange, MA Farm Bureau, MA Flowers Growers Association, MA Maple Association, MA Agricultural Fairs Association, Cape Cod Cranberry Growers Association, MA Fruit Growers, and MA Christmas Tree Growers Association. For 2020 and 2021, 2500 calendars were produced that were sold and distributed to teachers and the general public. As a means of promotion and awareness, MDAR maintains an Agriculture Education website that links to multiple educational organizations and resources throughout the Commonwealth geared towards teachers and educators, students and the general public with ways to volunteer and be involved as well.
The Division of Animal Health’s focus is preventing the introduction or spread of infectious and contagious diseases of domestic animals. This is accomplished through the imposition of health certification, testing and vaccination requirements for animals being imported, transferred within, or simply residing in Massachusetts. Since the level of care an animal receives from its owner can have a direct effect on its immune system and the animal’s susceptibility to illness, animal welfare is an integral component of disease prevention. By partnering with federal, state, and municipal agencies, the Division of Animal Health works to promote and safeguard animal health and welfare in the Commonwealth.

Regulating certain animal-related agricultural activities, which may include the inspection, examination, and licensing of both food-producing and companion animals, provides additional oversight where there may be increased risk to animal or human health. The Division licenses, inspects, or registers dairy farms (both raw and pasteurized producers), commercial cattle, poultry, and swine operations, as well as racehorses and equine riding stables, pet shops, and animal rescue shelters. Additionally, the Division prepares emergency response plans for disease outbreaks in livestock or poultry, and emergency sheltering plans for companion animals affected by natural disasters or other emergencies. Further, the Division is also responsible for providing training to municipal animal inspectors and animal control officers, on these and other related matters.

The COVID-19 pandemic in 2020 and 2021 presented some significant challenges to the Division of Animal Health since many of our duties were deemed “essential”. The care of live animals could not be shut down or put on lockdown, so many of the businesses that we license and inspect remained open. The production of food, including milk and meat, continued throughout the pandemic despite disruptions in the system due to illness in truck drivers and at processing plants. Some inspections and testing could be delayed, like poultry testing for exhibition purposes, since all the fairs were being canceled. Among other duties, Division staff still had to respond to sick animal calls, pet shop and animal shelter complaints, and raw milk testing at dairy farms. All this work had to continue even though many of the comforts of a normal workday were removed, including grabbing lunch at a local restaurant, or finding a public bathroom while on the road. The seismic shifts for office staff were equally challenging. With the help of the Department’s Information Technology team all office staff had to set up a home office, with connections to the Department’s computer network. Though the transition wasn’t exactly smooth, the team adjusted, and the work got done. In fact, the transition was so successful that the Governor has decided to make the hybrid work model permanent, even after the pandemic has ended.

The Division of Animal Health is comprised of 20 full time employees, including two veterinarians, program managers, inspectors, and administrative support staff. Staff deal with issues related to all domestic animals, from cats to cattle. The Division of Animal Health works with officers from the MSPCA, Animal Rescue League of Boston, and local police departments to address matters involving animal cruelty, as those are criminal offenses that require attention from law enforcement. Additionally, the Division receives some funding through cooperative agreements with the United States Department of Agriculture to address animal health issues that are important locally, nationally, and even internationally (see chart below). Disease surveillance and response efforts, including Avian Influenza, African Swine Fever, and other foreign animal diseases have the potential to be catastrophic to Massachusetts agriculture but also could impact interstate and international trade. Cooperating with
the USDA to mitigate the risk of these diseases and sharing responsibility for response should they be detected here ensures the least impact to animal owners and their business. For 2020 and 2021:

<table>
<thead>
<tr>
<th>Cooperative Agreement</th>
<th>2020 FUNDING</th>
<th>2021 FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Disease Traceability</td>
<td>$55,462</td>
<td>$55,462</td>
</tr>
<tr>
<td>Active and Passive Surveillance for the avian program (formerly Notifiable Avian Influenza) and Annual Livestock Inventory (Barn Book) Data Entry</td>
<td>$103,375.97</td>
<td>$101,540.82</td>
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<tr>
<td>Foreign Animal Disease Prevention (including Scrapie Prevention Program)</td>
<td>$10,244.54</td>
<td>$7,579.20</td>
</tr>
<tr>
<td>Swine Garbage Feeding Surveillance</td>
<td>$14,111.49</td>
<td>$14,046.16</td>
</tr>
<tr>
<td>All Non-Avian Foreign Animal Disease (including Small Ruminant, Bovine, Swine, One Health)</td>
<td></td>
<td>$3,905.82</td>
</tr>
</tbody>
</table>

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

Animal Imports and Livestock Markets / Animal Disease Traceability

Carry Shulock-Sexton

All livestock, horses, poultry, waterfowl, and other animals, including cats, dogs and other pets entering Massachusetts from other states must comply with Commonwealth regulations that require an official Certificate of Veterinary Inspection stating the animal is healthy prior to travel, plus official, individual identification for livestock. Additionally, some species may require certain testing to ensure negative status for diseases of concern depending on their state of origin. Exhibition animals shown in Massachusetts also must comply with health certificate and identification rules, ensuring the health of animals coming together for fairs and shows. These measures significantly reduce the possibility of introducing contagious disease to the Commonwealth’s domestic animal population.

As part of the Animal Disease Traceability program, the Division distributed 1755 swine tags and 3050 bovine tags to producers and veterinarians in 2020-2021. 175 Scrapie prevention program tags for sheep and goats were distributed and 27 flocks were referred to USDA APHIS for flock identification.
numbers and tags. Education and outreach efforts focused on biosecurity and transitioning to the use of electronic (RFID) livestock tags. An additional 1245 premises identification numbers (PINs) were created for Massachusetts livestock owners and producers over 2020-2021, allowing them to purchase and utilize electronic ID. The Division also provides technical assistance to Massachusetts accredited veterinarians upgrading to electronic test records and certificates of veterinary inspection and distributed 8 RFID readers/wands to veterinarians over the two-year period. MDAR implemented new software to facilitate the management of health certificates, including those for companion animals, in April 2021.

In addition, livestock and poultry dealers and transporters are licensed and their equipment and facilities are inspected. In 2020 (2021) there were 26 (31) licensed livestock dealers, 4 (8) licensed equine dealers, in Massachusetts. COVID-related limitations are considered to have led to decreased numbers of license applications during this timeframe.

**Dairy Program**

**John Nunes**

The Dairy Program ensures a healthy environment for livestock and a safe, high-quality supply of milk at fair prices for consumers, processors, and dairy farmers. This requires careful inspection and monitoring to enforce the relevant federal and state laws and regulations. The Program monitors milk production, hauling, distribution, 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 2020 there were 114 bovine farms and 9 caprine farms certified as dairies. At the end of 2021 there were 109 bovine dairy farms and 7 caprine and 1 ovine dairy farm.

**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 standard, this last part is especially important for farms selling raw milk retail at the farm premises directly to consumers, without the benefit of pasteurization, which kills most of the harmful bacteria, that is found in raw milk.

<table>
<thead>
<tr>
<th>ENFORCEMENT ACTION</th>
<th>2020</th>
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<tbody>
<tr>
<td>10-day Letter of Warning</td>
<td>6</td>
<td>5</td>
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<tr>
<td>2 out of 4 Letters of Warning</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>3 out of 5 Shut-Off Orders</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Cease and Desist</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>Antibiotic Residue Shut-Offs</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**Equine Program**

**Michael Gold**

Massachusetts Department of Agricultural Resources Annual Report 2020-2021
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 hayrides, 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.

In 2020, the Program administered 111 exams and in 2021 that number had increased to 153 indicating that we were beginning to return to our pre-pandemic levels which hovered between 190 and 200 exams annually. These figures are based on a strict calendar year as our testing regime runs from March to December each year.

In 2020, there were a total of 2,239 licensed riding instructors and in 2021 that number decreased slightly to 2,192. This represents a small decrease in 2020 and 2021 below pre-pandemic levels. It is possible that this is just a continuation of the annual decrease in licensed instructors and not a pandemic initiated trend. In 2018 we had a high of 2,348 instructors up from 2,312 in 2017 and have since declined slightly by about 2 percent annually. The Department licensed 424 Riding Stables in 2020, and 459 in 2021. All figures for stables and instructors are based on the licensing period running from April 1st to March 31st each year.

Enforcement Actions

In 2020, the Division issued five warning letters for regulatory violations, one of which resulted in prompt correction and compliance, and license renewal. Two other stables opted to go out of business. One stable was issued an order to cease and desist. The remaining stable has continued to struggle with compliance issues and further enforcement action is underway. Two operations were issued orders to cease and desist for operating without a license. Neither has completed the licensing process yet.

In 2021, one licensed stable was issued a warning letter for regulatory compliance issues. That stable has yet to correct the problems, and additional enforcement action is pending. Three other operations were issued orders to cease and desist for operating a stable without a license and for providing instruction without a license. One of those stables completed the licensing process and had gained compliance. The other two operations have not completed the licensing process.

Homeless Animal Prevention and Care Fund Program

Sheri Gustafson

The Homeless Animal Prevention and Care Fund (Mass Animal Fund), administered by the Division of Animal Health, seeks to respond to the Commonwealth’s ongoing problem of animal homelessness by providing no-cost spay/neuter/vaccination resources for homeless dogs and cats in municipal animal control facilities, for dogs and cats owned by low-income Massachusetts residents, and for feral cats. The Fund also provides free training opportunities and support to Massachusetts Animal Control Officers (ACO) so they can better serve their communities and provide uniform enforcement of animal control laws.
Since its inception in 2012, the Fund has acquired $3,364,094 to help address the needs of cats and dogs in the Commonwealth. The Massachusetts Animal Fund relies on donations from Massachusetts taxpayers, who have contributed 86% of this revenue through voluntary donations on Line 33f of the Massachusetts Income Tax Return and online giving. In 2020, the Fund received $370,686 in donations and in 2021 donations received were $422,405. Additional funding has been provided through Commonwealth of Massachusetts Budget Line Items of $50,00 in 2020, and $100,000 in 2021.

The Mass Animal Fund Spay/Neuter/Vaccination Voucher Program sent its first voucher in July 2014; since then, the program has disseminated 20,340 vouchers and has provided no-cost assistance to 15,487 animals through one of 58 veterinary providers/municipal partners across the state. The Fund’s veterinary network completed 1,067 voucher surgeries in 2020 and 2,054 in 2021. The largest population served was dogs and cats from low-income households (79%), followed by animals in municipal care (20%) and feral cats (1%). The most surgeries completed were on female cats (29%), followed by male cats (28%), female dogs (23%), and male dogs (20%). Reimbursement rates for surgeries were raised in January 2019, and the average cost of surgery is now $157 for standard surgeries and $209 for emergency surgeries. In 2020 and 2021, the Fund distributed spay/neuter/vaccination assistance to local animals in need totaling $508,255 of which $114,190 was spent on animals in emergency situations.

The Fund rolled out the Animal Control Officer Core Competencies Training Program in the March of 2016. During the first six years of the program, 660 commonwealth ACOs were trained in the areas of animal laws in Massachusetts, emergency preparedness, animal behavior/safe handling, communication/ officer safety, and report writing /record keeping. Continuing education course options were rolled out beginning in August 2016 and since the Fund has approved over 250 courses for continuing education credit. ACOs in Massachusetts completed 2,770 hours of continuing education in 2020 and 5,471 hours in 2021.

Municipal Animal Inspector Program

Ashley Kraft

The Division of Animal Health is responsible for appointing municipal animal inspectors for each and every city and town in the Commonwealth. These inspectors act as agents of the Division of Animal Health in the communities they serve. The primary duty of the municipal inspector involves issuing quarantines to owners of animals that have been exposed to or are potentially spreading the rabies virus. The other major role the inspectors fulfill for the Division is conducting the annual inspections of all domestic livestock and poultry housed on properties in their respective towns. These inspections are a part of MDAR’s disease surveillance system and assist in ensuring animal owners provide basic necessities for the animals in their care. Additionally, the information the Division receives through these inspections assists in the development of emergency response plans for disease outbreaks or other disaster situations. Municipal Animal Inspectors may be called upon to serve as first responders in implementing these plans at the local level. At the end of 2021 there were 519 municipal animal inspectors appointed to fulfill the above duties for cities and towns across the Commonwealth.

Pet Shop Program

Elsie Colon
The Division of Animal Health has the statutory responsibility to license all pet shops. In 2020 there were 138 duly licensed pet shops, and in 2021 that number decreased to 132. Inspections are required for licensure and for subsequent annual license renewals of all Massachusetts pet shops. Each establishment must meet strict facilities requirements designed to maximize sanitary conditions that promote animal health. These requirements are in place to protect the health of the animals, as well as that of the visiting public and the employees who work in these shops. In 2020 the Department discovered 4 entities operating pet shops without the required license. In 2021 an additional 5 entities were found operating without the required license. All were issued an Order to Cease and Desist and were required to come into compliance before continuing activities. Fines were issued on 5 different occasions to licensed pet shops found in violations of the regulations in 2020, and on 40 different occasions in 2021.

Poultry Program
Megan Megrath

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

Massachusetts law requires live poultry and hatching eggs moving within the Commonwealth to originate from flocks tested for and confirmed free of Salmonella pullorum bacteria. This annual testing is performed by the Division of Animal Health. Other testing available to Massachusetts poultry producers include Avian influenza, Mycoplasma gallisepticum, M. synoviae, and M. meleagradis.

A total of 5,825 birds were tested for the presence of Salmonella pullorum in 2020. This number is significantly lower than usual due to Covid 19 restrictions. During 2020, the Division of Animal Health continued to test flocks actively participating in the National Poultry Improvement Plan. Flocks selling or moving poultry were also tested for compliance with state law. The number of Salmonella pullorum tests increased to 8,527 in 2021, as Covid 19 restrictions eased. During those two years the number of premises housing those birds increased from 153 to 323. As is always done through our cooperative agreements with the United States Department of Agriculture (USDA), 10% of the samples drawn from each premises were also screened for Avian Influenza. In 2020, that represented 890 tests, and 2,659 tests for 2021.

Under the National Poultry Improvement Plan (NPIP) Avian Influenza (AI) screening is required at different intervals for different flock types. Massachusetts has two game bird flock (pheasants) participating under NPIP. In November of 2020 a new NPIP subsection for gamebird breeders become official. Both of our gamebird breeder/grower flocks were enrolled in the new Part 145 Subsection J and removed from Part 146. Avian influenza testing is now required every 90 days for breeders and RFR
gamebird flocks. This change resulting 150 samples in 2020 and increasing to 190 samples in 2021. In 2020 and 2021 participants enrolled in the H5/H7 Avian Influenza Clean program increased from 2 to 7 and resulted in an additional 190 AI samples submitted by the Department. Their testing regimen allowed them to expand their customer base by satisfying the import requirements for Avian Influenza testing across the country. This resulted in an additional 447 AI samples submitted by the Department. Massachusetts’ largest commercial egg producer is participating in NPIP in order to export shell egg product. Participation in this program classification generated 450 samples in 2020 and 2021 for AI and also allows them to meet the requirements for shipping spent hens to market, a significant financial benefit.

Additionally, two commercial turkey farms requested enhanced testing during both years, which resulted in another 600 samples for Mycoplasma gallisepticum, 200 samples for M. synoviae and 200 for M. meleagidis.

Screening tests for salmonella pullorum identified 4 flocks with a total of 4 suspect/positive birds in 2020. After further testing no salmonella was isolated from any of the birds. In 2021 the number of suspect/positive flocks increased slightly to 7 with 10 suspect/positive birds. A total of 4 birds were submitted for necropsy, no salmonella was isolated from those birds. Follow up testing on all other suspect birds was negative.

During 2020 office staff received 37 calls from flock owners reporting sick poultry in their flocks. In 2021 that number dropped slightly to 35. These calls are screened using an intake form developed by the poultry staff. The questions on the intake form are designed to gauge the severity of the illness in the poultry flock and evaluate the possibility of a flock infected with Avian Influenza. Once the intake form is sent to the poultry staff, the staff speaks with the flock owners. The majority of the calls received involved flocks most likely infected with Mycoplasma Gallisepticum, a respiratory disease, the virus Mareks disease, or Coccidiosis a protozoal gastrointestinal parasite. Several calls revealed issues with flock management and predation. Animal Health staff were able to help the owners correct these problems through education, ensuring an increased awareness of animal welfare.

The NPIP Program has maintained steady participation. In 2020 there were a total of 48 flocks, and that number increased slightly to 54 flocks in 2021. Twenty-three of the Massachusetts participants took advantage of the electronic import/export certificates in 2020, that number had increased to 25 participants by the end of 2021. This feature has benefited the program by reducing the amount of work required to file the hard copy forms. The electronic forms have also facilitated tracking import/export of poultry in Massachusetts for program participants. The database is easily searchable and capable of generating reports of various types. For instance, there were 249,310 total hatching eggs/live poultry imported into MA in 2020, and 330,862 in 2021. This number does not include the poultry imported on paper forms. In 2020, Massachusetts producer’s using the electronic forms produced 47,507 birds for export and 25,499 hatching eggs. In 2021 Massachusetts poultry producers exported 52,469 birds and 28,620 hatching eggs. During 2020-2021 MA producers hatched 33,754 birds that were sold within the Commonwealth.
**Rabies Program**  
Ashley Kraft

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

In 2020 there were 946 reported bite incidents involving domestic animals and humans. That number increased to 2375, in 2021. In 2020, 764 domestic animals had possible exposures to rabies through contact with wildlife or received wounds of unknown origin that appeared to be from a fight with another animal. 1,012 domestic animals had possible exposures in 2021. Some of the wildlife involved in those exposure cases were submitted for rabies testing at the Massachusetts Department of Public Health’s Rabies Laboratory. 126 animals tested positive in 2020, and 137 animals tested positive in 2021.

To enhance the numbers of vaccinated domestic animals in Massachusetts, the Rabies Program has implemented a user-friendly registration system for municipalities and entities holding rabies vaccination clinics. Registered clinics are posted on the MDAR website at http://www.mass.gov/eea/agencies/agr/animal-health/rabies-control-program/. In 2020, there were 15 rabies vaccination clinics promoted through this service. In 2021, that number dropped to 12.

**Reportable Disease Program**  
Elsie Colon

Reportable diseases include foreign animal diseases that are not currently affecting the state, diseases that have serious consequences to public or animal health, and diseases that MDAR has either previously eradicated from Massachusetts or is very close to eradicating. Veterinary practitioners are required to report suspected or positive cases of these diseases promptly to the Division of Animal Health. The Division seeks early detection in order to mount a rapid response in an effort to reduce the number of animals and animal owners affected by a disease outbreak.

In addition to the rabies cases mentioned previously, there were 41 suspected or confirmed cases of reportable diseases in 2020, and an additional 146 reported in 2021, including the following:

<table>
<thead>
<tr>
<th>2020 CASES</th>
<th>DISEASE</th>
<th>ANIMAL(S) IMPACTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Parvovirus</td>
<td>dog</td>
</tr>
<tr>
<td>4</td>
<td>Leptospirosis</td>
<td>dog</td>
</tr>
<tr>
<td>0</td>
<td>Canine Influenza</td>
<td>dog</td>
</tr>
<tr>
<td>0</td>
<td>Panleukopenia</td>
<td>cat</td>
</tr>
<tr>
<td>1</td>
<td>Canine Distemper</td>
<td>dog</td>
</tr>
<tr>
<td>4</td>
<td>Strep equi (Strangles)</td>
<td>horse</td>
</tr>
<tr>
<td>0</td>
<td>Feline Calicivirus</td>
<td>cat</td>
</tr>
<tr>
<td>0</td>
<td>Eastern Herpes Virus-1</td>
<td>horse</td>
</tr>
<tr>
<td>0</td>
<td>Brucellosis</td>
<td>dog, goat</td>
</tr>
<tr>
<td>0</td>
<td>Erysipelas</td>
<td>swine</td>
</tr>
<tr>
<td>1</td>
<td>Potomac Fever</td>
<td>horse</td>
</tr>
</tbody>
</table>
Shelter and Rescue Program

Patricia Cabral

The Division of Animal Health’s Animal Shelter and Rescue Program ensures the health and safety of companion animals being offered for adoption to the public. The Division of Animal Health licenses individual animal shelters and rescue groups who operate within Massachusetts and those that import and adopt animals into Massachusetts from other states. The Division responds to reports of infectious or contagious disease found in imported animals, or disease outbreaks occurring at local shelters. The Department also fields complaints from adopters who receive animals with concerning physical or mental health issues.

Since many animals that wind up in shelter and rescue channels have had little or no veterinary care, this disadvantaged portion of the domestic animal population requires greater attention. In March of 2020, the Division of Animal Health promulgated 330 CMR 30.00, the regulations for operating animal shelters and rescues in Massachusetts. These regulations replaced the outdated Animal Health Order issued in 2005. The new rules added several requirements for shelters and rescues, including vaccination and testing for certain diseases; behavioral observations and disclosure of any concerning behaviors noted; a requirement that all animals have to be examined by a veterinarian prior to adopting them out;

<table>
<thead>
<tr>
<th>CASES</th>
<th>DISEASE</th>
<th>ANIMAL(S) IMPACTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Babesia</td>
<td>dog</td>
</tr>
<tr>
<td>0</td>
<td>Listeria</td>
<td>goat</td>
</tr>
<tr>
<td>1</td>
<td>Canine Distemper</td>
<td>dog</td>
</tr>
<tr>
<td>0</td>
<td>Johnes</td>
<td>cattle</td>
</tr>
<tr>
<td>4</td>
<td>Equine Coronavirus</td>
<td>Horse (3 positive, 1 suspect)</td>
</tr>
<tr>
<td>1</td>
<td>Tularemia</td>
<td>cat</td>
</tr>
<tr>
<td>0</td>
<td>Mycobacterium</td>
<td>swine</td>
</tr>
<tr>
<td>0</td>
<td>West Nile Virus</td>
<td>horse, alpaca</td>
</tr>
<tr>
<td>0</td>
<td>Equine Viral Arteritis</td>
<td>horse</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2021 CASES</th>
<th>2021 DISEASE</th>
<th>ANIMAL(S) IMPACTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>Parvovirus</td>
<td>dog</td>
</tr>
<tr>
<td>35</td>
<td>Leptospirosis</td>
<td>dog</td>
</tr>
<tr>
<td>0</td>
<td>Canine Influenza</td>
<td>dog</td>
</tr>
<tr>
<td>5</td>
<td>Panleukopenia</td>
<td>cat</td>
</tr>
<tr>
<td>3</td>
<td>Canine Distemper</td>
<td>dog</td>
</tr>
<tr>
<td>9</td>
<td>Strep equi (Strangles)</td>
<td>horse</td>
</tr>
<tr>
<td>13</td>
<td>Feline Calicivirus</td>
<td>cat</td>
</tr>
<tr>
<td>2</td>
<td>Equine Herpes Virus-1</td>
<td>horse</td>
</tr>
<tr>
<td>0</td>
<td>Equine Herpes Virus-4</td>
<td>horse</td>
</tr>
<tr>
<td>0</td>
<td>Eastern Equine Encephalitis</td>
<td>horse, goat</td>
</tr>
<tr>
<td>1</td>
<td>Brucellosis</td>
<td>dog</td>
</tr>
<tr>
<td>0</td>
<td>Potomac Fever</td>
<td>horse</td>
</tr>
<tr>
<td>0</td>
<td>Listeria</td>
<td>goat</td>
</tr>
<tr>
<td>3</td>
<td>Canine Distemper</td>
<td>dog</td>
</tr>
<tr>
<td>0</td>
<td>Johnes</td>
<td>cattle</td>
</tr>
<tr>
<td>0</td>
<td>Equine Coronavirus</td>
<td>horse</td>
</tr>
<tr>
<td>0</td>
<td>Mycobacterium avian</td>
<td>swine</td>
</tr>
<tr>
<td>0</td>
<td>Contagious Echthyma</td>
<td>goats, sheep</td>
</tr>
</tbody>
</table>

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required spay and neuter surgeries for healthy animals; and maintenance of records for all of the animals handled. The rules are in place serve as protection to the Commonwealth’s resident animal population, the animals being handled within the shelter and rescue community, and the humans who seek to help them through adoption. For more information, see https://www.mass.gov/animal-shelter-and-rescue-program

The Department witnessed a huge spike in pet adoptions during the pandemic. During lockdown, many families felt it was an ideal time to bring a pet into their home. The increase in demand for pets was met by start-up rescue groups translocating animals across the country. A significant shift was noted over 2020 and 2021 in the primary sources of animals. In years past, most imports were coming from shelters along the east coast from Tennessee to the Carolinas. Through the pandemic, more animals were originating from Texas. Many of the groups from Texas seem to be unaware of the regulatory requirements in place here in Massachusetts.

ENFORCEMENT ACTIONS
In 2020, there were 441 registered shelters and rescues operating in Massachusetts and in 2021 that number increased to 448. In response to becoming aware of shelters and rescues that had failed to obtain a license from the Department and operate in compliance with the regulations, the Division issued 6 Orders to Cease and Desist in 2020 and another 8 in 2021. Administrative fines were issued to 3 groups in 2020 and another 4 groups in 2021. 3 of the fines were issued to registered organizations that failed to comply with the requirement to isolate imported animals for 48 hours, and the other 4 were organizations that violated an Order to Cease and Desist operations without a license.

Swine Program
Elsie Colon

The Swine Program includes permitted garbage feeders, licensed swine dealers, as well as Classical Swine Fever, Brucellosis and Pseudorabies testing. The word “garbage” is defined as any food waste containing meat scraps. With the required permit, swine farmers can collect garbage from restaurants, schools and other food establishments and use those materials to feed their herds, so long as it is re-cooked before serving to the animals. This can serve as a viable nutrition source for swine herds; farmers can sometimes be paid to haul off or receive for free this feed for their animals; and is an environmentally friendly means of recycling food waste. Such activities require a permit from both the Division of Animal Health and USDA/APHIS Veterinary Services. The issuance of this permit requires a facility inspection and garbage cooker temperature check. All garbage, regardless of previous processing, must be heated to 212 degrees Fahrenheit for a minimum of 30 minutes prior to being fed to swine. These strict regulations were implemented to mitigate the risk of disease transmission associated with feeding meat scraps to swine herds. In 2020, 13 permits to feed garbage were issued to swine operations in the Commonwealth. In 2021, 7 total permits were issued.
Division of Crop and Pest Services
Taryn LaScola

The Division of Crop and Pest Services has four programs within the Division. They are the following:
1. **Farm Products and Plant Industries**: oversees the inspection and licensing of farm products, plant industries, under Chapter 128 and its accompanying regulations.
2. **Pesticides**: regulates all pesticide use within the Commonwealth. It also is responsible for the registration and licensing of pesticide products, commercial applicators, and certain pesticide uses.
3. **Apiary**: ensures the health of the Massachusetts Honeybee population by inspection.
4. **Hemp Program**: oversees the inspection and licensing of individual growing and processing hemp.

Farm Products and Plant Industries Program
The Farm Products and Plant Industries (FPPI) Program staff supports multiple programs based upon seasonal or workload needs, including nursery inspection, CAPS, and feed and fertilizer programs. In many cases, inspectional staff members provide coverage for programs outside of their primary area of responsibility, which results in more effective program administration. FFPI works cooperatively with USDA and UMASS Extension on different aspects of the program.

The FPPI Program had a challenging year, with staff fluctuations and meeting the demands of the industry. Demand for inspection of farm products, nurseries, and greenhouses remains 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 several diversified quality-control programs for farm products and nursery stock, including Truth-in-Labeling Laws on fruit, vegetables, commercial feed, pet food, fertilizer, lime, and seeds.

Fertilizer Program
Howard Vinton

**2020**
MDAR was unable to produce statics for 2020. Due to COVID-19 samples were not collected.

**2021**
Approximately 560 companies were issued licenses to manufacture and distribute fertilizer in Massachusetts, and over 5865 products were registered as specialty fertilizers. A total of 276 fertilizer samples were collected and tested.

Feed Program
Howard Vinton

**2020**
The Feed Program reviewed and registered 16,793 products while registering 662 companies. There were 249 feed products sampled for crude protein, crude fat, and crude fiber under the Truth in Labeling law.
A total of 412 feed products were found to not be registered. There were 67 warning letters sent to companies for unregistered products and for label violations or unapproved ingredients.

**2021**

The Feed Program reviewed and registered 16,896 products while registering 689 companies. There were 241 feed products sampled for crude protein, crude fat, and crude fiber under the Truth in Labeling law. A total of 269 feed products were found to not be registered.

**Nursery Inspections**

**Howard Vinton**

The Nursery Inspection Program requires the inspection and certification of nurseries and greenhouses in the state. All known growers and agents are required to be licensed and must renew annually. A grower’s certificate is required to sell, exchange, give, deliver, or ship within the commonwealth any tree, shrub or plant commonly known as nursery stock. An agent’s license is issued to those who buy and sell nursery stock from certified nurseries throughout the country.

**2020**

There were 3 inspectors on staff that conduct annual inspections of all certified nurseries in the Commonwealth to ensure that they are free of insects and plant diseases for half of the year. MDAR registered 156 nurseries with all inspected between June and September 2020.

The Department licensed 1106 agents and 156 growers. The Inspectors conducted 176 nursery inspections. During these inspections, the following issues were found:

- Anthracnose
- Black Spot
- Black Vine Weevil
- Cedar Apple Rust
- Daylily Rust
- Gypsy Moth (damage observed was much lower than the last few years)
- Lily Leaf Beetle
- Willow Leaf Beetle
- Powdery Mildew (very heavy this year)
- Scorch (Later in season)
- Tar Spot
- Viburnum Leaf Beetle
- Winter Damage
- Leaf spot
- Galls
- Tent caterpillars
- Aphids
- Leafminer damage
- Daylily Streak
• Leaf curling (symptom of disease or pest)
• Japanese Beetle
• Sun scorch
• Tip blight

3 stop sales on prohibited plants. Stop Sales issued on the following:
• Norway Maples (Acer platanoides)
• Creeping Jenny (Lysimachia nummularia)
• Japanese Honeysuckle (Lonicera japonica)

MDAR issued 103 Ribes permits.

MDAR assisted the USDA with a trace forward of plants from Michigan that may have been infected with Ralstonia solanacearum. MDAR staff visited several locations in Massachusetts that had received potentially infected plants and assisted USDA staff with removing and discarding several thousand plants.

During the Fall of 2020, several Spotted Lanternfly (SLF) insects were found throughout Massachusetts. Most of these insects were dead. Nursery inspectors assisted the CAPS program in identification, surveying, and outreach for several of these findings. During this time SLF was not found to have established a population in Massachusetts. It was determined that the individual insects found were hitchhikers from other states.

2021
There were 3 inspectors on staff that conduct annual inspections of all certified nurseries in the Commonwealth to ensure that they are free of insects and plant diseases for half of the year. MDAR registered 156 nurseries with all inspected between June and September 2021.

The Department licensed 968 agents and 152 growers. The Inspectors conducted 129 nursery inspections. During these inspections, the following issues were found:

• Anthracnose
• Black Spot
• Black Vine Weevil
• Cedar Apple Rust
• Daylily Rust
• Gypsy Moth (light compared to past years)
• Lily Leaf Beetle
• Willow Leaf Beetle
• Powdery Mildew
• Scorch (Later in season)
• Tar Spot
• Viburnum Leaf Beetle
• Winter Damage
• Leaf spot
• Galls
• Tent caterpillars
• Aphids
• Leafminer damage
• Daylily Streak
• Leaf curling (symptom of disease or pest)
• Japanese Beetle
• Sun scorch
• Tip blight

It should be noted that Beach Leaf Disease and Boxwood Blight was found at a few nurseries in several counties. Plants that had Boxwood Blight were destroyed.

27 stop sales on prohibited plants. Stop Sales issued on the following;

- Creeping Jenny (Lysimachia nummularia)
- Japanese Honeysuckle (Lonicera japonica)
- Gooseberries, Black Currants, Red Currants (Ribes sp.)
- Parrot Feather (Myriophyllum aquaticum)
- Oriental Bittersweet (Celastrus orbiculatus)

MDAR issued 26 Ribes permits.

**Federal and State Phytosanitary Inspections:**

**Howard Vinton**

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

In cooperation with USDA-APHIS Plant Protection and Quarantine, MDAR conducts phytosanitary inspections and issues federal and state certificates.

**2020**

MDAR staff issued federal phytosanitary certificates for plant material being shipped to the following countries:

Australia (25), Austria (1), Belgium (11), Bermuda (3), Bulgaria (2), Canada (120),
Cayman Islands (1), China (41), Czech Republic (6), Dominican Republic (11), El Salvador (3), Finland (12), France (17), Georgia (1), Germany (46), Honduras (12), Hungary (10), Iceland (1), Indonesia (9), Ireland (1), Israel (1), Italy (7), Japan (17), Republic of Korea (40), Latvia (1), Lithuania (3), Mexico (17), Netherlands (66), New Zealand (8), Poland (4), Russian Federation (2), South Africa (1), Spain (6), Sweden (2), Switzerland (1), Taiwan (2), Trinidad and Tobago (3), United Kingdom (42), Vietnam (2)

MDAR staff issued state phytosanitary certificates for plant material being shipped to the following states:
California (706), Florida (4), Hawaii (2), New Jersey (3), Oregon (317), Texas (8), Utah (16), Washington (538)

* The number after each indicates how many phytosanitary certificates were issued from Massachusetts to that country or state during 2020.

2021

MDAR staff issued 576 federal phytosanitary certificates for plant material being shipped to the following countries:
Argentina (2), Australia (27), Austria (6), Belgium (8), Canada (149), China (45), Costa Rica (1), Czech Republic (8), Denmark (1), Dominican Republic (1), El Salvador (1), Estonia (3), Finland (3), France (26), Germany (42), Greece (1), Hungary (5), Indonesia (3), Ireland (1), Israel (6), Italy (3), Japan (19), Republic of Korea (53), Latvia (5), Lithuania (3), Malta (2), Marshall Islands (1), Mexico (45), Netherlands (57), New Zealand (4), Peru (2), Poland (7), Romania (3), Russian Federation (8), Slovakia (3), Slovenia (1), Spain (3), Sweden (7), Switzerland (4), Taiwan (4), United Kingdom (34)

In 2021 MDAR staff issued 1743 state phytosanitary certificates for plant material being shipped to the following states:
Alaska (1), California (835), Colorado (9), Florida (3), New Jersey (4), Oregon (313), Puerto Rico (1), Texas (3), Utah (8), Washington (574)

* The number after each indicates how many phytosanitary certificates were issued from Massachusetts to that country or state during 2021.

During the 2021 growing season, MDAR inspectors followed up on two trace forward reports for Phytophthora ramorum. In total four sites were visited, and five samples were collected. All samples came back negative for P. ramorum.

Several Spotted Lanternfly (“SLF”) insects were reported in Massachusetts. Most of these insects were dead. Nursery inspectors assisted the CAPS program in identification, surveying, and outreach for several of these findings. In the fall of 2021, the state of Massachusetts identified their first breeding population of SLF. MDAR and USDA worked together conducting grid surveys around the infestation. Several infested trees were treated and removed in the immediate vicinity of the initial infestation.
Cooperative Agricultural Pest Survey (Caps)
Joanne Klein

The Cooperative Agricultural Pest Survey (CAPS) program is a partnership between states and the United States Department of Agriculture Animal and Plant Health Inspection Services (USDA-APHIS) to detect and monitor for exotic insects, plants, and pathogens.

2020

In 2020, the CAPS program conducted the following survey work:

Forest Pest Survey: Traps were deployed at 40 sites in 11 counties.

<table>
<thead>
<tr>
<th>Target</th>
<th>Traps</th>
<th>Collections</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thamatopoea processionea</td>
<td>40</td>
<td>283</td>
<td>0</td>
<td>283</td>
</tr>
<tr>
<td>Leucoptera malifoliella</td>
<td>40</td>
<td>314</td>
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<td>314</td>
</tr>
<tr>
<td>Trichoferus campestris</td>
<td>40</td>
<td>169</td>
<td>0</td>
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</tr>
<tr>
<td>Platypus quercivorus</td>
<td>40</td>
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</tr>
<tr>
<td>Lycorma delicatula</td>
<td>200</td>
<td>-</td>
<td>0</td>
<td>200</td>
</tr>
</tbody>
</table>

Nursery and Retail Plant Survey: Visual survey was conducted at 32 sites in 13 counties.

<table>
<thead>
<tr>
<th>Target</th>
<th>Sites</th>
<th>Plants Inspected</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anoplophora chinensis</td>
<td>32</td>
<td>14047</td>
<td>0</td>
<td>14047</td>
</tr>
<tr>
<td>Anoplophora glabripennis</td>
<td>32</td>
<td>5611</td>
<td>0</td>
<td>5611</td>
</tr>
<tr>
<td>Raffaelea quercivora</td>
<td>32</td>
<td>388</td>
<td>0</td>
<td>388</td>
</tr>
<tr>
<td>Lycorma delicatula</td>
<td>32</td>
<td>Entire nursery inspected</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>Polygonum perfoliatum</td>
<td>32</td>
<td>Entire nursery inspected</td>
<td>0</td>
<td>32</td>
</tr>
</tbody>
</table>

PPA §7721 Apple Orchard Survey: Traps were deployed at 24 sites in 9 counties.

<table>
<thead>
<tr>
<th>Target</th>
<th>Traps</th>
<th>Collections</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoxophyes orana</td>
<td>24</td>
<td>178</td>
<td>0</td>
<td>178</td>
</tr>
<tr>
<td>Lobesia botrana</td>
<td>24</td>
<td>181</td>
<td>0</td>
<td>181</td>
</tr>
<tr>
<td>Epiphyas postvittana</td>
<td>24</td>
<td>180</td>
<td>0</td>
<td>180</td>
</tr>
<tr>
<td>Leucoptera malifoliella</td>
<td>24</td>
<td>189</td>
<td>0</td>
<td>189</td>
</tr>
<tr>
<td>Trichoferus campestris</td>
<td>24</td>
<td>158</td>
<td>0</td>
<td>158</td>
</tr>
</tbody>
</table>
**Candidatus Phytoplasma mali**

| 16SrX-A | Apple Proliferation Phytoplasma | N/A | 24 | 0 | 24 |

**Lycorma delicatula**

| Spotted lanternfly | N/A | 24 | 0 | 24 |

**PPA §7721 Phytophthora ramorum Survey:** Visual survey was conducted at 20 sites in 6 counties

<table>
<thead>
<tr>
<th>Target</th>
<th>Collections</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Phytophthora ramorum</em></td>
<td>Sudden Oak Death</td>
<td>91</td>
<td>0</td>
</tr>
</tbody>
</table>

CAPS staff conducted an emergency USDA survey for Tomato Brown Rugose Fruit Virus (ToBRFV) at three MA farms in two counties. All samples were negative for ToBRFV.

CAPS and MDAR staff responded to 25 reports of possible Spotted lanternfly (SLF) introductions to the state. No live populations of SLF were found in MA in 2020.

**2021**

Due to staffing issues, CAPS and PPA surveys were not conducted in 2021.

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**Invasive Pest Outreach**

**Jennifer Forman Orth**

MDAR provides educational outreach about invasive insect pests through the Forest Pest Outreach Program as well as the Forest Pest Outreach Coordinator.

**2020**

At the end of 2019, the Asian Longhorned Beetle (ALB) Outreach Coordinator’s responsibilities were folded into the Forest Pest Outreach Coordinator, with some tasks being re-assigned to the ALB Cooperative Eradication Program.

The Forest Pest Outreach Coordinator participated in 9 tabling events and 13 presentations during 2020. For this year, the Forest Pest Outreach Program focused mainly on spotted lanternfly (SLF), due to additional discoveries of dead SLF adults in Massachusetts. Accordingly, affected municipalities where SLF had been found and companies that may have come into contact with SLF were contacted to raise awareness. A total of 17 municipalities and 158 companies were reached out to in this way. The Forest Pest Outreach Coordinator also created a database of 167 transportation and moving services industry businesses since that is one of the main pathways that SLF is associated with.

Due to the pandemic, most in-person events planned for this year were cancelled, with any remaining events after March going virtual. The Forest Pest Outreach Coordinator was able to schedule several trainings and presentations through town libraries. Eight such presentations were to groups that haven’t received outreach before, including a presentation on SLF delivered through Baystate Roads to employees at the Massachusetts Department of Transportation.

The invasive species outreach programs distributed more than 9700 pieces of outreach materials, featuring SLF, emerald ash borer, and Asian longhorned beetle. Our pest ID cards and SLF pest alerts
were the most popular items distributed. In addition, two new pieces of SLF outreach material, a mini-poster and a best management practices guide for nurseries and landscapers, were created. The lack of in-person outreach events severely restricted the amount of outreach materials distributed, and online requests for outreach materials also dropped, but the program ramped up social media and blog posts and made printable materials available online to compensate (see https://massnrc.org/pests/blog/).

2021
Staff participated in 21 presentations and 2 tabling events in 2021, with the majority of outreach focused on spotted lanternfly (SLF). Highlights included a new quarterly series of free online webinars about SLF, hosted by MDAR and offering free pesticide license and other educational credits to encourage participation. Well over 500 participants attended the first 3 sessions.

Because in-person outreach remained extremely limited due to COVID-19, the program explored several new ways to reach audiences, including soliciting and writing pieces about SLF that were published in 8 different green industry association newsletters, including the Ecological Landscape Alliance and UMass Extension. The program also put out 2 press releases related to finds of spotted lanternfly and used advertising opportunities to place messaging about SLF in 10 different online webinars run by green industry associations and extension groups.

The program also responded to more than 1025 pest reports that came in through the reporting website or via phone or email, including suspected sightings of SLF, emerald ash borer (EAB), Asian longhorned beetle (ALB), Asian giant hornets, and jumping worms. The majority of these reports were negative, but they did lead to the discovery of two small infestations of SLF in Worcester County and several new towns confirmed to have EAB.

The program distributed more than 8700 pieces of pest outreach materials in 2021, for SLF, EAB, and ALB, and coordinated with MassDOT to execute an advertising campaign featuring spotted lanternfly mini posters displayed in the entryways of all 11 rest stop/service station along the Mass Pike during the summer and early fall. Staff also developed a number of print outreach materials related to SLF, including best management practices for businesses and checklists for drivers, and made these available to print on demand via our pest website (https://massnrc.org/pests/slf/).

Lack of in-person outreach events severely restricted the distribution of outreach materials again in 2021, but staff compensated by continuing to push social media (@MassPests on Twitter) and blog posts (https://massnrc.org/pests/blog/) and by amplifying this message through the MDAR Facebook account. The program also rebooted its pest newsletter as a short monthly e-blast, currently reaching more than 2300 subscribers (https://massnrc.org/pests/signup.aspx).

Country of Origin Labelling (Cool) Inspections
Trevor Battle

Since 2006, MDAR has been working under a Cooperative agreement with the USDA to perform audits relative to Country of Origin Labeling [COOL] requirements. Country of Origin Labeling is a labeling law that requires retailers, such as full-line grocery stores, supermarkets, and club warehouse stores, to notify their customers with information regarding the source of certain foods. Food products (covered
commodities) contained in the law include muscle cut and ground meats (beef, veal, pork, lamb, goat, and chicken), wild and farm-raised fish and shellfish, fresh and frozen fruits and vegetables, peanuts, pecans, macadamia nuts, and ginseng. Currently MDAR has two staff members that work on the COOL program.

**2020**

94 COOL retail inspections were assigned, completed, and submitted to USDA under MDAR’s multi-year cooperative agreement.

**2021**

50 COOL retail inspections were assigned, completed, and submitted to USDA under MDAR’s multi-year cooperative agreement.

**Apiary Program**

**Kim Skyrm**

As a service to Massachusetts beekeepers, MDAR Apiary Inspectors work with beekeepers to help them maintain healthy colonies and conduct hive inspections to check and assist with the detection of diseases and/or pests. Beekeepers are advised on how to treat any problems found. Apiary Inspectors also certify the movement of honey bee colonies throughout the state and the nation and inspect these colonies for diseases, pests, and unwanted bee species.

**2020**

Approximately 6-6,500 resident beekeepers currently maintain over 40-45,000 colonies in Massachusetts. These numbers fluctuate from year to year due mainly to high winter mortality and fluctuations in the numbers of hobby beekeepers given increasing interest in beekeeping. While the largest volume of colonies belong to commercial beekeepers, the Commonwealth is mainly comprised of hobby and sideliner beekeepers. Hobby, sideliner, and commercial beekeeper apiaries are routinely inspected for pests, parasites, pathogens, and other issues as they arise.

A total of 266 apiaries were voluntarily registered MDAR in 2020 bringing the grand total to 622 registered apiaries to date. A total of 637 inspection requests were received. The team of four inspectors visited 489 apiaries and conducted inspections of 5,448 honey bee colonies. Given restrictions due to COVID-19, a total 97 inspection requests were not completed. Inspectors conducted import inspections of 24 shipments of package bees, 19 shipments of nucleus colonies (nucs) and 1,145 colonies used for cranberry pollination to ensure regulatory compliance. Findings are as follows:

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Total Colonies Detected with Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Foulbrood (AFB)</td>
<td>6 (apiaries)</td>
</tr>
<tr>
<td>European Foulbrood (EFB)</td>
<td>67</td>
</tr>
<tr>
<td>Chalkbrood</td>
<td>44</td>
</tr>
<tr>
<td>Nosema</td>
<td>108</td>
</tr>
<tr>
<td>Parasitic Mite Syndrome (PMS)/Idiopathic Brood Disease Syndrome (IBDS)/Snot Brood/Varroosis</td>
<td>272</td>
</tr>
</tbody>
</table>
In addition, 121 “Dead Out” hives were inspected and sampled and the cause was determined to be related to Varroa Mites, associated viruses, and Nosema spp. loads. This information was shared with beekeepers as an education tool. The Apiary Program Team also monitored 66 honey bee colonies as part of the aerial mosquito spray.

The apiary program continued the Varroa Mite Education program in 2020. This included workshops, webinars, and distributing 912 Varroa mite jars and 375 sample kits to beekeepers. In addition, the program team either individually offered or led a coordinated effort of regional apiary inspectors to provide a total of 33 virtual outreach programs that reached 4,557 attendees from all New England states and New York. A new and very popular program series was created as a part of these efforts called “The New England Honey Bee Update”, and provided a regional approach to beekeeper support through facilitated discussions between apiary inspectors and beekeepers. The Health Survey was also offered again in 2019/2020 with 562 beekeeper responses and a reported 34% overall total loss of honey bee colonies.

The program continued to manage the two state apiaries consisting of 5-22 colonies and was able to harvest 600lbs of honey from them. The honey was bottled and donated to the Worcester County Food Bank (500lbs) or given as gifts by the Marketing Program.

2021

Approximately 6-6,500 resident honey beekeepers currently maintain over 40-45,000 colonies in Massachusetts. These numbers fluctuate from year to year due mainly to Winter mortality rates and fluctuations in the numbers of hobby beekeepers given the continued increased interest in honey beekeeping. While the largest volume of colonies belongs to commercial beekeepers, the Commonwealth is mainly comprised of hobby and sideliner beekeepers. A total of 309 apiaries were voluntarily registered with MDAR in 2021 bringing the grand total to 929 registered apiaries to date.

Honey bee health inspections are conducted by the Massachusetts Department of Agricultural Resources (MDAR) Apiary Program Team as visits by Apiary Inspectors to apiaries containing honey bees or used equipment located in the Commonwealth. Inspections are performed for regulatory purposes at
the discretion of the inspectors, as certification for interstate movement and routinely upon beekeeper request. The purpose of inspections is to examine live, declining, and expired honey bee colonies, packages, nucs and equipment for pests, parasites, pathogens, and invasive bee species in an effort to mitigate, manage and ultimately suppress the occurrence and spread of contagious and infectious disease.

A total of 907 inspection requests were received in 2021 and of these 836 were completed leaving 71 unfilled inspection requests. The team of four inspectors visited 14 counties, 249 cities/towns, 662 beekeepers, 684 apiaries and inspected 6,391 honey bee colonies. Of these, 998 inspections were for Dead-out and used equipment. The main cause of death for the Dead-outs was determined to be related to Varroa Mites, associated viruses, and Nosema spp. This information was shared with beekeepers as an educational tool. Inspectors also conducted import inspections of 32 shipments of package bees (15 suppliers, 14,112 imported packages total), 15 shipments of nucleus colonies (nucs) (9 suppliers, 1,808 inspected from 3,126 imported nucs total) and 918 colonies used for cranberry pollination to ensure regulatory compliance. A total of 221 samples were taken during inspections and sent to labs for analysis. Findings from inspections are as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Honey Bee Health Issue</th>
<th>Total Colonies Detected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacteria</td>
<td>American Foulbrood (AFB)</td>
<td>4 (apiaries)</td>
</tr>
<tr>
<td></td>
<td>European Foulbrood (EFB)</td>
<td>70</td>
</tr>
<tr>
<td>Fungi</td>
<td>Chalkbrood</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Nosema</td>
<td>71</td>
</tr>
<tr>
<td>Virus</td>
<td>Parasitic Mite Syndrome (PMS)/Idiopathic Brood Disease Syndrome (IBDS)/Snot Brood/Varroosis</td>
<td>324</td>
</tr>
<tr>
<td></td>
<td>Sacbrood Virus (SBV)</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>Deformed Wing Virus (DWV)</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>Black Queen Cell Virus (BQCV)</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Chronic Bee Paralysis Virus (CBPV)</td>
<td>13</td>
</tr>
<tr>
<td>Pest</td>
<td>Small Hive Beetle (SHB)</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Bear Damage</td>
<td>2</td>
</tr>
<tr>
<td>Management</td>
<td>Queen issues</td>
<td>130</td>
</tr>
<tr>
<td>Pesticides</td>
<td>Bee Kills</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>(15% of total inspected colonies)</td>
<td>930</td>
</tr>
</tbody>
</table>

The MDAR Apiary Program Team also received 8 Bee Kill complaints and investigated 2 cases collaboratively with the Pesticide Enforcement Team of which 1 case was confirmed to be due to pesticide mis-use.

The MDAR Apiary Program continued the MDAR Varroa Mite Education Program in 2021 distributing 900 Varroa mite sampling jars and 400 sample kits to beekeepers. The MDAR Apiary Program Team also continued to provide outreach educational programming to stakeholders virtually and in person. The Apiary Program team created, led, and coordinated a total of 42 educational outreach programs (31 virtual, 11 in-person) consisting of 109 instructional hours that reached a total of 4,183 attendees from Massachusetts Department of Agricultural Resources Annual Report 2020-2021 74
all over the Northeast. One series of unique virtual events, the *New England Honey Bee Update* (created in 2020 as a response to COVID-19) was offered again in 2021. This series is particularly popular since it offers a regional update on honey bee health and a facilitated discussion between the collaborative of apiary inspectors from New England states and New York with beekeepers.

The BEE AWARE Honey Bee Health Survey was also offered again in 2020/2021 with 751 beekeeper responses and a reported 23% overall total loss and 47% average loss of honey bee colonies in the Commonwealth. Since 2015/2016, this health survey has had a total of 2,456 beekeeper responses allowing for an important tool to gather local data on honey bee health and feedback regarding beekeeper needs. Results of the survey indicate that beekeepers attributed the top causes of colony losses this year were due to Varroa mites (38%), Queen issues (21%) and Environmental factors related to weather (21%). Beekeepers also reported that the single greatest problem affecting beekeepers in the Commonwealth was Varroa Mites (75%), Pesticides (29%) and Beekeeper mismanagement (20%).

The MDAR Apiary Program Inspector also managed the State Apiary locations in Amherst and Danvers, MA which are comprised of 5-12 active honey bee colonies that serve as outdoor classrooms for hands-on demonstrations and education. A total of 15 either virtual or in-person educational programs with 276 attendees were held at the State Apiaries. No honey was harvested from the colonies this year for Food Bank donations given the poor overwintering success of colonies combined with the late season dearth in floral resource availability.

The MDAR Apiary Program Team also participated in the USDA-APHIS National Honey Bee Survey which involved visiting 12 counties, 18 towns/cities, 19 beekeepers, and 23 apiaries consisting of 496 colonies of which 170 were sampled for a total of 58 submitted samples. The program team also collected 21 European Foulbrood (EFB) swab samples for researchers at the University of Saskatchewan as part of their evaluation of this bacterial disease in commercial beekeepers who provide pollination services.

**Pesticide Program**

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

**Pesticide Enforcement**

*Michael McClean*

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 are 4 pesticide inspectors and 1 Chief inspector.

2020

Overall, a total of 207 pesticide inspections of which 36 were investigations relative to pesticide complaints. These inspections covered a wide range of pesticide use in the Commonwealth were completed.

2021

Overall, a total of 264 pesticide inspections of which 45 were investigations relative to pesticide complaints. These inspections covered a wide range of pesticide use in the Commonwealth were completed.

**Please note, numbers reported are for the 2020 and 2021 federal fiscal year and do not include the pending enforcement actions on open investigations during that time.**

Pesticide Applicator and Licensing Program
Steve Antunes-Kenyon

2020 and 2021

The COVID-19 Pandemic and Massachusetts State of Emergency and Quarantine had a significant impact on the ability of the Department to administer pesticide exams. The Department did administer State commercial and private pesticide license exams on 28 distinct dates with stringent enforcement of exam size limits, use of protective equipment, and sanitation protocols designed to keep both exam administrators and examinees safe. In December of 2020, MDAR released its online pesticide exam. The online exam provided flexibility for the applicant to take the exam and allowed the exams to no longer be provided in person. Both 2020 and 2021 MDAR licensed approximately 9000 individuals.

Pesticide Product Registration
Susie Reed/Hotze Wijnja

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. New products are usually registered on a monthly basis. Every product label is thoroughly reviewed for compliance with state and federal laws and then brought to the Pesticide Board Subcommittee for consideration. A registration is valid for a period beginning with the initial date of approval by the Subcommittee and ending on the next June 30th.

2020 and 2021

Each year MDAR registers approximately 7000-8000 products. Of significance in 2021 the Pesticide Board Subcommittee voted to restrict certain uses of products containing neonicotinoids beginning July
1, 2022. Additionally, PFAS was found in a product called Anvil 10+10 ULV which brought national attention to the issue. EPA determined that the PFAS found in the product was due to contamination from the container and not the formulation.

**Industrial Hemp Program**

**Sarah Grubin**

The MDAR Hemp Program provides oversight and regulation of legally grown hemp for commercial purposes under M.G.L.c. 128 Section 116-123 in Massachusetts. The Hemp Program oversees all licensing for hemp cultivators and processors, and enforcement of laws and regulations pertaining to Industrial Hemp in the Commonwealth.

**2021**

The state plan for Massachusetts was approved in May 2020 and the MA Hemp Program now operates fully within the authority of federal law 7 CFR 990.

A total of 99 Hemp Licenses were issued in MA in 2020.

<table>
<thead>
<tr>
<th>License Type</th>
<th>Number issued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual Producer/Processor</td>
<td>50</td>
</tr>
<tr>
<td>Producer</td>
<td>30</td>
</tr>
<tr>
<td>Processor</td>
<td>19</td>
</tr>
<tr>
<td>Grand Total</td>
<td>99</td>
</tr>
</tbody>
</table>

The overall certification rate for hemp crops in 2020 was 60%.

**2021**

A total of 94 licenses were issued:

<table>
<thead>
<tr>
<th>License Type</th>
<th># Licenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual</td>
<td>40</td>
</tr>
<tr>
<td>Grower</td>
<td>24</td>
</tr>
<tr>
<td>Processor</td>
<td>30</td>
</tr>
<tr>
<td>Grand Total</td>
<td>94</td>
</tr>
</tbody>
</table>

The overall certification rate for hemp crop was 70%.
On December 11, 2020, Chapter 94G Section 12 was amended to include additional language relative to the sale of hemp and hemp-derived products by marijuana establishments (in bold): “No marijuana establishment shall cultivate, manufacture, sell or otherwise transact business with any products containing cannabinoids other than those that were produced, distributed and taxed in compliance with this chapter, or any hemp and hemp products cultivated and manufactured in compliance with a license from the department of agricultural resources pursuant to chapter 128 and is in compliance with regulations set forth by the United States Department of Agriculture.”

Since 94G passed, MDAR now allows for sale of the following hemp and hemp-derived products from a MDAR Licensee to a CCC Licensee in addition to previously approved products allowed for sale in the Commonwealth in accordance with the 2021 Processor Policy (link):

- Raw, unprocessed hemp, including flower
- Unfinished hemp-derived material such as extracts and distillates
- Finished hemp products, including raw flower packaged, labeled and ready for sale.

State Reclamation Board (SRB) 2020

The SRB oversees mosquito control and surveillance in the Commonwealth of Massachusetts, including 11 regional districts/projects providing services to 224 municipalities. The Board also establishes administrative and technical policy, guidelines, and best management practices to ensure that mosquito control programs are effective and safe.

The districts/projects collected more than 517,000 mosquitoes during the surveillance season, with about 154,000 submitted for arbovirus testing, a decrease of about 40% over 2019 totals. 2020 also saw a reduction in EEEV activity after an extremely active year in 2019, with only 66 EEEV-positive mosquito pools reported, 5 human cases and no animal cases. Drought conditions towards the end of the season likely contributed to this drop-in activity. West Nile Virus activity also remained low, with only 97 WNV+ mosquito pools, 8 human cases, and no animal cases. However, levels of EEEV at the peak of the season did trigger aerial spray activity, with a single spray event in Bristol/Plymouth County occurring on August 10th. For a complete report, including a map of the treated area, see https://www.mass.gov/doc/aerial-spray-bristol-and-plymouth-counties-august-10-2020/download.

In addition to trapping and surveillance of both larval and adult mosquitoes, the districts/projects completed a number of other projects over the course of the 2020 season as part of routine mosquito management, including ditch management and culvert cleaning covering more than 745,000 square feet, educational outreach to more than 800,000 residents in the municipalities they cover, and application of larvicide and adulticide targeted at known mosquito populations.
The MCDs provided services to 227 municipalities in 2021, with several new member communities joining the Pioneer Valley MCD, and one town (Stockbridge) leaving Berkshire County MCD. Together, the MCDs collected more than 970,000 mosquitoes during the surveillance season, with over 175,000 of these submitted for arbovirus testing, an increase of about 14% over 2020. 2021 also saw a further decrease in EEEv activity after an extremely active year in 2019, with zero EEEv-positive mosquito pools reported and no human or animal cases. Because EEE risk levels remained low, aerial spray operations were not required. West Nile Virus activity was up slightly over 2020, with 144 WNV+ mosquito pools, 8 human cases, and 1 animal case (an alpaca).

In addition to trapping and surveillance of both larval and adult mosquitoes, the MCDs completed a number of other projects over the course of the 2021 season as part of routine mosquito management, including ditch management and culvert cleaning covering more than 750,000 square feet. For detailed reports of these activities for each MCD, see https://www.mass.gov/service-details/state-reclamation-and-mosquito-control-board-annual-reports.

MDAR staff assisted the Executive Office of Environmental Affairs (EEA) by monitoring and assisting with meetings of the Mosquito Control for the Twenty-First Century Task Force (MCTF). The MCTF Subcommittees began to meet in September to develop recommendations that would be reported to the legislature in 2022. For the meeting minutes of these minutes see: Mosquito Control for the Twenty-First Century Task Force Meetings | Mass.gov. MDAR Staff updated the SRB throughout this process.
Division of Agricultural Conservation and Technical Assistance (DACTA)
Gerard Kennedy, Division Director

Agricultural Business Training Program (ABTP)

MDAR offers agricultural business training courses and workshops throughout the state to Massachusetts farmers at various stages of business development. The courses are taught by experienced instructors who are familiar with the challenges and opportunities in the agricultural field, providing guidance and resources to help farm operators learn business skills to improve their success.

In FY2020: MDAR offered Exploring the Small Farm Dream course in Winter of 2020 in Amherst to 13 participants representing 9 potential farm enterprises.

MDAR offered the Growing Your Farm Business planning course in Winter of 2020 in West Springfield to 10 participants representing 8 established farm businesses.

In FY2021: MDAR offered one 5-session Exploring the Small Farm Dream courses - in Winter of 2021 online to 22 participants representing 16 potential farm enterprises. The session was adapted to a virtual format due to the COVID pandemic.

MDAR did not offer the Growing Your Farm Business course in Winter 2021 due to in-person meeting constraints related to the COVID pandemic and the challenges of adapting this course to a virtual format.

Agricultural Climate Resiliency & Efficiencies Program (ACRE)
Laura Maul

The Agricultural Climate Resiliency & Efficiencies (ACRE) Program is a new program that started in Fiscal Year 2018. The program was created as part of the implementation of Governor Baker’s Executive Order 569, which lays out a comprehensive approach to further reduce greenhouse gas emissions, safeguard residents, municipalities, and businesses from the impacts of a changing climate, and build a more resilient Commonwealth.

The ACRE Program funds projects to address the agricultural sectors vulnerability to climate change, mitigate climate change in agriculture, and improve economic resiliency. This includes projects that improve soil health, improve water use efficiency and availability, promote efforts to reduce or limit greenhouse gas emissions, or to enhance greenhouse gas sequestration. In addition, projects that reduce post-harvest produce loss, improve energy efficiency, and facilitate clean energy adoption are also eligible.

In Fiscal Year 2018, 17 projects were awarded funding totaling $500,000. In Fiscal Year 2019, 40 projects were awarded funding totaling $1,000,000 in funding. Examples of funded projects include no-till planters, no-till drills, electronic irrigation controls, moisture and temperature sensors, compost application equipment, and controlled atmosphere storage bins.
Agricultural Food Safety Program (AFSIP)
Laura Maul
The Agricultural Food Safety Improvement Program (AFSIP) is a program which was created to help produce operations address farm food safety risks and work towards compliance with food safety regulations and third-party audits. Since 2014, the program has awarded 165 projects and over $1.5 million dollars in funding statewide to upgrade their farm food safety practices in order to maintain or increase market access, to meet regulatory requirements, and in doing so, work towards protecting public health.

Some examples of projects include wildlife exclusion fencing, packing shed upgrades, produce washing equipment, field harvest systems, hand washing sinks, and drainage systems. For FY2018, the program awarded 20 projects were funded totaling $275,000 in awards. For FY2019, the program awarded 21 projects were funded totaling $300,000 in awards.

Agricultural Environmental Enhancement Program (AEEP)
Laura Maul
AEEP is a voluntary program that provides financial support to agricultural operations to help implement conservation practices intended to protect the Commonwealth’s natural resources by the prevention or mitigation of pollution that may arise from agricultural practices. Since 1999, the program has awarded 637 projects statewide that improve water quality, conserve water, reduce greenhouse gas emissions, and conserve energy. Agricultural operations have received over $8 million dollars to help them address environmental concerns on their farms. In Fiscal Year 2018, 23 projects were funded totaling $350,000 in awards. In Fiscal Year 2019, 23 projects were funded totaling $350,000 in awards. Projects are selected based on their potential to impact the most sensitive resources, including drinking water supplies, wetlands, Department of Environmental Protection (DEP) priority water bodies, and Areas of Critical Environmental Concern.

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

Matching Enterprise Grants for Agriculture (MEGA)
Recognizing the importance of new farmers to the agricultural industry, the Department initiated the MEGA Program in 2010 in response to the needs of new and beginning farmers in Massachusetts. The program offers business and technical assistance to farm operators between 1 and 6 years in business that aspire to have commercially viable farm businesses along with 1 to 1 matching grants of up to $10,000 per farm. Selected farmers participate in a business planning process which helps identify the best use of the grant funds, which must be spent on equipment or capital improvements that will enhance farm viability.
In FY2020, $43,697 in total grants of up to $10,000 per farm were provided to 6 participating MEGA farms with more than $87,394 total spent on projects including farmer contributions. Technical assistance valued at $30,438 (an average of $5,073 per farm) was also provided. Grant projects include: mobile chicken coop, tractor, boat motor and pot hauler, floating gear for oyster production, refrigerated van, pick-up truck, and skid steer and post driver.

In FY2021, $65,749 in total grants of up to $10,000 per farm and a total of $29,255 technical assistance (an average of $3,657 per farm) were provided to 8 participating MEGA farms. Farmers contributed an additional $217,913 towards these farm improvement projects. Grant projects include: tractor, floating work station, fencing for livestock, barn addition, well and irrigation equipment, farm equipment, floating and bottom cages, and barn.

Since MEGA began in 2010, $834,327 total grants (an average of $8,514 per farm) and $397,117 of technical assistance (an average of $4,052 per farm) have been provided through 11 rounds of the program to 98 diverse beginning farms located across the state.

Agricultural Preservation Restriction Program (APR)

Ron Hall

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

Over the course of calendar years 2020 and 2021 the APR program protected 18 farm projects covering over 896 acres for a total consideration of over $9.6 million. This raised the total farm properties enrolled to 942 and the total farmland protected to just shy of 75,000 acres. To acquire most of these restrictions, the program partnered with the federal Natural Resources Conservation Service (NRCS) through the federal Agricultural Lands Easement Program (ALE).

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APR Improvement Program (AIP)

The purpose of the APR Improvement Program (AIP) is to help sustain active commercial farming on land that has already been protected through the Department’s Agricultural Preservation Restriction (APR) Program. AIP provides business planning and technical assistance to help improve the productivity and profitability of participating farms with the goal of enhancing the significance of APR farm operations and their contribution to the state’s agricultural industry. Participating farmers may be eligible for grant funds for projects identified through the planning process which must be spent primarily on farm infrastructure – capital projects to build or improve farm buildings or resource improvements that will help maintain or enhance the farm property.

In FY2020, $600,000 in total grants (an average of $66,667 per farm) and $49,063 in planning and technical assistance (an average of $5,451 per farm) were provided to 9 participating AIP farms from across the state with a combined total of 1,435 acres of APR land. Grant projects include: perennial fruit plantings; construction of new livestock barns; construction of new farmstands, barn repairs, and construction of new hay barn.

In FY2021, $588,816 in total grants (an average of $98,136 per farm) and $22,975 in planning and technical assistance (an average of $3,829 per farm) were provided to 6 participating AIP farms from across the state with a combined total of 1,104 acres of APR land. Grant projects include construction of new produce wash/pack facilities, construction of new livestock barns, barn extensions and repairs, new wells and irrigation infrastructure, and construction of a new storage building.

Since the program began in 2009, AIP has provided a total of $7,025,000 in grant funding and $558,958 of planning and technical assistance to 100 participating Massachusetts farms through 12 rounds of the program. These farms own a combined total of 14,690 acres of farmland that has been permanently protected from development under APRs.

Stewardship Assistance and Restoration on APRs (SARA)

The purpose of the Stewardship Assistance and Restoration on APRs (SARA) program, initiated in Fiscal Year 2016, is to improve the overall utilization of APR land resources for commercial agriculture. In 2021, SARA provided grant funding of up to $25,000 per farm, with a 15% required cash match, for identified improvements that will help restore or enhance protected resources on an APR farm property. The Program assists participants with conducting activities that will enhance the continued
use of the agricultural resource, which may include but are not limited to: improving soil health; stabilizing soil loss; reactivating cropland use that had been negatively impacted by erosion, flooding, natural disasters, or inactivity.

In FY2021, 17 respondents applied to 2 rounds of SARA and a total of $161,317 in grants were provided to 9 APR farms in 6 different counties. These funds helped to clear field edges, restore pasture, clean out drainage ditches, renovate orchard, restore farm access roads, assist with contaminated soil remediation, and make drainage improvements.

Agricultural Composting Program
Sean Bowen

MDAR's Agricultural Composting Program encourages and supports composting on farms by providing technical assistance to compost operators, and an Agricultural Composting Registration process which allows qualifying farms to register their operations with MDAR under an agricultural waste composting exemption in MassDEP's solid waste regulation, 310 CMR 16.00. Under that exemption, any farm that wishes to compost organic materials other than those that are generated on their own farms, must register their operation with MDAR.

Agricultural Composting is defined in 330 CMR 25.02 as: “The composting of agricultural materials and other compostable materials on an agricultural unit resulting in stabilized compost products for agricultural and horticultural uses.” In addition to agricultural wastes, registered composters may utilize the following compostable materials, provided the operation complies with policies of the Department of Agricultural Resources:

- Leaf and yard waste
- Wood wastes
- Paper and cardboard
- Clean compostable (i.e. thin) shells
- Vegetative material
- Food material

The Department is responsible for registering new agricultural composting sites, as well as renewing the registration of existing sites annually. In 2021, a total of 45 sites were registered in the MDAR Agricultural Composting Program. Throughout the course of the year, MDAR's Agricultural Composting Specialist conducts site visits to registered composters and prospective farms wishing to engage in agricultural composting to address any concerns that arise on registered sites, providing technical assistance and troubleshooting to improve the composting operation.

In February 2020, following numerous public hearings and review of many public comments, MDAR updated its Agricultural Composting Program Regulation, 330 CMR 25.00. The new regulations integrate changes intended to better align with MDAR’s mission of encouraging agriculture and the integration of on-farm composting.
One of the requirements of the new regulation is for registered composters to complete a Department approved compost training program. In March of 2020, MDAR began conducting in person training sessions, in accordance with this requirement. Unfortunately, due to the COVID-19 pandemic, these training were cancelled. The Department hopes to re-start these trainings in the very near future.

MDAR’s Agricultural Composting Improvement Program (ACIP), a grant program established in 2019 and designed to facilitate on-farm composting and compost use to improve soil on farms, provided $425,000 in funding to 16 farms during FY20-21. This money helped these farms purchase equipment such as compost spreaders, turners, and screeners, as well as the construction of new compost pads and bin systems.

Aquaculture Program 2020-2021

Sean Bowen

Aquaculture is the 5th highest valued agriculture sector in the Commonwealth of Massachusetts. Due to the economic downturn caused by the Covid-19 pandemic, the value of the Massachusetts oyster farming industry was just over $17 million dollars - a 40% drop since 2019 ($29 million). In 2020, a total of 386 aquaculture growers cultivated 1304.5 acres of area in Massachusetts. The value of the quahog industry (hard clams) was just over $1 million, which was an increase over 2019. In addition to oysters and quahogs, Massachusetts growers also culture soft shell clams, blue mussels, bay scallops, surf clams, and a type of seaweed called sugar kelp.

In November of 2021, the Massachusetts Shellfish Advisory Panel held its first official meeting. Established in law following the recommendation of the Massachusetts Shellfish Initiative, the SAP brings together members from the Executive and Legislative branches and 15 shellfish stakeholders representing commercial, recreational, research, enforcement, and trade associations. Chaired by the Director of the Division of Marine Fisheries, the mission of the SAP is to advise the director on matters of concern relevant to shellfish fisheries, provide a forum for Massachusetts governmental entities to receive and disseminate information relevant to shellfish resources and shellfish management, and allow members of the public and representatives of governmental entities of Massachusetts to bring forth emerging issues in shellfish fisheries. Within the enabling legislation, the Commissioner of MDAR is pleased to be one of the members of the SAP.

MDAR supports three Aquaculture Centers which provide technical support, marketing assistance and promotion, and education to the industry and the public. The Northeastern MA Aquaculture Center (NEMAC) is located within Salem State University, Southeastern MA Aquaculture Center (SEMAC), located within Barnstable County Cooperative Extension, and the Western MA Center for Sustainable Aquaculture (WMCSA) operated through UMASS Amherst. During FY 20-21, a total of $100,000 was provided to the Centers to support the Massachusetts aquaculture industry.
Energy Efficiency, Conservation, And Renewables Program (Energy Program)

Gerry Polano, Alternative Energy Specialist

Introduction

Since 2009, the Massachusetts Department of Agricultural Resources (MDAR) annually requests Massachusetts agricultural operations to submit proposals seeking funding for agricultural energy projects under our Agricultural Energy (AgEnergy) Grant Program. Now part of the Climate Smart Agricultural suite of Programs, CSAP, AgEnergy continues to be an effort to improve energy efficiency and to facilitate adoption of alternative clean energy technologies in order that farms can become more sustainable, and the Commonwealth can maximize the environmental and economic benefits from these technologies. By implementing these projects, the agricultural operation will also help farms contribute to the local food production goals of the MA Food Systems Plan and the MA 2050 Zero Net Energy and De-Carbonization Goals. Since inception our annual AgEnergy Grant has now helped fund upwards of 300 farms for a variety of energy efficiency and renewable energy projects, providing total funding of over $3.725 million dollars toward approximately $20 million dollars of total project construction costs, achieving over $1,350,000 in either annual energy savings or energy generation. Of significance in FYs 2020-2021 was a mid-year, MA legislative supplemental funding in FY2020 of $500,000, administered during the very challenging Covid epidemic. At the same time, this funding was well received by our agricultural community, enabling MDAR to expand the existing annual AgEnergy Grant Program in both per applicant amounts and in total grants awarded.

AgEnergy Grant Program 2020-2021

In FYs 2020-2021 the Baker-Polito Administration awarded 68 AgEnergy grants totaling $1,725,000 to Massachusetts farmers to implement renewable energy systems and improve energy efficiency on farms, reducing equivalent CO2 emissions by approximately 500 tons. Awarded through the Massachusetts Department of Agricultural Resources’ (DAR), funding was provided to farms in fifty-nine (59) towns in the Commonwealth, including Dartmouth, East Falmouth, Carver, Cummington, Hadley, Devens, West Brookfield, Sunderland, South Dartmouth, Amherst, Lancaster, Northborough, Berlin, Colrain, Carver, Lakeville, Gloucester, Buckland, Vineyard Haven, Whatley, Stow, Paxton, Plympton, Rochester, Hyde Park, Great Barrington, Gill, Dracut, Dudley, Wareham, Northfield, Rehoboth, Deerfield, West Wareham, South Deerfield, Northampton, Great Barrington, Hawley, Millbury, North Andover, Williamsburg, Worthington, Dracut, Belchertown, Ashfield, Vineyard Haven, Westfield, Phillipston, Sharon, Bernardston, Amesbury, Hopedale, Rehoboth, Dennis, Monterey, Rutland, Granville, Leicester, Fitchburg, and Sheffield.

The projects were a combination of energy efficiency and renewable energy projects including: Twenty-four roof- or ground-mounted, behind the meter, photovoltaic systems totaling over 785 kW, several with battery storage, for a variety of farm sector operations including vegetable, fruit, cow dairy cheese-making, horticultural, livestock and aquaculture; Maple syrup operations improvements including new reverse osmosis, evaporators, or pre-heaters; Several woody biomass boiler installations all substituting for propane fuel, using a combination of wood chips or wood pellets; Multiple energy efficient stand alone or walk-in coolers and freezers; Two solar thermal projects serving an orchard/farmstand and dairy operation. Heat recovery refrigeration for a dairy and high efficiency, de-centralized air compressors for aquaculture tank aeration.
Massachusetts Farm Energy Program (MFEP) - 2021

MFEP is a full-service technical assistance program helping over 800 agricultural producers across all agricultural sectors for the past 11+ years. These projects range from simple lighting or refrigeration efficiency upgrades to commercial-scale solar photovoltaic systems, helping to improve the viability of agricultural businesses across the state.

In 2021, MFEP provided more than 170 Massachusetts farms with technical and financial assistance, and partnered with federal and state agencies, public utilities, and nonprofits to develop and complete 11 farm energy projects throughout the state. MFEP also helped 22 farms secure targeted audits or access public utility assessments that outline recommendations, payback periods, and fulfill funding requirements, providing essential information for farm business decision-making.

The 11 projects installed in 2021 resulted in annual savings of over 36,000 kWh of electricity, over 2,600 therms, and more than 47 tons of CO2. Two solar photovoltaic projects completed in 2021 are generating over 24,000 kWh of electricity annually.

Energy efficiency improvements installed at farms ranged from energy efficient heat pads for poultry producers, to heat recovery for dairies, to efficient refrigeration for fruit and vegetable producers.

MFEP leveraged over $61,000 in federal and ratepayer funds and committed $105,339 in MDAR incentives (including $5,939 in MFEP funds) to energy efficiency and renewable energy projects in 2021. Farm energy projects for 2021 resulted in annual energy cost savings of approximately $18,200, helping farms create and maintain jobs and reinvest savings into the farming operation and local economy.

In 2021, MFEP also matched MDAR funds with a USDA Rural Business Enterprise grant of $33,500.

MFEP staff also provided one-on-one mentoring to 12 farms preparing to submit projects for MDAR’s Climate Smart Agriculture Program (CSAP) and 5 submitting to USDA REAP – resulting in several highly competitive grant awards. Staff also presented information on completing these applications to farms via webinar and distributed a bi-monthly newsletter. In collaboration with Mass Farmers Markets, MFEP staff conducted a webinar to offer suggestions and resources to help farms when working with vendors, host sites, and public attendees. In collaboration with CISA, staff held an on-farm event at Simple Gifts Farm which focused on short- and long-term energy efficiency projects. MFEP staff also had a call with the Buckland Town Energy Committee to discuss promoting energy opportunities for residents and businesses.

Farm Viability Enhancement Program Results as of June 30, 2020

During Fiscal Year 2020, the Farm Viability Enhancement Program provided technical assistance to 7 farms with 7 completing business plans. Of these, 7 farms received funding and were placed under Agricultural Covenants protecting 740 acres. The Program impacted an additional 433 acres of leased land and protected land under participant management. FY2020 spending was $450,000 in total grants to farms and $38,470 was spent on technical assistance costs to consultants and business plan writers ($5,496 average per farm).

Improvement projects for the year included: greenhouse and electrical connection, fencing, retail barn addition, driveway improvements, farm sign, hay storage barn, construction of a retail sugarhouse, hay
equipment, cattle housing, wash and pack improvements, poultry coop and equipment, walk-in cooler, and floral equipment.

Since the Farm Viability Program was initiated in 1996, 518 farms have been selected to participate in the program. A total of 446 farms have now been protected by Covenants and received grant awards.

The 446 farms that have participated in the Farm Viability Enhancement Program result in:
- 43,141.50 acres placed in protective covenants; 41,339 acres were impacted (additional acreage leased or used by participant farms.)
- A total of 84,480.50 acres of Massachusetts farmland have been impacted by the Farm Viability Program.
- Total of grants paid to participant farms $20,046,472. Total spending on grants per acre placed in protective covenant: $464.67 per acre.

Farm Viability Enhancement Program Results as of June 30, 2021

During Fiscal Year 2021, the Farm Viability Enhancement Program provided technical assistance to 9 farms with 9 completing business plans. Of these, 9 farms received funding and were placed under Agricultural Covenants protecting 1,572 acres. The Program impacted an additional 2,473 acres of combined leased land and protected owned land under participant management. FY2021 spending was $950,000 in direct grants to farms and $44,125 was spent on technical assistance costs to consultants and business plan writers ($4,903 average per farm). Improvement projects for the year included: farmstand, hay equipment, equipment repair and storage building, hard cider equipment; maple tapping equipment and pumphouse; value added kitchen equipment; grain combine, cornhead and hammermill; skidder, farm truck and maple equipment upgrades; dairy barn addition, manure collector and conveyer feed system. Since the Farm Viability Program was initiated in 1996, 527 farms have been selected to participate in the program. A total of 455 farms have now been protected by Covenants and received grant awards.

The 455 farms that have participated in the Farm Viability Enhancement Program result in:
- 44,713.50 acres placed in protective covenants; and 42,647 acres were impacted (additional acreage leased or used by participant farms.)
- A total of 87,360.50 acres of Massachusetts farmland have been impacted by the Farm Viability Program.
- Total of grants paid to participant farms $20,996,472. Total spending on grants per acre placed in protective covenant: $469.58 per acre.

Urban Agriculture Program

Rose Arruda

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

Since its establishment in 2014, grants from the Urban Agriculture Program have been awarded to over 95 urban farming projects. The program addresses challenges facing urban farmers and supports municipalities with technical assistance to help with the development of zoning ordinances, public education, and land assessments. The program is designed to build community partnerships, increase access to fresh, nutritious food for urban residents and to promote viable farming methods and support local initiatives that organizations and cities can replicate and benefit from.

**Urban Agricultural Grant Awards**

Rose Arruda

Municipalities, non-profit organizations, and other governmental entities are eligible to apply for grants in the range of $5,000 to $50,000 with preference for projects that attract multiple partners and funding sources. $100,000 is also available for the purchase of land, applicant must have 25% cash match.

The Urban Agricultural Grant Awards helps more enterprises in cities across the Commonwealth to grow their own food. The funds help to address some of the challenges facing urban farmers, such as suitable land, nutrient-poor soils, high start-up costs, and restrictive zoning rules.

**FY 2021:** The Urban Agriculture Program received thirteen (13) applications; funding was awarded to all the projects, totaling $259,015. Projects included farm site expansion, market infrastructure and greenhouse enhancements, all to support food access and distribution in low to moderate income areas.

**FY 2022:** MDAR received sixteen (16) proposals; a total of eleven (11) grants were awarded for proposals totaling $288,188. Projects ranged from soil regeneration, commercial greenhouses, and infrastructure improvements.

**MASSACHUSETTS FOOD VENTURE PROGRAM**

Rose Arruda

The Massachusetts Food Ventures Program (MFVP) is designed to advance the objectives of the Massachusetts Local Food Action Plan by providing funding through grants to support food ventures, primarily in communities of low or moderate income, including Gateway Cities and rural communities. Participants who are selected to participate in the program will be reimbursed up to $250,000, and the minimum award is $50,000. These grants are competitive one-year grants and are not re-occurring.

MFVP investments will include food processing infrastructure to meet the needs of the growing local food system; improved distribution systems to support opportunities for equitable access to fresh local food; and innovative retail outlet strategies that enhance access to healthy food.

**FY 2021:**
MDAR received $1,000,000 in funding for the Food Ventures Program in fiscal year 2021; the program received fifteen (15) applications; funding was awarded to five (5) projects and totaled $1,000,000. Projects include business expansion, distribution infrastructure and marketing improvements.

**FY 2022:**

The Food Venture Program received $1,000,000 in funding for the Food Ventures Program in fiscal year 2022; the program received fourteen (14) applications; funding was awarded to seven (7) projects and totaled $1,000,000.

**Massachusetts Food Trust Program**

The Massachusetts Food Trust Program (MFTP) is a statewide healthy food financing initiative aiming to increase access to healthy, affordable food in low-income urban, suburban, and rural communities with an emphasis on entrepreneurs producing, promoting, and selling healthy food grown, caught, or harvested in Massachusetts. The MFTP offers critical financing tools and business resources to launch and expand businesses, create jobs, increase economic opportunities, and stimulate the local economy.

**Eligible Applicants:**

A CDFI or Consortium of CDFIs with a designated lead, that demonstrates its ability to provide grants and loans across the Commonwealth which will further the goals of the Food Trust Program. Eligible applicants were Community Development Financial Institutions certified by the United States Treasury. Preference was given to applicants that had previous experience working with food related entities that operate in underserved communities and that have strong finance backgrounds. Applicants had to demonstrate the ability to leverage private and federal funds.

The Massachusetts Department of Agricultural Resources awarded $1,300,000 to the Consortium of Local Enterprise Assistance Fund (LEAF) - Lead; The Franklin County Community Development Corporation (FCCDC) for its management of the Massachusetts Food Trust Program (MFTP) in FY'22.

Since its inception in FY’19, 48 (forty-eight) projects, representing 10 (ten) counties, have made some impressive economic impacts: they combine to have created or retained 678 jobs by our latest estimates, and will affect an estimated 250,000 people with greater access to fresh food. Almost 90% of the projects accept or plan to accept SNAP and half accept WIC; all offer local MA food. Two businesses are immigrant-owned, 25 (twenty-five) are women-owned, and 16 (sixteen) are owned by entrepreneurs-of-color.

**MA Emergency Food Assistance Program (MEFAP)**

MEFAP provides food products for citizens of the Commonwealth in need. Through the program, a consistent supply of quality, nutrient-rich foods and locally grown fresh produce has been provided through four food banks to 968 emergency food providers (pantries, kitchens, shelters). MEFAP consists of two food purchasing programs – Core Food, representing 90.5% of funding for food purchases and The Massachusetts Grown Initiative, representing 7.5% of
food purchase funding; an administrative charge of 2% is retained by the Dept. of Agricultural Resources.

The Greater Boston Food Bank is the largest food bank in the state and receives 68.5% of MEFAP funding in FY’21.

Current Total MEFAP funding in the FY 2021-line item is $30,000,000.

FY’21:
Core Food Purchases: $26.2M
Massachusetts Grown Initiative: $2.2M
DAR Program Administrative fee: $696K
Food Banks Operating Funds: $1M

FY’22:
Total Funding: $30M
Core Food Purchases: $26.2M
Mass Grown Initiative: $2.191M
Food Banks Operating Funds: $1M