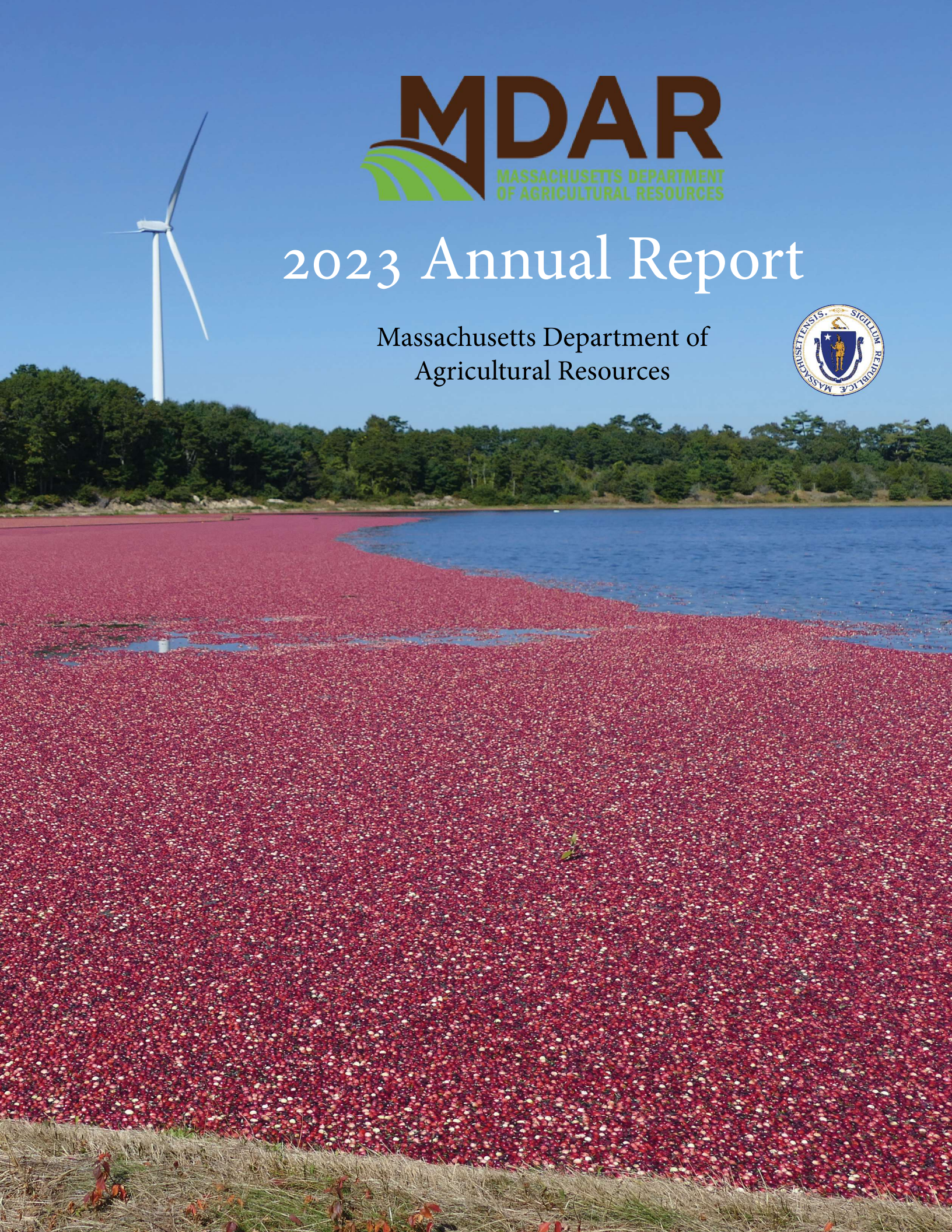




# 2023 Annual Report

Massachusetts Department of  
Agricultural Resources





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# THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

## Department of Agricultural Resources

225 Turnpike Road, 3<sup>rd</sup> Floor, Southborough, MA 01772

[www.mass.gov/agr](http://www.mass.gov/agr)



Maura T. Healey  
GOVERNOR

Kimberley Driscoll  
LIEUTENANT  
GOVERNOR

Rebecca L. Tepper  
SECRETARY

Ashley E. Randle  
COMMISSIONER

### Commissioner's Letter

#### **Ashley E. Randle, Commissioner**

Resiliency. The word that defined 2023 for the agricultural community and our team at the Massachusetts Department of Agricultural Resources (MDAR). A February 4<sup>th</sup> freeze, May 18<sup>th</sup> frost, and flooding that began on July 10<sup>th</sup> and continued throughout the summer had devastating impacts on crops throughout the state. Those events shone a light on the power of community and the collaborative efforts that we witnessed firsthand to ensure that farms would be able to continue operating into 2024. I'll share with you later on in this letter how the department and valued partners responded to those events in unprecedented ways.

I was privileged and honored to be appointed Commissioner by Governor Healey in March 2023. Having previously served as Deputy Commissioner/Legislative and Policy Director at MDAR, I was grateful to have the opportunity to continue to work with MDAR colleagues, the State Reclamation and Mosquito Control Board, and the regional Mosquito Control Projects and Districts to advance our work across the Commonwealth. It was a busy year to say the least, marked by the continuation of existing programs and the development of new, creative initiatives to support our stakeholder community. The themes of the year included climate resiliency and mitigation, food security, equity, and access.

This report offers detailed summaries of the activities of the Massachusetts Department of Agricultural Resources, and its sister agency, the State Reclamation and Mosquito Control Board. I encourage you to review them to become aware of the exceptional work that occurred in 2023. The year was marked by progress in many areas, with a several highlights worth noting here.

A deep freeze in February spoiled the year's peach crop and a late frost in May damaged most of the state's tree fruit crops. On July 10, heavy rainfall resulted in significant flooding across Massachusetts. By the end of the summer, 13,000 acres of Massachusetts crops had been destroyed or severely damaged, with farmers reporting more than \$65 million in losses. In response to the flooding, the administration launched the [Massachusetts Farm Resiliency Fund](#), in partnership with the United Way of Central MA, Community Involved in Sustaining Agriculture (CISA) and The Community Foundation of Western MA, and worked with the legislature to secure \$20 million in funding for impacted farms. MDAR quickly

launched the **Natural Disaster Recovery (NDR) program** to support farmers who had suffered losses. By December, MDAR [disbursed](#) the funds through payments of as much as \$350,000 each to 347 farms throughout the state. The two funds distributed more than \$23 million in total, helping prevent the loss of hundreds of farms.

Throughout the year, MDAR's work was grounded in the recommendations of the agency's internal **Environmental Justice Task Force**. Recognizing the importance of uplifting historically marginalized voices in the agricultural community, MDAR established the Director of Food & Climate Equity position. Thoughtful leadership and engagement with underserved farmers and stakeholders has helped the department make great strides with respect to ensuring greater access to our technical assistance, outreach and education, and program development. The EJ team has helped shepherd the recommendations of the EJ Task Force forward and worked to develop a comprehensive program booklet of MDAR's grants and programs in five languages. A directory of grant writers was developed, as well as English and Spanish-language webinars to further assist farmers applying to MDAR's grant programs.

The **Massachusetts Animal Fund** works to prevent animal homelessness through support from Massachusetts taxpayers for the responsible care of animals and the prevention of animal homelessness. In 2023, the Fund collected \$392,567 in taxpayer donations through line 33f on the Resident Income Tax Form. In addition, the Fund received \$105,000 in grants from The Stanton Foundation and \$100,000 in state support through the Massachusetts FY24 Budget. Since inception, the fund has spent over \$2.9 million to help more than 19,900 local Commonwealth animals in need and provided animal law and welfare training to over 800 Municipal Animal Control Officers so they can better assist animals in the communities they serve.

Invasive pests continue to be top of mind for MDAR's Division of Crop & Pest Services. The **Spotted Lantern Fly (SLF)** continued its spread across the state with new findings in Agawam, Ashland, Chelmsford, West Springfield, Wellesley, and Weston. MDAR's mission is to slow the spread of this insect, as eradication is unlikely and if it were to happen would take several years. MDAR continues to survey, monitor, and follow up on reports.

2023 also saw the first findings of **Box Tree Moth (BTM)** in the state, in Barnstable County. BTM is an invasive pest that feeds on the leaves of boxwood shrubs, popular plants commonly used in landscaping. The caterpillars can cause complete defoliation, eventually killing the plant. MDAR is working with our colleagues at USDA to issue a quarantine zone of the state so that BTM cannot travel outside of Massachusetts.

The **Agricultural Preservation Restriction (APR) Program** – the first state-run land protection program in the country - added eight projects, totaling 2,193 acres, bringing the total APR census at year-end to 982 active APRs on over 75,000 acres. We are a USDA Natural Resources Conservation Service (NRCS)-certified entity and partner with NRCS through the Agricultural Conservation Easement Program (ACEP)/Agricultural Land Easements (ALE) programs, allowing us to leverage significant federal financial and technical assistance resources.

MDAR's **Land Licensing** program further expanded its reach to provide licenses to new, beginning, and underserved farmers. In 2023, the agency had licenses with 24 farmers, seven of whom identify as underserved farmers, at state-owned sites in Danvers, Lakeville, Templeton, Foxborough, Northampton, New Braintree, Westfield, and Westborough.

The much-anticipated **Massachusetts Farmland Action Plan** was released in December 2023. The Plan offers goals and recommendations to address the alarming loss of productive farmland in the state over

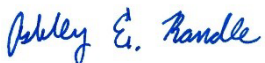
the last few decades, the challenges of farmland access and ownership, and the importance of ensuring that we have a viable farming sector. Massachusetts ranks third in the nation after New Jersey and Rhode Island in terms of the threats to our farmland, and we are projected to lose between 50,000 and 90,000 acres of additional farmland by 2040. We also have some of the most expensive farmland in the country, creating enormous barriers to access for farmers, particularly new and beginning farmers and historically underserved and marginalized groups. The Farmland Action Plan highlights and recommends strategies to help accelerate the pace of farmland protection in the state, address the challenges of access to land for farming and remedy historical inequities, and strengthen the economics of our farming sector through supports such as business and succession planning.

The Department continued to leverage funding opportunities through our federal partners at the United States Department of Agriculture (USDA) and received \$7.5 million through the Local Food Purchase Assistance Cooperative Agreement Program. Through a competitive RFR process, MDAR selected 16 organizations to implement the goals of the LFPA Program, which ran through May 2024. The purpose of the program is to maintain and improve food and agricultural supply chain resiliency through the purchase of domestic food from local and regional producers, by targeting purchases from socially disadvantaged farmers/producers and distribution to underserved communities. In 2023 USDA Announced a second round of LFPA funding, the Local Food Purchase Assistance Cooperative Agreement Program Plus (LFPA Plus). MDAR developed a competitive RFR process for this second round, while awards were to be made in 2024.

While 2023 was a challenging year for farmers, we're proud of the programs, policies, and funding initiatives undertaken by the administration to support the agricultural community. Mother Nature will continue to impact farms from severe droughts to extreme flooding to freeze events, however, our work at MDAR will continue to focus on building on-farm resiliency, climate mitigation, and infrastructure.

Thank you for taking the time to read MDAR's 2023 Annual Report. We look forward to updating you on these programs as well as new initiatives in calendar year 2024.

Respectfully submitted,



Ashley E. Randle

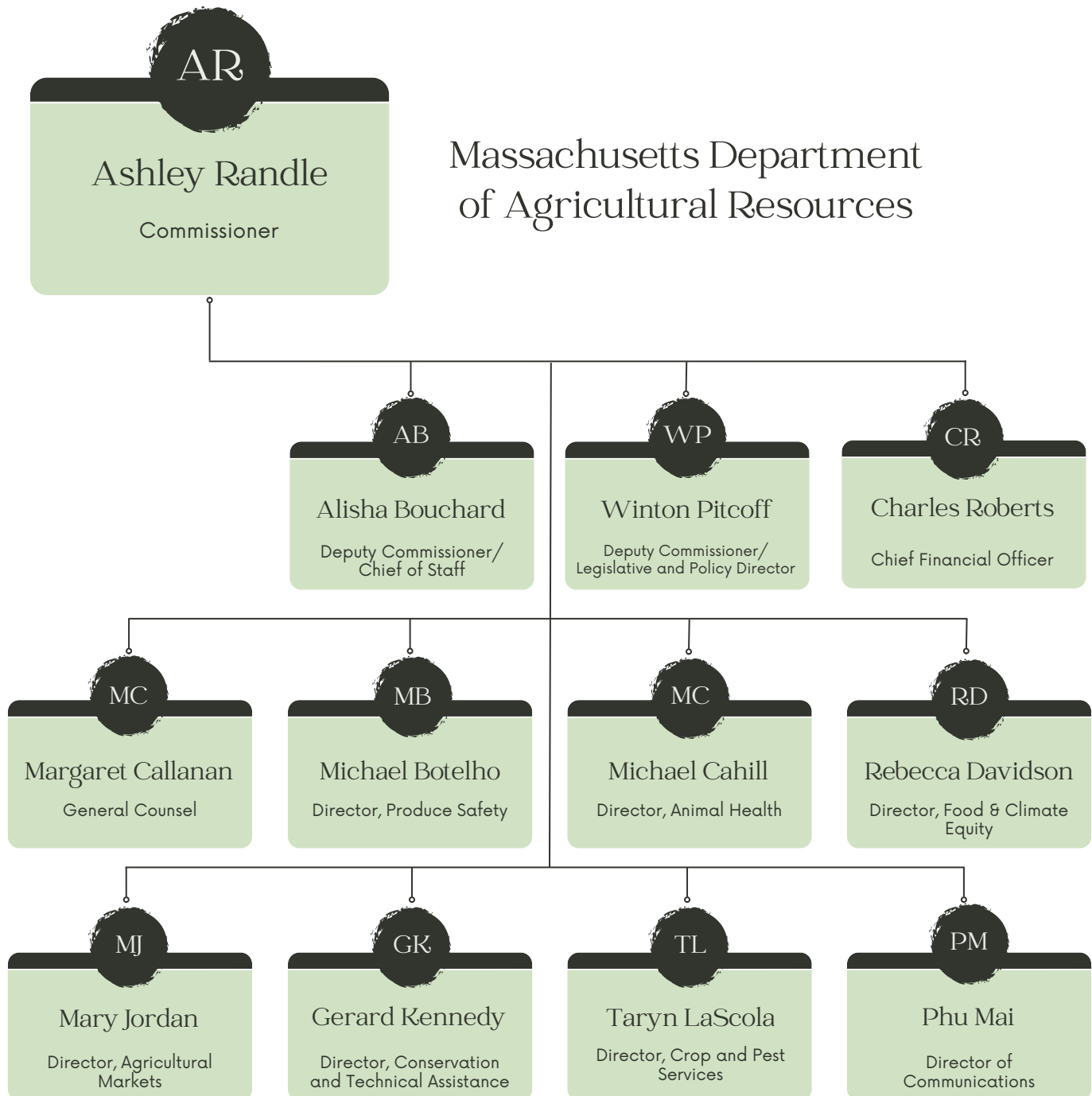
Commissioner

January 5, 2024

## Agency Organizational Overview

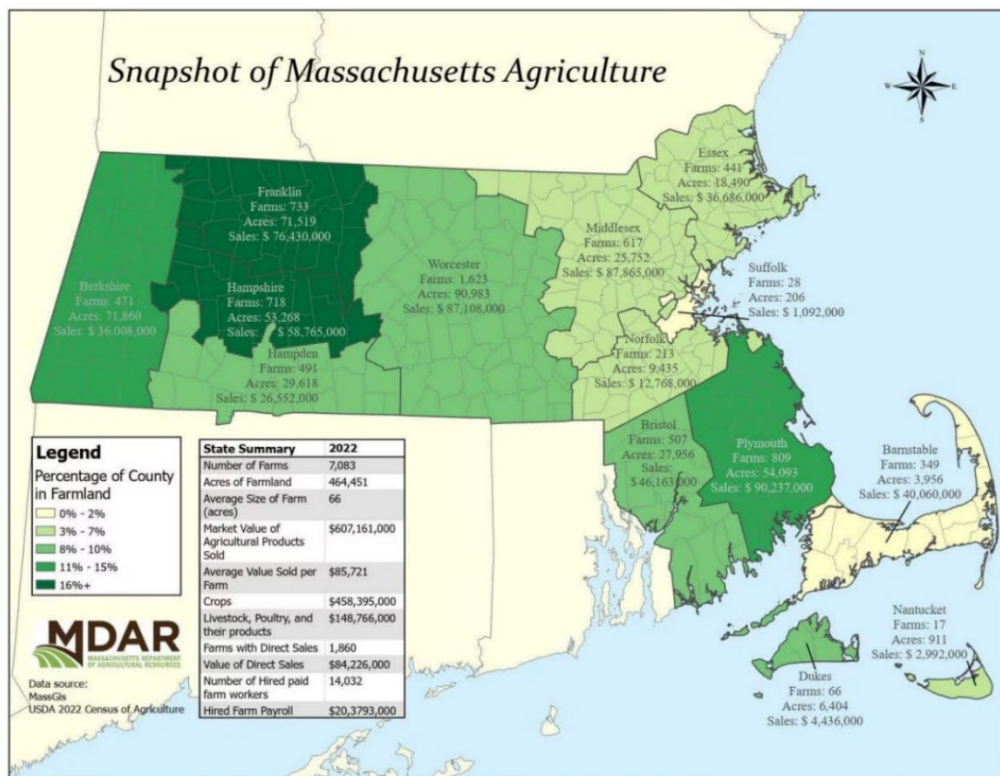
**MISSION:** The Massachusetts Department of Agricultural Resources' (MDAR) mission is to cultivate a robust and equitable agricultural economy, promote a safe and resilient food system, and preserve a healthy environment for Massachusetts farmers, animals, and consumers

**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.



## Snapshot of Massachusetts Agriculture

Massachusetts has 7,083 farms on 464,451 acres.<sup>1</sup> The entire agricultural industry produces an annual market value of over \$607 million dollars in agricultural goods. Most farms are individually, or family owned (95%) and fall into the category of “small farms” (94%).<sup>2</sup> The average farm produces \$85,721 in annual agricultural sales on 66 acres.



Massachusetts is the third most densely populated state in the U.S with 897 individuals per square land mile,<sup>3</sup> and is ranked the 4<sup>th</sup> highest state for average farmland value at \$15,300 per acre.<sup>4</sup>

### Greenhouse & Nursery

The greenhouse and nursery industry is Massachusetts’ largest agricultural sector. With 423 commercial greenhouse and nursery businesses<sup>5</sup>, it has a market value of over \$164 million<sup>6</sup>, and accounts for approximately 27% of the state’s agricultural economy.

### Fruits, Tree Nuts, and Berries

This sector has an annual market value of over \$131 million, and accounts for 34% of the agricultural economy.<sup>7</sup>

<sup>1</sup> All statistics are from the 2022 USDA Census of Agriculture unless noted otherwise.

<sup>2</sup> The United States Department of Agriculture defines small farms as farms with sales below \$250,000.

<sup>3</sup> <https://www.statista.com/statistics/183588/population-density-in-the-federal-states-of-the-us/>

<sup>4</sup> [https://www.nass.usda.gov/publications/highlights/2023/2023landvaluescashrents\\_FINAL.pdf](https://www.nass.usda.gov/publications/highlights/2023/2023landvaluescashrents_FINAL.pdf)

<sup>5</sup> [https://www.nass.usda.gov/Publications/AgCensus/2022/Full\\_Report/Volume\\_1\\_Chapter\\_1\\_State\\_Level/Massachusetts/st25\\_1\\_039\\_040.pdf](https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1_Chapter_1_State_Level/Massachusetts/st25_1_039_040.pdf)

<sup>6</sup> [https://www.nass.usda.gov/Publications/AgCensus/2022/Online\\_Resources/County\\_Profiles/Massachusetts/cp99025.pdf](https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Massachusetts/cp99025.pdf)

<sup>7</sup> [https://www.nass.usda.gov/Publications/AgCensus/2022/Online\\_Resources/County\\_Profiles/Massachusetts/cp99025.pdf](https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Massachusetts/cp99025.pdf)



## Vegetables, Melons, and Potatoes

There are 1,463 vegetable farms over 17,217 acres,<sup>8</sup> with over \$127 million in sales.<sup>9</sup>

## 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 384 growers on 12,875 acres.<sup>10</sup>

## 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.

## Dairy

Massachusetts had 95 dairy farms in 2023<sup>11</sup> that produced 178 million pounds of milk<sup>12</sup>, and over \$61 million in sales.<sup>13</sup>

## Aquaculture

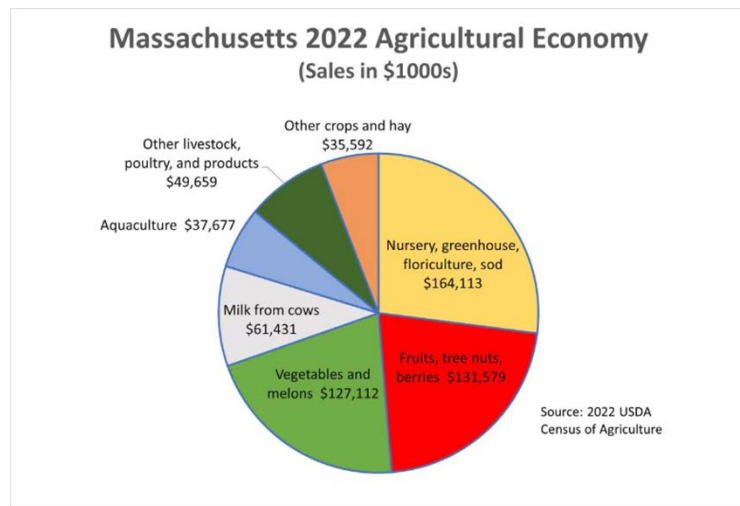
Massachusetts aquaculture industry ranks 15<sup>th</sup> in the country with sales over \$37 million.<sup>14</sup>

## Maple Syrup

Massachusetts has 261 farms with sales over \$3.1 million.<sup>15</sup>

## Christmas Trees

Massachusetts has 459 farms on 2,952 acres with sales over \$4.5 million.<sup>16</sup>



## Financial Report

In FY23, MDAR had total expenditures of \$76.4M which represented a 17% increase, or \$11.3M, as compared to FY22 when expenditures were \$65.0M. The increase was primarily driven by additional funding made available through the American Rescue Plan Act (ARPA). Two bills specifically, [Chapter 102 of the Acts of 2021](#) and [Chapter 268 of the Acts of 2022](#), authorized nearly \$50M to be spent on hundreds of earmarks and several existing programs over the course of several years (good through FY27). Driving the increase to a lesser degree were expenditures of \$3.5M through the ARPA-funded USDA [Local Food Purchase Assistance Program](#) which awards funds to groups who will buy food from socially disadvantaged farmers and producers to provide to underserved communities. These increases were only partially offset by a decrease in spending from our Capital budget where spending decreased by \$5.7M partially driven by payments in FY21 and FY22 of \$2.875M to support the design, construction, retrofitting and outfitting of the UMass Cranberry Station in East Wareham as well as a shift in Food

<sup>8</sup>[https://www.nass.usda.gov/Publications/AgCensus/2022/Full\\_Report/Volume\\_1\\_Chapter\\_1\\_State\\_Level/Massachusetts/st25\\_1\\_036\\_036.pdf](https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1_Chapter_1_State_Level/Massachusetts/st25_1_036_036.pdf)

<sup>9</sup>[https://www.nass.usda.gov/Publications/AgCensus/2022/Online\\_Resources/County\\_Profiles/Massachusetts/cp99025.pdf](https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Massachusetts/cp99025.pdf)

<sup>10</sup>[https://www.nass.usda.gov/Publications/AgCensus/2022/Full\\_Report/Volume\\_1\\_Chapter\\_1\\_State\\_Level/Massachusetts/st25\\_1\\_038\\_038.pdf](https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1_Chapter_1_State_Level/Massachusetts/st25_1_038_038.pdf)

<sup>11</sup> Internal MDAR Animal Health records

<sup>12</sup> [https://www.nass.usda.gov/Quick\\_Stats/Ag\\_Overview/stateOverview.php?state=MASSACHUSETTS](https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=MASSACHUSETTS)

<sup>13</sup> [https://www.nass.usda.gov/Publications/AgCensus/2022/Online\\_Resources/County\\_Profiles/Massachusetts/cp99025.pdf](https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Massachusetts/cp99025.pdf)

<sup>14</sup> [https://www.nass.usda.gov/Publications/AgCensus/2022/Online\\_Resources/County\\_Profiles/Massachusetts/cp99025.pdf](https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Massachusetts/cp99025.pdf)

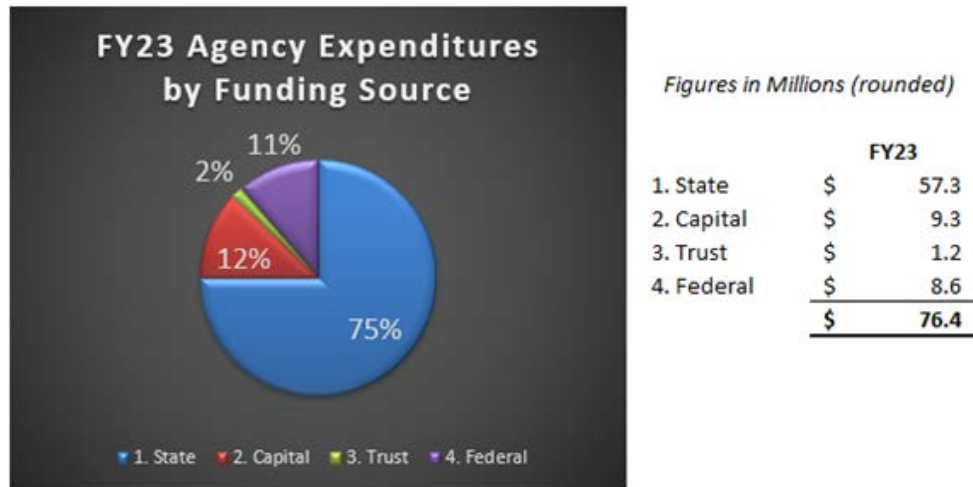
<sup>15</sup> [https://www.nass.usda.gov/Publications/AgCensus/2022/Full\\_Report/Volume\\_1\\_Chapter\\_1\\_State\\_Level/Massachusetts/st25\\_1\\_039\\_040.pdf](https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1_Chapter_1_State_Level/Massachusetts/st25_1_039_040.pdf)

<sup>16</sup> [https://www.nass.usda.gov/Publications/AgCensus/2022/Full\\_Report/Volume\\_1\\_Chapter\\_1\\_State\\_Level/Massachusetts/st25\\_1\\_039\\_040.pdf](https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1_Chapter_1_State_Level/Massachusetts/st25_1_039_040.pdf)



Security Infrastructure Grant (FSIG) spending which had been utilizing an MDAR authorization in FY21 and FY22 (\$2.2M), but shifted to an EOEEA authorization in FY23. The FSIG program is expected to shift to MDAR in FY25.

The chart below depicts MDAR expenditures, in FY23, by funding source:



## Budgetary Appropriations

### Administration Appropriation (2511-0100)

The Administration appropriation funds the day-to-day operations of the agency.

MDAR had total expenditures of \$10.2M in FY23 which represented a 20% increase, or \$1.7M, as compared to FY22 when expenditures were \$8.6M. The primary drivers of this increase are an increase in the number of earmarks (grants) as well as an increase in employee salaries and benefits costs.

Administration appropriation spending by category in FY23 includes:

- Employee salaries and benefits were \$6.6M.
- Earmarks accounted for \$2.6M including \$0.75M for Buy Local organizations.
- Leased facilities and utilities were \$0.2M.

### 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.

MDAR had total expenditures of \$930K which represented a \$1.2M decrease compared to FY22. The driver of this increase was a one-time expenditure in FY22 with the University of Massachusetts Pesticide Analytics Laboratory (MPAL) for the costs associated with the purchase and setup of specialized equipment used to perform the necessary scientific tests required of the hemp regulation 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). MDAR had expenditures of \$30.3M in FY23 which equaled FY22 when expenditures were also \$30.3M. Most of this funding goes to the

Greater Boston Food Bank which is responsible for the distribution of a percentage of funds earmarked for other Massachusetts food banks under a contractual agreement. In FY23, the funding provided to the Greater Boston Food Bank provided 25,453,097 equivalent meals.

The agency utilizes 2% of the Supplemental Food funding to administer the program.

#### Community Food Security Appropriation (2511-0107)

This appropriation was first established in FY22 and is entirely earmarked, representing 43 earmarks in FY23 totaling \$1.495M. These earmarks are for the advancement of community food security and the protection of public access to sufficient, safe, and nutritious food.

#### Integrated Pest Management Appropriation (2511-3002)

The Integrated Pest Management (IPM) program had expenditures of \$74K in FY23 which equaled spending in FY22.

#### Capital Accounts

MDAR had capital (bond) expenditures of \$9.3M in FY23 which represented a 38% decrease, or \$5.7M, as compared to FY22 when expenditures were \$15.0M. This decrease was largely driven by the previously mentioned payments of \$2.875M in both FY21 and FY22 to support the design, construction, retrofitting and outfitting of the UMass Cranberry Station in East Wareham as well as a shift in Food Security Infrastructure Grant (FSIG) spending which had been utilizing an MDAR authorization in FY21 and FY22 (\$2.2M), but shifted to an EOEEA authorization in FY23.

Capital funded programs include the Climate Smart Agriculture Program (CSAP), Agriculture Preservation Restriction (APR) Program, Farm Viability Enhancement Program (FVEP), Urban Agriculture, Agriculture Food Safety Improvement Program (AFSIP), the Massachusetts Food Venture Program, the Cranberry Bog Renovation Program, Food Security Infrastructure Grants (FSIG) and the Massachusetts Food Trust which has been supported through an Interdepartmental Service Agreement (ISA) with the Executive Office of Housing and Economic Development for \$1M each fiscal year (which will end in FY24).

#### Federal Funds

MDAR had federal expenditures of \$8.6M in FY23 which represented a 110% increase, or \$4.5M, as compared to FY22 when expenditures were \$4.1M. The increase was primarily driven by the previously mentioned ARPA-funded federal program [Local Food Purchase Assistance Program](#) (LFPA) which awards funds to food security stakeholder groups that then use the funds to purchase food from socially disadvantaged farmers and producers to provide to underserved communities. This program had expenditures in FY23 of \$3.5M in its first year of a multi-year program funded at \$14.6M. Additionally, and to a lesser degree, the Specialty Crop Block Grant Program had expenditures of \$697K in FY23 as compared to \$380K in FY22. While some of this increase can be attributed to timing of when project milestones are met, this program benefitted in 2021 when the USDA released a second round of the grant which resulted in 2021 funding of \$1.1M whereas most years are funded at ~\$450K. These are multi-year grants so the increase in 2021 program will be spent between fiscal years FY22 and FY25.

#### Trust Funds

Trust funds totaled 1.6% of agency spending in FY23 totaling \$1.24M which represented a 27% increase, or \$267K, as compared to FY22. The primary trust accounts from which spending occurred were the APR Mitigation Trust Fund (39%), Homeless Animal Prevention and Care Fund (29%), and the Dairy Promotion Trust Fund (18%).

## Revenue

MDAR collects 28 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) was 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.

Year	Revenue
2019	\$ 5,093,355
2020	\$ 7,705,511
2021	\$ 6,672,992
2022	\$ 6,823,370
2023	\$ 6,848,400

## Dairy Farmer Tax Credit Program

In 2023, 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 \$6 million in 2018 and then in 2023 the state budget increased the tax credit to \$8 million. For each month that the average cost of production exceeds milk prices, the dairy tax credit is triggered for the given month(s).<sup>17</sup> In 2023, the average cost of production exceeded the price of milk for all 12 months which triggered the tax credit for every month. This means that the full \$8 million was distributed to dairy farmers. The resulting tax credit payment to Massachusetts dairy farmers was \$4.474 per hundredweight of milk. 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 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 ensures compliance with [M.G.L. Chapter 94A](#), which seeks to create and protect a competitive milk market in the Commonwealth. To be compliant with Massachusetts law, 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.

## MDAR's Environmental Justice Program

The Environmental Justice (EJ) Team works to promote and integrate EJ considerations across MDAR programs, policies, and activities to ensure the equal access and meaningful involvement of all people residing in the Commonwealth with respect to agricultural economic and environmental sustainability and the equitable development, implementation, and accessibility to information and resources.

MDAR recognizes the historic and consistent barriers to farmland and agricultural resources for [socially-disadvantaged farmers and producers](#), as well as the marginalization of [Environmental Justice communities](#), and MDAR's EJ Program works to understand, outline, and address barriers to accessing farmland, healthy food, and resources.

MDAR's Environmental Justice goals and activities are outlined within [MDAR's Environmental Justice Strategy](#), a document shaped by constituent and partner organization feedback. In addition, the EJ Team

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<sup>17</sup> Average cost of production for milk is determined by UMASS Amherst studies



supports Language Access efforts and implements MDAR's Language Access Plan.

### Environmental Justice Strategy

EEA's EJ Policy and Executive Order 552 required that EEA agencies, including MDAR, develop their own strategies to "proactively promote environmental justice in all neighborhoods in ways that are tailored to their agencies' mission." EEA's EJ Office convened and led the EJ Task Force to develop this [draft EJ Strategy](#). The public comments period on the draft EJ Strategy concluded on February 17, 2023. The 2022 [Draft Environmental Justice](#) Strategy is available in the following languages:

[English](#) | [Español](#) | [Português](#) | [中国人](#) | [Kreyòl ayisyen](#) |  
[Tiếng Việt](#) | [عربي](#) | [اڤڤا](#) | [Русский](#) | [Kriolu](#)

In January 2023, MDAR conducted a public listening session to solicit feedback on the agency's Environmental Justice Strategy. MDAR also received written comments. The oral and written comments were integrated, or responded to, into a final Environmental Justice Strategy. The EJ Team would like to thank the thoughtful, honest feedback received from partner farmers and organizations throughout the public comment period. Your comments helped shape the final version of MDAR's Environmental Justice Strategy.

MDAR also adopted a model of continuous feedback and tracks important input on our programs and services. Constituents can provide anonymous (or non-anonymous) feedback on MDAR's Environmental Justice work, through [this survey](#).

### Grants and Metrics

In 2023, MDAR integrated a system to track the following metrics within all MDAR Grant Program Request-for-Responses (RFRs):

- Number of new applicants to MDAR Grant Programs
- Locations of funded and non-funded projects within Environmental Justice Communities
- Applications and awards to Historically Underserved Farmers or organizations with representation or leadership from Historically Underserved Farmers or Groups (including Socially Disadvantaged Farmers, Limited Resource Farmers, Veteran Farmers and Beginning Farmers)

MDAR RFRs included an Environmental Justice Questionnaire, and the metrics are being tracked and compiled for display on a public-facing dashboard.

In addition, MDAR's EJ Team supported webinars, outreach efforts, and language access efforts for several grant programs in an effort to enhance access to information and reduce barriers to participation.

### Outreach and Access to Information

MDAR launched an [Environmental Justice Newsletter](#) in March 2023 to provide updates on grants, events, and MDAR's progress on key environmental justice goals. The newsletter also provides an opportunity to celebrate the agricultural diversity in Massachusetts through Heritage Months and [Days](#). The public can view [past issues](#) and [subscribe](#).

In an effort to enhance access to information, MDAR published a booklet of Programs and Services. The booklet is organized into sections, and translated into 10 languages.

## [MDAR Overview of Programs and Services Booklet](#)

[Kriolu di Cabo Verde](#)

[简体中文](#)

[繁體中文](#)

[Kreyòl ayisyen](#)

[Lus Hmoob](#)

[ភាសាខ្មែរ](#)

[Português, Portugal](#)

[Soomaali](#)

[Español](#)

[Tiếng Việt](#)

## Language Access

MDAR prioritizes language services to ensure meaningful access to all programs and services. MDAR's Language Access Plan, which is currently under development, will outline MDAR's responsibilities and processes in regard to language services.

In 2023, MDAR implemented the following language access initiatives:

- Development and implementation of Language Services Process
- Collection of top languages spoken by farmers in Massachusetts
- Establishment of MDAR Language Pool for small translation or interpretation needs
- Staff training to ensure consistent understanding of MDAR's Language Services
- Completion of 16 translation jobs and six interpretation events

MDAR remains committed to deploying efficient and effective language access services to Massachusetts farmers, residents and partner organizations.

## MassGrown Wellness Program

The MassGrown Wellness program was launched by MDAR in 2023 to provide statewide mental health and well-being services to the Commonwealth's farmers, and those that support them. Program funding through USDA's Farm and Ranch Stress Assistance Network (FRSAN) was utilized to develop a responsive resource focused on helping overcome the stigma associated with discussing mental health challenges and be equipped to provide resources to those seeking assistance.

Over the course of the program's development, Massachusetts farmers have faced natural disasters, unfavorable growing conditions, and most recently Bird Flu, which have directly impacted productivity and profitable operation of the farm. MassGrown Wellness was able to address these unforeseen circumstances, through resources developed to specifically address the mental health impact these events had and how farmers might better manage their reactions.

The Peer Support Network ("Network"), formed in 2023, provided farmers facing unforeseen circumstances with fellow peer farmers available to discuss the situation and provide guidance resulting from the conversation. The Network graduated fifteen peer support network leaders, who participated in 18 hours of focused training over the course of six training sessions. These peers will now be trained and available to speak with fellow farmers and food system members about their mental health and wellbeing.

MassGrown Wellness outreach included efforts to reach the diverse farming community of Massachusetts. This outreach took into consideration the changing demographics of the Commonwealth's agricultural community and took steps to meet all community members where they are and in conversation that the community would understand and benefit.

As the program moves forward, MDAR will look to hire a Counselor to provide more specialized services to the agricultural community and further support the work of the Peer Support Network.

## Division of Agricultural Conservation and Technical Assistance (DACTA)

### 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 FY2023: MDAR offered a five-session Exploring the Small Farm Dream course during the winter of 2023 in Southborough to 11 participants representing eight potential farm enterprises. This course, developed by the New England Small Farm Institute, provides structure for participants exploring or planning to start a farm, to evaluate whether agricultural entrepreneurship is right for them and to help determine whether their small farm dream idea is feasible.

MDAR offered the Growing Your Farm Business course in Southborough in winter of 2023 to 11 participants from seven farms across the state. Course topics included resource assessment, financial management, marketing, quality of life, and goal setting with a guest speaker on online marketing strategies including social media. All participants completed a business plan with financial projections through the course to guide their farm business and earned a certificate of completion which was presented to them at the last class by MDAR Commissioner Ashley Randle.

### Agricultural Climate Resiliency & Efficiencies Program (ACRE)

The Agricultural Climate Resiliency & Efficiencies (ACRE) Program started in Fiscal Year 2018. The Program was created as part of the implementation of 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. Since 2018, the program has awarded grants to more than 135 projects totaling \$3,655,000.

The ACRE Program funds projects to address the agricultural sector's 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 FY23, 19 projects were awarded funding totaling \$655,000. Examples of funded projects include reduced tillage or no-tillage equipment, small-scale no-till equipment, maple monitoring systems, compost spreader, and dairy barn modifications.

### Agricultural Environmental Enhancement Program (AEEP)

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 more than 700 projects statewide that improve water quality, conserve water, reduce greenhouse gas emissions, and conserve energy. Agricultural operations have received over \$9 million dollars to help them address environmental concerns on their farms. In Fiscal Year 2023, 15 projects were funded totaling \$600,000 in awards. Projects are selected based on their potential to impact the most sensitive



resources, including drinking water supplies, wetlands, and Department of Environmental Protection (DEP) priority water bodies.

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, 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 one and six years in business that aspire to have commercially viable farm businesses along with one-to-one 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 FY23, \$47,252 in total grants of up to \$10,000 per farm were awarded to five participating MEGA farms for identified farm improvements. Farmers contributed more than \$74,000 of their own funds towards these projects. Grant projects include: walk-in cooler and packing table with sink, mower, freezers, trailer, box truck, tractor with forks, and hay equipment. In addition, participating farmers received direct business and technical assistance valued at a total of \$25,054 (an average of \$5,010 per farm).

Since MEGA began in 2010, \$953,681 total grants (an average of \$8,661 per farm) and \$449,771 of technical assistance (an average of \$4,089 per farm) have been awarded through 13 rounds of the program to 110 diverse beginning farms located across the state.

### Agricultural Preservation Restriction Program (APR)

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 prices at a level that can be supported by the land's agricultural uses and potential.

In FY23 the APR program protected seven farm projects covering over 364 acres for a total consideration of more than \$5.4 million. 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), as well as with the Municipalities of Great Barrington, Hadley, Harvard, Upton, and West Bridgewater. Also, the Harvard Conservation Trust, New Marlborough Land Preservation Trust, Inc., and the Sudbury Valley Trustees, Inc., contributed with the various APR projects.

	Municipalities	County	Closing Date	Article 97 Acreage	Total Consideration
1	Great Barrington	Berkshire	12/27/2022	66.8	\$920,000.00
2	New Marlborough	Berkshire	2/2/2023	53.372	\$635,000.00
3	Harvard	Worcester	6/26/2023	70.564	\$2,500,000.00
4	Upton	Worcester	6/27/2023	28.49	\$205,000.00
5	Richmond	Berkshire	6/29/2023	18.16	\$187,844.00
6	West Bridgewater	Plymouth	6/29/2023	59.3	\$360,000.00
7	Hadley	Hampshire	6/29/2023	68.07	\$657,000.00
				364.756	\$5,464,844.00

### APR Improvement Program (AIP)

The APR Improvement Program (AIP) helps 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 FY23, nine farms across the state participated in the APR Improvement Program, receiving a total of \$56,227 in business planning and technical assistance (average of \$6,247 per farm) and total grant funding of \$720,000 (\$80,000 average grant per farm). These farms have a combined total of 952.20 acres in APR land. Grant projects included the construction of equipment storage barns, renovation of a multi-use barn, manure management and heavy use area, new and expanded retail farmstands with wash and pack areas, new hay storage barns, improvements to an existing dairy barn, and repair and renovation of barn for livestock housing and hay storage.

Since the program began in 2009, AIP has provided a total of \$8,145,000 in grant funding and \$647,730 in planning and technical assistance to 115 participating Massachusetts farms through 14 rounds of the program. These farms own a combined total of 16,143 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 2023, SARA provided grant funding of up to \$35,000 per farm, with a 15% required cash match, for

identified improvements that helped 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 FY23, 13 respondents applied for SARA funds and a total of \$222,813 in grants were provided to nine APR farms in five different counties. These funds helped to clear field edges and fence lines to renovate, seed and fertilize pasture and hay land (26 acres improved). SARA also provided resources to restore farm access roads (4,250 feet road repaired), make drainage improvements to eliminate field wetness and erosion (6,990 feet of drainage installed) and rebuild a pond retaining wall.

### Agricultural Composting Program

Through its Agricultural Composting Program, MDAR encourages and supports composting on farms. Application of compost to agricultural soil improves tilth, soil organic matter, water holding capacity, and contributes nutrients. Composting farm manure provides a more stable form of nutrients, reducing odor, and resulting in a material which is lighter and easier to spread than manure.

Within its Division of Agricultural Conservation and Technical Assistance, MDAR administers 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, may register their operation with MDAR, while adhering to MDAR's Agricultural Composting Program regulations, 330 CMR 25.00.

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 MDAR:

- Leaf and yard waste
- Wood wastes
- Vegetative material
- Paper and cardboard
- Food material

MDAR is responsible for registering new agricultural composting sites, as well as renewing the registration of existing sites annually. In 2023, a total of 41 sites were registered in the MDAR Agricultural Composting Program. Throughout the course of the year, MDAR's Agricultural Composting Specialist conducted a total of 68 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.

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 \$190,287 in funding to nine farms during FY23. This money helped these farms purchase equipment such as compost spreaders, turners, chippers, and screeners, as well as the construction of new compost pads, improving the efficiency of their composting operations and helping to improve their farm soils through application of compost.



MDAR revised and published its Guide to Agricultural Composting during 2023. Updates were made to the previous version to reflect regulatory changes, adding helpful technical information.

### Aquaculture Program

Aquaculture is the 5th highest valued agriculture sector in the Commonwealth of Massachusetts. After experiencing a 40% drop due to the pandemic, the value of the Massachusetts oyster and hardshell clam industry rebounded to more than \$32,000,000 in 2023. In 2022, a total of 401 aquaculture growers cultivated 1,358.3 acres, producing over 54 million oysters and nearly 5 million hardshell clams. 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.

Established in law following the recommendation of the Massachusetts Shellfish Initiative, the Massachusetts Shellfish Advisory Panel (SAP) met six times during 2022-2023. The SAP brings together members from the Executive and Legislative branches as well as 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 FY23, a total of \$60,000 was provided to the Centers to support the Massachusetts aquaculture industry.

Massachusetts is also home to ten trout farms, producing fish worth more than \$2,000,000, and a large recirculating aquaculture facility in Franklin County which produces barramundi, an Asian sea bass.

### Energy Efficiency, Conservation, And Renewables Program (Energy Program)

Since 2009, the Massachusetts Department of Agricultural Resources (MDAR) annually invites 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 is an effort to improve energy efficiency and facilitate adoption of alternative clean energy technologies so farms can become more sustainable, and the Commonwealth can maximize the environmental and economic benefits from these technologies. These projects 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 helped fund more than 325 farms for a variety of energy efficiency and renewable energy projects, providing total funding of more than \$4.75 million dollars toward approximately \$23.75 million dollars of total project construction costs, resulting in more than \$1,600,000 in either annual energy savings or energy generation.

2023 also represented the fifth year of DOER's SMART Program and the Agricultural Solar Tariff Generation Unit (ASTGU) incentive for dual use of agricultural land with solar PV. To date the program has pre-approved 35 ASTGU projects through the required Pre-Determination process, totaling 48.12 MW AC and 83.14 MW DC in capacity. Due to COVID many of those projects were placed on hold but

are now beginning to initiate construction. Four projects have been completed, including Knowlton Farm in 2022. There are an additional 14 projects totaling 28.7 MW AC and 42.6 MW DC currently under review.

### AgEnergy Grant Program 2023

In FY23 MDAR awarded 23 AgEnergy grants totaling \$750,000 to Massachusetts farmers to implement renewable energy systems and improve energy efficiency on farms, reducing equivalent CO2 emissions by approximately 490 tons.

Funding was provided to farms in twenty-three (23) towns in the Commonwealth, including Brewster, Bolton, Canton, Carver, Chilmark, Cummington, Dracut, Granville, Hadley, Hardwick, Hyannis, Leominster, Lincoln, Orange, Pepperell, Rehoboth, Shelburne, Sunderland, Truro, Vineyard Haven, Westfield, Williamstown, and Worthington.

The projects were a combination of energy efficiency and renewable energy projects including: 11 roof- or ground-mounted, behind the meter, solar photovoltaic systems totaling more than 410 kW, for a variety of farm sector operations including vegetable, cranberry, dairy, horticultural, and vineyard; maple syrup operations improvements including new reverse osmosis, evaporators, or pre-heaters; energy efficient refrigerated display cases for retail operations; heat recovery refrigeration and new compressors for a dairy; and two all-electric refrigeration delivery trucks.

### Massachusetts Farm Energy Program (MFEP) – 2023

MFEP is a full-service technical assistance program helping over 800 agricultural producers across all agricultural sectors over the past 12+ 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 2023 MFEP provided more than 130 Massachusetts farms with technical and financial assistance, and partnered with federal and state agencies, public utilities, and nonprofits to develop and complete nine 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 nine projects installed in 2023 resulted in annual savings of more than 159,000 kWh of electricity, and more than 67 tons of CO2. Two solar photovoltaic projects completed in 2023 are generating more than 36,000 kWh of electricity annually. Energy efficiency improvements installed at farms in 2023 included energy efficient lighting, insulation and air sealing, and more efficient refrigerated display cases and cattle waterers.

MFEP leveraged more than \$85,000 in federal and ratepayer funds and committed \$80,456 in MDAR incentives (including \$14,456 in MFEP funds) to energy efficiency and renewable energy projects in 2023. Farm energy projects for 2023 resulted in annual energy cost savings of approximately \$30,124, helping farms create and maintain jobs and reinvest savings into the farming operation and local economy.

MFEP staff also provided one-on-one mentoring to 21 farms preparing to submit grants to USDA REAP, as well as providing Q&A support to farms applying to MDAR's Climate Smart Agriculture Program (CSAP) – resulting in several highly competitive grant awards. Staff presented information to farms on completing these applications via webinar and distributed a bi-monthly newsletter. In addition, MFEP staff collaborated with Farm Credit East to discuss what MFEP can offer to farms they work with, as well

as with New England Consulting Services and Complete Energy Services to discuss how we can partner to help farms with their energy efficiency needs.

MFEP also generates newsletters and conducts webinars. Past MFEP newsletters and webinar recordings are available to anyone at any time on the [News page News & Events – MA Farm Energy Program \(massfarmenergy.com\)](#) of the MFEP website. The link to the webinar recording is also distributed to all registrants after each session, regardless of attendance.

### Farm Viability Enhancement Program - (FVEP)

During Fiscal Year 2023, the Farm Viability Enhancement Program (FVEP) selected eight farms that applied to the Program. Of these, seven farms participated in the Program, received \$45,069.50 total business planning and technical assistance (average of \$6,438.50 per farm) and \$720,000 total grant funding (average of \$102,857 per farm) and a total of 769 acres were placed under short-term Agricultural Covenants to keep the land owned by these farms in agricultural use for a period of time.

Improvement projects funded with FVEP grants in FY23 include: the construction of a livestock barn, the construction of a livestock housing building and feeding equipment, the construction of a hay barn and purchase of fencing and a tractor, the construction of an equipment storage and maintenance building, the purchase of farm vehicles and a barn renovation, the purchase of a roof-mounted solar array and cattle headlocks, and the renovation of a barn and cider house and the purchase of orchard equipment. Since the Farm Viability Program was initiated in 1996, 542 farms have been selected to participate in the program. A total of 466 farms have been protected by Covenants and received grant awards. Farm Viability Enhancement Program Results to date include:

- 466 farms have benefited from business and technical assistance and grant funding;
- 45,805 acres of land has been placed in Agricultural Covenants;
- Total grants paid to participant farms \$22,016,472, an average of \$47,246 per farm;
- Total spending on grants per acre placed in protective covenant: \$480.66 per acre.

### Urban Agriculture Program

Urban Agriculture is an important component of the growing local food movement, nationally and across the Commonwealth.

MDAR recognizes that urban food production plays an important role in addressing health, social, economic, and environmental issues, and is works 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 more than 100 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 Agriculture Grant Awards

Municipalities, nonprofit 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, for which applicant must have at least 25%



cash match.

The Urban Agriculture Grant program helps enterprises in cities across the Commonwealth grow their own food. The funds help address some of the challenges facing urban farmers, such as securing suitable land, improving nutrient-poor soils, meeting high start-up costs, and complying with restrictive zoning rules.

FY 2023: MDAR received six proposals and awarded five grants for proposals totaling \$200,000. Projects included soil regeneration, commercial greenhouses, and infrastructure improvements.

### Massachusetts Food Venture Program

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. MFVP investments 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.

The Food Venture Program received twenty applications for funding in FY23 and awarded a total of \$1,044,766 to nine projects.

### 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.

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 department 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'23.

In FY23, 14 funded projects, representing 10 (counties, combined to create or retain 200 jobs, and will serve an estimated 68,000 people by providing greater access to fresh food. All the projects accept or plan to accept SNAP and half accept WIC. All offer local MA food.

### MA Emergency Food Assistance Program (MEFAP)

MEFAP provides food for residents of the Commonwealth in need. Through the program, a consistent supply of quality, nutrient-rich foods and locally-grown fresh produce is 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 department.

The Greater Boston Food Bank is the largest food bank in the state and received 68.13% of MEFAP funding in FY’23.

MEFAP funding in FY 2023: \$30M

Core Food Purchases: \$26,176,698.00 M

Mass Grown Initiative: \$ 2,243,301.00 M

Food Banks Operating Funds: \$1,000,000.00 M

MDAR Funding: \$580,000.00

## Division of Agricultural Markets

The Division of Agricultural Markets team offers expertise in the development and support of innovative market venues, business expansion, grant opportunities, consumer, and industry outreach.

In 2023, the Division of Agricultural Markets Team implemented several new initiatives focused on branding. We continued the Massachusetts Grown & Fresher initiative and pursued increased consumer awareness opportunities which aligned with the goals to increase access to local food through creative marketing initiatives, promotion initiatives, branding, and creative content for social media messaging. The Division, in collaboration with the farming community and agricultural stakeholders, published the first *Massachusetts Agriculture* magazine in late fall. The goal of the magazine is to provide an informative overview of the Massachusetts agricultural industry by giving the reader a good perspective of how agriculture is thriving in the Commonwealth. The content showcases the contributions of agriculture to the State of Massachusetts through engaging articles, photography, and design.

Programs and initiatives seek to accomplish the mission of the Division which is to foster the sustainability of Massachusetts agribusinesses through innovative implementation of marketing, public relations, and educational programs. These initiatives are designed to keep Massachusetts’ agriculture economically viable, while also serving the needs of consumers by connecting them with high quality, locally produced foods, and agricultural products.

## Agricultural Education

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. These highly specialized public secondary schools provide future generations with the knowledge and skillset they will need to be successful in the agricultural sector, from farm machinery to animal husbandry. Student Enrollment at the four agricultural high schools are as follows:

### **Agricultural High School Enrollment by Year**

	2021-2022	2022-2023	2023-2024
<i>Bristol County Agricultural HS</i>	499	549	592
<i>Norfolk County Agricultural HS</i>	588	580	586
<i>Essex North Shore Agricultural &amp; Technical HS</i>	1654	1,694	1,745
<i>Smith Vocational and Agricultural HS</i>	547	566	569

Agricultural education youth organizations continue to be a popular outlet for students, particularly the Massachusetts chapters of the FFA and 4-H Club. There are currently 19 FFA chapters in Massachusetts with a total membership of more than 2,700 students. During the 2022-2023 program year, Massachusetts 4-H clubs served more than 1,411 youth, ages 5-19, with the help of more than 676 adult volunteers. Additionally, Massachusetts 4-H served 8,865 youth, aged 5-19, involved in 4-H programs through school and community-based programs run by 4-H staff. The Massachusetts FFA Convention was held in April 2023, hosted at the Sheraton Framingham.



Representatives of the Massachusetts FFA represented the state at the National FFA Convention and Expo, in Indianapolis and brought home multiple awards. The Massachusetts 4-H Chapters hosted their annual fairs, along with managing the Massachusetts 4-H Milk Booth at 2023 Big E, on the grounds of the Eastern State Exposition.

With growing interest in agricultural literacy, MDAR continues to support integrating ag literacy in schools throughout the Commonwealth. To further these efforts, MDAR provides an annual Agricultural Education Grant.

In 2023, MDAR entered into a contract with Massachusetts Agriculture in the Classroom (MAC) for the amount of \$10,000 to provide workshops and grants for teachers and to produce the annual Massachusetts Agriculture calendars. The mission of MAC is to promote agricultural literacy among educators and to provide them with the skills and support to integrate agriculture into their classroom. Over the past 23 years, MDAR has partnered with MAC in producing a hard copy calendar filled with Massachusetts farming landscape photos selected through an annual public photography contest. The annual calendar, which is an excellent resource that serves as an educational tool for teachers and the public, includes monthly educational/teaching tips, fun facts, and special ag-related days and events. Each month is sponsored by a 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 2023, 2,500 calendars were produced and distributed to teachers and the general public.







Other educational partners include the Massachusetts Envirothon, Massachusetts Farm to School, the Massachusetts State Grange, Hawlemont Regional Elementary School, Growing Places, the state's regional Buy Local organizations and the Massachusetts Department of Elementary and Secondary Education (DESE). In 2023, MDAR staff once again participated as volunteers and members of the advisory committee for the annual Massachusetts Envirothon competition. The Envirothon is a statewide competition where high school teams are tested on their knowledge of wildlife conservation, aquatic ecology, soils, and forestry. The 2023 Massachusetts

Envirothon winner, Lexington High School, sent five teens who went on to compete and win first place at the International Envirothon competition in Canada.

### Agricultural Event Certification Program

On August 5, 2010, Governor Patrick signed S2582: 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 MDAR before a winery can apply for the appropriate license from the local licensing authority. In 2022, MDAR processed 160 applications for certified agricultural events. This number represents an increase of about 20% from 2021 figures which shows increasing demand and interest for our wineries to sell direct to consumers in the Commonwealth.

### 2023 Massachusetts Fairs Annual Report

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!

Commissioner Randle, Deputy Commissioner Pitcoff, and department staff traveled throughout the Commonwealth to visit approximately 90% of the state's agricultural fairs in 2023. MDAR staff worked closely with the officers of the Massachusetts Agricultural Fairs Association (MAFA) by attending board meetings and the organization's annual conference 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](https://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 national competitions.





## 2023 Massachusetts Building Annual Report

Eastern States Exposition (The Big E) is an annual event that takes place in West Springfield, MA for 17 days and draws more than 1.6 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.



In 2023, there were 36 Exhibitors:

- 6 Informational Government Agencies and 1 Non-food Government Agency (Lottery)
- 5 Food Non-profit/Commodity Groups
- 11 Food For-Profit Vendors and 13 Non-Food For-Profit Vendors

Last year, we welcomed seven new exhibitors, all of whom were well received by fairgoers. Although many exhibitors return annually and are fairgoer favorites, introducing a few new exhibitors every year keeps the building relevant and exciting.

2023 Total Fair Attendance : **1,427,234**

The Massachusetts Building participated in three special annual event days: Military Appreciation Day, Massachusetts Day, and Harvest New England Day. Highlights included:

**Military Day:** West Springfield Fire Department suspended a large American Flag over the front lawn in celebration of Massachusetts' veterans.





The Massachusetts Building celebrated Massachusetts Day on September 22<sup>nd</sup>, 2023. Lt. Brian Clapprood, who has worked with the Massachusetts Building educating the public on the role of the MA State Police, was added to the MA Building Wall of Fame. The weather was perfect, sunny and warm, the lawn was filled with families who enjoyed a DJ, simulated

downhill skiing with Mt. Wachusett, a cranberry bog, reenactors from REV 250, met Smoky the Bear and enjoyed free milk shakes from New England Dairy.

#### 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.

The Massachusetts Building at the Big E fair continues to be an excellent venue to showcase New England's heritage, agriculture, industry, education, and family entertainment.

#### Agricultural & Culinary Tourism

2023 saw continued public interest and engagement at agritourism farms in Massachusetts. During the late winter season, maple sugar houses and sugar shacks were busy welcoming guests for tours and pancake breakfasts complete with local maple syrup. Unfortunately, severe weather incidents throughout the year, impacted the growth of produce relied upon by pick your own (PYO) farms including berries, apples, peaches, and pumpkins. Despite these obstacles, many agritourism operations continued providing family-friendly activities at the farm for people to enjoy. MDAR continues to support agritourism with specialty months, proclamations and farm tours. These include March Maple Month, June Dairy Month, October Cranberry Month and Green Friday (Christmas trees), the last Friday in November.

MDAR continues to benefit from longstanding relationships with statewide agencies including the Massachusetts Office of Travel and Tourism (MOTT). By meeting





quarterly, both agencies are able to streamline messaging on agritourism and produce digital and printed collateral, including a reprint of the [Massachusetts Wine & Cheese Trail](#).

As always, MDAR will continue to be supportive of agritourism initiatives and programming and recognizes its economic benefit to Massachusetts farmers.

### Boston Public Market Commission

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 in Massachusetts and New England.

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.



In 2023, the Commission met on June 12 and December 6.

The Public Market Commission is chaired by MDAR Commissioner Ashley Randle with additional members from Executive Office for Administration and Finance; Executive Office of Energy and Environmental Affairs; Department of Transportation; State Senate; House of Representatives; Boston Planning and Development Agency; The Rose Kennedy Greenway Conservancy and the City of Boston . Commission members received updates regarding the Market's recovery from the effects of the COVID-19 pandemic, including marketing and programming. Two of the market's vendors gave presentations about their business: Red's Best and Soluna Garden Farm.

## Annual Tomato Contest



The 38<sup>th</sup> Massachusetts Tomato Contest was held on the Blackstone Street Plaza outside the Boston Public Market on Tuesday, August 23, 2023. The friendly contest, open to commercial tomato growers, is coordinated by MDAR 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.

The tomatoes were judged on flavor, firmness/slicing quality, exterior color, and shape by a panel of judges, including media, chefs, and government officials. Eighty-four entries were received. 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. Coverage of the event included media representing radio, newspaper, and television news.

## Export Market Development

Developing and expanding international markets and sales of Massachusetts products is essential for the Commonwealth's food and agriculture businesses to access more customers and to diversify their market opportunities. The Massachusetts total export value of Ag & Related Products (including seafood) was valued at \$783 million. The value of Processed Food totaled \$556 million. Separately, seafood totaled \$329 million. Of note is cranberries which totaled \$91.8 million. Source: USDA/FAS/GATS

MDAR Commissioner Randle is a board member of Food Export USA Northeast, a USDA Cooperator, leveraging access to funding programs and services for Massachusetts food, seafood, and agricultural businesses.

Funding is available through the USDA Farm Bill's Market Access Program, administered by Food Export. Small and medium size businesses can receive 50% cost-share reimbursement through the "Branded Program" for eligible expenses including international marketing and promotion support, trade events and label modification. Branded Fund awards in 2023 totaled over \$801,800 to 32 Massachusetts food businesses. MDAR has been supporting seafood export marketing since 2004. The Branded Program is made possible by MDAR's membership in Food Export.

Massachusetts continued a focus on market development for the shellfish aquaculture sector, important since production is expected to double in the upcoming five years. In late September, USDA FAS funds, administered through Food Export, supported a Shellfish Focused Trade Mission, bringing international importers and distributors to Massachusetts. Buyers from Italy, Latvia, the Netherlands, Saudi Arabia, Spain, and the UAE toured shellfish farms and facilities in Massachusetts, and met one-on-one with oyster, clam, and mussel growers. They learned about the nuanced flavor differences based on production method and location and explored business opportunities. Representatives from Pangea Shellfish, Boston; ARC/Chapin Farms, Dennis; Cape Cod Shellfish Company, Marston Mills; Island Creek Oyster, Duxbury; Plymouth Rock Shellfish Growers, Plymouth; and Wellfleet Shellfish Company, Wellfleet, sampled live Massachusetts oysters and clams with potential customers at their facilities and during the one-on-one meetings.





*Caption: Shellfish farmer Jake Puffer and his colleague show how to harvest oysters in Wellfleet Harbor to buyers from Singapore, Italy, and a representative from the Dutch Shellfish Federation.*

featured including Boston Smoked Fish Company, Boston; Channel Fish Processing, Braintree; Cindy's Kitchen, Brockton; John Nagle, Boston; North Atlantic Pacific Seafood, Gloucester; and Superior Lobster, Marshfield. The USDA funded Branded Program offset 50% of eligible costs for these exhibitors, as well as other Massachusetts exhibitors at the trade event. DMF's Marketing Program coordinated and paid for signage and merchandising.

A wide array of export programs and services are available for Massachusetts agricultural, seafood and food businesses, including exporter education, in-country market research, support at domestic and international trade shows. In addition to support at trade shows outside of the country, major US trade events that host international buyers are also eligible for the Branded cost-share program. To participate, products promoted must have at least 50% ingredients that are grown in the US. Buyers Missions offer a low-cost, low-risk opportunity to meet one-on-one with international buyers. Massachusetts companies participated in Buyer Missions connected with trade shows including the Global Pet Expo, Fancy Food Show, National Restaurant Association, Natural Products Expo, Private Label Trade Show, and Seafood Expo North America.

MDAR partners include the Massachusetts Export Center, the Cranberry Marketing Committee, the National Confectioners Association, and the Specialty Food Association.

To promote and educate Massachusetts agriculture and gain knowledge about international agriculture trade policy work that companies must navigate, USDA coordinates programs to connect agricultural leadership with their counterparts in other countries.

Educational programs during the mission helped convey that Northeast harvesters and dealers maintain stringent safety protocols in growing and handling oysters, and that the shellfish are grown in clean health water which is routinely monitored. The trade of molluscan shellfish (mussels, clams, oysters, and scallops) between the European Union and the U.S. resumed in early 2022, following a 10-year break after the two sides resolved regulatory disputes. Shellfish from the two states of Massachusetts and Washington are allowed to be exported to the EU.

2023 featured the 5th Massachusetts Avenue at Seafood Expo North America, Boston, organized in partnership with the Division of Marine Fisheries (DMF). Six companies were



*Caption: MDAR promoted the Massachusetts Avenue at the Summer Fancy Food Show, with the same theme as at Seafood Expo North America in Boston, developed by MDAR's sister agency and partner, Division of Marine Fisheries*

Commissioner Randle joined a National Association of Departments of Agriculture Emerging Markets Program, supported by USDA Foreign Agriculture Service (FAS) Agricultural Trade to Jakarta, Indonesia in early August. The programs aimed to boost exports of US Agricultural product and diplomatic relationships with developing countries with strong growth potential. They joined in-depth market briefings from FAS and participated in site visits to see American branded products and store promotions.



In early November, Commissioner Randle joined the British Embassy Washington's Delegation of Agricultural Commissioners to the United Kingdom. The program focused on expanding U.S. exports and seeking ways to reduce tariffs and non-tariff trade barriers to create equitable access to the marketplace and encourage science-based decision making in terms of agricultural and food policies.

*Caption: Commissioner Randle with Mission participants including Ted McKinney, Under Secretary for Trade and Foreign Agricultural Affairs, USDA, meet US Ambassador Sung Kim to the Republic of Indonesia.*

## Farm & Market Report

MDAR's bimonthly e-newsletter, [The Farm and Market Report](#), continues to be the MDAR's most important tool to disseminate departmental information and updates throughout the year. It includes the Commissioner's Column, program and grant updates, workshop and educational updates, USDA News, along with calendar and classified advertising sections. It is distributed via email to the agricultural community in Massachusetts and has more than 8,500 email subscribers. The Report, as well as timely eblasts, keep the ag industry informed with up-to-date grant information and resources. We encourage anyone looking for Massachusetts news related to agriculture, to subscribe by sending a request to Rick LeBlanc at [Richard.LeBlanc@mass.gov](mailto:Richard.LeBlanc@mass.gov).

## Farmers Market Program

There were 224 farmers markets in 2023, an increase of seven markets from 2022. Forty-nine winter farmers markets were open during the 2023 winter season.

In the fall of 2023 MDAR issued a Request for Response for the Farmers Market Sustainability Grant Program. This new grant program funds marketing, promotion, consumer education, planning, and infrastructure needs of farmers markets. Applications were due in November and MDAR received 44 applications. Of those, 23 were awarded grants totaling \$205,318.86. Awardees have until June 2024 to complete their projects.

Massachusetts Farmers Market Week was held the first week of August in conjunction with National Farmers Market Week. In celebration, Governor Maura Healey issued a proclamation and MDAR Deputy Commissioner Winton Pitcoff along with federal, state, local officials and partners, visited farmers



markets to recognize farmers markets and their contributions to local communities and agriculture.

Farmers Markets in the following communities were visited: Ashland, Cambridge, East Boston, Framingham, Lynn, Norwood, Pittsfield, Springfield and Truro.



Ashland



Cambridge/Central Sq.



Cambridge/Kendall Sq.



East Boston



Framingham



Lynn



Norwood



Pittsfield



Springfield/Brightwood



Truro



Springfield/Forest Park

## Farmers Market Numbers

Year	Number of Markets	Percent Growth	Number of Winter Markets	Percent Growth
2019	227	-6%	46	-13%
2020	195	-14%	36	-22%
2021	212	9%	41	14%
2022	217	2%	49	2%
2023	224	3%	49	0%

## 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 seeking vendors is maintained for growers and local food producers who are looking for markets to participate in. Days, times, and locations for all markets 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](https://mass.gov/massgrown).

## SNAP/EBT at Farmers Markets/Direct Marketing Farmers – Healthy Incentives Program (HIP)

MDAR maintains information on its website regarding how farmers and farmers markets can apply for, and receive, SNAP retailer authorization. Information on subsidized SNAP equipment options is also included.

MDAR continues to collaborate with the Department of Transitional Assistance (DTA) on the Healthy Incentives Program (HIP). HIP matches the purchase of fruits and vegetables when SNAP recipients shop with participating vendors at farmers markets, farm stands, Community Supported Agriculture Programs (CSAs), and mobile markets. A credit is instantly applied on participants' EBT cards, up to \$40, \$60 or \$80 month. MDAR assists DTA with training and technical assistance to farmers and farmers markets for HIP.



In 2023 there were approximately 300 vendors at 600 locations across Massachusetts. HIP incentives earned in 2023 totaled \$16,775,925.73, an increase of more than \$4 million from 2022.

## Farmers Market Nutrition Program

In 2023, the USDA FNS awarded Massachusetts with \$522,545 in federal food dollars to distribute to low-income elders along with \$58,060 to use to administer the program statewide. In addition, MDAR applied for and received a \$1.4 million grant to serve more eligible seniors and increase the benefit from \$25 to \$50. In 2023, 28,122 Massachusetts seniors and disabled individuals participated in the program compared with 25,446 in 2022. Participating elders received a benefit of \$50 per person for the 2023 growing season. 75.5% of issued coupons were redeemed at Massachusetts farmers markets and farmstands. This figure is slightly higher than the 73% redemption rate in 2022. In 2023, the program



utilized 100% of the USDA 2023 Food Allocation, as compared to 89.2% of the 2022 Food Allocation. The Senior FMNP home bound delivery program served 2,131 seniors in 2023 throughout the Commonwealth of Massachusetts. Twenty-four Elder Nutrition Programs distributed coupons and produce to seniors and disabled individuals across the state of Massachusetts. MDAR distributed a nutrition education flyer and a regional list of farmers' markets and farmstands.

In 2023, the USDA FNS awarded Massachusetts with \$922,622 in federal food dollars to distribute to participants in the WIC (Women, Infants and Children) program. The 2023 WIC Farmers' Market Nutrition Program (FMNP) served 28,666 women, children, and infants older than four months with coupons to buy fresh produce at farmers markets, which is an increase from the 22,522 served in 2022. 63% of WIC FMNP coupons were spent at farmers' markets and farmstand vendors. The WIC FMNP redemption figure is down by 2% when compared to last year's 65%. The program utilized 56% of the USDA FNS 2023 allocated food dollars, which is a slight increase from the 52.1% utilization rate of the USDA FNS 2022 allocated food dollars. Participants received a benefit of \$30 per person for the 2023 growing season.

The program certified 164 farmers markets, 132 farmstands, and 380 growers to serve the recipients of the Senior and WIC Farmers Market Nutrition Programs.

**Overall, these funds successfully allowed for the purchase of \$1,640,055 worth of fresh, local produce, which represents a 56% increase from 2022. To continue the increase in spending, MDAR will use enhanced outreach strategies and continue to distribute at farmers markets.**

### Farm to School Program

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% have edible gardens and 23.1% host student field trips to local farms. Farm to School activities in Massachusetts reach over 594,000 students.

In 2023, MDAR continued to support the Department of Elementary and Secondary Education (DESE) and MFTS on the MA FRESH and the Local Foods for Schools Cooperative Agreement Program (LFS). MA FRESH funds support schools' purchases of kitchen equipment to prepare food for school meals and snacks including, but not limited to, local, fresh produce, meats, seafood and dairy items; training for school kitchen staff in preparing fresh meals using local ingredients and in procuring such ingredients; training educators and other school staff in adding or integrating food system lessons to their curriculum; and infrastructure and programming for curricular and extracurricular activities, such as school gardens, for students to learn about agriculture and the food system. LFS

provides one time funding from USDA to support schools' ability to purchase local unprocessed or lightly processed foods.

## The Massachusetts Grown & Fresher Program

We continue to brand and offer the “Massachusetts Grown & Fresher” logo to farms, and offer posters, stickers, and price cards, with [order form here](#). The logo identifies and promotes crops and products grown in Massachusetts.

The “MassGrown & Fresher” homepage:

[www.Mass.gov/Massgrown](http://www.Mass.gov/Massgrown) continues to be a great source of seasonal information for the public to learn more about local agriculture, and where to find farms, farmers markets, and fairs in Massachusetts. It includes timely links, updates, and a Culinary and Ag-tivities [Calendar](#).



The featured [MassGrown Map](#) continues to be the most visited MDAR webpage with more than 213,000 pageviews in 2023. It maps over 1,500 locations of farms, farmers markets, agricultural fairs, and more. In 2023 we added two categories: mushrooms and native plants. 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 statewide. We also enhanced the search box to make it easier for the user to search by day, which now assists users in finding a farmers’ market on a specific day of the week. We continue to promote it through social media, eblasts, and at a booth in the Massachusetts Building at the annual Big E.



With a new Markets budget allocation for promotion, MDAR produced a billboard and mobile ad campaign. MDAR produced “Cultivating Community” billboards and posterboards that were disbursed throughout the MBTA system in June, 2023. We also produced 500,000 impressions via mobile ads.

Through an awarded USDA Specialty Crop Block grant, MDAR created and placed Facebook/Instagram ads for the first time.

From May-December, we produced seasonal ads which included links to the MassGrown Map. MDAR also sent monthly emails to our consumer e-list spotlighting specialty crops throughout the year and was pleased to gain over 4.2 million impressions, with a reach of 967,000 and over 80,000 clicks, with 3,774 post likes. Our Facebook followers increased from 2,525 to 5,651 and Instagram followers went from 1,714 to 2,432. MDAR expects to continue our consumer eblasts efforts in 2024.





In the fall, we produced new displays and promotional materials that were featured and shared at the MDAR/MassGrown booth during the Big E in the Massachusetts Building.

### The MassGrown Exchange

This online platform was developed in 2020 in response to the impacts of COVID shutdowns, which caused interruptions of food supply chains, but now continues as a platform to connect businesses with other businesses. It allows Massachusetts businesses to post available crops, value added products, and services to connect with potential buyers in the region. It connects a range of businesses, including farms, fisheries, food buyers, service providers, schools, supermarkets, and food banks. In 2023, 96 new businesses registered, for a total of 495 businesses by year end on the Exchange. There were also 144 products and services listed, with 16,200 email notifications sent, with 18,168 pageviews to the site.

### Division of Animal Health

The Division of Animal Health's focus is preventing the introduction and 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. Ensuring owners providing proper care for their animals reduces the animals' stress levels. Increased stress can weaken an animal's immune system and has a direct effect on their susceptibility to illness. Considering this, animal welfare becomes 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. The Division regulates certain animal-related agricultural activities, which may include the inspection, examination, and licensing of both food-producing and companion animal businesses. These efforts provide additional oversight where there may be increased risk to animal or human health. The Division has programs that require the licensing and inspection of dairy farms (both raw milk and pasteurized milk producers); commercial cattle, poultry, and swine dealing operations; thoroughbred and standardbred racehorse breeding; horseback riding stables; pet shops; and animal rescue organizations. 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. The Division is also responsible for providing training to municipal animal inspectors and animal control officers, on these and other related matters.



The Division of Animal Health ended 2023 with 20 full-time employees, including two veterinarians, program coordinators, 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 and could also 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 businesses. For 2023:

Cooperative Agreement	2023 Funding
Animal Disease Traceability	\$ 55,461.99
Active and Passive Surveillance for the avian program (formerly Notifiable Avian Influenza) and Annual Livestock Inventory (Barn Book) Data Entry	\$ 62,879.54
Foreign Animal Disease Prevention (including Scrapie Prevention Program)	\$ 19,572.96
Swine Garbage Feeding Surveillance	\$ 27,454.37
All Non-Avian Foreign Animal Disease (including Small Ruminant, Bovine, Swine, One Health)	\$ 17,825.15

## 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

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 (ADT) program, the Division distributed 600 swine tags and 4,050 bovine tags to producers and veterinarians in 2023. In addition, 200 Scrapie prevention program tags for sheep and goats were distributed and 18 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 105 premises identification numbers (PINs) were created for Massachusetts livestock owners and producers 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 2 RFID readers/wands to veterinarians. MDAR continued the implementation of a state-owned instance of CoreOne software in 2023, which has both improved animal disease traceability efficiency and is being customized for the integrated electronic management of animal health records and licenses across the division. ADT Information was included in the veterinary accreditation materials for 50 Massachusetts veterinarians and for 196 municipal animal inspectors who attended the fall 2023 in-person and live-streamed training sessions.

In addition, livestock and poultry dealers and transporters are licensed and their equipment and facilities are inspected. In 2023 there were 27 licensed livestock dealers in Massachusetts.

### Dairy Program

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. The Program also provides information and guidance to farmers looking to begin dairying operations. 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 2022 there were 103 bovine dairy farms and 8 caprine dairy farms. At the end of 2023 there were 103 bovine dairy farms and 9 caprine farms.

**Enforcement Actions** The Division utilizes a progressive enforcement protocol consisting of a Letter of Warning for violations required to be corrected within the following ten days; a Letter of Warning for test results indicating two of the last four samples were out of compliance with standards; a Shut-Off Order for test results indicating three of the last five 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. The Cease and Desist orders are 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.

Enforcement Action	2023
10-day Letter of Warning	7
2 out of 4 Letters of Warning	11
3 out of 5 Shut-Off Orders	2
Cease and Desist (Immediate Shut-Off)	14
Antibiotic Residue Shut-Offs	0

### Equine Licensing Programs

The Division of Animal Health administers a number of licensing programs involving horses and other equine species. Licenses are issued to horseback riding instructors, the riding schools/stables where they operate, and equine dealers and transporters engaged in significant levels of activity. Riding stable licenses are 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 2023, the Program administered 131 exams. Of those taking the exam, 118 passed all sections and 13 failed the exam. Ninety percent of those taking the exam typically pass. All those taking the exam participate in a Safety Training Program as part of the testing process. The safety trainings cover managing risk in horseback rides, understanding concussions, and responding to rider falloffs. Twenty-four group safety trainings were provided. These trainings were developed in-house and provided by program staff with no additional cost to the Commonwealth. This is the 3<sup>rd</sup> year of offering these trainings and it is a valuable tool for ensuring all new and reinstated instructors come in with a higher level of safety than in the past, and feedback from participants has been overwhelmingly positive. New training opportunities will be offered to existing instructors in the future. Applications received in 2023 continues to match trends in previous years.

In 2023, there were a total of 2,291 licensed riding instructors. This represents an increase over 2022 licensees of 2,196 and is nearly returned to pre-COVID numbers of nearly 2,350 in 2018. MDAR licensed 468 Riding Stables in 2023, also representing a slight increase and a reversal of closures presumably related to COVID. All figures for stables and instructors are based on the licensing period running from April 1<sup>st</sup> to March 31<sup>st</sup> each year. In 2023, there were five licensed Equine Dealer/Transporters in the state.

#### Enforcement Actions:

In 2023, the Division denied two applications for stable licenses and followed up on 16 reports of non-compliant operations. Those operations were inspected and 10 found no reason to engage in enforcement actions either because no violation was found, the alleged violations had stopped prior to our involvement, or did not involve any regulated area or animal. Of the other six, one operation ceased operating, four were resolved by compliance after applying for the required license and 1 investigation remains open with additional inspections pending.

### Standardbred and Thoroughbred Racehorse Breeding Program

The Division of Animal Health is charged with promoting, developing, and encouraging Standardbred and Thoroughbred horse breeding and racing in Massachusetts. The programs are intended to improve the quality of Massachusetts bred equine athletes. The mares and stallions present in Massachusetts for the programs offer sustainability to our breeding farms, encourage the protection of open space, and provide economic benefit to all the allied agricultural industries. Participants in the breeding programs are eligible to earn additional purse monies by participating in designated races. One Massachusetts racetrack hosts Standardbred racing. There are currently no Thoroughbred racetracks in the state.

Broodmares must be registered with MDAR by the program deadlines outlined in the statute and are required to remain in Massachusetts until foaling. Stallions must be registered with MDAR and must stand in Massachusetts for the entire breeding season, as defined by the statute and breed registries. Broodmares, stallions, and foals are subject to inspection by Animal Health staff at any time during their residency to confirm their location.

In 2023, there were 115 Standardbred foals born on 26 Massachusetts farms. There were no Standardbred stallions standing in Massachusetts for the 2023 breeding season. There were 153 Standardbred mares registered with MDAR by the December 1, 2023, deadline that are due to foal in 2024. These mares are located on 31 Massachusetts farms.

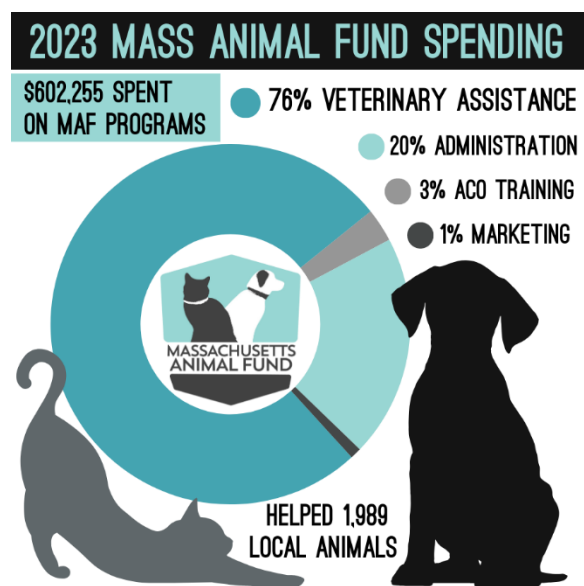
In 2023, there were 5 Thoroughbred foals born on 2 Massachusetts farms. Two Thoroughbred stallions

stood in Massachusetts for the 2023 breeding season. Four Thoroughbred mares were registered with MDAR by the October 15, 2023, deadline to foal in 2024.

### Homeless Animal Prevention and Care Fund Program

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 raised \$4,560,020 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 85% of this revenue through voluntary donations on Line 33f of the Massachusetts Income Tax Return and online giving. In 2023, the Fund received \$392,567 in public donations and \$105,000 in grant funding from The Stanton Foundation. Additional funding was provided through a Commonwealth of Massachusetts Budget Line Item of \$100,000.



The Mass Animal Fund Spay/Neuter/Vaccination Voucher Program sent its first voucher in July 2014; since then, the program has disseminated 26,317 vouchers and has provided no-cost assistance to 20,118 animals through one of 72 veterinary providers/municipal partners across the state. The Fund's veterinary network completed 1,989 voucher surgeries in 2023. The largest population served was dogs and cats from low-income households (73%), followed by animals in municipal care (25%) and feral cats (52%). The most surgeries completed were on female cats (28%), followed by male cats (26%), female dogs (26%), and male dogs (20%). The average cost of surgery is currently \$210 for standard surgeries and \$297 for emergency surgeries. In 2023, the Fund distributed spay/neuter/vaccination assistance to local animals in need totaling \$458,390 of which \$135,020 was spent on animals in emergency situations.

The Fund rolled out the Animal Control Officer Core Competencies Training Program in the March of 2016. Since the training program inception more than 800 commonwealth ACOs have been 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 then the Fund has approved over 360 courses for continuing education credit. ACOs in Massachusetts submitted 8,063 hours of education credits to the Mass Animal Fund's training program in 2023.

### Municipal Animal Inspector Program

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 2023 there were 479 municipal animal inspectors appointed to fulfill the above duties for cities and towns across the Commonwealth.

### Pet Shop Program

The Division of Animal Health has the statutory responsibility to license any entity engaging in the business of selling mammals, birds, or reptiles that are not the offspring of their personally owned animals. In 2023, the number of licensed pet shops dropped by six, to a total of 124. The Division conducts inspections of pet shops for initial licensure and for annual license renewals, as well as in the process of investigating any complaints received. Each establishment must meet strict facility requirements designed to promote sanitary conditions and improve animal health. These efforts protect the health of the animals, as well as that of the visiting public and the employees who work in the shop. In 2023, one entity was found operating without the required license. It was issued an Order to Cease and Desist and were required discontinue operation unless they came into compliance with the regulations. There were 64 entities that received 10-day compliance letters in 2023, due to failures of their facility to meet compliance with the regulations. These violations are frequently related to matters like chipped paint, cracked tiles, or rusted metal, making it impossible to fully clean and disinfect and thus creating a risk of harboring harmful pathogens. These 10-day "warning" letters grant the licensee 10 days to correct the violation before fines may be issued. Fines were issued on seven different occasions in 2023, either for a failure to fix a violation noted on a 10-day letter, or for violations of animal care standards such as a failure to provide fresh food and water or failing to maintain a sanitary environment.

### Poultry Program

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 Division of Animal Health strives to educate residents in order to reduce the potential for conflicts between abutting neighbors, regulatory officials, and poultry enthusiasts. The Division of Animal Health supports the keeping of poultry when it is done responsibly. Responsible poultry ownership benefits the birds, the owners, and the communities in which those flocks are located. Massachusetts law requires live poultry and hatching eggs moving into and within the Commonwealth to originate from flocks tested for and confirmed free of *Salmonella pullorum*. Avian Influenza screening of a percentage of these tested flocks is part of the program. Annual testing for participating flocks is performed by the Division of Animal Health staff. Additional testing may be available for some producers. Inspections, advice, testing, and possible necropsy services are some of the tool's staff uses to assist farmers to mitigate problems that may develop.

In 2023, Animal Health staff collected 6,364 serology samples for *Salmonella pullorum*. The serology samples were collected from 260 poultry flocks. Screening tests for *salmonella pullorum* identified three flocks with a total of four non-negative birds. The owner of two of the non-negative birds opted to submit them for necropsy. No *salmonella* was isolated in either bird. The remaining two no-negative birds were



retested 21 days after the initial test following National Poultry Improvement Plan (NPIP) protocol and were negative.

In addition to Avian Influenza (AI) screening of *Salmonella pullorum* samples, MDAR also provides AI screening for participants in the National Poultry Improvement Plan (NPIP) AI Clean programs. NPIP requirements dictate the frequency of testing for these participants. The total number of serology samples screened for AI in 2023 was 2,542. Cooperative agreements with the United States Department of Agriculture (USDA) support these efforts.

Initiated in 2022, the transition to paperless poultry records was completed in 2023. Inspectors use applications on their phones and/or tablets to submit their paperwork.

In 2023, Highly Pathogenic Avian Influenza continued to be detected in wild and domestic birds across the country. Increased public awareness of HPAI in poultry generated 58 calls/online submissions from flock owners reporting sick or deceased poultry in their flocks. Reports were screened and calls to poultry owners were made to further investigate perceived HPAI risk. In response to calls from flock owners, 32 samples were collected from deceased birds and 132 samples from live birds. No domestic poultry tested positive for HPAI in Massachusetts in 2023.

Education and outreach efforts are ongoing to prevent the spread of HPAI to the commercial poultry industry and backyard flock owners. MDAR used social media and email notifications to stress the importance of increased biosecurity for poultry flock owners. An online reporting form expedites sick bird reports from hobbyists, producers, veterinarians, and members of the public.

*Mycoplasma Gallisepticum*, Marek's disease, Coccidiosis, flock management and predation were among the other issues found to be causing morbidity and mortality in the reported flocks. Animal Health staff worked with owners to correct these problems through education, ensuring an increased awareness of animal health and welfare.

The NPIP Program has maintained steady participation. In 2023 there were a total of 24 active participants in the NPIP program. Ten of the participants are using the electronic 9-3 forms when selling their poultry and hatching eggs. This feature has benefited MDAR by eliminating the use of paper forms.

The NPIP 9-3 database is searchable, and import/export reports are easily generated. For instance, there were a total of 198,915 hatching eggs/live poultry imported into MA in 2023. This number does not include the poultry imports recorded on paper forms.

In 2023, Massachusetts producers using electronic 9-3 forms produced 52,114 poultry and 18,945 hatching eggs for export. During 2023 MA producers hatched 11,737 poultry and produced 526 hatching eggs that were sold within the Commonwealth.

## Rabies Program

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 2022 there were 2,615 reported bite incidents involving domestic animals and humans. That number

decreased to 1,465 in 2023. In 2023, 749 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. Some of the wildlife involved in those exposure cases were submitted for rabies testing at the Massachusetts Department of Public Health's Rabies Laboratory. A total of 80 animals tested positive in 2023.

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/>. There was a significant drop-off in participation due to the COVID pandemic, but the numbers have begun to bounce back. In 2022, there were 26 rabies vaccination clinics promoted through this service. In 2023, that number increased to 32.

### Reportable Disease Program

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 186 suspected or confirmed cases of reportable diseases in 2023, including the following:

2023 Cases	Disease	Animal(s) Impacted
86	Parvovirus	dog
43	Leptospirosis	dog
47	Panleukopenia	cat
5	Canine Distemper	dog
18	Strep equi (Strangles)	horse
23	Feline Calicivirus	cat
1	Eastern Herpes Virus-1	horse
0	Brucellosis	dog, goat
0	Erysipelas	swine
0	Babesia	dog
5	Canine Distemper	dog
1	Equine Coronavirus	Horse
1	Tularemia	cat

### Shelter and Rescue Program

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. MDAR 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, regulations for operating animal shelters and rescue organizations 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 must be examined by a veterinarian prior to adopting them out; required spay and neuter surgeries for healthy animals; and maintenance of records for all the animals handled. The rules are in place to protect 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. While the demand for pets slowed in 2022, rescues are seeing an increase in surrendered pets requiring homes. This trend continued into 2023 and shelter populations have remained high through the year. This has begun to cause problems for municipalities who rely on organizations to take stays when no owner is found. Many of those organizations are at capacity and can no longer accept animals from municipal animal control programs.

#### Enforcement Actions:

As of December 31, 2023, the Shelter and Rescue Program issued licenses to operate to 141 shelters and rescues. The Division issued eight Orders to Cease and Desist to unlicensed organizations in 2023. Three organizations were issued fines for failure to comply with regulations.

#### Swine Program

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 it 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 2023, 11 permits to feed garbage were issued to swine operations in the Commonwealth.



## Division of Crop and Pest Services

The Division of Crop and Pest Services has five programs within the Division. They are the following:

1. Farm Products and Plant Industries: oversees the inspection and licensing of certain farm products and plant industries, under M.G.L. c. 128 and its accompanying regulations at 330 CMR.
2. Pesticides: regulates all pesticide use within the Commonwealth under state and federal law. 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 honey bee population by inspection.
4. Hemp Program: oversees matters related to hemp, including the inspection and licensing of the production and processing hemp under state and federal law.
5. Invasive Pest Program: oversees the introduction and response to invasive pests into the Commonwealth.

## Farm Products and Plant Industries

The Farm Products and Plant Industries (FPPI) Program staff support multiple programs based upon seasonal or workload needs, including nursery inspections/licenses and feed and fertilizer programs. In many cases, inspectional staff members provide coverage for other cross over programs like the Invasive Pest Program. There are three staff members that work within this program.

### Fertilizer Program

Specialty fertilizers (Non-Agricultural Use) are required to be registered while companies that produce Agricultural Use fertilizer are required to be licensed. Inspectors perform the administrative work with licensing and conduct marketplace inspections where they ensure that products are registered. As part of the inspection samples of product may be collected to ensure that the NPK values of the product are as stated on the label. In 2023, 6,246 fertilizer products were registered, 147 manufacturers were licensed, and 179 fertilizer samples were collected with no fines issued from inaccurate NPK values on the label.

### Feed Program

Pet food and feed are required to be registered and companies are required to be licensed. Inspectors perform the administrative duties relative to registration and conduct marketplace inspections to ensure that products are registered. Samples of pet food and feed are collected to ensure that the products are safe. In 2023, 502 companies were licensed, 17,264 products were registered, 300 products were sampled, and 159 products were found to be unregistered resulting in 22 letters of warning being issued.

### Nursery Inspections

The Nursery Inspection Program requires the inspection and certification of nurseries and greenhouses in the state. All growers and agents are required to be licensed if they sell nursery stock 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. Inspectors conduct the administrative duties relative to licensing/certification along with conducting inspections. As part of the inspections, inspectors look for invasive pests, plants and other issues that may prohibit the movement of the plant.

In 2023, there were 150 Growers licenses and 995 Agent licenses issued, and 183 nursery inspections were conducted. The following were common issues found during nursery inspections.

- |                        |   |  |
|------------------------|---|--|
| • Anthracnose          | • Galls                                     | • Tip Blight   |
| • Black Spot           | • Tent caterpillars                         | • Rust Fungus  |
| • Black Vine Weevil    | • Aphids                                    | • Powdery Mildew – large increase in fungal pathogens likely due to all the wet weather over the summer. |
| • Cedar Apple Rust     | • Leaf miner damage                         |  |
| • Daylily Rust         | • Daylily Streak                            |  |
| • Lily Leaf Beetle     | • Leaf curling (symptom of disease or pest) |  |
| • Willow Leaf Beetle   | • Japanese Beetle                           | • Beach Leaf Disease – found at several nurseries in Bristol, Plymouth, and Barnstable counties.         |
| • Scorch, Tar Spot     | • Rose Rosette Disease,                     |  |
| • Viburnum Leaf Beetle | • Sun scorch                                |  |
| • Winter Damage        | • Chlorosis                                 |  |
| • Leaf spot            |   |  |

120 stop sales were issued on 304 plants in Massachusetts. All the stop sales were issued because the plants are on the MA Prohibited Plant List or a permit is required to grow the plants in Massachusetts (ie. *Ribes sp.*) Stop Sales were issued for the following plants:

- |   |   |
|---|---|
| • Creeping Jenny ( <i>Lysimachia nummularia</i> ) | • Gooseberries                                |
| • Scotch Broom ( <i>Cytisus scoparius</i> )       | • Black Currants Red                          |
| • Norway Maple ( <i>Acer platanoides</i> )        | • Currants, Jostaberries ( <i>Ribes sp.</i> ) |
| • Sycamore Maple ( <i>Acer pseudoplatanus</i> )   | • Barberry ( <i>Berberis thunbergii</i> )     |

## Federal and State Phytosanitary Inspections

Growers in Massachusetts who export plant material and/or seed require inspections prior to shipping. State and Federal Phytosanitary Certificates are issued by the inspectors 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.

MDAR issued 516 federal phytosanitary certificates. More than a third of all federal phytosanitary certificates issued by MDAR inspectors during the 2023 season were for orders going to Canada (267 out of 634). The remaining federal phytosanitary certificates were issued for shipments going to: Antigua and Barbuda, Australia, Austria, Barbados, Belgium, Bermuda, Canada, Cayman Islands, China, Czech Republic, Estonia, Finland, France, Germany, Guatemala, Hungary, India, Indonesia, Israel, Italy, Japan, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Mexico, Netherlands, New Zealand, Norway, Pakistan, Poland, Romania, Saint Kitts and Nevis, South Africa, Spain, Sweden, Switzerland, Taiwan, The Republic of Korea, Ukraine, the United Kingdom, Uruguay, and Zambia.

The department issued 1,450 State phytosanitary certificates for shipments going to: California, Colorado, Florida, Louisiana, New Jersey, New Mexico, Oregon, South Carolina, Tennessee, Texas, Utah, and Washington

Nearly half of all state phytosanitary certificates issued by MDAR inspectors during the 2023 season were for orders going to California. Washington and Oregon were a close second and third with roughly 400 certificates issued for order going to each state.

### Trace Forward and Trace Back

The nursery inspectors assist with trace forwards/trace backs regarding invasive species or regulated pests. This is primarily due to the fact that the trace forwards/trace backs are each linked to a nursery. In 2023, USDA notified MDAR of a trace forward regarding *Phytophthora ramorum* (Sudden Oak Death). Nursery/growers who received stock were inspected and samples were collected. All samples tested negative for *P. ramorum*.

### Invasive Species Reports

MDAR has an online reporting system for the public to use if/when they suspect they have seen an invasive species (see Education/Outreach). If time allows, inspectors follow up. During 2023, they followed up mainly with reports of two pests.

#### Spotted Lantern Fly (SLF)

Many of the reports turned out to be negative or single adult SLF hitchhikers from infested states. Nursery inspectors conducted 67 total site visits were conducted for Spotted Lanternfly. This includes visiting and surveying known infestations, as well as following up on possible SLF finds throughout the state. Additionally, the nursery inspectors assisted the SLF Team with surveying, outreach, removal (egg masses) and trapping.



#### Elm Zigzag Sawfly

In 2023, the Elm Zigzag Sawfly (*Aproceros leucopoda*) was detected for the first time in Massachusetts. The sawfly was detected in a small, forested area in Berkshire and Hampden County. While this pest is primarily a forest pest and response lies within the Department of Conservation and Recreation, inspectors added this pest to their inspection list of nurseries. No signs of the insect were found.

### Invasive Plant Site Visit

Massachusetts is home to many invasive species of plants. If certain invasive plants are identified at a site, inspectors visit the site throughout the year to determine the severity of the invasion. In some instances, inspectors will perform control measures such as pulling out the plant and/or treating the area. Currently there are three invasive plants which MDAR monitors.



### Giant Hogweed (GHW)

The Division conducted 11 Giant Hogweed (*Heracleum mantegazzianum*) site visits throughout the year. Management of cutting and pulling plants was also conducted at several sites. Several GHW reports were received by MDAR throughout the summer. No new GHW sites were found in 2023. The majority of the known GHW sites in the state are being controlled and slowly eradicated. Two Giant Hogweed sites were declared eradicated in 2023.

### Mile-a-Minute Vine (MAM)

Nursery inspectors conducted 35 Mile-a-minute vine (*Polygonum perfoliatum*) site visits in 2023. These visits included hand pulling of MAM plants and looking for signs of weevil biocontrol damage.

### Kudzu Vine

Nursery inspectors conducted 12 Kudzu Vine (*Pueraria montana*) site visits. Herbicide spray treatment was conducted by MDAR staff at one of the sites.

### Country Of Origin Labelling (“COOL”) Inspections

Since 2006, MDAR has been working under a Cooperative agreement with the USDA to perform audits relative to COOL requirements. COOL 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. MDAR had two staff members that work on the COOL program. USDA assigned and MDAR completed 64 inspections/reviews.

### Invasive Pest Program

Invasive pests are non-native species (insects, plants, or plant diseases) that cause harm to the natural environment or to economic resources. The risk of invasive species entering the country has risen over the years due to increased trade, travel, and online commerce. Invasive species may harm native species, alter ecosystem processes, transport disease, or interfere with crop production. A 2021 study estimated that invasive species have cost North America over \$26 billion per year since 2010 (Crystal-Ornela, R. et al. 2021). Massachusetts can be considered at higher risk than other New England states because Boston is a major port of entry from other countries.

MDAR works closely with USDA relative to invasive pests as they also have authority over invasive pests. The program has four staff members that work within the program and seasonal contractors (number is dependent on the surveys each year).

### USDA Invasive Survey Grants

Each year MDAR submits suggestions to USDA relative to surveys that it would like to conduct for the year. The federal funding mechanism is PPA7721 (Farm Bill). Additionally, MDAR participates in the Cooperative Agricultural Pest Survey (“CAPS”). Both the PPA7721 grants and CAPS funding allow MDAR to survey the state for invasive species. It should be noted that this is the only way that MDAR is able to conduct this work as there is no additional funding for surveying pests. MDAR received PPA772/CAPS funding for the following surveys:

- Orchard Survey: Surveys were conducted in selected orchards for the following pests of which none were found:

Scientific Name	Common Name
Anoplophora glabripennis	Asian longhorned beetle
Cydalima perspectalis	Box tree moth
Dendrolimus punctatus	Masson pine moth
Diprion pini	Pine sawfly
Persicaria perfoliata	Mile-a-minute weed
Tetropium castaneum	Black spruce beetle
Tetropium fuscum	Brown spruce longhorned beetle
Thaumetopoea pityocampa	Pine processionary moth
Scientific Name	Common Name
Anoplophora glabripennis	Asian longhorned beetle
Cydalima perspectalis	Box tree moth
Dendrolimus punctatus	Masson pine moth
Diprion pini	Pine sawfly

- Forest Pest Outreach: This grant supports education and outreach of invasive pests (see Education/Outreach section)
- SLF Outreach: This grant supports education/outreach materials and contractors to develop materials specific to SLF.
- Phytophthora ramorum* (Ramorum blight, Sudden Oak Death), a pathogen that poses a serious threat to the nursery industry as well as to the natural landscape, was not found in Massachusetts in 2023.
- CAPS: The following pests were surveyed for in nurseries stock of which none were detected:

Scientific Name	Common Name
Adoxophyes orana	Summer fruit Tortrix moth
Candidatus Phytoplasma mali 16SrX-A	Apple proliferation
Candidatus Phytoplasma phoenicium 16SrIX-B	Almond witches' broom
Candidatus Phytoplasma prunorum 16SrX-F	European stone fruit yellows
Epiphyas postvittana	Light brown apple moth
Grapholita funebrana	Plum fruit moth
Lobesia botrana	European grapevine moth
Lycorma delicatula	Spotted lanternfly
Rhagoletis cerasi	European cherry fruit fly

## Invasive Pest Detections and Response

There are currently two known invasive pests in Massachusetts, SLF and Box Tree Moth (“BTM”). SLF is not a pest that is regulated by USDA. While USDA is assisting MDAR with mitigation efforts by providing resources, MDAR cannot guarantee these resources in future years. SLF was first discovered in Massachusetts in 2021 and the population/spread continues to grow. BTM was found in 2023.

### Spotted Lantern Fly (SLF)

During January-August 2023, MDAR staff continued survey and delimitation of the infestations that had been confirmed during previous years in Fitchburg, Shrewsbury, Springfield, and Worcester. MDAR survey was aided by new SLF staff from USDA, hired specifically to help the programs in MA and RI. Population counts and delimitation surveys continued during which time the populations in Springfield, Worcester, and Shrewsbury appeared to have spread, while the population in Fitchburg remained close to the same.

MDAR contracted two tree service companies which performed several foliar treatments in Springfield and Worcester. These treatment sites were decided by MDAR to be areas with higher risk of transporting SLF to other parts of the state, or which had dense populations. USDA also performed several treatments using their own staff in the same municipalities.

Through SLF sighting reports, eight more municipalities (Holyoke, Agawam, West Springfield, Southborough, Weston, Wellesley, Chelmsford, and Ashland) were confirmed to have populations of SLF bringing the total number of towns that have infestations to 12.

### Box Tree Moth (BTM)

In July, Box Tree Moth (*Cydalima perspectalis*) was detected for the first time in Massachusetts. There were additional reports that were followed up by MDAR and USDA staff. USDA began monitoring areas around the detection and just outside the county line. To date, the infestation appears to be only in one county.

## Education and Outreach

MDAR provides educational outreach about invasive insect pests through the Outreach Program, run by the Outreach Coordinator and the Environmental Biologist. Staff participated in 21 presentations and 23 tabling events in 2023, and distributed materials to an additional 50 events/programs, with the majority of outreach focused on SLF. MDAR continued our successful quarterly series of free online webinars about SLF, hosted by MDAR and offering free pesticide license and other educational credits to encourage participation. Staff reached well over 1 million people through our in-person 2023 program efforts, including our display at the MDAR booth at the Big E.

MDAR received and responded to 1,000 pest reports that came in through the reporting website or via phone or email, including suspected sightings of SLF, BTM, emerald ash borer (EAB), Asian longhorned beetle (ALB), Northern giant hornet, and jumping worms. While the majority of these reports were negative, they did lead to the discovery of several new infestations of SLF and EAB.

The program distributed more than 56,000 pieces of pest outreach materials in 2023 for SLF, EAB, and ALB, including an SLF poster campaign that placed posters at rail trail and state park trailheads statewide. Staff also developed more than a dozen new print outreach materials related to SLF, including a look-alike guide, coloring sheet, and origami kits, and made these available to print on demand via our pest website (<https://massnrc.org/pests/slf/>).



Staff continued to push outreach through social media (@MassPests on Twitter) and blog posts (<https://massnrc.org/pests/blog/>) and by amplifying this message through the MDAR Facebook account. We posted 28 invasive species articles on our blog and deployed a press release for National Invasive Species Awareness Week related to spotted lanternfly management. The program's monthly pest newsletter also continued to grow its readership, and currently reaches more than 3,200 subscribers (<https://massnrc.org/pests/signup.aspx>).

### Apiary Program

Approximately 6-6,500 resident and migratory honey beekeepers currently maintain over 40-45,000 colonies in Massachusetts throughout the year. While the largest volume of colonies belongs to commercial beekeepers, the sector is mainly comprised of hobby and sideliner beekeepers who maintain fewer than 100 colonies each. The Apiary Program is charged with regulating beekeeping and honey bee health through the enforcement of the statutes (MGL 128 32-36B, 38) and regulations (330 CMR 8.00). There are three staff members that work in this program.

### Enforcement

Honey bee health inspections are conducted by the Apiary Program through 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, during emergencies, routinely upon beekeeper request and for mosquito control monitoring. Live, declining, and expired honey bee colonies, packages, nucleus colonies (nucs) and used equipment are visually inspected for the presence of pests, parasites, pathogens, pesticides, and invasive species. Inspectors routinely take samples during these inspections and analysis is performed by certified diagnostic labs.

In 2023, a total of 594 inspections were completed. These consisted of 437 for hobbyist/sideliner beekeepers and 113 for commercial beekeepers for migratory hives and 44 for research collaborative projects. Inspectors also conducted import inspections of 26 shipments of package bees (11 suppliers, 11,200 imported packages total), 13 shipments of nucs (7 suppliers, 2,031 inspected from 4,377 imported nucs total), and 1,280 colonies used for cranberry pollination (5 commercial beekeepers, 18 bogs). A total of 427 samples were taken during inspections and sent to analytical labs for analysis. Findings from visual inspections, sampling and lab analysis are as follows:

Type	Honey Bee Health Issue	Type	Honey Bee Health Issue
Bacteria	American Foulbrood (AFB)	Fungi/Microsporidia	Chalkbrood
	European Foulbrood (EFB)		Nosema spp.
Viruses	Parasitic Mite Syndrome (PMS)/Idiopathic Brood Disease Syndrome (IBDS)/Snot Brood/Varroosis		Crithidia mellificae
	Sacbrood Virus (SBV)		Lotmaria passim
	Deformed Wing Virus A-C (DWV A-C)	Pests/Predators/Parasites	Small Hive Beetle (SHB)
	Black Queen Cell Virus (BQCV)		Wax Moth
	Chronic Bee Paralysis Virus (CBPV)		Mice
	Acute Bee Paralysis Virus (ABPV)		Bear Damage
	Lake Sinai Virus 1 (LSV1)		Africanized Honey Bees (AHB)
	Lake Sinai Virus 2 (LSV2)		Acarapis woodi (Tracheal mite)
	Israeli Acute Bee Paralysis Virus (IABPV)		Tropilaelaps spp. (Tropi mite)
	Slow Bee Paralysis Virus (SBPV)	Management	Queen Issues
	Kashmir Bee Virus (KBV)	Pesticides	Bee Kills

The Apiary Program Team had limited availability to conduct routine health inspections this year due to a surge in AFB cases which resulted in the reallocation of time and resources to these investigations. A total of eight reports were received of aggressive colony behavior potentially due to the presence of Africanized Honey Bees (AHB). The Apiary Program Team also received 18 Bee Kill complaints and investigated two cases collaboratively with the MDAR Pesticide Enforcement Team. Only one of these cases was found to have pesticides in samples and at the level detected, pesticides were found to be part of the cause of the observed bee death.

A total of 443 apiaries were voluntarily registered with MDAR Apiary Program in 2023 bringing the total to 1,575 registered apiaries with 3,716 colonies.

#### Education

The Apiary Program created, led, and coordinated 62 educational outreach programs (26 virtual, 36 in-person, some were hybrid) consisting of 157.5 instructional hours that reached 5,262 attendees from all over the United States and Canada. One series of unique virtual events focused on regional beekeeping, the *Northeast Honey Bee Update Lunch and Learn*, was offered again this year due to continued interest.

The Apiary Program also collaborated with state level beekeeping groups and boards to host the Eastern Apicultural Society (EAS) annual conference at the MDAR State Apiary and on the campus of UMass-Amherst. The conference was attended by a national and international audience of 550 researchers, beekeepers, extension agents, government officials, and the public.

Finally, the Apiary Program (e)Mailing List created in 2018 in response to the need for communication with the growing beekeeper population added 147 members in 2022 and now has a total of 1,112 members. This list, along with the registry and inspection database, facilitates effective communication with stakeholders. The Apiary Program distributed a total of 700 sampling kits to beekeepers for use in

sampling AFB/EFB and Nosema/Varroa mites this year, along with 912 Varroa mite monitoring jars.

### Massachusetts Honey Bee Health Survey

The 2022-2023 Massachusetts Bee Aware Honey Bee Health Survey had responses from 221 beekeepers managing 873 hives who reported 32% overall total loss and 39% average loss of honey bee colonies.

Results of the survey indicate that beekeepers attributed the top causes of colony losses this year to Varroa mites (31%), queen loss/failure (24%), starvation (10%), environmental factors/climate change (23%), American Foulbrood (2%), European Foulbrood (2%), Chalkbrood (2%). Beekeepers also reported that the single greatest problem affecting beekeepers in the Commonwealth was Varroa mites (87%), pesticides (47%), beekeeper mismanagement (40%) environmental factors/climate change (31%), American Foulbrood (28%), European Foulbrood (2%), and Chalkbrood (3%).



### State Apiaries

The Apiary Program also managed State Apiary locations in Amherst, Danvers, and a newly established facility in Dighton this season which were comprised of 4-45 active honey bee colonies that served as outdoor classrooms for hands-on demonstrations and education. A total of nine in-person educational programs with 771 attendees were held at the State Apiaries. Honey harvested from these colonies totaled 60lbs. Inspectors were also able to pilot a local queen rearing program which was successful in producing a total of 12 mated queens this season for use in the apiary.

### Research and Monitoring

The Apiary Program team also participated in the USDA-APHIS National Honey Bee Survey which involved visiting 10 counties, 20 towns, 20 beekeepers, and 20 apiaries consisting of 591 colonies of which 185 were inspected and 56 submitted samples. The Apiary Program team also collected 18 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. The program also had the opportunity to collaborate with the University of Moncton to collect 80 samples for a health survey of honey bee disease genetic markers as well as the Utah Department of Agriculture and Forestry to submit seven samples for AFB/EFB co-infections. Finally, the program collected 48 samples for the North Dakota Department of Agriculture project with the National Agricultural Genotyping Center lab evaluating hive debris as a method for surveying invasive mites. Sample results are still pending for the USDA-APHIS National Honey Bee Survey and the University of Moncton research groups.

### Pesticide Program

MDAR is the lead state agency for pesticide regulation in the Commonwealth under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) as well as the Massachusetts Pesticide Control Act, M.G.L. c. 132B, and the regulations promulgated at 333 CMR 2.00 through 14.00. 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, Pesticide Board Subcommittee and two Advisory Councils.



There are a total of 12 staff members that work in this program.

### Enforcement

The Enforcement Program is charged with enforcing the provisions of the FIFRA, M.G.L. c. 132B, and the regulations promulgated thereunder at 333 CMR 2.00 through 14.00. The Enforcement Program conducts routine inspections of pesticide users' establishments and the producers from which they acquire the products. The Enforcement Program also investigates complaints regarding the misuse of pesticides in addition to providing education and outreach about MDAR's pesticide programs.

### Inspections

A total of 252 pesticide inspections of which 51 were investigations relative to pesticide complaints were conducted. The rest were relative to routine inspections with entities including, but not limited to, lawn care, tree/shrub care, structural pest control, golf courses, agriculture, and municipalities. These inspections cover items such as record keeping, storage, notification, worker protection, and use observations.

Beginning July 1, 2022, products labeled for outdoor uses (except agricultural products) and containing a neonicotinoid became state restricted. As FY23 was the first full year of having neonicotinoids as a state restricted pesticide, enforcement focused on conducting marketplace inspections to ensure that products were not being sold. In general, it appeared that there were minimal violations found.

\*Please note, the inspection/investigation numbers reported are for the 2023 federal fiscal year and do not include the pending enforcement actions on open investigations during that time.

### Education/Outreach

While the Pesticide Program does not have the resources to run trainings for licensed applicators, it often responds to requests to make presentation relative to rules/regulations, toxicology, pollinators, and related topics. In 2023, pesticide program staff presented at 14 events. Additionally, inspectors use routine inspections to educate the licensee of the requirements as well.

MDAR hosted a Pesticide Inspector Residential Training in May of 2023. The training was well attended with approximately 60 attendees from all over the Country, including included several tribes, America Samoa and Guam. The agenda covered interview techniques, sampling integrity, pollinator inspections/updates, calibration, and mock inspections, as well as other topics.

### Pesticide Applicator and Licensing Program

Approximately 2,590 individuals signed up for and completed MDAR's online pesticide examinations. This total includes Pesticide (core) Applicator, Pesticide Dealer, and both Commercial and Private Certification exams. Of these 2,590 exams taken, some 1,768 received a passing score and were offered the opportunity to apply for a license or certification to be issued by MDAR.

There were approximately 685 programs approved for Massachusetts Pesticide Applicator Continuing Education (PACE) Credit Hours. This includes 298 "on-demand" PACE trainings approved and/or re-approved, and 387 "livestreaming, Virtual or Traditional Classroom" PACE trainings approved.

MDAR developed an online Annual Use Report to take place of the hard copy form that was previously sent out. The form allows for a licensed applicator to submit the information which in turn MDAR receives and is able to organize and query electronically. Stakeholders expressed appreciation for the ease of the form.

## Pesticide Product Registration

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 pursuant to M.G.L. c. 132B. A registration is valid for a period beginning with the initial date of approval by the Pesticide Board Subcommittee and ending on the next June 30th. There were 602 new products registered and 8,078 products renewed.

## Industrial Hemp Program

The MDAR Hemp Program provides oversight and regulation of hemp under M.G.L. c. 128 Section 116-123 and 7 CFR 990. The Hemp Program oversees all licensing for hemp production and processing and enforcement of laws and regulations pertaining hemp in the Commonwealth.

A total of 73 licenses were issued (five Producer, 37 Processor, and 31 Dual Producer/Processor). There are currently three accepted categories for hemp cultivation: seed/grain production, fiber production, and cannabinoid production. Massachusetts hemp is grown 100% for cannabinoid production.

All hemp grown in Massachusetts is subject to regulatory testing prior to harvest for certification pursuant to state and federal law. Hemp produced in Massachusetts must be certified before it can enter the stream of commerce and must contain less than 0.3% total THC, inclusive of a

measurement of uncertainty, to be certified. A total of 69 individual hemp crops were grown and tested in 2023 from 21 different licensed producers. Of those 69 crops, 59 were certified after the first round of testing. Massachusetts allows for up to two additional re-tests if a crop does not meet the THC requirements after an initial test. Of the ten crops that tested with THC in excess of 0.3%, five were disposed of voluntarily by the producer, and five were re-tested. After re-testing, three additional crops were certified by MDAR, and two were disposed of through regulatory action for an overall certification rate of approximately 90%.

County	Licensed Acres (Outdoor)	Cultivated Acres (Outdoor)	Licensed ft <sup>2</sup> (Indoor)	Cultivated ft <sup>2</sup> (Indoor)
Barnstable	0	0	0	0
Berkshire	13	2.75	5300	0
Bristol	0	0	0	0
Essex	0	0	1710	400
Dukes	0	0	0	0
Franklin	1	0.01	14620	0
Hampden	11	1.0	8540	0
Hampshire	11	2.52	21936	600
Middlesex	3	2.78	53708	6234
Nantucket	4	0	25000	0
Norfolk	4	0	5350	0
Plymouth	3	0.5	1000	0
Suffolk	0	0	0	0
Worcester	16	3.33	21836	6163
Total	66	12.90	159,000	13,397

## Division of Agricultural Food Safety

<b>Technical Service Interventions (2023)</b>		
<b>Produce</b>	<b>Cranberry</b>	<b>Maple</b>
64	1	0

### Education and Outreach Program

The division offers educational opportunities to farms to help them prepare for inspections and compliance with the statutory authorities as well as general farm food safety training.

#### Produce Safety Alliance (PSA) Training

The Produce Safety Alliance (PSA) Grower Training Course is the foundation that teaches the clear understanding of practices and regulations contained in the Produce Safety Rule (PSR). It is the first step growers in Massachusetts should complete on their path to compliance. The PSA Grower Training Course is a critical requirement of the PSR for those farms covered under the rule, however, the training is offered to all growers, independent of coverage.

The Produce Safety Alliance Grower Training Course is provided by the Massachusetts Department of Agricultural Resources (MDAR), in partnership with the University of Massachusetts Agricultural Extension. The training is offered multiple times per year in locations across Massachusetts.

This training satisfies the FSMA Produce Safety Rule requirement for covered farms that "at least one supervisor or responsible party" completes "food safety training ... recognized as adequate" by FDA (21 C.F.R. §112.22(c)).

#### Workshops, Trainings, & Educational Opportunities

To assist Massachusetts growers in preparing for inspections and compliance, as well as general farm food safety training, the Division, in partnership with the University of Massachusetts Agricultural Extension, offers educational workshops, twilight meetings, and trainings across Massachusetts.

<b>Educational Initiatives (2023)</b>		
<b>Farmers attending PSA Courses</b>	<b>Twilights</b>	<b>Presentations</b>
56	2	5

### Agricultural Food Safety Improvement Grant Program (AFSIP)

The Agricultural Food Safety Improvement Program (AFSIP) is a reimbursement grant program that supports produce and aquaculture operations that are looking to improve their food safety practices that work towards minimizing the risks of microbial contamination and food-borne illnesses while increasing market access.

Example projects are listed below.

#### Produce Operations Sector Projects

Water systems, delivery, treatment devices, processing, and washing equipment • Portable restrooms and/or hand washing sinks (mobile or stationary) • Harvest & storage equipment (bins, totes, bin storage, racks) • Washing/Packing shed walls, ceilings, lighting fixtures, and upgrades • Drainage systems for coolers and washing & packing areas • Wildlife fencing • Pest deterrent • Refrigeration/Cooling

Equipment • Pesticide storage Maximum Funding Per Applicant \$50,000.00

#### Aquaculture Operations Sector Projects

Ice machines • Insulated containers • Walk-in refrigeration units • Processing equipment such as tumblers/graders to improve time to temperature control and process efficiency • Facility upgrades necessary to obtain a Massachusetts Department of Public Health license.

#### Natural Disaster Responses

Farmers in Massachusetts suffered significant losses as a result of climate-change related weather events in 2023. A deep freeze in early February prevented stone fruit such as peaches and plums from setting. A late frost in May after apple and other fruit trees had blossomed significantly reduced yields for those crops. And a series of rainstorms beginning on July 10 inundated farmland across the state and flooded rivers over their banks onto some of the Commonwealth's most productive farmland. Following the July flood, MDAR responded with technical assistance and financial support.

Within a day of the floods the department's produce safety team began visiting affected farms, educating farmers about regulations regarding adulterated crops and proper management practices for addressing saturation and contamination of soils, as well as disposal of damaged crops. Over the next several weeks staff visited hundreds of farms, supporting them as they cleaned up from the disaster.

When the legislature and Governor Healey appropriated \$20 million to support farmers who suffered losses, MDAR developed and launched the Natural Disaster Recovery Program for Agriculture. Applicants reported more than \$65 million in losses, and the funds were distributed through direct payments to 347 farmers beginning in December. Payments ranged from a few hundred dollars to \$350,000, depending on the scale of loss.

For many of the recipients the funding made the difference that kept their operation in business. Farmers used the program's resources in a variety of ways to cover the loss of income due to crop damage, including:

- Animal feed to make up for lost hay and corn harvest;
- Cover crops, fertilizer, and other inputs to restore soil health of damaged cropland;
- Equipment such as aerators and seed drills, which will allow for greater resilience in future storms;
- Replacement of ruined perennial stock, such as apple trees;
- Costs of insurance, taxes, labor, and other operational expenses; and
- Debt payments.