



Massachusetts  
Agriculture in the Classroom



# BI-ANNUAL NEWSLETTER

Connecting Massachusetts Educators & Agriculture

Photo Credit: Dylan Barstow Manz



## UPCOMING EVENTS, POPULAR TOPICS, AND FUN FACTS

### RASIED BED SOIL PREPARATION

By Quinn Bazinet



### READ MORE

Part of the appeal of raised beds lies in the gardener's ability to control exactly what soil and amendments are added to the bed. This same facet however can stymie prospective or beginning gardeners. This guide is designed to help answer that question, and allow you to more confidently fill your bed with the right growing medium.

### READ MORE



- We are very excited to announce our Spring conference on Saturday, April 12, 2025. Stay tuned for more information.
- Interested to present at this conference? email us at [massaginclassroom@gmail.com](mailto:massaginclassroom@gmail.com)

### UPCOMING WORKSHOPS

# A LETTER FROM OUR PRESIDENT

## "TEACHING TEACHERS ABOUT AGRICULTURE SINCE 1983"

By María Berríos, President of Mass Ag in the Classroom

As I sit down to write to you, I am cherishing the warmth in the air and cooler nights. Change is coming, and we can reflect on a great summer for MAC education with it culminating in a very successful On The Road to the Farms 2024. The beginning of the school year brings the frantic hustle and bustle of new and returning students in the hallway, as we prepare to welcome them once again to our classrooms. Gearing up for the full year can be a frantic process, but here at MAC we are excited to offer you already made lessons, activities, and many manuals. We cover topics as diverse as Fall Gardening, Preserving the Harvest, Themed Gardens, Cover Crops and more. Visit our website ([www.aginclassroom.org](http://www.aginclassroom.org)) so you can see the great selection of resources, workshops, and grants for you.

This year we have a great calendar of events. We will highlight farmers throughout the year, offer workshops, sponsor our Teacher of the Year to the National Ag in the Classroom conference, and more. Right now we are in the midst of our first Agricultural Literacy in the Classroom event starting in October. In partnership and through a grant from MDAR we have over 3,000 Farmer Eva's Green Garden Life books, accompanied lessons to give away, as well as inviting guest readers to your classroom. Our Spring conference will be in April, so keep your eyes open for more information. It is shaping up to be one of the best!

This work is being done by a wonderful group of volunteers. Today I would like to extend my thanks to Bobbie Oles on behalf of the entire MAC community. Bobbie just finished her 9 year tenure as MAC president, and she is the heart and soul of our organization. Thank you for your years of selfless service and for imparting your passion and knowledge of agriculture in the classroom and how to best inform our educators.

Educator friends, I hope this year is one full of new adventures and the one in which you are able to modify what you teach to include agriculture in the classroom.

I can not wait to meet you this year. It promises to be an exciting one!

Yours in agriculture education,

María Berríos





# RAISED BED SOIL PREPARATION

## A SIMPLE GUIDE

By Quinn Bazinet

### »»» PLANTING TIPS

Part of the appeal of raised beds lies in the gardener's ability to control exactly what soil and amendments are added to the bed. This same facet however can stymie prospective or beginning gardeners. This guide is designed to help answer that question, and allow you to more confidently fill your bed with the right growing medium.

Soil is judged based on both its physical and chemical properties. Soil texture, water retention, and aeration all play important parts in determining the suitability of soil for plant growth. Similarly, the presence and amounts of important nutrients like nitrogen, phosphorus, and potassium will determine the rate and vigor of potential plant growth.

### »»» SOIL

Many growers may already have some leftover soil to use for their beds; this is always preferable because purchasing soil is not an insignificant cost. Imported soil not only needs to be purchased, but by its very nature it is often mined from one area and transported to another. But, if your soil is contaminated you may have little choice. Sterilized loam can often be purchased from most garden centers; the sterility will guarantee a low weed load, and prevent you from inadvertently introducing new pests to your garden. While standard loam is usually lofted as the best soil texture,

most gardeners can benefit from the extra drainage that can be found in a slightly sandier loam (especially in a raised bed system). If you already have soil that you'd like to use but it's the wrong texture, amendments like sand, vermiculite/perlite, and several different types of clay can be purchased from garden centers.



### »»» SOIL PREPARATION

No matter what soil material you decide to use, ALWAYS get it tested first. A soil test can provide you with an amendment prescription, giving you product recommendations and quantities to apply over a fixed amount of time. Soil tests can be performed at several laboratories, but UMass Extension services at the Center for Food and Agriculture does offer multiple-sample soil testing. For example: if you had two raised beds, one for pumpkin production and the other for lettuce production, you can take samples from both, label them, and receive prescriptions for both pumpkin and lettuce growth in their respective beds. When it's time to fill your beds, make sure your soil is homogenized and loosely-packed, as this will help introduce air pockets important for beneficial aerobic microbes.





## WORKSHOPS

Since 1996, Massachusetts Agriculture in the Classroom has offered more than 260 workshops on farms across the state bringing on-farm education experiences to more than 3,000 educators.

Each session offers an in-depth educational overview of one aspect of agriculture with related hands-on activities that helped teachers take agriculture back to their classrooms. Each workshop also includes a farm tour and the opportunity to meet the farmer and learn about work that goes on at the farm. Ten professional development points are offered to teachers for each of the workshops, when they take what they learn back to the classroom and carry out an activity with their students and then send a report.

We plan to continue virtual workshops of 1-1.5 hours, FREE.

When appropriate, we will have outdoor farm based on site workshops with opportunity for 10 PDP's.



On the Road to the Farm Aug. 2024

Visiting three different farms to learn



Soil and Vermicomposting workshop for the Ayer-Shirley Regional Schools District in mAy & June 2024



Spring Conference, Saturday, April 12, 2025

Stay tuned for more information. Would you like to present on this conference? Please email us at [massaginclassroom@gmail.com](mailto:massaginclassroom@gmail.com)





# FARMER INTERVIEW

## SPOTLIGHT ON FOPPEMA'S FARMS: A COMMUNITY-ROOTED SUCCESS



### FOPPEMA'S FARM

This month, we're excited to highlight Foppema Farms, a cherished gem in Massachusetts that has been nurturing both land and community since 1983. Managed by Jesse, his brother Evan, and their dedicated team, this 130-acre farm thrives on a commitment to quality, sustainability, and local support.

### A DEEP COMMITMENT TO COMMUNITY

Foppema Farms has become a cornerstone for local residents, with 99% of its revenue generated from its vibrant farm stand and farmer markets. Since opening their current farm stand location in 1998 and expanding it in 2003, they have created a welcoming space where community members have come to rely on access to fresh, seasonal fruits and vegetables at reasonable prices. Jesse emphasizes the importance of supporting local patrons: "We want to provide our community with produce that's not just fresh, and full of flavor but at affordable prices."

### TRADITION MEETS SUSTAINABILITY

One of the most remarkable aspects of Foppema Farms is its steadfast adherence to time-honored farming practices. Jesse notes, "We've been doing this for generations, and we know what works." This deep-rooted knowledge allows them to maintain a sustainable approach to farming that prioritizes the health of both the land and the local ecosystem. Their commitment to traditional methods ensures that future generations will continue to enjoy the rich flavors of locally grown produce.

### LOOKING AHEAD

As Foppema Farms continues to thrive, Jesse expresses excitement about the future. It is evident that they are proud of their heritage and look forward to sharing their passion for farming with the community for many more years. With their unwavering focus on quality and community, Foppema Farms remains a model for sustainable agriculture in Massachusetts.

In conclusion, Jesse and his team at Foppema Farms exemplify what it means to be a community-oriented farm. Their dedication to providing flavorful, seasonal produce at reasonable prices is a testament to their hard work and commitment. We encourage everyone to visit their farm stand or local markets to experience the bounty of Foppema Farms firsthand!

## THE DAILY GRIND

### MEET JESSE

Jesse's day begins early, around 6:30 AM, and stretches until sunset. This dedication is evident in the quality of their crops, which include approximately 80 varieties of apples. Each variety is carefully tended to, ensuring that Foppema Farms delivers the best produce possible. Jesse and his team have honed their skills over the years, understanding precisely what it takes to cultivate fruits and vegetables that their community loves.

For more information on Foppema's Farms and their seasonal offerings, visit their website ([foppemafarms.com](http://foppemafarms.com)) or stop by their farm stand (1605 Hill Street, Northbridge) to support this local treasure!



# FEATURED

## Lesson Plans



### Apple Science: Comparing Apples and Onions

Students explore heredity concepts by comparing observable traits of apples and onions, collecting data on the traits of different apple varieties, and investigating apple production. Additional activities include hands-on methods for testing apple ripeness. **Grades 3-5**

### Soil and Sustainability

Students observe soil ecosystems to investigate how human impact affects the biodiversity of soils using the Simpson's Index of Diversity. Then, students conduct an investigation using field corn to determine how the introduction of nitrogen fertilizers impact soil microorganisms and biodiversity. **Grades 9-12**



## Free Lesson Plans

Lessons, activities and manuals are developed in collaboration with partners such as the Massachusetts Department of Agriculture Resources, the Massachusetts Dairy Promotion Board and the Massachusetts Society for Promoting Agriculture. The curriculum is designed to Massachusetts standards and education frameworks.



# ON THE ROAD TO THE FARM



## STONE FIELD FARM

On Wednesday, August 21, 2024 bright and early we got ready to start a day on the farm. This year we had a coach bus! It was comfortable and our driver was fantastic. The weather was just right. We had a meet and greet on our first farm Stone Field Farm in Acton, MA. The Executive Director ? and Alisa Ciolffi, Communications and Outreach Manager welcomed us and explained the farm's mission and operations: they "are a regional food systems organization working at the intersection of farming, food waste, and food access." Here volunteers procure, sort, pack and distribute surplus food to food pantries, and other organizations in need, also known as gleaning. We learned about gleaning and discussed how impactful this concept would be for our students and the community. We helped sort through 750 pounds of carrots and Hakurrai turnips.

## GAINING GROUND

From there we rode the bus to Concord, MA and went to Gaining Ground. We were welcomed by Avery Indermaur who talked to us about the history and workings of the farm. This grows "organic produce for hunger relief with help from volunteers of all ages and abilities, who work and learn in our fields". We toured the greenhouses and fields. Our conversation then turned to talk about how climate change is impacting crop growth and farmer adaptability to these changes.

On the road, we talked about how we could include these concepts into our current curriculum and started thinking of lesson ideas. Many giveaways were won and distributed.

## VERRILL FARM

From Concord we then left to Verrill Farm, where lunch awaited and Mr. Verrill himself delighted us with stories on how his family farm developed and the issues of then and issues in farming of today. Our afternoon was focused on the topic of pollinators, Beecology, and a Nose for Nectar Activity. Teachers had time to meet and discuss their lesson ideas. We finished the farm tour giving away books on pollination, climate change, farming, and bees. On the way back to our cars we were tired but excited and full of new ideas, lessons, and books that could be used right at the beginning of school.

Our participants' feedback expressed loving the workshop format, information, and the awesome experience of being in a farm and having first hand experience with farmers' work and their ability to adapt.






# UPCOMING MAC EVENTS

## Silent Auction

Funds generated through the auction will be used to improve teacher workshops and provide educator scholarships to agricultural conferences

[aginclassroom.org](http://aginclassroom.org)

 5 December 2024     10:00AM-2:00PM     UMass Amherst, Campus Center

Interested in donating items for the auction?  
Email: [president@aginclassroom.org](mailto:president@aginclassroom.org)





CALENDAR

CRAFT BEVERAGES

# MassGrown Map

Your gateway to Massachusetts farms, farmers markets, and fun ag-tivities!

Search 221 places Statewide

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- Farm Stands
- Agricultural Fairs
- Farmers' Markets
- Farm Stays (Bed & Breakfast)
- Dairy Farms
- Christmas Trees
- Greenhouses / Nurseries
- Pick Your Own
- Equine/ Riding Stables
- Maple Sugar Houses
- Honey Producers
- Livestock
- Organic Farms
- CSA Farms

# MassGrown Map

Your gateway to discover Massachusetts farms, farmers markets, flower and nursery greenhouses, and more! We will keep you up to date on seasonal crops and products grown locally across Massachusetts.



# FROM OUR PARTNERS

## Department of Elementary and Secondary Education

### Northeast Food for Schools

Do you want to learn more about whether your school cafeteria is sourcing local food from Massachusetts farmers? The Northeast Food for Schools is a USDA funded program for school nutrition programs that began last school year. Massachusetts received \$3.5 million from USDA for the Northeast Food for Schools program, to purchase local food with a focus on purchases from small and minority-owned businesses. Administered by MA Department of Elementary and Secondary Education, this funding has dramatically increased farm to school purchases across the Commonwealth. Learn more about the program and check to see if you school or district is participating in Northeast Food for Schools this Fall 2024.

### MA FRESH Grant Program

The Department of Elementary and Secondary Education's (DESE) Office for Food and Nutrition Programs in collaboration with Massachusetts Farm to School (MFTS) is accepting applications for the FY25 Massachusetts Farming Reinforces Education and Student Health (MA FRESH) grant program. Applications are due Friday, October 11 by 5:00 PM through DESE's GEM\$ grants management system. Up to \$500,000 is available for licensed early education programs, schools and school districts that sponsor Child Nutrition Programs. The grant funds are available for farm-to-school activities that support access to nutritious, local foods as well as educate students, teachers, school nutrition professionals and staff about the local food system. Application resources and mini application coaching sessions are available. Please email DESE Local Food System Specialist Maggie Nowak with questions.

### October is Farm to School Month!

In celebration of Massachusetts Farm to School Month and National Farm to School Month, Massachusetts Farm to School has created a #F2SMonth webpage for ideas of how to celebrate and support farm to school in your community and in the Commonwealth. Throughout the month, Mass. Farm to School will also be bringing you stories from school nutrition professionals, farmers and food hubs, educators and students, along with ways to get involved, and more! Sign up for Mass. Farm to School's mailing list to receive the weekly #F2SMonth emails. Do you know a farm to school champion in your community? In celebration of Farm to School Month, consider nominating them for Mass. Farm to School's Kale Blazer award.

OPEN NOW   
**TEACHER  
OF THE YEAR  
NOMINATIONS**



**NOMINATE YOUR FAVORITE TEACHER  
SUBMIT THE FORM BY  
NOVEMBER 10TH**

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## **Applications now Open**

**Do you know a teacher that does an outstanding work bringing agriculture in the classroom? Does this teacher go above and beyond, maybe without praise and recognition, encourage students to think outside the box and use agriculture to motivate and teach beyond the curriculum? We want to hear about these exceptional teachers and recognize them.**