2019 Mass Envirothon Community Award Summary – Research and Action on *Abundant, Affordable, Healthy Food*

Envirothon teams gain strong environmental knowledge and community connections through their community experiences. They develop teamwork skills and stewardship values. They show that they are capable of college level work and that they can make a real contribution to their communities. Their coaches deserve special commendation for the time and care they put into working with the team.

The Mass Envirothon Community Research Award recognizes teams who have done thorough and wide-ranging community investigations in preparation for their Current Issue presentation. Qualifying for this award in 2019 required teams to become acquainted with their local food system, including its ecological, economic, and social dimensions. Specifically, they looked at sustainable agriculture practices, food security, and food waste issues. They also investigated local organizations involved in agriculture, food distribution, and food waste reduction, and interviewed farmers, local officials, food justice activists, and natural resource managers to learn about their current work and identify key issues. In addition, the teams used maps and researched local newspapers and the internet.

The Mass Envirothon Community Action Award recognizes teams who take what they learn from this Current Issue research and apply it in service to their community.

More on the Envirothon Current Issue and Community Awards may be found at https://massenvirothon.org/areas-of-learning/current-issue/

Team	Research – What they did:	Action Project
4-H Cows-n-Clover 4-H Club (Bristol County area)	**The team studied a range of topics related to the Current Issue, including organic certification, zero waste on an organic farm, local food pantry operations, aquaponics, anaerobic digesters, and waste oil systems, renewable energy, and carbon management plans**	**Building on their work in the Bristol County 4-H public speaking program, the team prepared a community presentation about the importance of small, local farms, and presented it a Ag Day at the State House in Boston and at their local grange, among other places.**
Brockton High School/ Wildlands Trust	**Brockton's urban environment and industrial past proved to be a provocative and inspiring place to investigate food issues. They found that the large disparities in wealth in their community were a significant barrier to food access. They found that Brockton had developed an Urban Agriculture Plan in 2017, and saw some of the results in the work of the Brockton Farmers Market and the Brockton Community Garden Network, including work with immigrant communities. They saw that agriculture can be done almost anywhere at a variety of scales. They found interesting initiatives underway at their own school, as well.**	**The team did not "officially" engage in an action project. However, when they learned that the Brockton High School Community Garden was far behind on spring planting, they volunteered to help after school. They also planned to help with harvesting over the summer.**
David Prouty High School (Spencer)	**The team visited three local farms and studied the just released USDA farm census, which shows increasing numbers of small farms and female farmers. They were particularly interested in innovations for sustainability: drip irrigation to conserve water, an anaerobic digester to generate electricity and reduce waste, and a local restaurant's farm-to-table agreement.**	**The team drafted and submitted a proposal to change current zoning in Spencer to allow establishment of a Farmers Market in the downtown area. In the proposal, they asserted that such a market would offer nearby, inexpensive, fresh food options, and would support local farms and build community. They wrote to the town planner, requesting that he put the proposal on the fall town meeting agenda.**

Doherty Memorial High School (Worcester)	**The team did wide-ranging research and interviews in and around the City of Worcester, including farmers, a cafeteria manager, a supermarket general manager, a mobile farmers market, and a university sustainability coordinator. Their general conclusions: Abundance is not the main problem. Food access and distribution are the reasons for food insecurity in their community. Public awareness of the need for policy change is difficult.**	**After reading an article about composting in the Boston Globe, the team decided that community education about composting is a priority. They volunteered to display their red wriggler compost bin at the Regional Environmental Council's Annual Spring Garden Festival and Plant Sale.**
Fitchburg High School	**The team visited a variety of resource people and places involved in food production and access. One particularly inspiring organization was World Farmers in nearby Lancaster, which helps small farmers – particularly immigrant farmers - to build their capacity for sustainable agriculture. The team noted that many local farms need to rely on agrotourism activity to make a profit. The team recommended support for urban farming, including rooftop gardens.**	**The team helped a local community art program, the Revolving Museum, to design and paint panels for their traveling Eco-Mobile based on Green Chemistry. The team also planned a soil testing demonstration focused on soil health and sustainable agriculture for the Museum.**
Greater New Bedford Vocational Technical School	**The team visited and interviewed local farmers and community advocates about our food system's ecological footprint on the Massachusetts landscape. They looked in depth at best management practices.**	**The team developed informational flyers for sustainable gardening practices, including composting, water conservation, and edible plants in landscaping. They explained the practices and distributed the flyers at their school's Environmental Engineering Sustainable Plant Sale.**
Leicester High School	**The team visited and interviewed at local farms and a food pantry. They found a variety of ways that the community was addressing food security issues successfully. Many team members were personally involved in aspects of the food system through volunteering and work, and leveraged these connections in their research.**	**The team planned to run a snack shack near a Christmas display to raise funds for the Leicester Food Pantry**
Lexington High School	**The team found a rich variety of food system activists and activities in their suburban town. Their research included visits to Lexington Community Farms and the Lexington Food Pantry. They also interviewed parents involved in a school compost project aimed at reducing food in the waste stream.**	**The team decided that education about food production and access is important in their suburban town. They are advocating for a school-community partnership that would encourage Lexington students to learn through volunteering for service hours at Lexington Community Farm.**
Environmental Council of Millbury Jr/Sr High School	**The Council found a variety of people and organizations working on aspects of food security – from the local food pantry, to Butler Farm Community Garden, to staff in the high school cafeteria, to Pearson's Dairy Farm.**	
Newton North High School	**The team researched production, distribution, and waste management efforts in town, including the issue of polystyrene food containers. They were particularly impressed with efforts in town to link food waste reduction and food security consciousness. They summarized their findings: *Newton faces***	

	many barriers to agricultural production and self-sustenance: land in the city is expensive, not to mention limited, and the municipal government has shown little legislative and financial support for agricultural efforts and expansion. Many individuals and organizations are working to address food waste and security – from dedicated food pantry volunteers to local grocery stores' food recovery programs – but meaningful change will ultimately require more individual efforts like home gardening and informed consumer choices, combined with more systemic change like revised school curricula and city efforts.	
Norfolk County Agricultural High School	**The team visited and interviewed staff at several farms, and were particularly impressed by the potential of hydroponic crops when they visited Fresh Box Farms in Millis and saw lettuce grown in a high tech conditions in an old factory.**	**The team took their agricultural knowledge and skills and provided a hands on learning experience in growing lettuce to fifth graders at Elm Street School.**
Oliver Ames High School (Easton)	**In their research, the team encountered a variety of local efforts aimed at improving food production and access. They saw a special need for reducing food waste, and were impressed with the potential of composting to address this issue. They found that the level of awareness was not high enough to prompt action, and a focus on public awareness.**	
Pioneer Valley Regional School (Northfield)	**The team did wide ranging research to develop a picture of the local food system, visiting farms and a farmers market and interviewing farmers as well as a food pantry operator and a solid waste specialist. They saw potential to convert unused modular buildings to greenhouses at their school.**	
Quabbin Regional School (Barre)	**The team visited and interviewed at farms and organizations that are interested in promoting a sustainable food system. They learned that that costs are a major factor for decisions by both farmers and consumers, and that needed changes require educating the public. Food policy is highly political! They were impressed by the potential for a BioNutrient meter to make the nutrient density of food easily detectable. They concluded that people need to be convinced to care more about what food they eat and where it comes from.**	**The team decided to reestablish the composting system at the high school to alleviate food waste issues and to enhance the school garden's soil. The project had been discontinued because of rodent issues. They determined what materials should and should not be included in the compost, and proposed other improvements as well. Their efforts were aided by involvement in the Mass Department of Environmental Protection's GREEN TEAM program.**
Rockland High School	**While the team investigated a range of food system questions, they became particularly interested in food insecurity and food waste issues, including new understanding of the level of food insecurity in their own school and community.**	**The team did not "officially" engage in an action project. However, they documented their research and recommendations in their school newspaper and a podcast. Links may be found at: https://rhsveritas.wordpress.com/2019/05/page/2/**

Shepherd Hill Regional High School (Dudley)	**The team investigated a variety of food system issues in their towns, from innovative sustainable agriculture practices, to the impact of large solar farms, to the work of a food pantry. They gained respect and admiration for the work of farming, and were grateful for farmers' generosity with their time. The team was particularly interested in local soil types and protecting agricultural land.**	**The team worked on two projects. The first was to create a sustainable school garden to provide nutritious food for their cafeteria. The garden has been successful for building community within the school (from art to English to chemistry, also the custodial staff) and for connecting the school with the community. The second project was to create a partnership between Fay Mountain Farm and Chip-In Food Pantry to expand access to nutritious food within their community. Work with the food pantry included late summer donations of school garden produce.**