

How Massachusetts Farmers Make Money

Caroline Parlee & Steven E. Silvern
Department of Geography, Salem State University, Salem, MA



An Introduction and Research Objectives:

Massachusetts Farmers are being pressured by many factors including competition from grocery stores, encroaching urbanization, climate change, and much more. The question is how can farmers, in this environment, make money to support themselves. Land and equipment can be very expensive while the cost of food must be kept low to be competitive with grocery stores. In these conditions how can a Massachusetts farmer hope to survive?

Research objectives:

- Gain a better understanding of the practices of Massachusetts farmers do to support themselves
- Understand which practices seem to be working best and why
- Examine data from the state and other researchers to gain understanding of how farmers are making money

Abstract

One of the challenges confronting Massachusetts is how to feed its population with local resources. It takes a lot of food to feed these people and a lot of this food is coming from out of state. This means that the state's food supply requires fossil fuels for transport and this contributes to the state's carbon footprint and climate change. Numerous studies have recommended that food should be eaten and produced in the same area to increase sustainability and resilience and reduce its environmental impacts. So, the question is how to promote local agriculture? To do this we need to turn to Massachusetts farmers and see what they are actually doing to survive in a global agricultural marketplace. Lots of farmers are struggling to compete with grocery store chains despite their superior product. If these farms fail then the state is left with less local food and communities suffer for it. Here lies the question: what are Massachusetts farmers doing to make money and how can they improve on their existing business practices? In this study we examine the business practices of farmers through statistics, personal stories and interviews to see what is working and what is not in an effort to promote the sustainability and resilience of Massachusetts farmers

State	Number of Farms			Median Size Farm (Acres)			Average Size Farm (Acres)		
	2017	2012	%Δ	2017	2012	%Δ	2017	2012	%Δ
CT	5,521	5,977	-7.6%	20	22	-9.1%	69.1	73.0	-5.4%
MA	7,241	7,755	-6.6%	21	23	-8.7%	67.9	67.5	0.6%
ME	7,600	8,173	-7.0%	55	67	-17.9%	172.1	177.9	-3.3%
NH	4,123	4,391	-6.1%	35	38	-7.9%	103.2	108.0	-4.4%
RI	1,043	1,243	-16.1%	20	20	0.0%	54.5	56.0	-2.6%
VT	6,808	7,338	-7.2%	74	80	-7.5%	175.3	170.6	2.8%



Business to Business

Farms to Grocery Store

Most people get their groceries from a grocery store so farmers, will sometimes sell their products right to the grocery stores. Whole foods has programs with local farmers and most smaller grocery stores are willing to work with small farmers. But when farmers sell to grocery store they have to sell to a lower price making it less attractive to farmers. Parlee's Farm in Chelmsford has attempted to sell to grocery store but with the costs associated with growing and harvesting are produce are to high to sell at the low prices that grocery stores demand. Small farms can not compete with the prices that factory farms typically set for grocery stores.

Farmer to Farmer

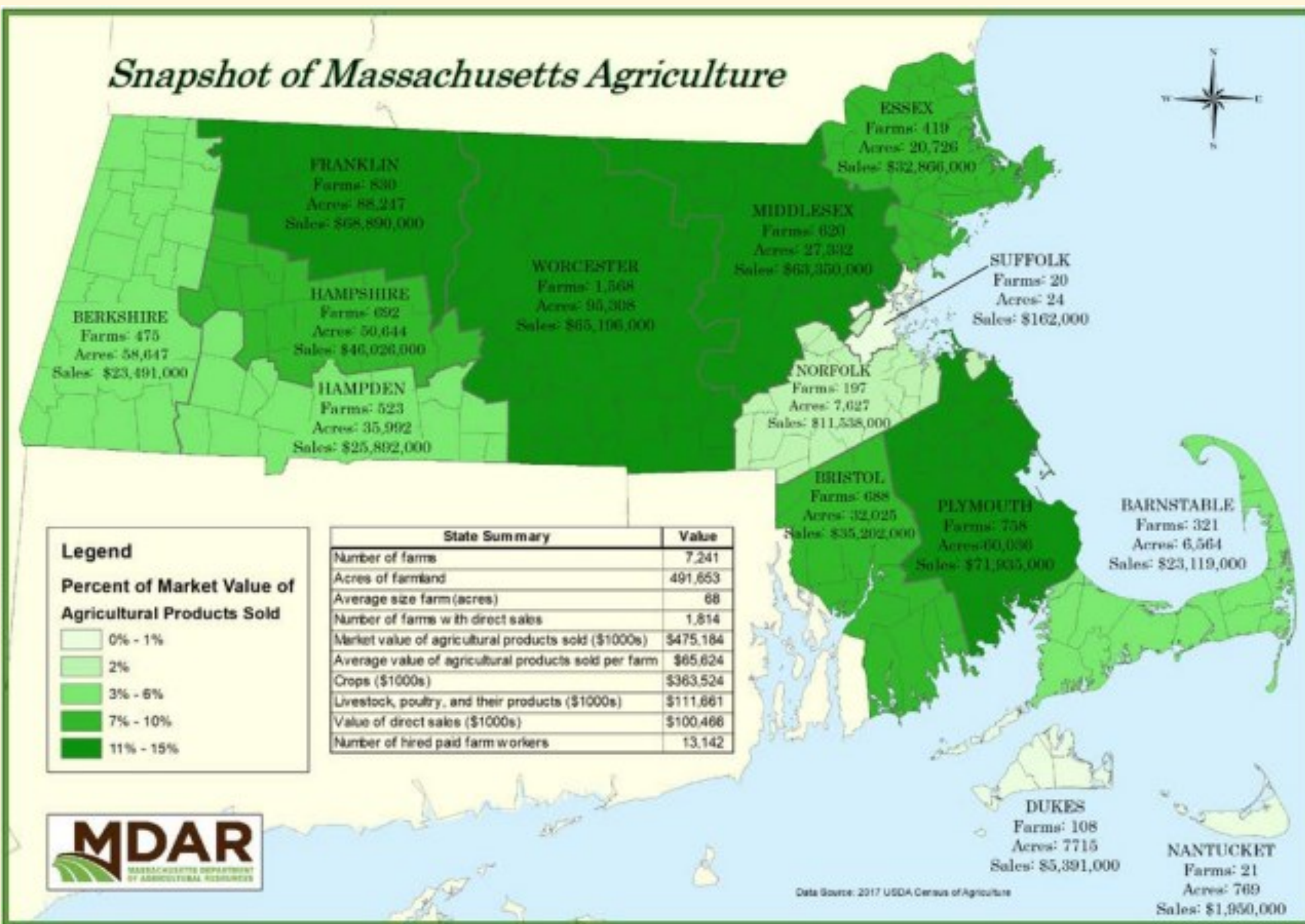
Farmers sell to one another different produce and products. Customers demand a variety of products and not all farmers have the time or space to grow everything their customers want so farmers will often purchase from each other. For example Parlee's Farm does not have an orchard but the Nahoog Hill Orchard has all the orchard products their customers want so Parlee's Farm will purchase or trade their own produce with them to get what their customers need.

Some farms such as Nourse Farms is Whatley grow and start plants for other farmers to purchase so they do not need to start their own plants from seeds. Of course the purchasing farmer pays a larger fee than they would if they started the plants themselves but they have a higher success rate and have to invest labor in the crop for a higher yield rate.

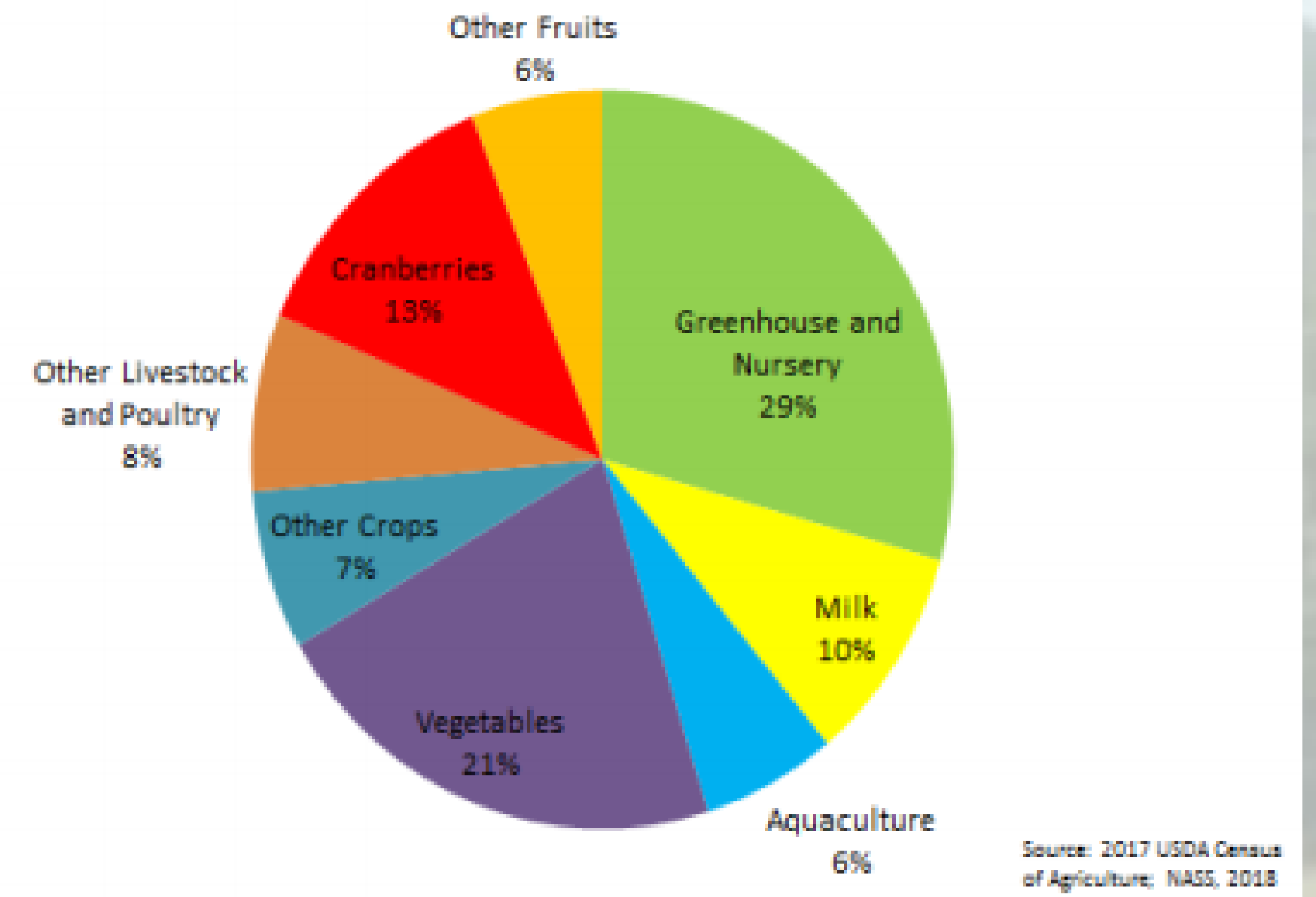
Idivilwe Farms located in Acton is primarily a grocer and while they grow a good portion of their food they also purchase a lot of their produce from other farmers in the area to supplement the needs of the consumers. They also purchase milks and meats from local farmers.

Farm to Restaurant

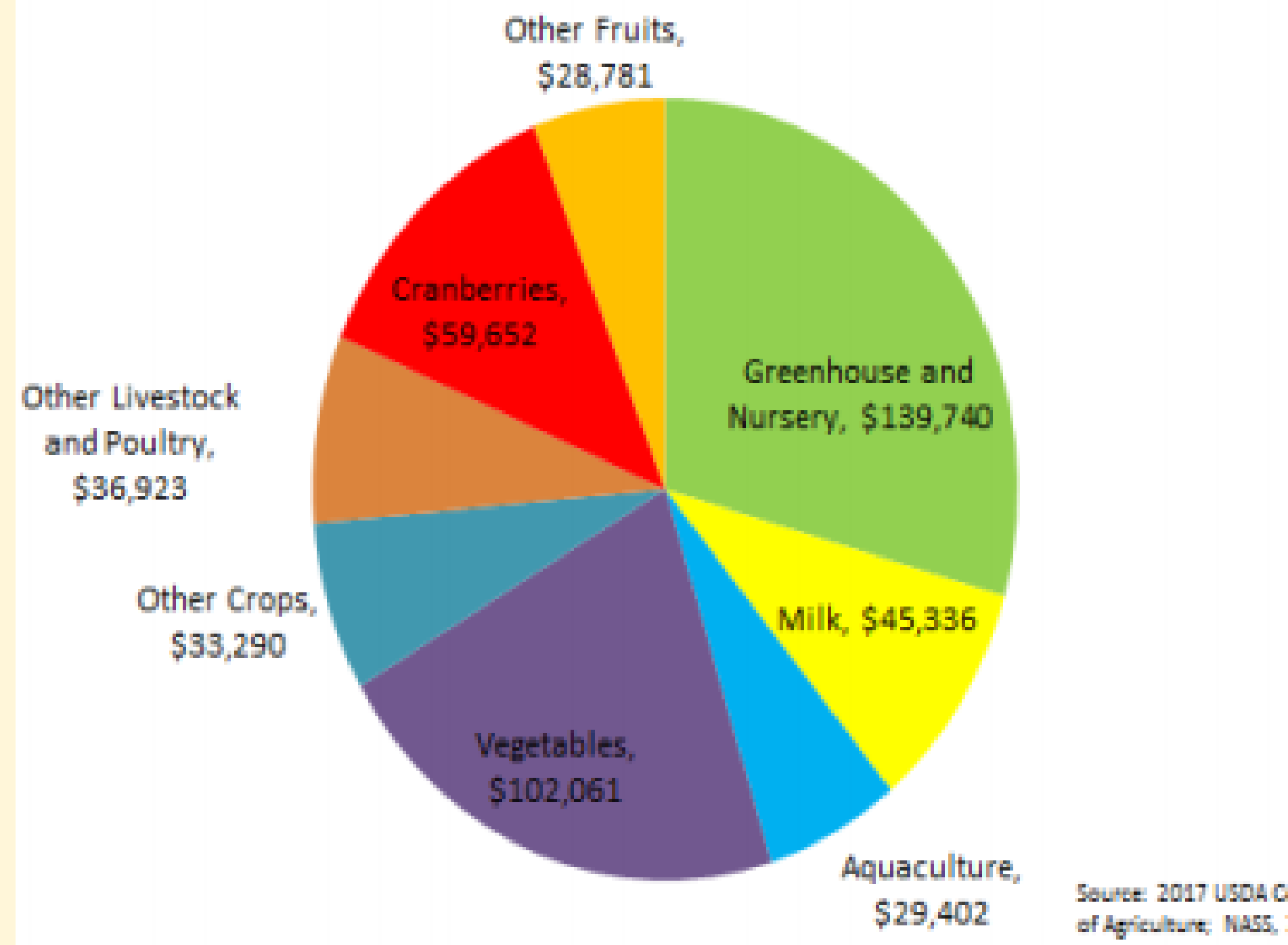
If restaurants want the best produce for their dishes they get them from local farms. Restaurants owners focused on the quality of the food will get their products from local farmers. For examples Rosie's Diner in Chelmsford purchased about sixty pounds of tomatoes from Parlee's Farm a week while they are in season. This market allows farmers to have consistent customers that do not have the buying power of grocery stores so they can sell to restaurants at a price that is sustainable for the farmer.



Massachusetts 2017 Agricultural Economy by Commodity



Massachusetts 2017 Agricultural Economy in \$1,000s



When are local products in season?



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DAIRY CHEESE & EGGS												
MOULTY												
MEAT & POULTRY												
FRUITS												
APPLES												
BLUEBERRIES												
CANTALOUPE												
CRANBERRIES												
PEACHES												
PEARS												
RASPBERRIES												
STRAWBERRIES												
WATERMELONS												
VEGETABLES												
KALE, CHARD & COLLARDS												
LETTUCE & SALAD GREENS												
BRUSCHETTA												
MOROCCHI												
CARROTS												
CABBAGE												
CUCUMBERS												
BEANS												
CARROTS												
POTATOES												
RADISHES												
TURKISH												
SPINACH												
LEKES												
ONIONS												
SCALLIONS												
POPPERS												
SQUASH, SUMMER & BUTTERNUT												
SQUASH, WINTER												
ASPARAGUS												
BEANS												
CELERY												
CORN												
CUCUMBERS												
EGGPLANT												
PEAS												
PEPPERS												
TOMATOES												
PLANTS												
BEDDING PLANTS												
CUT FLOWERS												
HERBS												

Who are Massachusetts Farmers and what are they Growing

What do Massachusetts farmer look like?

- The average farmer is 59.1 years old
- Female primary operators account for 38.5% of farmers
- 94.2% of farms are small farms and 79.7% of farms are family owned
- The average farmer makes \$65,000 per year on an average of 68 acres

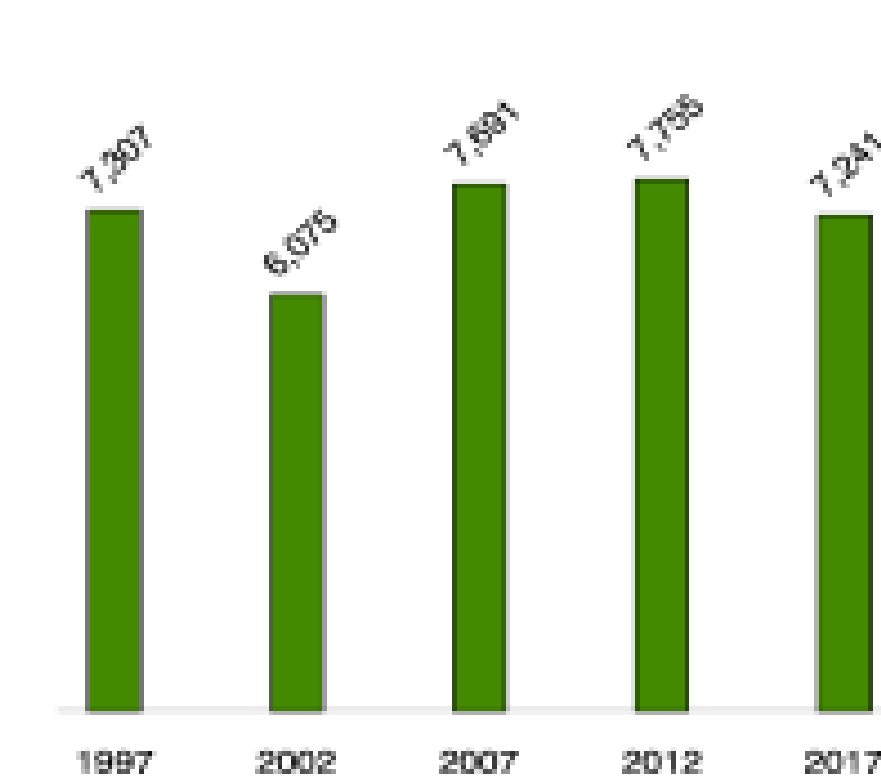
What are the growing

- The largest section of the above graph shows that nurseries are making the largest section. In this there are garden stores but also farmers that grow started plants and sell them to other farmers for example. Nourse Farms in Whatley Massachusetts start strawberry, raspberries and asparagus plants and sells them to farmer across New England
- Vegetables account for the second largest section which is made up of a wide variety of crops. A large sector of vegetables in Massachusetts is the sale of sweet corn and tomatoes in the summer months as well as smaller amounts of other common vegetables such as cucumbers, beans, and squashes. In the fall there vegetables such as pumpkins, fall squashes, beans and some other crops. The winter and spring months are full of green house grown crops such as lettuce and other greens.
- Cranberries are one of the staple crops of Massachusetts. Cranberries are fruits grown in bogs that can be used for juices, jellies and sold as is.
- The next largest sector is Milk. The milk can be sold as milk or created into other goods such as ice cream and cheeses. The milk is primarily cow milk but there is a few farms that sell goat and other animal milks.
- Live stock and Poultry accounts for meat, eggs and other materials that come off of animals such as wools.
- Other crops include hay, cut flowers, and other crops that may not be traditionally grown in the region.
- Other fruits are fruits that are not cranberries so apples, blueberries, strawberries, raspberries and other fruits grown in the region.

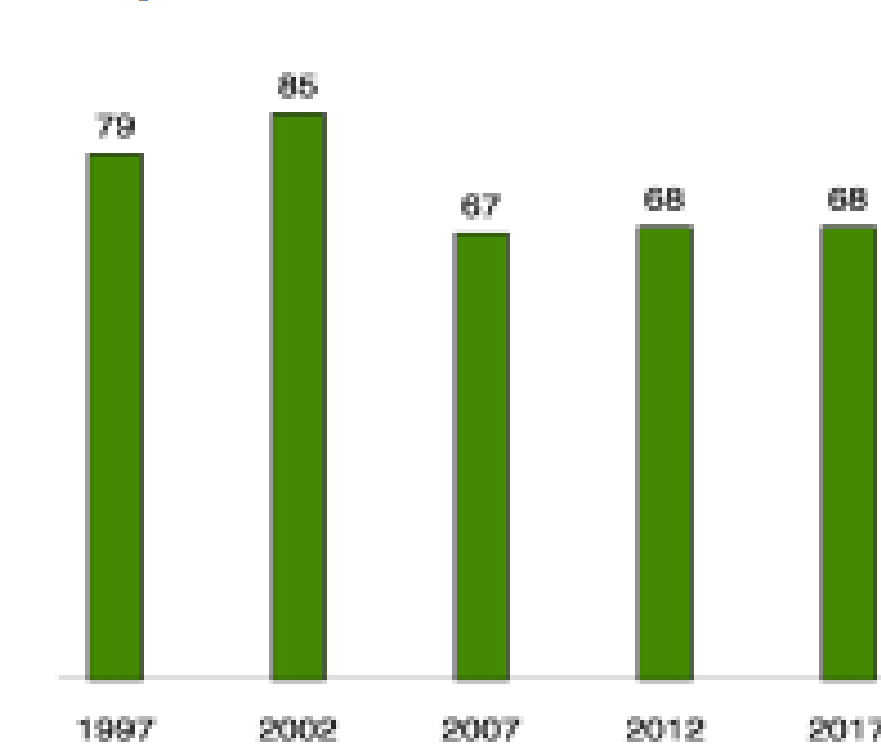
Value Added Products

Value added products are products that have been processed in a way to add value such as making jellies from fruit or turning wool into clothing. These items sell for more and are a key new area for farmers to concentrate in.

Number of Farms, 1997-2017



Average Farm Size, 1997-2017 (acres)



Farming in the Times COVID 19

Farming is a highly interactive environment as they producing food for people to eat and with that there needs certain precautions need to be taken but farmers still need be able to sell. Hopefully COVID 19 will be under control before the majority of summer crops are available but data shows that there maybe a resurgence of this virus.

Methods For Farmers to Doing Business

- Farmers can take customers orders over the phone or on online and prepare them for pick up
- Customers can point to the food items they want from six feet away and the person handling the store can bag up the items.
- Enforce social distancing in pick your own activities, encourage customers to wear personal protective gear and remind customers to wash the produce before the eat the food
- Have hand washing stations available for customer use
- When picking and creating value added products to wear personal protective gear
- Most importantly stay in touch with the USDA and MDAR as they are actively making laws and

Selected References and Data Sources:

- "100 Years and Still Going Strong." Freedom's Way National Heritage Area. 12 June 2018. freedomway.org/100-years-and-still-going-strong/
- Admin. "Massachusetts Agricultural Data." Center for Agriculture, Food and the Environment. 12 Feb. 2020. ag.umass.edu/resources/massachusetts-agricultural-data
- "Census of State Agriculture 2017." USDA. 2018. www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Massachusetts/cp99025.pdf
- "Home." Sustainability. 21 Apr. 2010. sustainability.admin.ox.ac.uk/home
- "Massachusetts Department of Agricultural Resources." Mass.gov. 2018. www.mass.gov/doc/massachusetts-department-of-agricultural-resources
- "Menu." Massachusetts Farm Bureau. www.farmbureau.co/
- "Snapshot of MA Agriculture Presentation." Mass.gov. 2018. www.mass.gov/doc/snapshot-of-ma-agriculture-presentation/
- "Sustainability." UMass Amherst. www.umass.edu/sustainability/