October 30, 2019

Testimony of Mr. Benjamin Whalen

Farmer and Owner of Bumbleroot Organic Farm in Windham, Maine House Committee on Agriculture Subcommittee on Biotechnology, Horticulture, and Research

Good morning, Chairwoman Plaskett, Ranking Member Dunn and Members of the Subcommittee. Thank you for the opportunity to testify and to share a young farmer's perspective on the state of organic agriculture.

My name is Ben Whalen. I'm thirty-two years old and have owned and operated Bumbleroot Organic Farm for five years with my wife, Melissa, and our business partners, Jeff and Abby Fisher. Bumbleroot is a small organic vegetable and flower farm located in Windham, Maine, just twenty minutes west of Portland, on the edge of suburban development and rural farmland.

Being an organic farmer in Maine is synonymous with being a small family farm. Our property is ninety acres of rolling pasture, fields, and forest, and we grow a diversity of certified organic vegetables, flowers, and herbs on just seven of those acres. We provide food for 125 families through our CSA program, attend three weekly farmers' markets, and work closely with twenty restaurants and caterers in the Portland area. We employ three full-time staff in addition to the owners and hire three part-time workers in the summer months.

Though our farm is unique in many ways, our scale of operation is not. According the 2017 Agricultural Census, of the 7,600 farms in Maine, nearly two thirds of them are less than 100 acres. 535 Maine farms are certified organic. At Bumbleroot, our production practices rely on a combination of manual hand labor and small tractors - much of our seeding, planting, weeding, and harvesting is done by hand while field preparation and cultivation is done by tractor.

As organic farmers, we believe that soil health is the most important consideration for all aspects of our farm. By building healthy soils we can increase biodiversity, grow healthier crops, decrease erosion, and sequester carbon. A term that is being used more often in our area, and across the country, is **regenerative agriculture**. The philosophy and principles of regenerative agriculture ask farmers to take a step beyond simply maintaining sustainable systems and to implement practices that regenerate the land and build soil health. These practices maximize carbon sequestration while minimizing the loss of that carbon once it is stored in the soil. Many of the practices used in regenerative agriculture are already best practices under the National Organic Standards: use of cover crops, crop rotations, and compost highlight the importance of soil fertility. Reducing and eliminating tillage, which destroys the biodiversity of the soil, can help maintain soil carbon once it is stored this seems to be a trend in the regenerative agriculture movement.

We view climate change as one of the greatest challenges our farm business will face over the coming decades. Organic and regenerative agriculture must be part of the solution to mitigating

and adapting to climate change. Research into how farms can more effectively sequester carbon in our soils, and how to protect that carbon once it is stored, can build more resilient farm businesses and create more sustainable food systems. For this reason, continued investment into organic research programs like Organic Agriculture Research and Extension Initiative (OREI) and Organic Transitions Program (ORG) are so important. I thank the committee for a 2018 Farm Bill which ramps up funding for OREI to \$50 million in permanent baseline funding by 2023. However, the recent relocation of NIFA will lead to significant delays in grant funding for these programs, putting at risk important organic research. Farmers cannot afford delays in research nor can we afford to fall behind the rest of the world. The relocation hurts organic research, farmers and U.S. agriculture. I urge this committee to work with your colleagues on agriculture appropriations to help defend the House bill's position to prohibit the relocation.

Another major challenge young and beginning farmers are facing is access to affordable farmland. Secure land tenure is fundamental to farm viability. Without secure land tenure, farmers are unable to invest in on-farm infrastructure and conservation practices critical to building soil quality, financial equity, and their businesses. Our farm was incredibly lucky to find our forever farm through working with Maine Farmland Trust, a farmland protection agency in Maine. But we've seen many of our peers close their farm businesses because they were unable to find long-term land. With the ever increasing cost of land, we need to increase funding for farmland protection. According to the 2017 Farm Census, between 2012 and 2017 over 146,000 acres of farmland were lost in Maine alone. Farmland conservation not only ensures space for future generations to grow food for their communities, it also has a direct impact on reducing the potential carbon emissions associated with development. Greater farmland protection coupled with transitioning farm businesses towards regenerative farm practices will allow our agriculture industry to lead the way in combating climate change while providing the healthiest possible food to our communities.

The scale of the work needed to be done to combat climate change is enormous. No one person, farm, or industry will be able to reverse the damage that has already been done over the last century. But by reimagining our food systems to reintegrate small scale, organic farms that use regenerative practices, we can build vibrant, resilient, localized food systems that better serve our communities, strengthen our regional economies, and

Soil Health

Soil is the soul of a vegetable farm. When I first got into farming, I had no idea I would need to become an expert on soil science. But as the years have gone on, I've realized that my capacity to understand what's happening below my feet directly impacts the success of my farm business. **Healthier soils mean healthier food which creates healthier communities**. By focusing on soil health we can adapt our farm practices to reduce our carbon emissions and sequester carbon in the soil. At Bumbleroot Organic Farm, we have begun experimenting with no-till farming techniques that will reduce our fossil fuel use and increase biodiversity in the soil. With healthier soils we expect to see higher yields with less off-farm inputs (fertilizers, fuels, organic pesticides, etc.). In the long run, incorporating these techniques will make our farm

business more resilient to the effects of climate change and more profitable through better crop yield.

Over the past few years we have worked with UMaine Extension on multiple **Sustainable Agriculture Research and Education Grant (SARE)** projects that specifically look at these techniques. In 2018, we hosted a cover crop trial that looked at the results of different combinations of cover crops on soil health and weed suppression. For the past two years we have participated in research to determine the impact of tarping over-wintered cover crops and the effects this practice has on weed suppression and crop yield.

The strength of our local food systems depends on the adaptability and resilience of farmers in the face of changing weather patterns and more extreme growing conditions - agriculture has to be part of the solution. Programs such as **SARE**, soil health initiatives, and incentives for organic and regenerative practices will help farmers build more sustainable farm businesses, build stronger more resilient soil, and grow healthier food for their communities. We thank this committee for its support of SARE over the years. But currently, SARE is appropriated at \$37 million. It is critical that farmers are given the right tools and know-how to meet the challenges of a changing climate and agricultural landscape. SARE is equipped to help them do so and increasing investment into this program is of key importance. As fiscal year 2020 discussions continue, I urge this committee to work with your colleagues on agriculture appropriations to defend the House bill and its \$45 million funding level for SARE.

Climate Change

We see climate change as the primary challenge our business will face in the decades to come. We are finishing up our fifth growing season and we're already feeling the impacts of extreme weather patterns. Last July we had a hail storm sweep through our farm, and it wiped out our entire onion crop and damaged many of our field crops. Just last week we had another storm with record winds in the Portland area - we were without power for days, relying on generators to keep our coolers running and fall crop storage secure.

We have directly benefited from **Natural Resource Conservation Service (NRCS)** programs such as **Environmental Quality Incentives Program (EQIP)** and **Agriculture Management Assistance (AMA)** that have allowed us to build five high tunnels, or greenhouses, which protect our high value crops and extend our growing season. These greenhouse structures have allowed our farm to grow vegetables year-round, even through the snowy Maine winters, which provides consistent income for our families as well as healthy, fresh food for our community 12 months out of the year. In the summer, the plastic provides shelter for our more vulnerable crops like tomatoes, peppers, and eggplant from potentially damaging weather, as well as protection from pest pressure. By integrating these high tunnels into our farming operation we have built a more resilient, more profitable business. As young farmers with limited financial resources, having access to funding for these high tunnels has allowed our business to grow more rapidly than we would have otherwise. I want to thank members of the committee for its work in supporting these vital programs in the 2018 Farm Bill which increases the payment cap for the EQIP Organic Initiative. But this increase in the payment cap is still far below the

payment cap for General EQIP and I urge that the separate payment cap within EQIP be promoted in conjunction with a state-based allocation for organic and transitioning participants.

Another area that we see as critical to building a more resilient farm in the face of climate change is incorporating **renewable energy** on farms. Last winter we explored adding solar panels to our barn that would cover the electricity needs of the farm business as well as two homes on the property. After scrutinizing the costs and our business financials, we decided the project was cost prohibitive for our young business. Greater funding for renewable energy on farms through **Rural Energy for America Program (REAP)** would have a huge impact on transitioning farms from fossil fuel based systems towards electric ones. From heating greenhouses to running tractors, the potential for renewable energy on farms in vast. Encouraging and incentivizing farms to transition to renewable energy is a direct way we can cut carbon emissions on farms.

As I mentioned earlier, the importance of soil health on our ability to mitigate and adapt to climate change cannot be over-emphasized. By utilizing **regenerative farming practices** to build soil, we can sequester carbon from the atmosphere and significantly reduce the erosion and the harsh impacts of flooding and drought. By increasing funding for research into new techniques and technologies, farms of all sizes can adopt practices that allow the agricultural industry to combat climate change rather than contribute to it.

Young Farmers

As farmers finishing our fifth year in business, we've experienced some of the challenges that are far too common for all young farmers across the country. After struggling for our first few years to secure reliable land tenure, we were able to purchase our farm from Maine Farmland Trust through their "buy, protect, sell" program. MFT purchased the property from the Week's family that had farmed the land for generations at market value, placed an agricultural easement and OPAV (Option to Purchase at Agricultural Value) on the property, and then sold it to us for less than half the initial cost. The importance of agricultural easements to make farmland more affordable to young and beginning farmers can not be overstated. We are grateful for programs like ACEP (Agricultural Conservation Easement Program) that enable land trusts across the country, like MFT, to offer agricultural easements and make farmland more affordable for young farmers. Greater funding for ACEP would allow land trusts to offer more easements without having to continually apply for more funding. As pressure grows from development, suitable and affordable land near major markets has become inaccessible to farmers just starting out. This past year we've had farmer friends of ours close their business because they were unable to figure out their land tenure. Further funding for land protection is essential to ensure that the next generation of farmers have affordable land to establish their businesses and be our food producers for years to come.

As young, organic farmers in Maine, our business has benefitted from so many federal programs. Program funding through the **BFRDP** (Beginning Farmer and Rancher Development Program) such as MOFGA's (Maine Organic Farm and Garden Association) **Farm Beginnings Course** has allowed our farm business grow with intention and given my partners and I the

business knowledge to effectively run our small farm business. Other programs such as **Organic Certification Cost Share** (OCCSP) helps alleviate the financial cost of organic certification, allowing us to invest that money back into our business. Increasing funding for these programs will insure that young farmers and organic growers have the resources they need to be lasting businesses and food producers in their communities. In total, \$40.4 million is provided under the 2018 Farm Bill for OCCSP over the next five years, which unfortunately is a cut below OCCSP's previous funding level of \$11.5 million per year. As more farmers transition to organic and the demand for cost-share assistance increases, it's possible that funding may fall short in the later years of the 2018 Farm Bill. It will be important, therefore, to closely monitor demand and total funds that remain available as implementation moves forward.

I want to thank the committee for providing mandatory funding for the Value-Added Producer Grants (or VAPG) and the Farmers Market and Local Food Promotion programs, which were combined in the Local Agriculture Market Program (LAMP) in the 2018 farm bill. While VAPG is used by all farmers, organic farmers have successfully utilized this program to increase their market opportunities. VAPG has historically received both mandatory and discretionary funds due to the high demand for this program, and so I would encourage you to work with your colleagues on agriculture appropriations to ensure the House bill's \$15 million funding level is included. I would also encourage this committee to support the House Bill's additional \$5 million for the Farmers Market and Local Food Promotion Programs, which would fund these programs at their historic levels. These programs have helped small and mid-sized organic farmers expand their operations to reach new local and regional food markets.

It is my view that the future of organic farming and organic food in our country involves more small family growers. We need to support these farms today. By supporting small scale organic growers we are directly investing in greater resiliency for our local food systems. By helping farms transition to organic and encouraging the adoption of regenerative practices, we can help organic farming be part of the solution to mitigating and adapting to the effects of climate change.

Once again, I would like to thank the Subcommittee for giving me the opportunity to testify today on the state of organic agriculture. I am happy to answer questions you may have.

BUMBLEROOT organic FARM

WINDHAM, MAINE

OUR FIRST 5 YEARS: HOW FEDERAL PROGRAMS HAVE HELPED GROW OUR FARM BUSINESS



TAKEAWAYS

1) ORGANIC CERTIFICATION COST SHARE PROGRAM (OCCSP):

As a small business and young farm, every cost counts. Adhering to the National Organic Standards set forth by the National Organic Program has always been a priority for us, although it can be costly. Every year we've been in business, the OCCSP has reimbursed us for up to 75% of the application fees and inspection fees we incur in order to be certified organic.

2) BEGINNING FARMER AND RANCHER DEVELOPMENT PROGRAM (BFRDP):

Beginning farmer training programs have been crucial in building a solid foundation for our business. We started our farm with no business background and these programs have instilled fundamental business planning principles that are essential to our long term and annual planning, as well as our day-to-day decision making.

3) ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (EQIP):

As vegetable producers in Maine, the NRCS high tunnel program has allowed us to extend our growing season into the long, cold winter months. We are now able to grow greens year-round in our high tunnels, harvesting spinach and lettuce in January and February when there is still snow on the ground. This allows us to provide fresh, organic produce to our community year-round, and provides our business with the income it needs to support us through the winter months.

4) SUSTAINABLE AGRICULTURE RESEARCH AND EDUCATION GRANTS (SARE):

The future of food depends on the adaptability and resiliency of farmers in the face of changing weather patterns and more extreme growing conditions. SARE offers farmers the opportunity to participate in and benefit from research that leads to innovation, more sustinable practices, and higher productivity. Our farm is a trial site for our local Cooperative Extension's SARE study which is focused on expanding no-till practices through cover cropping and the use of tarps.