

# Food and Farming

## Agriculture in the Berkshires at a Glance

- 475 farms in operation totaling \$23.5M in annual sales, based on 2017 agricultural census data
- Top crops include forage for animals (such as hay for livestock), corn for livestock feed, and vegetables
- Top livestock include cattle (for beef or dairy), laying hens, and horses and ponies
- Agriculture has important cultural benefits and tourism in the Berkshires that cannot be quantified

## Key Threats to Farms in the Berkshires from Climate Change

Information adapted from MA Climate Change Clearinghouse

- **Rising temperatures**
  - Crops that rely on specific temperature regimes like apples, cranberries, and maple syrup may fare poorly
  - Increasing heat stress days (above 90°F) will stress livestock and some crops
- **Changes in Precipitation**
  - Increased precipitation will lead to more flooding, soil erosion, and crop damage
  - Wetter springs may delay planting for crops and reduce yields
  - Drier summers and intermittent droughts may strain irrigation water supplies, stress crops, and delay harvests
- **More Extreme Weather Events**
  - Extreme storms may cause catastrophic damage to crops and fields, farm buildings, equipment and drainage systems
  - Heavy rainfall is likely to wash away fertile soils, damage water resources, and potentially increase risk of water supply contamination from farm runoff
- **More Pest Pressure**
  - More pest pressure from insects, diseases and weeds may harm crops and cause farms to increase pesticide use



Deerfield, MA farm post - Irene – 40 acres covered in silt. From MassLive

## Mitigation and Adaptation Strategies for Agriculture in the Berkshires

**Management Practices:** Changes in how food is grown can help farms adapt to climate change (adaptation) while also reducing current levels of emissions (mitigation). Here are a few examples:

- Increasing soil organic matter by planting cover crops, using no-till techniques, and effective livestock management can sequester atmospheric carbon while preparing farms for extreme weather events
- Crop diversification can increase on-farm resilience to weather and also support farm economic stability
- The integration of trees into crop and pastureland through agroforestry can sequester carbon and help farms withstand weather extremes while also adding new income sources to farms

### **Policy and Planning:**

- Farms throughout Massachusetts can apply for a grant for the state-wide ACRE program (Agricultural Climate Resiliency & Efficiencies) to reduce risks from climate change
- At the town level, Great Barrington can bolster support for policies like the Agricultural Preservation Restriction (APR) program which can help with access to land for young and beginning farmers, as well as succession planning for existing farms to keep agricultural land in use
- The Agricultural Commission can take an explicit look at climate change preparedness policies and programs

## Additional Areas of Concern Across Great Barrington's Food System

- **Food access and security:** Existing programs like SNAP (Supplemental Nutrition Assistance), WIC (Women, Infants, Children), as well as emergency food banks and distribution services should be bolstered to meet the rising cost of food resulting from the affect of climate change intensification on global supply chains
- **Food waste** is a major contributor to greenhouse gas emissions. Policies and programs in support of reducing food waste locally and regionally should be examined and supported. Examples include the development of town policy around community compost systems and the support of commercial composting enterprises

## Key Resources

- Massachusetts' Climate Change Clearinghouse, ResilientMA.org
- Berkshire Regional Planning Commission's 2014 report, *Local Food and Agriculture*
- USDA Northeast Climate Hub: [www.climatehubs.usda.gov/hubs/northeast](http://www.climatehubs.usda.gov/hubs/northeast)



GB Farmers Market raised an additional \$30K in 2019 to double the spending power of SNAP and WIC benefits, a creative solution that incentivizes healthy food purchases for recipients while increasing income for local farm producers.