



## 1) Introduction

**Title:** *Understanding and Strengthening Climate Resilience for Adirondack Farms*

**Organization:** Adirondack Council

### **Contact information:**

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**Organizational description:** The Adirondack Council is a privately funded not-for-profit organization whose mission is to ensure the ecological integrity and wild character of the Adirondack Park. With 15,000 member advocates across the country and a lively online community of over 50,000 people, The Adirondack Council, using the best science and catalyzing citizen action, works to protect and build a better Adirondack Park with wild character and vibrant communities. The Council works to defend and expand wilderness, support community sustainability, fight for clean air and water, combat invasive species and climate change, and advocate for private land stewardship and working farms and forests.

**2) Project Description.** How is climate change impacting farmers in the Adirondack Park? How can farmers best measure climate impacts? What is climate resilience as it applies to farms? What can farmers in the Park learn from similar regions to become more climate resilient?

**The goal of the project is to research the path(s) forward to achieving climate resiliency for Adirondack farms.**

Both small and large farms in the Adirondack Park are and will continue to be affected by the impacts of climate change. To help preserve the viability of farms in the Adirondacks as pillars of local food access, human health, open space preservation, and community vibrancy, the fellow will conduct research on the following:

- 1) Understand local insights regarding on-the-ground impacts farmers are seeing, what existing efforts are in place to reduce emissions and adapt to climate change, what is and is not working to make farms more resilient, and what else is needed to strengthen the resiliency of Adirondack farms. A deliverable could be a survey for farmers and agriculture institutions that seeks to identify and categorize challenges and successes in climate adaptation and mitigation on farms.
- 2) Identify resiliency technologies, methods and practices being implemented in similar regions of the U.S; and,

3) Determine if there are strategies elsewhere that could be successfully implemented by Adirondack farmers.

The Colgate Summer Field School fellow would be responsible for conducting literature and “local” research, meeting with Kristin and Mark Kimball of Essex Farm, and local staff from Cornell Cooperative Extension and Essex Farm Institute regarding local and regional climate and sequestration efforts. The fellow will also be a resource for the Council’s *Cool Farms/Healthy Park* micro-grant program, visiting farms and interviewing farmers on the success of the Council- provided grants for climate and sustainability projects.

A final product will include maps, infographs, and narratives that help describe best practices and a path toward climate resilient farms in the Adirondacks.

**3. Statement.** Over the past decade, small farms have become increasingly important to the conservation, rural economy and small communities of the six-million-acre Adirondack Park, especially in the Champlain Valley of the eastern Adirondacks. The Adirondack Council has a vested interest in securing the future of the region’s small-scale agriculture by helping farmers in the Adirondack and the wider North Country choose best practices that will sustain farms in the face of climate change and help farms play a role in mitigating climate change and reducing greenhouse gas emissions.

**4. Logistical considerations.** The fellow position will be most beneficial to the student and the Adirondack Council if it is a full-time position (35 hours/week) and based at the Council’s Elizabethtown office. The fellow will be supervised by Jackie Bowen, Conservation Associate with additional support from Rocci Aguirre, Conservation Director and Racey Henderson, Essex Farm Institute (a program of the Adirondack Council). Support from a Colgate professor with GIS expertise would be a benefit, helping the student shape the final research questions, determine the GIS applications, and structure a format for final presentation of the research data. The fellow will need transportation to travel to the office and local farms (program travel could be reimbursed by the Council.) Housing within a 30-mile radius is desirable, potentially in Elizabethtown, Keene, Keene Valley, Westport, or Lake Placid.

**Training/skills:** A student well-suited for a Summer Field School fellowship with the Adirondack Council will have skills, experience or interest in the following areas: GIS; graphs, infographics, and heat maps; design skills for communicating data; research, analysis, and writing; and, photography, video, and social media.

In addition, the fellow will participate in regular activities involving the conservation staff including weekly staff meetings, relevant public hearings and partner meetings, and reviewing and editing conservation memos, press releases, and blog posts.

**Attachments:**

2018 Micro-grants and Cool Farms/Healthy Park program description  
Essex Farm Institute announcement



## **Cool Farms/Healthy Park Micro-Grant Program**

Since the 1990s the Adirondack Council has acquired and then retired “pollution allowances” that power plants are required to purchase as part of a cap and trade program. Under the program, companies use their allowances to pay for the right to emit pollution from their smokestacks. Overtime the government reduces the number of allowances available and/or increases the cost of allowances, providing multiple incentives for companies to install new pollution control devices. Companies with better equipment, and therefore less pollution, can sell their excess allowances to another company. Originally established as a federal program to reduce the pollutants that cause acid rain (sulfur dioxide and nitrogen oxides), there are now similarly structured regional programs to reduce greenhouse gas emissions that are a major contributor to climate change. In the Northeast, nine states participate in the Regional Greenhouse Gas Initiative (RGGI) (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont).

Since 2008, the Adirondack Council has participated in the quarterly auctions alongside the power companies purchasing carbon allowances. Through the Adirondack Council’s carbon reduction certificate program, interested citizens and organizations can make a donation to the Adirondack Council to permanently retire allowances so they can never be used to emit pollution. Donors receive a certificate recognizing their commitment to reducing carbon emissions and protecting the Adirondack Park for future generations.

In 2016, the Adirondack Council launched the Cool Farms/Healthy Park micro-grants program to support efforts by local farmers to address climate change. We linked the proceeds from the carbon reduction certificates to the grant program, adding to the generous seed funding provided by two generous individual donors. The program recognizes the important role of small farms in open space conservation, community vitality, healthy food, and climate resiliency. In 2017, we expanded the program to include small businesses. The Council’s objective is to support community efforts to link conservation, sustainability, and economic vitality through outreach, education, and the micro-grants program.

### **2018 Champlain Valley Farm Awards:**

- 1) Black Kettle Farm – Essex – \$1,500 to purchase a keyline plow to build, aerate and loosen soil for tree planting and to aerate wet pasture land;
- 2) Blue Pepper Farm – Jay – \$1,300 to add a rainwater catchment system with water storage to the barn for livestock;
- 3) Brick House Farm Herbals – Essex – \$1,500 to build a swale along a prime agriculture plot location to create a sustainable agriculture utility out of non-agricultural land;

- 4) Clover Mead Café & Farm Store – Keeseville – \$1,500 to purchase materials to weatherize and insulate doors and windows of the café and farm store, and paint the exterior of the café;
- 5) DaCy Meadow Farm – Westport – \$1,000 to purchase a solar fence energizer, temporary fencing, and all connectors for a rotational grazing system;
- 6) Echo Farm – Essex – \$1,500 to install an off-grid solar-powered energy system to power lighting, a display fridge, and a scale within a newly established farm stand;
- 7) Essex Farm – Essex – \$1,500 to purchase a small-scale solar-powered water pump to be moved around the farm to provide water for animals and irrigation;
- 8) Fledging Crow Vegetables – Keeseville – \$1,300 to hire an excavator to move nearly 50 tons of compost into piles in order to eliminate dependence on 10 hauls of off-site compost per year;
- 9) Full and By Farm – Essex – \$1,500 (following a NYSERDA\* energy audit) to upgrade lighting and an old freezer, and upgrade and expand chamber lighting with LED grow lights;
- 10) Green St. Family Farm & Sawmill – Keeseville – \$1,500 to install a solar water pump;
- 11) Mace Chasm Farm – Keeseville – \$1,500 to purchase an energy efficient poultry scalding;
- 12) Staley's Maple Syrup & Farm – Saranac – \$1,500 to purchase an energy efficient reverse osmosis system and wood gasification evaporator;
- 13) Tangleroot Farm – Essex – \$1,500 to purchase greenhouse plastic, vents, fans and additional hardware and hire additional labor to complete a high tunnel project;
- 14) Triple Green Jade Farm – Willsboro – \$500 to purchase solar electric fencing for a moveable chicken coup to produce organic eggs; and,
- 15) Woven Meadows Farm – Saranac – \$500 for walk-in cooler improvements.

**Small Businesses Awards (Old Forge):**

- 1) Adirondack Woodcraft Camps – Old Forge – \$1,500 to upgrade to energy efficient kitchen appliances;
- 2) Hemmer Cottage – Old Forge – \$1,500 to add cellulose insulation to preserve an historic building;
- 3) Old Forge Hardware & Furniture Co. – Old Forge – \$1,500 to install an insulated fiberglass door; and,
- 4) The Toboggan Inn – Old Forge – \$1,500 to install 13 energy efficient windows.

## **A New Season for the Essex Farm Institute at the Adirondack Council**

Kristen and Mark Kimball, owners of Essex Farm in Essex, New York have trained and mentored over 50 people interested in sustainable farming over the past 10 years. Their unique hands-on teaching approach at Essex Farm eventually led to the establishment of 10 new farms. The Essex Farm Institute (EFI) was created five years ago to expand this training process proven successful at Essex Farm.

In 2012, a board of directors was formed, and EFI became a non-profit organization with a mission **to support, promote and train farmers to build resilient, diversified farms that are economically viable, socially responsible and environmentally beneficial.** Through support from the Open Space Institute Citizen Action Program, EFI holds workshops, conferences, farm tours, farmer training programs across the North Country,

Over the last 18 months, EFI held 25 demand-driven workshops for farmers, including welding classes, small engine repair, advanced grazing, sickle bar mower repair, and wildlife-friendly farming. In March 2018, EFI led a coalition of groups holding the first annual North Country Food Justice Summit at the Wild Center in Tupper Lake. 170 participants addressed a range of issues at the intersection of local, sustainable agriculture and public health. EFI also co-hosted the 2018 annual Draft Animal Power Network Plow Days, held in our region for the first time, in September.

### **What's Next for the Essex Farm Institute and the Adirondack Council**

Last fall, the Essex Farm Institute paused and assessed what was happening on farms in the region, and looked for ways to extend its reach. At the same time, the Adirondack Council began focusing more intensely on support for the working farms and forests of our region, in recognition of their important conservation, economic and cultural impact.

Through discussions, meetings and negotiations over the past six months, EFI and the Adirondack Council have mutually agreed that EFI will become a fully integrated program of the Adirondack Council to strengthen the capacity of the Institute and to help meet the Council's strategic objectives related to open space protection, working farms and forests, and community diversity in the Adirondacks.

As before, EFI will provide training and support for sustainable farms in our region. In addition, this new alliance will **empower EFI to become an effective policy advocate for our farmers** on the local, state and federal issues that shape our work.

### **What this means for farmers in the Adirondack Park**

EFI's activities will continue to focus on the expressed needs of farmers and agricultural communities in the Park. Planning is already underway for the 2019 Food Justice Summit, Feed Back - cultivating action, which will take place at the Wild Center on February 28th, 2019.

Racey Henderson will stay on as the Program Coordinator of EFI at the Adirondack Council. You can find EFI's website at [AdirondackCouncil.org/EssexFarmInstitute](http://AdirondackCouncil.org/EssexFarmInstitute) and follow us on Facebook and Instagram.