

## The Cornell Climate Smart Farming Program

Torrential downpours. Short-term droughts. New pests and diseases. Longer growing seasons. Farmers in the Northeast are under increasing pressure to respond to extreme weather events, climate variability, and climate change. To help producers and communities meet these challenges, the Cornell Climate Smart Farming (CSF) Program brings together world-class researchers, resources, and highly-trained extension specialists for agricultural stakeholders throughout New York State (NYS) and the entire Northeast.

Cornell CSF is based on the three pillars of climate smart agriculture from the Food and Agriculture Organization of the United Nations, and aims to:

- Increase farm resiliency to extreme weather and climate variability through adoption of BMPs for climate change adaptation.
- Reduce greenhouse gas emissions from agricultural production through adoption of best management practices (BMPs), increased energy efficiency, and use of renewable energy.
- Increase agricultural productivity and farming incomes sustainably.

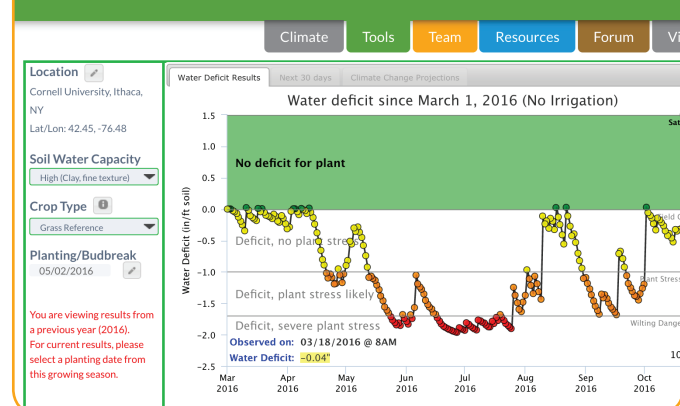
### Cornell CSF Initiatives

#### CSF Website

The CSF website ([climatesmartfarming.org](http://climatesmartfarming.org)) is a one-stop-shop for all the initiatives from Cornell's CSF Program. The website was built to serve farmers, extension educators, and agricultural consultants in the Northeast, and provides powerful, free, and user-friendly decision tools, resources, videos, and other CSF-specific items.



#### CSF Water Deficit Calculator



#### CSF Decision Tools

Because of increasing climate variability and change, it is becoming more difficult for farmers to make decisions simply based on intuition and historical conditions. Growers in the Northeast can benefit from the CSF decision tools that use weather, climate, agricultural, yield, and economic data to help them make the most informed decisions in the face of a changing climate. CSF tools such as the Growing Degree Day calculator, Water Deficit Calculator, and Freeze Risk Tools are built with farmer input and available on the CSF website.

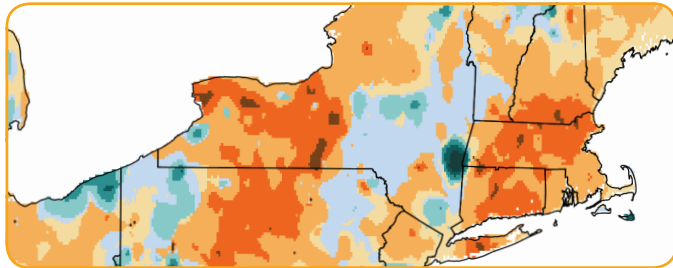
## CSF Extension Team

Cornell CSF has established the first Climate Smart Farming Extension Team in the nation. The Team gives NY farmers access to top extension specialists with particular expertise to help manage climate risks and increase resiliency and farm sustainability. Spanning NYS, the CSF Team provides detailed climate information on topics ranging from dairy and field crops to IPM and soil health. We hope this innovative approach to cooperative extension programming can also serve as a model for climate change extension efforts nationwide.



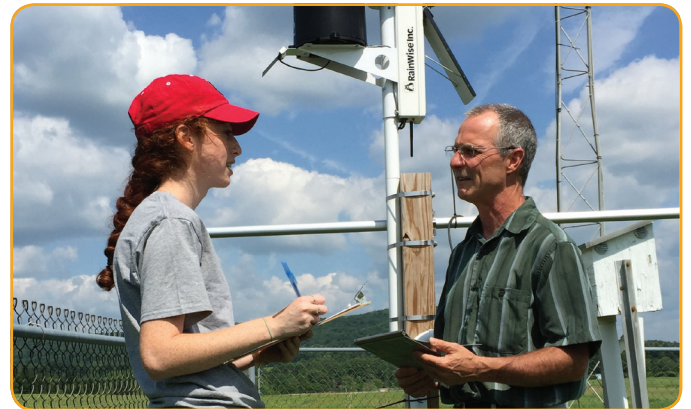
## Information Clearinghouse

Through Cornell CSF, agricultural stakeholders also gain free and direct access to farmer interview and management response videos, a repository of climate change resources and best management practices, and a forum to encourage farmer-to-farmer networking and information exchange.



## Cutting-Edge Research

Cornell scientists collaborate closely with the CSF Program, and are committed to translating their research into practical tools, resources, and applications to address current critical issues surrounding climate change and agriculture. Cornell University is one of the world's leading institutions for climate change research – including climate modeling and forecasts, greenhouse gas mitigation techniques, crop varieties, agricultural and land use adaptation, water resource management, economic risk assessment, and stakeholder engagement.



## Valuable Partnerships

Cornell CSF is a program of the Cornell Institute for Climate Smart Solutions (CICSS), and builds partnerships throughout the Northeast with organizations such as Cornell Cooperative Extension (CCE), the USDA Northeast Regional Climate Hub, the Northeast Regional Climate Center (NRCC), the Network for Environment and Weather Applications (NEWA), and other agricultural associations and government agencies.



Cornell Climate Smart Farming delivers trusted, research-based information and decision-making tools to agricultural stakeholders in the Northeast. Cornell CSF is a program of the Cornell Institute for Climate Smart Solutions.

**Cornell CALS**  
College of Agriculture and Life Sciences

For more information visit us at [www.climatesmartfarming.org](http://www.climatesmartfarming.org), or contact us at [cicss@cornell.edu](mailto:cicss@cornell.edu)