

VERMONT
FARMER
PROFILES 

BY UNIVERSITY
OF VERMONT
COMMUNICATIONS
CAPSTONE TEAM



Full Moon Farm

A FARM RISES TO THE CHALLENGE

In 2019, Full Moon Farm lost over 30,000 pounds of produce due to weather.

▲ David Zuckerman and Rachel Nevitt at Full Moon Farm.
Photo courtesy of Full Moon Farm.

Twenty years ago, David Zuckerman started Full Moon Farm with only one and a half acres of vegetables at the Intervale in Burlington, Vermont. Shortly after starting his operation, Zuckerman met his wife and farming partner, Rachel Nevitt. Together they have gradually expanded their production and moved it to Hinesburg. With increased acreage and a diversified operation, they now produce vegetables, pork, chicken, and eggs. Their produce and meat products can be found at the Burlington Farmers Market, in local stores, and through their CSA program. Looking toward the future, Full Moon Farm plans to incorporate fruit trees and someday, raise beef cattle.

In addition to being an organic farmer, Zuckerman is the current Lieutenant Governor of Vermont. As both, he is uniquely situated to understand the climate issues facing farmers. Like other small to medium-scale farms in Vermont, Full Moon is not immune to **climate challenges**. Some challenges are more easily dealt with than others. Some of the biggest climate concerns at Full Moon Farm include irregular wind, drought, and fluctuating temperatures. Students from UVM's Capstone Communications class interviewed Zuckerman to learn more about how his farm is adapting. During the interview, Zuckerman noted that his background as an organic farmer influences the way he does his job. "As an organic farmer, my goal is always to leave the land healthier than when I found it."

Zuckerman pointed to wind as becoming a more challenging factor to deal with on top of already significant increases in weather variability. Specifically, wind can cause plastic on high tunnels to tear, blow floating row covers away, and pull crops out of the ground. With irregular wind patterns creating difficulties for many other farmers as well, Zuckerman had some strategies to share that Full Moon Farm has used to overcome the problem.

One strategy he suggests is strengthening existing structures and securing covers. Reinforcing these structures can enhance durability and protect crops. Although this proved necessary to ensure the survivability of crops at Full Moon Farm, Zuckerman cautioned that this strategy often requires more time, physical labor and money. Wind damage can also be mitigated with strategic planting practices, such as using larger, more resilient crops to shield smaller crops. "Corn is a taller crop with a bigger profile to the wind. We try and plant a medium height crop next to the corn, and a short crop next to the medium height crop so that each one can buffer the next." Although he sees this as a potential solution, he acknowledges that it can often be difficult to create a "perfect" field plan.



"Irregular wind patterns are affecting the protection of many crops."

Drought is also a big concern for Full Moon Farm.

The changing climate is making it harder to continue to farm as usual and has necessitated rapid change. Zuckerman explained his struggle with drought stating: “It’s affecting us already. We’ve had much more variation in the type of weather throughout the season. In 2018, it was drought dry from mid-June on, and we actually ran out of water. We have two ponds, but ultimately, we used one up and pumped the other one and used that up.”

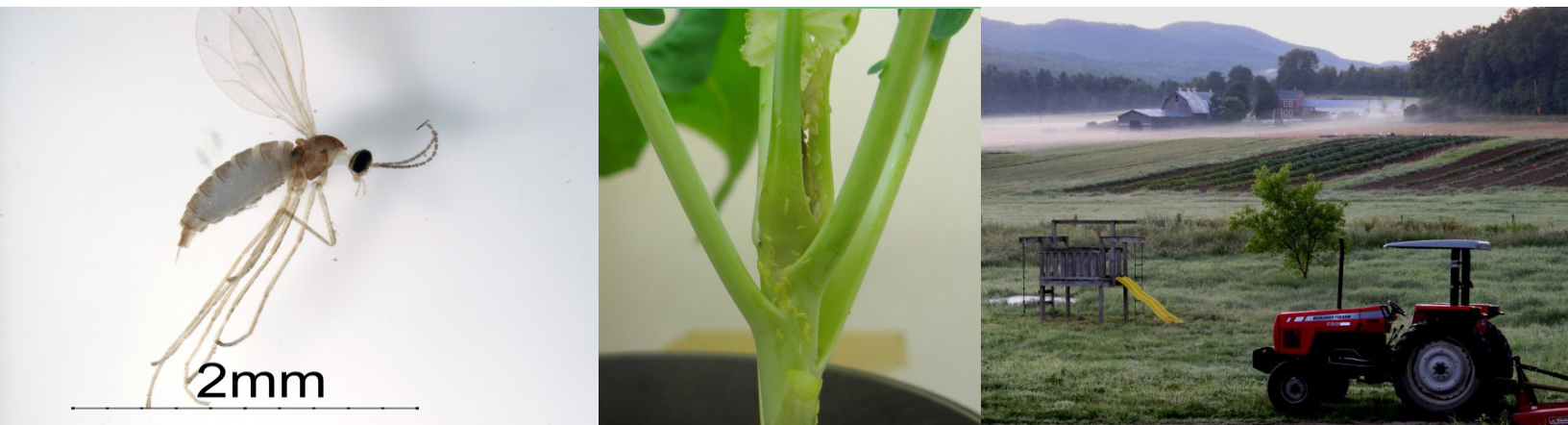
Fluctuating temperatures and weather patterns are bringing new pests northwards.

Zuckerman says the biggest pest headache for Full Moon Farm is the Swede Midge. This extraordinarily small flying pest affects brassicas (cole crops), which includes crops like broccoli, cauliflower, kale, and cabbage. The issue with this pest is its size. “These pests are so small they can get through the floating row cover and there is no organic spray or pesticides to kill it,” says Zuckerman. After noticing the affects Swede Midge had on Full Moon Farm’s crops, Zuckerman and Nevitt studied the pest to develop a solution. They found that, to prevent this particular pest problem they would have to “move the crop farther than 1,000 feet from one year to the next.” Zuckerman explained that this strategy ensured that any “residual pest pressure from the year before is far enough away” so that the pest can’t find the crop’s new location or dies before reaching it.

Agricultural tradition will persist.

According to Zuckerman, “Agriculture has always played a central role in the state of Vermont. Farming not only puts food on our tables, it shapes our values, our landscapes, our communities and our economy.” He believes it instills a strong work ethic and fosters creative problem-solving as well as beneficial skills for our youth and workforce. Unfortunately, hard-working Vermont **farmers currently face** threats to their livelihoods due to market prices and climate change. More extreme weather events, like wind and drought, and new pests in Vermont are just some of the many issues facing farmers today. Solutions will likely require advanced planning and additional costs, which can often be daunting prospects to many working farms. Zuckerman urged that, “together, we must continue to find ways to make our food production system more economically sustainable and environmentally responsible.”

- ▼ Female swede midge fly. Photo by Susan Ellis, USDA APHIS (left)
- ▼ Swede midge larvae and feeding on cauliflower. Photo by Mao Chen, Cornell University (middle)
- ▼ Foggy morning view of Full Moon Farm. Photo courtesy of Full Moon Farm (right)



Additional resources:

‘As If You Were There’ Virtual Farm & Forest Tours | www.climatehubs.usda.gov/hubs/northeast/project/360
Economics of Climate Change | www.climatehubs.usda.gov/hubs/northeast/topic/economics-climate-change
Northeast Regional Vulnerability Assessment | bit.ly/NEVulnerabilityAssessment
Adaptation Resources for Agriculture (Workbook) | bit.ly/AgAdaptationWorkbook
Climate Adaptation Fellowship | www.adaptationfellows.net