

Linking adaptive management to climate change impacts on diversified vegetable and berry farms in Northern New England SARE PROJECT GNE17-163 * ALISSA WHITE, University of Vermont

Objectives

- Identify adaptive management strategies for extreme weather risks in the Northeast region of the U.S that reflect the unique needs and challenges of diversified vegetable and berry farms.
- Capture the emergence of innovative ideas among agricultural information networks and geographic communities.
- Bridge the localized expertise of farmers with scientific research and regionalized outreach experts to identify information critical to supporting climate change adaptation and overcoming the climate information usability gap.
- Facilitate information sharing across farmer networks.

Approach

Boundary organizations facilitate the research and outreach interface with producers in the region.

- UVM Cooperative Extension
- New England Vegetable and Berry Growers Association
- New England Fruit ad Vegetable Conference
- Maine Organic Farmer and Gardener's Association
- Vermont Vegetable and Berry Growers Association
- Northeast Organic Farmers Association New Hampshire
- Northeast Organic Farmers Association Vermont
- Community Involved in Sustaining Agriculture (MA)
- Rural Vermont

Year 1: Regional Survey (Winter 2017-2018)

Year 2: Farmer Focus Groups (Winter 2018-2019)

Bridging the Climate Information Usability Gap

What information do farmers and outreach professionals need to best support vegetable and berry growers in adapting to the impacts of climate change?

Interviews with 6 Extension Professionals in April 2017 about climate change outreach



Context specific. Information is more useful when it is tailored to unique operating contexts.

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One level down. Information is more tangible and usable if it is tied to climate impacts, rather than climate change

Responses were collected November 2017 through March 2018 in collaboration with local famer networks and organizations. Producers completed a survey with 77 questions about adaptive management, site characteristics, perceived vulnerability & capability.

n = 190

Average age

Gender

Mean total farm acreage in production

Average years as a decision maker on a farm



Preliminary Results





Farmers use a diversity of strategies to proactively manage for drought and heavy precipitation events. 190 responses to a regional survey identify which strategies are most commonly employed across all soil types and production contexts for managing drought and heavy precipitation.

Future Analysis & Outreach

Ongoing analysis of the survey dataset will allow us to answer:

- \succ How does adaptive management differ by soil type?
- \succ How does adaptive management differ by site specific vulnerability?
- \succ How is adaptive decision-making influenced by perceived vulnerability & capability?

The project is partnering with farmer networks to conduct a multi-faceted outreach effort in conjunction with a listening tour at farmer meetings and conferences next year.



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How does adaptive management differ by farm production characteristics & demographic?

> Do information networks or location correlate to emerging adaptive management strategies?





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