Farming in a New Weather Reality: Farmer Stories from Maine







Who We Are

The Maine Climate and Agriculture Network was initiated by faculty at the University of Maine to increase communication and coordination among those working on issues related to climate and agriculture. This web site provides an initial portal to some of the climate related activities at the University of Maine, and serves as an invitation to those with an interest in this topic to participate. The Maine Climate and Agriculture Network is intended to be a transparent and inclusive framework that will represent agricultural concerns and activities in the broader conversations on climate change across campus and with other institutions and agencies within the state and region (e.g., the USDA Northeast Climate Hub).

Climate and Ag in the News

Morning Sentinel covers panel discussion on farming in changing weather

Farming in new weather reality focus of panel discussion

AP advances panel discussion on farming in new weather reality

UMaine researchers to receive USDA funds for climate adaption project with UVM



Wet winter, spring alleviate drought conditions in state



"Farming in a New Weather Reality"

Farmer Panel Session

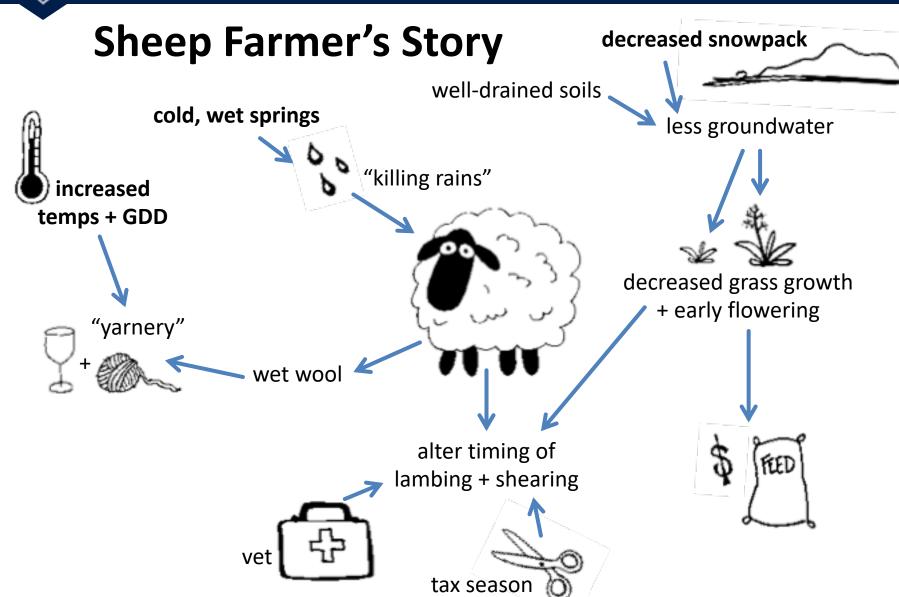
Maine Agricultural Trades Show

January 9, 2018

Farming operations represented:

- Sheep & fiber
- Honey bees
- Turf
- Apples
- Mixed vegetables







Perceived Weather Δ	Perceived Impacts
个 heavy precipitation (4)	↑ soil erosion ↓ field access Poor crop establishment
个 growing season length & GDDs, milder winters (3)	New pests & and parasites ↑ Lyme disease ↓ tree death due to freezing More efficient solar dye process
Cooler, wetter springs (2)	Slow N mineralization Lamb death & wet wool Delayed manure spreading
个 drought (2)	 ↓ productivity Altered white grub phenology ↑ customer demand for drought-tolerant grasses ↓ pasture regrowth
↑ ice storm frequency (1)	个 building and fencing damage



Honey bees



"There is really nothing new in the recent weather that we beekeepers have not seen many times before, including early or late springs and autumn freezes."



Turf



"Customers are getting concerned about weather and drought, and being more specific about the varieties they want – especially more drought tolerance."



Turf

Rainfall Extremes

- → Drought
- → Erosion and field access
- Species and variety selection drought tolerance; quick growth for erosion control
- Infrastructure investment irrigation; 4WD harvester





Apples



"We've always felt a little bit smug in Maine that we didn't have some of these [pests and diseases] problems and now we do."



Apples

More precipitation

→ Fire blight



- Monitor & watch weather
- Cut out diseased areas



Mixed Veggies



Heavy Rains

- → Erosion and field access
- Permanent raised bed system new equipment to implement
- Adjusted bed orientation



Mixed Veggies



"We tried NRCS/SWCD guidance which says, 'Thou shalt plow on the contour.'
This was disastrous for us!"



Sheep



"It's all about infrastructure"



Responses reflect unique circumstances

- Soil type
- Farming system
- Market demands
- Experiences and beliefs
- Skill sets

"Invest in the things that give you options to help you respond."



Desired Adaptation Resources

- Assistance investing in infrastructure
 - Grants with cost-sharing
 - Assistance needs to be timely!
- Extension Ag Engineer to help design solutions
- Education about emerging "occupational hazards"
 - Lyme disease

Participant Feedback

"More conversations like this!

It didn't get too political – great idea to keep it experience-based."

