



United States Department of Agriculture
Northeast Climate Hub



‘AS IF YOU WERE THERE’ 360° Demonstrations of Climate Adaptation Actions

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September 28, 2017 | ERIN LANE, USDA Northeast Climate Hub



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USDA Northeast Climate Hub

A Cross-USDA Partnership With Land Grant Universities, Tribes, NGOs, States
& other Federal Agencies

- Deliver science-based, regionally specific information, tools, & practices to assist farmer and land managers in achieving their goals in the changing climate

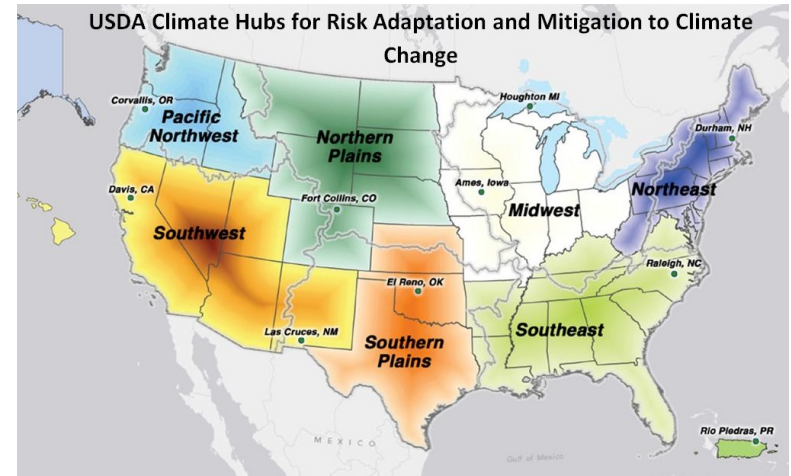


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- Understand climate trends and projections in the Northeast.
- Determine impacts & assess risk: opportunities and vulnerabilities.



- Discover needs, practices, and tools to deal with changes.
- Share/deliver information and useful tools
- Highlight success in effective and innovative ways.



Opportunities

- longer growing season- double cropping, planting new varieties

Vulnerabilities & Adaptation Practices

- increased pest pressure – integrated pest management
- spring frost risk after bloom – warning, protection
- drought – soil health, irrigation
- runoff from manure & chemical fertilizers – tools, cover crops, stream buffers



Adapt

- **Promote soil health; reduce soil erosion**
 - Cover crops and reduce tillage; improve resilience
- **Protect from extremes**
 - High tunnel houses, ventilation systems, riparian buffers, expanded irrigation, and the shifting of production zones away from flood- and frost-prone areas
- **Decision support: better information faster**
 - Integrate pest management, shift planting dates, adjust feeding management, identify and select better adapted varieties, breeds and cultivars





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Demonstrations are a Tool for Sharing Information

- Showcase climate adaptation tactics currently in use in the Northeast
- See and understand technologies, practices, and systems



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Field Tours are a Powerful Teacher

- *Visit* farms and forests where adaptation is demonstrated.
- Become more comfortable with adaptation options and actions.





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“As If You Were There”



- Utilizes 360 degree photography, and video to showcase expertise, leaders and actions.
- Targets Extension and outreach professionals (technical service providers), and their agriculture and forestland clientele.

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Education Leads to Adoption

- Increase adaptation actions that work to achieve goals and reflect landowner values



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Issues • Innovation • Impact

A Part of the Cooperative Extension System

i-Three Issue Corp on Climate and Food Systems

- Our project was selected as part of a national search and identified as a “Rapid Solution.”
- Jennifer Volk at University of Delaware leads the production operations. eXtension offers tools to help Jennifer organize, plan, and implement this strategy of messaging and storytelling



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16 University-based Farms and 7 Forest sites

- University of New Hampshire (IPM)
- University of Vermont (reduced tillage)
- Clark University (**Urban Forestry**)
- University of Rhode Island (High tunnels)
- Providence, RI (**Forest Management**)
- Yale Orchard (tree diversity)



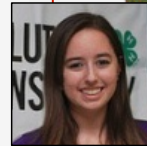
Karrah Kwasnik, UNH
NE Hub Digital Content Manager

- Cornell University (biochar)
- Angus Glen Farms (**Agroforestry**)
- The Rockaways (**Urban Forestry**)
- Rutgers University (living shorelines)
- University of Massachusetts (permaculture)

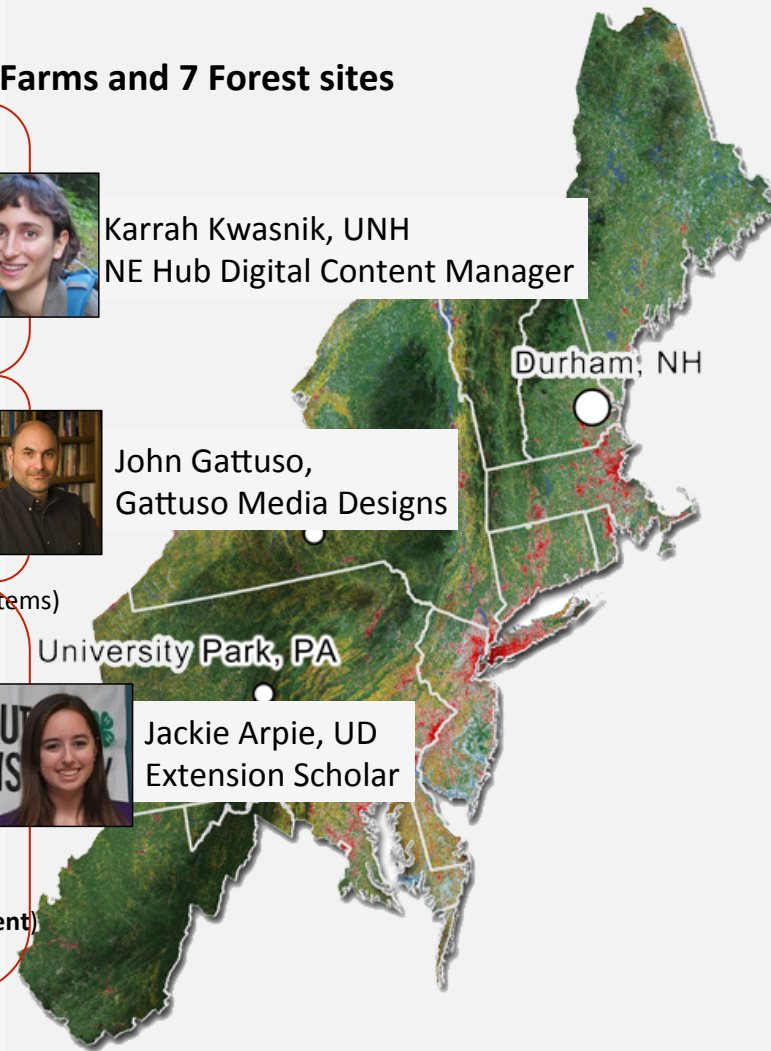


John Gattuso,
Gattuso Media Designs

- Pennsylvania State University (dairy cropping systems)
- Dickenson College (**Agroforestry**)
- Delaware State University (**season extension**)
- University of Delaware (irrigation)
- University of Maryland (greenhouses)
- University of Maryland Eastern Shore (buffers)
- University of District of Columbia (urban farms)
- West Virginia University (IPM)
- Monongahela National Forest (**Forest Management**)
- West Virginia State University (aquaponics)



Jackie Arpie, UD
Extension Scholar



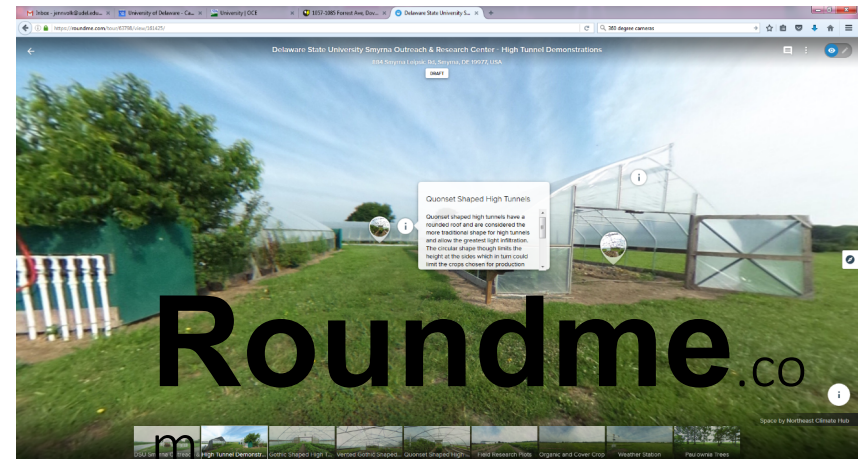
Virtual Equipment for Storytelling



RICOH
THETA S



iPad mini





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“As If You Were There” Demonstrations





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Website: climatehubs.oce.usda.gov/northeast

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