

# 2022 Northeast Cover Crops Council Conference

## Virtual Meeting—March 10 and 11, 2022

The Northeast Cover Crops Council, the Pennsylvania Association for Sustainable Agriculture (PASA), and University of Vermont Extension invite you to join us for the fifth annual [Northeast Cover Crops Council Conference](#). The conference will be held virtually on Thursday, March 10, 9:00 a.m. to 12:30 p.m. and Friday, March 11, 9:00 a.m. to 12:30 p.m.

Each day of the conference will include a morning plenary session and graduate student lightning talks that all can access. Concurrent sessions you choose to attend follow, as well as networking opportunities!

Registration gives you access to the conference platform a week before and two weeks following the conference. Enjoy presentations and resources at your leisure.

Plenary speakers include sustainable agriculture and climate resilience expert **Dr. Mitch Hunter** from American Farmland Trust, and **Dr. Victoria Ackroyd** with the University of Maryland sharing information on cover crop tools.

Topic highlights include weed control, pest management, planting green, and tarping in cover crops, corn, soybean and on-farm research, precision agriculture, and more.

**Please register by noon, March 7, 2022.**

Cost is \$75 per registrant. Registration is online through UVM at

<http://go.uvm.edu/registration-2022neccc>

When you register, you will receive a confirmation email noting you will receive the links and instructions prior to the conference.

Graduate student lightning talks - three minute lightning talk to share live.

Contact Arthur Siller to register or for more information, [asiller@umass.edu](mailto:asiller@umass.edu), or call 608-774-0890. View informational [flyer here](#).

### Sponsorship Opportunities

Please contact Victoria Ackroyd ([VAckroyd@umd.edu](mailto:VAckroyd@umd.edu)) by January 15, 2022 if you are interested in becoming a sponsor, or register and pay for sponsorship [online](#). More information can also be found [here](#).

**DISCLAIMER: Changes may be made to this agenda.**

### KEYNOTE SPEAKER



**Dr. Mitch Hunter** is a Research Director at American Farmland Trust. He earned a doctorate in agronomy from Penn State University, where his thesis focused on sustainable intensification and climate resilience, particularly using cover crops to improve soils and help crops survive drought. Mitch's presentation is **All the C's: Congress, Cover Crops, Climate, Carbon, and Conservation**.



**NORTHEAST  
COVER CROPS  
• COUNCIL •**

*If you require an accommodation related to a disability, please contact the Pennsylvania Association for Sustainable Agriculture at [events@pasafarming.org](mailto:events@pasafarming.org).*

# AGENDA - Day 1, March 10, 2022

## 2022 Northeast Cover Crops Council Conference

Time	Session I	Session II	Session III
8:30—9:00 a.m.	Joining virtually		
9:00—9:30 a.m.	<b>Opening Remarks and Policy Updates</b> <i>Dr. Heather Darby, NECCC Chair</i>  <b>Advancing cover crop planning in the NRCS with <i>Dr. Brandon Smith, Acting Director, USDA-NRCS Soil Health Division</i></b>		
9:30—10:30 a.m.	<b>Plenary Session (X CCA CEU)</b> <b>All the C's: Congress, Cover Crops, Climate, Carbon, and Conservation</b> <i>Dr. Mitch Hunter, American Farmland Trust</i>		
10:30—11:00 a.m.	Graduate Student Lightning Talks - 3 minute presentations up to 5 grad students		
<b>Session (1.5 CEUs)</b>	<b>Cover Crops and IPM</b>	<b>Cover Crops and Tarping in Vegetable Systems</b>	<b>On-Farm Research</b>
11:00– 11:30 a.m.	<b>New perspectives on white mold control in beans using rolled-crimped cereal rye mulch</b>  <i>Dr. Sarah Pethybridge, Associate Professor, Cornell AgriTech</i>	<b>Using precious growing degree days: tradeoffs between cover crop growth, termination date, and tarping duration in small-scale organic no-till</b>  <i>Dr. Natalie Lounsbury, postdoctoral scholar at University of New Hampshire</i>	<b>Collaborating with Vermont farmers to modify corn practices for better cover crops</b>  <i>Dr. Heather Darby, Agronomic and Soil Specialist, University of Vermont</i>
11:30– 12:00 p.m.	<b>Combining cover crops and IPM to manage insect and slug pests in no-till fields</b>  <i>Dr. John Tooker, Entomology Professor at PennState</i>	<b>Trials and tales of tarping with reduced tillage</b>  <i>Ryan Maher, Research and Extension Specialist with the Cornell Small Farms Program</i>	<b>Evaluating winter cover crop mixture performance across the Northeast</b>  <i>Helen Boniface, M.S. Student at University of Maryland</i>
12:00—12:30 p.m.	<b>Assessing the efficacy of using a perennial and self-reseeded cover crop for pest suppression in a sweet corn soybean rotation system</b>  <i>Dr. Cerutti RR Hooks, Professor at University of Maryland</i>	<b>Tarping for no-till vegetable production at Colfax Farm</b>  <i>Molly Comstock, Owner and operator of Colfax Farm, Berkshire Mountains of Massachusetts</i>	<b>Unearthing soil health trends: insights from community science on 100+ farms</b>  <i>Sarah Bay Nawa, Research Coordinator, Pennsylvania Association for Sustainable Agriculture</i>

## AGENDA - Day 2, March 11, 2022

### 2022 Northeast Cover Crops Council Conference

Time	Session I	Session II	Session III
8:30—9:00 a.m.	Joining virtually		
9:00—9:30 a.m.	<b>Opening Remarks</b> <i>Dr. Heather Darby, NECCC Chair</i>		
9:30—10:30 a.m.	<b>Cover Crop Tools—Seeding Rate and Cover Crop Selector Tool</b> <i>Dr. Victoria Ackroyd, Assistant Research Scientist at the University of Maryland</i>		
10:30—11:00 a.m.	<b>Graduate Student Lightning Talks</b> - 3 minute presentations up to 5 grad students		
<b>Session (1.5 CEUs)</b>	<b>Precision Sustainable Agriculture</b>	<b>Planting Green - Corn and Soybean Research</b>	<b>Cover Cropping Strategies for Weed Management</b>
11:00– 11:30 a.m.	<b>From the field to space: remote sensing technologies for winter cover crops</b> <i>Dr. Jyoti Jennewein, Research Physical Scientist/Post-doctoral Researcher with USDA ARS in Beltsville, Maryland</i>	<b>Evaluating planting green across New York farms</b> <i>David Degoyler, Consultant of the Western NY Crop Management Association</i>	<b>Employing ecological strategies to manage weeds with cover crops</b> <i>Dr. Toni DiTommaso, Professor of Weed Ecology, Cornell University</i>
11:30– 12:00 p.m.	<b>Precision Sustainable Agriculture (PSA) National On-Farm Network: common research to build predictive tools for growers</b> <i>Sarah Seehaver Eagen, Research Specialist at North Carolina State</i>	<b>Planting green, weed control and soybeans</b> <i>Dr. Mark VanGessel, Professor at University of Delaware</i> <i>Dr. Alison Robertson, Professor at Iowa State University</i>	<b>Designing cover crop mixtures for weed suppression</b> <i>Dr. Rich Smith, Associate Professor of Agricultural Ecology, University of New Hampshire</i>
12:00—12:30 p.m.	<b>Farmer experiences with technology</b> <i>Scott Magnan, owner Scott Magnan’s Custom Service</i> <i>Savanna Crossman, Certified Crop Advisor</i>	<b>Farm experiences with planting green</b> A panel of farmers will share their experiences and strategies for planting green.	<b>Roll-crimped cover crops: Weeds we control and weeds that get away</b> <i>Uriel Menalled, PhD student at Cornell University</i>
<b>Conference web site will remain accessible for 2 weeks to view presentation videos.</b>			

## Day 1, March 10, 2022

**9:00 —9:30 am:** Opening remarks and NECCC updates.

**Heather Darby**, Chair, **Victoria Ackroyd**, Program Manager, NECCC, and **Brandon Smith**, USDA-NRCS Soil Health Division.

**9:30—10:30 am:** Plenary session (1 CCA CEU), *All the C's: Congress, Cover Crops, Climate, Carbon, and Conservation*. **Dr. Mitch Hunter**, American Farmland Trust.

**10:30—11:00 am:** Graduate Student Lightning Talks

### Breakout Sessions, 11:00—12:30 pm

#### Cover Crops and IPM

**11:00 am:** *New perspectives on white mold control in beans using rolled-crimped cereal rye mulch*. **Sarah Pethybridge**, Associate Professor at Cornell AgriTech.

**11:30 am:** *Combining cover crops and IPM to manage insect and slug pests in no-till fields*. **John Tooker**, Entomology Professor at PennState.

**12:00 pm:** *Assessing the efficacy of using a perennial and self-reseeded cover crop for pest suppression in a sweet corn soybean rotation system*. **Cerutti RR Hooks**, Professor at University of Maryland.

#### Cover Crops and Tarping in Vegetable Systems

**11:00 am:** *Using precious growing degree days: tradeoffs between cover crop growth, termination date, and tarping duration in small-scale organic no-till*. **Natalie Lounsbury**, post-doctoral scholar at University of New Hampshire.

**11:30 am:** *Trials and tales of tarping with reduced tillage*. **Ryan Maher**, Research and Extension Specialist with the Cornell Small Farms Program.

**12:00 pm:** *Tarping for no-till vegetable production at Colfax Farm*. **Molly Comstock**, Owner and operator of Colfax Farm.

#### On-Farm Research

**11:00 am:** *Collaborating with Vermont farmers to modify corn practices for better cover crops*. **Heather Darby**, Agronomic and Soil Specialist, University of Vermont Extension.

**11:30 am:** *Evaluating winter cover crop mixture performance across the Northeast*. **Helen Boniface**, M.S. Student at University of Maryland.

**12:00 pm:** *Unearthing soil health trends: insights from community science on 100+ farms*. **Sarah Bay Nawa**, Research Coordinator, PASA.

## Day 2, March 11, 2022

**9:00 —9:30 am:** Opening remarks and Policy Updates. **Heather Darby**, NECCCC Chair.

**9:30—10:30 am:** Plenary session (1 CCA CEU) *Cover Crop Tools—Seeding Rate and Cover Crop Selector Tool*, **Victoria Ackroyd**, University of Maryland.

**10:30—11:00 am:** Graduate Student Lightning Talks

### Breakout Sessions, 11:00—12:30 pm

#### Precision Sustainable Agriculture

**11:00 am:** *From the field to space: remote sensing technologies for winter cover crops*. **Jyoti Jennewein**, USDA ARS.

**11:30 am:** *Precision Sustainable Agriculture (PSA) National On-Farm Network: common research to build predictive tools for growers*. **Sarah Seehaver Eagen**, Research Specialist, North Carolina State University.

**12:00 pm:** *Farmer experiences with technology*. **Scott Magnan**, Scott Magnan's Custom Service, and **Savanna Crossman**, Certified Crop Advisor and UVM Extension.

#### Planting Green—Corn and Soybean Research

**11:00 am:** *Evaluating planting green across New York farms*. **David Degoyler**, Consultant of the Western NY Crop Management Association.

**11:30 am:** *Planting green, weed control and soybeans*. **Mark VanGessel**, Professor at University of Delaware, and **Alison Robertson**, Professor at Iowa State University.

**12:00 pm:** *Farm experiences with planting green*. **To be determined**.

#### Cover Cropping Strategies for Weed Management

**11:00 am:** *Employing ecological strategies to manage weeds with cover crops*. **Toni DiTommaso**, Professor of Weed Ecology, Cornell University.

**11:30 am:** *Designing cover crop mixtures for weed suppression*. **Rich Smith**, Associate Professor, University of New Hampshire.

**12:00 pm:** *Roll-crimped cover crops: weeds we control and weeds that get away*. **Uriel Menalled**, PhD Student, Cornell University.



## Presenter Bios

**Dr. Victoria Ackroyd** is an Assistant Research Scientist at the University of Maryland, a Visiting Scientist with USDA ARS in Beltsville, MD, and Program Manager for the Northeast Cover Crops Council. She earned her Ph.D. in Crop and Soil Science from Michigan State University. Her current work focuses on the development and dissemination of tools and resources to promote and support cover crop use.



**Helen Boniface** is an M.S. student at the University of Maryland in the lab of Dr. Kate Tully; she is co-advised by Dr. Steven Mirsky. Her thesis work includes research on cover crop mixture dynamics throughout the northeastern US in which she is assessing the performance of cover crop treatments under a range of climate and soil conditions. This research will ultimately contribute to the growing knowledge on site-specific species selection and seeding rate recommendations for the successful adoption of winter cover crop mixtures.



**Molly Comstock** is the owner and operator of Colfax Farm, located in the southern Berkshire Mountains of Massachusetts. The farm produces organic vegetables, herbs, flowers and berries on approximately three acres of leased land in Alford, MA. Molly spent ten years as a nomadic farmer, managing farms

and growing food throughout the Hudson Valley and Berkshire regions prior to finding her farm home. She has been utilizing tarps for opening new fields, and preparing established beds for 4 seasons now.

**Savanna Crossman** is a native of Northwest Vermont where she has worked extensively with crop and dairy farmers. She holds a Master's Degree in Agronomy from Kansas State University, and a Bachelor's Degree in Agronomy and Soils from the University of Vermont. She has been a certified crop advisor (CCA) through the American Society of Agronomy since 2014.



**Dr. Heather Darby** is an Agronomic and Soils Specialist for University of Vermont Extension. She has expertise in soil quality and nutrient management, water quality, grain production, organic farming, forages, hops, hemp, and participatory research. Being raised on a dairy farm in Northwest Vermont has allowed her to play an active role in all aspects of dairy farming and gain knowledge of the land; creating an awareness for the hard work and dedication required to operate a farm. These practical experiences, complemented by her education, including her PhD in Crops and Soils at Oregon State University, have focused her attention towards sustainable agriculture and promotion of environmental stewardship. Heather is involved with research and outreach programs in the areas of soil, forage, and grain production systems in New England.

**David Degoyler** is the executive managing consultant of the Western New York Crop Management Association (WNYCMA), a grower-owned cooperative that specializes in crop consulting and environmental planning. He is a CCA (certified crop advisor) and the first certified CAFO (Concentrated Animal Feeding Operations) planner in New York State. David has been a crop consultant for thirty-two years and has been managing the cooperative since 1995. He holds a Bachelors of Science in Agronomy from Cornell University.



**Dr. Toni DiTommaso** is a Professor of Weed Ecology at Cornell University. His research program aims to gain in-depth understanding of ecological principles governing agricultural and environmental weed population dynamics that lead to sustainable and economically viable weed management strategies.

## Presenter Bios, cont.

**Sarah Seehaver Eagen** is a Research Specialist at North Carolina State University and Program Manager for the Southern Cover Crops Council. She earned her M.S. degree in Soil Sciences from NCSU. She currently directs the on-farm effort as part of the Precision Sustainable Agriculture team and is heavily involved in sensor and data flow work.



**Dr. Cerruti RR Hooks** is a Professor & Extension Specialist at the University of Maryland. He has a MS degree in Weed Science from NC State University and a PhD in Entomology from the University of Hawaii at Manoa.



**Dr. Mitch Hunter** is the Research Director at American Farmland Trust (AFT), where he leads research on land use change and climate mitigation in agriculture. He previously worked on improving conservation programs in the 2014 Farm Bill as Federal Policy Manager for AFT. In the meantime, Mitch studied diverse cover crop mixtures and their effects on climate resilience in his Ph.D. at Penn State University. He then did a postdoc at the University of Minnesota, working to develop management strategies for the novel perennial grain Kernza®. Mitch received a B.A. in Government from Harvard University following two years of liberal arts study, self-governance, and student labor at Deep Springs College.



**Dr. Jyoti Jennewein** is a Research Physical Scientist/ Post-doctoral Researcher with USDA ARS in Beltsville, Maryland. She completed her Ph.D. in Natural Resources at the University of Idaho, with a specialty in remote sensing forage quality. Her current work focuses on the use of remote sensing to quantify cover crop use and performance in the mid-



Atlantic US.

**Dr. Natalie Lounsbury** is a postdoctoral scholar in the Agroecology lab at the University of New Hampshire. For her dissertation, she addressed the tradeoffs farmers face when trying to implement cover crop-based no-till on a small-scale. Prior to her tenure at UNH, Natalie managed an organic vegetable farm, worked as an organic inspector, and earned her M.S. in Soil Science from the University of Maryland where she studied winter killed cover crops. Natalie's focus is on using cover crops to reduce tillage, and ultimately aid farms in nutrient cycling, water management, weed management, and soil health.



**Scott Magnan** operates, Scott Magnan's Custom Service in St.



Albans, Vermont where he has become proficient in installing and providing education to farmers on precision ag equipment and software to enable his customers to get the biggest return on their investment. In addition he offers custom manure spreading, crop planting and harvesting services to farms in northern Vermont.

**Ryan Maher** is a Research and Extension Specialist with the Cornell Small Farms Program. He works in vegetable cropping systems and supports farmers in adopting scale-appropriate practices to reduce tillage, integrate cover crops, and improve soil health. Prior to joining the Small Farms Program in 2013, Ryan earned his M.S. in Sustainable Agriculture from Iowa State University where he studied soil processes in native grassland restorations and spent 5 years with USDA-ARS working with perennial legumes to improve nitrogen management in field crops.



**Uriel Menalled** is a PhD student at Cornell University. Uri's research interests include understanding the interactions between weed communities and crops to promote ecological weed management. His dissertation research focuses on advancing no-till organic systems by using cover crop based weed management strategies.





## Presenter Bios, cont.

**Sarah Bay Nawa** is the Research Coordinator for PASA Sustainable Agriculture where she supports farm-based research on issues including soil health and financial viability. She has more than a decade of combined farming and farm-advising experience from New Morning Farm, the Fulton Farm at Wilson College, and Tuscarora Organic Growers Cooperative. Sarah holds a B.S. in Environmental Science.



**Dr. Sarah Pethybridge** is an Associate Professor and Program Leader of Plant Pathology at Cornell AgriTech. Her program works with New York growers to integrate disease management strategies for leguminous crops, with a focus on snap bean and dry bean. She received her Bachelor of Agricultural Science (with Honors) degree and Doctor of Philosophy (Plant Pathology) degrees at the University of Tasmania, Australia. She joined Cornell University after 14 years experience as an extension pathologist, industry research and development manager, and a government Science Group Leader in Australia and New Zealand.



**Dr. Alison Robertson** is a Professor and Extension Field Pathologist at Iowa State University. She leads the Precision Sustainable Agriculture team effort focused on cover crop interactions with weeds, insects, and diseases.

**Dr. Brandon Smith** is the Acting Director for the USDA-NRCS Soil Health Division (SHD). He provides leadership on soil health planning through NRCS programs to other NRCS staff, external partners, and producers across the country. Prior to working with SHD he was State Agronomist and Grazing Specialist for NH NRCS for 7 years. Brandon was a research professor of organic crop production at the University of TN and a research technician at the UNH before he joined NRCS in 2008. Brandon earned a B.S. and M.S. in Horticulture & Agronomy from the UNH, and a Ph.D. in Horticulture & Agronomy from Cornell University.



**Dr. Rich Smith** is an Associate Professor of Agricultural Ecology at the University of New Hampshire. He received his PhD from Michigan State University in 2005. His research and education program centers on ecologically based weed management and the role of crop plant diversity, including cover crop mixtures, plays in agroecosystem function and resilience.



**Dr. John Tooker** is a Professor and Extension Specialist in the Department of Entomology at The Pennsylvania State University. His research group studies relationships among plants, invertebrate herbivores, and natural enemies to understand factors that regulate populations of herbivorous insects and slugs.

**Dr. Mark VanGessel** is a Professor and Extension Specialist in Weed Science and Crop Management at the University of Delaware. His extension focus is on developing and disseminating weed control recommendations and other technical information appropriate to agronomic and commercial vegetable crops. Research interests include weed biology and ecology, integrated pest management, cover crops for weed management, herbicide-resistant weeds, and herbicide evaluation.



# 2022 Northeast Cover Crops Council Conference

## THANK YOU TO OUR CONFERENCE COLLABORATORS AND SPONSORS



This work is supported by a Sustainable Agricultural Systems (SAS) Coordinated Agricultural Project (CAP) grant (award # 2019-68012-29818) from the USDA National Institute of Food and Agriculture and ongoing funding from NRCS.



Additional funding provided by the University of Minnesota Digital Center for Risk Management Education under USDA/NIFA Award Number 2018-70027-28584. USDA and the University of Vermont are equal opportunity providers and employers.

United States Department of Agriculture  
National Institute of Food and Agriculture



Additional support received from the Vermont Agency of Agriculture, Food and Markets.

## CONFERENCE SPONSORS

**VISIONARY**

\$1,000

**TILLER**

\$500

**SEEDLING**

\$250

