



CONSERVATION TILLAGE & TECHNOLOGY CONFERENCE

Thirty-third
Annual

March 11-12, 2025 McIntosh Center Ohio Northern University Ada, Ohio



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March 11, 2025 Tuesday

Room A - GENERAL SESSION

Sponsored by:



8:30 **Welcome and Awards**

Master Farmer Awards: Editor of American Agriculturist, Jennifer Kiel
 Outstanding Certified Crop Adviser Award: Jason Hatschuh, Ohio CCA Board
 - Randall Reeder, OSU Extension Ag Engineer (retired)

9:00 **Farmer’s Role in Washington Decisions**

(PD=1.0)

- Fred Yoder, past president of National Corn Growers Association

Ohio Ag Updates

- Brian Baldrige, Director, Ohio Department of Agriculture

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March 11, 2025 Tuesday

Room A - GENERAL SESSION

Sponsored by:



Speaker Introductions: Stephanie Karhoff

Moderators: Wayne Dellinger, Amber Emmons, Lee Beers, and Amanda Douridas

AGRONOMIC CROP MANAGEMENT

- 10:00 **Waterhemp Management in Soybean: Cost-Effective Herbicide Selection and the Role of Cover Crops** (PM=1.0)
- Rodrigo Werle, University of Wisconsin-Madison
- 11:00 **Agronomic Weed Management Update** (CLM=0.5;PM=0.5)
- Alyssa Essman, The Ohio State University
- 11:30 **LUNCH is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)**
- 12:45 **What Will Matter in 2025?** (CM=1.5)
Panel: moderated by Dusty Sonnenberg
- Fred Yoder, Bill Bayliss, Jeff Duling (sponsored by Pioneer), and Connor Sible (sponsored by Calmer)
- 2:15 **The Ohio Corn Performance Tests: Trends, Changes, and Yields over 50 Years** (CM=0.5)
- Osler Orteiz, The Ohio State University
- 2:45 **Interseeding Soybeans Into Wheat and Its Effect on Weeds and Soybean Cyst Nematode** (CM=0.5)
- Colin Barclay, The Ohio State University
- 3:15 **BREAK is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)**
- 3:30 **The Soybean Cyst Nematode Challenge: Present and Future** (PM=1.0)
- Horacio Lopez-Nicora, The Ohio State University
- 4:30 **Managing Nutrient Sources in Dry Conditions for Silage and Hay Production** (CLM=0.5;NM=0.5)
- Emma Matcham, The Ohio State University
- 5:00 **Effect of Starter Phosphorus Fertilizer on Yield and Economics** (NM=0.5)
- Kendall Lovejoy, Ohio State University Extension Fulton County
- 5:30 **Adjourn**



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March 11, 2025 Tuesday

Room B - Nutrient Management

Sponsored by:



Speaker Introductions: Glen Arnold

Moderators: Tim Barnes, Kendra Rose and Mike Gastier

10:00	Variability in Manure Application Rates and Composition in Ohio - Doug Jackson Smith, Ohio State University	(CLM=0.5;NM=0.5)
10:30	Long-term Effects of Crop Livestock Integration on Soil Health in Ohio - Ryan Haden & Matt Falb, OSU-ATI	(CLM=0.5;SW=0.5)
11:00	Innovative Conservation Practice Implementation in Mercer County - Theresa Dirksen, Mercer SWCD	(CLM=0.5;SW=0.5)
11:30	Maximizing the Value of that Other Commodity – Manure - Christine Brown, Ontario Ministry of Agriculture, Food and Rural Affairs	(CLM=0.5;NM=1.0)
12:30	LUNCH is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)	
1:45	Best Management Practices for Manure Handling and Application - Frances Springer, Ohio Dept. of Agriculture, Division of Soil and Water Conservation	(CLM=0.5;NM=0.5)
2:30	ODA-DLEP – Overview and Regulation Changes for permitted livestock operations - Sam Mullins, Ohio Department of Agriculture	(CLM=0.5;NM=0.5)
3:00	Is Anaerobic Digestion the Right Choice for Your Farm - Dan Anderson, Iowa State University	(CLM=1.0;NM=1.0)
4:00	BREAK is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)	
4:15	Putnam County SWCD Water Quality Monitoring Project - Jeff Nordhaus, Putnam Co. Soil & Water Conservation District	(CLM=0.5;SW=0.5)
4:45	360 Rain Manure Application on Corn and Forages - Glen Arnold, OSU Extension	(CLM=0.5;NM=0.5)
5:15	End	



March 11, 2025 Tuesday

Room C - Precision Ag & Technology

Sponsored by:



Speaker Introductions: John Fulton

Moderators: Beth Scheckelhoff, Gary Wilson and Kendall Lovejoy

10:00	Using AERO-Blitz for Drone Delivery of Nutrients - Jeff Gilder, Agronomist, The Andersons	(NM=0.5)
10:30	UAS Integration and the Impact on State Government - David Gallenger, Ohio UAS Center	(PA=0.5)
11:15	Using Drones to Seed Pastures and Plant Cover Crops - Alex Thomas, The Ohio State University	(CM=0.5)
12:00	LUNCH is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)	
1:15	High Clearance Robotic Irrigation Impacts on Yield and Nutrient Application - Andrew Klopfenstein, The Ohio State University,	(CLM=1.0;NM=1.0)
2:15	Panel: Using High Clearance Robotic Irrigation to Manage Nutrients - Trent Stoller - Bill Lemhkuhl - Andrew Klopfenstein	(CLM=1.0;NM=1.0)
3:15	BREAK is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)	
3:30	Targeted Spraying Technology for Applying Crop Protection Products: OSU Experience and Economics from 2024 - Nate Douridas, Farm Manager, Ohio State University - Amanda Douridas, Ohio State University	(PM=0.5)
4:00	John Deere See & Spray - Jenna Elleman, Regional Integrated and Solutions Manager, AgPro	(PM=0.5)
4:30	Precision Planting Symphony Nozzle + Symphony Vision - Bill Lemhkuhl, Precision Agri Services	(PM=0.5)
5:30	Adjourn	

Advancing Conservation. OSU researchers, led by Dr. Robyn Wilson, are collecting data to understand what type of farmer stories are useful for motivating others to engage in conservation. If you are wondering how to advance conservation, talk to Anna at the OSU table in the Exhibit area. You'll receive \$20 for 15 minutes of your time completing a survey!

March 11, 2025 Tuesday

Room Chapel - Soil Health, Cover Crops and No-Till

Sponsored by:



Speaker Introductions: Asmita Murumkar and Jim Hoorman

Moderators: Sarah Noggle, Rachel Cochran and Brother Nick Renner

10:15 **Cover crop research and opportunities in Ohio's cropping systems** (CLM=1.0;CM=1.0)
- Dr. Osler Ortez, OSU Extension Corn Specialist

11:15 **Ideal cover crop mixes** (CLM=0.5;SW=0.5)
- Michael Watercutter, Mercer Landmark / Truterra

11:45 LUNCH is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)

1:00 **What's ahead for 2025 on the Drought** (CLM=1.0;NM=1.0)
- Dr. Aaron Wilson, OSU Climate Specialist

2:00 **Farm Panel: How to Deal with Drought using No-till & Cover Crops** (CLM=1.0;SW=1.0)
- Keith Dennis
- Jeff Duling (sponsored by Pioneer)
- Leon Klopfenstein
- Alan Sundermeier
- Matt Van Tilburg
- Mark Hoorman

3:00 BREAK is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)

3:15 **Managing Crop Residue with Biology** (CLM=0.5;CM=1.0)
- Dr. Connor Sible, University of Illinois (sponsored by Calmer)

4:15 **Can Biological Testing save you Money on Nutrients?
Research from Northwest Ohio** (CLM=0.5;NM=0.5)
- Alan Sundermeier, Conservation Action Project (CAP)

4:45 **Measuring Soil Organic Carbon using Robots** (CLM=0.5;CM=1.0)
- Dr. Linda Barrett, S4 Mobile Laboratories

5:15 **Adjourn**

2025

- ◆ July 23, Conservation Action Project Workshop, Archbold
- ◆ Aug. 27, No-till and Soil Health (evening), Fred Yoder Farm, Plain City
- ◆ Aug. 28, Soil Health and Water Management, OSU Lima Campus
- ◆ Sept. 16-18, OSU Farm Science Review
- ◆ Dec. 3, Ohio No-till Conference, Plain City

2026

- ◆ Jan. 6-9, National No-till Conference, St. Louis, MO
- ◆ March 10-11, Conservation Tillage & Technology Conference, Ada, Ohio
- ◆ March 16-20, Overholt Drainage School

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- ∞ Ohio CCA Program
- ∞ Ohio Soybean Council & OSU SENR
- ∞ OSU Farm Service Review
- ∞ OSU (Farmer Survey)
- ∞ Paradise Energy Solutions
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The Annual meeting of the Board of Directors of the Conservation Tillage & Technology Conference will be held on April 17, 9:00 to 12:00noon , in Kenton at the OSU Extension office. Everyone is invited. Both in-person and on Zoom.

March 12, 2025 Wednesday

Room A - Agronomic Crop Management

Sponsored by:



Speaker Introductions: Stephanie Karhoff

Moderators: Amber Emmons, Lee Beers and Nick Eckel

8:30	Evaluating Cover Crop Seeding Rates - Stephanie Karhoff, Ohio State University Extension	(CLM=0.5;CM=0.5)
9:00	Drone Cover Crop Seeding - Alex Thomas, The Ohio State University	(CM=0.5)
9:30	Managing Ear Rots and Mycotoxins in Corn Silage - Manni Singh, Michigan State University	(PM=1.0)
10:30	BREAK is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)	
10:45	Vomitoxin Management Research Update and Industry Panel - Jason Hartschuh, Ohio State University Extension	(PM=1.5)
12:15	LUNCH is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)	
1:45	Evaluation of Fungicide Timing Strategies for Tar Spot Management in the Midwest - Morgan Goodnight, Purdue University	(PM=0.5)
2:15	Conducting a Nitrogen Rate Trial Following a Cereal Rye Cover Crop Utilizing the MRTN Framework - Rachel Cochran, Ohio State University Extension	(CLM=0.5;NM=0.5)
2:45	BREAK is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)	
3:00	What's Ahead for 2025 - Aaron Wilson, Ohio State University Extension	(CM=1.0)
4:00	Adjourn	

Were you at CTTC ten years ago?



All Conservation Tillage & Technology Conference services are offered on a non-discriminatory basis without regard to race, color, national origin, religion, sex, disability, political beliefs, and martial or family status.

March 12, 2025 Wednesday

Room B - Water Quality and Conservation Practices

Sponsored by:



Speaker Introductions: Jocelyn Henderson

Moderators: Alan Leininger, Gary Wilson and Jocelyn Ruble

8:30	Maumee Soil Test P Trends - Boden Fisher & Justin McBride, Water Quality Specialist & H2Ohio Engineering Manager, Ohio Dept. of Agriculture	(CLM=0.5;NM=0.5)
9:00	Two-Stage ditch nitrogen (N) and phosphorus (P) retention during five flow regimes. - Katie Rumora, Biologist, USDA-ARS Drainage Unit	(CLM=0.5;SW=0.5)
9:30	Understanding the performance of cascading waterways in Ohio agricultural landscapes. - Steve Lyon, Professor, OSU, Hydrology and Water Resources	(CLM=0.5;SW=0.5)
10:00	BREAK is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)	
10:15	Risk reduction through automated drainage water management. - Steve Lyon, Professor, OSU, Hydrology and Water Resources	(CLM=0.5;SW=0.5)
10:45	Nutrient losses and soil health of fields under long-term no-till and cover crops. - Dr. Will Osterholz, Research Soil Scientist, USDA-ARS Drainage Unit	(CLM=0.5;NM=0.5)
11:15	Soil Health Legacy Effects of Alternative Approaches to Integrating Crop and Livestock Production. - Dr. Louceline Fleuridor, Post Doctoral Scholar, OSU	(CLM=0.5;SW=0.5)
11:45	LUNCH is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)	
1:15	Are we making progress in agricultural P loss? Panel - Terry Mescher, H2Ohio Program manager, Ohio Dept. of Agriculture	(CLM=1.0;SW=1.0)
2:15	P and N rate on-farm trials. - Alan Sundermeier, Conservation Action Project (CAP), and OSU Extension (Retired)	(CLM=0.5;NM=0.5)
2:45	BREAK is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)	
3:00	Should we consider soil residual N to improve corn N management? - Greg LaBarge, Agronomic Systems, OSU Extension	(CLM=0.5;NM=0.5)
3:30	NRCS Conservation Programs Update - Mark Smith and Jason Undercoffer (NRCS)	(CLM=0.5;PD=0.5)
4:00	Updates: H2Ohio and Voluntary Nutrient Management Plans - Kip Studer and Paige Scott, Conservation Programs Manager & Nutrient Management Specialist, ODA-Division of Soil and Water Conservation	(CLM=0.5;NM=0.5)
4:30	Adjourn	

March 12, 2025 Wednesday

Room C - Regenerative Ag and Ecosystem Services

Organized by: Rafiq Islam and Josh Winters, OSU Extension

Sponsored by:



Speaker Introductions: Beth Scheckelhoff

Moderators: Curtis Young, Kendra Rose and Kendall Lovejoy

8:30	Regenerative practices or soil carbon storage – Which should be our goal? - Prof. Warren Dick, OSU Soil Scientist (retired)	(CLM=0.5;SW=0.5)
9:00	Regenerative agriculture: Diversifying your farm - Lydia Dresbach, Dresbach Farms	(CLM=0.5;CM=0.5)
9:30	Integrated tests to better understand soil biology - Alan Sundermeier, Conservation Agriculture Project (CAP)	(CLM=0.5;SW=0.5)
10:00	Artificial intelligence and drones for regenerative agriculture - Chris Stewart, OSU Prof., Computer Science Dept.	(PA=0.5)
10:30	BREAK is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)	
10:45	Regenerative agriculture outlook - Etienne Sutton, Center for Regenerative Agric., Univ. of Missouri	(CLM=0.5;SU=0.5)
11:15	Improving regenerative practices with the soil quality / health calculator App - Arif Rahman, OSU South Centers	(CLM=0.5;SW=0.5)
11:45	LUNCH is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant)	
1:00	Controlled grazing and regenerative agriculture - Josh Winters, OSU Extension, Jackson County	(CLM=0.50;NM=0.5)
1:30	Aspirin and sulfur fertilization to improve drought tolerance of crops - Rafiq Islam, OSU South Centers	(CLM=0.5;NM=0.5)
2:00	Healthy Soils Yield Healthy Crops, Communities, and Planet - John Andersen, President, and Katie DeMuro, Program Manager, Greenleaf Communities NFP	(CLM=0.5;SW=0.5)
2:30	Panel discussion: Audience questions - Chris Stewart - Warren Dick - Etienne Sutton Moderated by Rafiq Islam	(SU=1.0)
3:30	Adjourn	

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 During Lunch on Wednesday: Informal Gathering in the Atrium area of the Cafeteria (behind the registration tables). Join the **Farmer Advocates for Conservation** to chat about farmer-to-farmer information sharing. Anyone is welcome!

March 12, 2025 Wednesday

Room Chapel - Soil Health, Cover Crops and No-till

Sponsored by:



Speaker Introductions: Asmita Murumkar and Jim Hoorman
Moderators: Sarah Noggle, Rachel Cochran and Brother Nick Renner

- | | | |
|-------|---|------------------|
| 8:30 | Using Biologicals to reduce nutrients and costs
- Jim Hoorman, Hoorman Soil Health Services | (CLM=1.0;SW=1.0) |
| 9:30 | Forty years of no-till and cover crop progress at the Brandt Farm
- Chris Brandt, Brandt Family Farm | (CLM=0.5;NM=0.5) |
| 10:00 | BREAK is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant) | |
| 10:15 | Farmer Panel: Reducing Costs with No-till and Cover Crops
- Matt Burkholder
- Jeff Duling (sponsored by Pioneer)
- Matt Van Tilburg
- Cody Beacom | (CLM=1.0;NM=1.0) |
| 11:15 | LUNCH is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant) | |
| 12:30 | USDA Updates, Farm Bill, 45Z, E15 and Carbon
- Fred Yoder, No-till Farmer, Plain City, Ohio | (CLM=1.0;NM=1.0) |
| 1:30 | Diversifying your farm using soil health to increase profits
- Lydia Dresbach, Dresbach Farms | CLM=1.0;NM=1.0) |
| 2:30 | BREAK is sponsored by A&L Great Lakes Laboratories & Amplify (The Professional Agronomy Consultant) | |
| 2:45 | Managing cover crops species diversity for multiple benefits
- Etienne Herrick-Sutton, University of Missouri | CLM=1.0;NM=1.0) |
| 3:45 | All about Glyphosate Effects and finding Alternatives
- Jim Hoorman, Hoorman Soil Health Services | (CLM=0.5;NM=1.0) |
| 4:15 | Adjourn | |

Honoring Bill Richards



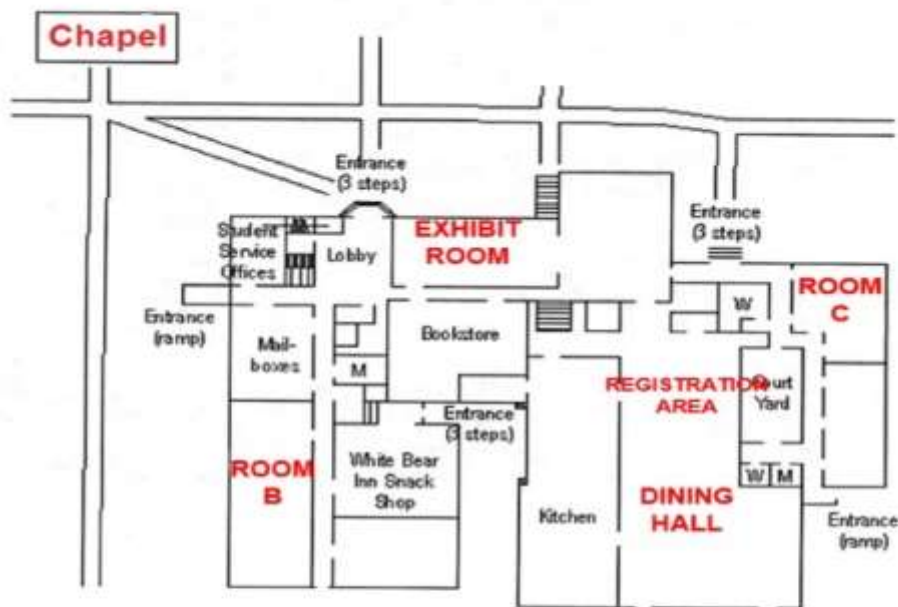
Bill Richards, Circleville, Ohio, began experimenting with reduced tillage in the 1950s. Once he learned about the no-till research at Ohio State University (OARDC) at Wooster in 1962, he quickly adopted no-till.

He continued teaching and preaching no-till until his death on Nov. 12, 2024, at age 93. He spoke frequently at CTTC (photo).

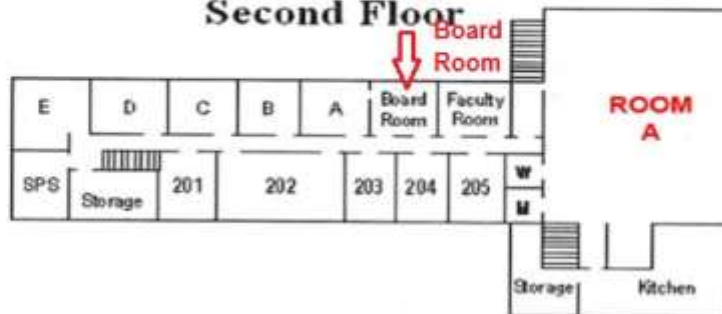
Bill was Chief of SCS (now NRCS) from 1989-93. He and Jim Moseley (Assistant Secretary, USDA) developed EQIP and CSP programs which continue to financially support conservation practices.

- 2025
- ◆ July 23, Conservation Action Project Workshop, Archbold
 - ◆ Aug. 27, No-till and Soil Health (evening), Fred Yoder Farm, Plain City
 - ◆ Aug. 28, Soil Health and Water Management, OSU Lima Campus
 - ◆ Sept. 16-18, OSU Farm Science Review
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 - ◆ March 10-11, Conservation Tillage & Technology Conference, Ada, Ohio
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McIntosh Center Floor Plan First Floor



Second Floor



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*Chad Warner
Darke County*



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