

CONSERVATION TECHNOLOGY INFORMATION CENTER

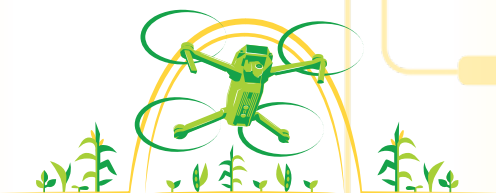


ST. LOUIS

CONSERVATION IN ACTION TOUR

15TH ANNUAL TOUR • SEPTEMBER 12TH – 13TH 2022





THANK YOU

to our sponsors, whose generosity and active engagement have made this tour—and all our programming—possible.

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PLATINUM LEVEL



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SILVER LEVEL



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Please share your perspective throughout
the tour and tag us!

Find us on 

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@ctic_tweet

#CTICTour #BestTourEver

SCHEDULE

Monday, September 12

6:30 - 9:30 PM

CTIC 40th Anniversary Celebration
Trolley Room, Forest Park, St. Louis, Mo.

Tuesday, September 13

8:00 AM

Depart Hilton St. Louis Frontenac Hotel

9:00 AM

Arrive at Henry White Experimental Farm

12:15 PM

Lunch at Hilton St. Louis Frontenac Hotel

2:00 PM

Arrive at Donald Danforth Plant Science
Center for Panel Discussions

4:00 PM

Ag Tech Showcase and Optional Tours of
Donald Danforth Plant Science Center

6:00 PM

Closing Banquet

9:30 PM

Buses Depart

Welcome to Our Digital Tour Book

Welcome to the 15th annual CTIC Conservation in Action Tour! You'll notice that this year's tour is different from tours that came before. For one thing, our partnership with the Donald Danforth Plant Science Center this year has created a great opportunity for us to celebrate our 40th anniversary with several panel discussions and an Ag Tech Showcase—opportunities to look not just at the present state of conservation agriculture, but at its future, too.

We're also walking the conservation walk more than ever. Fewer tour stops mean less fuel. A digital tour book has cut out several heavy cartons of paper, as well as ink and energy that would have been used to print and ship the guide. And we focused on selecting earth-friendly vendors and suppliers right down to our cupcakes (red velvet, of course, to celebrate our Ruby Anniversary!), which were made by local sustainable bake shop Whisk.

None of these steps will move the environmental needle in a big way. But every little effort helps us put conservation into action. Conservation takes thought, planning and action. We're trying to integrate that into our daily operations more than ever.

WELCOME

Welcome from the Chair of the CTIC Board

On behalf of the entire CTIC Board, thank you for joining us on the 15th annual Conservation in Action Tour, which will be especially festive this year as we are also celebrating CTIC's 40th anniversary. CTIC is a unique organization that was formed in 1982 to champion, promote and provide information on technologies and sustainable agricultural systems that conserve and enhance soil, water, air and wildlife resources and are productive and profitable—including such practices as no-till, cover crops, and advanced nutrient management.

This is an exciting time for CTIC, as the scientific community has grown to realize that these very same practices may be a powerful suite of tools to reduce greenhouse gas emissions and improve the resilience of farms to the vagaries of climate change, such as heat, drought, and heavier rainstorms. CTIC stands ready to serve as an important partner on the new USDA push to explore the introduction of climate smart commodities as one important policy initiative to address climate change.

You will see and hear much more about the many benefits of conservation agriculture during this year's tour, which promises to be yet another **#BestTourEver**. I'd like to thank the CTIC staff for all their hard work in creating this year's program and getting us all back on the bus after two years of virtual tours.

Over the next two days, please make sure to introduce yourself to the other attendees. CTIC always brings together a unique mix of farmers, conservation experts, agribusiness representatives, government agency personnel, scientists, and others—all sharing a passion for seeing the benefits of conservation agriculture more widely understood and adopted.

Thanks so much for joining us!

Mark White,
Syngenta | CTIC Board Chair



Welcome from the Interim Executive Director

On behalf of the dedicated staff here at CTIC, I also welcome you to the **#BestTourEver**. We are genuinely excited about the Conservation in Action Tour this year, to be held in my adopted hometown of St. Louis, Missouri. Not only is it our first in-person tour in three years, but it is also CTIC's 40th anniversary.

Anniversaries prompt us to look back at where we have been, and it's clear that CTIC has accomplished a great deal over the past 40 years. An organization that was launched to promote no-till soon taught us all that tillage is just one part of conservation agriculture. The science, and the need for information, quickly evolved to encompass not only soil loss, but water quality, air quality, habitat, and soil health. Throughout that evolution, CTIC has been at the forefront, connecting people with information, ideas, and each other.

We've continued to grow in ways we couldn't have imagined 40 years ago. Where we once coordinated in-field tillage surveys, we now use satellite imagery through OpTIS. We still conduct agriculture's best tours and meetings, but now we also bring people together through Zoom. Our website allows us to serve as an information clearinghouse 24/7 for anyone in the world. Our future and our past connect every day.

In closing, I wish to express a special note of thanks to a former Monsanto colleague, Stephanie Regagnon, who now serves as Donald Danforth Plant Science Center's executive director of Innovation Partnerships. It was over a cup of coffee at my old neighborhood coffee shop earlier this year that we brewed up the idea of bringing this next CTIC Tour to St. Louis. Her wonderful spirit of collaboration made a key portion of the tour program possible, for which I am deeply appreciative.

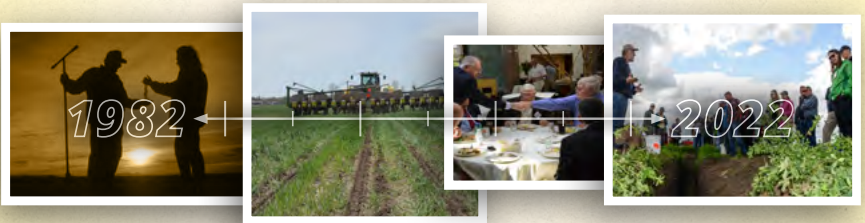
That's all for now. Thanks so much for taking the time to "Meet Us in St. Louis"!

Dave Gustafson
Interim Executive Director, CTIC





CTIC: CELEBRATING 40 YEARS



At the October 1982 meeting of the American Agricultural Editors Association, Chevron product manager Dick Foell announced the formation of the Conservation Tillage Information Center (CTIC), a national clearinghouse for conservation tillage information backed by a broad coalition of agribusiness, government, and conservation district leaders. Under the umbrella of the National Association of Conservation Districts (NACD), the new organization would serve as a focal point for people interested in no-till and conservation tillage.

By the time Foell announced the formation of CTIC, the founders had been meeting for a year to shape the new organization. Foell originally charged PR expert Bob Rice of Gibbs & Soell to put together a no-till club to promote the practice, but Rice's research indicated that the more pressing need was for a central, neutral source of information about conservation. Years before the phrase "public-private partnership" became a favorite of management consultants, CTIC was putting the principle to work.

40TH ANNIVERSARY



CTIC: CELEBRATING 40 YEARS

The steering committee for the nascent organization included:

Joe Antognini, BASF Wyandotte Corp.

Ralph G. Christensen, US Environmental Protection Agency

Dick Foell, Chevron Chemical Co.

John Fortino, Mobay Chemical Co.

Arnold D. King, USDA Soil Conservation Service (SCS)

Jim Lake, National Association of Conservation Districts

Daniel H. Nelson, Allis-Chalmers

Walter Peechatka, Soil Conservation Society of America

Edward E. Puletz, E.I. du Pont de Nemours

Skip Ragland, Ciba-Geigy

Duane Sand, Iowa Natural Heritage Foundation

Warren Saufferer, DMI, Inc.

John Soghigian, Dow Chemical Co.

K.M. Thurow, International Harvester

John Wetton, Farm and Industrial Equipment Institute

Bob Rice, Gibbs & Soell, acting secretary



On January 2, 1983, executive director Jim Lake opened the door to the new CTIC office in Fort Wayne, Ind. As an NACD employee and member of the CTIC steering committee, Lake had played an active role in shaping the group. With Foell as the organization's first chairman and Lake in the executive seat, CTIC was off and running.



CTIC: CELEBRATING 40 YEARS

Demand for CTIC's insight was huge—150,000 copies of the Center's 8-page "Have You Considered Conservation Tillage?" brochure were distributed in a matter of months. The launch announcement at an agricultural media conference was no accident—from the very first discussions that gave it shape, CTIC has enjoyed the support of Frank Lessiter, publisher of No-Till Farmer, and the organization quickly teamed up with journalists from Agri-Marketing, Progressive Farmer, Farm Journal, Successful Farming and other ag media to spread the facts about conservation farming.

Working with national agronomist Dave Schertz of the Soil Conservation Service (now the USDA Natural Resources Conservation Service), CTIC disseminated data from the ground-breaking Crop Residue Management (CRM) Survey, which also began in 1982. The Center staff embraced the latest technology from the start, offering data on computer tape for corporate and institutional users, and even floppy disks for the early adopters of personal computers. The Center Scoop newsletter, followed by Conservation Impact and Conservation Partners, spread the word in print, and CTIC shifted to the web as internet technology came into focus in the 1990s.

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CTIC: CELEBRATING 40 YEARS



In 1986, CTIC changed its name, swapping the “Tillage” for “Technology.” The shift reflected a growing awareness that conservation farming is about more than tillage or no-till. It also allowed the Center to widen its focus to how farmers could protect water and air quality while also reducing erosion.

Since then, CTIC has been at the vanguard of conservation thinking and practice. From the Know Your Watershed initiative—launched in 1994 and still an oft-searched page on the CTIC website today—through 2008’s guidebook on water quality credits and today’s innovative pilot projects on nutrient credits, the Center has grown with the understanding of the roles farmers and landowners can play in protecting the nation’s soil health, water quality, and air.

Data and demonstration remain critical to CTIC’s mission. While the national CRM Survey lost its funding for fieldwork, the Operational Tillage Information System (OpTIS) now uses satellite imagery and a unique algorithm to track tillage and cover crop use. The National Cover Crop Survey, performed with the Sustainable Agriculture Research and Education (SARE) program and the American Seed Trade Association for years, has been cited on Capitol Hill in testimony to support conservation funding.

And the Let’s Do the Math on Cover Crops project helped put cover crops into context through the experience of commercial farmers.





CTIC: CELEBRATING 40 YEARS

Bringing people together has been in CTIC's DNA since the start. Over the years, CTIC has conducted capacity-building training for watershed groups and coordinated complex programs like the Indian Creek Watershed Project. The Center organized the Conservation Agriculture Systems Alliance (CASA) in 2007, a global effort to help ag producer groups coordinate their conservation programming. And the Conservation in Action Tour series—of which this is the 15th annual example—has brought a wide range of participants around the country to see diverse conservation farming systems up close.



In 2005, CTIC became an independent 501(c)(3) organization, and we have continued on our mission. Our 40th anniversary provides us a chance to think about the partnerships we have enjoyed and the things we have learned—and the frontiers we will continue to explore together. Thank you for your support, for a great 40 years, and for the chance to point CTIC into the future.

For a more detailed account of CTIC's history, [click here](#).

CTIC Executive Directors

1982-1987	Jim Lake
1988-1991	John Becherer
1991-1995	Jerry Hytry
1995-1999	John Hebblethwaite
1999-2005	John Hassell
2005-2016	Karen Scanlon
2016	Nancy DeLong (interim)
2016-2018	Chad Watts
2018-2019	Dave Gustafson (interim)
2019-2022	Mike Komp
2022	Dave Gustafson (interim)



CTIC: CELEBRATING 40 YEARS

Chairs of CTIC's Board of Directors

1982-1983	Dick Foell - Chevron Chemical Co./ICI Americas, Inc.
1984-1985	Marlin Edwards - Pioneer Hi-Bred International, Inc.
1986-1987	John Johansen - Allis-Chalmers Corp.
1988-1989	Jim Conroy - American Cyanamid
1990-1991	Dick Foell - ICI Americas Inc./Zeneca Ag Products
1992-1993	Dale Darling - E.I. du Pont de Nemours
1994-1996	Ray Brownfield - Capital Ag Property Services, Inc.
1997-1999	Paul Kindinger - Agricultural Retailers Association
2000-2002	Bruno Alesii - Monsanto
2003	Bill Richards - Richards Farms, Inc.
2004	Scott Hedderich - Pioneer Hi-Bred International, Inc.
2005-2006	Neil Strong - Syngenta
2007-2008	Chris Foster - John Deere
2009-2010	Tim Healey - Agrotain International
2011-2012	Rex Martin - Syngenta
2013	Dave Gustafson - Monsanto
2014	Pauley Bradley - John Deere
2015	Alan Ayers - Bayer Crop Science
2016-2018	Lara Moody - The Fertilizer Institute
2018-2020	Terry Tindall - J.R. Simplot Co.
2020-2022	Mark Schmidt - John Deere
2022-Present	Mark White - Syngenta



MONDAY NIGHT

CTIC 40TH ANNIVERSARY CELEBRATION



6:30 – 9:30 pm

The Trolley Room, Forest Park,
St. Louis, Mo.

The Trolley Room is part of Forest Park's David and Judith Jones Visitor and Education Center. Built in 1892 as a streetcar station for the Lindell Railway, the building was used during the 1904 World's Fair, also called the Louisiana Purchase Exposition. At that World's Fair, guests were introduced to Alexander Graham Bell's wireless radiophone, the telautograph (precursor to the fax machine), and the x-ray machine. Many visitors had their first exposure to electric streetcars and ice cream cones there, too. Be sure to take a look around at the beautiful and historic surroundings!





CTIC 40TH ANNIVERSARY CELEBRATION

INTRODUCTORY SPEAKER



Rod Snyder

Agricultural Adviser to the Administrator
U.S. Environmental Protection Agency
Washington, DC

Rod Snyder was appointed Senior Advisor for Agriculture to the Administrator of the U.S. Environmental Protection Agency in October 2021. He is recognized for his nearly two decades of leadership at the intersection of agricultural and environmental policy.

From 2014-2021, Snyder served as president of Field to Market: The Alliance for Sustainable Agriculture, which is the largest multi-stakeholder initiative working to advance the sustainability of commodity crop farming in the United States. In this role, he forged science-based consensus among diverse stakeholders across the food and agriculture value chain on complex issues such as climate change, water quality, biodiversity, and pest management. In 2015, Snyder co-founded the Sustainable Agriculture Summit, which has grown to be the largest and most prominent annual sustainable agriculture conference in North America.

Prior to his time at Field to Market, Snyder held positions as Public Policy Director for the National Corn Growers Association (and represented NCGA on CTIC's board) and Government Affairs Leader for CropLife America. He has been a longtime champion of agricultural solutions to climate change and has on two occasions organized farmer delegations to participate in UN Climate Summits in Paris and Copenhagen.

Snyder holds a B.A. in Political Science from Eastern University in St. Davids, Pennsylvania. He resides on his family farm in Shenandoah Junction, West Virginia.



CTIC 40TH ANNIVERSARY CELEBRATION

SPEAKER



Liz Hunt

Sustainable Solutions Lead
Syngenta

Liz Hunt combines practical know-how and visionary partnerships to make sustainability accessible and real.

She is here to bring insights on scaling sustainable agriculture to life across all cropping systems. Liz believes that sustainability has to be attainable for farmers and the value chain. While her day-to-day focus is on regional solutions, she is on the lookout for opportunities to improve smallholder livelihoods through access to agronomic education and technology. She is grateful to work for a company that can have a positive impact on farmers of all sizes and crops around the world.

Liz has had the opportunity to see the world throughout her career and have a true appreciation for the needs of farmers globally. She participated in an experiential learning opportunity with Syngenta working with smallholder farmers in rural Bangladesh where she got first-hand knowledge of farmer needs and how access to agriculture technology can truly make a difference in farmer livelihoods.

The root of her work stems from the fact that I love all plants, whether they feed your body or your soul. After earning a Bachelor of Science degree in Horticulture and Business Management from Iowa State University, Liz spent 20+ years in the flower industry developing, producing, and marketing plants for indoor and outdoor gardening. Her passion for plants was easily transferred to sustainable agriculture and applying the same scientific principles and insights to agronomic crops—plants are plants!



CTIC 40TH ANNIVERSARY CELEBRATION

KEYNOTE SPEAKER



Bruno Pigott

Deputy Assistant Administrator for the
U.S. Environmental Protection Agency's
Office of Water

Bruno Pigott is Deputy Assistant Administrator for the U.S. Environmental Protection Agency's Office of Water.

The Office of Water works to ensure that drinking water is safe, wastewater is safely returned to the environment, and surface waters are properly managed and protected. Prior to joining EPA, Bruno held multiple roles at the Indiana Department of Environmental Management, serving most recently as the Commissioner, Agency Chief of Staff, and Assistant Commissioner in the Office of Water Quality. He started his state service as chief of the State Revolving Loan Fund Program in Indiana. Bruno holds a bachelor's degree in political theory and economics from James Madison College at Michigan State University and a master's degree in public and environmental affairs from Indiana University's School of Public and Environmental Affairs.



CTIC 40TH ANNIVERSARY CELEBRATION

Celebrating 40 Years of Partnership: Productive Past, Exciting Future

We'll welcome some of our partners to look back at the past 40 years and look forward to the next 40. Our first speakers have been integral to the growth of CTIC.



Timothy Healey
Retired CTIC Chair

Timothy Healey was a long-time employee of Lange-Stegmann, a fertilizer company based in St. Louis, as well as Agrotain and Bruce Oakley International. He retired in 2019. Tim was a member of the CTIC board of directors from 2004 to 2014 and served

in several roles on the executive committee. Tim served as CTIC board chair in 2009-2010.



Rex Martin
Chief Executive Officer
Alpha Gamma Rho

Rex Martin grew up on a farrow to finish swine operation in Camden, Arkansas. A former Arkansas State FFA President, Rex has worked in various positions related to environmental regulation and legislation at the state and federal levels including Head, External Relations at Syngenta and Senior

Vice President of Owner Relations for Dairy Management Inc. He has received a number of awards recognizing his leadership commitment to agricultural organizations, including the William Larue award from the Southern Crop Production Association, the Soil and Water Conservation Chair's Leadership Award, the Croplife America Workhorse Award and the Missouri Corn Growers Association and American Agri-Women President's Award. He also was the first-ever recipient of the Kansas Ag Retailers Association's "Standing TALL" award. Rex served on CTIC's board and was board chair in 2011-2012.



CTIC 40TH ANNIVERSARY CELEBRATION

Mike Komp, as CTIC's executive director, was elected to the board of directors of Field to Market, creating new opportunities for partnerships between the two organizations.



Scott Herndon

President of Field to Market

Scott Herndon serves as the President of Field to Market. Prior to joining Field to Market in 2022, he served as the Vice President and General Counsel of the American Sugarbeet Growers Association, focusing on the regulatory issues that impact the industry including pesticides, biotechnology, sustainability, and crop insurance. Scott has also served as Director of Global Government and Public Policy for S&P Global in Washington, D.C. and in various roles for Members of the House of Representatives and the Florida Senate. He also worked in the orange juice production business started by his great grandfather, for Louis Dreyfus Commodities in Brazil, and for a citrus and cattle business in Florida. Scott holds a JD from the University of Miami, an MBA from the University of Florida, and a BA from Tulane University. He has studied in Costa Rica, Argentina, Mexico, and Brazil and speaks Spanish and Portuguese. Scott currently lives in Washington, DC with his wife, daughter, and Labrador retriever.



CTIC 40TH ANNIVERSARY CELEBRATION

Now we'll hear from three speakers who are engaged in some of CTIC's most exciting current projects: **OpTIS** and **PLUS-UP**.



Dr. Laura Johnson

Director, National Center for Water
Quality Research
Heidelberg University

Dr. Laura Johnson is director of the National Center for Water Quality Research at Heidelberg University, where long-term monitoring of streams and rivers is used to examine the influence of human activities on water quality and help decide actions that lead to healthier ecosystems. Laura is best known for research examining the linkages between agricultural runoff and harmful algal blooms in Lake Erie. As director, she has overseen the expansion of the monitoring program, curriculum development in Watershed Science, revitalization of the Sandusky River Watershed Coalition, and has been part of numerous workgroups and advisory boards. Under her guidance since 2016, the NCWQR continues to be the gold standard for research in nonpoint source pollution in watersheds. Laura received her PhD from the University of Notre Dame in 2008 and was a postdoctoral research associate at Indiana University in Bloomington prior to joining Heidelberg University in 2013.



CTIC 40TH ANNIVERSARY CELEBRATION



Mary Fales

Program Director, Saginaw Bay Watershed
The Nature Conservancy

Mary Fales has served as the Program Director for Michigan's Saginaw Bay Watershed since 2012. Her work has led to several multi-million-dollar projects, including the \$10M Regional Conservation Partnership Program, focused on targeting agricultural best management practices to

the fields that need them most to reduce nutrient and sediment laden runoff and increase groundwater recharge for the benefit of people and nature. She previously worked in environmental consulting, for the Michigan Department of Environmental Quality Water Bureau and for the Macatawa Watershed Project (Holland, MI). Mary served as the president of the Michigan Soil and Water Conservation Society and was awarded the 2014 Friend of Conservation Award from the Michigan Association of Conservation Districts. She was a participant in the 2015 cohort of The Nature Conservancy's Science Impact Project and is completing a Soil Health and Nutrients Coda Fellowship for the Midwest Division.



Jeff Seale

Director of Environmental Strategy
and Climate Policy
Regrow Ag

Dr. Jeffrey Seale has used his 25+ years of experience to help develop innovations that improve the sustainability of agricultural systems. He has been awarded four U.S. patents and is the author of 10 peer-reviewed publications and 2 book chapters. Jeff has been an invited speaker at the annual United Nations Climate Conference and serves as an expert reviewer for the Intergovernmental Panel on Climate Change.



CTIC 40TH ANNIVERSARY *CELEBRATION*

Introducing the **CTIC** *Hall of Fame*

Over the past four decades, CTIC has been fortunate to work with countless friends, allies and supporters. As part of this year's anniversary celebration, we are launching an effort that will recognize some of the pivotal people that have helped us develop, grow and evolve over the years. Tonight, we will inaugurate the CTIC Hall of Fame with our very first three honorees and begin a program that allows us to express our admiration and gratitude for some of the people who have been so dedicated to CTIC and conservation farming systems.



CTIC 40TH ANNIVERSARY CELEBRATION



Dick Foell

Chevron/ICI/Zeneca/Syngenta
CTIC's First Chairman

Dick Foell used his considerable energy and vision to rally a dedicated group of pioneers around the idea of creating a clearinghouse of information on no-till farming, then spent two decades promoting CTIC and its work. Long after his tenure as CTIC's first chairman ended, Dick remained the

organization's biggest cheerleader and most dedicated supporter, whether out in the field promoting the virtues of "farming ugly" or late at night at a conference bringing people together to build momentum for a demonstration project. Often accompanied by his wife Chic, Dick was in many ways the face, voice and heart of CTIC as the organization took flight. Even retirement, he's enthusiastic—as recently as July 2022, Dick did a podcast interview with fellow CTIC founder Frank Lessiter in which he highlighted the Center's accomplishments.



Dan Towery

CTIC Natural Resources Specialist
Ag Conservation Solutions

Second perhaps only to Dick Foell, **Dan Towery** was another face and voice of CTIC around the country and around the world in the organization's formative years. Dan worked his way up through the SCS/NRCS ranks from district conservationist to Illinois state conservationist, then spent 10 years

seconded to CTIC from 1995 through 2005. During his tenure with the Center, Dan drove countless miles, gave untold numbers of presentations, met with hundreds or even thousands of farmers, and wrote some of CTIC's most valuable and widely distributed publications. No-Till Farmer named Dan one of its first No-Till Legends in 2011. Dan's deep knowledge of the science and practicalities of conservation, coupled with his tireless work ethic, propelled CTIC into prominence and helped connect stakeholders with the useful and practical information they needed.



CTIC 40TH ANNIVERSARY CELEBRATION



Karen Scanlon

Executive Vice President
Dairy Management Inc.

Karen Scanlon served as CTIC Executive Director for 11 years, a period of significant growth of the organization in both dollars and scope of mission. Prior to her role as ED, Karen managed communications for CTIC. Inspired by Karen's management skill, focus, and passion for the

organization, CTIC's board members coalesced as an active and engaged group, a hands-on team united around the Center's mission. Karen strengthened CTIC's relationship with many partners in government, agribusiness, the non-profit sector, and the media and extended its reach across the nation and around the world.

THANK YOU TO OUR **RUBY**
40TH ANNIVERSARY SPONSORS!



Bayer CropScience



DONALD DANFORTH
PLANT SCIENCE CENTER

**Collaboration is key
to helping biodiversity
flourish. We can each play
a part to help conserve
resources, preserve land
and protect pollinators
of all kinds.**



**Visit our biodiversity and pollinator
resources at BeeHealth.org**

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TUESDAY

TOUR STOP 1

The Henry White Farm
Belleville, Illinois

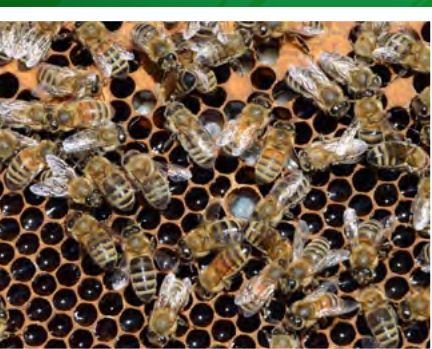
Our morning tour stop is the Henry White Experimental Farm, four miles outside of Belleville, Illinois. The farm's 65 acres of cropland form an outdoor laboratory for research into sustainable agriculture; an additional 29 acres of wetlands, evergreen and deciduous woods, and restored prairie supply habitat for wildlife.



TOUR STOP 1



Conservation projects on the Henry White Farm include conservation tillage, cover crops, sediment basins, riparian buffers, pollinator and butterfly habitat and tile inlets. The farm's apiculture program also makes it an outstanding place to study the productive coexistence of a full suite of modern farming practices alongside commercial beekeeping.



The Henry White Farm was bequeathed to the Illinois Department of Agriculture in 1985. In 2014, Monsanto (now Bayer Crop Science) began managing the farm under a memorandum of understanding (MOU) with the state. That year, the entire farm was put into no-till and fall cover cropping began across the property. In 2018,

Bayer added Climate Fieldview mapping capabilities to the farm; today, the farm is entirely covered by geospatial data. Today, we will learn about the farm's new long-term protocol, which includes research on tillage.

CTIC thanks Elliot Lagacy of the Illinois Department of Agriculture, Randy McElroy, technology development rep for Bayer Crop Science and collaborating researcher at the Henry White Farm, and Randy's team—farm manager Madelyn Walls and teammates Levi, Angela and Seth—for organizing this visit and hosting us today.

TOUR STOP 1

Speakers at this stop include:

Dr. Karla Gage, Southern Illinois University, and beekeeper

Mike Wuerffel – Pollinator habitat

Nathan Johanning, University of Illinois Extension—Cover crop species

Dr. Stacy Zuber, Illinois State Soil Health Specialist—Soil health and tillage

SPEAKERS



Dr. Karla Gage

Dr. Karla Gage is Assistant Professor of Weed Science and Plant Biology at Southern Illinois University Carbondale, where she received her Ph.D. in Plant Biology with a focus in Weed Ecology in 2013. She holds a cross-appointment between the College of Agricultural Sciences, Department of Plant Soil and

Agricultural Systems and the College of Science, Department of Plant Biology. She has experience working with weed management research, planning and control in agricultural, grassland, forest, and aquatic ecosystems.



Nathan Johanning

As Commercial Agriculture Educator, **Nathan Johanning** develops and delivers research-based programs which address all issues related to the local food system. Johanning collaborates with extension educators, campus-based specialists and various other agencies to provide timely and relevant programming focused around

agronomic and horticultural crop production, including cover crops, pest management, soil and nutrient management, and food safety and security.

TOUR STOP 1



Randy McElroy

Randy McElroy works as a Technology Development Rep (TDR) with Bayer Crop Science based near Irvington, Ill. His passion for row crops includes new germplasm testing, screening, and characterization in corn and soybean, corn plant population and row spacing dynamics, soybean plant population and row spacing interactions, light effects on corn and soybean yield, long term tillage systems in corn and soybeans, effective weed management strategies, along with cover crop adaptation to row crops. He will be sharing an overview of the Henry White Farm along with some data from the farm.



Mike Wuerffel

Mike Wuerffel lives on a small farm near Gerald, Mo., where he raises bees, local produce, and row crops. Mike has established multiple apiaries across southern Illinois and Missouri, working with growers to pollinate a variety of produce. In his nearly 50 years of beekeeping Mike has taken care to incorporate pollinator habitat on his farm to benefit the health of his apiaries. Recently Mike began incorporating multi-species cover crops into his crop rotation to increase early spring forage for pollinators. Mike has a passion for teaching and enjoys providing hands-on experience with bees and agriculture in his community.

TOUR STOP 1



Dr. Stacy Zuber

Dr. Stacy Zuber is the Soil Health Specialist with USDA Natural Resources Conservation Service in Illinois. Stacy grew up on her family farm in southeast Illinois and received master's and doctorate degrees in Crop Sciences from the University of Illinois. After completing her graduate work, she conducted post-doctoral research at Purdue University and the University of Missouri-Columbia using on-farm research to evaluate soil health tests and indicators before returning to Illinois as the State Soil Health Specialist. Stacy will be speaking about the impact of tillage on soil health and soil aggregation.

THANK YOU TO OUR SPONSORS!



JOHN DEERE



NATIONAL
CORN GROWERS
ASSOCIATION

LUNCH

Frontenac Hilton St. Louis

St. Louis, Missouri

Among the highlights of the annual CTIC Conservation in Action Tour is the chance to talk over meals with people who share an interest in conservation agriculture. For 40 years, CTIC has been a hub for a wide range of people and perspectives, centered around our common passion for helping farmers become more economically and environmentally sustainable.

At today's lunch, we'll hear from Louis Aspey, Associate Chief of the USDA Natural Resources Conservation Service...but before that, please make a point of introducing yourself and hearing from the folks at your table. We bet you'll be glad you did.

THANK YOU TO OUR SPONSORS!



KEYNOTE PRESENTATION



Louis Aspey

Associate Chief

**USDA Natural Resources
Conservation Service**

Washington, DC

Louis Aspey is the Associate Chief for the Natural Resources Conservation Service (NRCS). In this role, he ensures the agency's conservation mission is carried out in line with the Chief's priorities and with an emphasis on doing what's best for our customers. He provides corporate leadership across the Programs, Soil Science and Resource Assessment, Science and Technology, and Management and Strategy Deputy areas.

Louis, a native of southwestern Pennsylvania, is proud to be the first in his family to attend college. He earned an undergraduate degree in civil engineering from Geneva College in Beaver Falls, Pennsylvania, and a graduate degree in public administration from American University in Washington, D.C. In his free time, Louis enjoys fishing, camping, traveling, and exploring the outdoors with his wife, Karen, and beloved rescue dog Oatie.



TUESDAY

TOUR STOP 2

Donald Danforth Plant Science Center
St. Louis, Missouri

The Donald Danforth Plant Science Center is hosting the afternoon and evening portion of our program—and what an ideal venue! The Danforth Center is a vibrant research facility, home to 31 scientific teams pursuing 199 funded projects in the plant sciences.



THIS STATE-OF-THE-ART RESEARCH SITE FEATURES:

- Advanced bioimaging laboratory with light, confocal and electron microscopy
- Proteomics and mass spectrometry facility to study reactions at the molecular level
- Computing and data analytics hub with a high-throughput computing cluster
- Plant transformation facility with the latest genetic engineering tools
- Phenotyping facility with automated weighing and conveyance systems and daily imaging technology
- Plant growth facility with more than 54,000 square feet of greenhouse and 82 growth chambers

TOUR STOP 2

Optional tours of the Center will be available this afternoon
(4:00 to 5:00 pm)

The Danforth Center is also a hub for ag technology startups—not just the nine companies launched by members of the center's faculty, but innovators drawn to the incubator here at the complex. We'll meet many of the entrepreneurs working on tomorrow's farming challenges today at our Ag Tech Showcase.



Finally, the Danforth Center team is deeply committed to education and outreach, providing St. Louis area students from kindergarten to graduate school with opportunities to engage in science, technology and discovery...and to discover the wonder of plant sciences. The Center recently teamed up with the Jackie Joyner-Kersey Foundation to launch the Jackie Joyner-Kersey Food, Agriculture, and Nutrition Innovation Center in East St. Louis, where students will be empowered to transform their lives through plant science and agriculture while transforming their community from a food desert into a food oasis.

TOUR STOP 2

This afternoon, we will enjoy three panel discussions.



DONALD DANFORTH
PLANT SCIENCE CENTER

SOIL CARBON TECHNOLOGIES

Michael DeCamp, CEO, CoverCress

Dr. Melissa Motew, ecosystem scientist, Indigo Ag

Dr. Cintia Ribeiro, carbon field program lead,
Bayer Crop Science

Dr. Christopher Topp, principal investigator,
Donald Danforth Plant Science Center



Mike DeCamp

Mike DeCamp serves as President and Chief Executive Officer of CoverCress Inc. Founded in 2013, the St. Louis-based company is developing a winter oilseed crop for commercial production, derived from the native winter annual pennycress, under the CoverCress™ brand. Mike joined the company as Chief Operating

Officer in 2020. He has over 30 years of diversified experience in agribusiness, corporate finance, law, corporate strategy, and M&A. Mike began his career as a CPA with Ernst & Young; practiced corporate and securities law with Greensfelder, Hemker & Gale in St. Louis; worked for Monsanto Company in legal, strategy and operational executive roles; founded an agricultural focused strategic advisory and transaction services firm; and lead the corporate finance, capital management, M&A and strategy functions as CFO and CIO for a production agriculture focused private equity firm in Indianapolis.

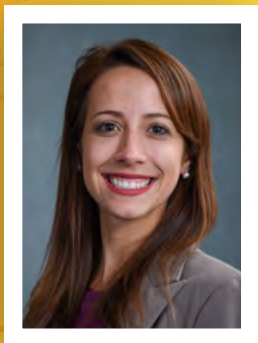
TOUR STOP 2

SOIL CARBON TECHNOLOGIES SPEAKERS



Dr. Melissa Motew

Dr. Melissa Motew of Indigo Ag is an ecosystem scientist working at the nexus of food sustainability, digital technology, and greenhouse gas accounting. At Indigo she specializes in the quantification and tracking of GHGs and other environmental indicators to support program offerings to growers. She helped develop Indigo's first monitoring, reporting, and verification system that generates registry-certified agricultural carbon credits at scale. Originally from New England, Dr. Motew currently resides in Madison, Wisconsin, where she received her M.S. and PhD from the University of Wisconsin and served in post-doc appointments at The Nature Conservancy and USDA-ARS.



Dr. Cintia Ribeiro

Innovation is the common theme of **Dr. Cintia Ribeiro's** career. After earning her PhD in Molecular Biology she joined Bayer Crop Sciences in 2014, as part of Emerging Leaders in Science rotational program where she had the opportunity to lead projects across agricultural product research teams in different fields. Currently, she is one of the leads of the Bayer Carbon Program, where Bayer is merging its commitments in sustainability with the core of business strategy and the goal of redefining the value of agriculture.

TOUR STOP 2

SOIL CARBON TECHNOLOGIES SPEAKERS



Dr. Christopher Topp

Dr. Christopher Topp is an Associate Member and Principal Investigator at the Donald Danforth Plant Science Center. He was the 2020 President of the [North American Plant Phenotyping Network](#), and is a current co-director of the Subterranean Influences on the Nitrogen Cycle (SINC) Center. The Topp Lab takes an integrated phenomics approach to the study of root and rhizosphere traits. By integrating these efforts with natural variation and genomics, Topp's lab focuses on new crop and cover crop varieties with root systems tailored to the local environment that enhance drought tolerance, efficient nutrient uptake, and ecosystem services towards sustainable agriculture goals



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TOUR STOP 2

REMOTE SENSING & DATA SCIENCE: CONSERVATION'S BIG PICTURE

Dr. Noah Fahlgren, director, Data Science Facility,
Donald Danforth Plant Science Center

Joshua White, Geospatial Director, T-REX

Soren Rundquist, OpTIS science lead, Regrow Ag

Dr. Michael Sunde, assistant research professor,
Missouri Resource Assessment Partnership (MoRAP)



Dr. Noah Fahlgren

Dr. Noah Fahlgren is the Director of the Data Science group at the Donald Danforth Plant Science Center. The Data Science group works at the intersection of plant science and computational sciences. In particular, the group develops data management and analysis software and approaches for proximal and remote sensing of plants.

These tools are used to quantitatively measure plant phenotypes and responses to the environment for applications in foundational research, breeding, and precision agriculture.



Joshua White

Josh White is the Geospatial Director for T-REX, a non-profit technology entrepreneur center located in St. Louis's downtown innovation district. Josh recently joined T-REX after a 20-year career in the national security sector, where he developed and applied geospatial intelligence tradecraft to meet the needs of the nation's warfighters,

diplomats, and humanitarians. Most recently, Josh served at the National Geospatial-Intelligence Agency as a data scientist and community outreach officer. He holds a B.A. in Intelligence Studies from American Military University, a Data Analytics certificate from Cornell University, and multiple industry certifications.

TOUR STOP 2

REMOTE SENSING & DATA SCIENCE SPEAKERS



Soren Rundquist

Soren Rundquist grew up in Northwest Iowa and currently lives in Minnesota. He holds degrees from the University of Iowa and Penn State. Soren uses GIS and remote sensing data to better understand how conservation practices are impacting agricultural landscapes and the environment. Over the past 15 years,

Soren has worked in geospatial capacities for the commercial, government and non-profit sectors. In 2021, Soren joined Regrow with a primary focus on improving conservation practice detection at larger scales.



Dr. Michael Sunde

Dr. Michael Sunde's research focuses on using quantitative modeling, geospatial, and remote sensing approaches to evaluate the impacts of stressors such as urbanization, deforestation and climatic changes on the environment, with particular emphasis on watershed systems. He currently serves as director

of the Missouri Resource Assessment Partnership (MoRAP), a group at the University of Missouri specializing in remote sensing and geospatial research conducted in cooperation with various partners. Recent MoRAP projects include developing automated methods to identify unregulated dams in Missouri; high-resolution riparian cover mapping in New Mexico; ecosystems and ecological significance mapping for the St. Louis region; and statewide land-cover and ecosystems mapping to support fire-fuel modeling and land management efforts for the states of Texas, Nebraska, and Kansas.

TOUR STOP 2

ADVANCED NUTRIENT TECHNOLOGIES

Dr. Ivan Baxter, principal investigator, Donald Danforth Plant Science Center

Dr. Jin Zhu, product development support lab lead, Pivot Bio

Mike Gill, senior advisor, Nutrien Ag Solutions

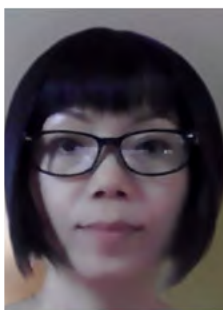
Adam Herges, senior sustainability agronomist, The Mosaic Company



Dr. Ivan Baxter

Dr. Ivan Baxter is a Principal Investigator and Member at the Donald Danforth Plant Sciences Center in St. Louis, Missouri. He received a BA in Chemistry from Goucher College and a PhD in Molecular and Cellular Structure and Chemistry from The Scripps Research Institute before moving on to a

postdoc at Purdue University. Dr. Baxter studies how plants adapt to their abiotic environment using elemental profiling, image-based phenotyping, quantitative genetics and bioinformatics.



Dr. Jin Zhu

Dr. Jin Zhu is the Product Development Support Lab Lead at Pivot Bio. She leads a St. Louis based team to develop and execute lab based microbial and molecular assays to support Pivot Bio's microbial product application in the field. Jin Zhu received her PhD in Crop Sciences from the University of Illinois, Urbana-Champaign

in 2009. She has been a genomic scientist and team lead with a St. Louis based startup company and then with Monsanto/Bayer for more than a decade focusing on developing sequencing technologies before transitioning to the current role at Pivot Bio.

TOUR STOP 2

ADVANCED NUTRIENT TECHNOLOGIES SPEAKERS



Mike Gill

Mike Gill is Senior Advisor for Nutrien Ag Solutions Sustainable Ag Platform. Mike is responsible for researching and advising Nutrien Ag Solutions on the future direction of sustainable agriculture, carbon programs and projects for North America. Prior to working for Nutrien Ag Solutions, Mike was Director of Conservation Agriculture for the Illinois Soybean Association. Mike has also held the positions of Crop Nutrient Technical Manager for Growmark for the US and Canada and Research Agronomist for The Climate Corporation assigned to Nitrogen Adviser crop model improvement and validation. Mike is a Certified Crop Adviser and Certified Professional Agronomist and holds degrees in Soil Science and Field Biology/Land Reclamation. Mike is passionate about regenerative agriculture, the economic well-being of farmers and the environment.



Adam Herges

Adam Herges is Senior Sustainability Agronomist, Corporate Public Affairs at The Mosaic Company, the world's largest producer of phosphate and potash fertilizers. Adam leads Mosaic's North American 4R Nutrient Stewardship strategy and partnerships. He also provides technical agronomy expertise on key issues related to sustainable agriculture production and water quality. Prior to joining Mosaic in September 2015, Adam was Director of Research and Market Development at South Dakota Soybean Research and Promotion Council in Sioux Falls. Earlier in his career, Adam worked in a variety of roles with the Minnesota Department of Agriculture and The University of Minnesota.

TUESDAY

AG TECH SHOWCASE

Donald Danforth Plant Science Center
St. Louis, Missouri

Some of our past Conservation in Action Tours have included showcases to introduce guests to a variety of partners and demonstrate key conservation principles. But as we celebrate our 40th anniversary by looking at the next four decades of agricultural technology—and enjoy the setting of one of the country's most advanced plant science research facilities and ag tech incubators—we are taking the opportunity to gather the next generation of agriculture's problem solvers and technology innovators in a unique Ag Tech Showcase.

AG TECH

This afternoon, you'll meet some of the most exciting thinkers, doers and makers in the ag innovation space. Please make a point of checking out the displays and meeting the people behind these exciting companies.

Among the companies we expect at the Showcase are:

BENSON HILL

BIOSTL'S EAGIC PROGRAM

COVERCRESS

DIVERSE CORN BELT PROJECT

INTACT GENOMICS

NANO GUARD TECHNOLOGIES

PLASTOMICS

PLUTON BIO

SOLIS AGROSCIENCES

ST. LOUIS AGRIBUSINESS CLUB

At press time, companies were still signing up.
Check the **CTIC website** for more participants.



TUESDAY

CLOSING BANQUET

Donald Danforth Plant Science Center
St. Louis, Missouri

CTIC's roots are in the soil, starting with our initial focus on using no-till and conservation tillage to reduce erosion. As the scope of our work has evolved over the past four decades, our thinking about the soil has expanded to include a greater appreciation of its role in improving water quality, boosting biodiversity, and sequestering carbon.

The ability of America's farmland to capture and hold carbon—and the role no-till and other conservation farming systems can play in reducing fuel consumption and other inputs—puts farmers in the exciting position of being key partners in the fight against climate change. But they are also highly susceptible to the effects of climate change, which include more dramatic shifts in weather, increased likelihood of both flood and drought, and changes in growing seasons.

All of those effects can impact the need for and approaches to conservation farming systems. This evening's speaker, world-renowned climatologist Dr. Don Wuebbles, will give us a look into the future climate for farming and conservation.

CLOSING BANQUET

KEYNOTE SPEAKER



Dr. Don Wuebbles

Harry E. Preble Professor of
Atmospheric Science

**Director, Center for Urban Resilience and
Environmental Sustainability (CURES)**

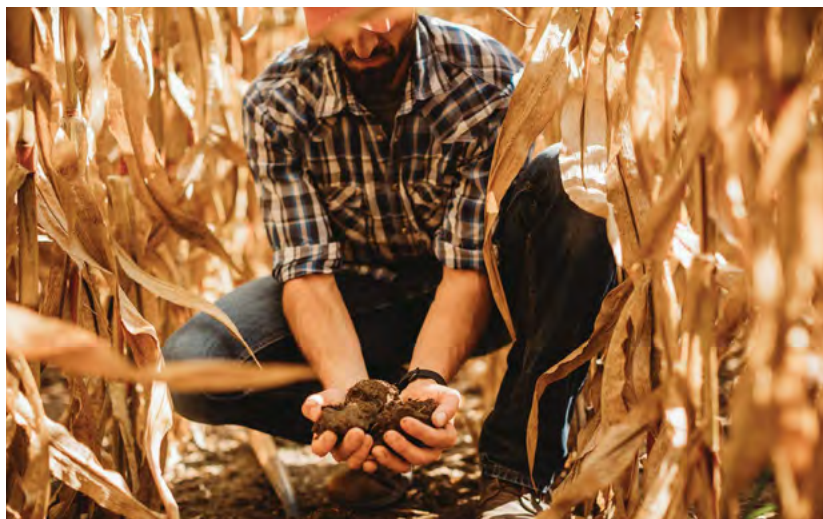
University of Illinois

From 2015 to early 2017, **Dr. Donald J. Wuebbles** was Assistant Director with the Office of Science and Technology Policy at the Executive Office of the President in Washington DC, where he was the White House expert on climate science. He was Head of the Department of Atmospheric Sciences at the University of Illinois from 1994 to 2006 and first director of the School of Earth, Society, and Environment.

Dr. Wuebbles is an expert in atmospheric physics and chemistry, with over 500 scientific publications related to the Earth's climate, air quality, and the stratospheric ozone layer. He was Coordinating Lead Author on several international climate assessments led by the Intergovernmental Panel on Climate Change (IPCC) that resulted in IPCC being awarded the Nobel Peace Prize in 2007. He co-led the first volume of the 4th U.S. National Climate Assessment (November 2017), led an assessment on the impacts of climate change on the Great Lakes (March 2019) and co-led a special assessment of the impacts of climate change on the state of Illinois published in May 2021.

Dr. Wuebbles has two degrees in Electrical Engineering from the University of Illinois (1970, 1972) and a Ph.D. in Atmospheric Sciences from the University of California, Davis (1983), and has received major awards from the American Meteorological Society, US EPA, and American Geophysical Union.





Fortify your soil – and your bottom line with carbon farming practices

There are many benefits to carbon farming – both in your fields and to your bottom line. Practices such as planting cover crops and reducing tillage can lower input costs while addressing stubborn agronomic challenges like resistant weeds and low fertility. These practices also build your soil's ability to sequester carbon and generate credits.



The main result is lower overhead in terms of equipment, labor, fuel cost. Then to get paid for sequestering CO₂? It was a no-brainer.

– Greg Woll, Indiana, Carbo by Indigo farmer

**Curious how much you could earn from farming carbon?
Get an estimate in less than a minute at indigoag.com/fortify**

carbon™
by indigo

CTIC PROJECTS

For the past 15 years, the Conservation in Action Tour has been a labor of love for the CTIC staff and volunteer leadership, bringing a wide range of people together around conservation agriculture. But we have also been busy on many other projects in our efforts to advance conservation and live up to our goals to Connect, Inform, and Champion.

Here is a quick peek at some of the highlights of the past year.

The Phosphorus Load-Reduction Stimulus (PLUS-UP)

Program had a very successful pilot year, designing and executing a program to pay 10 farmers in exchange for implementing practices that prevented nearly 500 pounds of dissolved reactive phosphorus (DRP) from entering the Lake Erie watershed.

With project funding from the U.S. Environmental Protection Agency (under assistance agreement 00E02797) and DRP credits purchased by the Bayer Carbon Program, PLUS-UP provided stimulus funding for almost 5,000 acres. CTIC worked very closely

with Dr. Laura Johnson and Judy Smith of the National Water Quality Research Center at Heidelberg University and Dr. Cintia Ribeiro of Bayer Crop Science, developing a protocol that used farmer-supplied data and the Nutrient Tracking Tool (NTT) model to estimate the impact of no-till and cover crops on DRP reduction and determine the appropriate payout to each farmer.

Roger Meyer and Kevin Stark of St. Mary's University of Minnesota created a GIS-driven story map that describes PLUS-UP in detail. [Check it out here.](#)

We recently received funding from The Mosaic Company for a similar conservation stimulus pilot project in Saginaw Bay.



CTIC PROJECTS

The Operational Tillage Information System (OpTIS) has been updated to use a proprietary algorithm to analyze satellite imagery to identify winter cover crops and crop residue levels. Data are available from 2005 to 2020 and may be queried free at the HUC8 or Crop Reporting District level across a range of commodity crop rotations.



OpTIS data have also been run through the [De-Nitrification/DeComposition model](#) to provide estimates of the impact of cover crop and tillage adoption trends on carbon, phosphorus and nitrogen cycling. A sophisticated visualization tool on the CTIC website allows users to explore OpTIS data and DNDC modeling results deeply, varying timeframes, crop rotations and geography. Visit ctic.org/OpTIS to access the webinar and learn more.

In April, CTIC hosted a [1-hour webinar](#), now available on-demand through CTIC's website. In the program, Dr. Roderick Rejesus of North Carolina State University described how he used OpTIS data to explore whether crop insurance programs discourage growers from planting cover crops. The April program also features Soren Rundquist of Regrow Ag and CTIC's Dave Gustafson describing updates in the algorithm and coverage area of OpTIS.

The Rejesus webinar is part of a six-webinar series coordinated by CTIC over the next two years. Stay tuned for more exploration of the power of remote sensing in conservation systems.



CTIC PROJECTS



Thirty partners, including CTIC, have teamed up on the **Diverse Corn Belt Project (DCB)**, a multidisciplinary project exploring alternative crops, longer rotations, integrating livestock and perennials that could help increase resilience in Midwest agriculture. From agronomists to economists to social scientists, the research partners are exploring diversification at the farm, market, and landscape level that can broaden new opportunities for Midwest farmers and rural communities.

The **Diverse Corn Belt Project** is funded by the USDA National Institute of Food and Agriculture through an Agriculture and Food Research Initiative competitive grant. Members of the research team represent land grant institutions, federal agencies, and non-profit organizations. CTIC is helping with communications for the project, including branding, outreach and developing the program's website.

The Diverse Corn Belt Project focuses on Indiana, Illinois and Iowa. The team will conduct research, extension and modeling in all three states. Interested farmers and other stakeholders can learn more about the Diverse Corn Belt project at diversecornbelt.org, and volunteer to participate at <https://bit.ly/GoDCB>. (Learn more about Diverse Corn Belt at the Ag Tech Showcase Tuesday afternoon.)



In April, CTIC hosted the 2022 **National Aquatic Resource Survey (NARS) National Workshop**, a three-day event featuring speakers from the U.S. Environmental Protection Agency, state environmental agencies, and partners from tribes and other entities. **Dozens of presentations and breakout sessions** are available free on CTIC's website.

NARS is a collaborative program between EPA, states and tribes designed to assess the quality of the nation's coastal waters, lakes and reservoirs, rivers and streams, and wetlands using a statistical survey design. The workshop covered topics relevant to all four waterbody types. The program included an address and Q&A session with John Goodin, director of US EPA's Office of Wetlands, Oceans and Watersheds.

CTIC PROJECTS



CTIC was a partner in the **Bee Integrated Demonstration Project**, led by the Honey Bee Health Coalition and the Keystone Center. Bee Integrated brought together beekeepers and farmers in a holistic approach to honey bee health in agricultural landscapes. In the North Dakota pilot project—centered in the nation’s top honey-producing state—beekeepers and farmers adopted best management practices and opened lines of communication to improve the health of honey bees and other pollinators. In addition to helping coordinate the project, CTIC helped create [reports](#) on the program, [outreach materials](#) to inspire similar efforts in other states, and [spread the word on BMPs](#) like prairie strips and other forms of pollinator habitat.

CTIC continues to tap into our long experience in **training and outreach**, partnering with the U.S. Environmental Protection Agency, the Agricultural Drainage Management Coalition, and others to bring people together to share information on conservation. Especially over the past couple of years, many of those projects were virtual, like the [National Aquatic Resource Surveys National Workshop](#) in April; others, like the summer tour of the Hoosier Chapter of the Soil and Water Conservation Society in Noblesville, Indiana, were held in-person.



We’ve also launched **Conservation Stories**, a spotlight on conservation activities from our partners and friends. The first focused on [native prairie plantings](#) by CTIC member Bamert Seed; stay tuned for our next one highlighting Sand County Foundation’s Land Ethic Mentoring program.

CTIC STAFF



Dr. Dave Gustafson
Interim Executive Director

Dr. Dave Gustafson is an independent scientist, now serving for the second time as CTIC's interim executive director and in various other roles on multiple CTIC projects, drawing upon his experience in predictive modeling and data analysis. He is a past CTIC Board Chair and had agribusiness experience with Monsanto, Rhone-Poulenc and Shell, as well as his current work at the Agriculture & Food Systems Institute and Washington State University. Educated as a chemical engineer, Dave holds a BS from Stanford and a PhD from the University of Washington.



Crystal Hatfield
Operations Director

Crystal Hatfield is responsible for the overall administration of CTIC. Crystal assists the executive director with memberships, sponsorships, and all other day to day operations. Crystal joined CTIC in the fall of 2014.



Callie Cleveland
Communication and Events Director

Callie Cleveland joined the CTIC team in 2019. She is the communications and events director- developing effective messaging and communication strategies to promote CTIC's brand. Callie is a 2016 graduate of Purdue University where she graduated with a degree in animal sciences and agribusiness. She has also worked in the livestock industry and enjoys going to pig shows in her free time with her family. Callie spearheaded the effort to organize and promote this year's 40th Anniversary celebration and Conservation in Action Tour.

CTIC STAFF



Dr. Hans Kok
Senior Project Director

Dr. Hans Kok is Senior Project Director, based out of Indianapolis. Hans was one of the founding members of the Indiana Conservation Cropping Systems Initiative and helped launch the Soil Health Partnership. Dr. Kok received Bachelors in Environmental Science and Masters in Agricultural Engineering degrees from the Agricultural University in The Netherlands, and a PhD in Agricultural Engineering from the University of Idaho. He has written numerous soil and water conservation extension publications, educational materials, and refereed journal articles. Hans was an Extension Specialist for Conservation at Kansas State University, Washington State University, and the University of Idaho.



Sue Tull
Project Director

Sue Tull joined CTIC in 2013. Sue leads multiple projects with a wide range of partners and assists CTIC staff with events, communications and administration. Sue spent most of her career in plant breeding research as a soybean technician and plant pathology lab manager. She has also worked with two Soil and Water Conservation Districts in Indiana, as a district technician and urban conservationist.



Steve Werblow
Communications Director

Steve Werblow has worked with CTIC since the early '90s, helping promote conservation practices across the country. A graduate of Cornell University's College of Agriculture and Life Sciences, Steve is a four-time American Agricultural Editors Association Writer of the Year, award-winning photographer, and self-described "soil hugger." He is based in Ashland, Oregon, and has covered agricultural stories on six continents for a wide range of farm magazines.



CTIC

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Dave Gustafson
Conservation Technology
Information Center

Jeremy Peters
National Association of
Conservation Districts





Join the Movement:
JOIN CTIC!

As a member of CTIC, you'll be connected to a world of people from government, academia, the nonprofit sector, agribusiness, the agriculture and food supply chain, and the farm who are deeply committed to practical, productive conservation farming systems.

Keep the conversation going, stay connected, and help CTIC continue its 40-year role as a trusted source of information on conservation farming practices. A suite of membership levels provides opportunities for individuals, organizations, and companies to get involved.

[Click here to download more details on how you can join CTIC.](#)

Don't forget to share your perspective throughout the tour and tag us!



Conservation.Technology.Information.Center



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