Welcome

As August comes to a close, members of the **Diverse Corn Belt** team are thinking about harvest: a rich harvest of data that has started rolling in from surveys, interviews, focus groups, models and fieldwork for the Diverse Corn Belt program.

After a year of planning and coordination, it is exciting to see data, and equally exciting to see the team members collaborating to begin sharing it with each other and with wider audiences. As a team from more than a dozen institutions and organizations, we realize that we are not only doing research and publishing data, we're breaking down barriers between disciplines and training a new generation of young scientists and educators.

We have gathered insights from nearly 1,000 farmers so far. The information is honest and frank, a look at both opportunities and barriers. Farmers are renowned for their ability to spot opportunities that help them succeed and endure. If our work demonstrates and quantifies that diversification improves resilience and provides a brighter future for Midwest agriculture, I believe farmers are ready to hear it and act on it.

It's not easy—not just because the questions around diversification are huge and the silos we generally work in are firmly in place, but also because we are looking at adaptive change. Changing farms, changing landscapes and changing entrenched systems can be uncomfortable. Change can spark fears of risk and feelings of loss, even if it leads to great success in the end.

In our early data, I see a lot of farmers who have not formed a strong opinion on what constitutes a diversified or not diversified farm. At one level, that indicates that the language around diversification is unclear or still evolving. But at another level, it indicates that there is still a lot of space to work with farmers. There's space to assess the opportunities, break down the silos, figure out how to lower the barriers, and find paths toward a bright future for the Corn Belt.

Enjoy the newsletter and stay in touch as our research continues.

Linda S. Prokopy, Ph.D.
Purdue University
Diverse Corn Belt Project Director

DCB Team Presents At Soil & Water Conservation Society

Members of the Diverse Corn Belt team presented a symposium on the DCB project at the annual conference of the Soil and Water Conservation Society in Des Moines, Iowa, on August 8, 2023. The 90-minute session included an overview by project director Linda Prokopy of

Purdue University, followed by a comparison of diversity on the farm scale vs. the landscape scale by Benjamin Gramig of the USDA-Economic Research Service.

Purdue's Lauren Asprooth presented farmer perspectives on diversification from interviews and focus group data collected during the project's first 18 months. Keith Schilling of the University of Iowa followed with a discussion of the biophysical aspects of on-farm diversification, detailing some of the efforts of the DCB In-Field team on farms across Indiana, Illinois and Iowa.

Finally, Phil Gassman described the Modeling team's approach to studying the potential impacts of various diversification programs and scales.

DCB project manager Emily Usher says the audience was engaged. "The information shared spurred great questions and an interesting discussion about the best ways to communicate our results and findings to a broad audience," she reports.

The researchers also engaged nearly two dozen conference attendees in an additional workshop to help refine an activity focused on different viewpoints about diversity,. This activity will be conducted with participants at upcoming discussions with farmers, advisors, community leaders and other agricultural stakeholders.

Other summer conference travel and presentations included Purdue grad student Katharine Piraval's poster on diversification at the International Food and Agribusiness Management Association/E Tipu: The Boma Ag Summit conference in Christchurch, New Zealand in June and presentations by Rebecca Traldi and Kristin Floress at the International Association for Society and Natural Resources (IASNR) conference in Portland, Maine.

Stay tuned for the results that follow in the coming year!

Keith Schilling spreads the word on the DCB project

"In the future, farms in my region will....": First RAD Team Meets in Fowler, Indiana

The first Diverse Corn Belt RAD Team met in Fowler, Indiana on August 28 for a discussion and visioning session focused on what the Corn Belt could look like in the future.
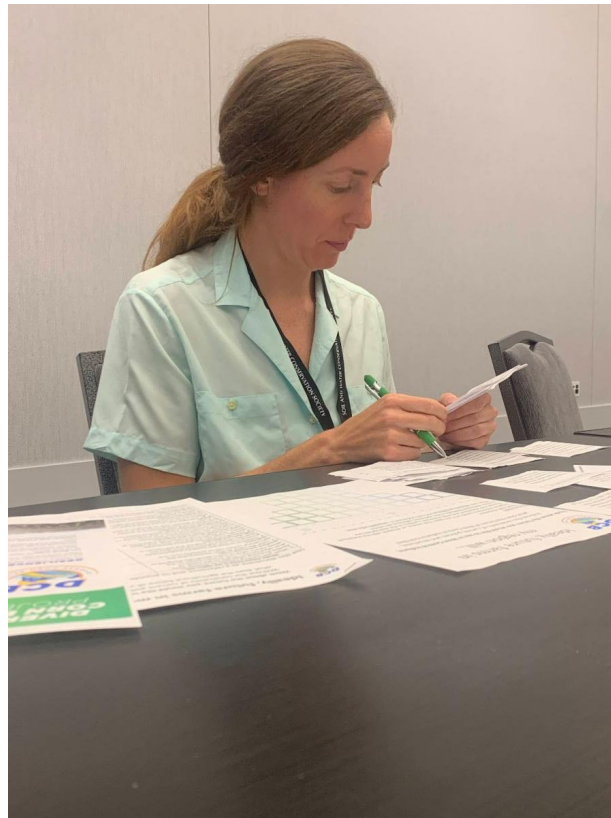
The first RAD Team—which stands for Reimagining Agricultural Diversity—brought together 17 farmers, county commissioners, economic development staffers, crop advisors, extension agents, and non-profit personnel from seven counties around Fowler. Future RAD Teams could

also include supply chain partners, civic leaders and other stakeholders to imagine the future of the Corn Belt with and without diversification.

"The RAD Teams will help us identify opportunities and barriers that affect diversification, understand information gaps at various levels from farm to plate, explore the language around diversification, and guide our modeling efforts through the issues they raise," explains Linda Prokopy, DCB project director at Purdue University.

"The ability to dig deeper in discussion with a wide variety of stakeholders who will meet a couple of times per year for the rest of the project will provide us with a depth and breadth of insight that will complement the focus group, in-field research and modeling elements of the project," Prokopy adds.

At the August meeting, members of the RAD Team sorted through a series of future-looking statements and used them to explore possible pathways to diversification or identify key sticking points. Results from the first session will feed into future meetings of the group and guide other RAD Teams across Indiana, Illinois and Iowa.

Lauren Asprooth of Purdue demonstrates a sorting exercise that will provide perspectives on stakeholders' visions of the future.

DCB All-Team Meeting Pulls Together Insights in Quad Cities

Dozens of members of the Diverse Corn Belt team gathered in Davenport, Iowa, from May 31 to June 2, 2023, to report on progress, exchange ideas and plan future research. The group also met counterparts from the NIFA-funded IMPACT[2] project, which is also exploring diversification in Midwest agriculture.
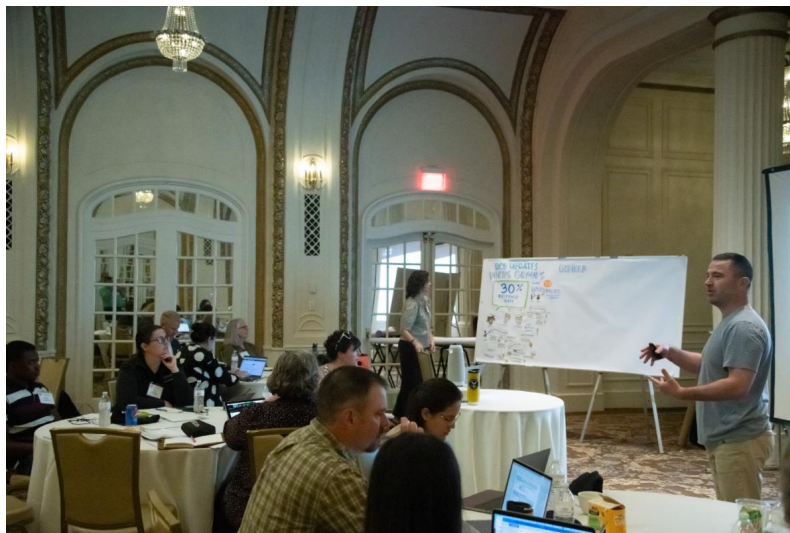
Among the highlights of the meeting:

- A report by Rebecca Traldi on a survey of more than 900 farmers across the Midwest as well as results from 16 focus groups. Data are still being analyzed, but Traldi reported that many diversified farmers are proud of expanding their rotations and see diversification as an important step to supporting the next generation on the farm. Participants also identified capital investment and added management as key barriers to diversifying.

- Lauren Aspooth's report on nearly 40 hours of in-person interviews with diversified farmers, which provided deep insight into how a wide range of farmers implemented diverse systems on their operations and how they addressed challenges along the way.

- A presentation by the In-Field team on research initiated in approximately 80 fields on 30 farms across the Indiana-Illinois-Iowa study region. From field prep to pest control, soil health and crop yields, the In-Field component of DCB will compare diversified and conventional corn/soybean operations for insight into the impacts of diversification on biophysical factors, said Purdue entomologist Ian Kaplan on behalf of the team.

- The Markets team detailed its surveys further down the value chain. At Illinois State University, Aslihan Spaulding and Randy Ackah targeted food processors, while Ariana Torres, Camila Ulloa and Katherine Piraval at Purdue focused on food wholesalers. Data are currently being processed.

- The Education team—Pete Lammers of University of Wisconsin-Platteville, Natalie Hunt from the University of Minnesota, and Purdue's Sarah LaRose and Steve Hallett—unveiled the first, draft education modules based on DCB principles. The team also codified a series of student learning objectives that will guide educators at the secondary and college levels.

- The Modeling team—represented at the presentation by Phil Gassman, Benjamin Gramig of USDA-Economic Research Service, David Mulla of the University of Minnesota and Silvia Secchi of the University of Iowa—zeroed in on the current level of diversity in the three-state study region, setting the stage for further modeling of diverse crop rotations in the future. The group also reported on its environmental effects modeling.

- The Communications team, led by the Conservation Technology Information Center (CTIC) team of Ryan Heiniger, Callie North and Steve Werblow, detailed the tools available to help DCB team members present the project to a wide range of audiences. Tools include Powerpoint slides, handouts, online outreach, and more.

  Dennis Todey, director of the USDA's Midwest Climate Hub in Ames, Iowa, introduced the Integrated Midwest Partnerships for Actionable Climate Tools and Training (IMPACT[2].) program. The $1.5-million program will help farmers in Iowa, Illinois and Indiana assess and address the challenges presented by climate change. Todey highlighted the complementary goals of DCB and IMPACT2 and pointed out that several investigators are participating in both projects.

Participants also rolled up their sleeves and broke into smaller groups for work sessions on the next stages of research. They engaged in exercises in "horizon scanning" to envision future trends, brainstormed on crossover opportunities for data, and planned presentations for audiences at academic, professional and farm conferences.

By the end, the team was energized and ready to hit the field, crunch the numbers, and create the posters that will push DCB to the next level.

Ian Kaplan presented on the work of the DCB In-Field team.

Julia Resch of Stone Soup Creative captures insights from Randy Akah of Illinois State University in an action-packed graphic.

Diversity Spotlight: What is Agroforestry?

A Diverse Corn Belt can take many forms, from integrating livestock into an operation to adding a wider variety of crops to a corn/soybean rotation—which could include permanent crops. Among the permanent crop approaches is agroforestry.

DCB researchers are often asked to define agroforestry. Riparian buffers and windbreaks fall under USDA's description of agroforestry, but the term also describes farming systems like:

- Alley cropping, which uses the space between rows of trees to produce grain, vegetables, fruit, flowers, bioenergy feedstocks or other cash crops. Farmers can use the annual crops to enhance cash flow while the trees mature.

- Forest farming (or multi-story cropping), where food, ornamental, herbs or botanical crops are produced under a forest canopy managed to provide optimum levels of shade.

- Silvopasture, which integrates forage and tree crop production. Trees can be managed for nuts, fruit, fodder or timber as well as shade, which reduces stress on grazing livestock and shelters them from weather.

Learn more at the **USDA Agroforestry Center** website.

Picture From the Field

Entomologist Christine Elliott and tech Alexis Proudman of Purdue gather data for the DCB project in Iowa while trying to avoid accumulating smoke particles from Canadian wildfires in June.

Come See Us!

Learn more about DCB at our booth at the Field to Market/Innovation Center for US Dairy Sustainable Agriculture Summit in Charlotte, NC December 6-7, 2023.

Stay Connected

If you received this newsletter from a friend or colleague, please sign up for our subscription list. We'll keep you up to date on the Diverse Corn Belt project and tell you what we're finding. If you're a subscriber already, please feel free to forward this newsletter to someone you think might enjoy learning about our project.

DCB is all about diverse perspectives and connecting with people throughout the Midwest to help create opportunities for farmers and rural communities, so feel free to share this far and wide.

Got an idea? Want to share your insight or host an in-field research project? Contact project manager Emily Usher or click here to join our contact list.

Get In
Touch