Discovery Farms Summit

January 7-8, 2020
Hilton Minneapolis St Paul Airport

Day 1 January 7

9-10 am registration

10 am: Beginning at the beginning: The start of Discovery Farms
Dennis Frame, Discovery Farms Co-Founder, Joe Bragger, first Discovery Farms farmer participant

In the early 2000s, researchers, policymakers and farmers were grappling with rules and regulations necessary to achieve water quality goals in Wisconsin. To address questions about the impact of agricultural practices on water quality, Wisconsin needed research data from real, working farms. The idea for an on-farm research program was born and is now operational in multiple states across the US. Dennis and Joe will take us back to the beginning of the program and share an inside perspective from the masterminds of the program.

11 am: Funding credible on-farm research
Panelists

- Dairy Farmers of Wisconsin- Brenda Murphy
- MN Corn Growers- Adam Birr
- Wisconsin Cattleman's Association- Terry Quam

Moderator- Warren Formo, Discovery Farms Minnesota

Discovery Farms Programs would not exist without our supporters. This panel of Wisconsin and Minnesota key Discovery Farms funders will share their candid reasons why they started supporting this type of on-farm research. The group will also share the value in continuing to support the programs and how the information produced is used in their messaging to farmers and consumers.

12 pm: Here we are: Data summary from 250 site years of surface runoff data
Tim Radatz, Discovery Farms Minnesota

The day began with our roots, Tim will share how the Discovery Farms tree has branched and where the program still has room to grow. Here's your first chance of the day to get a peek at data from Wisconsin and Minnesota's combined 100+ site years of data from edge-of-field surface runoff on agricultural fields of all varieties.

12:30 pm: Lunch

1:30 pm Breakout sessions
Discovery Farms participants: the farms behind the dataset

- Minnesota, Wisconsin and Arkansas farmer participants
- Moderator- Warren Formo, Discovery Farms Minnesota

These data are collected on-farm, how do they apply to the farm? Hear from farmers that have participated in Discovery Farms research and used the information to make decisions on their farms.

Incorporating Discovery Farms science into best management practices
Using data from real farms makes for more workable and realistic policy

- Sara Walling- DATCP (20 min)

- Runoff Risk Advisory - NWS-Dustin Goering (10 min)
- Laura Ward Good- UW-Madison, Department of Soil Science (10 min)
- Houston Engineering - Drew Kessler (20 min)
- Matt Otto-NRCS-utilizing data for creation of standards (20 min)
- Moderator- Tim Radatz, Discovery Farms Minnesota

On-farm research isn't just important to the farmer, but also those who create tools and policies that are used by agriculture. Data from Discovery Farms have improved models and tools and added more science into policy.

3:00 pm Break

3:15 pm Here we are: Data summary from 100+ site years of tile drainage data
Eric Cooley, Discovery Farms Wisconsin

Even though Discovery Farms started with only surface water monitoring, it quickly became apparent that tile drainage was just as important to understanding agricultural water quality. With monitoring on over 30 farms, the combined Wisconsin and Minnesota dataset gives a new look at the similarities and differences in tile systems.

4:00 pm Breakout Session

Discovery Farms data as a basis for publications and projects

- WI/MN phosphorus data-Matt Ruark- *(25 min)*
- Red River Valley and tile - Jeppe K. MDA *(25 min)*
- Kevin Kuehner/Ron -Root River project, how it interfaced with and shared ideas from DF- (25 min)
- Moderator- Tim Radatz, Discovery Farms Minnesota

The Discovery Farms dataset has tremendous possibility for peer-reviewed publications and to reference in related projects. These examples are sure to spur many more ideas.

Part of the team: Invaluable local and state partnerships

- Local partners (30 min)-our role in DF projects and what we get out of it
    - Dennis Fuchs, Stearns County Soil and Water Conservation District (SWCD)
    - Chuck Bolte, Ag Source
- USGS – Todd Stuntebeck (25 min) - have developed monitoring techniques, provided in kind support
- MDA - Scott/Katie (25 min)
- Moderator- Erica Olson, Discovery Farms Wisconsin

We can't do it alone, and we don't. Discovery Farms maximizes the reach and value of our research together with partners, both local and statewide. From monitoring to community outreach, partners are one of the engines that drive our work.

5:30 pm Adjourn

6:15 pm Dinner

Day 2 January 8

7:30 am Breakfast

8:30 am Breakout sessions

1. Modeling and Monitoring (Todd, Scott and Katie, Laura, Dustin, Drew) Eric/Tim moderate
2. From science to solutions: Applied outreach and farmer leadership

Dive more into the details of Discovery Farms by choosing the modeling and monitoring track or the applied outreach and farmer leadership session. This time allows you to reconnect with Monday's speakers and get all of your questions answered.

9:30 am Branching out: Nitrogen use efficiency and soil health
Abby Augarten, Discovery Farms Wisconsin

Newer projects like Nitrogen use efficiency and soil health augment and expand on the water quality programming and messages for the program. We have added to the Wisconsin and Minnesota knowledge base in these areas and used these data as tools to engage with farmers and make sense of the relationship between these complicated topics and water quality.

10:15 am Break

10:30 am Farmer leadership, credible research, and outreach: Discovery Farms
Amber Radatz, Discovery Farms Wisconsin

The three pillars of Discovery Farms guide and ground our work. We will pull together the lessons from the past two days and lay the groundwork for the future. There are plenty of ways to use this information and approach, and we plan to leave you with the tools to move forward.

11:30 pm Adjourn