

Outcomes Estimation Tools Training Webinar Series

**Featuring:
Field to Market
FieldPrint Platform
(climate)**

Michelle Perez, PhD
Water Initiative
Director

Aysha Tapp Ross
Water & Soil
Health Scientist

Kinzie Reiss
Ag Conservation
Innovations Program &
Communications
Manager

**September 6, 2023
Noon to 1:30 pm eastern**

Agenda



- Welcome, Poll (5 min)
- FieldPrint Platform Presentation (35 min)
- FieldPrint Platform Demonstration (35 min)
- Q&A (15 min)



WALTON FAMILY
FOUNDATION



American Farmland Trust

Zoom Webinar Reminders

- Use Q&A Box - last 15 minutes (Vote up!)
- Use Zoom Direct Message feature to Kinzie if having technical difficulties
- Email with resources to follow each webinar
- Recordings posted on the webinar series site the following Monday
- Evaluation survey in the Chat Box



Time for 3 polls!

Tools in 2023 Trainings*

May 3: Webinar Launch & PCOC (recording)

June 7: Model My Watershed (recording)

July 12: Nutrient Tracking Tool (NTT) (recording)

August 2: NRCS Cover Crop Economics Tool
(economic) (recording)

September 6: FieldPrint Platform

October 4: EPA PLET (water quality)

November 1: PTMApp Web Tool (water quality)

December 6: AFT Retrospective-Soil Health
Economics (R-SHEC) Tool (economic)

Tools in 2024 Trainings*

January 10: SIPES Method/SIDMA Tool (social)

February 7: Fast-GHG (climate)

March 6: Cool Farm Tool (climate)

April 3: TBD

May 1: COMET-Farm & COMET-Planner (climate)

June 5: TBD

July 3: TBD

*Subject to change



Field to Market®

The Fieldprint Platform As an Outcomes Estimation Tool

September 6, 2023

© 2023 Field to Market. All rights reserved.

www.fieldtomarket.org

Speaker Introduction

Eric Coronel, Ph.D.

Director of Science & Research

ecoronel@fieldtomarket.org



Education

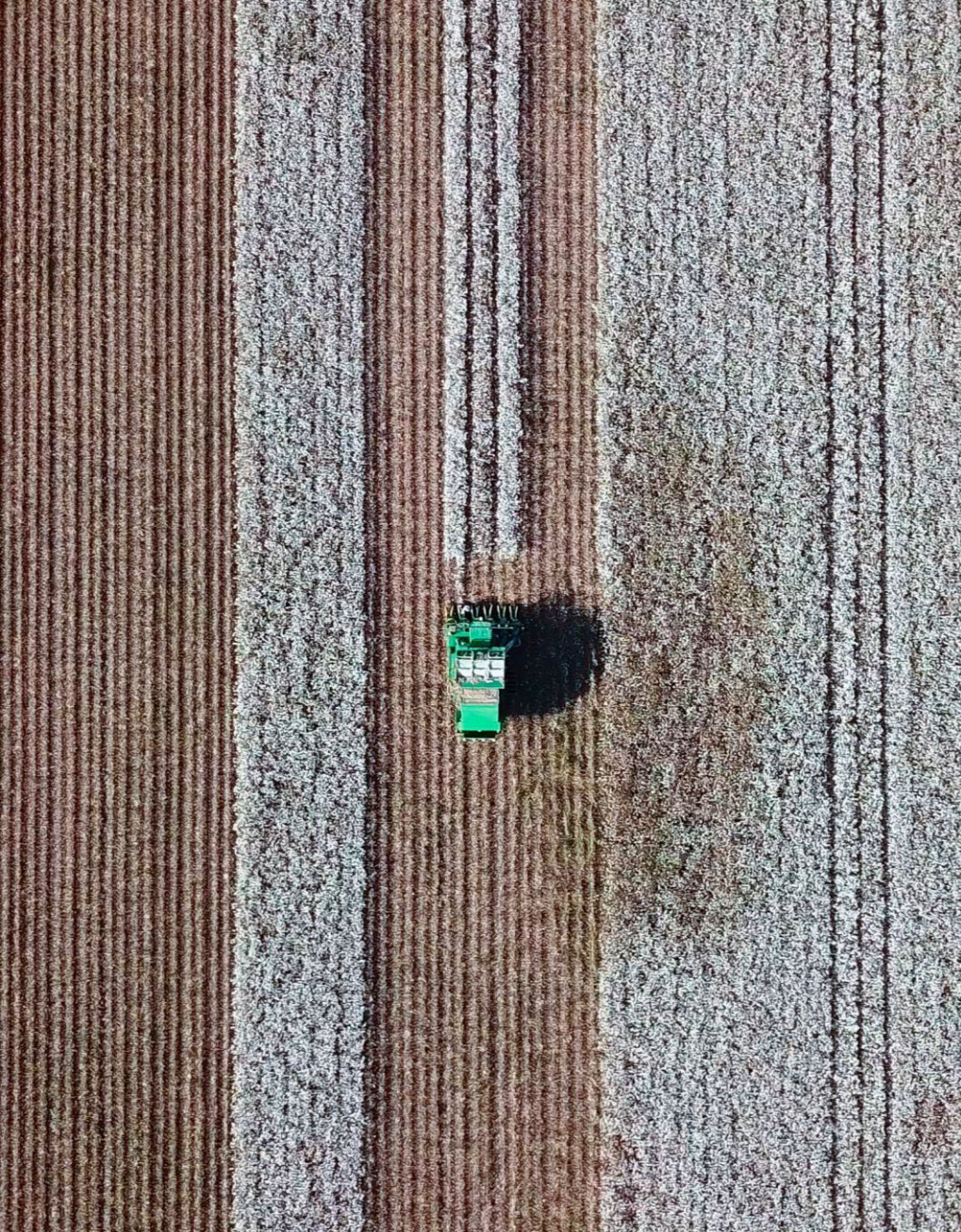
- B.S. & M.S. in Environmental Science
- Ph.D. in Crop Sciences

Areas of Expertise

- Data analysis
- Implementing agricultural models at the field level
- Precision ag
- GHG emissions quantification

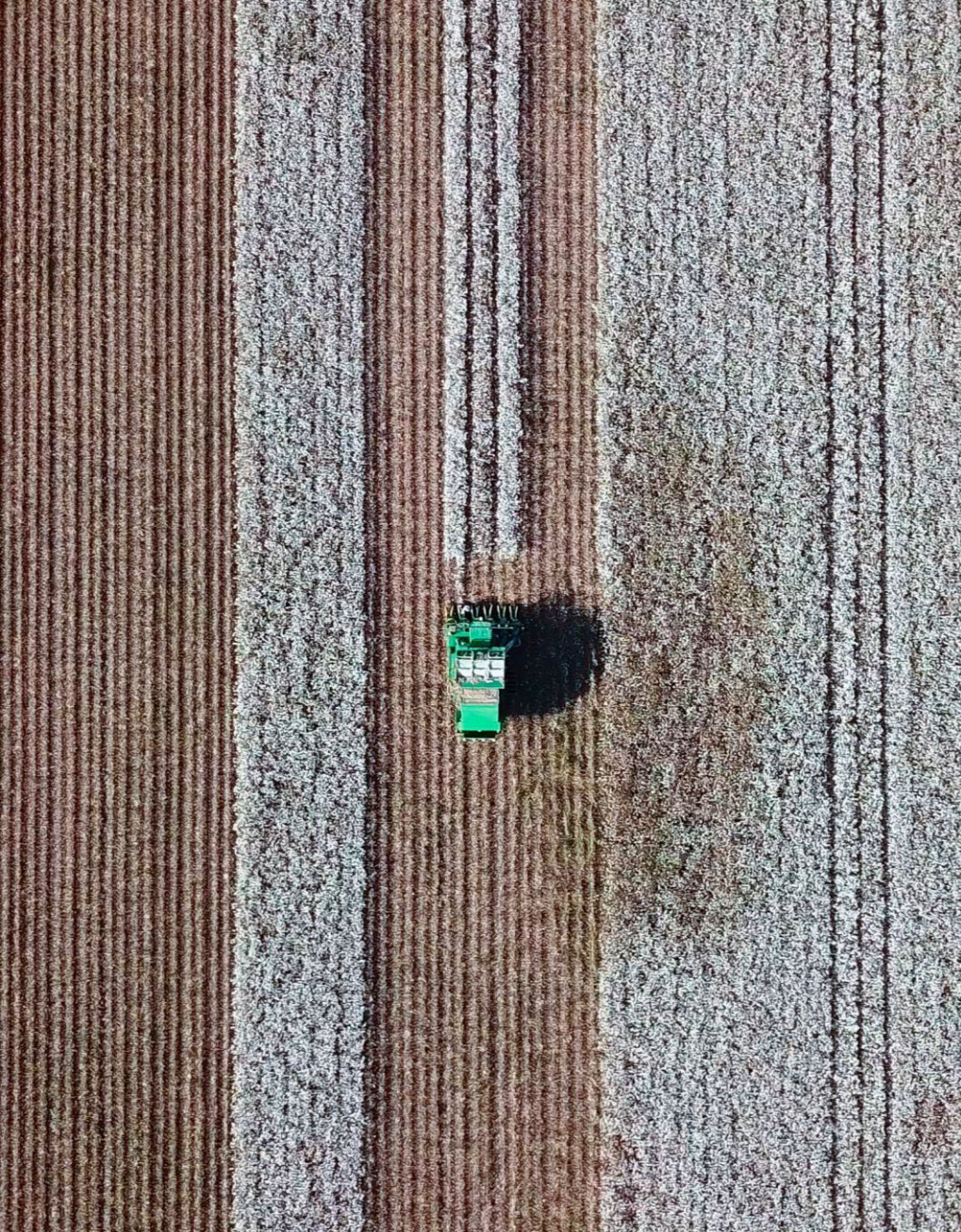
Other positions

- Research agronomist at John Deere Tech Center
- Director of sustainability at the American Peanut Council



FieldPrint Platform Webinar Topics

1. Cover how to complete the field-level questionnaire, which growers can typically answer without consulting their records.
2. Explain how to interpret the scores from the sustainability metrics and how to share the results in a meaningful way.
3. Describe how to engage growers in a credible framework and use the data analysis tools available for project managers.
4. Explain how project managers can use the tool to evaluate and report on project-level outcomes associated with adopting conservation practices by growers in a project.



Agenda

- Climate & Water Quality Tool Snapshot Summary & Strengths & Limitations
- Intro to Field to Market and the Fieldprint Platform
- Learning about the environmental metrics
- Learning about projects
- Demonstrations
- Closing thoughts
- Q&A

Summary

Feature	Fieldprint Platform
Scale & level of specificity	Field level. Users and projects can aggregate outcomes as needed. Several metrics capture location-specific data: weather, soil types and properties, energy grid, field slope and orientation, among others.
Outcomes	Biodiversity (index), Energy Use, GHG Emissions, Irrigation Water Use, Land Use, Soil Carbon (index), Soil Conservation, and Water Quality (index)
Conservation practices	Tillage management, cover crops, crop rotations, irrigation, biodiversity, 30+ CPS (not all conservation practices influence all metrics)
Land uses & production systems	Cropland and grazing (alfalfa only). Twelve commodity row crops.
States & territories	Continental United States
Time, data, skills to generate an outcome estimate	No experience required. Nearly all first-time users can generate an analysis within 20-40 minutes per field. Users can copy inputs among fields. Users need crop rotation information and field boundaries.
Current version	V4
Utilization	In 2022, the Fieldprint Platform analyzed over 500,000 reports from 6,000 growers

Strengths

- Growers can typically enter data inputs from memory and copy inputs across fields with similar management.
- Metrics developed in collaboration with all sectors of the supply chain.
- Quantification estimates at both the field and project scale; aggregation of results across farmers for a project.
- Supply chain actors can readily use data outputs.
- Equivalency with other sustainability organizations such as the Sustainable Agriculture Initiative (SAI) and The Sustainability Consortium (TSC).
- There are nine data partners who have incorporated the Fieldprint Platform into their own systems.

Limitations

- All eight metrics are calculated simultaneously; the Platform cannot calculate one metric separately.
- Entering data for the first time could take from 20 to 30 minutes per field; it gets much easier with practice.
- Though the tool is free and publicly available, organizations must join Field to Market to access all data and project management features.
- Field to Market has rules about communicating of environmental impacts if reported in a public-facing document.
- Three metrics are qualitative rather than quantitative (Biodiversity, Soil Carbon, Water Quality).
- The Platform works in the continental U.S.

A photograph of three people walking away from the camera in a field during sunset. The scene is bathed in a warm, orange glow. The people are silhouetted against the bright sky. The person on the left is wearing a jacket and pants. The person in the middle is wearing a hat and a jacket. The person on the right is wearing a jacket and pants. The field is filled with tall grasses or crops. The sky is a mix of orange and yellow, with some clouds visible.

FIELD TO MARKET

WHO WE ARE

Origins of Field to Market

- Keystone Policy Center convened supply-chain stakeholders in 2006, to ideate what eventually became Field to Market.
- The work started soon after, publishing sustainability reports for row crop commodities, and releasing tools that became the foundation of the Fieldprint Platform.
- We launched as an independent non-profit in 2013. Full-time staff increased to 10 over a few years.

The entire value chain must work together to meet the demand for food, feed, fiber, and fuel in a sustainable and responsible way.

Vision

To harness the collective action of the value chain to support resilient ecosystems and enhance farmer livelihoods

Guiding Principles

- Transparent
- Grounded in science and focused on outcomes
- Open to the range of technology choices
- Committed to creating opportunities for continuous improvements in environmental outcomes

Sustainable Agriculture

Across the agriculture supply chain — from the farm gate to the consumer — we face the challenge of producing enough food, feed, fiber, and fuel for a growing population while conserving natural resources.

Our Definition of Sustainable Agriculture:

Meeting the needs of the present while improving the ability of future generations to meet their own needs.

Regenerative Agriculture

Interest in regenerative agriculture has increased over the past five years. What was initially considered a niche approach to sustainability has taken off with company commitments, marketing campaigns, and a proliferation of definitions within the U.S. and globally.

Our Regenerative Agriculture Principles:

- Minimizing soil disturbance.
- Maintaining living roots in the soil.
- Continuously covering bare soil.
- Maximizing diversity with an emphasis on crops, soil microbes, and pollinators.
- Integrating livestock where it is feasible.

UNITING THE ENTIRE
AGRICULTURAL VALUE CHAIN

FIVE DIVERSE MEMBERSHIP SECTORS



GROWER



CIVIL SOCIETY



AFFILIATE



AGRIBUSINESS



BRANDS & RETAIL



**No membership cost
In-kind contribution**

FIELD TO MARKET

The Fieldprint Platform

A man and a woman are standing in a field, looking at something together. The man is wearing a cap and a plaid shirt, and the woman is wearing a plaid shirt and dark pants. They are both looking down at something in the man's hands. The background is a vast field with rows of crops stretching into the distance under a hazy sky.

Origins of the Fieldprint Platform

- Field to Market released the Fieldprint Platform as a web-based tool in 2009 to estimate environmental outcomes at the field level.
- The Platform serves farmers and stakeholders in the agricultural value chain.
- It provides data collection, metric outputs, analysis, reporting, and project management features.
- The Fieldprint Platform is simple to use, though the technology behind it is complex.

Field to Market

Welcome

Dashboard

Field Library

- Tim Smith's Farm
- Corn & Soy Field
- Add Field
- Justin Knopf's Farm
- Wheat Field
- Add Field
- Glenn Schar's Farms
- Sorghum & Cotton Field
- Add Field
- Adam Rabinowitz's Farm

Crop Rotation Library

Support

Collapse Panel

See our Privacy Policy | Terms of Use

Hi, Guest

Shine a Light on Your Sustainability Story

Across the country, farmers like you harness the power of sustainability metrics from the Fieldprint® Platform to engage the supply chain and consumers on their sustainability story. Discover how this free and confidential tool can help you demonstrate the conservation and stewardship efforts on your farm. Learn how farmers throughout the United States use the Fieldprint Platform to document the sustainability outcomes of their stewardship efforts, pursue continuous improvement and partner with downstream customers in the value chain to advance sustainable agriculture.

Hear from Farmers Like You

All Farmers:

- Tim Smith**
4th Generation Farmer
Eagle Grove, Iowa
Corn & Soy
[View Profile](#)
- Justin Knopf**
5th Generation Farmer
Gypsum, Kansas
Wheat
[View Profile](#)
- Glenn Schar**
4th Generation Farmer
Plainville, Texas
Sorghum & Cotton
[View Profile](#)

www.fieldtomarket.org | www.fieldtomarket.org

Field to Market

Welcome

Dashboard

Field Library

- Tim Smith's Farm
- Corn & Soy Field
- Add Field
- Justin Knopf's Farm
- Wheat Field
- Add Field
- Glenn Schar's Farms
- Sorghum & Cotton Field
- Add Field
- Adam Rabinowitz's Farm

Crop Rotation Library

Support

Collapse Panel

See our Privacy Policy | Terms of Use

Hi, Guest

Corn & Soy Field on Tim Smith's Farm

[View Quick Facts](#)

Fieldprint Spidergram

Fieldprint results are shown on the spidergram as relative indices on a scale of 1-100 that represent your metric scores. The indices are calculated so that smaller values indicate less resource use or environmental impact from your field. This illustration can be used to identify where the greatest opportunities for improvement are for your field, and over time can be used to evaluate progress and trade-offs between different sustainability metrics for your field.

Select Active Year for Data

Active Year: 2018 - Corn (gwin)

Display Benchmarks

State Benchmarks: On Off

National Benchmarks: On Off

Use the buttons indicated to plot the state and national benchmarks relevant for this Fieldprint.

[Fieldprint Report](#)

[Return to Data Input](#)

Benchmarks represent an average based on USDA statistical data for the period 2008-2012 and

www.fieldtomarket.org | www.fieldtomarket.org

User Resources (links in supplementary slides)

- Public documentation of all the metrics.
- Technical support site with step-by-step guides and video tutorials.
- Fact sheets describing each metric and how to improve scores, tailored towards producers and crop advisers.
- Brochure with data input requirements.
- Learning modules available via the American Society of Agronomy's Online Learning Classroom for crop advisers (SPARC Initiative).
- Interactive, web-based data analysis tool (plug-and-play).
- Learning Academy Training and Data Analyst Training (two separate programs) once a year.
- Demonstration data from three growers to explore as a guest user.
- Staff support hours available for members.



Crops



Alfalfa



Barley



Corn for Grain



Corn for Silage



Cotton



Peanuts



Potatoes



Rice



Sorghum



Soybeans



Sugar Beets



Wheat

Sustainability Metrics

Analyzing all metrics at once enables farmers to consider trade-offs across sustainability outcomes:



Biodiversity



Land Use



Energy Use



Soil Conservation



Greenhouse Gas Emissions



Soil Carbon



Irrigated Water Use



Water Quality



Biodiversity: measures the capacity of a farm to support habitats for plants and animals. This could look at things like flooded rice fields that support migrating waterfowl, or edge-of-field areas that allow for wildlife to form habitat. **Unit: index. Note: Likely to be updated in 2024.**



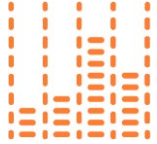
Energy Use: calculates all energy used in the production of one crop in one year, from pre-planting activities to the first point of sale. This means that it considers the embedded energy used to produce seed, fertilizer and chemicals applied to the field. **Unit: BTUs per acre or per yield unit.**



Greenhouse Gas Emissions: calculates the total greenhouse gas emissions from four main sources—energy use, nitrous oxide emissions from soils, methane emissions (from flooded fields), and emissions from residue burning. **Unit: lb GHG_e per acre or per yield unit.**



Irrigated Water Use: accounts for the amount of water used to achieve an increase in crop yield. **Unit: acre-inches per yield improvement.**



Land Use: looks at productivity by accounting for how much land is used to produce a crop. **Unit: Area per yield unit.**



Soil Conservation: measures soil lost to erosion from water and wind, which is shown to a farmer as tons of soil lost per acre (NRCS models: water and wind erosion). **Unit: ton soil loss per acre.**

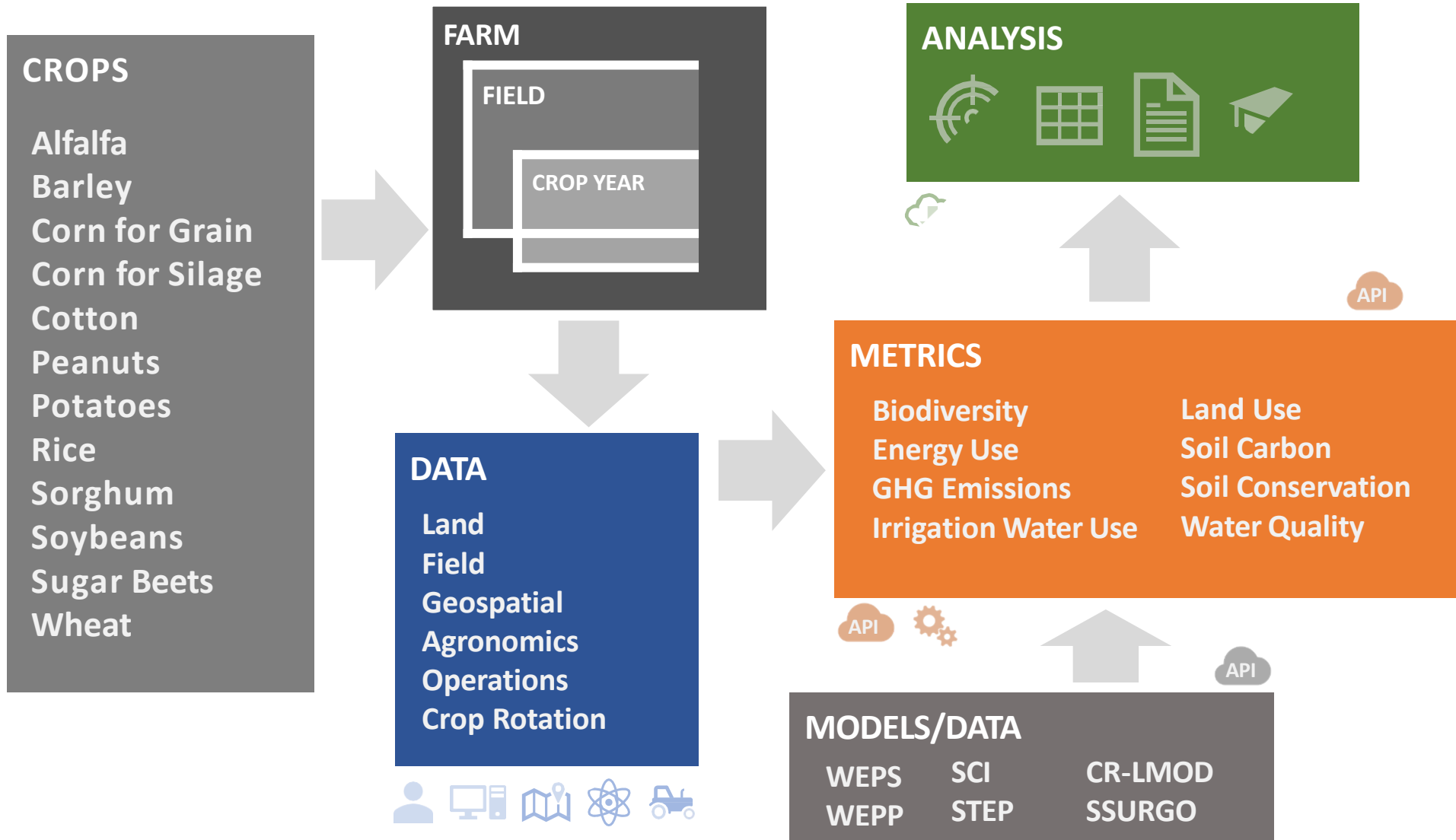


Soil Carbon: utilizes an NRCS tool, the Soil Conditioning Index (SCI), to analyze whether a field is gaining or losing carbon. **Unit: index.**



Water Quality: assesses the risk of nutrient loss on a field and how well some practices mitigate that risk (NRCS tool: STEP). **Unit: index.**

THE FIELDPRINT PLATFORM ENGINE



THE FIELDPRINT PLATFORM



Qualified Data Management Partners





FIELDPRINT PROJECTS

CREATING A ROBUST
SYSTEM OF SUPPORT
TO ENHANCE

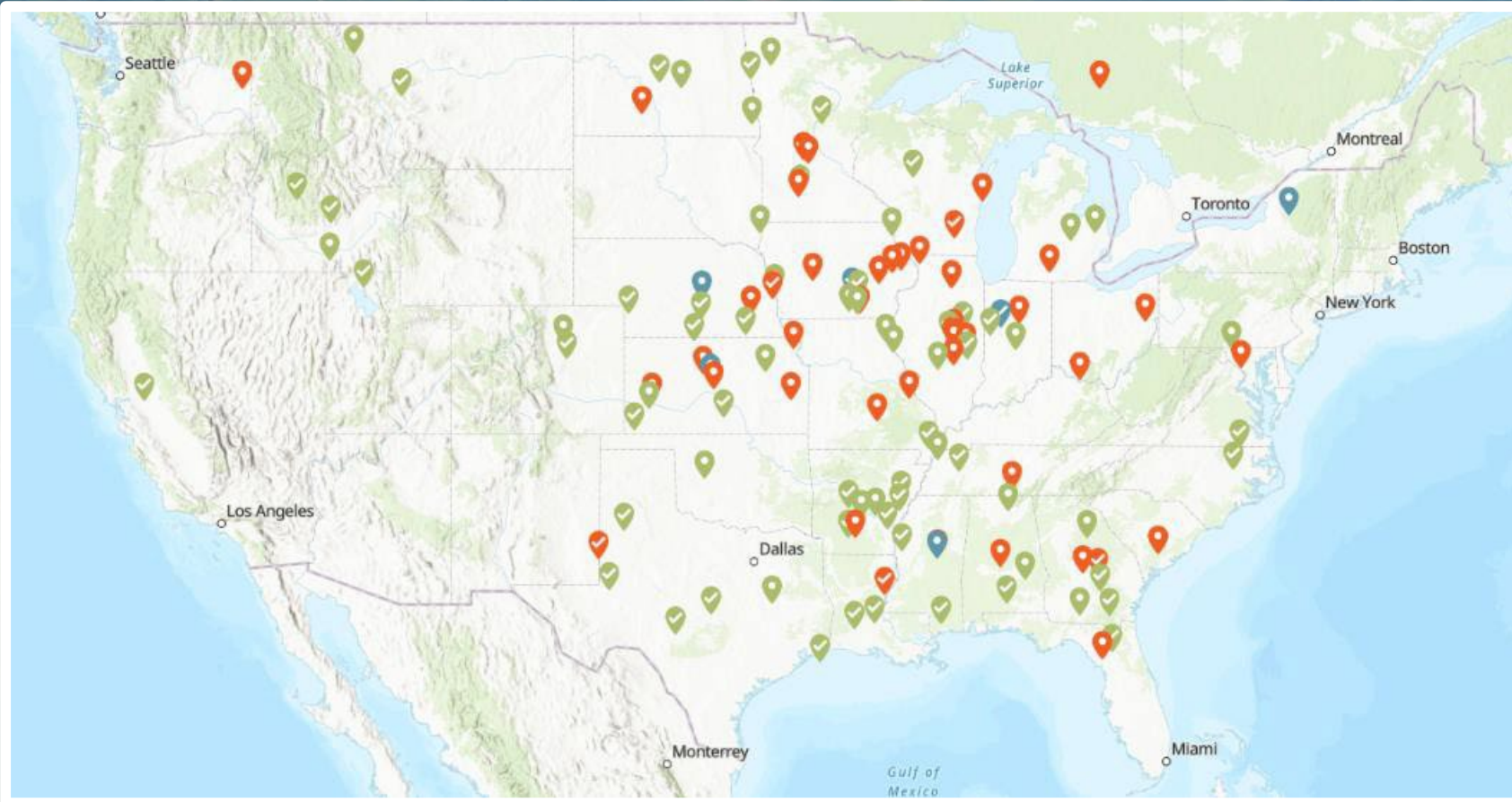
FARMERS + RESILIENT
LIVELIHOODS ECOSYSTEMS

TRANSLATING SCIENCE INTO ACTION

Backed by the industry's leading pre-competitive sustainability measurement framework, Field to Market's **Continuous Improvement Accelerator** supports farmers and organizations in making decisions based on science, enabling the entire value chain to catalyze action across the agricultural landscape.



Implementing Programs at Scale: Fieldprint Projects



- In 2022, partners implemented 60+ projects across 5.4 million acres
- Many organizations and companies pool resources together to increase their impact (even competitors!)

See dashboard: <https://members.fieldtomarket.org/members/projects>



Three Continuous Improvement Project Types



INCUBATION

Creating enabling conditions by engaging with farmers on the connection between practices and at least one sustainability indicator



INSIGHT

Offering sustainability insights for farmers and transparency for value chain partners through measurement



INNOVATION

Provides tangible support for farmers in accelerating adoption of practices that deliver improved sustainability outcomes consistent with public project goals

Five Claim Categories

Credible Communications Backed By Data



PROJECT PARTICIPATION CLAIM

Number of acres and growers



ADOPTION CLAIM

Uptake of a specific practice or intervention



MEASUREMENT CLAIM

One-year snapshot of aggregate environmental outcomes



TRENDS CLAIM

Directional improvement in Field to Market's metrics



IMPACT CLAIM

Sustained Improvement in Field to Market's metrics

EXPLORE YOUR ROLE IN SHAPING PROJECTS FOR IMPACT



GROWERS

Cohorts of
engaged farmers

IMPLEMENTATION PARTNERS

Aggregators & processors
Ag service providers
Conservation districts
Grower organizations
NGOs
University extension

PROJECT SPONSORS

Agribusinesses
Brands and retailers
Grower organizations
NGOs

Why use the Fieldprint Platform? What are the benefits of projects?



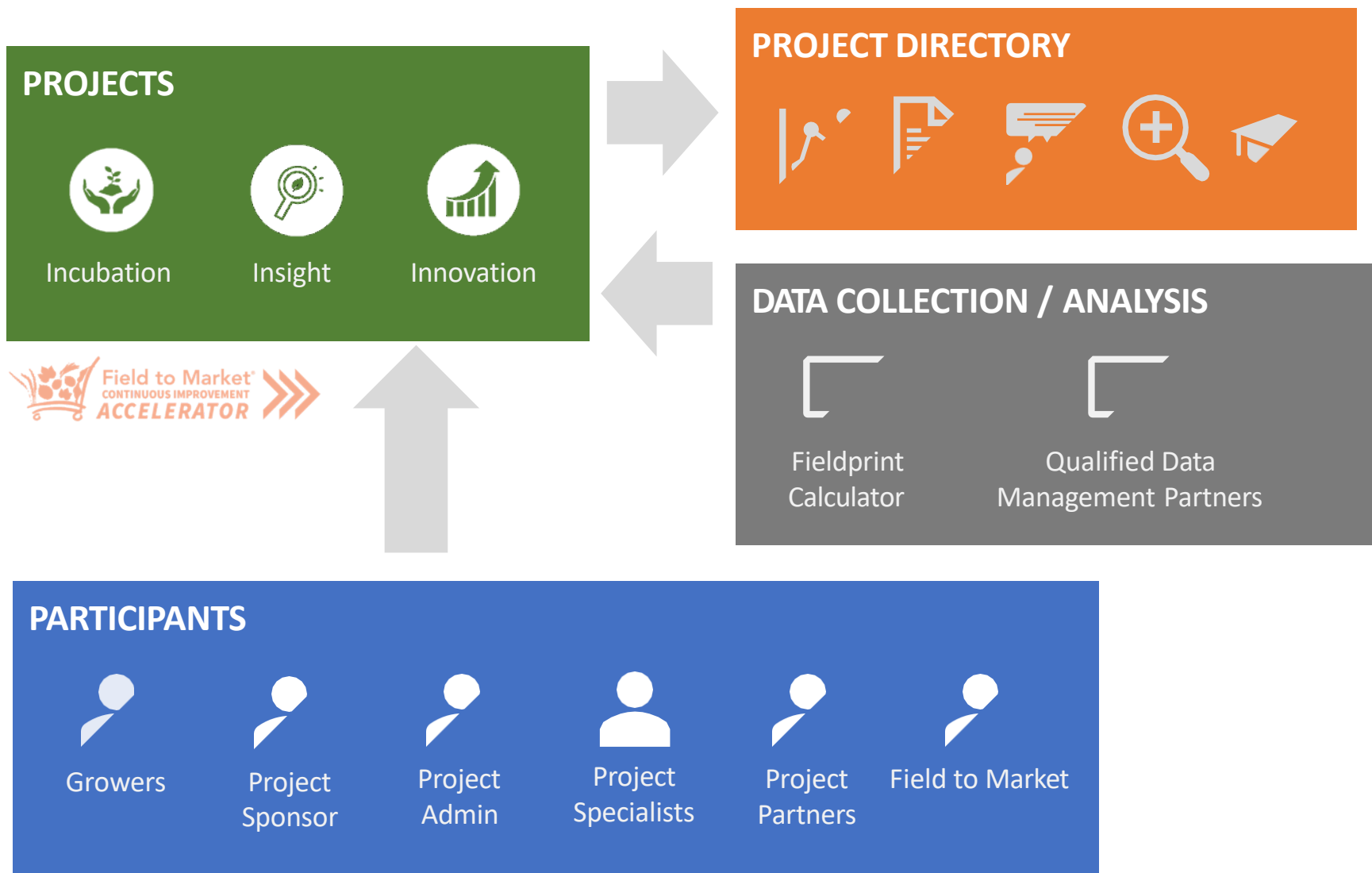
Farmers

- Data for decision support
- Technical Assistance
- Peer-to-peer networks
- Incentives
- Market Access

Project Sponsors & Implementation Partners

- Outcomes reporting
- Supplier-specific emissions factors
- Regenerative ag goals
- Actionable data for interventions
- Research
- Grower relationships

HOW PROJECTS WORK



Continuous Improvement Project

Lafayette Ag Stewardship Alliance

The goal of this project is to improve water quality and soil health in an area of Southwest Wisconsin where a group of conservation-minded farmers are learning together and implementing practices to make a difference. This will be done by engaging farmer members of the Lafayette Ag Stewardship Alliance (LASA) and their partners in utilizing tools and data to increase knowledge and maximize the benefits of on-farm conservation work.

- **Edge Dairy Farmer Cooperative**
- **Houston Engineering**
- **The Nature Conservancy**
- **University of Wisconsin - Madison**

Continuous Improvement Project

Lafayette Ag Stewardship Alliance

The goal of this project is to improve water quality and soil health in an area of Southwest Wisconsin where a group of conservation-minded farmers are learning together and implementing practices to make a difference. This will be done by engaging farmer members of the Lafayette Ag Stewardship Alliance (LASA) and their partners in utilizing tools and data to increase knowledge and maximize the benefits of on-farm conservation work.

- Edge Dairy Farmer Cooperative (growers)
- Houston Engineering (tech partner)
- The Nature Conservancy (education)
- University of Wisconsin – Madison (education)

RECOGNITION

Sustainability Awards

Celebrating growers, advisors, and collaborators





FIELD TO MARKET

DEMONSTRATIONS

Fieldprint Platform Demonstration

<https://calculator.fieldtomarket.org/>

The Fieldprint® Platform is a pioneering assessment framework that empowers brands, retailers, suppliers, and farmers at every stage in their sustainability journey, to measure the environmental impacts of commodity crop production and identify opportunities for continuous improvement.

Project Management Features

- Grower view
- Project admin view

Data Analysis Tool Demonstration

[**https://fieldtomarket.org/QA**](https://fieldtomarket.org/QA)

Field to Market's Quality Analysis (QA) tool will help you identify outliers, find errors, and gain insights about your Continuous Improvement Project



Closing Thoughts

- More than just a tool, Field to Market provides a collaborative ecosystem to measure environmental impact and engage in continuous improvement with the entire agricultural value chain.

Contact Information

Science, Research, and Tech Inquiries

Eric Coronel, ecoronel@fieldtomarket.org

Membership Inquiries

Coralie Pierre, cpierre@fieldtomarket.org

Partnership Inquiries

Kelsey Billings, kbillings@fieldtomarket.org



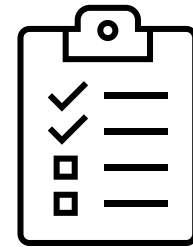
FIELD TO MARKET

Q&A



Next steps in our outcomes estimation journey

- Join October 4 for the EPA PLET webinar
- Fill out the 6-question (2-min) online evaluation survey
- Schedule a free “coaching” session with us
 - Email atappross@farmland.org, RE: Coaching Request
- Order a free print copy of the OET Guide
 - Keyword: “AFT outcomes tools”



*Please keep in touch:
outcomestools@farmland.org*

User Resources (links provided here)

- [Public documentation of all the metrics](#)
- [Technical support site with step-by-step guides and video tutorials](#)
- [Fact sheets describing each metric](#) and how to improve scores, tailored towards producers and crop advisers
- [Brochure with data input requirements](#)
- [Learning modules](#) for crop advisers publicly available (SPARC Initiative)
- [Interactive, web-based data analysis tool](#) (plug-and-play)
- Learning Academy Training and Data Analyst Training (two separate programs) once a year
- [Demonstration data from three growers](#) to explore as a guest user
- Staff support hours available for members

FIELD TO MARKET

Fieldprint Calculator: Grower View Screenshots

Welcome!

The Fieldprint® Platform is a pioneering assessment framework that empowers brands, retailers, suppliers and farmers at every stage in their sustainability journey, to measure the environmental impacts of commodity crop production and identify opportunities for continuous improvement.

Get Started

Use of the Calculator is free and data is kept confidential. Login, register for an account or explore the features as a guest. By Continuing with any of these options, you agree to the [Terms of Use](#).

[Login](#)[Register](#)[Guest](#)




Need Help? Visit the [Support Portal](#) or contact us at support@fieldtomarket.org. Password reset is available from the login page.

Announcements

As of June 2023, Field to Market has achieved Gold Level Equivalence against SAI Platform's new FSA 2.0, which is the highest possible rating. Additional resources related to this Equivalence will be posted

Welcome

Dashboard

Field Library Tim Smith's Farm Justin Knopf's Farm Glenn Schur's Farm Adam Rabinowitz's Farm Demo Farm 

Crop Rotation Library

COMET-Planner 

SCENARIO TOOL

Support

Collapse Panel

Shine a Light on Your Sustainability Story

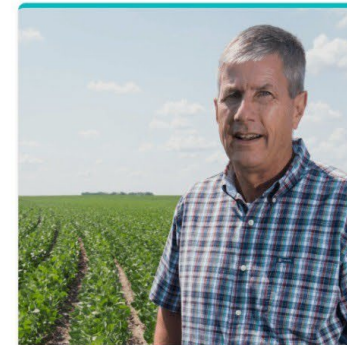
Across the country, farmers like you harness the power of sustainability metrics from the Fieldprint® Platform to engage the supply chain and consumers on their sustainability story. Discover how this free and confidential tool can help you demonstrate the conservation and stewardship efforts on your farm.

Learn how farmers throughout the United States use the Fieldprint Platform to document the sustainability outcomes of their stewardship efforts, pursue continuous improvement and partner with downstream customers in the value chain to advance sustainable agriculture.

Hear from Farmers Like You



All Farmers:

**Tim Smith**

4th Generation Farmer
Eagle Grove, Iowa
Corn & Soy

[View Profile](#) **Justin Knopf**

5th Generation Farmer
Gypsum, Kansas
Wheat

[View Profile](#) 

Welcome!

The Fieldprint® Platform is a pioneering assessment framework that empowers brands, retailers, suppliers and farmers at every stage in their sustainability journey, to measure the environmental impacts of commodity crop production and identify opportunities for continuous improvement.

Get Started












Use of the Calculator is free and data is kept confidential. Login, register for an account or explore the features as a guest. By Continuing with any of these options, you agree to the [Terms of Use](#).

Welcome, Eric!

[Continue to Calculator](#)[Logout](#)




Need Help? Visit the [Support Portal](#) or contact us at support@fieldtomarket.org. Password reset is available from the login page.

Announcements

-  Dashboard
-  Field Library ^
-  Fieldprint Tool - Demo Data v
-  Rice Example Farm - Arkansas v
-  Various Examples v
-  Add Farm
-  Crop Rotation Library
-  Projects
-  COMET-Planner New
SCENARIO TOOL
-  Support
-  Collapse Panel

Dashboard











 View Quick Facts

This page provides a dashboard view of your Farms and Fields. You can view your fields in map view () or in table view (). Click on a map marker () or the field boundary (depending on zoom level) to see additional field details and link to the field dashboard.

Filter by Category

Select View

Farm	Field	Acres	Year ↓	Crop	Project	Finalized*	View
Fieldprint Tool - Demo Data	Bird Field (Mr. Rocky Courson's 2021)	28.0	2023	Peanuts	N/A	No	 
Fieldprint Tool - Demo Data	Peanuts Demo	37.0	2022	Peanuts	N/A	No	 
Fieldprint Tool - Demo Data	Better South	40.0	2022	Peanuts	N/A	No	 
Rice Example Farm - Arkansas	my-example-field-01	193.0	2022	Rice	N/A	No	 
Fieldprint Tool - Demo	Peanuts Demo	37.0	2021	Peanuts	N/A	No	 

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field**
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
- Add Farm
- Crop Rotation Library
- Projects
- COMET-Planner New

Bird Field on Fieldprint Tool - Demo Data

[View Quick Facts](#)

Modify Field Location

Move Field Delete Field

Crop Years

Your Fieldprint Analysis is calculated at the Crop Year level (e.g. 2017 Corn, 2016 Soybeans). Use this page to add Crop Years and then click the edit icon () to enter your Fieldprint Data. When Fieldprint data entry is complete, you can click the analysis icon () to calculate and view your Fieldprint Results. Click the delete icon () to delete a Crop year. Note that deleting a crop year permanently deletes all data associated with the crop year and removes any associations to Projects. Where double cropping is in use, data entered for a Crop Year should be based on the primary cropping system. Production from the secondary crop is not included in the Fieldprint Analysis at this time.

Please visit the new Fieldprint Platform [Support Portal](#) to learn more about the Version 4 Release. Read the [Version 4 Release Overview](#) document to learn about the Version 4 enhancements including the new Water Quality metric. **Version 4.0 introduces changes in overall data inputs at the crop year level.** The [Version 4 Release Overview](#) describes the potential impact to your data and includes a detailed breakdown of input changes.

Add New Crop Year

Options	Year ↓	Crop	In Project?	Last Update	Data Entry Progress	Data Status?
	2023	Peanuts	No	8/26/2023	100% <div style="width: 100%; height: 10px; background-color: #f4a460;"></div>	Provisional
	2021	Peanuts	No	8/26/2023	100% <div style="width: 100%; height: 10px; background-color: #f4a460;"></div>	Provisional

- Dashboard
- Field Library
 - Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
 - Rice Example Farm - Arkansas
 - Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library

Keira - Example on Various Examples

[View Quick Facts](#)

Modify Field Location

Move Field Delete Field

Crop Years

Your Fieldprint Analysis is calculated at the Crop Year level (e.g. 2017 Corn, 2016 Soybeans). Use this page to add Crop Years and then click the edit icon () to enter your Fieldprint Data. When Fieldprint data entry is complete, you can click the analysis icon () to calculate and view your Fieldprint Results. Click the delete icon () to delete a Crop year. Note that deleting a crop year permanently deletes all data associated with the crop year and removes any associations to Projects. Where double cropping is in use, data entered for a Crop Year should be based on the primary cropping system. Production from the secondary crop is not included in the Fieldprint Analysis at this time.

Please visit the new Fieldprint Platform [Support Portal](#) to learn more about the Version 4 Release. Read the [Version 4 Release Overview](#) document to learn about the Version 4 enhancements including the new Water Quality metric. **Version 4.0 introduces changes in overall data inputs at the crop year level.** The [Version 4 Release Overview](#) describes the potential impact to your data and includes a detailed breakdown of input changes.

Add New Crop Year

Options	Year ↓	Crop	In Project?	Last Update	Data Entry Progress	Data Status?
	2021	Corn (grain)	No	5/18/2023	100% <div style="width: 100%; height: 10px; background-color: #f4a460; border-radius: 5px;"></div>	Provisional
	2020	Corn (grain)	No	5/18/2023	100% <div style="width: 100%; height: 10px; background-color: #f4a460; border-radius: 5px;"></div>	Provisional

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
- Add Farm
- Crop Rotation Library

Keira - Example

Various Examples > Keira - Example > Crop Year: 2021 Corn (grain)

FPP ID: 46257

Plantable Acres: 45.0 acre

Farm Serial Number:

Last Updated: 5/18/2023

Location: Clermont County, OH

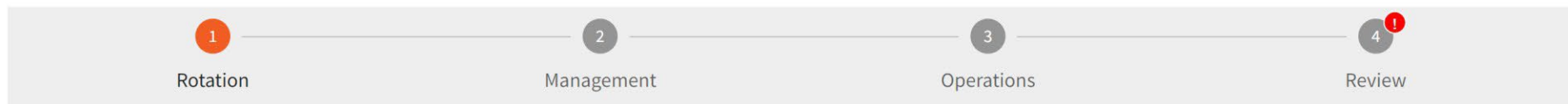
Tract Number:

Last Updated By: ecoronel@fieldtomarket.org

Crop Management Zone: 62

Field Number:

Hide Quick Facts
















Rotation and Residue Practices

Was the previous crop residue burned? ?

Yes No

How would you classify the crop rotation in which this primary crop is grown?

Crop rotation

-  Dashboard
-  Field Library ^
-  Fieldprint Tool - Demo Data ^
-  Better South
-  Bird Field
-  Peanuts Demo
-  Add Field
-  Rice Example Farm - Arkansas
-  Various Examples ^
-  Keira - Example
-  Add Field
-  Add Farm
-  Crop Rotation Library

Do you use a cover crop (planted or naturally established)? 

Yes No

How would you classify the predominant tillage regime used across the entire crop rotation?




15-30% residue (Reduced tillage) 

Select a Crop Rotation System

Please select or build a representative crop rotation system for your crop year. To apply a system, either select a template from the 'Crop Rotation Library' OR click on 'Add New System' below.

This rotation is used to run the models that estimates soil erosion, the soil conditioning index, and the chosen activities are used to estimate energy and GHG emissions and some aspects of the water quality metric - please make it as accurate as possible.

Crop Rotation Library

Use Template	Template Name ↑	NRCS Template Name	Last Updated	View Template
<input type="checkbox"/>	Ohio - Corn / Soybean	corn grain;NT, Soybean, nr, FC, st pt, fcult z4	5/18/2023	
<input type="checkbox"/>	Ohio - Corn / Soybean + Cover Crop	corn grain;NT, Soybean, nr, FC, st pt, fcult z4	5/18/2023	
<input checked="" type="checkbox"/>	Ohio - Corn / Soybean + Winter Wheat	corn grain;NT, Soybean, nr, FC, st pt, fcult z4	5/18/2023	

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
- Better South
- Bird Field
- Peanuts Demo
- Add Field
- Rice Example Farm - Arkansas
- Various Examples
- Keira - Example
- Add Field
- Add Farm
- Crop Rotation Library

Keira - Example

Various Examples > Keira - Example > Crop Year: 2021 Corn (grain)

View Quick Facts



Management Information

Field management practices are collected for a variety metric calculations including energy use, greenhouse gas and water quality. Please answer the questions below.

Is this crop irrigated?

Yes No

Does the field have a feature that would qualify as a wind barrier based on NRCS standards?

Yes No

Tile drainage system characteristics

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
- Better South
- Bird Field
- Peanuts Demo
- Add Field
- Rice Example Farm - Arkansas
- Various Examples
- Keira - Example
- Add Field
- Add Farm
- Crop Rotation Library

Did you apply nitrogen this crop year? ?

Yes No

What was the approximate soil nitrogen carry-over from last season?

lbs/ac ?

If you do not have this information, you can use a default of 50 lbs/ac.

Nutrient management techniques ?

- Nutrient application form - Nitrification inhibitors
- Nutrient application form - Slow or time release nitrogen fertilizers
- Nutrient application form - Urease inhibitors
- Nutrient application rate - Adjust based on cornstalk nitrate test
- Nutrient application rate - Adjust based on fall soil nitrate test (FSNT)
- Nutrient application rate - Adjust based on pre-sidedress nitrogen test (PSNT) or late spring soil nitrate test
- Nutrient application rate - Adjust based on tissue testing
- Nutrient application rate - Nutrient application set-backs
- Nutrient application rate - Precision application

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library

Was any part of this field converted from a use other than cropland within 5 years of the entered crop year? ?

Yes No

Do you practice any season enhancements for wildlife habitat? (select all that apply) ?

Provide foraging habitat Provide breeding and/or nesting habitat

Conservation Practices

Select one or more water conservation practices used that pertain to this field. ?

Search Filter
Start typing to search for a practice.

- Field border
- Filter strip 30 ft min width
- Grassed waterway
- Residue and tillage management, reduced tillage
- Access control

- Dashboard
- Field Library ^
- Fieldprint Tool - Demo Data ^
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples ^
 - Keira - Example
 - Add Field
- Add Farm
- Crop Rotation Library

Operations

The following inputs are related to field operations. Not all field operations in your crop rotation management are required here. Data requested is based on metric input requirements. Commercial Fertilizer and Crop Protectant Applications are organized on a per trip basis. For example, you might have three commercial fertilizer and/or crop protectant trips over the course of a season. In your first application trip, you might apply multiple fertilizers in addition to crop protectants.














Planting ▼Harvesting ▼

Fertilizer and Spraying Operations

+ Add Commercial Fertilizer and Protectant Trip

Commercial Fertilizer and Protectant Trip 1 ▼

+ Add Manure Fertilizer Trip

-  Dashboard
-  Field Library ^
-  Fieldprint Tool - Demo Data ^
 -  Better South
 -  Bird Field
 -  Peanuts Demo
 -  Add Field
-  Rice Example Farm - Arkansas
-  Various Examples ^
 -  Keira - Example
 -  Add Field
 -  Add Farm
-  Crop Rotation Library

protectants.



Planting ^

Seeding rate (range)

30000 - 31999

Seed treatment

Yes No

Save Planting



Harvesting v

Fertilizer and Spraying Operations

 Add Commercial Fertilizer and Protectant Trip



Commercial Fertilizer and Protectant Trip 1 v

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library



Harvesting

Yield

Yield (on a per planted acre basis)

 bushel / acre ?

Did you abandon or not harvest any acres you planted for this year? ?

Yes No

Product

Transportation/Hauling

Distance from field to point of sale (miles)

 miles ?

Did you haul back a load? ?

Yes No

Transportation fuel type

 ?

Drying

Drying system

 ?

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
- Better South
- Bird Field
- Peanuts Demo
- Add Field
- Rice Example Farm - Arkansas
- Various Examples
- Keira - Example
- Add Field
- Add Farm
- Crop Rotation Library



Commercial Fertilizer and Protectant Trip 1

Application timing

Fertilizer application method

Fertilizer applications made during this trip. Add a record for each application.

Fertilizer product type	N	P2O5	K2O
Custom N-P2O5-K2O rate	120.0 lb/ac	40.0 lb/ac	50.0 lb/ac

Add Fertilizer Application +

Spraying Operations

Herbicide(s)

Insecticide(s)

Fungicide(s)

Growth regulator aid(s)

Fumigant aid(s)

Delete Application Trip

Save Application Trip

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library



Commercial Fertilizer and Protectant Trip 1

+ Add Manure Fertilizer Trip



Manure Fertilizer Trip 1

Manure/organic fertilizer form

Solid



Manure/organic fertilizer amount

2,000 - 4,000

lb / acre



Manure/organic fertilizer application timing

Pre-plant (>21 days before planting)



Manure/organic fertilizer application method

Immediate incorporation, banded, or i...



Pounds of nitrogen applied per acre

10

lbs/ac



Pounds of phosphorous applied per acre

6

lbs/ac



Delete Manure Fertilizer

Save Manure Fertilizer Trip

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
- Add Farm
- Crop Rotation Library

1. Confirm Data Status

By default, crop year data status is marked as provisional. When your data is complete and finalized for the year, and you have reviewed the data for accuracy, mark the data as finalized. This is important as only finalized data is included in Project and Field to Market Program analysis and reporting.

Current Data Status: Provisional

[Click to Finalize Your Current Data](#)

2. Calculate Fieldprint Analysis

Now that your data is complete, you can generate your Fieldprint Analysis. You can return at any time to edit the crop year data or change the data status.

[Generate Your Fieldprint Analysis](#)

Other Steps

Return to Field Dashboard

Return to the dashboard for this field to manage other crop years. [Go Now >](#)

Associate Field with a Project

If you are already part of a Project or if you have been invited to join a Project, manage these field associations from the Project page. [Go Now >](#)

When should I finalize my data?

Data should be marked as finalized when the data entered for a crop year is final for year and it has been validated or reviewed for accuracy. The goal is to improve data quality.

What happens when I finalize my data?

Data that is finalized will be included in Field to Market program and Project analysis and reporting. Data marked provision is not included.

Can I revert my data back to provisional status?

You can set data back to provisional if needed. For example, if you realize data inputs need to be changed but the data is not yet available, mark the data provisional. Once completed, you can set the data back to finalized.

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
- Add Farm
- Crop Rotation Library

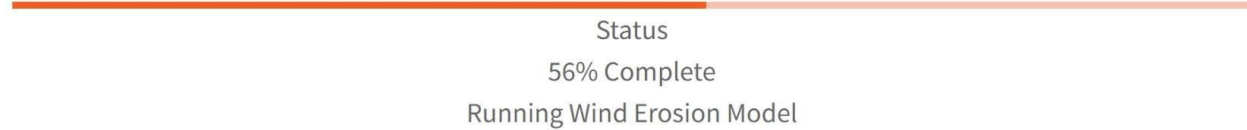
Keira - Example on Various Examples

View Quick Facts


Fieldprint Spidergram

Fieldprint results are shown on the spidergram as relative indices on a scale of 1-100 that represent your metric scores. The indices are calculated so that smaller values indicate less resource use or environmental impact from your field. This illustration can be used to identify where the greatest opportunities for improvement are for your field, and over time can be used to evaluate progress and trade-offs between different sustainability metrics for your field.

We are calculating your Fieldprint Results



Please be patient while your Fieldprint Results are calculated for display. This can take up to several minutes, dependent on your specific inputs and your crop rotation system. If you encounter a connection or timeout error, please select Try Again.

Alternatively, you can leave this page to perform other tasks while results are being calculated in the background. Return to this page by clicking the chart icon () for the crop year from the field library page.

If you experience significant delays or encounter an error message, please contact us at support@fieldtomarket.org

Select Active Year for Data

Active Year
2021 — Corn (grain)

Display Benchmarks

State Benchmarks
Off On

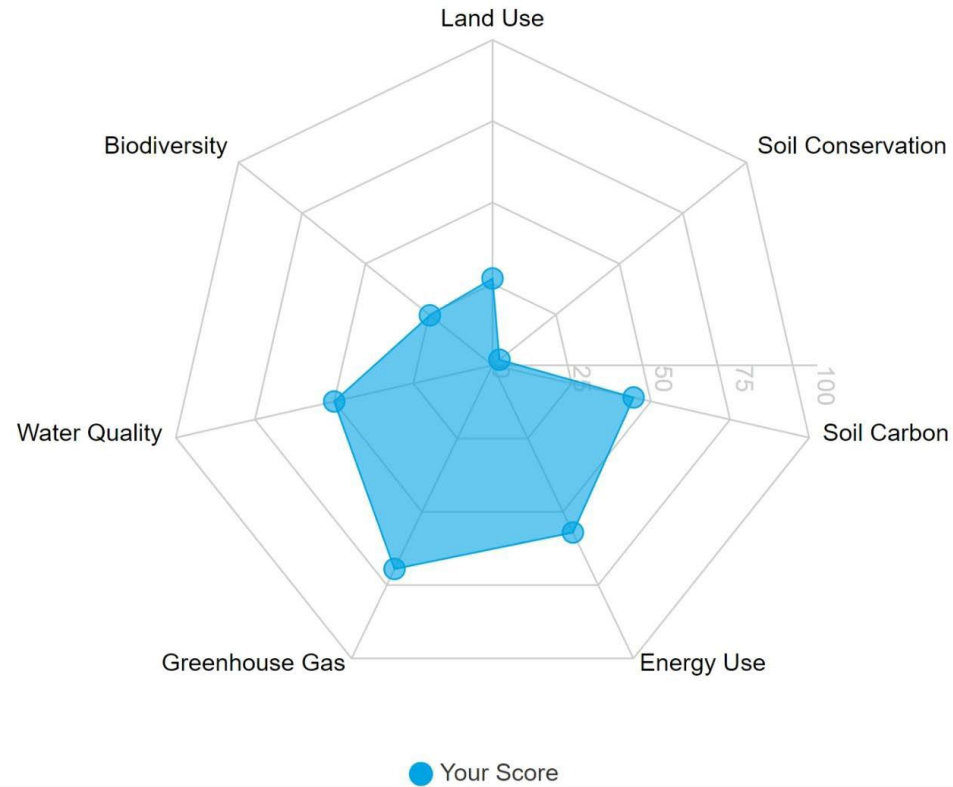
National Benchmarks
Off On

Use the buttons indicated to plot the state and national benchmarks relevant for this Fieldprint.

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library

Fieldprint Spidergram

Fieldprint results are shown on the spidergram as relative indices on a scale of 1-100 that represent your metric scores. The indices are calculated so that smaller values indicate less resource use or environmental impact from your field. This illustration can be used to identify where the greatest opportunities for improvement are for your field, and over time can be used to evaluate progress and trade-offs between different sustainability metrics for your field.



Select Active Year for Data

Active Year

Display Benchmarks

State Benchmarks
 Off On

National Benchmarks
 Off On

Use the buttons indicated to plot the state and national benchmarks relevant for this Fieldprint.

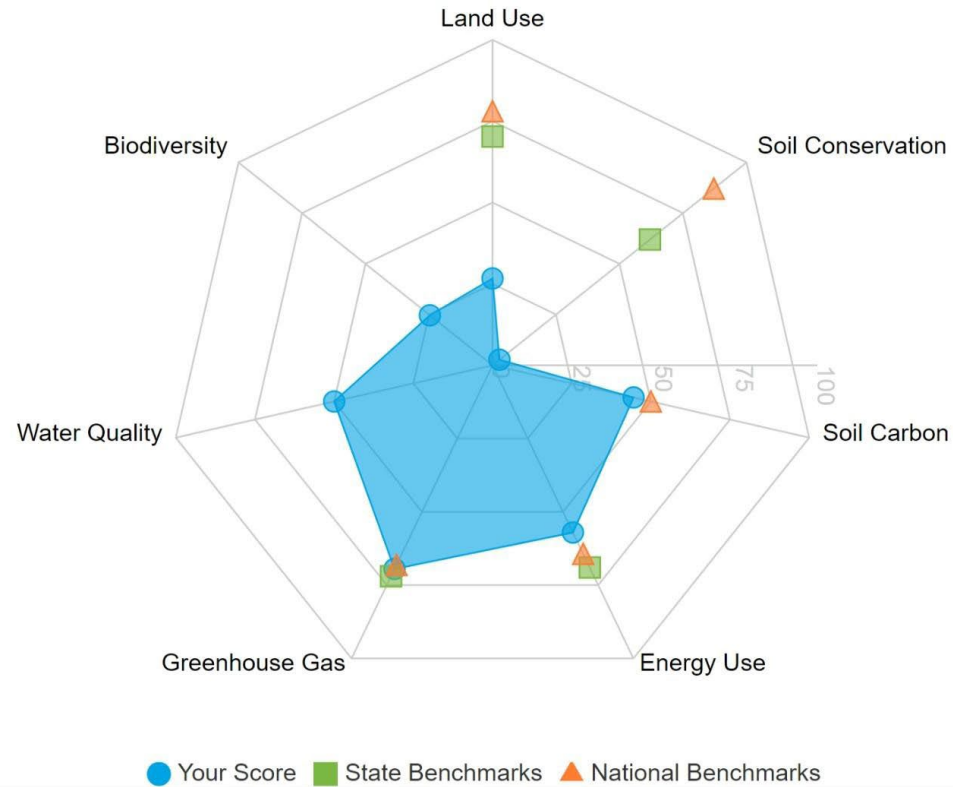
[Fieldprint Report \(PDF\)](#)

[Return to Data Input](#)

- Dashboard
- Field Library
 - Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
 - Rice Example Farm - Arkansas
 - Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library

Fieldprint Spidergram

Fieldprint results are shown on the spidergram as relative indices on a scale of 1-100 that represent your metric scores. The indices are calculated so that smaller values indicate less resource use or environmental impact from your field. This illustration can be used to identify where the greatest opportunities for improvement are for your field, and over time can be used to evaluate progress and trade-offs between different sustainability metrics for your field.



Select Active Year for Data

Active Year
2021 — Corn (grain)

Display Benchmarks

State Benchmarks
Off On

National Benchmarks
Off On

Use the buttons indicated to plot the state and national benchmarks relevant for this Fieldprint.

[Fieldprint Report \(PDF\)](#)

[Return to Data Input](#)

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library

Land Use

The Land Use metric is an efficiency metric that uses a simple equation to account for the planted area used to produce a crop. Land Use is calculated as the simple inverse of user-supplied crop yield. Outcomes are in units of planted land area per unit of production. A lower number indicates greater efficiency.

Land Use

2021 Corn (grain)

0.0056

acre / bushel


Land use efficiency is a measure of the amount of land (acres) used to produce a unit of crop (bushels, pounds, etc.) Examples: In corn, land use is measured in acres/bushel; in cotton as acres/pound of lint. This is an inverse of yield measures, which are expressed as bushels per acre or pounds of lint per acre. Lower scores are desirable and indicate greater land use efficiency.

Score	Result
■ Your Score	0.0056 acre / bushel
■ State Benchmarks	0.0069 acre / bushel
■ National Benchmarks	0.0074 acre / bushel

Land Use score in comparison to available benchmarks. Benchmarks are an average of USDA statistical data for the period 2008-2012, to provide context for your scores. Benchmarks should not be interpreted as a specific level of sustainability, or a performance target. State and National benchmarks that are not shown in the table or on the spidergram are not available for the applicable metric.

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library

 Water Quality

 Biodiversity

The Biodiversity metric is a measure of the potential capacity of the field to support diverse ecosystems. It is an index metric calculated based on both inherent land properties and land management.

Biodiversity

2021 Corn (grain)

Your Total % Realized HPI for your Cultivated Land

75%

Total HPI Score

450

Biodiversity is assessed using the Habitat Potential Index (HPI). HPI scores the potential for a given farm to provide wildlife habitat on land or in the water. HPI scores range from 0-100 and measure the level of opportunity to improve or maximize habitat potential. Higher scores are desirable and indicate a greater potential to support wildlife habitat.

Scores less than 50% represent significant opportunities for improving habitat potential, whereas values of 50-80% indicate moderate realized potential and scores greater than 80% demonstrate farms that have maximized opportunities for biodiversity to flourish.

Your HPI score is **Moderate (50-80%)**; you have opportunities to improve the habitat support on this field.

For all scores, consult the [Fact Sheet](#) and consult with your advisor about specific opportunities to improve your score on this field.

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library

Surface P (Phosphorus), Subsurface P, Surface N (Nitrogen), and Subsurface N. STEP then assigns mitigation points for management practices that impact nutrient loss (a Risk Mitigation Score (RMS)).

Water Quality

2021 Corn (grain)

2 / 4

Pathways Mitigated

The combined STEP metric indicates how many pathways have been mitigated.

Loss Pathway	Field Sensitivity Category	Pathway Ratio (RMS / FSS)	Pathway Mitigation
Surface Phosphorus	Moderate	2.68 (53.5 / 20)	Mitigated
Subsurface Phosphorus	High	0.14 (10 / 70)	Improve
Surface Nitrogen	Moderate	1.81 (63.5 / 35)	Mitigated
Subsurface Nitrogen	High	0.42 (25 / 60)	Improve

The final metric score for each nutrient loss pathway is a ratio of how effective management practices are at mitigating nutrient loss (Risk Mitigation score (RMS)) to how sensitive the field is to nutrient loss based (Field Sensitivity Score (FSS)). If the ratio is 1 or higher, the basic level of risk mitigation for excessive nutrient loss has been met. If the ratio is below 1, excessive nutrient loss is likely, and producers should discuss potential mitigation practices with their advisors.

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library

Energy Use

The Energy Use Metric calculates all energy used in the production of the crop in one year from pre-planting activities through to the first point of sale. It is an efficiency metric, calculated using a series of algorithms and designed to provide feedback on the energy used per unit of crop production.

Energy Use

2021 Corn (grain)
32,465
btu / bushel

The Energy Use metric includes direct energy used for operating equipment, pumping irrigation water, grain drying and transport as well as embedded energy, which is required to produce crop inputs like seeds, fertilizers and crop protectants.

Energy use is expressed as British thermal units (BTU) per unit of crop production (i.e., bushel, pound or hundred weight). It takes one BTU to raise the temperature of one pound of water by 1°F. One gallon of diesel produces 137,452 BTU.

Lower numbers are desirable and indicate less energy used to produce a unit of crop.

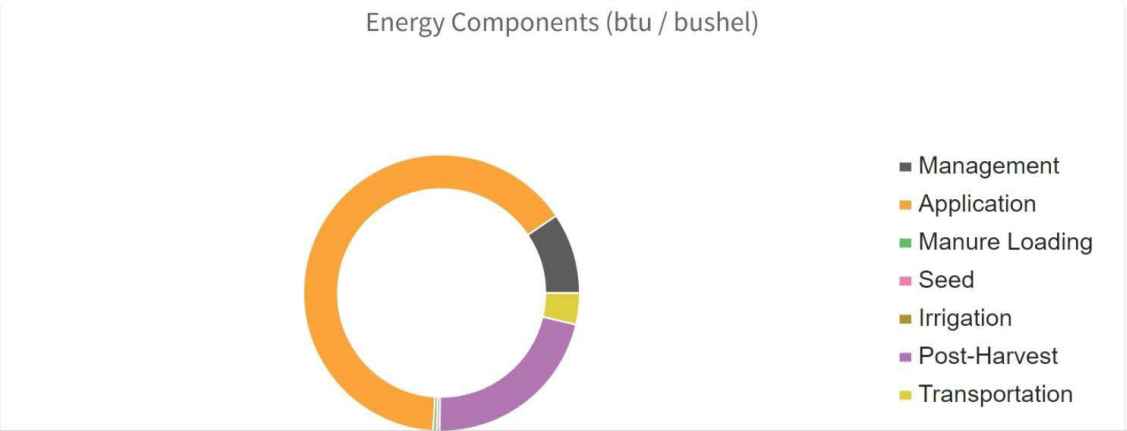
Score	Result
■ Your Score	32,465 btu / bushel
■ State Benchmarks	37,223 btu / bushel
■ National Benchmarks	35,312 btu / bushel

Energy Use score in comparison to available benchmarks. Benchmarks are an average of USDA statistical data for the period 2008-2012, to provide context for your scores. Benchmarks should not be interpreted as a specific level of sustainability, or a performance target. State and National benchmarks that are not shown in the table or on the spidergram are not available for the applicable metric.

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library

Component	(btu / acre)	(btu / bushel)
Management Energy	551,190	3,062
Application Energy	3,774,166	20,968
Manure Loading Energy	24,234	135
Seed Energy	19,872	110
Irrigation Energy	0	0
Post-Harvest Energy	1,259,280	6,996
Transportation Energy	214,898	1,194
Total Energy	5,843,640	32,465

Table showing values for each individual component of your Energy Use score, in both BTU / acre and BTU / bushel.



- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library



Greenhouse Gas

The Greenhouse Gas (GHG) Emissions metric calculates the total emissions from four main sources – energy use, nitrous oxide emissions from soils, methane emissions (rice only) and emissions from residue burning. It is an efficiency metric calculated using a series of complex algorithms to determine the total GHG emissions per unit of crop production.

Greenhouse Gas

2021 Corn (grain)

11.6

lbs-CO₂e / bushel














Greenhouse gas emissions are reported in the Fieldprint® Platform as pounds of carbon dioxide equivalent (CO₂e) per crop unit produced (e.g. bushels or pounds). “CO₂e” simply means the N₂O and CH₄ emissions are converted to the equivalent amount of CO₂, to provide a common unit of all emissions in one measure, which is comparable over time and influenced by all the actions a farmer takes.

The Fieldprint® Platform uses standard U.S. government assumptions regarding fuel use, such as the 22.3 pounds of CO₂e that are emitted per gallon of diesel combusted. Emissions also result from electricity and fuel usage as well as from burning crop residues.

Low scores are desirable and indicate less greenhouse gas emitted per unit of crop produced.

Score	Result
■ Your Score	11.6 lbs_co2e / bushel
■ State Benchmarks	11.9 lbs_co2e / bushel














Greenhouse Gas score in comparison to available benchmarks. Benchmarks are an average of USDA statistical data for the period 2008-2012, to provide context for your scores. Benchmarks should not be interpreted as a specific level of sustainability, or a performance target. State and National benchmarks that are not shown in the table or on the spidergram are not

-  Dashboard
-  Field Library ^
-  Fieldprint Tool - Demo Data ^
 -  Better South
 -  Bird Field
 -  Peanuts Demo
 -  Add Field
-  Rice Example Farm - Arkansas
-  Various Examples ^
 -  Keira - Example
 -  Add Field
 -  Add Farm
-  Crop Rotation Library

Component	GHG Emissions	
	(lbs-CO ₂ e/ac)	(lbs-CO ₂ e/bu)
Emissions associated with energy used on the Farm		
Management Energy Emissions	90.3	0.5
▼ Application Energy Emissions	607.1	3.4
Manure Loading Energy Emissions	4	0
Seed Energy Emissions	5.9	0
Irrigation Energy Emissions	0	0
Post-Harvest Energy Emissions	283.1	1.6
Transportation Energy Emissions	35.2	0.2
Energy Subtotal	1,025.6	5.7
Soil N ₂ O emissions	1,060.2	5.9
Residue burning emissions	0	0
Total GHG Emissions	2,085.8	11.6

Breakdown of Greenhouse Gas Emission components. Values are shown on both a per acre and per bushel basis.

Nitrous oxide emissions from a field are taken from results of a detailed crop model based on crop type, region of the country and soil texture to determine how much N₂O results from additions of nitrogen (N) from fertilizer and manure.

-  **Dashboard**
-  **Field Library** ^
-  **Fieldprint Tool - Demo Data** ^
 -  Better South
 -  Bird Field
 -  Peanuts Demo
 -  Add Field
-  **Rice Example Farm - Arkansas**
-  **Various Examples** ^
 -  Keira - Example
 -  Add Field
 -  Add Farm
-  **Crop Rotation Library**

 **Soil Conservation** ^

The Soil Conservation metric is a measure of soil lost to erosion from water and wind, and is calculated using USDA NRCS models and reported to the user as tons of soil lost per acre. It is an efficiency metric that uses a complex biophysical model to simulate crop growth, water flow across the field, and sediment runoff.




Soil Conservation

2021 Corn (grain)

0.9

ton / acre / year

The Soil Conservation metric is expressed as soil erosion and is measured as tons of soil lost (T) per unit of land area (acre) per year. Lower numbers are desirable and indicate less soil lost from erosion per acre. A Soil Erosion Fieldprint Score of 0 would indicate that no soil was lost in that year.

Score	Result
 Your Score	0.9 ton / acre / year
 State Benchmarks	2.3 ton / acre / year
 National Benchmarks	3.6 ton / acre / year

Soil Conservation score in comparison to available benchmarks. Benchmarks are an average of USDA statistical data for the period 2008-2012, to provide context for your scores. Benchmarks should not be interpreted as a specific level of sustainability, or a performance target. State and National benchmarks that are not shown in the table or on the spidergram are not available for the applicable metric.

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library

Soil Carbon

Soil carbon is important in supporting water infiltration, water and nutrient holding, crop productivity and carbon storage. The Fieldprint Platform utilizes the Soil Conditioning Index (SCI) a qualitative, directional measure of how soil carbon is impacted by the organic matter and crop residue on your field, the soil lost to wind and water erosion, and soil impacting characteristics of your field operations.

Soil Carbon
2021 Corn (grain)
0.11
(Increasing)

The Soil Carbon metric in the Fieldprint Platform® is measured using the NRCS Soil Conditioning Index. The SCI returns a value between -1 and 1 for each field. A positive value indicates increasing soil carbon, a neutral value (between -0.05 and 0.05) indicates maintaining soil carbon, and a negative value indicates depletion of soil carbon. The magnitude of the index reflects confidence in the directionality and does not indicate a higher or lower quantity of carbon in the soil. Scores ranges from +1 to -1 and are unitless, relative, and crop-specific.



The SCI returns a value between -1 and 1 for each field. A positive value indicates increasing soil carbon, a neutral value (between -0.05 and 0.05) indicates

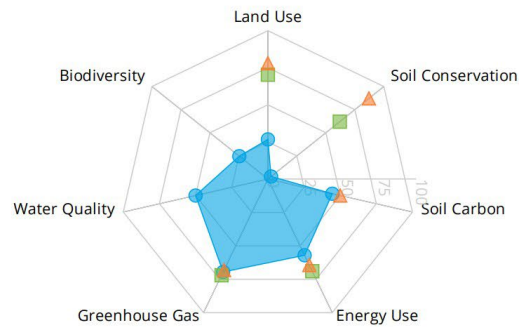


Fieldprint Analysis Report | 2021 Corn (grain)

Grower/Account Name: ecoronel@fieldtomarket.org	Plantable Acres: 45.0 acre
Location: Clermont County, OH	Irrigated: No
Farm/Field: Various Examples / Keira - Example	Platform: Fieldprint Calculator
Crop Year: 2021 Corn (grain)	FPP Version: 4.0
Report Generated: 08/28/2023 01:39 PM	Data Status: Final

Fieldprint Result

Fieldprint results are shown on the spidergram as relative indices on a scale of 1-100 that represent your metric scores. The indices are calculated so that smaller values indicate less resource use or environmental impact from your field. This illustration can be used to identify where the greatest opportunities for improvement are for your field, and over time can be used to evaluate progress and trade-offs between different sustainability metrics for your field.



Metric	Your Result	State Benchmark	National Benchmark
Land Use (acre / bushel)	0.0056	0.0069	0.0074
Soil Conservation (ton / acre / year)	0.9	2.3	3.6
Soil Carbon	0.11	N/A	0
Energy Use (btu / bushel)	32,465	37,223	35,312
Greenhouse Gas (lbs-CO ₂ e / bushel)	11.6	11.9	11.4
Water Quality	2	N/A	N/A
Biodiversity	75%	N/A	N/A

The Water Quality score here indicates how many of the four loss pathways have been mitigated. For more detail on each metric score please refer to the individual metric output. Benchmarks represent an average based on USDA statistical data for the period 2008-2012 and provide context for how your scores relate to this known point. Benchmarks should not be interpreted as a specific level of sustainability, or a performance target. State and National benchmarks that are not shown in the table or on the spidergram are not available for the applicable metric.

- Dashboard
- Field Library
- Fieldprint Tool - Demo Data
 - Better South
 - Bird Field
 - Peanuts Demo
 - Add Field
- Rice Example Farm - Arkansas
- Various Examples
 - Keira - Example
 - Add Field
 - Add Farm
- Crop Rotation Library

Export Data

Data Export














Use the data export function to download your input data and Fieldprint Results in a single spreadsheet. This can be useful to store, transfer or evaluate your data across all fields. Filter the report using the filters below. Once you request the report, the Platform will send an email with a link to download the file.

The current Metric Version is 4.0.

Partnering with Field to Market and USDA National Resource Conservation Service (NRCS) in Conservation Planning

Your downloaded data can be used by conservation planners as input to tools like NRCS Conservation Application Ranking Tool (CART), for faster evaluation and assessment. Check all data export options including the option to download your boundary files and the Fieldprint Platform to CART Data Crosswalk. Your data will come in a compressed file format (.zip) and can be emailed or uploaded to [Farmers.gov](https://farmers.gov). Learn more by downloading the [Field to Market NRCS Interoperability Project Handout](#).

Farm ↑	Field	Year	Crop	Data Status	Metric Status	Metric Version	Project	Select
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
Fieldprint Tool - Demo Data	Peanuts Demo	2015	Peanuts	Provisional	Calculated	4.0		<input type="checkbox"/>
Fieldprint Tool - Demo Data	Peanuts Demo	2021	Peanuts	Provisional	Calculated	4.0		<input type="checkbox"/>

-  Dashboard
-  Field Library ^
-  Fieldprint Tool - Demo Data ^
 -  Better South
 -  Bird Field
 -  Peanuts Demo
 -  Add Field
-  Rice Example Farm - Arkansas
-  Various Examples ^
 -  Keira - Example
 -  Add Field
 -  Add Farm
-  Crop Rotation Library

Fieldprint Tool - Demo Data	Better South	2020	Peanuts	Provisional	Calculated	4.0	<input type="checkbox"/>
Fieldprint Tool - Demo Data	Better South	2021	Peanuts	Provisional	Calculated	4.0	<input type="checkbox"/>
Fieldprint Tool - Demo Data	Better South	2022	Peanuts	Provisional	Calculated	4.0	<input type="checkbox"/>
Various Examples	Keira - Example	2019	Corn (grain)	Provisional	Calculated	4.0	<input checked="" type="checkbox"/>
Various Examples	Keira - Example	2020	Corn (grain)	Provisional	Calculated	4.0	<input checked="" type="checkbox"/>

Rows per page: 10 ▾ 1-10 of 12 |< < > >|












Select Data Export Options

-  Comprehensive Data Output File
-  Fieldprint Analysis Reports
-  Field Boundaries
-  CART Data Crosswalk for Fieldprint Platform Data

Request Report




FIELD TO MARKET

Project Management Screenshots: Grower View

-  Dashboard
-  Field Library ^
-  Demo Farm 06 ^
-  Field 06
-  Add Field
-  Add Farm
-  Crop Rotation Library
-  Projects
-  **COMET-Planner** New
SCENARIO TOOL
-  Support
-  Collapse Panel

Dashboard

 View Quick Facts







This page provides a dashboard view of your Farms and Fields. You can view your fields in map view () or in table view (). Click on a map marker () or the field boundary (depending on zoom level) to see additional field details and link to the field dashboard.

Filter by Category












Farm Field Crop Year

Select View

Farm	Field	Acres	Year ↓	Crop	Project	Finalized*	View
Demo Farm 06	Field 06	286.07	2021	Alfalfa	Demo Project on Test	Yes	 
Demo Farm 06	Field 06	286.07	2020	Corn (grain)	Demo Project on Test	Yes	 
Demo Farm 06	Field 06	286.07	2019	Soybeans	Demo Project on Test	Yes	 

* Fieldprint Data in the Platform has two states - provisional and finalized. Until a Field is finalized (options available on the Analysis page for a given field), data is provisional and changes can be made. Once finalized, Fieldprint Data can be reported. You should finalize a Field once all data has been entered, finalized, and validated.




-  Dashboard
-  Field Library ^
-  Demo Farm 06 ^
-  Field 06
-  Add Field
-  Add Farm
-  Crop Rotation Library
-  Projects
-  COMET-Planner New
SCENARIO TOOL
-  Support
-  Collapse Panel

 View Quick Facts


 Modify Field Location






 Move Field  Delete Field












Crop Years

Your Fieldprint Analysis is calculated at the Crop Year level (e.g. 2017 Corn, 2016 Soybeans). Use this page to add Crop Years and then click the edit icon () to enter your Fieldprint Data. When Fieldprint data entry is complete, you can click the analysis icon () to calculate and view your Fieldprint Results. Click the delete icon () to delete a Crop year. Note that deleting a crop year permanently deletes all data associated with the crop year and removes any associations to Projects. Where double cropping is in use, data entered for a Crop Year should be based on the primary cropping system. Production from the secondary crop is not included in the Fieldprint Analysis at this time.

Please visit the new Fieldprint Platform [Support Portal](#) to learn more about the Version 4 Release. Read the [Version 4 Release Overview](#) document to learn about the Version 4 enhancements including the new Water Quality metric. **Version 4.0 introduces changes in overall data inputs at the crop year level.** The [Version 4 Release Overview](#) describes the potential impact to your data and includes a detailed breakdown of input changes.

 Add New Crop Year

Options	Year ↓	Crop	In Project?	Last Update	Data Entry Progress	Data Status?
  	2021	Alfalfa	Yes	8/24/2023	100% <div style="width: 100%; height: 10px; background-color: #f4a460; border-radius: 5px;"></div>	Final
  	2020	Corn (grain)	Yes	8/24/2023	100% <div style="width: 100%; height: 10px; background-color: #f4a460; border-radius: 5px;"></div>	Final
  	2019	Soybeans	Yes	8/24/2023	100% <div style="width: 100%; height: 10px; background-color: #f4a460; border-radius: 5px;"></div>	Final

-  Dashboard
-  Field Library ^
-  Demo Farm 06 ^
-  Field 06
-  Add Field
-  Add Farm
-  Crop Rotation Library
-  Projects
-  COMET-Planner New
SCENARIO TOOL
-  Support
-  Collapse Panel

Projects

Launched in 2019, our [Continuous Improvement Accelerator](#) harnesses the power of collaboration across the agricultural value chain to implement locally-led conservation solutions and deliver sustainable outcomes through member-led continuous improvement projects. Our Continuous Improvement Accelerator enables our member organizations to design and implement projects in one of three Project Pathways, allowing for maximum flexibility and impact in delivering sustainable outcomes.




Incubation: Creates enabling conditions to advance sustainable agriculture by helping farmers connect farming practices to sustainability outcome(s) through outreach and education.












Insight: Offers farmers actionable sustainability insights and improves transparency on sustainability performance for the value chain through measurement.

Innovation: Supports farmers in accelerating adoption of practices that deliver improved sustainability outcomes through value-added incentives and quantifying impact.

Projects

Opt-In to New Project 

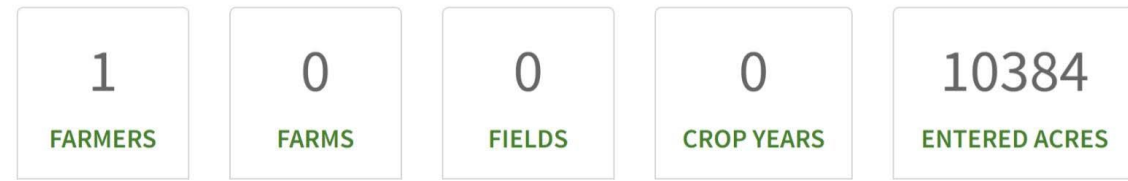
Project 	Sponsor	Crops Analyzed	Fields Assoc.	Acres Assoc.	Active?	Actions
Demo Project on Test	Field to Market	Alfalfa, Corn (grain), Rice, Soybeans, Sugar beets, Wheat (durum), Wheat (spring), Wheat (winter)	60	10384.13	Yes	 

-  Dashboard
-  Field Library ^
-  Demo Farm 06 ^
-  Field 06
-  Add Field
-  Add Farm
-  Crop Rotation Library
-  Projects
-  COMET-Planner New
SCENARIO TOOL
-  Support
-  Collapse Panel

Demo Project on Test

[Project Dashboard](#) > [Demo Project on Test](#)

Project Type: Supply Chain **Crops Analyzed:** Alfalfa, Corn (grain), Rice, Soybeans, Sugar beets, Wheat (durum), Wheat (spring), Wheat (winter)















This page helps you manage fields associated with a specific Project. The table below shows existing associations and you have the option to associate additional fields.

Project Team

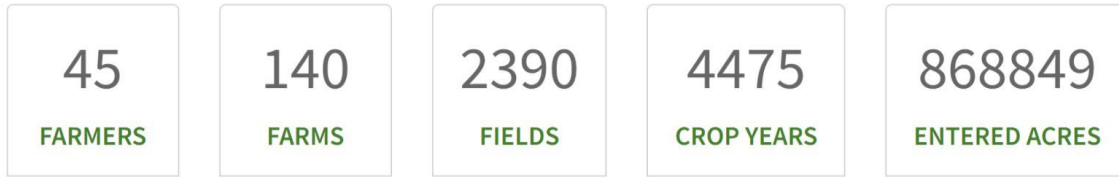
Organization ↑	Organization Role	Representative	Representative Role
Field to Market	Project Sponsor	Demo 09 Demo 09	Project Administrator
Field to Market	Project Sponsor	Paul Hishmeh	Project Administrator
Field to Market	Project Sponsor	FTM Project Admin FTM Project Admin	Project Administrator

FIELD TO MARKET













Project Management Screenshots: Admin View

-  Dashboard
-  Field Library 
-  Demo 
-  Add Farm
-  Crop Rotation Library
-  Projects 
-  **COMET-Planner** New
SCENARIO TOOL
-  Support
-  Collapse Panel

Project Type: Insight **Crops Analyzed:** Corn (grain), Soybeans, Wheat (durum)












- Project Participants 
- Manage Project Data 
- Project Statistics 
- Project Overview 
- Project Crop Management Systems 

-  Dashboard
-  Field Library 
-  Demo 
-  Add Farm
-  Crop Rotation Library
-  Projects 
-  **COMET-Planner** New
SCENARIO TOOL
-  Support
-  Collapse Panel

45 FARMERS	140 FARMS	2390 FIELDS	4475 CROP YEARS	868849 ENTERED ACRES
----------------------	---------------------	-----------------------	---------------------------	--------------------------------

- Project Participants 
- Manage Project Data 
- Project Statistics 
- Project Overview 
- Project Crop Management Systems 
- Field Crop-year Associations 

-  Dashboard
-  Field Library ^
-  Demo ∨
-  Add Farm
-  Crop Rotation Library
-  Projects ∨
-  **COMET-Planner** New
SCENARIO TOOL
-  Support
-  Collapse Panel

Project Statistics ^

Note that these totals can change as farmers associate and dissociate fields from the project. Provisional data is included in this table.

 [Copy to Clipboard](#)

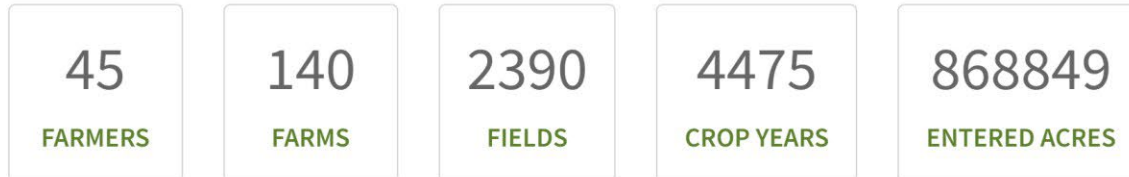
Year ↑	Crop	Total Unique Farmers	Total Unique Farms	Total Unique Fields	Total Entered Acres (all fields)	Total Managed Acres (all farms)	Total Enrolled Acres*
2017	Corn (grain)	20	22	726	157,632.21	277,225.68	160,799.43
2017	Wheat (winter)	1	1	1	117.96	400.00	400.00
2018	Soybeans	41	117	1130	168,933.85	134,643.72	191,546.34
2018	Corn (grain)	43	112	1142	194,816.08	179,993.42	214,507.30
2018	Wheat (winter)	2	3	22	1,592.98	2,058.00	2,123.99
2019	Soybeans	5	8	17	2,569.99	3,423.00	4,036.41
2019	Corn (grain)	4	7	22	3,003.41	16,509.00	5,189.03

Rows per page: 10 ∨ 11-17 of 17 |< < > >|

Value for enrolled acres at the project level is the total of a) the sum of the entered acres for each farmer with less than 10% of their managed acres entered and b) the sum of the stated managed acres for each farmer with more than 10% of their managed acres entered. The total managed acres for a crop for a particular year is entered by farmers.

- Dashboard
- Field Library
- Demo
- Add Farm
- Crop Rotation Library
- Projects
- COMET-Planner New
SCENARIO TOOL
- Support
- Collapse Panel

Project Type: Insight Crops Analyzed: Corn (grain), Soybeans, Wheat (durum)



Reports

- Participation Data Output File
- Comprehensive Data Output File
- Project Stats Report
- Project Overview Report
- Project Fields Shapefile
- Project Benchmarks
- TSC Reporting
- SAI Platform's FSA Equivalency

and crop years for which Results have not been computed are excluded from reports.

will queue the report. When processing is complete, the system will generate an email with a download link. This can take from depending on the number of fields, crops and years and required computation time.

FIELD TO MARKET

QA Tool Screenshots

Welcome Field to Market Project Admins and Specialists

Field to Market's Quality Analysis (QA) tool will help you identify outliers, find errors, and gain insights about your Continuous Improvement Project

[Learn more by watching a video tutorial](#)

Upload a Comprehensive Data Output File to Get Started

Browse... No file selected

[Click here to load demonstration data](#)

Data Upload Status

No data have been uploaded

Website Last Updated On

December 02 2021

Documentation and FAQs

[Download PDF](#)

Website Developer Information

[Paul Hishmeh](#) - Data and Technology Director

Welcome Field to Market Project Admins and Specialists

Field to Market's Quality Analysis (QA) tool will help you identify outliers, find errors, and gain insights about your Continuous Improvement Project

[Learn more by watching a video tutorial](#)

Upload a Comprehensive Data Output File to Get Started

Browse...

No file selected

[Click here to load demonstration data](#)

Data Upload Status

The data for Demonstration Project are ready for review

Website Last Updated On

December 02 2021

Documentation and FAQs

[Download PDF](#)

Website Developer Information

[Paul Hishmeh](#) - Data and Technology Director

Return here at any time to include or filter out data by Crop, Crop Year, and/or Field Name. The Field Name shown here is a combination of Crop Year, Grower ID, and Field Name to avoid issues with duplication. By default, all project data are included from the start. When Crops and/or Crop Years are included or filtered out, the list of Field Names and the table with Crop Year counts will update accordingly. The website will fail if all items for Crop, Crop Year, or Field Name are filtered out. The data filtering only applies to the current website session and it does not modify the uploaded Comprehensive Data Output File.

Count of Crop Years by Crop and Season

Crop	2006	2007	2008	2009	2010
Corn (grain)	11	10	6	12	4
Cotton	28	19	22	4	4

Deselect Crop(s) to Filter Out

- Corn (grain)
- Cotton

Deselect Crop Year(s) to Filter Out

- 2006
- 2007
- 2008
- 2009
- 2010

Deselect Field(s) to Filter Out

- 2006 1168 3f612e6d
- 2006 294 1c07ec30
- 2006 294 a9120d29
- 2006 295 079c7fe8
- 2006 295 81080d46
- 2006 297 77acad54
- 2006 297 9275ec4f
- 2006 298 22a432e3
- 2006 298 d3f28036

Use this map to check field locations and boundaries to identify if any errors were made in the field delineation step. You can zoom in and out to see reference roads and other landmarks. The Download button located below the map will save an image of the current map view. Clicking the checkbox will make field names visible. You can also see field names by hovering your mouse pointer over a field. There are several basemaps available, explore the options to find the most appropriate basemap for your needs. Please do not print or share maps with visible field names to protect farmers' privacy.

Select Crop Year(s)

2006
2007
2008
2009
2010

Select Crop(s)

Corn (grain)
Cotton

Plot

Boundaries

Centroids

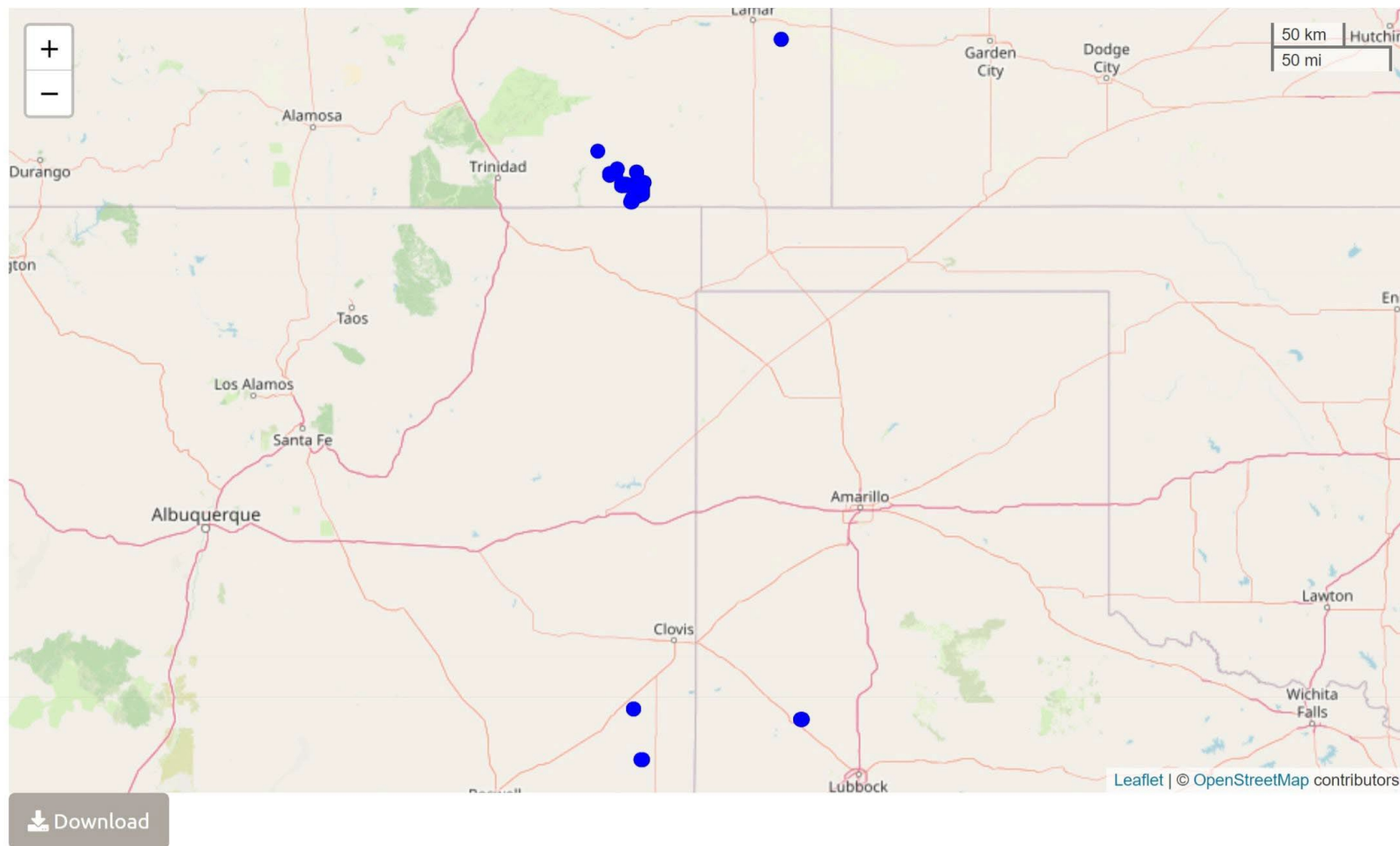
Show Field Names

Select Basemap

OpenStreetMap

Select Fill Color

Blue



Use these plots to identify any outlier values that are significantly higher or lower than other fields. Outliers may indicate that an error was made during data entry.

What is an outlier?

Metric Description

Greenhouse gas emissions are reported as pounds of carbon dioxide equivalent (CO₂e) per crop unit produced (bushels, pounds, etc.). CO₂e means all other emission sources are converted to the equivalent amount of CO₂. CO₂ emissions also result from electricity and fuel usage as well as from burning crop residues. The Fieldprint Platform uses data on crop type, region, and soil texture to determine how much nitrous oxide (N₂O) results from additions of nitrogen (N). Methane is only calculated for rice, and emissions are based on region of the country. To calculate CH₄ emissions, the Fieldprint Platform evaluates a farmer's responses to questions about water management, organic and fertilizer amendments and other management practices.

Select Metric

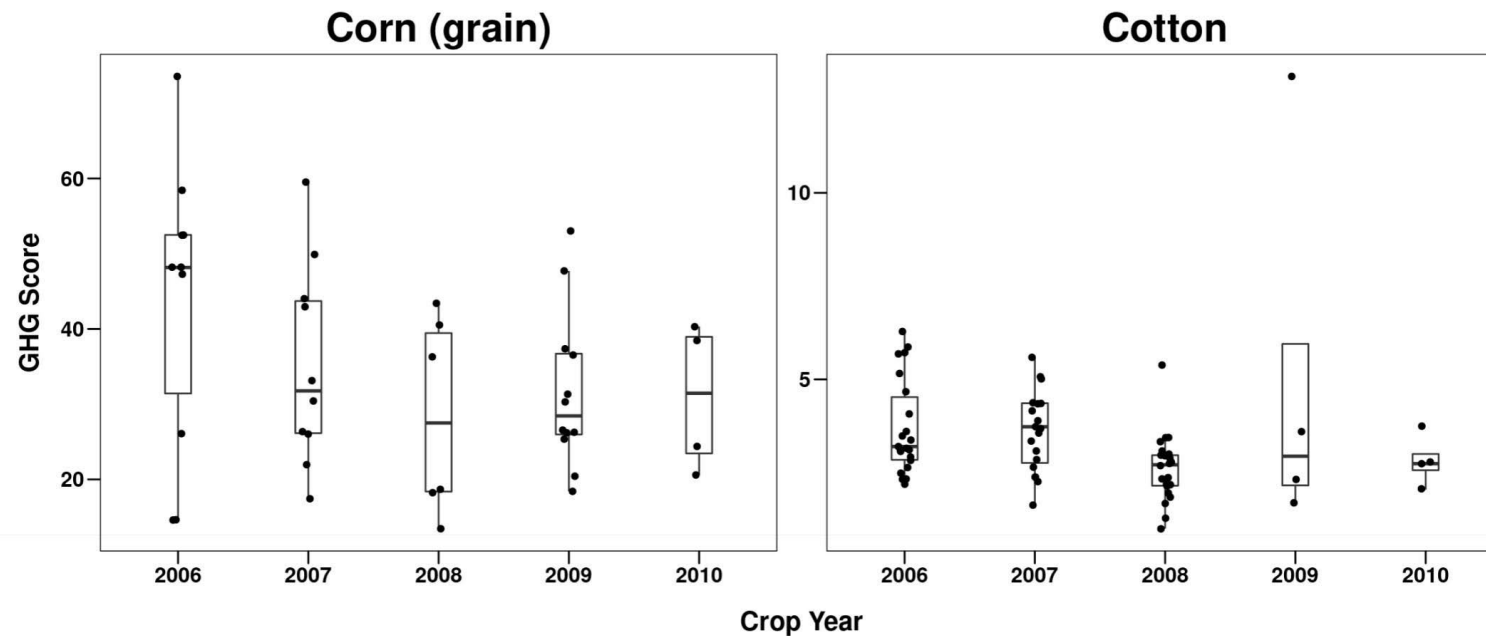
- Biodiversity
- Energy Use
- Greenhouse Gas Emissions
- Irrigation Water Use
- Land Use
- Soil Carbon
- Soil Conservation
- Water Quality

Select Subcomponents

GHG Score

Hide Outliers

Table of Potential Outliers



Use these plots to identify any outlier values that are significantly higher or lower than other fields. Outliers may indicate that an error was made during data entry.

What is an outlier?

Metric Description

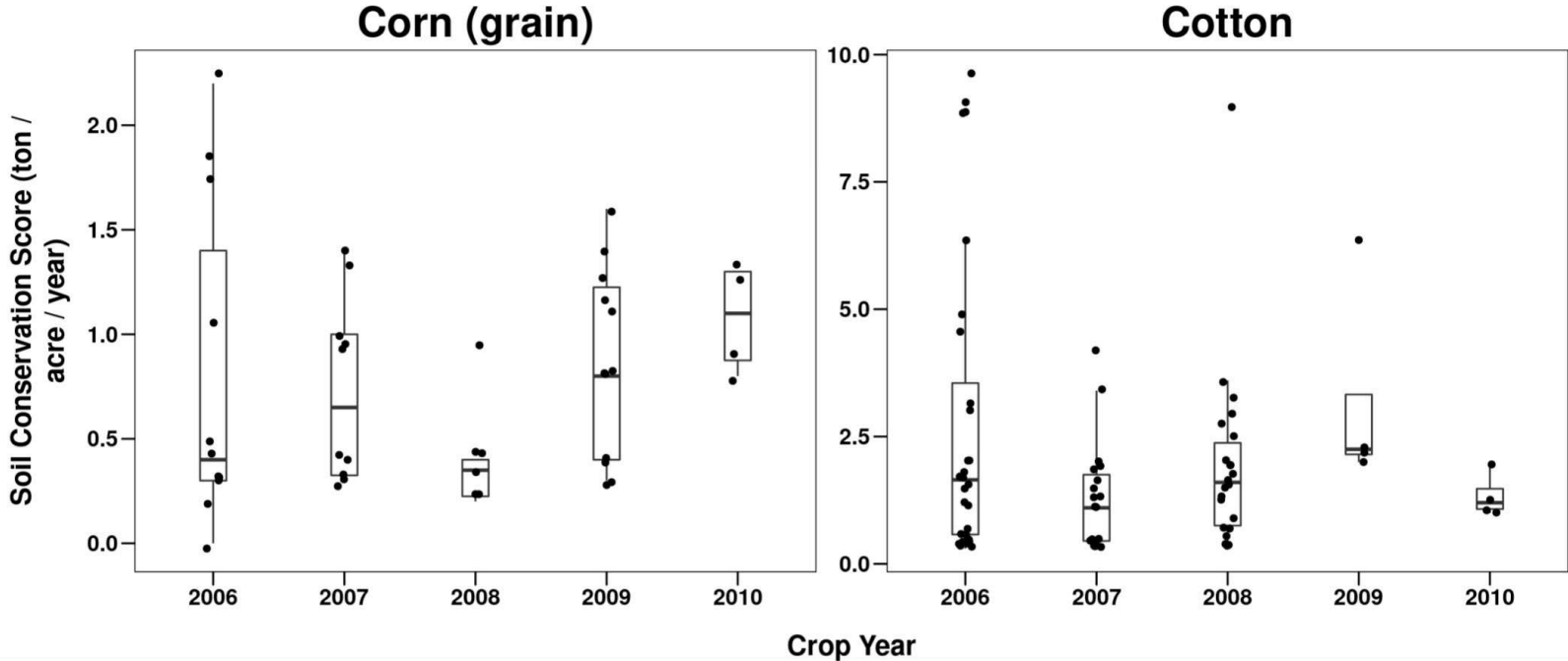
The Soil Conservation metric is a measure of soil lost to erosion from water and wind and reported as tons of soil lost per acre. Lower numbers are desirable.

Select Metric

- Biodiversity
- Energy Use
- Greenhouse Gas Emissions
- Irrigation Water Use
- Land Use
- Soil Carbon
- Soil Conservation
- Water Quality

Hide Outliers

Table of Potential Outliers



Use these plots to identify any outlier values that are significantly higher or lower than other fields. Outliers may indicate that an error was made during data entry.

What is an outlier?

Description

Here you can visualize the total amounts of N-P-K applied during the crop year as calculated from the sum of all your fertilization trips. The nitrogen applied does not include nitrogen from manure. To see how much nitrogen was applied from manure, please select the option "N from Manure".

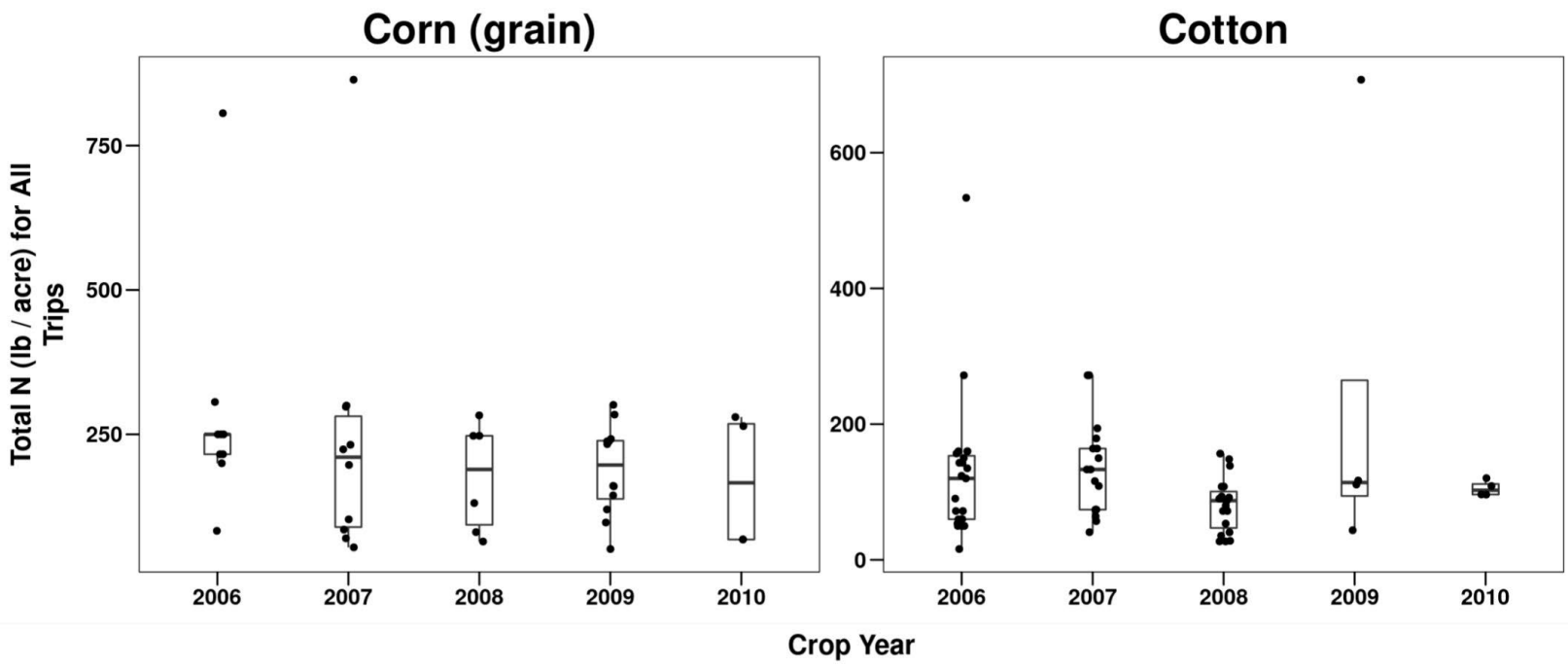
Select Parameter

- Fertilizers
- Crop Protectants
- Lime
- N from Manure

Select Fertilizer

Nitrogen

Hide Outliers



Use these plots to identify any outlier values that are significantly higher or lower than other fields. Outliers may indicate that an error was made during data entry.

What is an outlier?

Description

This graph displays the total number of applied crop protectants during each crop year.

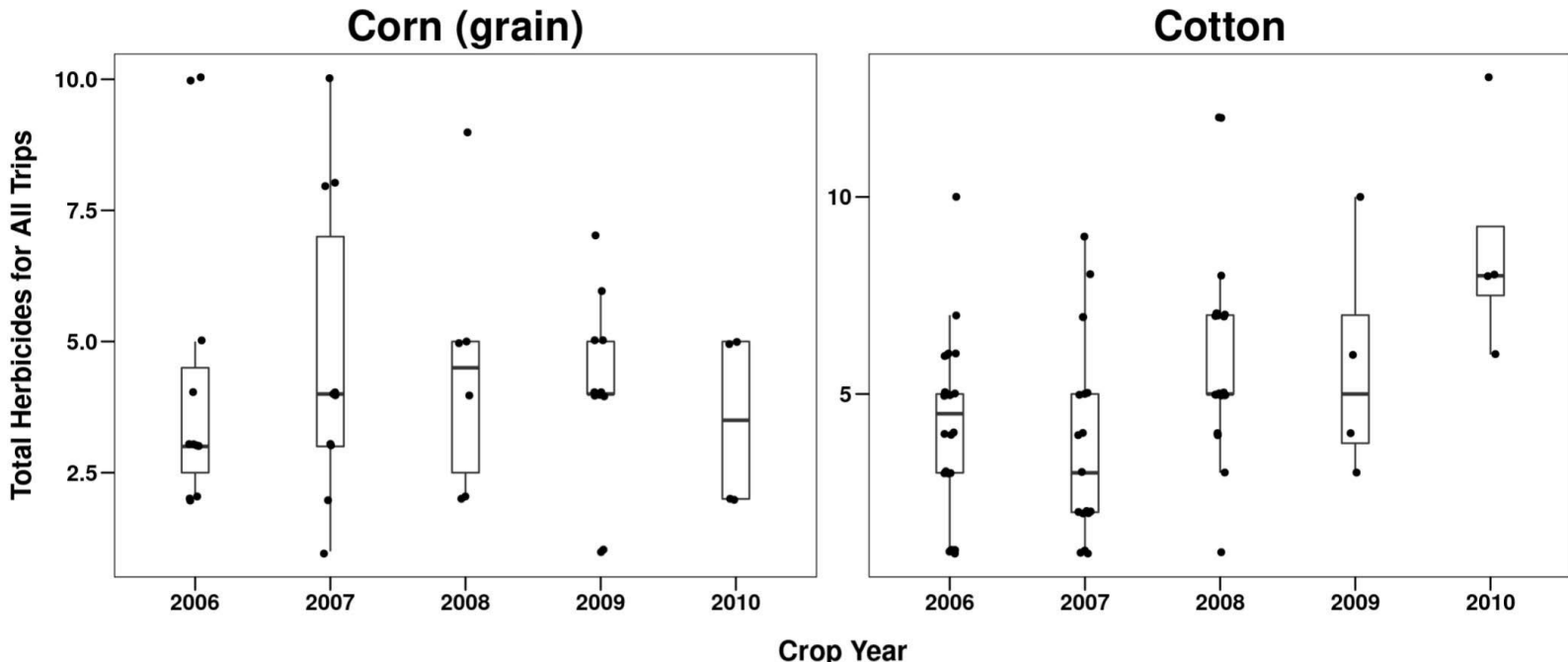
Select Parameter

- Fertilizers
- Crop Protectants
- Lime
- N from Manure

Select Crop Protectant

Total Herbicides for All Trips

Hide Outliers



Select Rotation

T9659 V19

Unmask Field Names

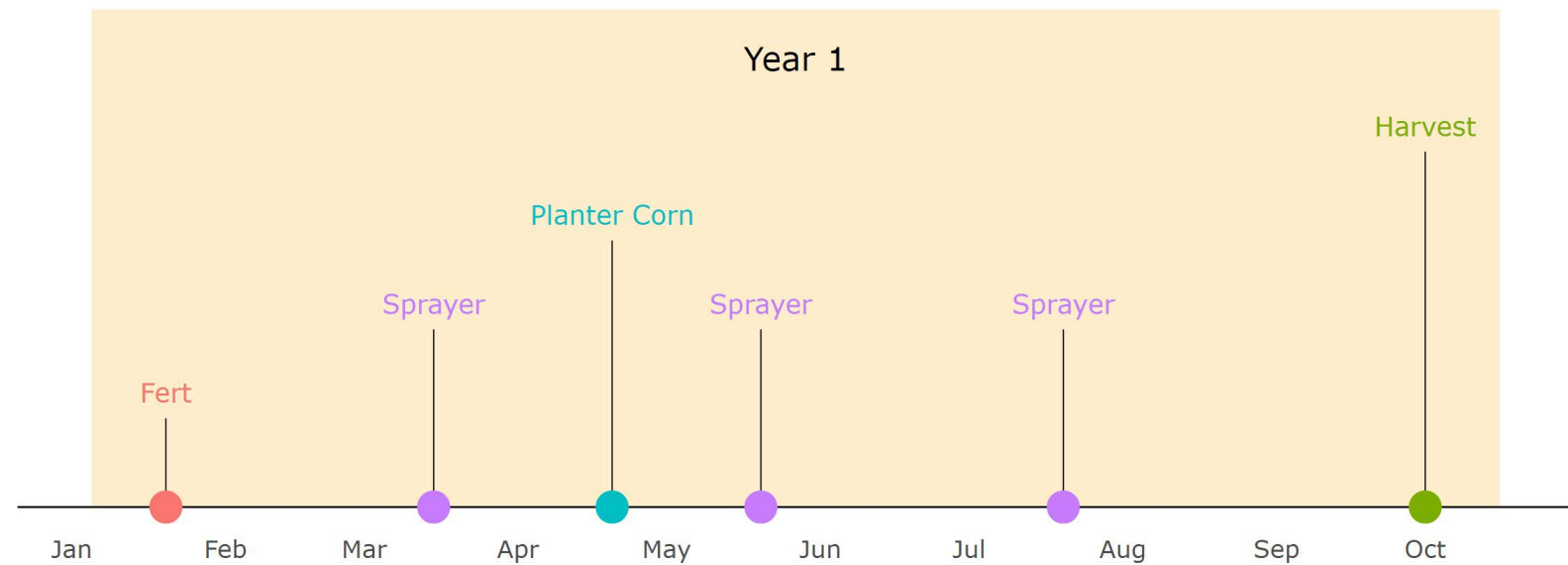
[Search Field & Rotation Table](#)

Rotation Template Frequency Count

Rotation Template	Crop Year Count
T7332 V27	32
T7331 V25	25
T9981 V5	16
T9979 V11	15
T7323 V40	8
T9980 V1	7
T7326 V20	5
T7327 V4	5

Timeline of operations for the crop rotation selected. Plot background color changes by rotation year

Crop Rotation Template: T9659 V19



List of fields using the crop rotation selected

Rotation Template Grower ID Field Name Crop Years

These tables summarize the average input values by crop and year and are provided for use in quality analysis of data entry.

Select Summary Table

Grower Participation ▾

This table shows how many crop years were entered by each Grower ID during a given growing season. Ideally, Grower ID would list the producers that managed their respective fields entered for the duration of the project. Knowing which fields are/were managed by each producer will likely enhance the quality of a statistical analysis. If the project is ongoing, it could also help to tailor educational materials and interventions related to the objective of the project.

Grower ID	Crop Year 2006	Crop Year 2007	Crop Year 2008	Crop Year 2009	Crop Year 2010	Total Crop Years
303	3	3	2			8
307	2	2	2	1		7
309	3	1	1	1	1	7
297	2	1	2	1		6
386	2	1	1	1	1	6
298	2	2			1	5
301	1	1	1	1	1	5
395	1	1	1	1	1	5
396	2	1	2			5
397		2	1	2		5

These tables summarize the average input values by crop and year and are provided for use in quality analysis of data entry.

Select Summary Table
Field Crop Sequence ▾

This table shows the crop history for each field and crop year.

Field Name	Crop Year 2006	Crop Year 2007	Crop Year 2008	Crop Year 2009	Crop Year 2010	Total Crop Years
19524cba	Corn (grain)	Corn (grain)	Cotton	Corn (grain)	Corn (grain)	5
d5aba573	Cotton	Cotton	Cotton	Cotton	Cotton	5
082f26c3	Cotton	Corn (grain)	Cotton	Corn (grain)		4
4309a7c8	Cotton	Cotton	Corn (grain)	Corn (grain)		4
9275ec4f	Cotton	Cotton	Cotton	Corn (grain)		4
aaafa09f	Cotton	Corn (grain)	Corn (grain)		Corn (grain)	4
e73eccd0	Cotton	Cotton	Cotton	Cotton		4
06ec12a8	Cotton	Cotton	Cotton			3
0bf262ef	Corn (grain)	Corn (grain)	Cotton			3
2c621f75	Cotton	Cotton	Cotton			3

These tables summarize the average input values by crop and year and are provided for use in quality analysis of data entry.

Select Summary Table

Yield ▼

This is a table of average yield by crop and crop year.

Crop Year	Crop	Yield	Number of Fields
2006	Corn (grain)	159.3	11
2006	Cotton	1027.3	28
2007	Corn (grain)	209.8	10
2007	Cotton	1607.7	19
2008	Corn (grain)	213.4	6
2008	Cotton	1165.5	22
2009	Corn (grain)	199.5	12
2009	Cotton	1310.2	4
2010	Corn (grain)	203.5	4
2010	Cotton	1610.0	4

A scatter plot allows you to visualize the relationship between any two variables from the comprehensive data output file. Some variables might not conform to plotting. The Color Variable dropdown menu has been limited to variables related to field information. Click the checkbox to remove outliers from the current plot.

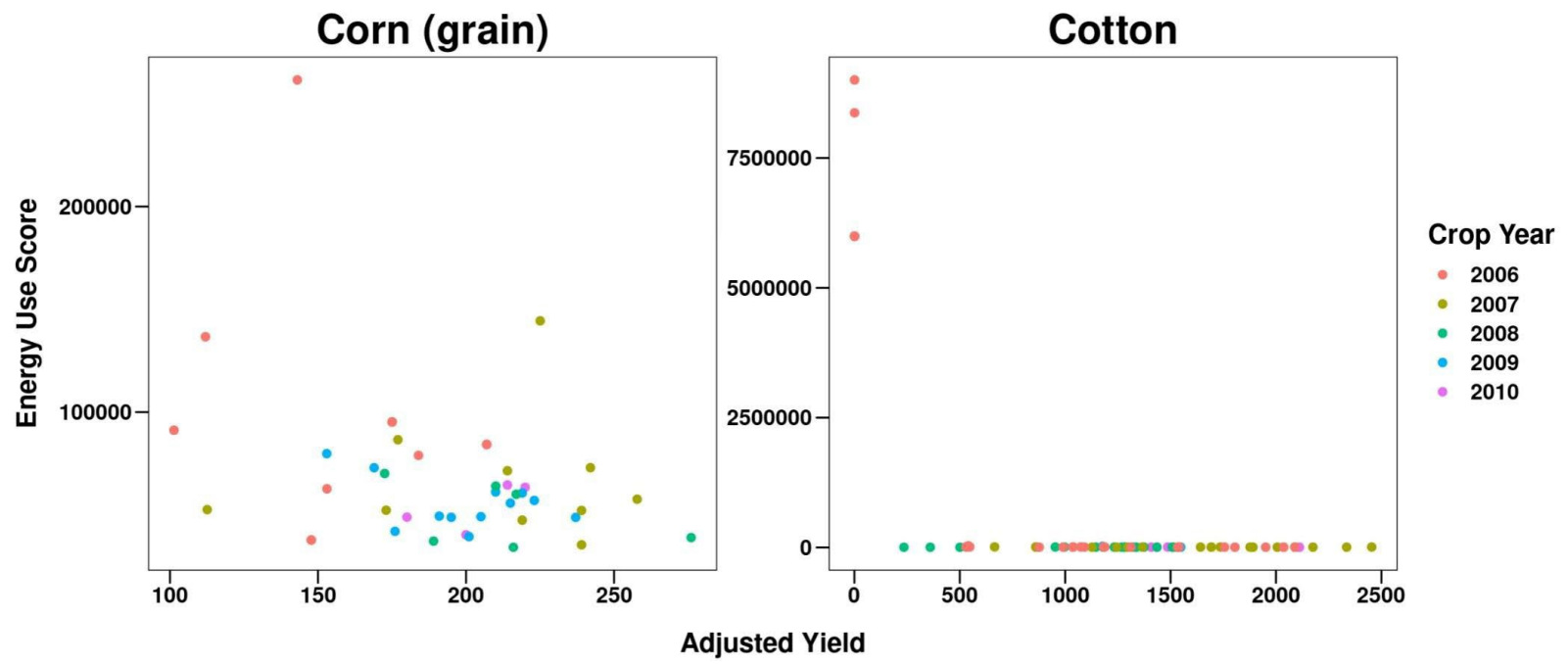
Choose X-axis Variable
Adjusted Yield

Choose Y-axis Variable
Energy Use Score

Choose Color Variable
Crop Year

Hide Outliers

Explore the Data in Table Form



FIELD TO MARKET

www.fieldtomarket.org

