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Outline

- Introduction
- On-Farm Network[®] (OFN)
- Nitrogen Management
 - Tools used by On-Farm Network[®]
- Where it is and expansion

Overall Objective

- Improving farmer profitability and the environment
 - Better management driven by better data



On-Farm Network®

- Developed in 2000 by Iowa Soybean Association
 - Address challenges in production agriculture as it relates to water quality and nutrient management
 - ISA directors wanted to increase farmer profitability while reducing environmental impacts of grain production

On-Farm Network[®]

- Coordinated interaction and learning among farmers, advisors and technical experts
 - Organize farmers to address various questions or production topics
 - Collect data using protocols implemented on participant fields
 - Pool the data, and discuss the results



University
and
Extension
Experts

State Depts.
of Ag

Farmers

Independent
Crop Consultants

Local
Conservation
Districts

Agricultural
Organizations /
Assns.

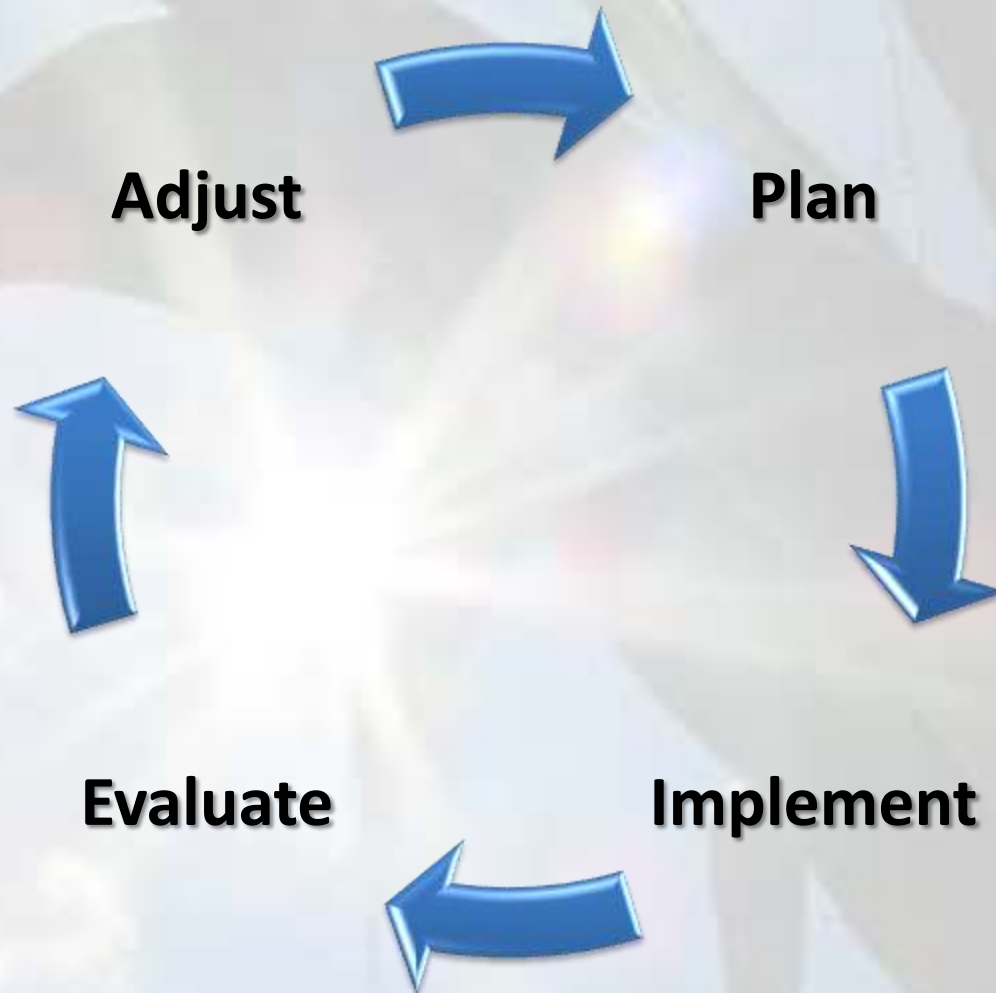
NRCS

Project Goal

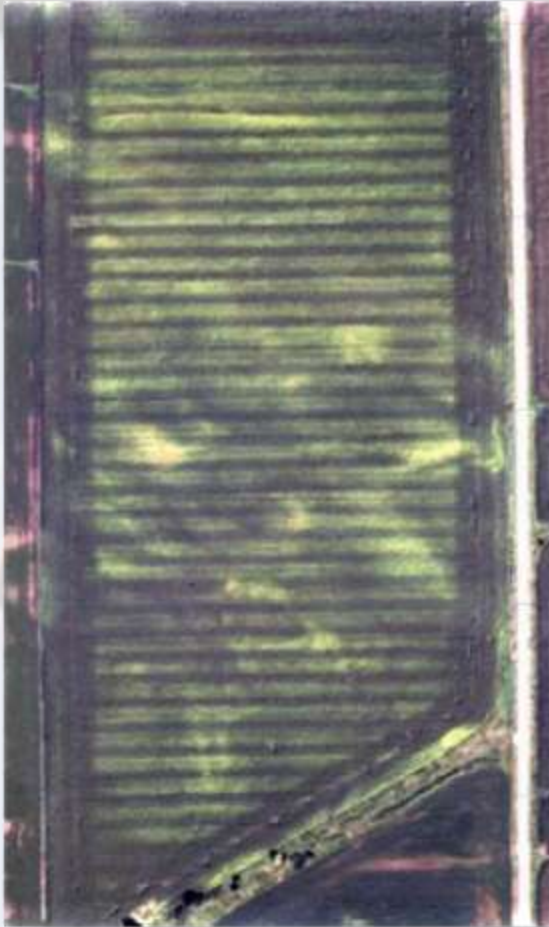
- The overall goal is to improve N management in corn production.
- In-field evaluations are used to guide decision-making that leads to improved management.



Adaptive Management



Results



- Currently have about 1000 farmers managing almost 1 million acres
- On average, farmers **reducing Nitrogen applications by 33 lbs/acre**
- 85% of participating farmers change their behavior based on participation

Tools of OFN[®]

- Guided Stalk Sampling
 - Corn Stalk Nitrate Test
 - Aerial Imagery
- Replicated Strip Trials
 - Precision Agriculture
 - Corn Stalk Nitrate Test
 - Aerial Imagery



Aerial Imagery



Stalk Nitrate Test

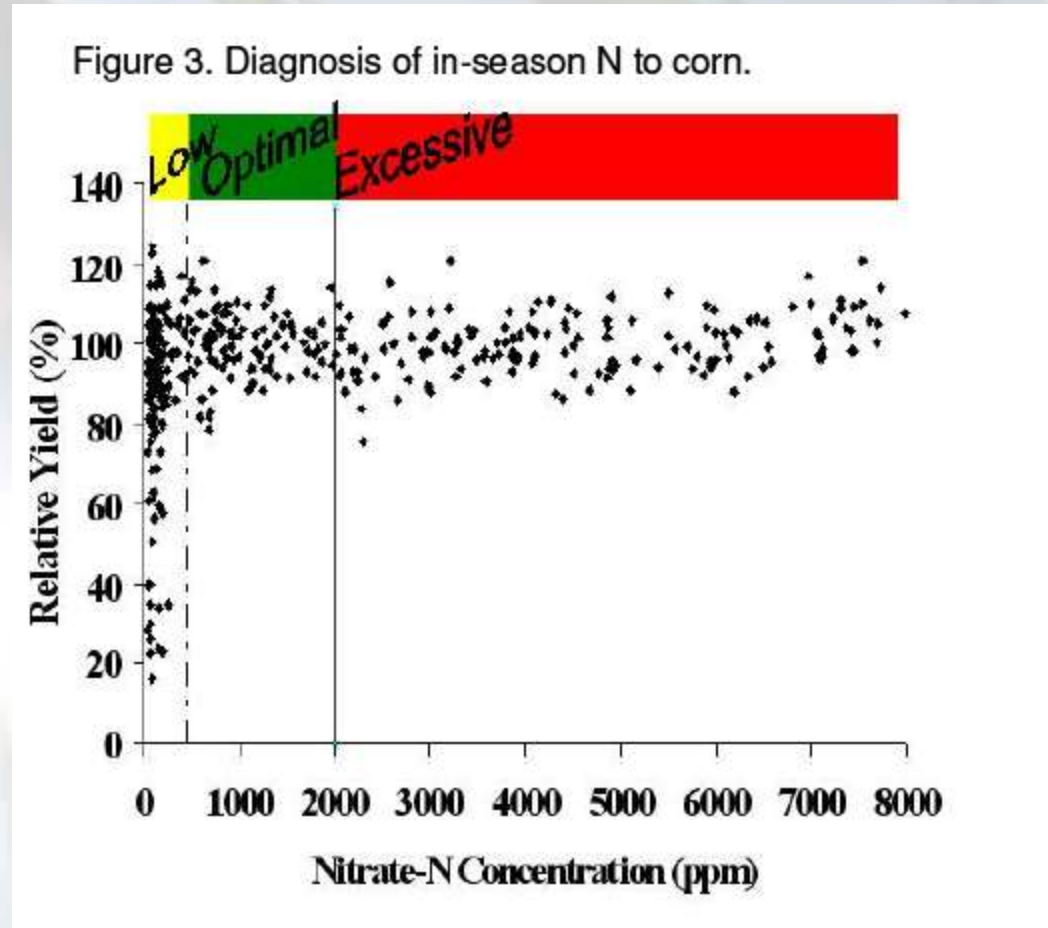
- After physiological maturity (blacklayer)
- 8 in. sample 6 in. above ground



Stalk Nitrate Test cont.

- Low: < 450 ppm
- Optimal: 450 - 2000 ppm
- Excessive: > 2000 ppm

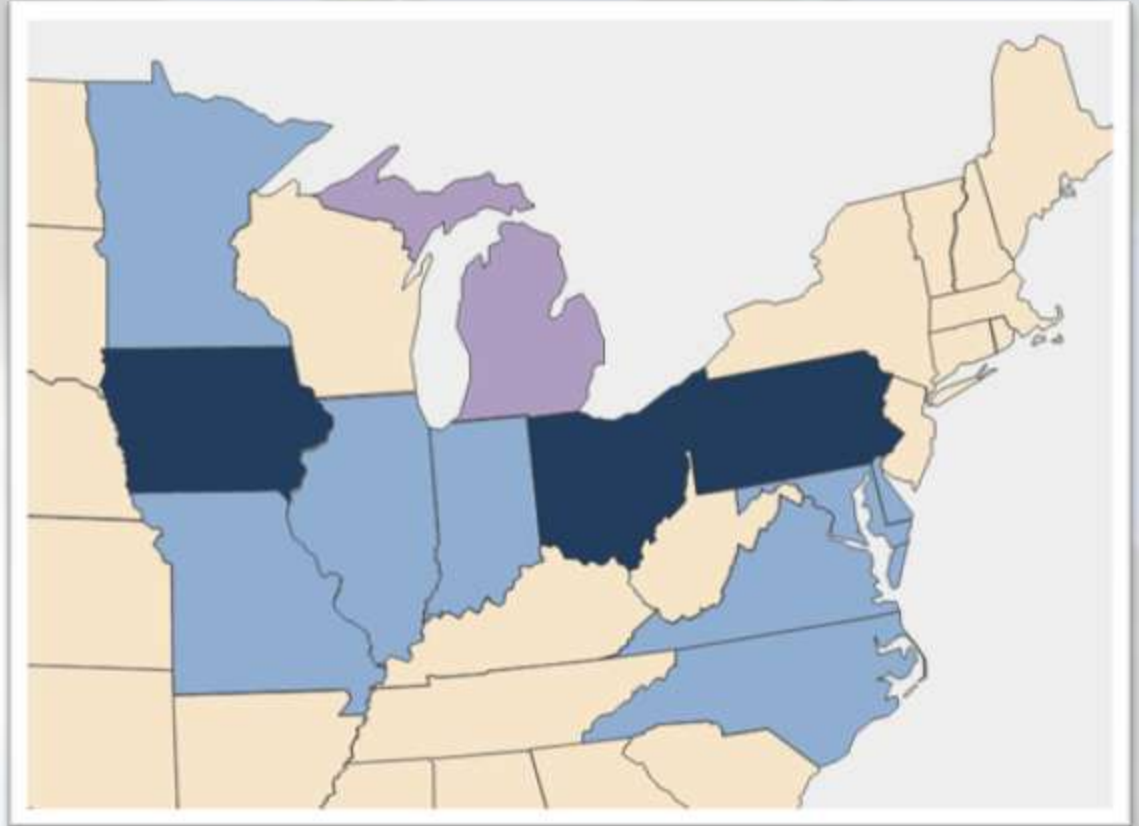
*Yield differences can't be detected when over-fertilized



Source: Purdue AY-322-W

Where it is...

- Iowa
- Minnesota
- Missouri
- Illinois
- Indiana
- Ohio
- Michigan
- Pennsylvania
- Maryland
- Delaware
- Virginia
- North Carolina



On Farm Network Growth – 2000-2011

- 2000: ~50 farmers in IA
- 2004: ~ 250 farmers in IA; 25 in PA
- 2007: ~400 farmers in IA, ~ 80 in PA, 30 in OH
- 2009: 500 farmers in IA, 100 in PA, 60 in Ohio, 25 in VA
- 2010: 965 - 600 farmers in Upper Miss River Basin (IA, IL, IN, MN, MO); 265 in Ches Bay (PA, VA, MD, and DE); 90 in W Lake Erie Basin (OH, IN); 10 in NC
- 2011: more than 1000 - 685 farmers in Upper Miss River Basin (IA, IL, IN, MN, MO);
- 2012: Expanding into MI – 4 groups of farmers

On Farm Network – Illinois

- Launched in 2010 by ISA and EDF with crop consultants and other partners
- Funded through CCPI and grant funds
- Senachwine Watershed: 60 fields
- Bureau Creek Watershed: 20 fields
- Mackinaw Watershed: 92 fields

Process



Indiana On-Farm Network[®]



Contact Info

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