# GLOBAL PARTNERSHIP ON NUTRIENT MANAGEMENT BMP Case Study

### **Overview**

Name: Using Cover Crops to Facilitate the Transition to Continuous No-Till

Location/Terrain: Indiana and Ohio

Crop(s): Cover crops

Nutrient(s): Soil health and nutrient content

Rationale: Cover crops can be used to ease farmers into the transition to a continuous no-till system.

### Issue(s) of Concern/Challenges:

Despite the proven economic and environmental benefits, some farmers remain hesitant to fully adopt no-till farming techniques.

## **Practice Objectives:**

The objective of this project is to help farmers transition to a Continuous No Till system (CNT) through the use of cover crops. The project addresses obstacles and provides support for these farmers during their transition.

# **Practice Description:**

This project activities are to: develop an online and printed cover crop matrix to aid farmers in choosing the correct cover crop; assist six farmers transiting to continuous no till with personalized technical support; host an additional workshop (first one was held in



August 2009) featuring the experiences of these six farmers to help promote the use of CNT-cover crops systems; partner with Soil and Water Conservation Districts, farmers, the Natural Resources Conservation Service, university extension services (located at land grant universities that engage with farmers and provide all kinds of farming advice) and the Ohio No-Till Council to host more than 5 workshops for farmers transitioning to CNT; through winter farmer networking meetings, form social support networks for farmers transition to CNT; conduct a Cropping Decisions Survey and conduct extensive soil quality testing to show benefits of cover crops in a CNT system.

### **Outcomes:**

The goal of the project is to increase the number of farmers who use a CNT system. From 2009-2011, through plot demonstrations, soil tests, field days, farmer networks, networking sessions, the Conservation

Tillage and Technology Conference, along with the aid of the Midwest Cover Crop Council Cover Crop Decision Tool and web site and CTIC's Cover Crop web site, The farmers intend to continue this practice. There were also valuable lessons learned as a result of this project:

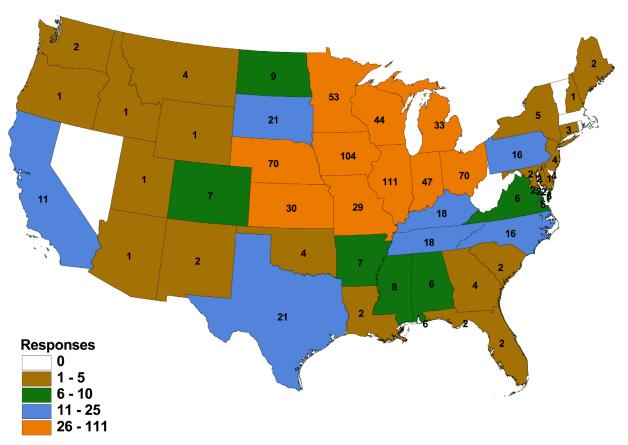
- Modifying a farming operation to continuous no-till/cover crop rotation requires specific information and technical support
- Farmers need to transition at their own pace
- Farmers that had access to technical, financial and social support proved most successful
- Farmers learn best about new practices or management from farmers that have successfully adopted those same practices
- Soil tests confirmed that soil quality-improved in a continuous no-till/cover crop rotation after just 2
  years

### **Significance:**

This project is significant since it will showcase how farmers can make a more gradual transition to CNT.

Data/Graphs:

# **Cover Crop Survey Participants**



### Why are cover crops not in your crop rotation?

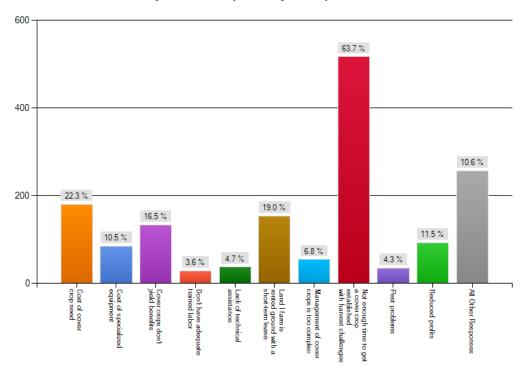
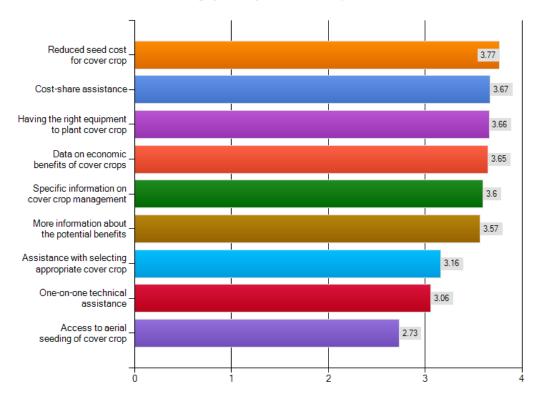


Figure 3. Reasons for not using cover crops.

### What would encourage you to try some cover crops next season?



### What characteristics would you look for in a cover crop?

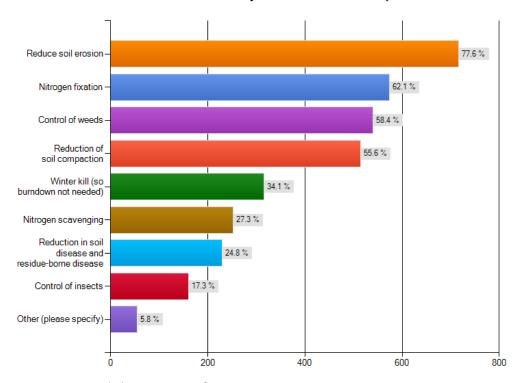


Figure 5. Desired characteristics of cover crops.

### What do you think are the challenges of cover crop management?

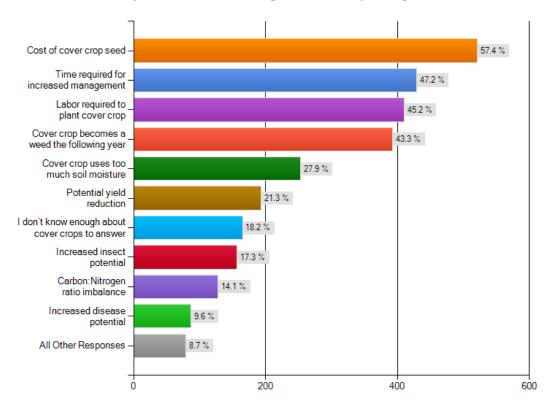


Figure 6. Challenges of managing cover crops.

# Who are you MOST LIKELY to go to as a trusted source of information (or expertise) about cover crops?

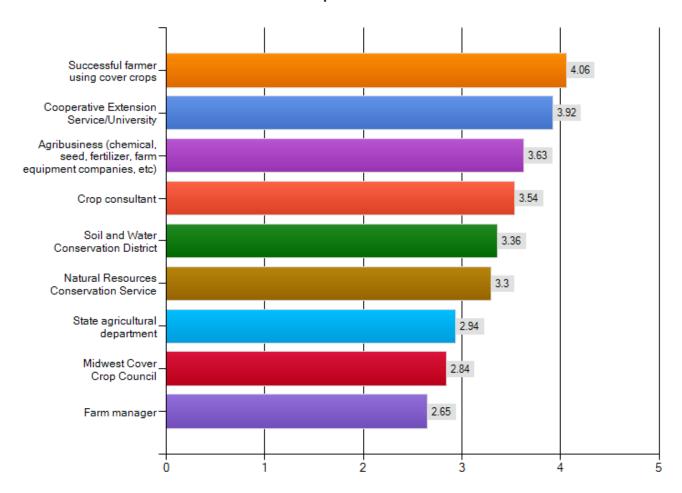


Figure 7. Trusted sources of information about cover crops.

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