

Farmer Field School Approach to Increasing Cover Crop Adoption in Iowa and Minnesota: Minnesota Happenings

Jill Sackett, University of Minnesota Extension Educator*; Sarah Carlson, Practical Farmers of Iowa; Linda Meschke, Rural Advantage

*Corresponding Author (sacke032@umn.edu; 507-238-5449)

Education and Outreach

The education and outreach portion of this grant funded project is an important piece. The Extension Educator - Conservation Agronomist funded through Rural Advantage has developed curriculum for the field days, workshops, and listening sessions in Minnesota. Since the beginning of the three-year project in October 2009, many education and outreach events have been held by Rural Advantage and the Extension Educator - Conservation Agronomist. These include: media contact of press releases, articles, radio interviews, and television interviews; field days; listening sessions; and Rural Advantage's 3rd Crop Producer Meetings. The development of a cover crop business directory is a goal for both partners as well. A team effort has been used between Rural Advantage, the Extension Educator - Conservation Agronomist, and PFI to develop a short survey for attendees to complete at the beginning of events. Yearly evaluations will be sent to cooperators and event attendees at the end of each year. Both will be used to analyze the success of the project and used to assist in development of the cover crop decision tool.



An example of a booth developed by the Extension Educator - Conservation Agronomist for use at a listening session



Attendees looking at a species demonstration late-September 2010 on cost-share acres in Le Sueur County, Minnesota.

Introduction

North Central Region – Sustainable Agriculture Research and Education [NCR-SARE] grant partners Practical Farmers of Iowa [PFI] and Rural Advantage feel that one tool to increase the sustainability of annual cropping systems is the utilization of cover crops. The benefits of cover crops are numerous and varied, from decreasing soil erosion to increasing soil tilth, but still there is a lack of adoption in both Iowa and Minnesota. The goals of this project include: 1) education and outreach through farmer-led field days, workshops, listening sessions, surveys, evaluations, and media stories; 2) increased number of cover crop acres through cost-share funds and improved cover crop education; and 3) assist in the development of a cover crop decision tool via information collected from surveys, evaluations, and cost-share demonstration acres. The effectiveness of the project will be evaluated through survey results; number of attendees at events; number of inquiries about cover crops; and increased number of cover crop acres.



Biomass sampling in late April 2010 just days prior to grazing a cooperator's cost-share acres of Winter Rye in Watonwan County, Minnesota

Cost-Share Funds

The cost-share funds available through this NCR-SARE grant project are meant to allow farmers to lead demonstration and education of cover crops in their area of the state as well as to increase cover crop acres. Rural Advantage and PFI have funds for 20 cooperators each to cost-share up to \$20 per acre for up to 20 acres [maximum total of \$400]. Rural Advantage is targeting corn and soybean producers in Minnesota, but small grain and canning crop producers are also accepted. Other important aspects include choosing cooperators from around the state for good geographic representation and each cooperator having a strong demonstration project. Demonstration ideas could be anything from varied planting dates to different species mixes to weed counts, etc. Cooperators must keep simple records and be willing to host a field day or speak on a farmer panel if asked.



Tillage Radish established in mid-August 2010 and pulled during late-September 2010 on cost-share acres in Waseca County, Minnesota

Surveys and Evaluations

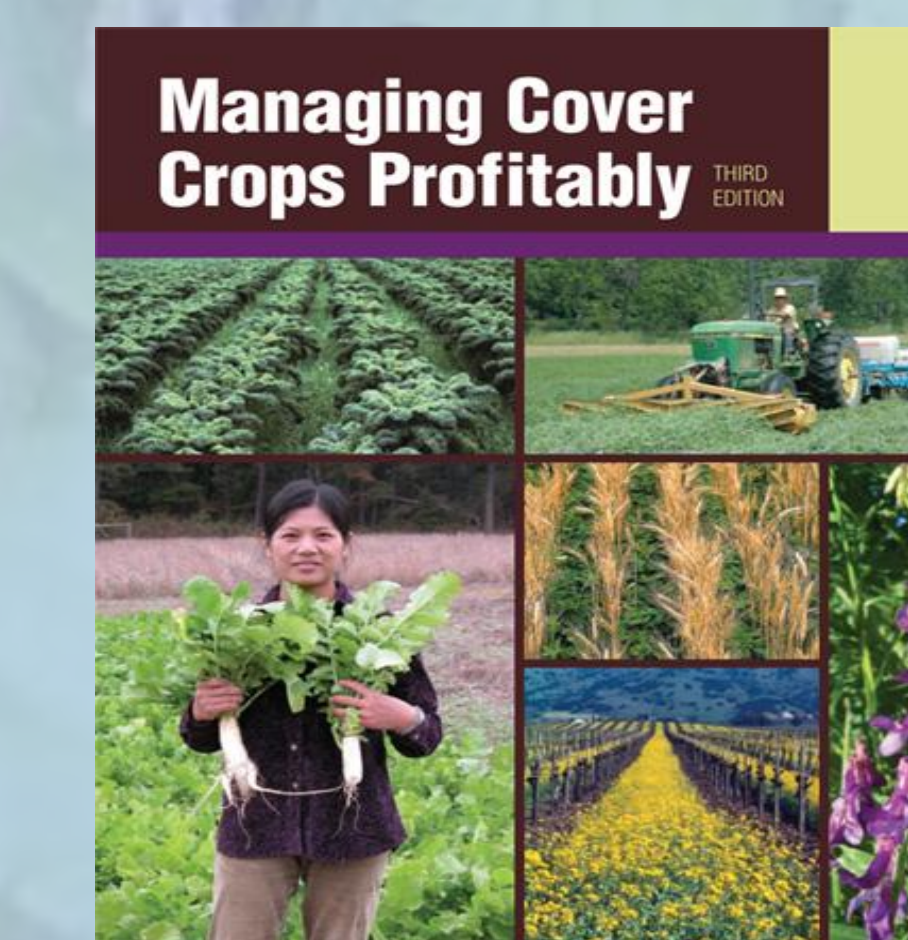
Rural Advantage and the Extension Educator - Conservation Agronomist with partner PFI developed event surveys to be handed out and collected before field days, workshops, and listening sessions. Evaluations will be sent yearly to event attendees and cooperators which will ask more in-depth questions regarding the agronomics of cover crops in Minnesota. This information will be used to evaluate the success of the project as well as to assist in developing a Cover Crop Decision Tool for both Iowa and Minnesota.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Cover crops are plants that cover the soil between the harvest and planting of each crop, typically from fall until spring. Have you, in the last five years, planted cover crops?					
2. What was the highest acreage of cover crops that you have planted in a single year?					
3. Please indicate your agreement or disagreement with these statements about cover crops.					
a. Cover crops can reduce soil erosion significantly.	1	2	3	4	5
b. Cover crops reduce nitrogen and phosphorus losses.	1	2	3	4	5
c. If 50 percent cost share were available for cover crop establishment, I would plant them.	1	2	3	4	5
d. I don't know enough about cover crops to use them.	1	2	3	4	5
e. I don't have the necessary equipment for cover crops.	1	2	3	4	5
f. Cover crops can delay spring planting.	1	2	3	4	5
g. There is not enough time between harvest and winter to justify the use of cover crops.	1	2	3	4	5
h. I would like to know more about aerial seeding cover crops.	1	2	3	4	5
i. I would like to know when to purchase cover crop seed.	1	2	3	4	5
j. I would like to know about local businesses that could plant or spray kill my cover crop.	1	2	3	4	5
k. The use of cover crops decreases weeds and pests.	1	2	3	4	5
l. I use cover crops as forage in either the fall or spring.	1	2	3	4	5
m. The extra cost and possible soil reductions prevents my use of cover crops.	1	2	3	4	5

An example survey used at the beginning of listening sessions, field days, and workshops.

Cover Crop Decision Tool

Working with the Midwest Cover Crop Council, Dean Baas with Michigan State University, and knowledgeable cover crop people from around Minnesota, the development of the Minnesota Cover Crop Decision Tool will begin during the second year of the NCR-SARE grant. Meetings will be conducted to extend the decision matrix from SARE's "Managing Cover Crops Profitably" and make it more specific to Minnesota. Information from this project's surveys, evaluations, and cost-share acres will be used to assist in the development of the tool. This process will take approximately one year and will be done in both states.



Managing Cover Crops Profitably
Third Edition
Sustainable Agriculture Research and Education

Project Partners



This project is funded through North Central Region – Sustainable Agriculture and Education Research [NCR-SARE].