

Supplementary Material

Appendix 1. Guide for moderator

Economic Evaluation of Cover Crops in Midwest Row Crop Farming
NCR-SARE Research and Education Grant H003679435
First Focus Group: Ames, IA. December 10, 2015

Guide for Moderator

➤ **Introduction to ISU-PFI Research Project on cover crops.**

Presenters: Alejandro Plastina and Fernando Miguez, Iowa State University

10:00 AM – 10:10 AM

➤ **Q&A on Project**

10:10 AM – 10:15 AM

➤ **Focus Group Discussion**

Moderator: Sarah Carlson, PFI

• **Question 1 (5 minutes):**

“Please tell us who you are, where’s your farm, and the year when you first planted cover crops.”

10:15 am – 10:20 am

• **Question 2 (5 minutes):**

“Please describe your crop rotations (row crops and cover crops) and soil types.”

10:20 am -10:25 am

• **Question 3 (5 minutes):**

“Think back to when you did not plant cover crops, what prompted you to plant cover crops the first time?”

10:25 am – 10:30 am

• **Question 4 (5 minutes):**

“What drives you to plant cover crops today?”

10:30 am – 10:35 am

• **Question 5 (10-15 minutes):**

“Describe the differences in management practices for a corn-soybean, or corn-corn rotation with cover crops versus a rotation without cover crops. Write your answers on the first page of the handout. In a moment, we’ll share these with each other.”

- Pause for 2-3 minutes for participants to jot down some ideas.
- List responses on flip chart.
- 10:35 am – 10:50 am(MAX)

- **Question 6 (10-15 minutes):**

“Compared to the alternative of leaving land fallow during winter, what new or additional revenue have you cover crops generated for you? Write your answers on the second page of the handout. In a moment, we’ll share these with each other.”

- Pause for 2-3 minutes for participants to jot down some ideas.
- List responses on flip chart.
- 10:50 am – 11:05 am (MAX)

- **Question 7 (10-15 minutes):**

“Compared to the alternative of leaving land fallow during winter, what costs have you actually eliminated or reduced in a corn-soybean, or corn-corn rotation by using cover crops? Write your answers on the third page of the handout. In a moment, we’ll share these with each other.”

- Pause for 2-3 minutes for participants to jot down some ideas.
- List responses on flip chart.
- 11:05 am – 11:20 am (MAX)

- **Question 8 (10-15 minutes):**

“Compared to the alternative of leaving land fallow during winter, what new or additional costs have you actually incurred in a corn-soybean or corn-corn rotation due to cover crops? Write your answers on the fourth page of the handout. In a moment, we’ll share these with each other.”

- Pause for 2-3 minutes for participants to jot down some ideas.
- List responses on flip chart.
- 11:20 am – 11:45 am (MAX)

- **Question 9 (10-15 minutes):**

“Compared to the alternative of leaving land fallow during winter, what revenue have you actually lost or seen decline in a corn-soybean, or corn-corn rotation due to cover crops? Write your answers on the last page of the handout. In a moment, we’ll share these with each other.”

- Pause for 2-3 minutes for participants to jot down some ideas.
- List responses on flip chart.
- 11:45 am – 12:00 pm (MAX)

- **Question 10 (5-10 minutes):**

This is the first of our discussions. We are planning to hold two more over the coming weeks with producers from Illinois and Minnesota. What advice do you have for us?

- 12:00 pm – 12:10 pm (MAX)

- **Thank participants, next steps:**

- Possible follow up by email or phone to clarify transcription of today’s discussion.
- Next focus group: late-May 2016 (after planting)

Appendix 2. Guide for moderator: supporting material

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Guide for Moderator: Supporting Material

Focus Group Discussion

Moderator: Sarah Carlson, PFI

Important tips for moderating the discussion:

- **Never ask why, ask what instead.** When asked why, respondents will focus on the logic of the answer instead of the facts. By asking **what** (What prompted...? What drives...?), respondents focus on facts.
- Stick to the questioning route to produce comparable results across focus groups.
- Manage time to avoid going over 2 hour limit
- Probe questions to request more detailed information at any point in time during the focus group:
 - Would you explain further?
 - Can you give me an example?
 - Would you say more?
 - Is there anything else?
 - Please describe what you mean
 - I don't understand.

- The goal of today's exercise is to populate the following table on the flip chart:

1) Additional Revenue from Cover Crops - - -	3) Additional Costs from Cover Crops - - -
2) Reduced Costs from Cover Crops - - -	4) Reduced Revenue from Cover Crops - - -

- In order to do so, we start with a few simple questions to help participants relax and encourage them to actively discuss the issues.

- Then, we ask about differences in management practices (question 5) to populate the following table. The goal is to brainstorm and list all changes in practices without evaluating the logical sequence of the responses, or their order, or their relevance.

Practices for corn-soybean rotation with cover crops	Practices for corn-soybean rotation without cover crops
- - -	- - -
Practices for corn-corn rotation with cover crops	Practices for corn-corn rotation without cover crops
- - -	- - -

- Then, after they thought about the differences in practices with/without cover crops we ask them to distinguish between those practices that increased revenue (question 6), reduced costs (question 7), increased costs (question 8), or reduced revenue (question 9).
- If the discussion get stalled at any point, the moderator can use “probes”. The following table lists probes for each section of the focus group.

Discussion triggered by:	Probes
Question 5: management practices	<ul style="list-style-type: none"> ✓ Did you change hybrids? ✓ Did you change the corn or soybean planting population? ✓ Did you change your nitrogen use? ✓ Did you change your herbicide usage? ✓ Have you changed the number of passes across the field? ✓ Have you changed the horsepower used in production? ✓ Have you changed fungicide/insecticide use? ✓ Have you changed your planter set-up? ✓ Have you changed your harvest set-up? ✓ Have labor requirements changed? How? ✓ Are weeds/weed populations different across fields with/without cover crops? ✓ Have you changed your weed management practices?
Question 6: new or additional revenue from CC	<ul style="list-style-type: none"> ✓ Were you able to sell some sub-product of cover crops? ✓ Did you use cover crops as animal feed? How much? Dollar value? Livestock type?

	<ul style="list-style-type: none"> ✓ Was your row crop yield higher in areas with cover crops than in acreage with no cover crops? When (after #of years under cover crops)? How many times since the first time you used cover crops (same plot every year or how frequently did you plant cover crops in those plots with higher yields?)
Question 7: reduced or eliminated costs due to CC	<ul style="list-style-type: none"> ✓ What changes in practices associated with cover crops have saved you money in cover crop production, and/or row crop production? (Row crop seed population, N use, herbicide, fungicide, insecticide, passes across the field, horsepower, etc.) ✓ What's the dollar value of those changes? ✓ Are there any monetary incentives available to plant cover crops (NGOs, government, etc.)? How do they work? \$ Amount?
Question 8: new or additional costs from CC	<ul style="list-style-type: none"> ✓ What changes in practices associated with cover crops have increased your costs of cover crop production and/or row crop production? (Row crop seed population, N use, herbicide, fungicide, insecticide, passes across the field, horsepower, etc.) ✓ What's the dollar value of those changes?
Question 9: lost or reduced revenue from CC	<ul style="list-style-type: none"> ✓ Was your row crop yield lower in areas with cover crops than in acreage with no cover crops? When (after #of years under cover crops)? How many times since the first time you used cover crops (same plot every year or how frequently did you plant cover crops in those plots with higher yields?) ✓ Did you lose the capacity to sell some sub-product of row crops due to cover crops? ✓ Did you use lose capacity to grow animal feed due to cover crops? How much? Dollar value? Livestock type?

Appendix 3. Supporting material for participants

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Supporting Material for Participants

Focus Group Discussion. Moderator: Sarah Carlson, PFI

Question 5:

“Describe the **differences in management practices** for a corn-soybean or corn-corn rotation **with** cover crops versus a rotation **without** cover crops.”

Practices for <u>corn-soybean</u> rotation with cover crops	Practices for <u>corn-soybean</u> rotation without cover crops
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

Practices for <u>corn-corn</u> rotation with cover crops	Practices for <u>corn-corn</u> rotation without cover crops
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-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

Question 6:

“Compared to the alternative of leaving land fallow during winter, what **new or additional revenue** have cover crops generated for you?”

New or additional revenue in a <u>corn-soybean</u> rotation due to cover crops
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-
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-
-

New or additional revenue in a <u>corn-corn</u> rotation due to cover crops
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Question 7:

“Compared to the alternative of leaving land fallow during winter, what **costs have you actually eliminated or reduced** in a corn-soybean, or corn-corn rotation by using cover crops?”

Costs reduced or eliminated in a <u>corn-soybean</u> rotation by cover crops
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-
-
-
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-
-
-
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Costs reduced or eliminated in a <u>corn-corn</u> rotation by cover crops
-
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-
-

Question 8:

“Compared to the alternative of leaving land fallow during winter, what **new or additional costs** have you actually incurred in a corn-soybean or corn-corn rotation due to cover crops?”

New or additional costs in a <u>corn-soybean</u> rotation due to cover crops
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-
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-
-
-
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-
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-

New or additional costs in a <u>corn-corn</u> rotation due to cover crops
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