

## **2011 Event Evaluations**

Compiled and submitted by Jacqueline Comito & Nathan Stevenson

#### INTRODUCTION

Iowa Learning Farms continues to build a *Culture of Conservation* by utilizing sound research (from Iowa State University and ILF partner agencies), in-field application and demonstration, and outreach and education to Iowans of all ages and residencies.

It is clear that Iowa Learning Farms is making a difference. Since 2008, 83% of farmers attending ILF field days have made a change in their behavior:

- Average of 33% of farmers increased surface residue management on 64,145 new acres of strip-till or no-till
- 461 = average number of increased acres put into no-till/strip-till
- 5,947 = new acres with cover crops since 2010

#### **OVERVIEW OF ILF IN 2011**

From January to December 2011, the Iowa Learning Farms:

- Sponsored 24 farmer events (field days/workshops) attended by 1,250 people
- Participated at 101 other events, attended by approximately 13,600 people

Iowa Learning Farms event evaluations occur at five stages:

- **Event Evaluations** for any event that ILF team members participate. These forms (completed by ILF team members) help us to understand the audience's level of engagement and help us to improve future outreach activities.
- **Comment Cards** filled out by all participants at an ILF-sponsored event in order to gain a better understanding of who they are and why they are there.
- Mailed Evaluation Questionnaires to participants in any sponsored "field" event as a part of the ILF program. These questionnaires were sent within three weeks of the event. The questions focus on the clarity and accessibility of the information received and inquired whether participants planned to make any changes in their land management as a result of the event.
- **Follow-up Evaluation Questionnaires** to participants in any sponsored "field" event. This survey was sent in January 2012 to see if the participants had made the changes they said they were going to make in earlier evaluations.
- **Teacher Evaluations** of Conservation Station or ILF classroom events. These questionnaires were handed to the teachers at the event with a return envelope to help see how these individuals perceived our educational programming.

## **EVENT EVALUATIONS**

Iowa Learning Farms staff complete event evaluation forms for all major presentations including field days. For detailed information of a specific event, see the quarterly and year-end reports.

Month	# of events				
	2007	2008	2009	2010	2011
January			5	1	5
February			8	3	4
March			5	14	8
April	1	2	2	3	15
May	2	6	3	6	15
June	8	7	8	14	19
July	14	17	9	22	20
August	9	4	6	12	8
September	8	8	5	11	21
October	1	3	3	6	10
November			1		
December			3		
Total	42	46	58	92	125

Event objectives					
	2007	2008	2009	2010	2011
Community Event	4	5	8	24	27
Youth Event/Outdoor Class	5	12	6	17	40
Agency/Organization Event	7	6	9	11	9
Farmer Events	8	11	20	15	27
Conference/Clinic	3	2	8	11	8
Fair/expo	15	10	7	14	14

Description of Audiences					
	2007	2008	2009	2010	2011
Number of events	43	46	58	92	125
Total numbers for events	3,373	3,945	9,700	11,500	17,200
Age groups					
Primarily youth	14%	26%	10%	24%	27%
All ages	42%	35%	21%	27%	27%
Primarily adults	44%	44%	69%	49%	46%
Background					
Rural	56%	54%	47%	52%	52%
Urban	7%	11%	2%	14%	9%
Rural/urban	37%	35%	52%	34%	39%
Level of engagement					
High	77%	83%	81%	78%	78%
Average	18%	13%	14%	15%	18%
Low	5%	4%	5%	7%	1%

## 2011 ILF Field Day/Workshop Audience Participation in Evaluation

	#Attendees	#Comment Cards	#Returned Evaluations	#Returned Follow-up Evaluations
Cover Crop Workshop, Spencer	50	42	20	9
No-till Workshop, Le Mars	140	120	63	45
Cover Crop Workshop, Rock Valley	35	30	8	6
No-till/Strip-till Workshop, New Hampton	35	27	15	12
Arlo Van Diest Strip-Till Open House, Webster City	53	26	7	6
Rob Stout ILF/PFI Cover Crop Field Day, West Chester	33	19	10	10
Arlo Van Diest Strip Tillage Field Day, Webster City	64	50	13	12
Jeff Joyce ILF/PFI Cover Crop Field Day, Ruthven	56	43	16	16
Doug Nolte Field Day, West Liberty	55	36	10	7
Dallas Co. CREP Wetland Tour	27	18	4	4
Kossuth Co. CREP Wetland Tour	20	13	3	6
Silver Lake Watershed Field Day, Lake Park	44	26	11	8
Craig Embretson Field Day, Elkader	45	24	11	11
Harold Whipple 'Conversations on the Prairie' Field Day, Lacona	120	43	21	16
Smeltzer Trust Farm Field Day, Otho	45	24	11	9
ISU Neely-Kinyon Farm ILF No-Till, Cover Crop, and Miscanthus Management Field Day, Adair County	40	19	9	7
Nashua CREP tour	54	36	16	9
Strip-Tillage Field Day,	85	56	26	24

ISU Agronomy Farm, Boone				
Kelly Tobin No-Till/Cover Crop Field Day, New Market	56	31	12	8
Neal Smith National Wildlife Refuge STRIPs Field Day, Prairie City	30	17	8	5
Hickory Grove Lake Watershed Field Day, Colo	41	16	6	3
Competine Creek Watershed/ Pekin High School Field Day	39	18	4	1
ILF/PFI Open House Cover Crops Field Day, Lyon County	15	9	3	5
ILF/PFI Gustafson Farms Cover Crops Field Day, Boone	65	43	19	14
Total	1,247	734	326*	253+

<sup>\*</sup>This is a 44% response rate to mailed questionnaire—6% higher response rate than we normally get. This is a good response to a single mailed survey.

<sup>+</sup>This is a 35% response rate—lower than a usual rate. We mailed survey right after the New Year's holiday instead of waiting until February as in past years.

## **Summary of Follow-Up Evaluation Questionnaires For Field Days**

(sent by mail in January 2012 to all those who filled out comment cards)

Please describe at least one way you will integrate what you learned at this meeting into your farming:

	Jan 2012	Feb 2011	Feb 2010	Feb 2009
	Follow-up	Follow-up	Follow-up	Follow-up
	n=253	n=96	n=130	n=69
Increased use of surface residue management (no-till or strip-till) on some of my acres (n=234)*	38%	32%	30%	32%
List # of acres	32,058	8,983	12,558	10,546
Average # of acres per respondent who said they were putting more acres into no-till or strip-till	458	428	370	586
Using fall seeded rye or other cover crops (n=95)	32% (4,348 new acres)	47% (1,599 new acres)	23%	Not asked
I have established (or improving existing) prairie land on some of my acres in 2011 (n=21)	0%			
Sought additional information via web, state agencies or ISU employees	36%	22%	36%	42%
I discussed +/- of using no-till or strip- till with my landowners (n=234)	35%	27%	33%	39%
I discussed +/- of using cover crops with my landowners (n=95)	21%			
I discussed conservation and water quality improvement ideas with other farmers in my area	47%	61%	72%	70%

I am working cooperatively with neighboring farmers and landowners to make best use of conservation structures and prairies within our local watershed (n=21)	19%	35%~	28%~	Not asked
I purchased strip-till equipment, made a joint purchase of strip-till equipment with my neighbors, or leased equipment from a local ag supplier or co-op or contracted for aerial seeding of cover crops (n=234)	11%	8%	Not asked	14%
I followed up with my local FSA and NRCS/SWCD offices to ask whether or not my farm is eligible to host a CREP wetland (n=19)	16%	Not asked	Not asked	Not asked
I have discussed benefits of CREP wetlands and other in-field and edge-of-field strategies to reduce nitrate losses with my landowners/tenants (n=19)	16%	Not asked	Not asked	Not asked
I will coordinate follow-up educational sessions for farmer-clients to learn more about CREP wetlands, cover crops, and other nitrate-reducing management strategies (n=19)	16%	Not asked	Not asked	Not asked
Installed waterways, buffers and/or terraces (n=27)	Not asked	68%	44%	Not asked
I did not make any changes	14%	16%	18%	18%

<sup>\*</sup>These are the number of possible respondents for each question for 2011 field days. Those without a smaller number after the question were asked for all the field days.

## The final three questions were only asked on the follow-up questionnaire:

Do you think, in general, we are moving toward increased or decreased implementation of soil conservation practices? (check best answer)

78% INCREASED

22% DECREASED

Educating youth on the value of our natural resources and on the importance of improving soil and water quality in Iowa is a worthwhile investment of federal and state dollars.

93% I AGREE

7% I DISAGREE

Does the environment receive the right amount of emphasis from government and officials in your community? (CHECK ONE ANSWER)

- 36% Not enough emphasis is placed on environmental protection
- 50% Environmental protection receives about the right amount of emphasis
- 13% Too much emphasis is placed on environmental protection

## Summary of Comment Cards (filled out by attendees at the field day)

Which statement best des	scribes you?
Farmer	61%
Landowner	33%
Government employee	20%
Student	3%
Other	14%
Individuals could choose n	nore than one category.

How did you hear abou	ut the field day?
Neighbor	12%
ISU Extension Staff	23%
DNR/NRCS Staff	25%
Website	7%
Radio	10%
Newspaper	16%
IDALS staff	1%
Mailing	4%
Other	4%

#### INDIVIDUAL FIELD DAYS

## March 10: Iowa Learning Farms/Practical Farmers of Iowa Cover Crop Workshop Clay County Regional Events Center, Spencer, n=20

On a scale of 1 to 5, please rate the following (circle the number):

	Excellent	Good	Average	Fair	Poor
Overall quality of workshop	7	6	2	3	2
Effectiveness of Tom Kaspar's presentation about cover crop management issues	6	6	4	3	1
Effectiveness of John Sawyer's presentation about corn nitrogen needs following winter rye cover crops	8	5	4	2	1
Effectiveness of Mark Hanna's presentation about planting into a winter rye cover crop	7	6	3	2	2
Quality of information exchanged during presentations and discussion	6	7	2	2	3

Please describe at least one way you will integrate what you learned from this workshop into your farming operation and management choices (Place "X" in front of all that apply):

- 10 ... I am considering use of fall-seeded rye or other cover crop on some of my acres in fall 2011 (or more acres, if you have used cover crops previously)
- 2 .... (Renters) I have discussed (or plan to discuss) benefits and challenges of including fall-seeded cover crops as part of my crop rotation with my landowners
- 3.... I am networking conservation ideas with other farmers
- 1.... I am considering purchase of a grain drill or other seeding equipment, joint purchase of seeding equipment with neighbors, leasing equipment from a local ag supplier or co-op, or contracting for aerial seeding of fall 2011 cover crops
- 7....I do not plan to make any changes in my current management practices

What was the most important thing you learned from the March 10 ILF/PFI cover crop workshop in Spencer?

- It is not easy and it is costly to right
- With the attitude towards cover crops (meeting speakers) why even consider cover crops. They had no positive things to make us consider cover crops. Too bad.
- Rye cover crop will reduce next year's corn yield by 6 bu per acre while costing \$20 per acre aerial seeding charge and \$10 per acre seed
- No yield advantage on cover crops, but can improve organic matter
- Kill cover crop at least 14 days before planting corn

- Unfortunately, don't plant cover crops!
- Been thinking for years this needs to be in practice
- Planting corn into rye is hard to justify
- Don't use rye before corn!
- Why would I try it?
- Cover crops are 'not' economically feasible to my operation
- Needs further research
- It is good when farmers are considering cover crops. They can't keep plowing up the fields before winter and expect to keep top soil
- You can't expect a top yield in corn if it is following a cover crop of rye. You can possibly lose a lot of bushels. I would prefer to conserve my soil with terraces.

## March 18: Northwest Iowa No-Till & Strip-Till Conference Le Mars Convention Center, Le Mars, n=63

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of workshop	34	26	2	-	1
Effectiveness of farmer Tom Oswald's presentation about strip-till and no-till	36	25	2	-	-
Effectiveness of morning farmer panel discussing short-term experiences with no-till crop management	21	30	10	1	1
Effectiveness of afternoon farmer panel discussing long- term experiences with no-till crop management	23	20	8	1	1
Effectiveness of ISU Extension Field Agronomist Joel DeJong's presentation about nitrogen management	38	22	2	-	-
Quality of information exchanged during presentations and discussion	29	30	2	-	1

Please describe at least one way you will integrate what you learned from the March 18 conference into your farming operation and management choices (Place "X" in front of all that apply):

- 31 ... I am considering use of no-till or strip-till on some of my acres in 2011 or 2012 (or more acres, if you have used no-till or strip-till previously)
- 6..... (Renters) I have discussed (or plan to discuss) benefits and challenges of no-till or strip-till management with my landowners
- 15 ... I am networking conservation ideas with other farmers

- 4 ..... I am considering purchase of a different planter to plant no-till
- 14 ... I am considering modifying my existing planter with trash whippers, coulters, and/or different closing wheel attachments to plant no-till
- 8 ..... I am considering purchase of strip-till equipment, joint purchase of strip-till equipment with neighbors, or contracting with a local custom strip-till provider
- 13 ... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the March 18 Northwest Iowa No-Till & Strip-Till Conference in Le Mars?

- That what I'm already doing is right, I'm already no-tilling
- That no-till is feasible in NW Iowa
- The effectiveness of the nitrogen stabilizers. However, more care should be taken in selecting the farmers on the panel. Their experience was primitive and what they said was illogical and false. Waste of my time. Maybe you should have put 'novice' or 'beginning' strip-till/no-till conference. I've been doing this stuff for 15 years already.
- First no-till meeting I ever attended. Extremely impressed and can't wait till next year.
- Residue is not a good indicator of soil health. Need to do more study of micro health of soil and be biologically alive if you have soil bugs it will break down residue and turn it into organic matter.
- I am a crop consultant and would encourage more farmers to go no-till
- 6,600 more people in the world to feed every hour
- You can no-till with a variety of equipment, you just need to manage all phases
- I like the DVD you gave out with Mark Hanna setting planter. Doing one in the field might be a consideration
- Dialog during breaks- the speakers sparked ideas and further dialog, networking improved these ideas
- Different ways work for different farmers
- I might need to fine tune my planter depth settings
- The many different applicators used to apply NH3
- Should look for more experienced panel members
- I was not aware of Nitrogen burn from shallow placed NH3 in strip-till
- No-tilling corn on hog manure applied ground
- Just try to no-till and there are plenty of mentors out there
- There is NO single method that works and the learning curve isn't easy
- Not to set trash wipers too deep
- The difficulty some persons were experiencing with no-till and strip-till Why so different?
- Improved the soil, increase organic matter

## March 24: Iowa Learning Farms/Practical Farmers of Iowa Cover Crop Workshop Pizza Ranch Restaurant, Rock Valley, n=8

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of workshop	3	4	1	-	-
Effectiveness of Sarah Carlson's presentation about cover crops	3	4	1	-	-
Effectiveness of farmer Nathan Anderson's presentation about his experiences with cover crops	3	5	-	-	-
Effectiveness of Jeremy Singer's presentation about cover crop management considerations	2	5	1	-	-
Quality of information exchanged during presentations and discussion	3	5	-	-	-

Please describe at least one way you will integrate what you learned from this workshop into your farming operation and management choices (Place "X" in front of all that apply):

- 7 ..... I am considering use of fall-seeded rye or other cover crop on some of my acres in fall 2011 (or more acres, if you have used cover crops previously)
- 1 ..... (Renters) I have discussed (or plan to discuss) benefits and challenges of including fall-seeded cover crops as part of my crop rotation with my landowners
- 2 ..... I am networking conservation ideas with other farmers
- 4..... I am considering purchase of a grain drill or other seeding equipment, joint purchase of seeding equipment with neighbors, leasing equipment from a local ag supplier or co-op, or contracting for aerial seeding of fall 2011 cover crops
- 0 ..... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the March 24 cover crop workshop in Rock Valley?

- Cover crops are expensive to plant but given the proper management they can add profit to my operation. I like the idea of using a cover crop to protect my most important asset, my soil. I think it is a challenge to get a cover crop established after a full season crop, but after corn silage I think it is a good fit
- Using cover crops on highly erodible acres
- Seed 2 bu oats after chopping silage
- The amount of nutrient uptake on tie up that rye can do
- Maybe it was what cover crop to use winter hard

## April 5: Iowa Learning Farms Strip-Tillage/No-Till Workshop Kolby's Dine & Stein Restaurant, New Hampton, n=15

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of workshop	8	7	-	-	-
Effectiveness of farmer panelists (Jon Gisleson, Collin Jensen, Randy Norby) presentation about strip-tillage/no-till management on their farms	9	6	-	-	-
Effectiveness of workshop informal discussions concerning strip-tillage/no-till crop management	7	6	2	-	-
Quality of information exchanged during presentations and discussion	7	8	-	-	-

Please describe at least one way you will integrate what you learned from the April 5 workshop into your farming operation and management choices (Place "X" in front of all that apply):

- 8 .... I am considering use of strip-tillage on some of my acres in fall 2011 or spring 2012 (or more acres, if you have used strip-tillage previously)
- 1 .... (Renters) I have discussed (or plan to discuss) benefits and challenges of strip-tillage or no-till management with my landowners
- 2 .... I will discuss strip-tillage or no-till crop management with my clients
- 4 .... I am networking conservation ideas with other farmers
- 4 .... I am considering purchase of a different planter to plant no-till
- 1 .... I am considering modifying my existing planter with residue managers, coulters, and/or different closing wheel attachments to plant no-till
- 5 .... I am considering purchase of strip-tillage equipment, joint purchase of strip-tillage equipment with neighbors, or contracting with a local custom strip-tillage provider
- 1 .... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the April 5 workshop in New Hampton?

- Basic technique basic starting points, some of us older guys can't hear too well louder speakers would be great
- The management techniques to make strip tillage work for the farm operators
- The effectiveness of strip-till. Listening to how others equip their planters for strip-till and how they perform the strip-till strips (make them). It would have been helpful for someone to draw together where the strip-till equipment can be purchased
- Just went to learn more about it pros and cons
- Want to try cover crops, every field is different
- I enjoyed listening to the farmer panelists. What they do, what they did that worked and what didn't work
- That we need to get all the land tiled that we farm, so this could be a possibility! Saves time and money and the fellows that have and are doing it, believe in what they are doing
- I have just started strip-tilling fall 2010 and want more information
- Yields can be maintained with less tillage, a field visit at planting time or after crop emergence would have been useful, also at the workshop some slides showing more of the equipment and fields would have been good
- Knowing I have a local network of strip-tillers I can contact with questions
- No single thing, just interaction with other strip-tillers

## April 18: Iowa Learning Farm Open House Strip-Till Field Day Arlo Van Diest Farm, Webster City, n=7

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day open house	4	1	2	ı	1
Effectiveness of farmer Arlo Van Diest's presentation about strip-till	4	2	1	-	
Effectiveness of morning open house informal discussions concerning strip-till crop management	2	3	1	1	1
Quality of information exchanged during presentations and discussion	2	3	2	-	-

Please describe at least one way you will integrate what you learned from the April 18 field day into your farming operation and management choices (Place "X" in front of all that apply):

- 5 .... I am considering use of strip-till on some of my acres in 2011 or 2012 (or more acres, if you have used no-till or strip-till previously)
- 1 .... (Renters) I have discussed (or plan to discuss) benefits and challenges of strip-till management with my landowners
- 1 .... I will discuss strip-till crop management with my clients
- 2 .... I am networking conservation ideas with other farmers
- 0 .... I am considering purchase of a different planter to plant no-till
- 2 .... I am considering modifying my existing planter with trash whippers, coulters, and/or different closing wheel attachments to plant no-till
- 3 .... I am considering purchase of strip-till equipment, joint purchase of strip-till equipment with neighbors, or contracting with a local custom strip-till provider
- 0 .... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the April 18 Iowa Learning Farms/Practical Farmers of Iowa cover crop field day?

- I have attended other strip till demonstrations 1) the way the soil tilth changes with strip till, 2) fertilizer spread broadcast rather than in furrows, 3) corn on corn plant in row spacings, corn on beans plant on bean rows
- The soil texture in the strip is so mellow and stays that way
- It works
- There were many good thoughts and ideas

## June 1: Iowa Learning Farms/Practical Farmers of Iowa Cover Crop Field Day Rob Stout's Farm, West Chester, n=10

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day	3	5	1	-	
Effectiveness of farmer Rob Stout & George Schaefer discussion about cover crops in the field	3	7	-	-	-
Effectiveness of the Cover Crop Working Group scientists' presentations on cover crops	3	6	1	-	-
Quality of information exchanged during presentations and discussion	4	6	-	-	-

Please describe at least one way you will integrate what you learned from the June 1 Field Day into your farming operation and management choices (Place "X" in front of all that apply):

- 8 .... I am considering use of fall-seeded rye or other cover crop on some (or more) of my acres in fall 2011.
- 1 .... (Renters) I will discuss positives and negatives of including fall-seeded cover crops as part of my crop rotation with my landowners.
- 4.... I am networking conservation ideas with other farmers.
- 4 .... I am considering purchase of a grain drill or other seeding equipment, joint purchase of seeding equipment with neighbors, leasing equipment from a local ag supplier or co-op, or contracting for aerial seeding of fall 2011 cover crops.
- 0 .... I do not plan to make any changes in my current management practices.

Conservation Station	Strongly Agree	Agree	Disagree	Strongly Disagree	Didn't See
Rainfall Simulator effectively demonstrated connection between residue, tillage and soil erosion.	4	6	-	-	1
Educators were knowledgeable and concerned that you understood the material.	5	5	-	-	1

What was the most important thing you learned from the June 1 Iowa Learning Farms/Practical Farmers of Iowa sponsored cover crop field day?

- Aerial seeding looked good
- As a new member I found the time very worthwhile and educating. I would have like more time hearing from the farmers pros and cons with their soil possible phone numbers to be able to talk with them later. Amazed that there is no open discussion of the danger GMO places on all farmers who wish not to be GMO. No open discussion on the Monsanto Problem in Iowa but of course Monsanto gives money to Iowa State are we being bought to not raise the questions?
- The research that has been done on cover crops
- Verify the cost difference between aerial seeding and no-till seeding. To adopt practices: a larger farm operation so I could afford enough employees to make machinery and time challenges affordable. Our small, odd shaped fields limit aerial seeding opportunities.

## June 14: Iowa Learning Farm Open House Strip-Till Field Day Arlo Van Diest Farm, Webster City, n=14

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day open house	6	6	1	-	-
Effectiveness of farmer Arlo Van Diest's presentation about strip-till	8	3	1	-	-
Effectiveness of open house informal discussions concerning strip-till crop management	6	4	-	1	1
Quality of information exchanged during presentations and discussion	4	5	1	1	1

Did you attend the field day on the Arlo Van Diest farm in April?

4....Yes 9....No

Please describe at least one way you will integrate what you learned from the Van Diest June 14 field day into your farming operation and management choices (Place "X" in front of all that apply):

- 7 .... I am considering use of strip-till on some of my acres in 2011 or 2012 (or more acres, if you have used no-till or strip-till previously)
- 1 .... (Renters) I have discussed (or plan to discuss) benefits and challenges of strip-till management with my landowners
- 0 .... I will discuss strip-till crop management with my clients
- 5 .... I am networking conservation ideas with other farmers

- 0 .... I am considering purchase of a different planter to plant no-till
- 2 .... I am considering modifying my existing planter with trash whippers, coulters, and/or different closing wheel attachments to plant no-till
- 4 .... I am considering purchase of strip-till equipment, joint purchase of strip-till equipment with neighbors, or contracting with a local custom strip-till provider
- 1 .... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the June 14 field day at the Arlo Van Diest farm?

- Strips can be made in fall or spring.
- I am a landowner and love discussing it with my tenant. Thank you.
- Uniformity of corn, we are tiling most of our farms this fall manure management this fall
- Visiting with farmers that have implemented strip tillage
- Corn on corn, residue loads effectively managed
- Each soil type lends itself to different spring applications
- Corn on corn strip till is not out of the question

## June 17: Iowa Learning Farms/Practical Farmers of Iowa & ISU Extension Strip-Till and Cover Crop Management Field Day, Jeff Joyce Farm, Ruthven, n=16

On a scale of 1 to 5, please rate the following (circle the number):

	Excellent	Good	Average	Fair	Poor
Overall quality of field day open house	9	6	-	-	1
Effectiveness of farmer Jeff Joyce's presentation about winter rye cover crops and strip-till	8	4	3	-	1
Effectiveness of presentation about cover crop management	4	10	1	-	1
Effectiveness of Mark Hanna's farm energy presentation (fuel savings with reduced tillage depth, equipment maintenance, lowered throttle)	8	5	2	-	1
Quality of information exchanged during presentations and discussion	11	3	1	-	1

Please describe at least one way you will integrate what you learned from the June 17 field day into your farming operation and management choices (Place "X" in front of all that apply):

- 5 .... I am considering use of a cereal grain cover crop on some of my acres in fall 2011
- 4 .... I have discussed benefits and challenges of cover crops with my landowners/tenants

- 3 .... I am networking conservation ideas with other farmers
- 6.... I am considering use of strip-tillage on some of my acres in fall 2011 or spring 2012
- 1 .... I am considering modifying my existing planter with residue managers, coulters, and/or different closing wheel attachments to plant no-till
- 2 .... I am considering purchase of strip-till equipment, joint purchase of strip-till equipment with neighbors, or contracting with a local custom strip-till provider
- 3 .... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the June 17 field day at the Jeff Joyce farm?

- That the cover crop help to be used for nutrient and erosion control
- The extra expense planting and destroying the cover crop is prohibitive as far as I'm concerned, if it reduces the following corn yield it will be very unpopular
- Hearing Jeff tell what he did, when he did and how he did it
- The cover crop releases N as it breaks down slowly
- Cover crop seems to work well but some of the yield data for the state leaves questions
- Hopefully we are going to start doing more micromanaging of our resources, put more farmers in the mix and realize one farm and one farmer per township may not be the ultimate goal of agriculture!
- Killing the rye in the spring
- The farm energy presentation
- Time out in field
- Cover crops don't fit my farming area
- The value of a cover crop

What could have been done more effectively in planning and implementing the June 17 field day?

- Sent the mailers out earlier, I got mine three days before
- Nothing, I enjoyed the presentation and the lunch
- Need better sound system
- As a strip-till/no-till landowner my tenant and I found out about the field day shortly before on the radio
- Pictures of rye before killing and early spring pictures
- Sound very poor in building
- Good turnout, well attended, very well done

## June 22: Iowa Learning Farms Strip-Till Field Day Doug Nolte's ILF Demonstration Site, West Liberty, n=10

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day open house	3	6	1	-	
Effectiveness of farmer Doug Nolte presentation about striptill	2	5	2	1	
Effectiveness of discussions concerning strip-till crop management	2	1	7	-	-
Quality of information exchanged during the presentation on energy by Mark Hanna	1	4	4	-	-

Please describe at least one way you will integrate what you learned from the June 22 field day into your farming operation and management choices (Place "X" in front of all that apply):

- 3 .... I am considering use of strip-till on some of my acres in 2011 or 2012 (or more acres, if you have used no-till or strip-till previously)
- 2 .... (Renters) I have discussed (or plan to discuss) benefits and challenges of strip-till management with my landowners
- 7 .... I will discuss strip-till crop management with my clients
- 4 .... I am networking conservation ideas with other farmers
- 1 .... I am considering purchase of a different planter to plant no-till
- 0 .... I am considering modifying my existing planter with residue managers, coulters, and/or different closing wheel attachments to plant no-till
- 1 .... I am considering purchase of strip-till equipment, joint purchase of strip-till equipment with neighbors, or contracting with a local custom strip-till provider
- 0 .... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the June 22 field day at the Doug Nolte farm?

- Actual amounts of soil erosion that occurs during rain, demonstration was very insightful
- Kind of disorganized on the field site, don't remember Mark Hanna's presentation
- Learned a few management ideas
- I would have liked more information about economics of the different management alternatives demonstrated on this field day
- Crops looked good, did not see much difference between strip-till and no-till. We presently till most
  of our ground

### June 23: Iowa Learning Farms Dallas County CREP Wetland Tour, n=4

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of bus tour	1	3	-	-	1
Effectiveness of Shawn Richmond and Matt Lechtenberg's presentation about CREP wetlands	1	1	2	-	-
Effectiveness of Laura Christianson's presentation about denitrifying bioreactors and other nitrate-reducing strategies	1	3	-	-	-
Quality of information exchanged during presentations and discussion	1	3	-	-	-

Please describe at least one way you will integrate what you learned from the June 23 CREP wetland tour into your farming operation or into your discussions with farmer-clients (Place "X" in front of all that apply):

- $0 \dots I$  am following up with my local FSA and NRCS/SWCD offices to ask whether or not my farm is eligible to host a CREP wetland
- 1 .... I have discussed (or plan to discuss) benefits of CREP wetlands and other in-field and edge-of-field strategies to reduce nitrate losses with my landowners, tenants or neighbors
- 2 .... I will coordinate follow-up educational sessions for farmer-clients to learn more about CREP wetlands, cover crops and other nitrate-reducing management strategies
- 0 .... I will use fall-seeded cereal grain cover crops on part of my farm, or will promote their use with my farmer-clients
- 0 .... I do not plan to make any changes in my current management practices

What are some of the benefits of CREP wetlands (select all that apply)?

- 3 .... Improve water quality in the local watershed and downstream
- 3 .... Remove some nitrates and pesticides from tile-drained waters
- 2 .... Provide wildlife habitat

What was the most important thing you learned from the June 23 Dallas County CREP wetland tour?

- Putting names to faces
- That there is so much more to be done to get farmers to get involved
- The large amount of water filtering that occurs
- Good things are happening!

What could have been done more effectively?

- It would be helpful to see a projected pool area map showing water depth ratios for both sites. Also nice to have walked proposed new structure site. Any water sampling data from the existing, established site? Also, educational to have seen a bio-reactor in place, working and water sampling data
- Hard to hear what was being said
- I would have liked more specific info on actually planting wetland ground

#### June 28: Iowa Learning Farms Kossuth County CREP Wetland Tour, n=3

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of bus tour	1	2	-	-	-
Effectiveness of Shawn Richmond and Matt Lechtenberg's presentation about CREP wetlands	3	-	-	-	-
Quality of information exchanged during presentations and discussion	2	1	-	-	-

Please describe at least one way you will integrate what you learned from the June 28 CREP wetland tour into your farming operation, or into your discussions with farmer-clients (Place "X" in front of all that apply):

- $0\,...I$  am following up with my local FSA and NRCS/SWCD offices to ask whether or not my farm is eligible to host a CREP wetland
- 3 .... I have discussed (or plan to discuss) benefits of CREP wetlands and other in-field and edge-of-field strategies to reduce nitrate losses with my landowners, tenants or neighbors
- $1 \ldots I \ will \ coordinate \ follow-up \ educational \ sessions \ for \ farmer-clients \ to \ learn \ more \ about \ CREP \ wetlands, cover \ crops \ and \ other \ nitrate-reducing \ management \ strategies$
- 0 .... I will use fall-seeded cereal grain cover crops on part of my farm, or will promote their use with my farmer-clients
- 1 .... I do not plan to make any changes in my current management practices

What are some of the benefits of CREP wetlands (select all that apply)?

- 3 .... Improve water quality in the local watershed and downstream
- 3 .... Remove some nitrates and pesticides from tile-drained waters
- 3 .... Provide wildlife habitat

What was the most important thing you learned from the June 28 CREP wetland tour?

- To see how they have been implemented locally
- The benefits of nitrate reduction awesome and drainage districts should support these structures. We should have more of these and spend less money on dredging drainage ditches.

What could have been done more effectively in planning and implementing the tour?

- Make continuing ed credits available, advertise more so more people attend? Invite farm groups in the county too? Corn, pork, beef producers, etc, Farm Bureau
- Nothing

#### July 7: Iowa Learning Farms Silver Lake Watershed Field Day, Lake Park, n=11

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day open house	6	4	1	-	-
Effectiveness of farmer Tom Wagner's presentation about strip-till	6	4	1	-	-
Quality of information exchanged during presentations and discussion	4	7	-	-	-

Please describe how you will integrate what you learned into your farming operation and/or land management choices (Place "X" in front of all that apply):

- 3 .... I am considering use of strip-till on some of my acres in 2011 or 2012 (or more acres, if you have used no-till or strip-till previously)
- 2 .... (Renters) I have discussed (or plan to discuss) benefits and challenges of strip-till management with my landowners
- 1 .... I will discuss strip-till crop management with my clients
- 4 .... I am networking conservation ideas with other farmers/watershed residents
- 0 .... I am considering purchase of a different planter to plant no-till
- 3....I do not plan to make any changes in my current management practices

Conservation Station	Strongly Agree	Agree	Disagree	Strongly Disagree	Didn't See
Rainfall Simulator effectively demonstrated connection between residue, tillage and soil erosion.	8	3	-	-	-
Learning Lab display was understandable and engaging.	6	5	-	-	-
Educators were knowledgeable and concerned that you understood the material.	6	5	-	-	-

What was the most important thing you learned from the July 7 Silver Lake Watershed field day?

- The need to continuously take care of our soil and water
- How to decrease run off from city property
- Listening to practices used by an actual farmer to cut back nutrient rates and promote soil conservation. Promotion and funding for Basal stalk/guided imagery testing was interesting as a new N management tool

July 13: Iowa Learning Farms No-Till/Cover Crop Field Day Craig and Lee Embretson Farm, Elkader, n=11

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day	3	8	-	-	
Effectiveness of farmers Craig & Lee Embretson's presentation about no-till crop management	2	8	-	-	-
Effectiveness of Tom Kaspar's presentation and discussion about cover crop management	5	5	1	-	-
Effectiveness of Laura Christianson's presentation about nitrate removal strategies	2	6	3	-	-
Quality of information exchanged during presentations and discussion	3	8	-	-	-

Please describe at least one way you will integrate what you learned from the July 13 field day into your farming operation and management choices (Place "X" in front of all that apply):

- 6....I am considering use of no-till on some of my acres in 2012 (or more acres, if you have used no-till previously)
- 1 .... (Renters) I have discussed (or plan to discuss) benefits and challenges of no-till management with my landowners
- 4 .... I will discuss no-till crop management with my clients
- 3 .... I am networking conservation ideas with other farmers
- 1....I am considering purchase of a different planter to plant no-till
- 1 .... I am considering modifying my existing planter with residue managers, coulters, and/or different closing wheel attachments to plant no-till
- 7 .... I am considering addition of a cereal grain cover crop to my crop rotation
- 1 .... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the July 13 field day at the Embretson farm?

- They prove no-till works, twenty years of doing it, that's wonderful! We've been no-tilling beans and corn on bean ground, this year we went 100% no-till on all our crop ground (310 acres). Thank you for the field day, everyone did a good job of covering their topics, etc.
- Cover crop concept
- The recommendation to use winter rye before soybeans and oats before corn
- I learned that I was already doing many of the things for conservation that the "experts" were talking about
- Hairy vetch may be an important cover crop that is winter hardy and can add some nitrogen value
- I got some confidence to try no-till corn on corn. I also got some ideas from another farmer about no-tilling into sod.

## July 19: Iowa Learning Farms "Conservation Conversations on the Prairie" gathering Harold Whipple farm, Lacona, n=22

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of Whipple prairie gathering	11	9	-	-	1
Effectiveness of prairie tour	8	9	3	1	-
Quality of information exchanged during discussion	10	6	3	1	_

Please describe how you will integrate what you learned into your farming operation and/or land management choices (Place "X" in front of all that apply):

- 14.... I plan to attend future local watershed meetings and events.
- 16.... I will discuss conservation and water quality improvement ideas with other farmers and land owners
- 7 ...... I am considering establishing (or improving existing) prairie land on some of my acres
- 9 ...... I plan to work cooperatively with neighboring farmers and landowners to make best use of conservation structures and prairies within our local watershed
- 2 ...... I do not plan to make any changes in my current behavior or management practices

Conservation Station	Strongly Agree	Agree	Disagree	Strongly Disagree	Didn't See
Rainfall Simulator effectively demonstrated connection between residue, tillage and soil erosion.	12	5	-	-	4
Learning Lab display was understandable and engaging.	7	9	1	-	4
Educators were knowledgeable and concerned that you understood the material.	9	8	-	-	4

What was the most important thing you learned from the July 19 Iowa Learning Farms-sponsored Conservation Conversations at Harold Whipple's prairie?

- Multiple habitats for wildlife diversity
- That many others are very concerned about rates of soil erosion and the failure of voluntary programs
- There are some exceptionally dedicated volunteers, knowledgeable on conservation, who can be relied upon to further the conservation cause
- Variety of opinions discussed
- Involvement and dedication of "conservation partnership"
- Reaffirmed- private prairie development with help from appropriate organizations create beautiful conservation projects
- Had good discussions with other commissioners about future redirection possibilities for SWCDs
- That there are a lot of people interested in conservation issues!
- Wise land use
- Some of the most outspoken USDA employees didn't know what they were talking about
- I was there as a professional conservationist but I liked the mixing of ideas during the after dinner session. Helps everyone better their property.
- That the learning lab display is out there to use at special events

• I felt that my time was not valued in this field day. There was a lot of standing around and as I was invited to something called "Conservation Conversations on the Prairie" I was disappointed when we got to the discussion part and it was so narrowly focused to only include water quality. I assumed we would be discussing conservation in a more broad way- particularly prairie conservation. I was pleased with the Whipples' effort- work on their farm area initiative. It would be wonderful if more landowners took the time to look at things beyond their farm boundaries. Their neighbors/friends were also wonderful. I simply feel like ILF took over this field day and made it theirs instead of assisting the Whipples with their effort/intent.

## July 20: Iowa Learning Farms Field Day Smeltzer Trust Farm, Otho, n=11

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day	4	4	2	1	-
Effectiveness of farmer presentation about strip-till and cover crops	5	3	1	1	-
Effectiveness of strip-till crop management demonstration	4	4	-	3	-
Effectiveness of Laura Christianson's presentation about bioreactors & nitrate removal	2	5	3	-	1
Quality of information exchanged during presentations and discussion	3	5	2	-	1

Please describe at least one way you will integrate what you learned from July 20 field day into your farming operation and management choices (Place "X" in front of all that apply):

- 6....I am considering use of fall-seeded rye or other cover crop on some (or more) of my acres in fall 2011.
- 0 .... (Renters) I will discuss positives and negatives of including fall-seeded cover crops as part of my crop rotation with my landowners.
- 5 .... I am considering use of strip-till on some of my acres in 2011 or 2012 (or more acres, if you have used no-till or strip-till previously)
- 0 .... (Renters) I have discussed (or plan to discuss) benefits and challenges of strip-till management with my landowners
- 2 .... I will discuss strip-till crop management with my clients
- 4.... I am networking conservation ideas with other farmers
- 1 .... I am considering purchase of a different planter to plant no-till
- 3 .... I am considering purchase of strip-till equipment, joint purchase of strip-till equipment with

neighbors, or contracting with a local custom strip-till provider

0 .... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the July 20 field day at the Smeltzer Trust Farm?

- Making strip till work for corn on corn
- Cover crop ideas. No till works here, so not interested in strip till
- Streambank stabilization options. Actually seeing a bioreactor installed
- I was highly disappointed that there was so little time spent on strip-till/no-till at this strip-till/no-till field day

## July 27: Iowa Learning Farms Field Day ISU Neely-Kinyon Research Farm, Adair, n=10

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day	4	5	1	-	-
Effectiveness of farmer Randy Caviness' presentation about no-till crop management	2	6	1	-	1
Effectiveness of Jeremy Singer's presentation and discussion about cover crop management	3	5	1	-	1
Effectiveness of Matt Helmers' presentation about incorporating perennial vegetation strips into row crop acres	5	4	-	1	ı
Effectiveness of Emily Heaton's presentation about Miscanthus perennial crops	5	3	1	-	-
Quality of information exchanged during presentations and discussion	5	4	-	-	-

Please describe at least one way you will integrate what you learned from the July 27 field day into your farming operation and management choices (Place "X" in front of all that apply):

- 3 .... I am considering use of no-till on some of my acres in 2012 (or more acres, if you have used no-till previously)
- 1 .... (Renters) I have discussed (or plan to discuss) benefits and challenges of no-till management with my landowners
- 6.... I am networking conservation ideas with other farmers
- 2 .... I am considering purchase of a different planter to plant no-till. or modifying my existing planter with residue managers, coulters, and/or different closing wheel attachments to plant no-till
- 3....I am considering addition of a cereal grain cover crop to my crop rotation

- 3 .... I am interested in learning more about Miscanthus management practices
- 1 .... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the July 27 no-till, cover crop and miscanthus crop management field day at the ISU Neely-Kinyon Research & Demonstration farm?

- Propagation and research of Miscanthus. Also the opportunity to view the low disturbance NH3
  applicator
- Growing interest in Miscanthus grass
- We need to get out of the corn-soybean flip-flop. Tillage should be a thing of the past on our highly erodible land.

## August 24: Iowa Learning Farms Nashua CREP Wetland Tour, n=16

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of bus tour	10	4	-	1	ı
Effectiveness of IDALS' staff presentation about CREP wetlands	8	6	-	1	-
Effectiveness of Laura Christianson's presentation about denitrifying bioreactors	9	3	2	-	1
Quality of information exchanged during presentations and discussion	7	6	1	-	1

Please describe at least one way you will integrate what you learned from the August 24 CREP wetland tour into your farming operation, or into your discussions with farmer-clients (Place "X" in front of all that apply):

- 1 .... I am following up with my local FSA and NRCS/SWCD offices to ask whether or not my farm is eligible to host a CREP wetland
- 11..I have discussed (or plan to discuss) benefits of CREP wetlands and other in-field and edge-of-field strategies to reduce nitrate losses with my landowners, tenants or neighbors
- 3 .... I will coordinate follow-up educational sessions for farmer-clients to learn more about CREP wetlands, cover crops and other nitrate-reducing management strategies
- 4 .... I do not plan to make any changes in my current management practices

What are some of the benefits of CREP wetlands (select all that apply)?

- 16.... Improve water quality in the local watershed and downstream
- 15.... Remove some nitrates and pesticides from tile-drained waters
- 15.... Provide wildlife habitat

What was the most important thing you learned from the August 24 Nashua CREP wetland tour?

- More information about CREP wetlands. Seeing what has been done in one project. Great tour and information. Thanks.
- Cooperation between adjacent landowners to form shared wetland area
- Cover crop problems with corn planted. Billbug problems
- Value of cover crops- holding soil and nutrients
- Bioreactors need more experimentation and improvement before they would make sense to use. Our land will not accommodate a dam with a pond, but there are other options.
- The loss of nitrate through field tile. The help of bioreactors and wetlands in managing nitrate loss.
- There is no "one answer" cure for farm runoff pollution
- There is <u>much</u> to do to address downstream costs of intensive row-crop agriculture and answers will require sustained education, research, and PR efforts, as well as substantial public financial support!
- An improved understanding of the management of the aquatic vegetation involved in the CREP wetland
- I learned what a wetland is and basically how it works. My farm has a creek running through it and the tiles drain into that and is also very flat land. I learned about the concern of ISU about the complaints of people on the lower Mississippi River.
- Options available, general information. Excellent presentation-Informative. Please do more such programs!
- Controlled drainage.
- The fact that the US government may be mandating lower N losses in coming years.
- Introduction to CREP wetlands. Interesting and beneficial.

## August 25: ILF & ISU Agronomy Strip-Till Field Day Ag Engineering and Agronomy Farm, Boone, n=25

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day	11	13	-	-	-
Effectiveness of Mark Hanna's presentation	12	11	1	-	-
Effectiveness of Matt Darr's presentation	9	10	3	1	-
Effectiveness of Roger Elmore's presentation	10	11	2	-	-
Effectiveness of Allison Robertson's presentation	11	12	-	-	-
Quality of information exchanged during presentations and discussion	10	11	2	-	-

Please describe at least one way you will integrate what you learned from the March 18 conference into your farming operation and management choices (Place "X" in front of all that apply):

- 12.. I am considering use of no-till or strip-till on some of my acres in 2011 or 2012 (or more acres, if you have used no-till or strip-till previously)
- 2 .... (Renters) I have discussed (or plan to discuss) benefits and challenges of no-till or strip-till management with my landowners
- 8 .... I am networking conservation ideas with other farmers
- 0 .... I am considering purchase of a different planter to plant no-till
- 5 .... I am considering modifying my existing planter with trash whippers, coulters, and/or different closing wheel attachments to plant no-till
- 5 .... I am considering purchase of strip-till equipment, joint purchase of strip-till equipment with neighbors, or contracting with a local custom strip-till provider
- 4.... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the August 25 Iowa Learning Farms-sponsored ISU Agronomy Farm Strip-till field day?

- I am a journalist and wrote a story based on Robertson's presentation.
- GPS systems are not as good as the manufacturers let you know.
- The portable toilet had NO hand sanitizer or soap!!
- Enjoyed the field day but was disappointed when Matt Darr said if you don't have precision steering you cannot strip-till. Also Allison Robertson said the best way to control Goss's wilt is to bury all residue. I think these speakers should know the group they are talking to and rethink how they say things. If I wasn't already strip-tilling I don't think I would after hearing them.
- The hands-on operation and results of the different strip-tillage machines.
- Precision Ag isn't good enough yet to use strip-till on contour farming.
- Confirmation that my approach is sound, both environmentally and economically.
  - o Woodchip bioreactor: If aerobic, how do you get de-nitrification?
- Which strip-till machines work better in the fall or spring.
- I know this looks like not much thought applied but it is what I think and I am ready for a repeat anytime ISU is.

## August 30: Iowa Learning Farms No-Till/Cover Crop Field Day Kelly Tobin Farm, New Market, n=12

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day	6	6	-	-	
Effectiveness of farmer Kelly Tobin's presentation about notill & cover crop management	5	6	-	1	-
Effectiveness of Tom Kaspar's presentation and discussion about cover crop management	5	6	-	1	-
Effectiveness of farmer Paul Ackley's presentation about cover crop management	4	4	2	1	-
Effectiveness of Mark Hanna's presentation and discussion about machinery and farm energy	5	5	2	-	-
Quality of information exchanged during presentations and discussion	6	4	1	-	-

Please describe at least one way you will integrate what you learned from the August 30 field day into your farming operation and management choices (Place "X" in front of all that apply):

- 4 .... I am considering use of no-till on some of my acres in 2012 (or more acres, if you have used no-till previously)
- $1 \dots$  (Renters) I have discussed (or plan to discuss) benefits and challenges of no-till management with my landowners
- 3 .... I will discuss no-till crop management with my clients
- 4.... I am networking conservation ideas with other farmers
- 0 .... I am considering purchase of a different planter to plant no-till
- 8....I am considering addition of a cereal grain (or legume) cover crop to my crop rotation
- 0 .... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the August 30 field day at Kelly Tobin's farm?

- Challenges in establishing ground cover in the fall
- Paul Ackley said cover crops save two days of filling gullies in the spring, which equates to <u>cover crops save soil</u>. That alone is a good value of cover crops. Would like to see more said about working with FSA/NRCS at the Co. level to promote cover crops. Some counties have a cost share in place for cover crops. If cover crops were shown to be of value (and they are), then public (farmers

- & others) need to be brought into the program with education, incentives, etc. This could be included in the next farm bill.
- More about no-till. The fact that it reduces yield.

# September 6: Iowa Learning Farms Field Day Neal Smith National Wildlife Refuge, Prairie City, n=8

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of the field day	3	4	1	-	-
Usefulness of the multi-site discussions	5	3	-	-	-
Quality of information exchanged during presentations and discussion	4	3	-	1	-

Please describe at least one way you will integrate what you learned from this field day into your farming operation and management choices (Place "X" in front of all that apply):

- 3 .... I will discuss conservation and water quality improvement ideas with other farmers and land owners
- 3 .... I am considering establishing (or improving existing) prairie land on some of my acres
- 2 .... I plan to work cooperatively with neighboring farmers and landowners to make best use of conservation structures and prairies within our local watershed
- 0 .... I do not plan to make any changes in my current behavior or management practices

Conservation Station	Strongly Agree	Agree	Disagree	Strongly Disagree	Didn't See
Rainfall Simulator effectively demonstrated connection between residue, tillage and soil erosion.	2	2	1	-	3
Learning Lab Display was understandable and engaging.	2	2	1	1	3
Educators were knowledgeable and concerned that you understood the material.	5	1	-	1	1

What was the most important thing you learned from the September 6 Iowa Learning Farms-sponsored Conservation Conversation Neal Smith Wildlife Refuge?

- That each year there is 1.5 tonnes of soil lossed in Iowa! But it is not a fatality.
- Nice Theory. But no help to a real farmer
- Impressed by how a small amount of vegetation can hold so much soil during runoff.
- Sediment delivery was greatly reduced
- Small areas of prairie can make a big difference
- That Neal Smith NWR is cooperating in this important research and the info of this research
- A practical method for conserving soil and putting biodiversity back on the land
- We are already doing no-till and continue to upgrade waterways. Conference was good and interesting and confirmed what we are doing. We didn't really learn anything new in terms of our farming practices. It seemed more geared toward academics.
- I learned about strip-till and enjoyed hearing it from a farmer's perspective.

## September 8: Iowa Learning Farms Field Day Hickory Grove Lake Watershed, Colo, n=7

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day open house	4	3	-	-	-
Effectiveness of farmer Dave Nelson's presentation about strip-till and cover crops	1	6	-	-	-
Effectiveness of Rick Cruse's discussion of erosion issues and soil quality	5	2	-	-	-
Effectiveness of Jim Russell's discussion on keeping cattle out of local streams	1	1	1	3	-
Quality of information exchanged during presentations and discussion	3	2	1	-	-

Please describe how you will integrate what you learned into your farming operation and/or land management choices (Place "X" in front of all that apply):

- 0....I am considering use of strip-till on some of my acres in 2011 or 2012 (or more acres, if you have used no-till or strip-till previously)
- 0 .... I am considering purchase of a different planter to plant no-till
- 1 .... I will discuss conservation and water quality improvement ideas with other farmers, landowners and neighbors
- 1 .... I plan to work cooperatively with neighboring farmers and landowners to make best use of

conservation structures, reduced tillage practices and cover crops within our local watershed.

- 0 .... I plan to work cooperatively with neighboring farmers and landowners to keep cattle from local streams to keep the lake cleaner.
- 2 .... I plan to seek more information concerning conservation practices that can improve water quality in Iowa's lakes
- 0 .... I do not plan to make any changes in my current behavior or management practices

What was the most important thing you learned from the Sept. 8 Hickory Grove Lake watershed field day?

- Well, I learned what strip tillage was, it was very interesting to me!
- I learned that new techniques are necessary for improvement and that the amount of water Saudi Arabia had is almost over, need to import soon.

September 14: Iowa Learning Farms & Competine Creek Watershed In-Field Nitrogen Management Strategies Field Day, Pekin Community High School, n=4

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day	1	3	-	-	-
Effectiveness of Jamie Benning's presentation about using (and interpreting results from) the end-of-season cornstalk nitrate test	1	2	1	-	-
Effectiveness of farmer Rob Stout's presentation about cover crop management	1	2	1	-	-
Effectiveness of Tom Kaspar's presentation and discussion about cover crop management	1	2	1	-	-
Effectiveness of John Sawyer's presentation and discussion about corn nitrogen needs following a winter rye cover crop	1	1	1	-	-
Quality of information exchanged during presentations and discussion	1	1	2	-	-

Please describe at least one way you will integrate what you learned from the September 14 field day into your farming operation and management choices (Place "X" in front of all that apply):

- 1 .... I am considering use of the end-of-season cornstalk nitrate test on some of my corn acres in 2012 (or more acres, if you have used the test previously)
- 0 .... (Renters) I have discussed (or plan to discuss) benefits and challenges of the end-of-season cornstalk nitrate test and cover crop management with my landowners

- 2 .... I will discuss use of cover crops with my farmer and landowner clients
- 1 .... I am networking conservation ideas with other farmers
- 1 .... I am considering addition of a cereal grain (or legume) cover crop to my crop rotation
- 0 .... I am re-assessing my intended per-acre nitrogen fertilizer rate for 2012 corn acres
- 0 .... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the September 14 in-field nitrogen management strategies field day at Pekin High School?

• Cover crop information; primarily next spring killing of plant 2 weeks prior to planning corn.

## September 30: Iowa Learning Farms/Practical Farmers of Iowa Cover Crop Management Field Day, Lyon & Sioux Co. NRCS, Jansma farm, Hull, n=3

*On a scale of 1 to 5, please rate the following (circle the number):* 

	Excellent	Good	Average	Fair	Poor
Overall quality of field day	1	2	-	-	-
Effectiveness of Sarah Carlson's presentation and discussion about cover crop management	1	2	-	-	-
Quality of information exchanged during presentations and discussion	2	1	-	-	-

Please describe at least one way you will integrate what you learned from the September 30 field day into your farming operation and management choices (Place "X" in front of all that apply):

- $0 \dots I$  am considering use of cover crops on some of my acres in 2012 (or more acres, if you have used cover crops previously)
- $0\ldots$  (Renters) I have discussed (or plan to discuss) benefits and challenges of cover crop management with my landowners
- 2 .... I will discuss cover crop management with my clients
- 0 .... I am networking conservation ideas with other farmers
- 1 .... I am considering addition of a cereal grain (or legume) cover crop to my crop rotation
- 0 .... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the September 30 cover crop management field day at the Jansma farm near Hull?

- That more information is needed for varieties/crops that would be effective in NW Iowa
- Just overall strategies in managing residue and all of the effects. It would be nice to have a plot that demonstrates the different cover crop species, that way on a field day you could showcase the benefits/challenges of each species.

October 27: Boone Co. NRCS & Practical Farmers of Iowa/Iowa Learning Farms Cover Crop Management Field Day, Jeremy Gustafson farm, Boone, n=20

On a scale of 1 to 5, please rate the following (circle the number):

	Excellent	Good	Average	Fair	Poor
Overall quality of field day	8	12	-	-	-
Effectiveness of farmer Jeremy Gustafson's presentation about cover crop use on his farm	14	6	-	-	-
Effectiveness of pilot Ralph Storm's presentation about aerial seeding of cover crops	6	11	3	-	-
Effectiveness of Tom Kaspar's presentation about cereal grain and legume cover crop management	5	11	4	-	-
Effectiveness of Jose Pantoja and John Sawyer's presentation about nitrogen fertilization of corn following winter rye cover crops	3	13	3	1	-
Quality of information exchanged during presentations and discussion	7	11	2	-	-

Please describe at least one way you will integrate what you learned from the October 27 field day into your farming operation and management choices (Place "X" in front of all that apply):

- 6.... I am considering use of a cover crop on some of my acres in 2012
- 3 .... I have discussed benefits and challenges of cover crops with my landowners/tenants
- 11.. I am networking conservation ideas with other farmers or my farmer clients
- 2 .... I am considering modifying my existing planter with residue managers, coulters, and/or different closing wheel attachments to plant no-till, or into cover crop residue
- 3 .... I am considering purchase of seeding equipment, joint purchase of seeding equipment with neighbors, or contracting with a local custom cover crop aerial applicator (pilot)
- 3 .... I do not plan to make any changes in my current management practices

What was the most important thing you learned from the October 27 cover crop management field day at the Jeremy Gustafson farm?

- That it works
- That innovative producers are no experimenting with cover crops other than the classics of rye or oats
- Rye does not release the nitrate in the spring. Just holds it.
- When to burn down the cover crop before planting corn.
- That cover crops are a viable option for conserving and helping next year's crop.
- I liked Jeremy's honesty. He wasn't selling anything-just providing his experiences and telling why he does cover crop apps.
- Species that work best for cover crops. Hearing from farmer what works best
- That the N tied up by the cover crop is N that almost always would have been lost.
- Awesome spread of viable seed in aerial application in standing corn.
- It was good to see that the drilled cover crops had pretty good emergence and growth despite the dry weather.
- Aerial application/seeding, timing/rates, etc
- I visited with the Gustafsons several years ago about this concept of less tillage ad cover crops. This field day was an excellent climax to this revolutionary, soil conserving method of crop farming.

What could have been done more effectively in planning and implementing the October 27 field day?

- Fine job all around
- More guidance on how to manage the cover crops based on different scenarios, such as dry soils (especially anticipating for the spring), wet soils, early fall applied manure (ie put seed in slurry), etc
- It was a good field day. Lunch was good also. Hard to hear and understand a couple of speakers.
- You can beat farmers over their heads and say they will still drive the \$300,000 tractor and the \$15,000 disc tiller. I think the only thing to help them is prayer. I'm 85 years and we have no tilled for over 30 years. But the cover crop is interesting.
- It would be cool to have a field day in cooperation with an actual aerial application...
- It was done very well.
- I always think presenters should do a better job of presenting information about corn following a rye cover crop. There seems to be conflicting information presented. Is rye terminated 14 days before planning corn in the tests? Is there a statistically significant yield drag if rye is terminated 14 days before planting?
- To cover organic practices i.e. instead of saying a burn down with Round-Up add "or have to till under cover crops."
- Great day!
- The only things that would have made the field day more exciting would have been demonstrations of the land seeding and aerial seeding.

#### **CLASSROOM EVALUATIONS FROM TEACHERS**

*On a scale of 1 to 5, please rate the following (circle the number):* 

n=67	Excellent	Good	Average	Fair	Poor
Overall quality of ILF Conservation Station or indoor classroom activities	60%	39%	1%		
Effectiveness of water quality and conservation lesson	68%	28%	4%		
Effectiveness of Rainfall Simulator at demonstrating connection between land management choices, soil erosion, and water quality	75%	20%	5%		
Engagement of educators – knowledgeable and concerned that students understood the material	80%	19%	1%		

# of teachers surveyed by grades of students taught			
K-2	12		
3-4	14		
5-6	23		
7-8	6		
9-12	5		

What impact do you think the Conservation Station had on the students?

#### March 29: Creston Elementary schools at Southwestern Community College

- Made them aware of what a watershed is
- My students were able to answer the questions on the back of the paper given to us the next day. I think they will think about the amount of water they are using. Are the videos at a 1<sup>st</sup> or 2<sup>nd</sup> grade level? This was a wonderful field trip. Thank you so much for allowing us to go! The whole school loved the t-shirts. Thank you! MHCS-Creston, IA
- I think it got the students thinking about the water around them and the quality the water is in. I also think the students became aware of all the different uses for water and how the way we live affects water quality
- Helped them to see how what they do affects water that they use and eventually drink again
- I think they understood a little more about how important it is for grass, stalks and other plants to protect our lakes and water sources. This was a wonderful program. My students truly enjoyed learning about watersheds and conservation.

## **April 7: Benton Community Schools**

#### **CS Impact-**

• I think students were greatly impacted. They learned a lot and enjoyed the station.

## Lessons improvement-

More time! I wish we could have had more time with each class.

#### April 11 and 12: Ames High School

#### **CS** Impact-

- I feel the students had a very good introduction into the effects of farming practices on water and soil resources
- Great examples for us to refer back to during future Earth Science lessons
- The students were able to see and experience the surface vs groundwater. The students were able to learn about wetlands from 5 perspectives (5 stations)
- Besides being outside on a perfect day- they do know what a watershed is!

#### Lessons improvement-

- I think the lessons are good but some of the interactions could be improved. For example, I noticed some of the educators asked a lot of yes/no or other dichotomous questions. I would work on trying to ask students extended answer questions, that are more thought provoking and cognitively demanding of students
- Excellent for the time period given. Suggestion: add a prairie to the runoff and sediment model
- The addition of the hands-on aspect and mapping sheet have been excellent! Any time kids are doing and thinking, better than listening and thinking. The videos were used as pre-work: students love the fact that friends and neighbors are in the movie- makes it very relevant for them. If I had to find an improvement... I try to address quality vs quantity of water resources in Iowa. A lot of Learning Farm station was on quality (several posters on rain station, pictures and statements in trailer, discussion of soil erosion w/ residue station and pollutants w/groundwater model). Maybe add a little more in the quantity side-it is discussed but not obvious or directly included in all the stations. Posters and statements about the number of wetland acres, but not much on direct practice = decline of practices or of geologic structures (over pumping w/wells). Again if I had to find an improvement ©
- The majority of my students are hands on learners

## **April 15: Orchard Place School, Des Moines**

- Helped them to realize their actions affect a bigger picture. Visual enhancement aided in impact
- They should have a better understanding of how their actions effect water quality, they should have a better idea of why we conserve. The content was relevant to our current studies.

## **April 19: Clarion-Goldfield Schools**

- They were able to make the students aware of what goes in our water supply. They were able to give them ways to make a difference in a way(s) they are able to achieve!
- Adds to our classroom discussion about erosion, great activities, videos are AWESOME!!, kids
  enjoyed the activity, overall a great, great experience for all
- Awesome presenters, they worked very well together! It increased their awareness of recycling and pollution. They enjoyed the hands-on factor, making the experience a more lasting memory

#### **April 21: Humboldt Schools**

- Students received a true picture of what a watershed is and the importance of water quality
- It really made students think about our impact on the quality of water in our ponds, lakes, streams, and rivers. Awesome visual with the rainfall simulator. Thank you for offering this learning.

## **April 28: North Polk Elementary Schools**

- They are very interested in Science and some are farm kids so I think they can begin to understand the idea of watershed and the no-till farm field
- They loved it
- Hopefully conserve
- Gave them (or reminded them) of ideas to conserve water
- Great info! Visuals were a great way for them to gain understanding
- Opened their eyes to local conservation
- Reminded students of info they already know and taught them some new info
- Got them interested in watersheds. Vey engaging!
- Good exposure/introductory lesson
- We are just starting a unit on landforms in which we learn about the effects of erosion and deposition. The Conservation Station was a great tie-in and will be referred to repeatedly throughout the unit. Nice job of keeping the discussion interactive so students stayed attentive
- Intro new vocab and ideas to younger students
- It was a good introduction to the vocabulary they will hear again in a few years when they study these concepts. (Average for 1st grade, probably much more effective w/older students)
- Introduction for them as kindergarteners
- I think the program increased their awareness and knowledge of soil/water conservation. The message for students was great but if students could be more actively engaged I think the material would be more meaningful.

#### May 4: Moulton-Udell Schools

- I believe it made them all aware of how polluting water in Iowa affects the water all the way down to the Gulf of Mexico
- Raised awareness

### May 5: Audubon Co.

- When we toured the Little Field area after your session, the students seemed to have gained much knowledge and asked good questions during the tour.
- It was extremely educational and the students are still discussing it!

#### May 6: Palo Alto

- I think the activities were very engaging for the students. The presenters did a great job of being enthusiastic and related well to the students!
- Very nice- timing was perfect, we are studying soil in science

## May 6: Edgewood-Colesburg 2nd Grade, Kerns Farm

• They now understand the meaning of a watershed. They are able to visualize the interdependence with a watershed they know.

#### May 11: Clay Co.

#### CS Impact-

• It taught them many key facts.

#### Lessons improvement-

• Find a way to make it interactive for them

## May 17: Pocahontas Co.

### CS Impact-

- It made them think about their choices for land use and what kinds of things effect the environment.
- I liked the watershed simulation, but I am not sure the students quite grasped the idea.

#### Lessons improvement-

- They did an excellent job already.
- Show them real life pictures of grass water ways, shelter belts, terraces, etc.

#### May 19: Muscatine Co.

#### CS Impact-

- Lots- we have been studying water in science and it was a great addition to our unit!
- I think it "sparked" their interest a bit more in observation of environmental health.

#### Lessons improvement-

- All three presenters were great!
- We were short on time. I think the students needed a hands on lesson examining "earth's materials".

### September 8: Dickinson Co. 6th Grade Outdoor Classroom

### 'Lil CS Impact-

• They really enjoyed the session!

#### September 13: O'Brien Co. 6th Grade Outdoor Classroom

#### 'Lil CS Impact-

- Cool activity- I think they liked it. Wish we had more time!
- Will be using the videos along with a science unit on water (& natural resources)- Great stuff!
   Thanks!
- I think you met your learning objective! The students understood.
- I think that it gave them something to think about.
- Impressive. Made students much more aware! They are often clueless on these conservation habits and info.

#### Lessons Improvement-

- Really hit home the fact that water can be polluted in different ways.
- If we had more time, showing how it effects the students directly helps.
- The station is excellent. Wish we had about 5 more minutes.

#### September 16: Borlaug Harvest Fest, Nashua

#### 'Lil CS Impact-

- It gave them an awareness they probably had not had before
- I think the students understand where the runoff goes and how polluted the runoff water is.
- We are studying water filtration and they are making their own systems. This was a great introduction.
- I think the farm kids were really impacted by what they see their parents practicing-tillage effects

#### Lessons Improvement-

• We think that the time frame was not long enough. It would be great to have you come to our school for more information.

#### September 20: Margaret Hogan Outdoor Classroom, Earlville

#### **CS** Impacts-

• Students were very involved and learned much about watersheds. Ellie and John did a fantastic job. Keep up the good work.

#### September 27: Southeastern Community College Environmental Science Class, Keokuk

#### CS Impacts-

Actively engaged them in learning about agricultural impacts on environment.

#### Lesson Improvements-

• Give examples of what farmers are doing to decrease their impact on waterways and water systems i.e. drip irrigation, terracing, etc.

#### October 4: Sibley-Ocheyedan Science Day

CS impacts-

- Reinforced current curriculum
- They were interested
- Students really liked the drawing activity. They also like the visual of the different types of soil and drainage water.
- It was great to see that the students could carry over what they had learned from previous experiences to the Conservation state. Reinforcement and extension of prior knowledge. Some students were able to tell their parents about conservation practices. Thanks for coming!

Other way to integrate ILF material-

• I teach Language Arts/English. I will incorporate this information into a conservation writing project.

#### October 6: Northern Iowa Community College students at Smeltzer Farm Outdoor Classroom

CS impacts-

• Very positive. Most of these students come from an urban background.

### October 6: Knoxville 7th Grade Ecology/Conservation Field Day

Lil CS impacts-

• I asked them and most really enjoyed it!

#### October 11: East Sac 8th Grade Ag Exploratory Class

CS impacts-

• It really reinforced what I've been teaching in class...Excellent.

Other way to integrate ILF material-

• I will use them with future groups...this was the end of my conservation unit.

Please describe at least one way you will integrate the Iowa Learning Farms conservation material in your classroom (Place "X" in front of all that apply):

## (NOTE: several of the teachers at outdoor classrooms taught other subjects and told us they would pass on the materials to the science teacher.)

**73%** I will follow-up the Conservation Station with future discussion of watersheds and teamwork.

**61%** I will use the enclosed worksheets and certificates as a follow-up to the outdoor classroom.

**54%** I will use the videos (Culture of Conservation and Troubled Waters) as a follow-up to the outdoor classroom.

**1%** I do not plan to use the Iowa Learning Farms materials in my classroom.