

IOWA LEARNING FARMS 2015 EVALUATION REPORT

Compiled and submitted by Jacqueline Comito,
Nathan Stevenson, & Julie Whitson

Introduction

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

2015 was a record year for the Iowa Learning Farms (along with sister program Water Rocks!) with 204 events that reached 22,486 people. 2015 saw more program events than any other previous year; the ILF/WR! team participated in 22% more events in 2015 than in 2014. With the addition of the Water Rocks! program, the team has experienced a 63% increase in events in just five years.

The heart of the ILF program remains farmer field days and workshops. Iowa Learning Farms continues to deliver quality programming. Ninety-three percent of our participants in field days and workshops believed that the overall quality of those events was good or excellent.

Targeted mailings and word of mouth among neighbors are the most effective outreach methods the program uses for promoting field day events, drawing 50% of attendees to field days in 2015.

Highlights

- 89% of attendees were **farmers/operators and landowners**.
- Farmers who attended an ILF field day planted **40,257 acres of cover crops in 2015**, 35% of which were new acres of cover crops.
- ILF is reaching **new potential conservationists**. An estimated 38% of attendees have not planted a cover crop.
- 93% of attendees said that the overall quality of the field day was **good or excellent**.
- Farmers who attended an ILF field day **influenced 61% more farmers** than attended the event.
- **Targeted mailings** have increased how people heard of an ILF event by 20% since 2010.



ILF Approach to Evaluation

Evaluation of Iowa Learning Farms outreach events occurs in six stages:

- **Event Evaluations** for every event in which ILF team members participated. 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 field day or workshop in order to gain a better understanding of who they are and why they are there.
- **Planning Cards** filled out by only farmers and landowners at an ILF-sponsored field day or workshop in order to understand their intention to implement conservation practices. Planning cards were a new addition to our evaluation strategy in 2015.
- **Follow-up Evaluations** mailed to participants at ILF-sponsored field days or workshops that happened before October 15. These questionnaires were sent within three weeks following the event. The questions focused 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. The individual field day evaluations are in a separate report.
- **January Evaluations** mailed to only farmers/operators and landowners at all ILF-sponsored field days or workshops. These questionnaires were sent in January 2016 to see if the participants had made the changes they said they were going to make in earlier evaluations and on their planning cards.
- **Teacher Evaluations** of Water Rocks! school activities (these events are co-sponsored by ILF). Questionnaires were handed to the teachers at each outreach event with a return envelope to see how these individuals perceived our youth educational programming. These evaluations are in a separate report.



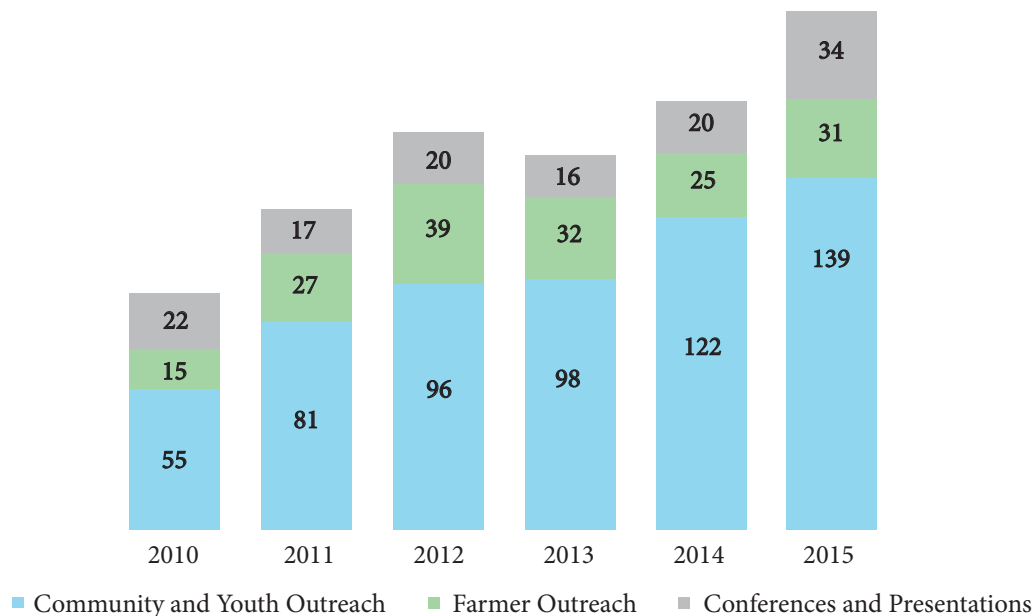
Event Evaluations

Our staff completed Event Evaluation forms for all events, including field days. For detailed information of a specific event, see the quarterly and year-end reports. In 2015, Iowa Learning Farms/Water Rocks! programs had an outstanding year with a total of 204 events. This number represents a 22% increase in events from 2014, which was also a record year for the programs with 167 events. Our goal is to maintain this level in 2016 and continue to reach diverse audiences through a variety of events and activities. We also plan to increase the number of farmer events and presentations.

Month	Number of Events					
	2010	2011	2012	2013	2014	2015
January	1	5	7	3	5	3
February	3	4	4	1	8	13
March	14	8	8	8	11	14
April	3	15	15	15	13	18
May	6	15	21	14	15	24
June	14	19	21	24	26	25
July	22	20	34	27	28	40
August	12	8	19	13	15	20
September	11	21	9	9	16	13
October	6	10	14	12	18	19
November			2	17	12	13
December			1	3		2
Total	92	125	155	146	167	204

Events fall into three categories: community and youth outreach, farmer outreach, and conferences and presentations. In 2015, the majority of events fell into the category of community and youth outreach that includes school visits, youth outdoor classrooms/camps, and state and county fairs.

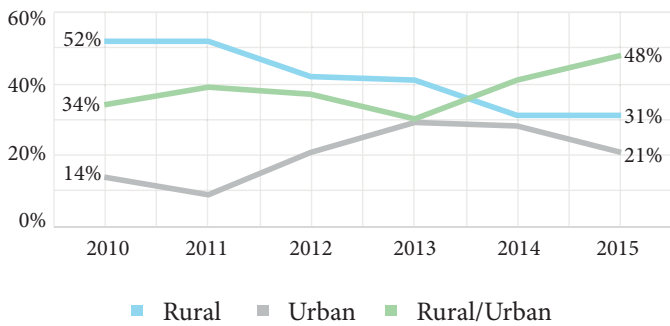
ILF Outreach Events by Type and Year



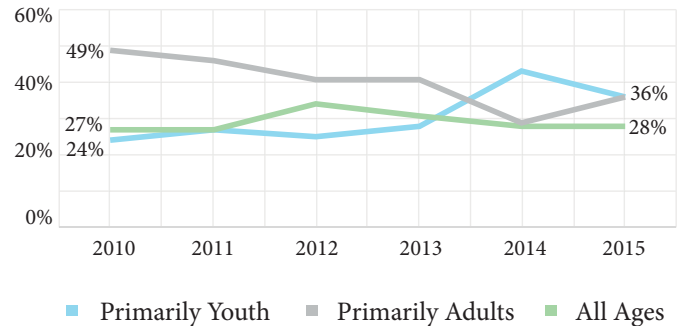
Event Evaluations: Description of Audiences at Outreach Events

Audiences who participate in ILF/WR! outreach events continue to change over time. In 2010, audiences were primarily rural (52%). In 2015, “rural only” audiences comprised only 31% of audiences. We are still reaching the same or greater number of rural residents, but we are also reaching a greater number of urban residents. Age groups have also changed over time. Between 2010 and 2015, “all ages” audiences have remained relatively constant. During the same time, adult audiences have decreased and youth audiences have increased to make up 36% (each) of our total event audience. Again, we continue to talk to the same number of adults each year; the expansion of our programs via Water Rocks! has been in youth outreach.

Background of Audiences at Outreach Events



Age Groups of Audiences at Outreach Events

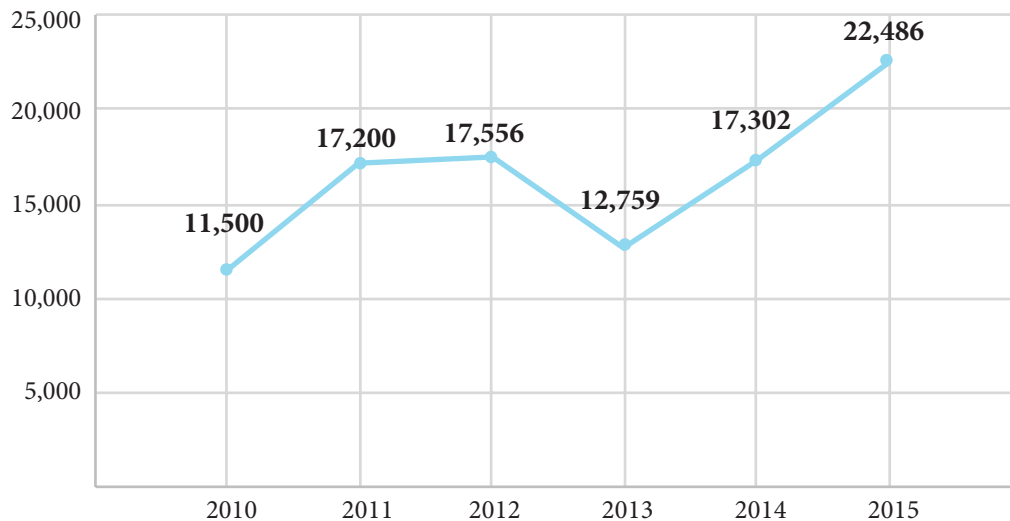


Level of Audience Engagement and Attendance

Levels of engagement at program events remain strong. We track levels of engagement through evaluations that staff members complete after every outreach event. These evaluations help us improve future outreach activities. In 2015, Iowa Learning Farms drew a record attendance of 22,486 people to its events – a 30% increase from 2014!

	2010	2011	2012	2013	2014	2015
Level of Engagement						
High	78%	81%	91%	85%	92%	88%
Average	15%	18%	8%	14%	7%	12%
Low	7%	1%	1%	1%	1%	0%

Total Number of Attendees

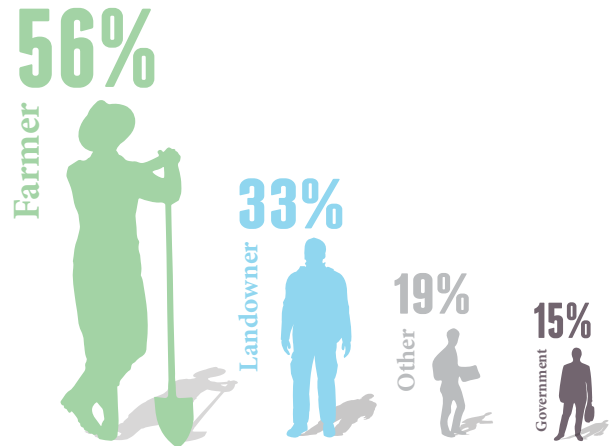


Summary of Comment Cards (filled out by attendees at field days)

Comment Cards were filled out by all participants who attended an ILF-sponsored field day or workshop. In total, 854 Comment Cards were received (n=854). In 2015, 89% of field day attendees were farmers/operators and/or landowners. This number shows that ILF field days are reaching those who have direct decision-making power to change practices on the land. The average age of farmers/operators who attended ILF field days in 2015 was 55, which is slightly younger than the average age of a farmer in Iowa (57)—this has remained consistent in the three years we have been tracking age.

<i>Which statement best describes you?</i>	
Farmer/operator	56%
Landowner	33%
*Other	19%
Government Employee	15%
Individuals could choose more than one category.	

*Other includes media, students, contractors and ag industries.

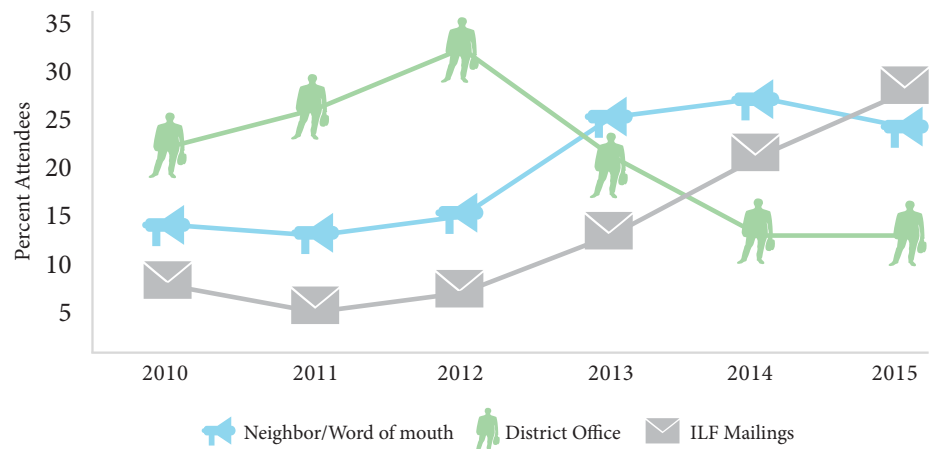


<i>Age range of attendees</i>	
18-30	15%
31-40	13%
41-50	12%
51-60	24%
61-70	21%
71+	15%

40% of attendees are 50 years of age or younger.

When asked how attendees heard about the field day, 50% of attendees heard about the event through a mailing or neighbor/word of mouth. Over time, targeted mailings to farmers/landowners who live near the field day have increased event turnout. In 2010, only 7% of attendees found out about the event through a mailing. In 2015, this number was up to 27%. Event attendance has also increased as a result of neighbor/word of mouth from 13% in 2010 to 23% in 2015.

<i>How did you hear about the field day?</i>	
Mailing	27%
Neighbor/Word of mouth	23%
ISU Extension Staff	15%
Newspaper	15%
Other	13%
District Office	12%
Website	8%
Radio	3%
Individuals could choose more than one category.	



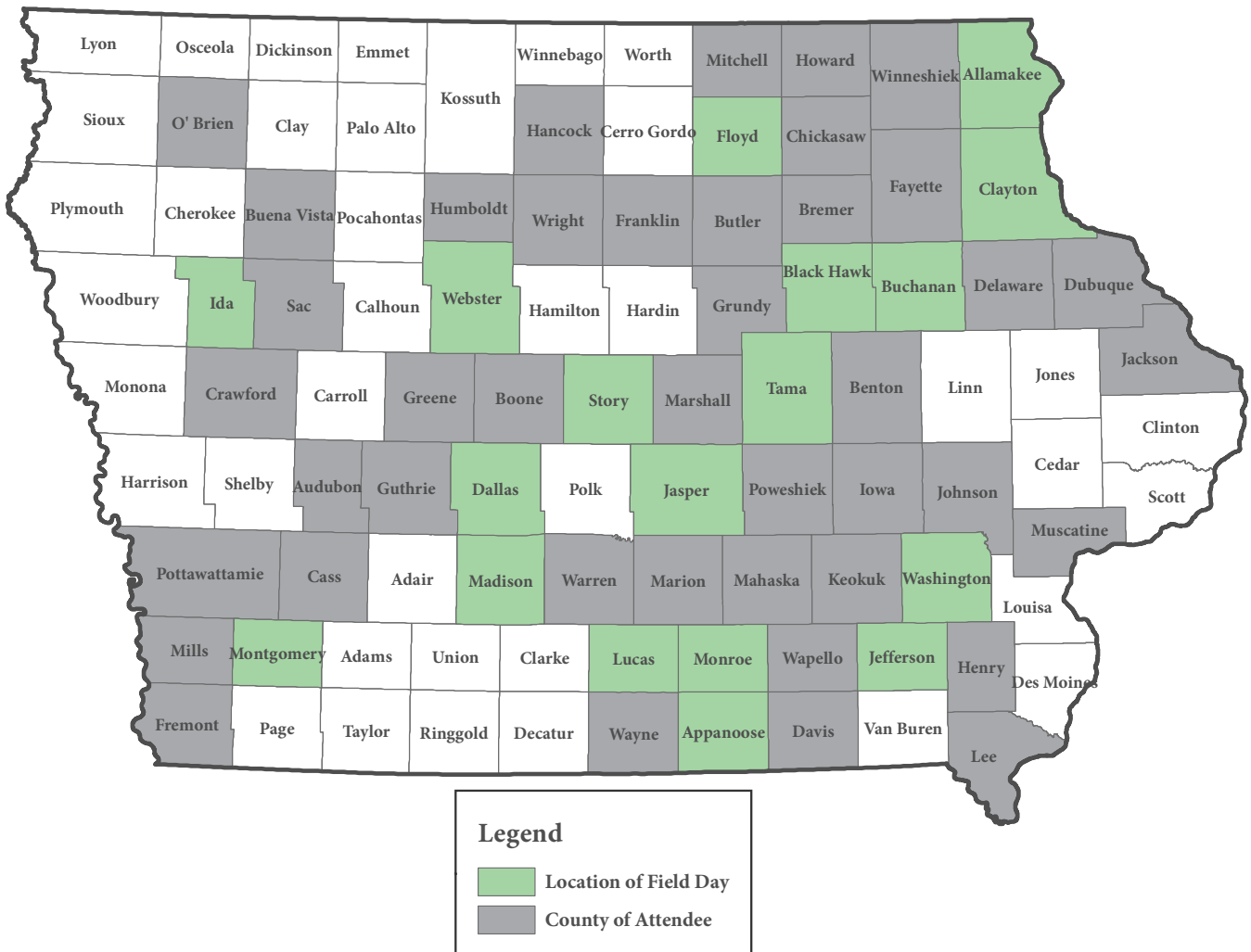
Planning Cards

In 2015, Iowa Learning Farms asked farmers/operators and landowners who attended field days and workshops to fill out “Planning Cards” that would encourage farmers to commit to specific conservation practices. The idea behind these cards is that you are more likely to change behavior if you encourage farmers to make a public

Number of Farmer Operators/Landowners at 20 Field Days	Number of Planning Cards Received	Response rate
601	267	44%

pledge toward increased conservation. These cards asked farmers about conservation practices that had already been implemented, and which practices they would commit to implementing in the coming year. In 2015, Planning Cards were given out at 20 field days in 18 different counties that had a total of 601 farmers/operators and landowners in attendance. Of the 601, 267 farmers/operators and landowners filled out Planning Cards (44% response rate). Planning Card responses came from attendees in 60 of the 99 counties in Iowa. The map below shows the geographic range of those who filled out Planning Cards.

2015 Location of Field Days and Attendees Who Filled Out Planning Cards



Cover Crops

Sixty-two percent of the farmers who completed Planning Cards reported seeding an average of 219 cover crop acres in past years. Of those farmers who had already planted cover crops, 60% planned to plant an average of 180 additional acres in the fall of 2015 or 2016. In the Follow-Up Evaluation, 49% of the respondents said they were considering planting an average of 198 acres and 39% already had an average of 237 acres of cover crops on their farms. In the January Evaluation, 67% of the respondents reported planting an average of 249 acres of cover crops in 2015 (with a range of 2 to 1,500 acres). Sixty-four percent of those farmers added to existing cover crop acres from previous years with an average of 135 acres of cover crops per farmer (with a range of 2 to 780 acres).

According to the Planning Cards, 17% of the farmers were considering planting cover crops for the first time (either fall 2015 or 2016). New farmers to cover crops were considering an average of 125 new cover crop acres per farmer (with a range of 5 to 780 acres). In the January Evaluation, 19% of the respondents indicated that they planted an average of 107 acres of cover crops for the first time in fall 2015 (with a range of 5 to 780 acres). The planning cards and the January Evaluation yielded similar results. ***This finding suggests that asking farmers to fill out planning cards could be beneficial in helping farmers to commit to conservation farming practices like cover crops.***



No-Till/Strip Tillage

Seventy-three percent of farmers who completed Planning Cards reported planting an average of 511 acres of no-till/strip tillage. Twelve percent of those farmers reported that they planned on adding an average of 288 new acres of no-till/strip tillage. Four percent of farmers who completed Planning Cards planned to try the practice out for the first time in 2015 or 2016 on an average of 98 acres per farmer. Fifty-four percent of the respondents to the Follow-Up Evaluation reported using no-till/strip tillage on their farm. In comparison, our January Evaluation showed that 49% of farmers were currently using no-till/strip tillage with an average of 483 acres per farmer. Sixteen percent of farmers already farming this way intended to increase no-till/strip tillage acres by an average of 151 acres per farmer. Seemingly, 6% of the farmers in the January Evaluation reported putting in an average of 71 acres of no-till/strip tillage for the first time.



Prairie Strips

Four percent of farmers who completed Planning Cards said that they planned to put in new prairie strips. In total, these farmers planned to add 246 new acres of prairie strips in Iowa, an average of 19 acres of prairie strips per farmer. In the Follow-up Evaluation, 4% of respondents also said they were considering prairie strips with plans to install 208 acres, an average of 26 acres per farmer. In the January Evaluation, nine percent of the respondents reported using prairie strips, for a total of 477 acres, an average of 24 acres per farmer. It was not possible to determine if these were existing acres or new acres.



Preaching Beyond the Choir

Thirteen percent of the people who filled out Planning Cards indicated that they did not have any cover crops or no-till/strip tillage acres on their farm. Twenty-seven percent of the people who responded to the January Evaluation reported no cover crop and no-till/strip tillage acres. We learned from our planning cards that 38% of the farmers/landowners attending our farmer events have not planted cover crops and 27% are not using no-till/strip tillage on their acres. *These numbers show that Iowa Learning Farms is reaching out to audiences beyond those who have already tried conservation farming practices.*



Planning Card Takeaway

The Planning Cards showed similar results to our January Evaluation, which helps validate both sets of data. Planning Cards are more reliable data on the conservation profile of the farmers/landowners who attend our field days because they are only filled out by attendees who are farmers or landowners. Planning Cards are yet another tool to help us reach out to farmers who are not currently using conservation farming practices and help them hold themselves to trying a practice that they see at a field day. *Iowa Learning Farms is drawing an audience of farmers/operators and landowners that are both experienced with conservation farming practices and new to the ideas.*

Summary of Follow-up Evaluations for Field Days

Follow-up Evaluations were mailed to participants at ILF-sponsored field days and workshops that happened before October 15. These questionnaires were sent within three weeks following the event. The questions focused 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. *The individual field day evaluations are in a separate report.* Eighteen of our field days/workshops were evaluated in this way. The remaining seven field days were administered the January Evaluation only. There were four CREP tours and two farmer listening sessions that were not evaluated.

We did a one-time mailing of these Follow-up Evaluations to 598 field day attendees (all those people who filled out comment cards that didn't work for ISUEO or one of our partnering agencies). Attendees returned 243 evaluations for a 41% response rate, which is quite good for a one-time mailing.

	# Attendees	# Comment Cards	# Returned Surveys	Planning Cards
March 5, Cover Crop Workshop, Newton	67	55	28	
March 25, Cover Crop Field Day, Wellman	136	92	41	✓
April 2, Cover Crop Field Day, Dickens	45	31	14	
April 9, Cover Crop Workshop, Elkport	42	36	21	✓
June 16, Cover Crop/STRIPs Field Day, Chariton	30	17	7	✓
June 17, Cover Crop/Rotations Field Day, Kalona	53	24	6	✓
June 18, Cover Crop/STRIPs Field Day, Rowley	42	26	12	✓
June 23, Cover Crop/STRIPs Field Day, Holstein	34	28	14	✓
July 21, Cover Crop Workshop, Colfax	55	23	6	✓
July 23, Cover Crop/Bioreactor Field Day, Eddyville	57	38	10	✓
August 4, Cover Crop Field Day, Postville	43	31	14	✓
August 5, Fleishman Field Day, Minburn	27	10	3	✓
August 26, Nutrient Reduction Field Day, Roland	29	19	7	✓
August 27, Nutrient Reduction Field Day, Gilmore City	91	54	18	
September 2, "Conservation at Work" Field Day, Otho	86	37	10	
September 3, Nutrient Reduction Field Day, Red Oak	40	27	13	✓
September 10, Cover Crop/Drainage Field Day, Woolstock	54	30	8	✓
September 17, Grassland Management Field Day, Melrose	57	33	11	✓
October 28, Nutrient Management Field Day, Clutier	43	23	Not sent	✓
November 4, Cover Crop Field Day, Van Meter	44	29	Not sent	✓
November 5, Cover Crop Field Day, Buckingham	77	32	Not sent	✓
November 12, Cover Crop Field Day, Prairie City	39	27	Not sent	
November 17, Cover Crop Field Day, Woodward	29	24	Not sent	✓
November 19, Cover Crop Field Day, Nashua	120	80	Not sent	✓
December 16, Nutrient Management Meeting, Iowa City	41	28	Not sent	✓
Total	1,381	854 (598 mailed)	243 (41% response rate)	

Iowa Learning Farms continues to receive positive feedback for field day/workshop programming. Eighty-five percent of those responding to the evaluation ranked the effectiveness of expert presentations and effectiveness of farmer presentations as either good or excellent. Below are the full results (n=243).

# Surveys sent	# Surveys returned	Response rate
598	243	41%

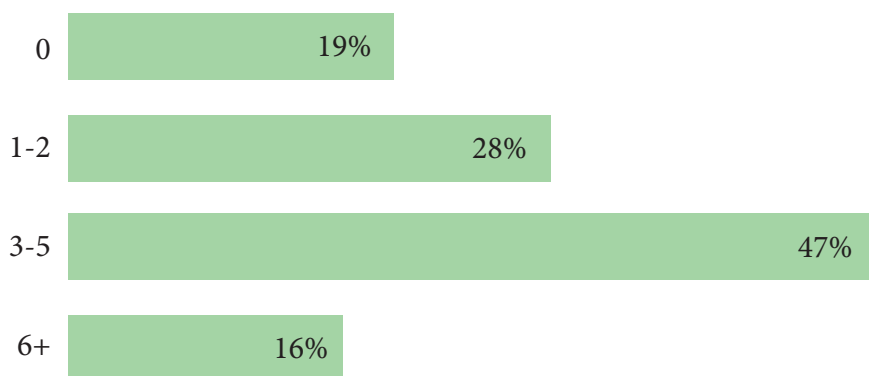
	Excellent	Good	Average	Fair	Poor
Overall quality of field day or workshop	45%	48%	6%	1%	--
Effectiveness of expert presentations	44%	44%	10%	1%	1%
Effectiveness of farmer presentations	50%	35%	14%	1%	--

	Excellent	Good	Average	Fair	Poor	Response averages
Overall quality of field day or workshop	5 ↑	4	3	2	1	4.36
Effectiveness of expert presentations	5 ↑	4	3	2	1	4.30
Effectiveness of farmer presentations	5 ↑	4	3	2	1	4.33

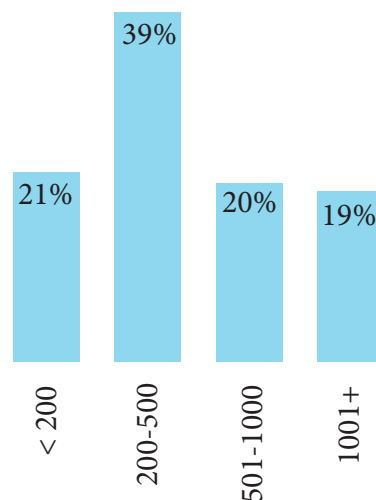
For the first time on the Follow-up Evaluations, we asked respondents to report the number of acres they farmed and what types of conservation practices they were currently using on their farm. Seventy-six percent of the respondents reported the number of acres they farmed, with an average of 622 acres (range of 2 to 2,700 acres). Of those respondents, 78% farmed more than 200 acres, which is Iowa Learning Farms’ target audience. Similar numbers of 200+ acre farmers were present in our January evaluation group.

Respondents were also asked what types of conservation practices they currently utilize, and they were given a list of the following practices: grassed waterways, crop rotation, no-till/strip till, cover crops, nutrient management, filter strips, rotational grazing, and other. Sixty-three percent of respondents answered that they utilize three or more conservation practices. Nineteen percent of farmers who answered the question did not list any conservation practices that they currently implemented.

Number of Conservation Practices



Number of Acres Farmed (Follow-up Evaluation)



Summary of January Evaluations for Field Days

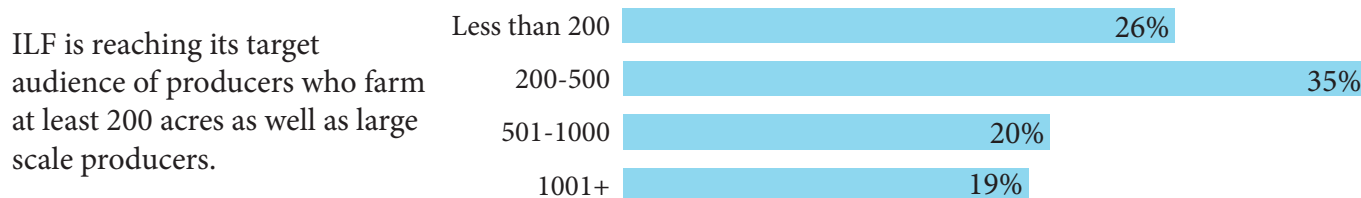
January Evaluations were mailed to only farmers/operators and landowners at most of the ILF-sponsored field days and workshops. These questionnaires were sent in January 2016 to see if the participants had made the changes they said they were going to make in earlier evaluations and on their planning cards. We did a one-time mailing of these January Evaluations to 609 farmer/landowner field day attendees who filled out a Comment Card. A month after the mailing, we sent out an email to attendees who gave us their email addresses to thank them for their participation and to remind them to return the questionnaire if they hadn't. Attendees returned 242 evaluations for a 40% response rate, which is quite good for a one-time mailing.

# Surveys sent	# Surveys returned	Response rate
609	242	40%

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

	Field Day Season 2013 n=408	Field Day Season 2014 n=174	Field Day Season 2015 n=242
Increased use of surface residue management (no-till or strip till) on some of my acres	51%	44%	41%
List # of acres	12,414	24,120	54,425 (7,949 new acres)
Average # of acres per respondent who said they were putting more acres into no-till or strip till	318	395	169
I fall seeded cover crops on some of my acres in fall 2015	64% (42,167 new acres)	63% (16,979 new acres)	70% (14,050 new acres)
Total acres of cover crops planted in 2015	Not asked	Not asked	40,257
Average # of acres per respondent who said they were putting more acres into cover crops	168	170	255
I discussed +/- of using no-till/strip till/cover crops with my landowners/tenants	Not asked	73%	71%
I networked conservation ideas with other farmers or my farmer clients	67%	67%	71%
If yes, how successful were you? (Number of people you influenced)	One other: 36% Two or more: 40% No others: 24%	One other: 48% Two or more: 32% No others: 20%	One other: 24% Two or more: 46% No others: 30%
I did not make any changes	8%	11%	11%

Number of Acres Farmed (January Evaluation)



Cover Crops

Thirty-five percent of the cover crops reported in the January Evaluation were new acres. If we project this ratio of new and existing cover crop acres to Iowa as a whole, we can predict that there were approximately 472,500 total acres of cover crops planted statewide in 2015, compared to 350,000 acres of cover crops statewide in 2014. If this holds true, our sample of ILF field day attendees represents ~9% of the overall cover crop acres in Iowa.



In addition, respondents to the survey reported an average of 30% of their total row crop acres in cover crops. Seventy percent of the overall cover crop acres were covered by cost share. Within this sample, there is a strong relationship between an increase in cover crop acres and the use of cost share to help cover the expense of planting them.

Types of cover crops used? (could list more than one)

n=160

	2014	2015
Cereal rye	77%	88%
Radish/turnips	35%	27%
Oats	17%	17%
Other*	13%	12%
Wheat	4%	7%

*Other includes hairy vetch, clover, winter pea, rape-seed, triticale, and annual rye.

	Less than 160 acres in cover crops	160+ acres in cover crops
Cereal rye	84%	93%
Radish/turnips	21%	36%
Oats	17%	18%
Other*	9%	18%
Wheat	1%	12%

Farmers with larger total acreage in cover crops tended to plant more cover crop mixtures than single species. Overall, single species plantings appeared to go up from 2014 to 2015. Anecdotally, this finding could be a result of more farmers testing cover crops for the first time and using a single species on a smaller acreage. Later, as they plant more acres in cover crops, they plant more mixes. It could also be that a single species is less expensive than using a mixture.

The majority of farmers who attended our field days reported planting cover crops for the first time at least 3 years ago. Approximately 60% of farmers used cost share to plant cover crops in 2015. This number remains similar to what was reported in 2014.

Number of years with cover crops? n=160

	2014	2015
1	30%	19%
2	23%	18%
3-5	34%	47%
6+	13%	16%

Was cost share used?

	2014	2015
Yes	58%	60%
No	42%	40%

Single Species or Mix Planted

	2014	2015
Single species	55%	60%
Mix	45%	40%

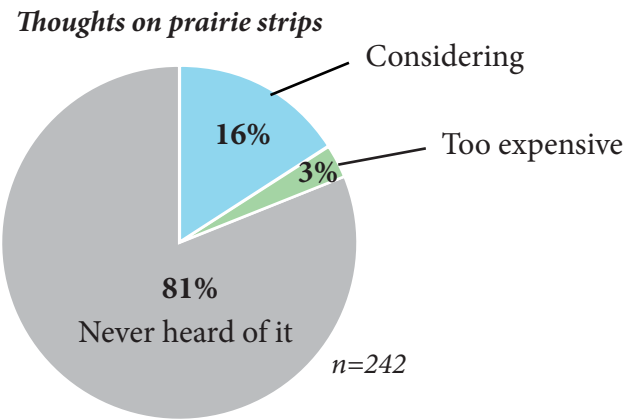
	Less than 160 acres	160+ acres
Single species	60%	55%
Mix	40%	45%

Prairie Strips

Nine percent of farmers/operators or landowners who attended ILF field days in 2015 had used prairie strips within a row crop field to reduce erosion and create pollinator habitat.

Those farmers/operators or landowners reported **477 total prairie strip acres already planted.**

However, when asked about their thoughts on prairie strips, the majority of farmers had never heard of them.



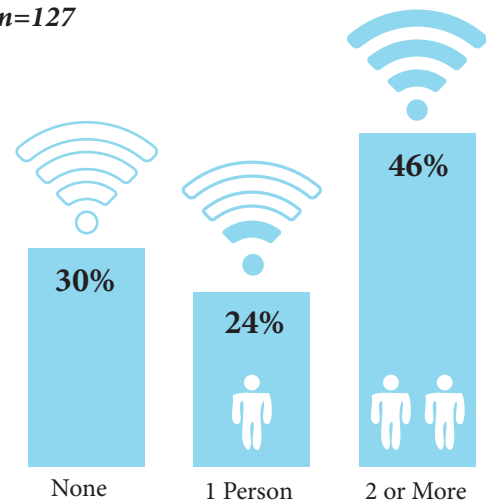
Networking

As Iowa Learning Farms considers its future messaging and event outreach strategies, it is important for the program to take a closer look at who among attendees is networking with other farmers and discussing conservation ideas. Since 2013, the number of farmers who attended field days and networked conservation ideas with other farmers continues to increase – **from 65% in 2013 to 71% in 2015.**

A follow-up question asks “How successful were you?” and asks if farmers were able to influence zero, one, or two or more people when they networked conservation ideas with other farmers. Farmers who were able to influence two or more other farmers reached its highest point in 2015.

How Successful Were You in Networking?

n=127

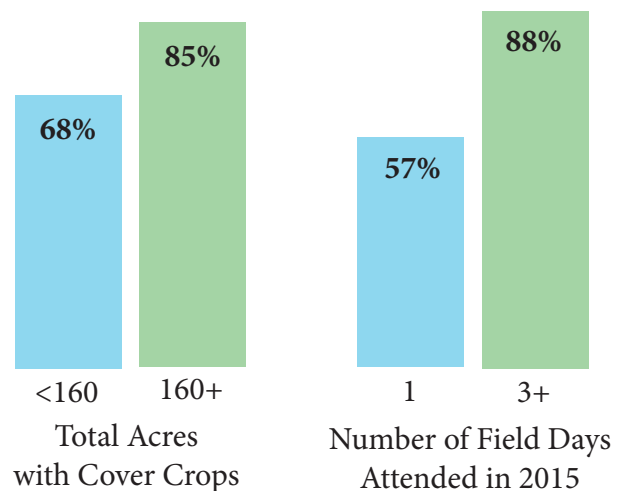


We know that some farmers network about conservation ideas and others do not. Are there certain factors that make farmers more likely to network? To break this idea down, the following factors about farmers who participated in our evaluation were considered: number of total acres farmed, total acres with cover crops, and repeat field day attendance.

To further explore this idea, we considered whether the number of total cover crops planted had an effect on whether farmers reported being successful at influencing others. We found a strong relationship between the total number of acres a farmer planted in cover crops and the farmer’s ability to influence others. This means that the more total acres of cover crops a farmer planted, the more likely they were to report being successful at influencing another person when discussing conservation ideas. In addition, if a farmer attended three or more field days, they reported influencing more farmers than if they attended only one field day.

Did You Network Ideas?

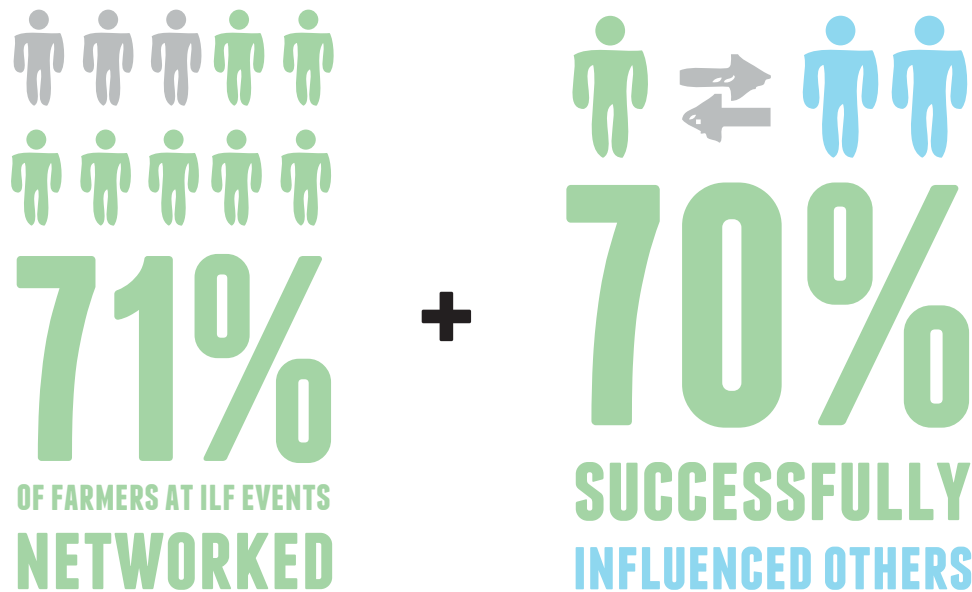
n=224



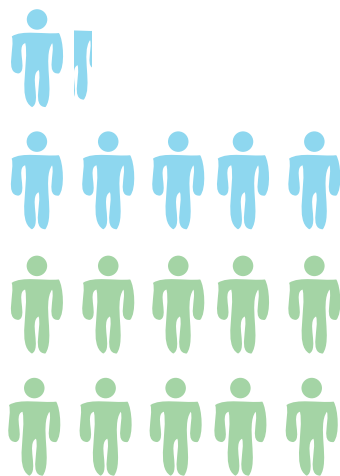
On average, farmers who farmed more total acres and who planted more total cover crop acres were more likely to network conservation ideas with other farmers. In addition, field day attendees who came to more than the average of two farmer outreach events in 2015 were more likely to network conservation ideas. The data also show that the more acres you have, the more likely it is that you will influence other people to try conservation.

Multiplier Effect

Field day attendees are networking with their peers, influencing farmers who did not attend the field day, thus creating a multiplier effect. Seventy-one percent of farmers who attended an ILF event said that they networked. Seventy percent said that they successfully influenced others. As a result, farmers are extending influence to 61% more farmers than attended the event. Field days make sense!

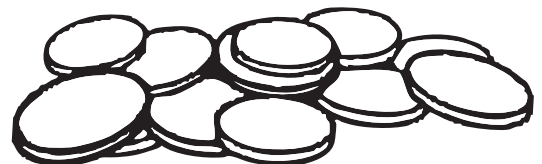


ILF FARMERS ARE EXTENDING
ILF'S INFLUENCE TO
61%
MORE FARMERS
THAN ATTENDED THE EVENT

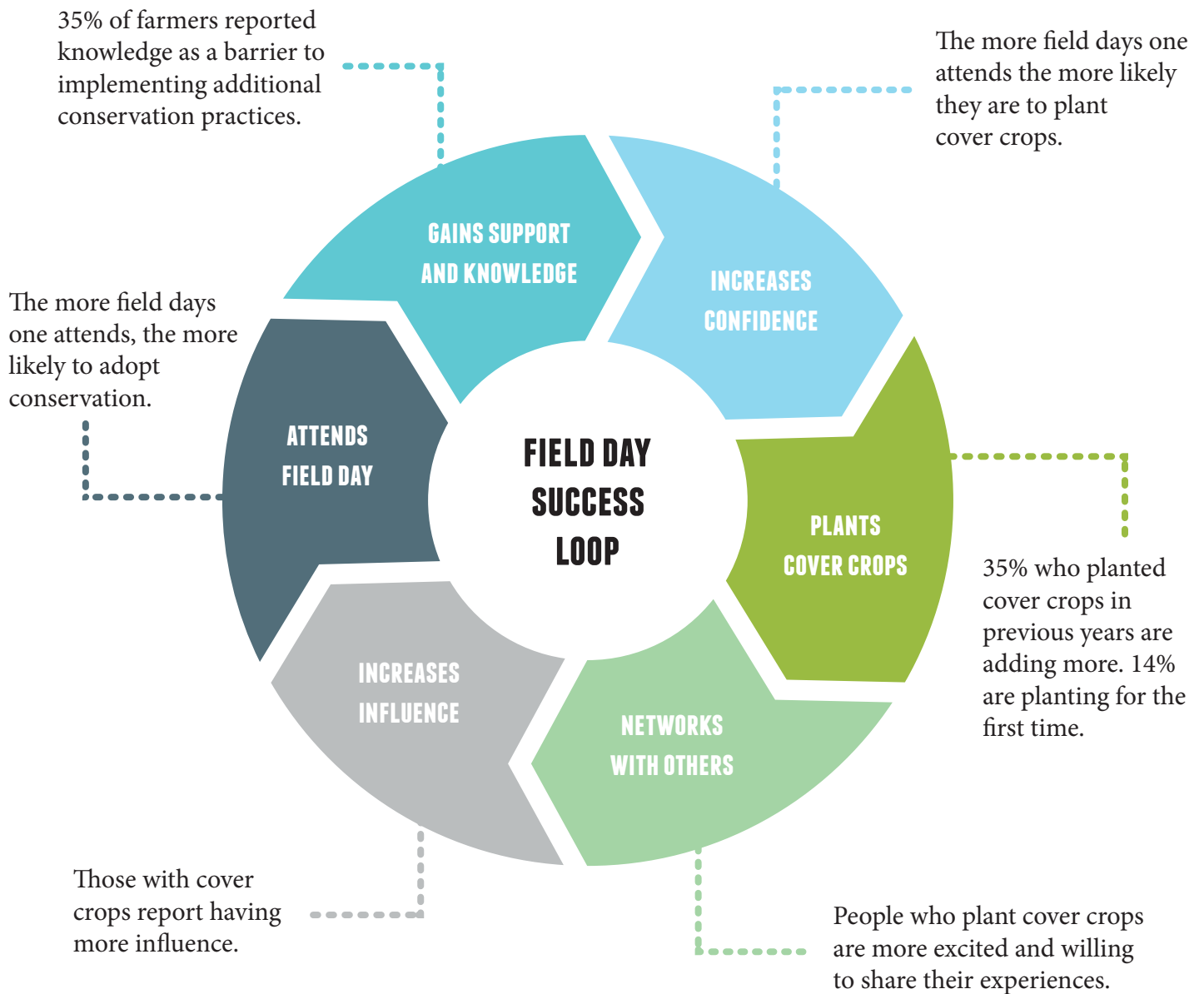


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That's a \$1.61 return for every dollar spent on an ILF event.



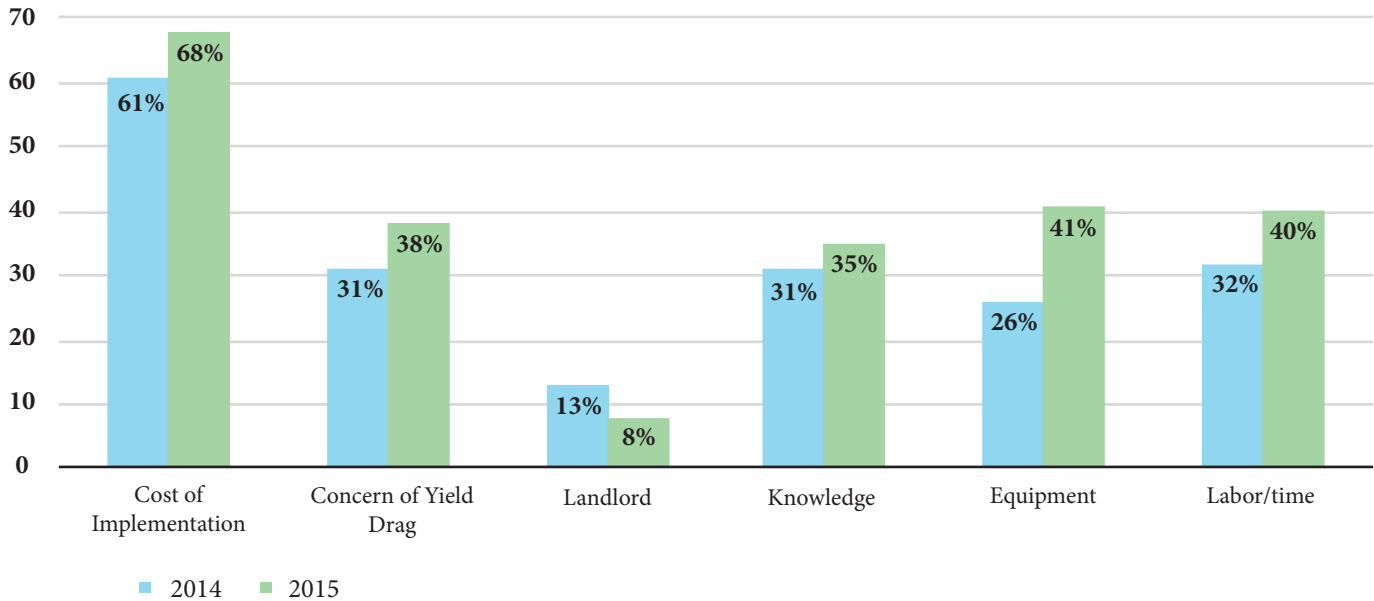
Field Day Success Loop



Barriers

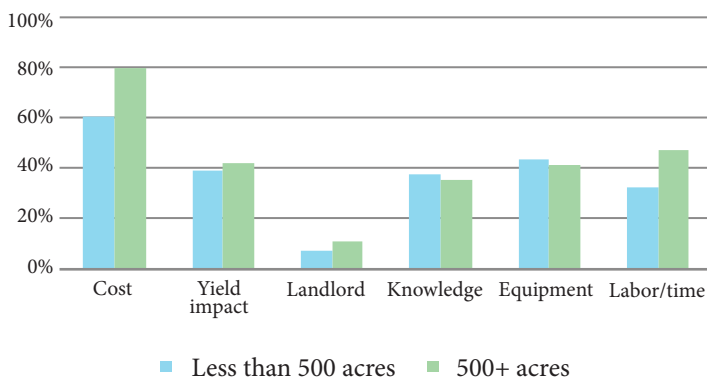
Respondents cited cost of implementation as the biggest barrier to applying conservation practices on their land for the second year in a row. In 2015, respondents were more concerned about all barriers to implementation listed in the question except for “landlord.”

What are the biggest barriers to implementing additional conservation practices? (Could list more than one)
n=242

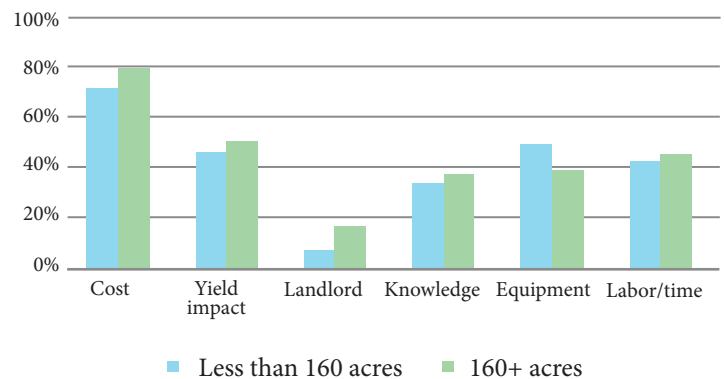


If we compare respondents’ opinions based on two broad categories – total acres farmed and total cover crop acres farmed – there are several points that emerge. First, “cost” is a barrier that ranks much higher among those who farm a larger amount of acres overall. Equipment appears to be less of a barrier to farmers with higher total acres in both cases. Having more total acres to farm might mean more access to equipment that could make implementation of conservation practices easier. Finally, labor/time is a concern that ranks slightly higher among those farmers who farm more land.

Barriers - Total Acres Farmed



Barriers - Total Cover Crop Acres

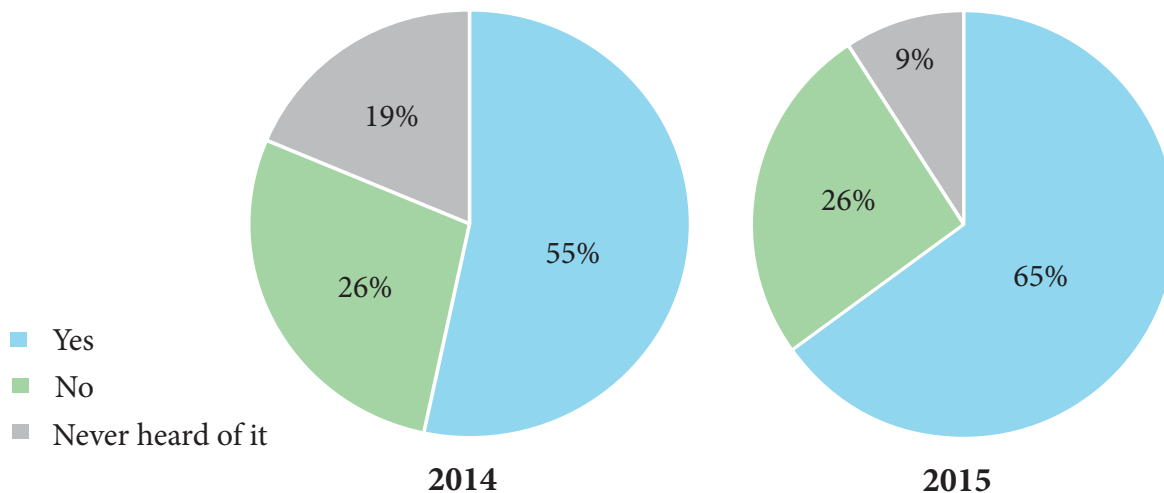


Iowa Nutrient Reduction Strategy

Farmers/operators and landowners who attended ILF field days in 2015 were asked about the Iowa Nutrient Reduction Strategy (NRS) as part of the January Evaluation. In 2015, fewer respondents (9%) said that they didn't know or didn't understand the NRS enough to say whether the goals of the NRS were achievable when compared with 2014 (19%). The percentage of respondents who state that they thought the goals of the NRS were achievable went from 55% in 2014 to 65% in 2015. These findings could indicate that more conversations are occurring around the NRS, and more farmers understand what needs to be accomplished in order to meet the goals of the NRS. Those farmers who are successfully networking are much more likely to say that the Iowa Nutrient Reduction Strategy goals are achievable.

The Iowa Nutrient Reduction Strategy calls for reductions in nonpoint source loads: 41% for nitrogen and 29% for phosphorus. Based on your knowledge of the local area, is this achievable?

n=242



Respondents were also asked more about the NRS, Iowa's water quality, and sediment and nutrient transport. The findings indicate a high level of agreement.

