



Building a Culture of

CONSERVATION

Iowa Learning Farms | 2017 Evaluation Report

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Introduction

Iowa Learning Farms continues to build a Culture of Conservation as we bring together farmers, landowners, agribusiness, researchers and state and federal agency partners. In 2017, Iowa Learning Farms delivered or participated in 92 outreach events that reached a total of 7,372 people. Our staff, trailer fleet and partners across the state helped us reach new communities and participants as we continue to build a Culture of Conservation.

Highlights

83%

of field day/workshop attendees described themselves as either **farmers/operators or landowners.**

Overall quality of field days/workshops increased by

8%

in 2017.

Respondents who attended an ILF field day in 2017 planted

49,749

total acres of cover crops, **24% of which were new acres** of cover crops.

Farmers are extending ILF's influence to

55%

more farmers than attended the event.

An estimated

30%

of attendees have never planted a cover crop and **52% reported no current acres in strip-till or no-till.**

7,372

people attended an ILF event.



ILF Approach to Evaluation

Evaluation of Iowa Learning Farms outreach events occurs in five 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, document the questions that were asked by participants and help us to improve future outreach activities. For detailed information of a specific event from this evaluation work, please see the ILF quarterly reports on our website.

The remaining evaluation process is specific for farmer outreach activities that we hold:

- **Comment Cards** filled out by all participants at ILF-sponsored field days/workshops in order to gain a better understanding of who they are and why they are there.
- **Demographic Cards** filled out by all participants at ILF-sponsored field days/workshops. Demographic cards provide a snapshot of attendees in terms of their age, gender, role in agriculture and information about their farming operation. The cards also capture preferences on timing and topics of interest for future outreach events.
- **Follow-up Evaluations** mailed to participants at ILF-sponsored field days/workshops that happened before November 7. 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 available in a separate report.
- **January Evaluations** mailed to only farmers/operators and landowners at all ILF-sponsored field days/workshops. These questionnaires were sent in January 2018 to see if the participants had made the changes they said they were going to make in earlier evaluations.



Event Evaluations

Event evaluation forms were completed by Iowa Learning Farms team members following all outreach events, including field days/workshops. For detailed information of a specific event, see the respective quarterly reports.

ILF 2017 Events

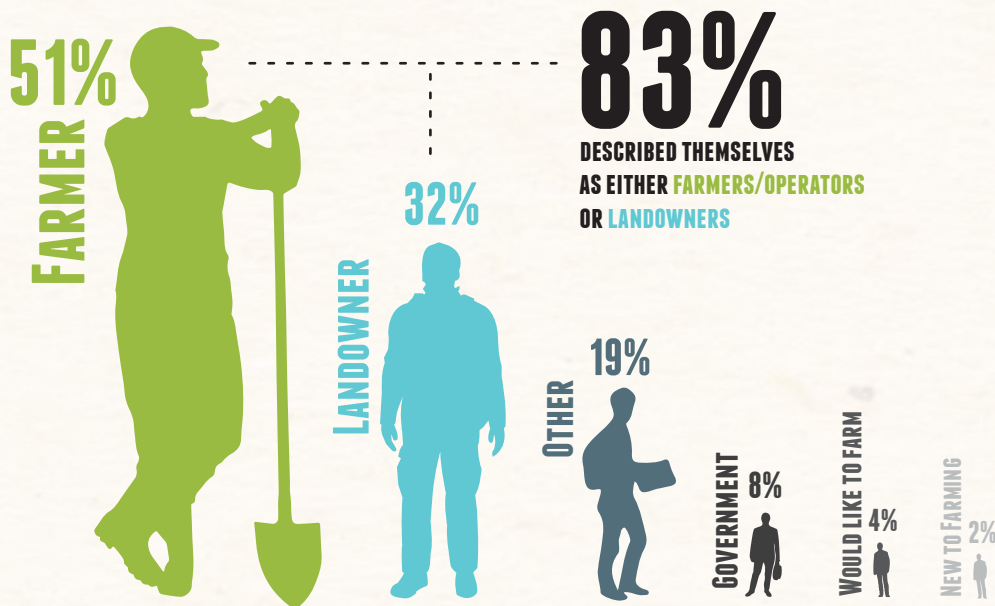
	Number of Events	Number of Attendees
Field Days/Workshops	29	1,280
Presentations	18	1,216
Community Events/Conservation Station Appearances	45	4,876

Field Day Attendees

The Iowa Learning Farms field day demographic card was introduced in 2017. As we try to reach out to less traditional field day attendees such as younger farmers and women, we thought it was important to understand these groups better. Each attendee, excluding speakers and partners, was asked to fill out the card at the beginning of the field day. Since each individual attendee fills out a demographic card (rather than each household that fills out a comment card), we are able to get a more accurate representation of who is attending our field days. Midway through 2017, we started to use this information to help us plan better field days/workshops for the second half of the year. We will continue to experiment with time of day and week for field days to see if we can't get a better diversity of audience. This information will provide us feedback as we plan future events. Total number of demographic cards collected in 2017 was 915.

Description of Field Day Attendees (n=915)

Eighty-three percent of the field day attendees identified themselves as either farmers/operators or landowners (n=693). Two percent of the attendees were new to farming and four percent would like to start farming. In 2018, we want to explore reaching out to those populations better.



*Respondents could choose more than one category

**Other includes: student or educator, media, agricultural business or industry, or unspecified

About half of respondents indicate they own over 75% of their land. However, when looking at respondents aged 50 and under, that changes dramatically to 57% of respondents reporting that they own 25% or less of their acres. Faced with many acres changing hands in the next five to ten years, it is important to continue to develop outreach materials and plan events accessible to both landowners and farmer/operators. To reach our goals of increasing conservation implementation, it will be a coordinated effort by both landowners and those who actively farm.

The average age of farmers/operators attending ILF field days was 55 years, which was slightly younger than the average age of a farmer in Iowa (57 years). This finding has been consistent in the four years that we have been tracking age information. The average age of landowners attending ILF field days was higher at 64 years.

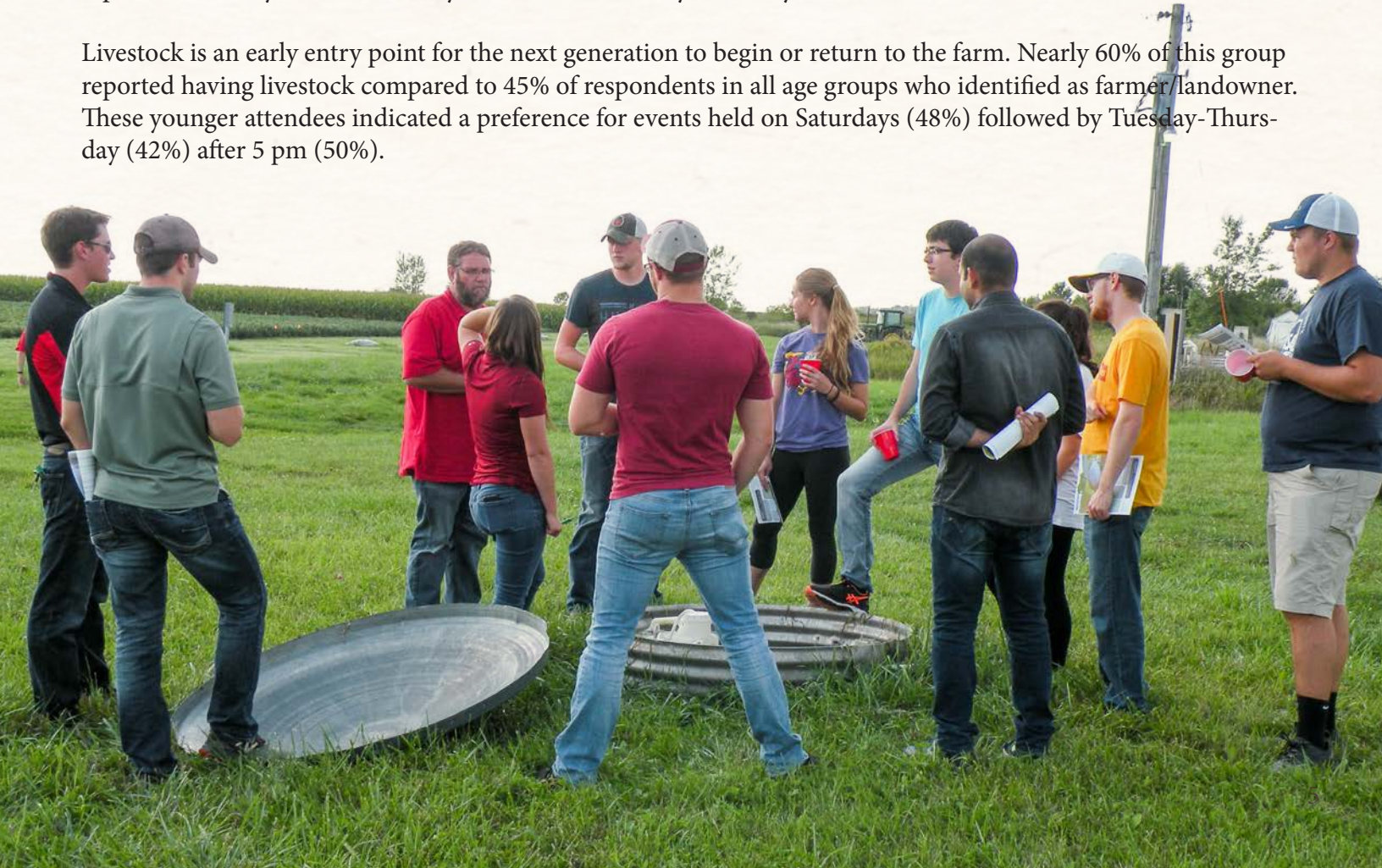
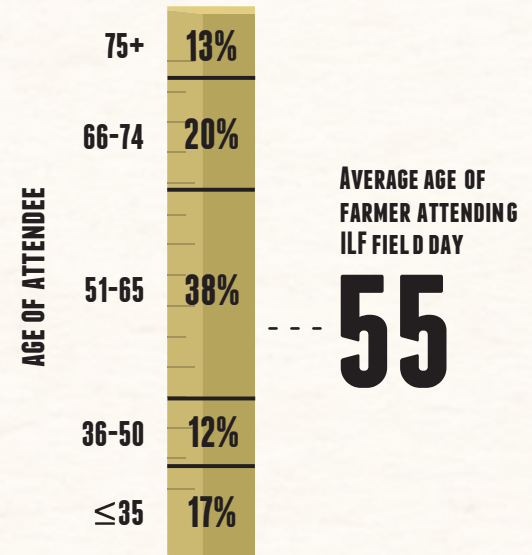
In general, field day attendees indicated a preference for Wednesday field days that were held in the afternoon or after 5 pm. We plan to update the ILF Field Day Toolkit and add these findings to event planning best practices.

Farmers 35 and Younger

Seventeen percent of our field day attendees are 35 years or younger; 80% of attendees are men while 20% are women.

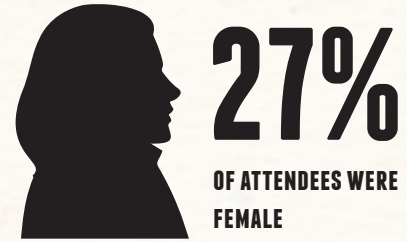
On average, farmers in this age group farm 739 acres of row crop land (range of 40 – 3,500 acres) and own 25% of their farmland. Nearly 57% of respondents in this category reported that they did not own any of the acres that they currently farm.

Livestock is an early entry point for the next generation to begin or return to the farm. Nearly 60% of this group reported having livestock compared to 45% of respondents in all age groups who identified as farmer/landowner. These younger attendees indicated a preference for events held on Saturdays (48%) followed by Tuesday-Thursday (42%) after 5 pm (50%).



Gender at Field Days/Workshops

Twenty-seven percent of attendees at ILF field days/workshops in 2017 were women. This number remained the same over 2016 despite efforts to increase female attendees. Seventeen percent of all attendees who identified as farmers/operators or landowners were women; 40% of those who identified as “other” were women (government employees, agribusiness, students or educators). Since Iowa Learning Farms first started hosting field days, the number of women attending field days has increased. There are more women serving as Extension Specialists, agronomists, and government employees and this is reflected in our data.



Forty-three percent of women attendees describe themselves as active farmers/operators and 64% describe themselves as landowners. Nearly 60% reported owning more than three-quarters of their land. This finding is consistent with the trend of increasing numbers of acres owned by female landowners. It is encouraging to see these women taking an active role in the management of their land as both farmer/operator and/or landowner.

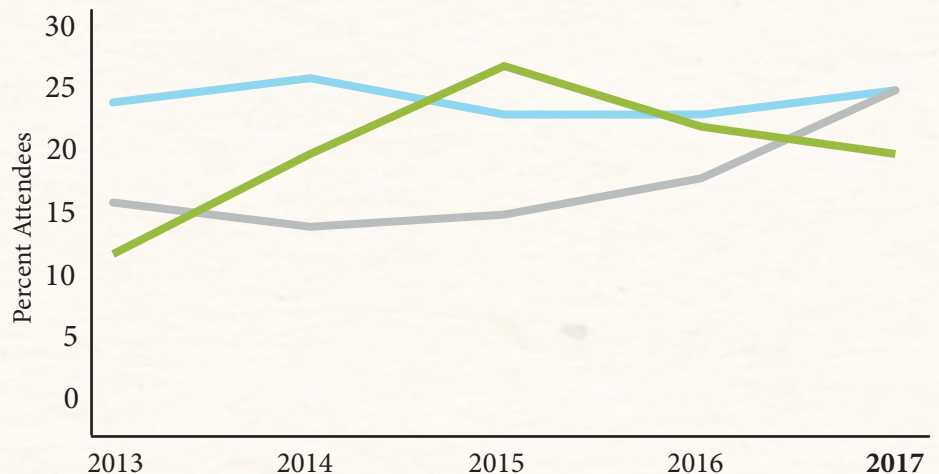
In 2018, ILF will continue to seek new ways to increase female attendance, especially female farmers/operators and landowners, at field days and workshops. Women indicated to us that they would prefer to attend events on Tuesday-Thursday either in the morning (41%) or afternoon (57%). In 2018, we plan to offer events at these times to see if we can increase the number of women attending our events. We also plan to partner with organizations that focus on women farmers/operators and landowners for multiple events in 2018.

How Did Attendees Hear about the Field Day

Word of mouth (25%), newspaper articles (25%) and direct mailings (20%) were the primary ways that field day attendees found out about ILF field days/workshops. ILF will continue to use a diversified communications approach in order to maximize the number of attendees at our events. Respondents specifically mentioned Farm Bureau Spokesman as one of the newspapers where they heard about ILF field days/workshops. In 2017, ILF events coordinator Liz Juchems made a point of getting the field day/workshop announcements to the local Farm Bureau offices as well as to the Spokesman editor.

How did you hear about the field day?	
Neighbor/Word of Mouth	25%
Newspaper	25%
Mailing	20%
Email	14%
ISU Extension Staff	13%
Website	8%
District Office	7%
Other	5%
Radio	5%
Social Media	4%

Individuals could choose more than one category.



Summary of Follow-up Evaluations for Field Days

Follow-up evaluation questionnaires were mailed to participants at ILF-sponsored field days and workshops that occurred before November 7. The one-page questionnaires were mailed within three weeks of the event and focused on event feedback and whether participants intended to change any land management practices. A total of 580 evaluations were mailed; 268 questionnaires were returned for a 46% response rate (n=268).

	# Attendees	# Comment Cards	# Returned Surveys	# Demographic Cards
February 22, Cover Crop Workshop, Nashua	60	52	24	55
February 23, Cover Crop Workshop, Central City	23	19	16	19
February 28, Cover Crop Workshop, Knoxville	50	36	21	39
March 8, Cover Crop Workshop, Sioux Center	39	33	21	33
March 9, Cover Crop Workshop, Eldora	35	31	15	32
March 29, Cover Crop Field Day, Afton	29	20	10	20
April 13, Rapid Creek Watershed Field Day, Iowa City	30	18	7	21
June 8, Abels Field Day, Holland	42	35	21	35
June 13, Haren Field Day, Webster City	56	30	17	34
June 14, Monarch and Wetland Field Day, Roland	42	14	4	17
July 12, Scott County Field Day, Donahue	43	26	7	25
August 1, Tesdell Field Day, Slater	31	18	5	23
August 3, Taylor County Pasture Walk, Bedford	58	36	13	38
August 9, Dickinson County Field Day, Spirit Lake	79	56	20	64
August 30, Gilmore City Field Day, Gilmore City	40	31	7	26
August 31, Jefferson County Field Day, Fairfield	54	37	19	41
September 7, Monarch and Abandoned Mine Land Field Day, Bussey	112	67	27	86
September 13, Kiel Field Day, Orange City	58	51	10	51
September 14, Whiterock Conservancy Field Day, Coon Rapids	13	6	4	6
November 7, Wassenaar Field Day, Prairie City	51	41	Not sent	39
November 8, Lindaman Field Day, Aplington	29	19	Not sent	19
November 15, Bayer Field Day, Guernsey	29	17	Not sent	14
November 16, Conservation Learning Labs Field Day, Floyd	38	30	Not sent	29
November 21, Upper Iowa Watershed Field Day, Decorah	57	26	Not sent	27
November 28, Walnut Creek Field Day, Red Oak	42	33	Not sent	26
November 30, Conservation Learning Labs Field Day, Roland	42	27	Not sent	34
December 6, Elk Run Workshop, Carroll	33	26	Not sent	28
December 13, East Pottawattamie Workshop, Oakland	40	32	Not sent	34
Total	1,255	867 (580 mailed)+	268*	915

*46% response rate

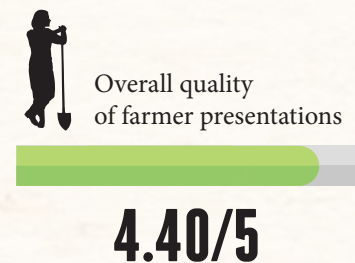
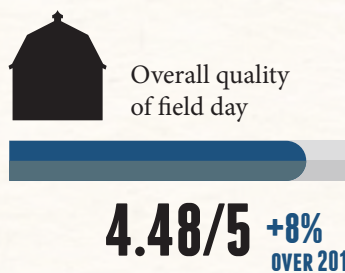
+Field days held in November or later are sent only the January survey.

All three categories that we use to evaluate the effectiveness of field days saw improvement over 2016 numbers. The “effectiveness of expert presentations” metric saw a ten percent increase over last year in the people who considered it excellent and the “overall quality of the field day or workshop” metric saw an eight percent increase over last year in the people who considered it excellent. Such a significant improvement is certainly a credit to Liz Juchems’s work as events coordinator. *The individual field day evaluations are available in a separate report.*

(n=171)

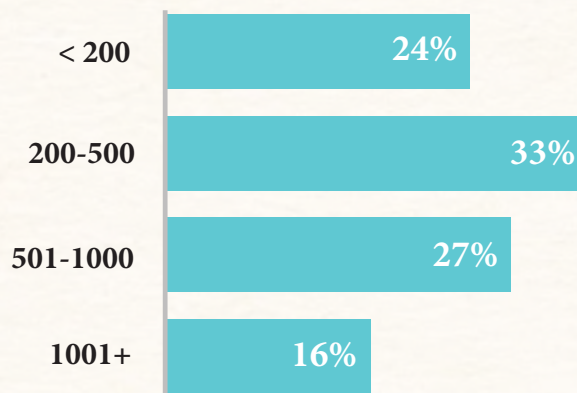
	Excellent (5)	Good (4)	Average (3)	Fair (2)	Poor (1)
Overall quality of field day or workshop	53%	43%	4%	--	--
Effectiveness of expert presentations	60%	34%	6%	--	--
Effectiveness of farmer presentations*	54%	33%	12%	--	1%

* Did not ask question at first five events of 2017 (Winter Cover Crop Workshops). These workshops featured a facilitated group exercise driven by participant questions rather than formal expert and farmer presentations.



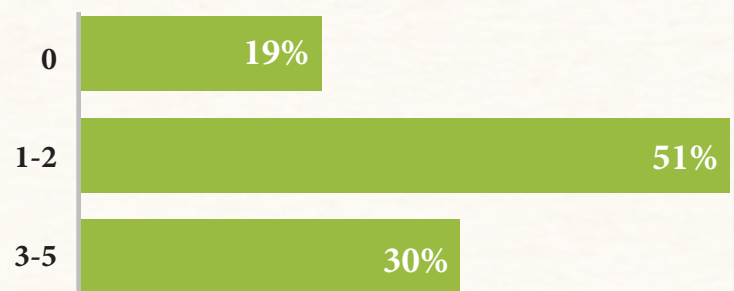
Number of Acres Farmed (n=202)

According to the follow-up evaluation data, 76% of respondents in our data set farmed 200 or more acres, which is Iowa Learning Farms’ target audience. Respondents reported an average of 612 acres farmed per farmer (median 400 acres) with 75% of respondents reporting. These acreage numbers closely match our demographic card data set (average of 608 acres farmed), further validating both data sets.



Number of Conservation Practices (n=268)

Respondents were asked what types of conservation practices they currently utilize, and they were given a list of the following practices: no-till/strip-till, rotational grazing, prairie strips, extended crop rotation, grassed waterways and filter strips. Thirty percent of respondents answered that they utilize three or more conservation practices. The most common conservation practice reported was grassed waterways with 61% of respondents already using that practice.



Summary of January Evaluations for Field Days

January evaluations were mailed to only farmers/operators and landowners for all 28 ILF-sponsored field days/workshops of 2017. We mailed these questionnaires in early January 2018. The goal of the January evaluation is to investigate whether respondents made changes to their farming practices. In a one-month period, attendees returned 251 evaluations for a 42% response rate, which is quite good for a one-time mailing.

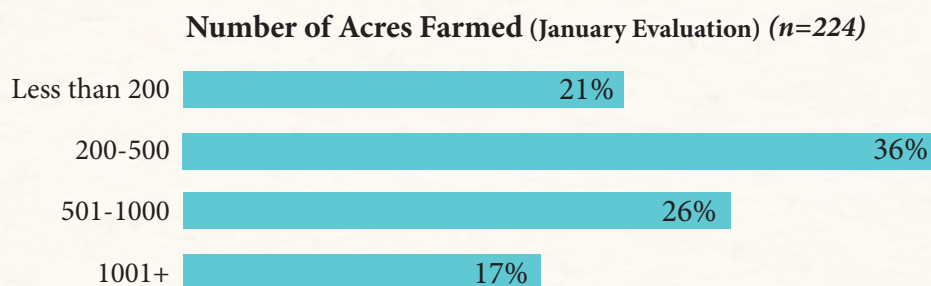
# Evaluations Sent	# Evaluations Returned	Response Rate
593	251	42%

Please describe the ways you have integrated what you learned from this field day or workshop into your farming operation.

	Field Day Season 2015 n=242	Field Day Season 2016 n=273	Field Day Season 2017 n= 251
Increased use of surface residue management (no-till or strip-till) on some of my acres	41%	36%	28%
Total acres of no-till/strip-till implemented by ILF field day attendees	54,425 (7,949 new acres)	78,309 (7,596 new acres)	67,711 (5,410 new acres)
Average # of acres per respondent who said they were putting more acres into no-till or strip-till	169	165	135
I seeded cover crops on some of my acres in fall	70% (14,050 new acres)	62% (18,943 new acres)	70% (10,973) new acres
Total acres of cover crops planted by ILF field day attendees	40,257	44,721	48,749
Average # of acres per respondent who said they were putting more acres into cover crops	255	174	127
I discussed +/- of using no-till/strip-till/cover crops with my landowners/tenants	71%	69%	62%
I networked conservation ideas with other farmers or my farmer clients	71%	65%	68%
If yes, how successful were you? (Number of people you influenced)	One other: 24% Two or more: 46% No others: 30%	One other: 37% Two or more: 34% No others: 29%	One other: 40% Two or more: 37% No others: 23%
I did not make any changes	11%	13%	7%*

* This number comes from the 2-week survey.

ILF is reaching a variety of producers. Our target audience of those who farm 200 or more acres made up 79% of our January evaluation respondents. Respondents reported farming an average of 666 acres and collectively operated on 149,268 total crop acres in Iowa.





Cover Crops

Twenty-two percent of cover crops reported in the January evaluation were new acres. This is a 10% decline in new cover crop acres over last year's estimate and a thirteen percent decline since 2015 when 35% of all the cover crop acres were new. If we project the 2017 ratio of new and existing cover crop acres to Iowa as a whole, we can predict that there were ~760,000 total acres of cover crops planted statewide in 2017, compared to ~623,000 in 2016. If this holds true, our sample of ILF field day/workshop attendees represents 6% of the overall cover crop acres in Iowa (the same as last year). The percentage of farmers who were trying cover crops for the first time in 2017 also declined while the percentage of those farmers using cost share to plant cover crops increased. **Twenty-eight percent of the growth in new acres of cover crops came from farmers planting them for the first time in 2017.**



The majority of respondents (68%) started seeding cover crops at least three years ago. The average number of years that each respondent reported using cover crops was three years. If we look at the respondents' percentage of row crop acres seeded to cover crops, there is a steady increase corresponding with the number of years that a respondent reported seeding cover crops. Those respondents with cover crops reported an average of 46% of their total row crop acres in cover crops—6% more than in 2016. **Respondents who planted cover crops for the first time in 2017 planted an average of 89 acres, slightly higher than last year's average.**

Number of years with cover crops? (n=172)

	2014	2015	2016	2017
1	30%	19%	21%	16%
2	23%	18%	10%	16%
3-5	34%	47%	36%	26%
6+	13%	16%	33%	42%

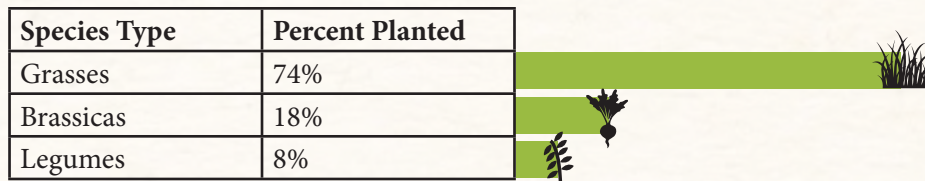
68%

HAVE BEEN USING COVER CROPS FOR THREE YEARS OR MORE

The overall percentage of farmers who are using cost share to seed cover crops has increased by seven percent over four years of data. However, 52% of respondents who planted cover crops for the first time in 2017 used cost share, compared to 68% in 2016. Forty-four percent of the respondents who have planted cover crops for six or more years used cost share. However, 66% of the overall cover crop acres were planted with cost share, while 78% of those new acres were planted with cost share. Use of cost share is highest for respondents who report using cover crops for two years.

For those respondents who listed the types of cover crops they use, the most common cover crops used were grasses, primarily cereal rye and oats. Reported brassica and legume usage is down overall compared to 2016 data.

2017 Cover Crop Planting by Type
(Could choose more than one) (n=161)



Was cost share used? (n=173)

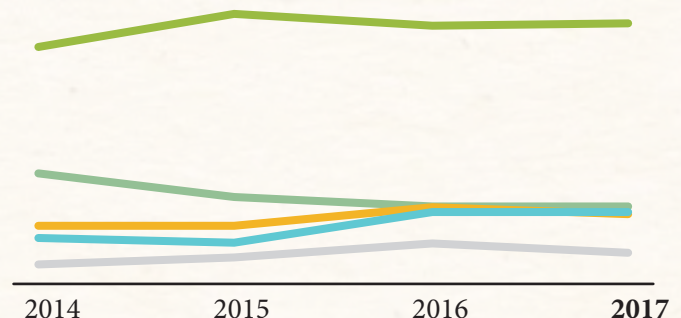
	2014	2015	2016	2017
Yes	58%	60%	61%	65%
No	42%	40%	39%	35%

Similar to findings in previous years, respondents with more acres in cover crops tended to list a variety of cover crop species rather than listing one single species. Those respondents were also very likely to use cereal rye on at least some of their acres (94% seeded cereal rye).



* Other includes hairy vetch, clover, winter pea, cowpea, rapeseed, triticale, mustard and annual rye

	2014	2015	2016	2017
Cereal rye	77%	88%	84%	85%
Radishes/ Turnips	35%	27%	24%	24%
Oats	17%	17%	24%	21%
Other*	13%	12%	22%	22%
Wheat	4%	7%	12%	8%

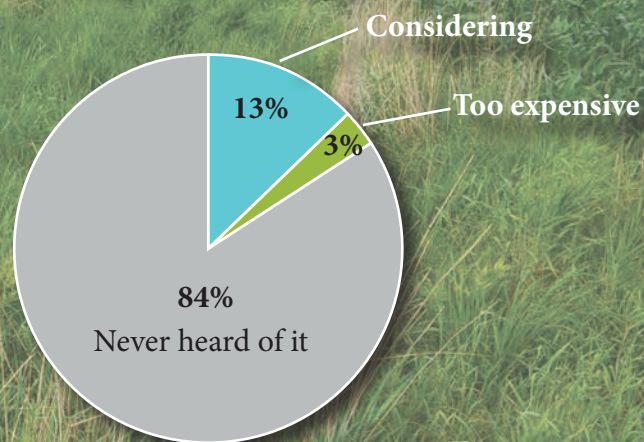


Prairie Strips

Eight percent of farmers/operators and landowners who attended ILF field days in 2017 reported using prairie strips on their land. This number has fluctuated in recent years – we saw 9% in 2015 and 14% in 2016. Respondents who reported acres in prairie strips accounted for a total of 436 prairie strip acres in Iowa (123 of those acres were new in 2017).

The vast majority of respondents who answered this question (84%) continue to report that they are not familiar with prairie strips. Thirteen percent report that they are considering installing prairie strips as a conservation practice on their land, which is the same as last year.

Thoughts on prairie strips



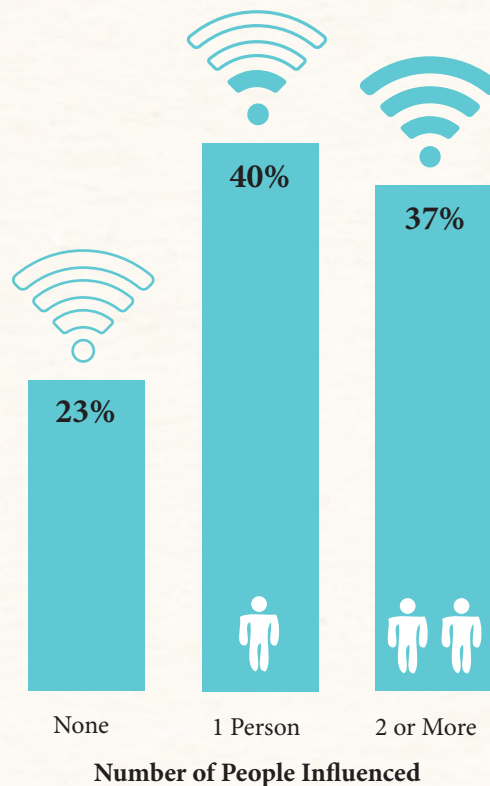
Networking

Networking by field day attendees remains an important outreach method for Iowa Learning Farms as we host farmer outreach events and provide valuable information to farmers, landowners, agricultural professionals and others. In 2017, networking by field day attendees continued, with 68% of respondents reporting that they networked with others about conservation ideas.

Of those attendees who networked, 60% reported that they were successful, influencing at least one other person. **Given this, these farmers are extending ILF's influence to 55% more farmers than attended ILF events in 2017. That's a \$1.55 value for every dollar invested in ILF.** Successful networking has increased over 2016 data but is still not as high as in 2015.

Certain factors make respondents more likely to connect with others and network about conservation ideas. Those respondents who have more years of experience with cover crops and those who attend more field days are more likely to report networking conservation ideas. Particularly in 2017, respondents who farm a larger number of total acres were more likely to report networking conservation ideas.

How Successful Were You in Networking?
n=125



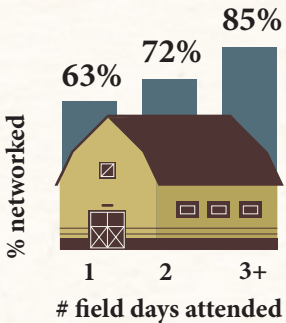
Field Day Success Loop

33% 

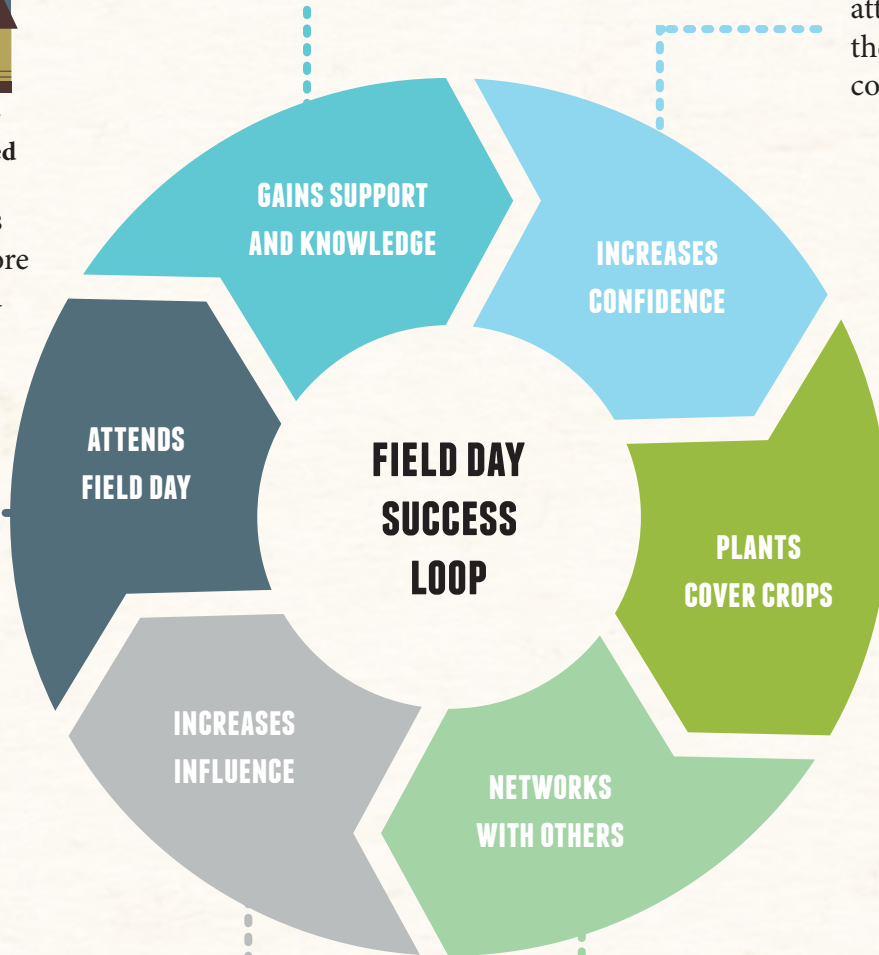
of farmers reported knowledge as a barrier to implementing additional conservation practices.



The more field days one attends, the more likely they are to plant cover crops.



The more field days one attends, the more likely they reported networking and influencing others.



24%

of cover crops were new acres.

FARMERS ARE EXTENDING ILF'S INFLUENCE TO

55%

MORE FARMERS THAN ATTENDED THE EVENT



That's a \$1.55 return for every dollar spent on an ILF event. ILF makes sense!



68%

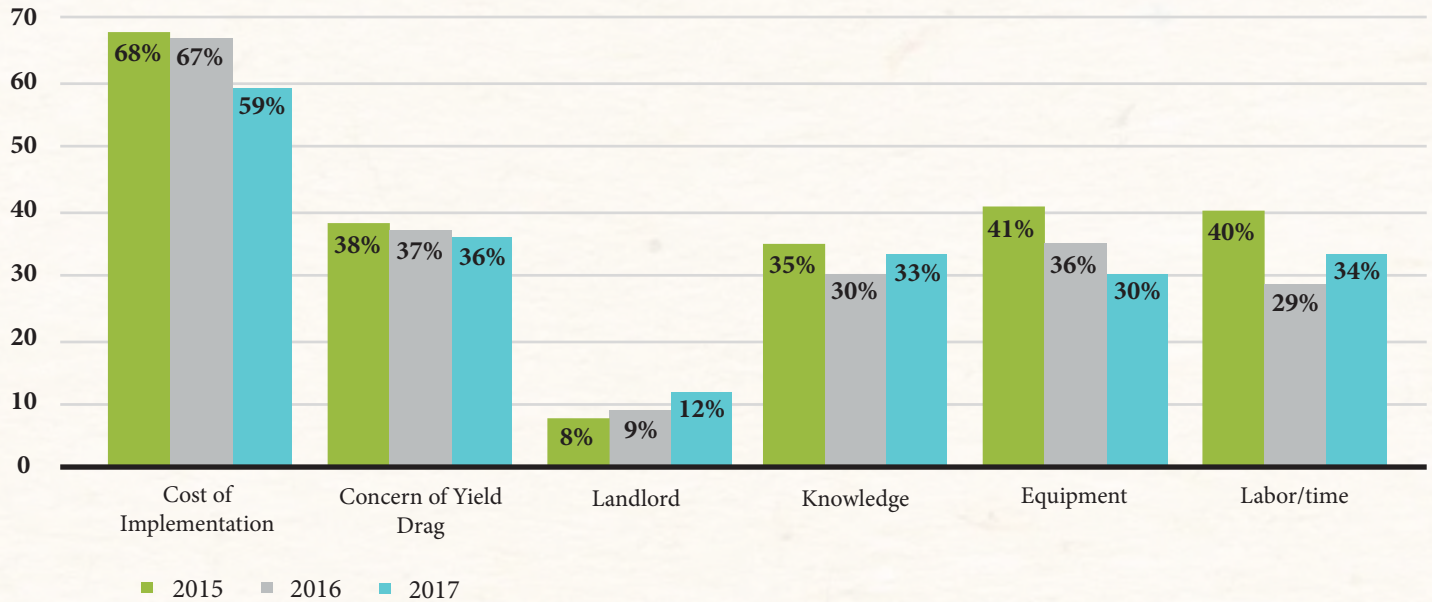
OF FARMERS AT ILF EVENTS NETWORKED



Barriers

Respondents cited cost of implementation as the biggest barrier to applying conservation practices on their land for the fourth year in a row. The three most recent years of data are included below.

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



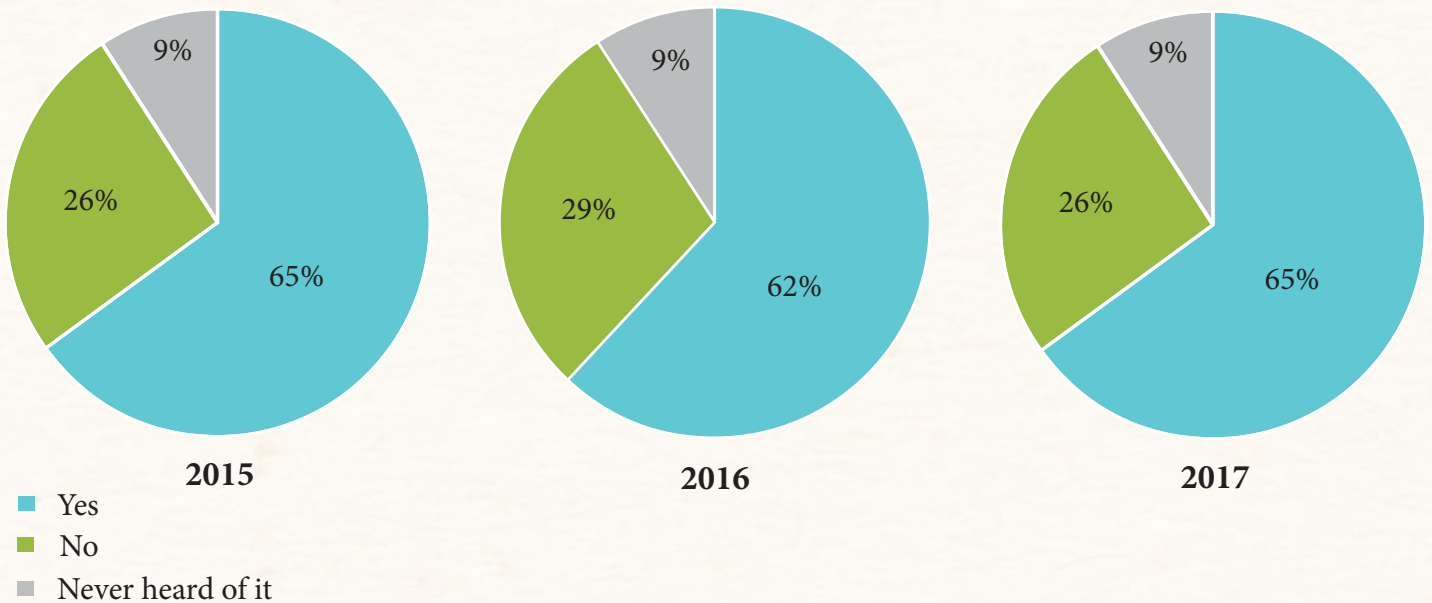
If we compare respondents' opinions based on two broad categories – total acres farmed and number of years with cover crops – additional themes emerge. Cost of conservation practices is now a bigger concern for smaller farmers. Concerns about a landlord being a barrier to implementing conservation practices is now up significantly among larger farmers – 19% of large farmers saw landlords as a barrier versus 8% of smaller farmers. Smaller farmers report knowledge and equipment more often as barriers than larger farmers.



Iowa Nutrient Reduction Strategy

Farmers/operators and landowners who attended ILF field days/workshops in 2017 were asked about the Iowa Nutrient Reduction Strategy (NRS) as part of the January Evaluation. For the last three years, the percentage of those who had never heard of the NRS remained constant at 9%. The percentage of those who thought the NRS was achievable has fluctuated between 62% and 65%.

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?



For the second year in a row, we found that respondents who answered “yes” to the question above had higher implementation rates of cover crop seeding. Respondents who answered “no” had higher implementation rates of no-till. Respondents who stated that they strongly agreed that helping to meet the NRS’s goals was a high priority for them attended an average of two field days in 2017; the average across all respondents was one field day.

Helping to meet the Nutrient Reduction Strategy’s goals is a high priority for me.

