

2018 Summary Report Iowa Learning Farms Field Days and Workshops

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 2018, Iowa Learning Farms hosted 24 farmer-focused workshops and field days. Through a multi-faceted approach to evaluation, Iowa Learning Farms collects information at each famer-focused event.

This report summarizes each event, providing a snapshot of participant questions, quality of the event, a summary of participant demographic data and the status of conservation practice planning and implementation by participants. We hope that this report will help readers gain a better understanding about each event, and the associated participants of those events, in 2018.

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.
- **Comment Cards** filled out by all participants at ILF-sponsored field days and 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 and 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 topic of future outreach events.
- **Follow-up Evaluations** mailed to participants at ILF-sponsored field days and workshops that happened before November 7. These questionnaires were sent within two 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 evaluation results are summarized in this report.
- **January Evaluations** mailed to only farmers/operators and landowners at all ILF-sponsored field days and workshops. These questionnaires were sent in January 2019 and the results are also summarized in this report.

2018 Iowa Learning Farms Field Days/Workshops

Crop Reporting District	Field Day/Workshop Description	Total Attendees	Comment Cards ¹	Demo Cards ²	Follow-Up Evaluations Returned ³	January Evaluations Returned ⁴
Central (Detailed on p.4-19 of this report)	6/7, Marshall Co. Women Landowners Workshop, Marshalltown	25	15	14	6	2
	7/17, Bioreactor Field Day, Boone	35	26	26	10	9
	8/8, Story Co. Cover Crop Field Day, Roland	52	31	36	16	12
	8/22, Walnut Creek Watershed Field Day, Dallas Center	33	16	12	11	6
	8/23, Poweshiek Bioreactor Field Day, Brooklyn	52	28	36	14	7
	9/13, LICA Field Day, Melbourne	89	39	39	10	7
	11/15, Mike Helland Cover Crop Field Day, Huxley	25	9	11	Not sent	4
East Central (Detailed on p.20- 23 of this report)	8/7, Scott Co. Saturated Buffer Field Day, Walcott	40	15	17	9	4
North Central (Detailed on p.24- 26 of this report)	11/27, Kossuth Co. Cover Crop Field Day, Algona	49	38	35	Not sent	13
Northeast (Detailed on p.27- 33 of this report)	3/29, Brian Meyer Field Day, Readlyn	101	38 & 27 students	40	16	14
	11/13, Nick Meier Cover Crop Field Day, Waterloo	45	35	36	Not sent	9
	11/29, Clayton Co. Cover Crop Field Day, Luana	37	27	26	Not sent	14
Northwest (Detailed on p.34- 40 of this report)	8/9, Dickinson Co. "Edge of Field" Field Day, Spirit Lake	53	32	32	11	8
	9/5, Dordt College Ag. Field Day, Sioux Center	186	72 & 73 students	140	13	4
	11/14, Dick Lund Cover Crop Field Day, Laurens	23	11	10	Not sent	3
South Central (Detailed on p.41- 43 of this report)	3/28, Union Co. Women Landowners Field Day, Diagonal	19	9	9	5	2
Southeast (Detailed on p.44-50 of this report)	11/7, Lake Geode Watershed Field Day, West Burlington	66	40	46	Not sent	11
	11/20, Cedar Creek Partnership Field Day, Ottumwa	55	26	27	Not sent	21
	11/28, Lower Skunk River Field Day, Hillsboro	49	33	33	Not sent	13

Comment cards were filled out by all participants (per household) at ILF-sponsored field days and workshops in order to gain a better understanding of who they are and why they are there.
 Demographic cards were filled out by all participants at ILF-sponsored field days and workshops. Demographic cards provide a snapshot of attendees

^{2 -} Demographic cards were filled out by all participants at ILF-sponsored field days and workshops. Demographic cards provide a snapshot of attendees in terms of their age, gender, role in agriculture and information about their farming operation.
3 - Follow-up evaluations were mailed to participants at ILF-sponsored field days and workshops that happened before November 7. Questions focused

^{3 -} Follow-up evaluations were mailed to participants at ILF-sponsored field days and workshops that happened before November 7. Questions focused on the clarity and accessibility of the information received, helpfulness of materials provided and asked what conservation practices attendees were currently using.

^{4 -} January evaluations were mailed to only farmers/operators and landowners attending ILF-sponsored field days and workshops. These questionnaires were sent in January 2019.

Central Crop Reporting District Field Days

Counties: Boone, Dallas, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Webster

7 Iowa Learning Farms field days/workshops held in 2018, covering the following topics:

- ✓ Cover Crops (discussed at 3 field days/workshops)
- ✓ Edge of Field Practices (discussed at 4 field days/workshops)
- ✓ Earthworms (discussed at 1 field day/workshop)

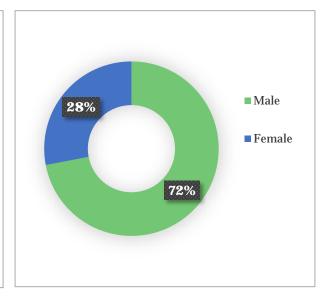
Demographics of Field Day/Workshop Attendees

311 total attendees*

- 62 farmers/operators
- 63 landowners
- 20 other (unspecified)
- 7 agricultural business or industry professionals
- 26 government agency staff
- 3 would like to farm
- 2 new to farming
- 6 students or educators
- 7 tile contractors

40 = average attendance per field day/workshop

54 = average age of field day attendees



^{*}Total number of attendees at 2018 ILF field days in district. Attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Marshall Co. Women Landowners Field Day

Event Summary

Field Day: Marshall Co. Women Landowners Field Day

Location: Marshalltown Date: Thursday, 6/7/2018 Time: 10:30 AM - 12:30 PM

Field Day/Workshop Topics

✓ Cover Crops

Field Day/Workshop Speakers

- ✓ Allen Burt (farmer)
- ✓ Liz Juchems (expert)
- ✓ Ann Staudt (expert)
- ✓ Charles Brown (expert)

Quality of Field Day/Workshop

4.8 / 5 = Overall quality of field day/workshop

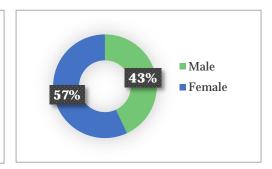
4.9 / 5 = Effectiveness of expert presentation(s)

4.8 / 5 = Effectiveness of farmer presentation(s)

Description of Field Day/Workshop Attendees

25 total attendees*

- 4 farmers/operators
- 8 landowners
- 1 government agency staff
- 1 other (unspecified)



60 = average age of attendees

6 = number of attendees with livestock

*Total number of attendees at this field day/workshop – attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

Alan

What is your cover crop program now?

What is 10-23-23?

Do you just let the cover crops grow or do you work the seeds in?

How do you get oats seeded?

What kind of seed do you use for aerial application?

I want to learn more about cover crops because we have always done no-till and would like to hear more about the benefits.

Do you work with your landlords to encourage cover crop?

How do you strike up a conversation with the landlord if you are the tenant? Or start a conversation to the tenant about cover crops if you're the landlord

How do you work out the cost?

Do you have a written lease?

What do you do with your cover crop?

If you have done it for four years, was it on the same field? And what were its benefits?

What does corn yellowing represent this year?

Liz/Ann

Did you explore added costs of planting cereal rye?

How do you measure biomass?

Are you finding trends in different types of cover crops across Iowa?

Can you track your data to the types of cover crops used with soil types?

Is there a difference between earthworms and nightcrawlers?

Were all seven types of nightcrawlers imported?

Charles

How tall and what does the cereal rye look like when you kill it off? What is your nitrogen program? How do you determine high, medium, and low quality soil? What kind of planter do you use? How do you manage weeds and what are your costs?

Marshall Co. Women Landowners Field Day

Responses to Two Week Follow-up Evaluation

15 Evaluations Mailed

6 Evaluations Returned

 $2\ Farmers\ responded,$ farming an average of 163 ac.

Attendees were asked to describe their current farming practices:

- 2 are actively farming
- 6 lease land to a tenant
 - Total leased acres: 2212
 - 2 have conservation measures built into their lease
- Conservation practices used on land owned/operated:
 - 5 no-till/strip till
 - Total no-till/strip till acres: 780
 - 3 use cover crops
 - Total cover crop acres: 325

Helpfulness of take home materials

■ 1-page document: 4.3 / 5

4-page document: 3.8 / 5

Full research report: 2.8 / 5

■ DVD: 2.8 / 5

Presentation slides: 3.5 / 5

- 1 uses rotational grazing
- 1 uses prairie strips
- 2 use extended crop rotation
- o 5 use grassed waterways/filter strips/buffers

Marshall Co. Women Landowners Field Day

Responses to Year-End Evaluation

13 Evaluations Mailed

2 Evaluations Returned

2 Farmers responded, farming an average of 195 ac.

- 2 fall seeded cover crops in 2018 on 310 total cover crop acres
- 2 discussed challenges/benefits of conservation practices with landowners/tenants
- 2 networked conservation ideas with other farmers or farmer clients
 - 1 successfully influenced two or more farmers
 - o 1 influenced no farmers

Bioreactor Field Day

Event Summary

Field Day/Workshop Topics

✓ Bioreactors

Field Day/Workshop Speakers

✓ Joe Ruetter (local landowner)

✓ Liz Juchems (expert)

✓ Jace Klein (expert)

Description of Field Day/Workshop Attendees

35 total attendees*

7 farmers/operators

9 landowners

• 5 government agency staff

• 5 other (unspecified)

• 1 new to farming

55 = average age of attendees

4 = number of attendees with livestock

Field Day: Boone Bioreactor Field Day

Location: Boone

Date: Tuesday, 7/17/2018 Time: 5:00 - 7:15 PM

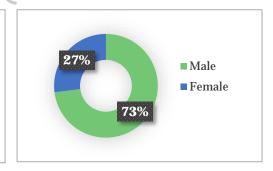
Quality of Field Day/Workshop

4.4 / 5 = Overall quality of field day/workshop

4.6 / 5 = Effectiveness of expert presentation(s)

4.1 / 5 = Effectiveness of farmer presentation(s)

4.1 / 5 = Effectiveness of field portion



*Total number of attendees at this field day/workshop — attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

Is there any way to install a saturated buffer without a creek or stream to flow into?

Does the water slow down when it enters the bioreactor?

What does the drier summer months with no tile flow do to the bioreactor?

How long do these systems last?

Do the woodchips need to be hardwood?

Is there a size the woodchips need to be?

Could it (bioreactor) go in any corner of the field?

How deep is the woodchip bed?

So what's the goal? – One every ¼ mile?

Can you design and put a bioreactor in with neighbors' tile connected to yours?

Is there a slope or grade this won't work on?

How do I figure out where the strips are going downhill?

How does this compare to cover crops in effectiveness (of N removal)?

What kind of cost share is available?

How temperature dependent is the denitrification process?

I head IA is #1 for putting N in the Gulf. Is that true?

With bioreactor, are you filtering out soil too?

Does the liner go on the sides and top?

Are you putting crops over the bioreactor?

Can you plant prairie over top or are the roots too much?

Can you adjust the stop logs – especially during dry periods?

Any chance of roots plugging the tile in the system? Specs on saturated buffers in SW Iowa?

Bioreactor Field Day

Responses to Two Week Follow-up Evaluation

25 Evaluations Mailed

10 Evaluations Returned

5 Farmers responded, farming an average of 1253 ac.

Attendees were asked to describe their current farming practices:

- 5 are actively farming
- 5 lease land to a tenant
 - o Total leased acres: 908
 - o 1 has conservation measures built into their lease
- Conservation practices used on land owned/operated:
 - o 7 no-till/strip till
 - Total no-till/strip till acres: 1088
 - 5 use cover crops
 - Total cover crop acres: 145

Helpfulness of take home materials

■ 1-page document: 3.9 / 5

■ 4-page document: 3.9 / 5

• Full research report: 3.8 / 5

■ DVD: 4.0 / 5

Presentation slides: 4.0 / 5

- 2 use other conservation practices
- 4 use prairie strips
- 7 use grassed waterways/filter strips/buffers

Bioreactor Field Day

Responses to Year-End Evaluation

15 Evaluations Mailed

9 Evaluations Returned

5 Farmers responded, farming an average of 1,058 ac.

- 4 fall seeded cover crops in 2018 on 1,600 total cover crop acres
- 6 discussed challenges/benefits of conservation practices with landowners/tenants
- 7 networked conservation ideas with other farmers or farmer clients
 - 1 successfully influenced two or more farmers
 - o 2 successfully influenced one other farmer
 - 3 influenced no farmers

Story Co. Cover Crop Field Day

Event Summary

Field Day/Workshop Topics

✓ Cover Crops

Field Day/Workshop Speakers

✓ Brian Sampson (farmer)

✓ Tim Couser (farmer)

√ Jamie Benning (expert)

✓ Shannon Moeller (expert)

✓ Hillary Olsen (expert)

✓ Brent Metzger (expert)

Field Day: Story Co. Cover Crop Field Day

Location: Roland

Date: Wednesday, 8/8/2018

Time: 5:30 - 7:30 PM

Quality of Field Day/Workshop

4.3 / 5 = Overall quality of field day/workshop

4.4 / 5 = Effectiveness of expert presentation(s)

4.4 / 5 = Effectiveness of farmer presentation(s)

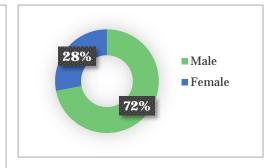
Description of Field Day/Workshop Attendees

52 total attendees*

- 14 farmers/operators
- 20 landowners
- 2 government agency staff
- 2 agricultural business or industry professionals
- 1 new to farming
- 3 other (unspecified)

57 = average age of attendees

14 = number of attendees with livestock



*Total number of attendees at this field day/workshop — attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

Jamie

What is the slope of the (CLL) watershed? Are there any sand pockets in the watershed? What (cover crops) were seeded? Was the project voluntary?

Hillary

Is anhydrous considered tillage?

What about liquid manure?

Are you encouraging radishes?

State cost share – what are the rates? Is it the same statewide?

Does (state cost share) vary based on species used?

Is the federal only offered once?

What percentage of cover crop acres of cost shared?

Have you talked your family into using cover crops?

When you chop does that kill it (cover crops) or do you still need to spray it?

Are there any resources looking at the economics of cover crops?

Brent

Any fertilizer in with the strip-till acres? What varieties of rye are you using? Are you looking for rye or oat growers? Are the cover crop seeds difficult to store? Could you use the carry over seed for feed? Do you do any aerial application?

Brian

Did you harvest any rye for feed?

Does ryelage behave differently than oatlage?

Both seeded in corn and soybeans with the cover crops?

Manure applied to cereal rye?

Is there a creek in the watershed?

All surface inlets taken out? Was that part of the project?

What is organic matter?

What are the soil types?

What was the % moisture for silage?

How did you store the silage?

Tim

How many acres did you seed? How many acres went to corn? What was your burndown? Was the weather cold when you sprayed? How much water in the sprayer tank?

Story Co. Cover Crop Field Day

Responses to Two Week Follow-up Evaluation

31 Evaluations Mailed 16 Evaluations Returned

 $7\ Farmers$ responded, farming an average of 1273 ac.

Attendees were asked to describe their current farming practices:

- 7 are actively farming
- 12 lease land to a tenant
 - Total leased acres: 1219
 - o 3 have conservation measures built into their lease
- Conservation practices used on land owned/operated:
 - 13 no-till/strip till
 - Total no-till/strip till acres:2605
 - 6 use cover crops
 - Total cover crop acres: 1160
 - 1 uses rotational grazing

Helpfulness of take home materials

• 1-page document: 4.0 / 5

4-page document: 3.4 / 5Full research report: 3.0 /5

■ DVD: 2.8 / 5

Presentation slides: 4.0 / 5

- 1 uses prairie strips
- o 4 use extended crop rotation
- 12 use grassed waterways/filter strips/buffers
- 2 use other conservation practices

Story Co. Cover Crop Field Day

Responses to Year-End Evaluation

23 Evaluations Mailed

12 Evaluations Returned

7 Farmers responded, farming an average of 1,434 ac.

- 5 fall seeded cover crops in 2018 on 1,409 total cover crop acres (390 new cover crop acres)
- 12 discussed challenges/benefits of conservation practices with landowners/tenants
- 7 networked conservation ideas with other farmers or farmer clients
 - 1 successfully influenced two or more farmers
 - o 4 successfully influenced one other farmer
 - 1 influenced no farmers

Walnut Creek Watershed Field Day

Event Summary

Field Day: Walnut Creek Watershed Field Day

Location: Dallas Center Date: Wednesday, 8/22/2018

Time: 5:30 - 7:30 PM

Field Day/Workshop Topics

 \checkmark Edge of Field Practices

Field Day/Workshop Speakers

- ✓ Amanda Brown (expert)
- ✓ Ann Staudt (expert)
- ✓ Karl Gesch (expert)
- √ Tim Minton (landowner)
- ✓ Brandon Dittman (expert)

Quality of Field Day/Workshop

4.5 / 5 = Overall quality of field day/workshop

4.3 / 5 = Effectiveness of expert presentation(s)

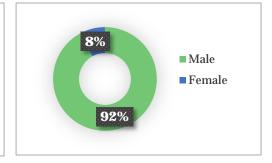
4.6 / 5 = Effectiveness of farmer presentation(s)

4.5 / 5 =Effectiveness of field portion

Description of Field Day/Workshop Attendees

33 total attendees*

- 5 farmers/operators
- 6 landowners
- 2 government agency staff
- 1 other (unspecified)
- 1 would like to farm



62 = average age of attendees

3 = number of attendees with livestock

*Total number of attendees at this field day/workshop – attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

General Edge of Field Questions

What is the decision process when choosing between saturated buffers and bioreactors?

What is the cost of the saturated buffers and bioreactors?

Is there any economic return to the producer?

How many acres can saturated buffers and bioreactors treat?

Saturated Buffers

How much is ACPF being used?

Did you (ISA) develop this ACPF tool?

How wide would a saturated buffer be?

Does saturation in the soil affect streambank erosion/shearing of the banks? All things equal, would a saturated buffer be more prone to shearing?

What type of vegetation is best – grasses, trees, a mix?

How much nitrate reduction are you seeing with saturated buffers?

What causes the variability in performance?

Bioreactors

With a bioreactor, couldn't you have it overflow into a pond instead, so you wouldn't have to go adjust the gates when you get a 6" rain?

Is there a value to the used woodchips?

Are there algae that grow on the woodchips that can be beneficial?

With bioreactors, can you inoculate it/introduce your own bacteria to get even higher nitrate removals?

Wetlands

With this wetland in place, are there any flooding benefits downstream?

So you're capturing sediment in the pond out there?

How long will it be before you have to dredge it?

Do the emergents – cattail, bulrush – provide any benefits, like substrate for the bacteria to live on?

Can you convert a 30-year easement to permanent down the road?

How did you come to the decision to put a CREP wetland out here?

Miscellaneous

What is the size of this Walnut Creek Watershed?

Chestnut Lamprey: Is it a plant? Is it a bird? What is it???

Walnut Creek Watershed Field Day

Responses to Two Week Follow-up Evaluation

16 Evaluations Mailed

11 Evaluations Returned

2 Farmers responded, farming an average of 825 ac.

Attendees were asked to describe their current farming practices:

- 2 are actively farming
- 6 lease land to a tenant
 - o Total leased acres: 1539
 - o 4 have conservation measures built into their lease
- Conservation practices used on land owned/operated:
 - 6 no-till/strip till
 - Total no-till/strip till acres: 650
 - 3 use cover crops
 - Total cover crop acres: 250

Helpfulness of take home materials

1-page document: 3.8 / 5

4-page document: 3.6 / 5

• Full research report: 3.3 / 5

■ DVD: 2.8 / 5

Presentation slides: 2.7 / 5

- 3 use rotational grazing
- 4 use prairie strips
- 2 use extended crop rotation
- 8 use grassed waterways/filter strips/buffers

Walnut Creek Watershed Field Day

Responses to Year-End Evaluation

- 8 Evaluations Mailed
- 6 Evaluations Returned
- 4 Farmers responded, farming an average of 993 ac.

- 4 fall seeded cover crops in 2018 on 495 total cover crop acres
- 6 discussed challenges/benefits of conservation practices with landowners/tenants
- 4 networked conservation ideas with other farmers or farmer clients
 - 3 successfully influenced one other farmer
 - 1 influenced no farmers

Poweshiek Co. Bioreactor Field Day

Event Summary

Field Day/Workshop Topics

Bioreactors

Field Day/Workshop Speakers

✓ Liz Juchems (expert)

✓ Kristina TeBockhorst (expert)

✓ Keegan Kult (expert)

Roger Van Ersvelde (farmer)

Field Day: Poweshiek Co. Bioreactor Field Day

Location: Brooklyn

Date: Thursday, 8/23/2018

Time: 5:30 - 7:30 PM

Quality of Field Day/Workshop

4.1 / 5 = Overall quality of field day/workshop

4.1 / 5 = Effectiveness of expert presentation(s)

4.5 / 5 = Effectiveness of farmer presentation(s)

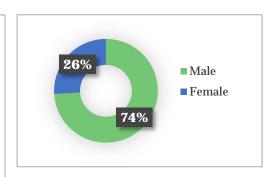
Description of Field Day/Workshop Attendees

52 total attendees*

- 17 farmers/operators
- 11 landowners
- 1 government agency staff
- 5 students or educators
- 1 would like to farm
- 5 other (unspecified)

53 = average age of attendees

10 = number of attendees with livestock



*Total number of attendees at this field day/workshop — attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

Liz/Kristina/Keegan

How long to the woodchips last? How deep is the trench?

Do you just mow over the top of them?

Does one type of wood work better than others?

What about surface inlets upstream of the tile?

How many acres does this bioreactor treat?

How many trees does it take to fill a bioreactor?

How many truckloads of chips?

What type of management is need for the control structure?

Can there be any issues with CO2 buildup? What do you do with the spent woodchips? If you are next to a named stream, is there a risk of bank destabilization with saturated buffers?

Roger

What did you seed on top of the bioreactor? Have you changed your nitrogen application? How long was the process of getting the bioreactor – from start to finish? Was your tile mapped?

Poweshiek Co. Bioreactor Field Day

Responses to Two Week Follow-up Evaluation

28 Evaluations Mailed

14 Evaluations Returned

8 Farmers responded, farming an average of 818 ac.

Attendees were asked to describe their current farming practices:

- 8 are actively farming
- 4 lease land to a tenant
 - o Total leased acres: 1410
 - o 3 have conservation measures built into their lease
- Conservation practices used on land owned/operated:
 - o 9 no-till/strip till
 - Total no-till/strip till acres: 3110
 - 7 use cover crops
 - Total cover crop acres: 1565

Helpfulness of take home materials

- 1-page document: 4.0 / 5
- 4-page document: 3.8 / 5
- Full research report: 3.1 / 5
- DVD: 3.0 / 5
- Presentation slides: 3.9 / 5
- 3 use extended crop rotation
- 12 use grassed waterways/filter strips/buffers
- 2 use other conservation practices

Poweshiek Co. Bioreactor Field Day

Responses to Year-End Evaluation

21 Evaluations Mailed

7 Evaluations Returned

5 Farmers responded, farming an average of 1,078 ac.

- 3 fall seeded cover crops in 2018 on 1,766 total cover crop acres (186 new cover crop acres)
- 6 discussed challenges/benefits of conservation practices with landowners/tenants
- 5 networked conservation ideas with other farmers or farmer clients
 - o 2 successfully influenced two or more farmers
 - o 1 successfully influenced one other farmer

LICA Field Day

Event Summary

Field Day/Workshop Topics

✓ Edge of Field Practices

Field Day/Workshop Speakers

- ✓ Liz Juchems (expert)
- ✓ Aaron Lyle (expert)

Description of Field Day/Workshop Attendees

89 total attendees*

- 8 farmers/operators
- 7 landowners
- 15 government agency staff
- 3 agricultural business or industry professionals
- 1 would like to farm
- 1 student or educator
- 5 other (unspecified)

45 = average age of attendees

6 = number of attendees with livestock

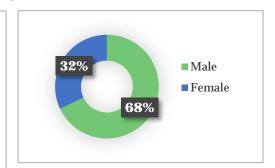
Field Day: LICA Field Day Location: Melbourne Date: Thursday, 9/13/2018 Time: 11:00 AM - 1:30 PM

Quality of Field Day/Workshop

4.8 / 5 = Overall quality of field day/workshop

4.7 / 5 = Effectiveness of expert presentation(s)

4.7 / 5 = Effectiveness of field portion



*Total number of attendees at this field day/workshop — attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

Liz

Does the buffer need to be seeded to grass?

What if the stream meanders, does the tile follow its curves?

How much maintenance is there with the control structures?

Can you use any type of tree like those cut from road ditches?

How do you get multiple landowners to agree to a wetland?

Other programs, beyond CREP, for those in other parts of the state?

What percentage of the tile flow goes through the bioreactor?

How big is the tile for the saturated buffer?

Aaron

Can drainage be viewed as a conservation practice? How much do you think you have invested in conservation practices on this farm? Anyone upstream in your watershed helping cover the cost of your practices?

LICA Field Day

Responses to Two Week Follow-up Evaluation

37 Evaluations Mailed

10 Evaluations Returned

3 Farmers responded, farming an average of 233 ac.

Attendees were asked to describe their current farming practices:

• 3 are actively farming

• 4 lease land to a tenant

o Total leased acres: 620

o 2 have conservation measures built into their lease

• Conservation practices used on land owned/operated:

• 4 no-till/strip till

■ Total no-till/strip till acres: 440

2 use cover crops

Total cover crop acres: 40

o 1 uses rotational grazing

Helpfulness of take home materials

■ 1-page document: 4.4 / 5

• 4-page document: 4.1 / 5

Full research report: 3.6 / 5
 DVD: 4.0 / 5

Presentation slides: 4.2 / 5

• 1 uses prairie strips

o 2 use extended crop rotation

5 use grassed waterways/filter strips/buffers

• 2 use other conservation practices

LICA Field Day

Responses to Year-End Evaluation

13 Evaluations Mailed

7 Evaluations Returned

4 Farmers responded, farming an average of 749 ac.

- 2 fall seeded cover crops in 2018 on 390 total cover crop acres (30 new cover crop acres)
- 4 discussed challenges/benefits of conservation practices with landowners/tenants
- 5 networked conservation ideas with other farmers or farmer clients
 - 2 successfully influenced one other farmer
 - 2 influenced no farmers

Mike Helland Field Day

Event Summary

Field Day: Mike Helland Field Day

Location: Huxley

Date: Thursday, 11/15/2018 Time: 12:00 - 3:00 PM

Field Day/Workshop Topics

- ✓ Cover Crops
- ✓ Earthworms

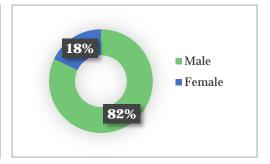
Field Day/Workshop Speakers

- ✓ Liz Juchems (expert)
- ✓ Matt Lechtenberg (expert)
- ✓ Adam Kiel (expert)
- ✓ Farmer panel: Mike Helland, Mark Kenney, Aaron Lehman

Description of Field Day/Workshop Attendees

25 total attendees*

- 7 farmers/operators
- 2 landowners
- 2 agricultural business or industry professionals



59 = average age of attendees

2 = number of attendees with livestock

*Total number of attendees at this field day/workshop — attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

Field Visit with Mike

What was the stage of soybeans when you aerially seeded?

What did you try to seed a V5 corn?

Does E/W or N/S rows matter for keeping the seeded cover crop alive that early?

Did you change planter settings for seeding soybeans into green rye?

Are you doing all winter kill ahead of corn?

How much diesel do you save by not tilling this field?

What is your tillage plan for corn?

So you haven't done any deep till on your fields for years?

When you started no-tilling, what was the setup of the planter?

How many acres do you seed a day with the drill? At what speed can you run?

Any issues keeping the planter in the ground with no-till?

Why the gap in the aerially seeded cover crop?

How old are the prairie strips?

How did you work with the tenant to get the strips done?

Were the terraces always here?

Earthworm Talk

How long do earthworms live? Any differences in populations where anhydrous was applied? Were sites in corn and soybeans the same year to see the effects of anhydrous?

Cover Crops + Crop Insurance

What is the length of IDALS commitment? Is the sign up period for this year or next? How do you verify the cover crops are seeded? So you don't need to submit receipts? What is the sign up deadline?

Water Quality

Does your data show a difference between rates of nitrogen and nitrate losses? How far back does your data set go? Any trends in the data? Have there been decreases in losses? Your measuring at the field and stream, but what about the rivers/Mississippi River? Any impacts on the Gulf yet?

Farmer Panel/Discussion

So you are choosing some of your lower performing acres to seed your oats for cover crop seed? How do you have the cover crop conversation with the landowner? Who pays for the cover crops in the rental agreement? Any tips for breaking even/cutting costs on cover crops?

Mike Helland Field Day

Responses to Two Week Follow-up Evaluation*

*Because the field day occurred near the end of the 2018 growing season (November 2018), event participants were not mailed a two-week follow-up evaluation. Field day attendees were still asked to participate in the January evaluation (data below).

Mike Helland Field Day

Responses to Year-End Evaluation

- 6 Evaluations Mailed
- 4 Evaluations Returned
- 3 Farmers responded, farming an average of 1,800 ac.

- 3 fall seeded cover crops in 2018 on 1,276 total cover crop acres (100 new cover crop acres)
- 3 discussed challenges/benefits of conservation practices with landowners/tenants
- 3 networked conservation ideas with other farmers or farmer clients
 - 1 successfully influenced one other farmer
 - o 1 influenced no farmers

East Central Crop Reporting District Field Days

Counties: Benton, Cedar, Clinton, Iowa, Linn, Jackson, Johnson, Jones, Muscatine, Scott

1 Iowa Learning Farms field days/workshops held in 2018, covering the following topics:

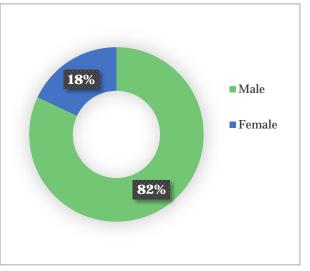
✓ Edge of Field Practices (discussed at 1 field day/workshop)

Demographics of Field Day/Workshop Attendees

40 total attendees*

- 6 farmers/operators
- 5 landowners
- 3 other (unspecified)
- 1 agricultural business or industry professional
- 1 government agency staff
- 2 would like to farm
- 1 student or educator

60 = average age of field day attendees



^{*}Total number of attendees at 2018 ILF field days in district. Attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Scott Co. Saturated Buffer Field Day

Event Summary

Field Day/Workshop Topics

- ✓ Saturated Buffers
- ✓ Soil Health
- ✓ Cover Crops

Field Day/Workshop Speakers

- ✓ Mike Paustian (farmer)
- ✓ Kristina TeBockhorst (expert)
- ✓ Jason Steele (expert)
- ✓ Steve Berger (farmer)

Field Day: Scott Co. Saturated Buffer Field Day

Location: Walcott

Date: Tuesday, 8/7/2018 Time: 5:30 - 8:00 PM

Quality of Field Day/Workshop

4.8 / 5 = Overall quality of field day/workshop

4.7 / 5 = Effectiveness of expert presentation(s)

4.8 / 5 = Effectiveness of farmer presentation(s)

4.6 / 5 = Effectiveness of field portion

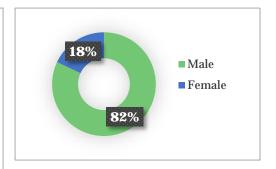
Description of Field Day/Workshop Attendees

40 total attendees*

- 6 farmers/operators
- 5 landowners
- 1 government agency staff
- 1 agricultural business or industry professional
- 2 would like to farm
- 1 student or educator
- 3 other (unspecified)

60 = average age of attendees

7 = number of attendees with livestock



Questions Asked at Field Day/Workshop

Mike/Kristina

What's in the saturated buffer?

Are there woodchips in there?

Do you monitor the nitrate? How much is in there? What's coming out?

Couldn't you just measure the water right there in the flow control box?

With a saturated buffer, wouldn't there be no direct benefit to me as the landowner?

Is there anything mechanical that needs power?

Do you put the bacteria in there, or are they naturally occurring?

What makes the bacteria good down there where it's anaerobic?

Are there certain times of year they're more active than others?

Will herbicides or pesticides negatively affect the bacteria in these things?

What is the lifespan of a saturated buffer?

Does it make a difference if it's clay or plastic tile?

Is this very costly to put in? Doesn't look like it...

What is the cost?

What cost share assistance is available?

^{*}Total number of attendees at this field day/workshop – attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Do you know what value the bacteria are doing?

Have you done soil samples on this site?

If you had sandier soils, would you be worried about it leaching out without being treated?

How large is the treated area?

Did you have corn in here last year?

Are you adjusting your N application?

Does this get fertilized with manure every year?

Does the DNR tell you how much manure to put on?

How much calculated N is put on this field (in the manure)?

Why should somebody from Davenport, Pleasant Valley, etc. care about what's going on out here?

Where do Scott, Cedar, and Clinton Counties fall on the continuum in terms of urban and rural working together?

Federal/state/county/city level – where do you think these water quality discussions should be taking place?

Jason/Steve

If I was writing a book, "Farming for Dummies," would I be understanding compacted and aerated soil correctly? Compacted soil doesn't allow water and nutrients through, while aerated soil lets water infiltrate and nutrients move more readily?

Are you seeing a lot of farmers buying into this no-till system?

How long has this "soil health" stuff been going on?

Why did that rye get so tall?

Did you have difficulty applying Roundup?

Miscellaneous Questions

What other field days do you have coming up?

Where are you going next?

TeBockhorst, that's a familiar name. Are you from around here?

Are you going all the way back to Ames tonight?

What department are you in on campus?

Are you in the new ABE building?

How can I test for nitrates in my tile line?

Scott Co. Saturated Buffer Field Day

Responses to Two Week Follow-up Evaluation

15 Evaluations Mailed

9 Evaluations Returned

4 Farmers responded, farming an average of 369 ac.

Attendees were asked to describe their current farming practices:

- 4 are actively farming
- 5 lease land to a tenant
 - O Total leased acres: 3375
 - 2 have conservation measures built into their lease
- Conservation practices used on land owned/operated:
 - 5 no-till/strip till
 - Total no-till/strip till acres:1800
 - 3 use cover crops
 - Total cover crop acres: 855

Helpfulness of take home materials

■ 1-page document: 4.0 / 5

4-page document: 3.5 / 5

• Full research report: 3.0 / 5

■ DVD: 2.0 / 5

Presentation slides: 2.5 / 5

- 1 uses other conservation practices
- o 1 uses extended crop rotation
- 7 use grassed waterways/filter strips/buffers

Scott Co. Saturated Buffer Field Day

Responses to Year-End Evaluation

- 9 Evaluations Mailed
- 4 Evaluations Returned
- 0 Farmers responded

- 1 fall seeded cover crops in 2018 on 400 total cover crop acres
- 2 discussed challenges/benefits of conservation practices with landowners/tenants
- 1 networked conservation ideas with other farmers or farmer clients
 - o 1 influenced no farmers

North Central Crop Reporting District Field Days

Counties: Butler, Cerro Gordo, Floyd, Franklin, Hancock, Humboldt, Kossuth, Mitchell, Winnebago, Worth, Wright

1 Iowa Learning Farms field days/workshops held in 2018, covering the following topics:

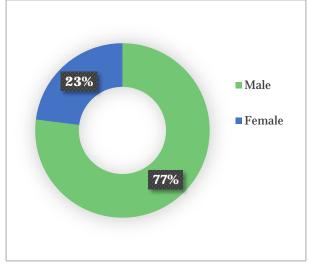
✓ Cover Crops (discussed at 1 field day/workshop)

Demographics of Field Day/Workshop Attendees

35 total attendees*

- 24 farmers/operators
- 5 landowners
- 1 other (unspecified)
- 1 agricultural business or industry professional
- 10 government agency staff

45 = average age of field day attendees



^{*}Total number of attendees at 2018 ILF field days in district. Attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Kossuth Co. Field Day

Event Summary

Field Day: Kossuth Co. Field Day

Location: Algona

Date: Tuesday, 11/27/2018 Time: 12:00 - 2:00 PM

Field Day/Workshop Topics

✓ Cover Crops

Field Day/Workshop Speakers

- ✓ Liz Juchems (expert)
- ✓ Matt and Nancy Bormann (farmers)
- ✓ Doug Adams (farmer/expert)
- ✓ Patrick Chase (expert)

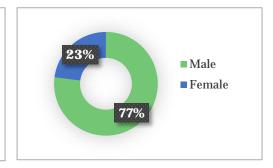
Description of Field Day/Workshop Attendees

49 total attendees*

- 24 farmers/operators
- 5 landowners
- 10 government agency staff
- 1 agricultural business or industry professional
- 1 other (unspecified)

45 = average age of attendees

13 = number of attendees with livestock



*Total number of attendees at this field day/workshop — attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

Liz

How tall does the cover crop need to get to know its working?

What about oats, how tall?

Any research on intercropping?

Termination recommendations for cereal rye in the spring?

If we plant the rye after oats and take a forage off in the fall, will there be enough spring growth to roll for weed suppression in our organic system?

Matt

What are you gaining by vertical tilling ahead of soybeans?

What does the pass of vertical till cost? Have you compared ESN to straight urea?

Doug

Do you roll the rye before or after planting?
How long do you wait to after planting to roll the rye?
Do you think row cleaners are needed to plant green?
Do you need to change the planting depth at all with cover crops?

How much water in the tank for termination? Any issues with herbicide carryover and cover crop germination?

Kossuth Co. Field Day

Responses to Two Week Follow-up Evaluation*

*Because the field day occurred near the end of the 2018 growing season (November 2018), event participants were not mailed a two-week follow-up evaluation. Field day attendees were still asked to participate in the January evaluation (data below).

Kossuth Co. Field Day Responses to Year-End Evaluation 23 Evaluations Mailed 13 Evaluations Returned 13 Farmers responded, farming an average of 863 ac.

- 3 fall seeded cover crops in 2018 on 1,357 total cover crop acres (430 new cover crop acres)
- 7 discussed challenges/benefits of conservation practices with landowners/tenants
- 7 networked conservation ideas with other farmers or farmer clients
 - o 5 influenced no farmers

Northeast Crop Reporting District Field Days

Counties: Allamakee, Black Hawk, Bremer, Buchanan, Chickasaw, Clayton, Delaware, Dubuque, Fayette, Howard, Winneshiek

3 Iowa Learning Farms field days/workshops held in 2018, covering the following topics:

- ✓ Cover Crops (discussed at 3 field days/workshops)
- ✓ Bioreactors (discussed at 1 field day/workshop)
- ✓ Earthworms (discussed at 1 field day/workshop)
- ✓ Soil Health (discussed at 1 field day/workshop)

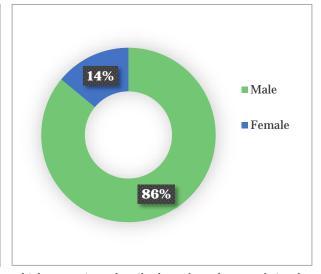
Demographics of Field Day/Workshop Attendees

183 total attendees*

- 60 farmers/operators
- 30 landowners
- 6 other (unspecified)
- 8 agricultural business or industry professionals
- 10 government agency staff
- 2 would like to farm
- 3 new to farming

34 = average attendance per field day/workshop

55 = average age of field day attendees



 $[*]Total\ number\ of\ attendees\ at\ 2018\ ILF\ field\ days\ in\ district.$ Attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Brian Meyer Field Day

Event Summary

Field Day: Brian Meyer Field Day

Location: Readlyn

Date: Thursday, 3/29/2018 Time: 12:30 - 2:30 PM

Field Day/Workshop Topics

- ✓ Cover Crops
- ✓ Bioreactor
- ✓ Soil Health

Field Day/Workshop Speakers

- ✓ Brian Meyer (farmer)
- ✓ Liz Juchems (expert)
- ✓ Ron Lenth (expert)
- ✓ Neil Sass (expert)

Quality of Field Day/Workshop

4.5 / 5 = Overall quality of field day/workshop

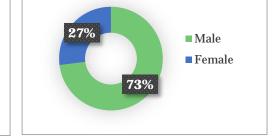
4.4 / 5 = Effectiveness of expert presentation(s)

4.6 / 5 = Effectiveness of farmer presentation(s)

Description of Field Day/Workshop Attendees

101 total attendees*

- 23 farmers/operators
- 12 landowners
- 5 government agency staff
- 2 new to farming
- 5 other (unspecified)



58 = average age of attendees

10 = number of attendees with livestock

Questions Asked at Field Day/Workshop

Less than 5% of Iowans were using cover crops in 2017. I get it because I attempted radishes and they didn't work, how can we promote these, despite these challenges?

Do cover crops help add nutrients to the soil?

What about using rollers to terminate rye?

Does it have to be a sharp roller?

^{*}Total number of attendees at this field day/workshop – attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Brian Meyer Field Day

Responses to Two Week Follow-up Evaluation

37 Evaluations Mailed

16 Evaluations Returned

11 Farmers responded, farming an average of 255 ac.

Attendees were asked to describe their current farming practices:

• 11 are actively farming

• 8 lease land to a tenant

Total leased acres: 1895

o 8 have conservation measures built into their lease

• Conservation practices used on land owned/operated:

○ 5 no-till/strip till

Total no-till/strip till acres: 40

• 6 use cover crops

Total cover crop acres: 220

Helpfulness of take home materials

■ 1-page document: 4.1 / 5

4-page document: 4.1 / 5Full research report: 3.9 / 5

■ DVD: 3.6 / 5

• Presentation slides: 3.9 / 5

• 1 uses prairie strips

• 4 use extended crop rotation

8 use grassed waterways/filter strips/buffers

Brian Meyer Field Day

Responses to Year-End Evaluation

29 Evaluations Mailed

14 Evaluations Returned

8 Farmers responded, farming an average of 289 ac.

- 9 fall seeded cover crops in 2018 on 1,405 total cover crop acres (435 new cover crop acres)
- 10 discussed challenges/benefits of conservation practices with landowners/tenants
- 7 networked conservation ideas with other farmers or farmer clients
 - 4 successfully influenced two or more farmers
 - 1 successfully influenced one other farmer
 - 1 influenced no farmers

Nick Meier Field Day

Event Summary

Field Day: Nick Meier Field Day

Location: Waterloo

Date: Tuesday, 11/13/2018 Time: 4:00 - 7:30 PM

Field Day/Workshop Topics

- ✓ Cover Crops
- ✓ Earthworms

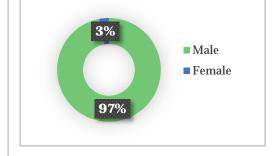
Field Day/Workshop Speakers

- ✓ Lisa Kubik (expert)
- ✓ Nick Meier (farmer)
- ✓ Matt Lechtenberg (expert)
- √ Theo Gunther (expert)
- √ Jamie Benning (expert)
- √ Farmer panel

Description of Field Day/Workshop Attendees

45 total attendees*

- 22 farmers/operators
- 8 landowners
- 4 government agency staff
- 6 agricultural business or industry professionals
- 2 would like to farm
- 1 new to farming
- 1 other (unspecified)



48 = average age of attendees

7 = number of attendees with livestock

Questions Asked at Field Day/Workshop

If they are enrolled in CRP, do you still qualify?
Were the earthworms in a no-till field?
Any info on earthworms in strip-till field?
Do earthworm populations migrate?
Is it true that worms don't like to travel uphill?
Are there problems with army worms?
What's the termination date/rules with federal crop insurance?
Can you speak about planting into green cover crops?
Do you have guidance on your planter when you plant into rye?
How are you applying the cover crop?

^{*}Total number of attendees at this field day/workshop – attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Nick Meier Field Day

Responses to Two Week Follow-up Evaluation*

*Because the field day occurred near the end of the 2018 growing season (November 2018), event participants were not mailed a two-week follow-up evaluation. Field day attendees were still asked to participate in the January evaluation (data below).

Nick Meier Field Day

Responses to Year-End Evaluation

- 21 Evaluations Mailed
- 9 Evaluations Returned
- 7 Farmers responded, farming an average of 788 ac.

- 7 fall seeded cover crops in 2018 on 3,505 total cover crop acres (306 new cover crop acres)
- 8 discussed challenges/benefits of conservation practices with landowners/tenants
- 7 networked conservation ideas with other farmers or farmer clients
 - 2 successfully influenced two or more farmers
 - 3 successfully influenced one other farmer

Clayton Co. Field Day

Event Summary

Field Day: Clayton Co. Field Day

Location: Luana

Date: Thursday, 11/29/2018 Time: 10:00 AM - 12:30 PM

Field Day/Workshop Topics

✓ Cover Crops

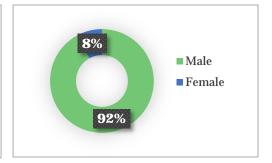
Field Day/Workshop Speakers

- ✓ Liz Juchems (expert)
- √ Neil Sass (expert)
- ✓ Eric Palas (expert)
- ✓ Farmer panel: Brian Keehner, Dan Keehner, Mark Glawe

Description of Field Day/Workshop Attendees

37 total attendees*

- 15 farmers/operators
- 10 landowners
- 1 government agency staff
- 2 agricultural business or industry professionals



58 = average age of attendees

11 = number of attendees with livestock

Questions Asked at Field Day/Workshop

Farmer Panel

What is your goal for using cover crops?

Do you feel you are running short on N?

What was the crop rotation?

Did you change your N application during the 2013-2017 timeframe when OM was sampled?

Was the cover crop cereal rye?

This was the first year you planted green (corn)?

How tall was it when you terminated?

The rye didn't help dry out the soil?

Were you satisfied with the corn stand in the green rye?

How quickly do the grass cover crop species release the N?

Did you spray any insecticide?

Do you have a height you aim for at termination?

How long did it take to modify your combine to seed?

How did you decide to seed with your combine?

How far are your row spacings?

How often do you need to refill?

Seeding rye only? Tried any radishes?

Next steps for modifying your prototype?

What was the cost of the seeding units?

Do you guidance or use row markers?

Any trouble seeing your mark with the extra residue?

For termination, what are you using and at what rate?

Have you tried anything other than glyphosate?

Advice for those starting out?

Liz

Any studies looking at earthworms with different fertilizer types?

^{*}Total number of attendees at this field day/workshop – attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Clayton Co. Field Day

Responses to Two Week Follow-up Evaluation*

*Because the field day occurred near the end of the 2018 growing season (November 2018), event participants were not mailed a two-week follow-up evaluation. Field day attendees were still asked to participate in the January evaluation (data below).

Clayton Co. Field Day

Responses to Year-End Evaluation

22 Evaluations Mailed

14 Evaluations Returned

10 Farmers responded, farming an average of 686 ac.

- 12 fall seeded cover crops in 2018 on 1,415 total cover crop acres (748 new cover acres)
- 5 discussed challenges/benefits of conservation practices with landowners/tenants
- 7 networked conservation ideas with other farmers or farmer clients
 - 2 successfully influenced two or more farmers
 - 1 successfully influenced one other farmer
 - o 1 influenced no farmers

Northwest Crop Reporting District Field Days

Counties: Buena Vista, Cherokee, Clay, Dickinson, Emmet, Lyon, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sioux

3 Iowa Learning Farms field days/workshops held in 2018, covering the following topics:

- ✓ Cover Crops (discussed at 1 field day/workshop)
- ✓ Edge of Field Practices (discussed at 2 field days/workshops)
- ✓ Earthworms (discussed at 1 field day/workshop)

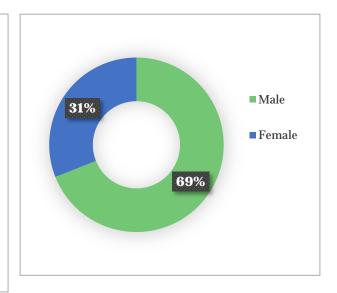
Demographics of Field Day/Workshop Attendees

262 total attendees*

- 62 farmers/operators
- 25 landowners
- 17 other (unspecified)
- 2 agricultural business or industry professionals
- 14 government agency staff
- 18 would like to farm
- 4 new to farming
- 101 students or educators
- 1 media representative

74 = average attendance per field day/workshop

33 = average age of field day attendees



^{*}Total number of attendees at 2018 ILF field days in district. Attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Dickinson Co. "Edge of Field" Field Day

Event Summary

Field Day/Workshop Topics

✓ Edge of Field Practices

Field Day/Workshop Speakers

✓ Matt Helmers (expert)

Description of Field Day/Workshop Attendees

 $53\ total\ attendees^*$

- 5 farmers/operators
- 11 landowners
- 10 government agency staff
- 1 media representative
- 10 other (unspecified)

55 = average age of attendees

4 = number of attendees with livestock

Field Day: Dickinson Co. "Edge of Field" Field Day

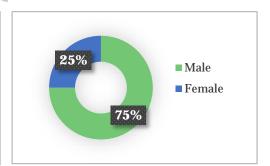
Location: Spirit Lake Date: Thursday, 8/9/2018 Time: 9:30 AM - 12:00 PM

Quality of Field Day/Workshop

4.6 / 5 = Overall quality of field day/workshop

4.7 / 5 = Effectiveness of expert presentation(s)

4.6 / 5 = Effectiveness of field portion



*Total number of attendees at this field day/workshop — attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

What frequency of rain are wetlands designed for?
How many watersheds near this lake need attending?
Is there payment for OTE practices?
Do you ever approach landowners and make offers?
Have you looked at other benefits like pollinators?
What type of woodchips?
Can you redesign ditches?
What is the cost of a bioreactor?
How do you know when a bioreactor needs replaced?
Can you increase the life of a bioreactor if the nitrates are low?

Dickinson Co. "Edge of Field" Field Day

Responses to Two Week Follow-up Evaluation

27 Evaluations Mailed

11 Evaluations Returned

2 Farmers responded, farming an average of 365 ac.

Attendees were asked to describe their current farming practices:

- 2 are actively farming
- 5 lease land to a tenant
 - Total leased acres: 2395
 - 2 have conservation measures built into their lease
- Conservation practices used on land owned/operated:
 - 3 no-till/strip till
 - 4 use cover crops
 - Total cover crop acres: 285

Helpfulness of take home materials

■ 1-page document: 4.8 / 5

• 4-page document: 4.7 / 5

• Full research report: 4.0 / 5

■ DVD: 2.8 / 5

Presentation slides: 3.0 / 5

- 1 uses extended crop rotation
- 5 use grassed waterways/filter strips/buffers

Dickinson Co. "Edge of Field" Field Day

Responses to Year-End Evaluation

12 Evaluations Mailed

8 Evaluations Returned

5 Farmers responded, farming an average of 678 ac.

- 6 fall seeded cover crops in 2018 on 1,216 total cover crop acres (498 new cover crop acres)
- 8 discussed challenges/benefits of conservation practices with landowners/tenants
- 4 networked conservation ideas with other farmers or farmer clients
 - 4 successfully influenced two or more farmers

Dordt College Ag. Field Day

Event Summary

Field Day/Workshop Topics

✓ Edge of Field Practices

Field Day/Workshop Speakers

- ✓ Matt Helmers (expert)
- ✓ Joel De Jong (expert)
- ✓ Colton Meyer (expert)

Field Day: Dordt College Ag. Field Day

Location: Sioux Center Date: Wednesday, 9/5/2018

Time: 5:30 - 8:00 PM

Quality of Field Day/Workshop

4.0 / 5 = Overall quality of field day/workshop

4.0 / 5 = Effectiveness of expert presentation(s)

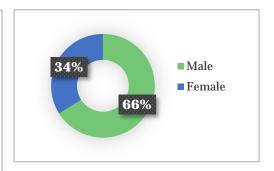
Description of Field Day/Workshop Attendees

186 total attendees*

- 51 farmers/operators
- 13 landowners
- 4 new to farming
- 1 government agency staff
- 1 agricultural business or industry professional
- 18 would like to farm
- 101 students or educators
- 7 other (unspecified)

26 = average age of attendees

66 = number of attendees with livestock



*Total number of attendees at this field day/workshop — attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

How deep under surface does bioreactor need to be?

Can you till above the bioreactor?

What do you do when we have rains that we have had and overflow of the system?

How long can wood chips last?

Do you have to use wood?

What kind of active management do you need on control structure?

Are there different times of year where there is more water flowing through system?

How does frost affect control box?

Isn't this just putting a Band-Aid on the overall system?

What kind of incentives are available?

If we don't change our practices upstream, will these make a difference?

Dordt College Ag. Field Day

Responses to Two Week Follow-up Evaluation

62 Evaluations Mailed

13 Evaluations Returned

4 Farmers responded, farming an average of 288 ac.

Attendees were asked to describe their current farming practices:

- 4 are actively farming
- 4 lease land to a tenant
 - o Total leased acres: 1016
 - 4 have conservation measures built into their lease
- Conservation practices used on land owned/operated:
 - o 5 no-till/strip till
 - Total no-till/strip till acres: 835
 - 2 use cover crops
 - Total cover crop acres: 310

Helpfulness of take home materials

■ 1-page document: 3.9 / 5

4-page document: 3.7 / 5Full research report: 4.0 / 5

■ DVD: 3.1 / 5

Presentation slides: 3.7 / 5

- 1 uses rotational grazing
- 2 use extended crop rotation
- 3 use grassed waterways/filter strips/buffers

Dordt College Ag. Field Day

Responses to Year-End Evaluation

34 Evaluations Mailed

4 Evaluations Returned

2 Farmers responded, farming an average of 127 ac.

- 1 fall seeded cover crops in 2018 on 12 new cover crop acres
- 2 discussed challenges/benefits of conservation practices with landowners/tenants
- 3 networked conservation ideas with other farmers or farmer clients
 - 1 successfully influenced two or more farmers
 - 2 successfully influenced one other farmer

Dick Lund Field Day

Event Summary

Field Day: Dick Lund Field Day

Location: Laurens

Date: Wednesday, 11/14/2018

Time: 12:00 - 3:00 PM

Field Day/Workshop Topics

- ✓ Cover Crops
- ✓ Earthworms

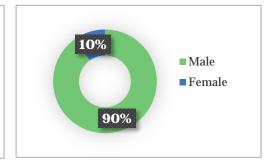
Field Day/Workshop Speakers

- ✓ Jacob Ness (expert)
- ✓ Ann Staudt (expert)
- ✓ Will Myers (expert)
- ✓ Shannon Moeller (expert)
- ✓ Chris Hay (expert)
- ✓ Farmer panel: Dick Lund, Dyle Erickson, Aaron Lehman

Description of Field Day/Workshop Attendees

23 total attendees*

- 6 farmers/operators
- 1 landowner
- 3 government agency staff
- · 1 agricultural business or industry professional



55 = average age of attendees

1 = number of attendees with livestock

*Total number of attendees at this field day/workshop — attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

Field Visit (+ Earthworm Talk)

How long has this field been in no-till?

How many of you farmers have tried cover crops? What are you using?

What are you doing over there? (Searching for earthworm middens ... got the ball rolling for Ann's presentation!)

In your earthworm study, how many years had those sites been in cover crops?

Has anyone ever tried to increase the population of earthworms?

Is there an effective way to introduce earthworms into fields?

What about the other species of worms, besides nightcrawlers?

You said these nightcrawlers live in one burrow their whole life. So how do they migrate – their offspring?

Do earthworms reproduce sexually or asexually?

Are the nightcrawlers territorial?

How much area does each nightcrawler need to feed?

What are the highest amounts of nightcrawlers you've found out in the field?

Cover Crops + Crop Insurance

Are there certain types of cover crop seed/seeding rates you need to use to qualify?

What about seeding techniques?

How and why did you connect this incentive with crop insurance?

Water Quality

Are you just checking nitrate in the tile lines?

Does anybody check for phosphorus?

Are you seeing high nitrate loads there because the infiltration is higher on cover crop fields?

How does manure effect nitrate yield?

Farmer Panel/Discussion

How did the roller/crimper work for you? What date did you roller/crimp? Are you putting your cover crops in 15 inch rows?

Dick Lund Field Day

Responses to Two Week Follow-up Evaluation*

*Because the field day occurred near the end of the 2018 growing season (November 2018), event participants were not mailed a two-week follow-up evaluation. Field day attendees were still asked to participate in the January evaluation (data below).

Dick Lund Field Day

Responses to Year-End Evaluation

- 4 Evaluations Mailed
- 3 Evaluations Returned
- 3 Farmers responded, farming an average of 637 ac.

- 3 fall seeded cover crops in 2018 on 651 total cover crop acres (195 new cover crop acres)
- 2 discussed challenges/benefits of conservation practices with landowners/tenants
- 3 networked conservation ideas with other farmers or farmer clients
 - 3 successfully influenced one other farmer

South Central Crop Reporting District Field Days

Counties: Appanoose, Clarke, Decatur, Lucas, Madison, Marion, Monroe, Ringgold, Union, Warren, Wayne

1 Iowa Learning Farms field days/workshops held in 2018, covering the following topics:

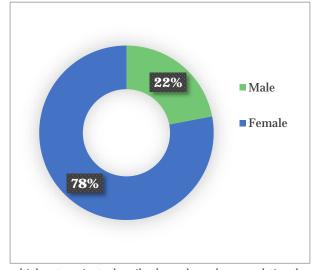
- ✓ Cover Crops (discussed at 1 field day/workshop)
- ✓ Leases (discussed at 1 field day/workshop)
- ✓ Soil Health (discussed at 1 field day/workshop)

Demographics of Field Day/Workshop Attendees

19 total attendees*

- 4 farmers/operators
- 6 landowners
- 1 government agency staff

70 = average age of field day attendees



 $[*]Total\ number\ of\ attendees\ at\ 2018\ ILF\ field\ days\ in\ district.$ Attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Union Co. Women Landowners Field Day

Event Summary

Field Day/Workshop Topics

- ✓ Cover Crops
- ✓ Leases
- ✓ Soil Health

Field Day/Workshop Speakers

- ✓ Liz Juchems (expert)
- ✓ Ann Staudt (expert
- ✓ Charles Brown (expert)
- ✓ Deb Thummel (farmer)
- ✓ James Allen (farmer)
- ✓ Local NRCS Staff (expert)

Field Day: Union Co. Women Landowners Field Day

Location: Diagonal

Date: Wednesday, 3/28/2018 Time: 10:30 AM - 1:00 PM

Quality of Field Day/Workshop

4.6 / 5 = Overall quality of field day/workshop

4.6 / 5 = Effectiveness of expert presentation(s)

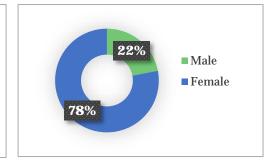
4.6 / 5 = Effectiveness of farmer presentation(s)

4.8 / 5 = Effectiveness of field portion

Description of Field Day/Workshop Attendees

19 total attendees*

- 4 farmers/operators
- 10 landowners
- 1 government agency staff



70 = average age of attendees

4 = number of attendees with livestock

*Total number of attendees at this field day/workshop – attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

Liz/James

When did you plant the cover crop out here? What is your plan for termination? Do you do any grazing of the cover drops?

Ann

Have you done any earthworm studies looking at no-till?

Charles

You're saying cover crops are a long term thing — should that also be factored in with longer term leases? What about cover crops on those real wet spots where it's tough for it to dry out anyway? Wouldn't that make

it even harder to get in for termination/spring field operations?

Deb

What are your top take-home points, or what advice would you give somebody starting out with cover crops, based on your years of experience?

NRCS

I saw a recent demonstration by Doug Petersen and I was really impressed by how much the nutrient levels were reduced in the water passing through the land that had a cover crop. Could it have been like 10x less?

Union Co. Women Landowners Field Day

Responses to Two Week Follow-up Evaluation

- 7 Evaluations Mailed
- 5 Evaluations Returned
- 4 Farmers responded, farming an average of 850 ac.

Attendees were asked to describe their current farming practices:

- 4 are actively farming
- 3 lease land to a tenant
 - o Total leased acres: 350
 - o 3 have conservation measures built into their lease
- Conservation practices used on land owned/operated:
 - 3 no-till/strip till
 - Total no-till/strip till acres: 700
 - 2 use cover crops
 - Total cover crop acres: 50

Helpfulness of take home materials

- 1-page document: 3.8 / 5
- 4-page document: 3.8 / 5Full research report: 3.5 / 5
- DVD: 4.0 / 5
- Presentation slides: 4.0 / 5
- 2 use extended crop rotation
- 1 uses grassed waterways/filter strips/buffers

Union Co. Women Landowners Field Day

Responses to Year-End Evaluation

- 9 Evaluations Mailed
- 2 Evaluations Returned
- 2 Farmers responded, farming an average of 575 ac.

- 2 fall seeded cover crops in 2018 on 237 total cover crop acres (212 new cover crop acres)
- 1 discussed challenges/benefits of conservation practices with landowners/tenants
- 2 networked conservation ideas with other farmers or farmer clients
 - o 1 successfully influenced one other farmer

Southeast Crop Reporting District Field Days

Counties: Davis, Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Mahaska, Van Buren, Wapello, Washington

3 Iowa Learning Farms field days/workshops held in 2018, covering the following topics:

- ✓ Cover Crops (discussed at 3 field days/workshops)
- ✓ Edge of Field Practices (discussed at 1 field day/workshop)
- ✓ Grazing Cover Crops (discussed at 1 field day/workshop)

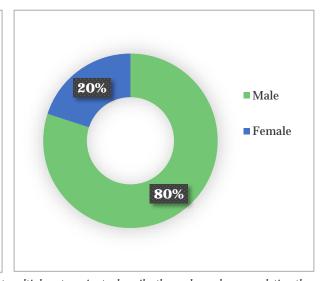
Demographics of Field Day/Workshop Attendees

170 total attendees*

- 72 farmers/operators
- 27 landowners
- 4 agricultural business or industry professionals
- 4 government agency staff
- 11 would like to farm
- 3 new to farming
- 1 students or educator

57 = average attendance per field day/workshop

48 = average age of field day attendees



 $[*]Total\ number\ of\ attendees\ at\ 2018\ ILF\ field\ days\ in\ district.$ Attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Lake Geode Watershed Field Day

Event Summary

Field Day: Lake Geode Watershed Field Day

Location: West Burlington Date: Wednesday, 11/7/2018

Time: 4:00 - 6:00 PM

Field Day/Workshop Topics

✓ Cover Crops

Field Day/Workshop Speakers

- ✓ Caleb Waters (expert)
- ✓ Spring Run Services (expert)
- ✓ Jason Steele (expert)
- ✓ Thom Miller (farmer)
- ✓ Liz Juchems (expert)
- ✓ Drew DeLang (expert)

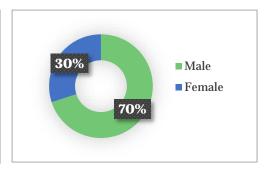
Description of Field Day/Workshop Attendees

66 total attendees*

- 32 farmers/operators
- 9 landowners
- 1 student or educator
- 2 new to farming
- 8 would like to farm

35 = average age of attendees

23 = number of attendees with livestock



*Total number of attendees at this field day/workshop – attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

Spring Run Services

What cover crops are you seeding with the Hagie?

Jason

What's your optimum number of earthworms you want to see per acre?

Will radish taproots go deeper after several rotations of rye cover crops?

Will the radishes stink?

Liz

You're not getting much root structure from oats are you?

Is it better to drink seeds than do aerial application for establishing root structure?

What do you recommend for grazing sheep?

Thom

What type of collard did you plant for grazing?

What was the planting date?

Do you have a hard time killing the sunflowers?

How do you plan where you have different size seeds to get them to go through the drill?

You don't have a small seed box then?

How many species do you plant in a mix?

Have you done a cost comparison of cover crop mixes vs corn/hay for feeding your cattle?

Have you had neighbors ask you about grazing cover crops on their land?

Do you graze all of your cover crops?

Did your crop yields go down?

Lake Geode Watershed Field Day

Responses to Two Week Follow-up Evaluation*

*Because the field day occurred near the end of the 2018 growing season (November 2018), event participants were not mailed a two-week follow-up evaluation. Field day attendees were still asked to participate in the January evaluation (data below).

Lake Geode Watershed Field Day

Responses to Year-End Evaluation

- 31 Evaluations Mailed
- 11 Evaluations Returned
- 9 Farmers responded, farming an average of 951 ac.

- 9 fall seeded cover crops in 2018 on 2,153 total cover crop acres (713 new cover crop acres)
- 7 discussed challenges/benefits of conservation practices with landowners/tenants
- 6 networked conservation ideas with other farmers or farmer clients
 - 4 successfully influenced one other farmer

Cedar Creek Partnership Field Day

Event Summary

Field Day: Cedar Creek Partnership Field Day

Location: Ottumwa

Date: Tuesday, 11/20/2018 Time: 10:30 AM - 12:30 PM

Field Day/Workshop Topics

- ✓ Cover Crops
- ✓ Grazing Cover Crops

Field Day/Workshop Speakers

- ✓ Don Swanson (farmer)
- ✓ Patrick Wall (expert)
- ✓ Liz Juchems (expert)
- ✓ Lanessa Baker (expert)

Description of Field Day/Workshop Attendees

55 total attendees*

- 18 farmers/operators
- 7 landowners
- 2 government agency staff
- 2 agricultural business or industry professionals
- 2 would like to farm
- 1 new to farming

4%■ Male
■ Female **96%**

56 = average age of attendees

14 = number of attendees with livestock

*Total number of attendees at this field day/workshop – attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

What kind of vertical tillage unit do you use?

Have you had any trouble with the cornstalks blowing away after vertical tillage?

What was your seeding rate?

Do you graze all of your cover crops?

Do you calve in the cover crops?

What is your herbicide plan that allows the rye to grow following corn?

Cedar Creek Partnership Field Day

Responses to Two Week Follow-up Evaluation*

*Because the field day occurred near the end of the 2018 growing season (November 2018), event participants were not mailed a two-week follow-up evaluation. Field day attendees were still asked to participate in the January evaluation (data below).

Cedar Creek Partnership Field Day

Responses to Year-End Evaluation

- 21 Evaluations Mailed
- 21 Evaluations Returned
- 18 Farmers responded, farming an average of 802 ac.

- 17 fall seeded cover crops in 2018 on 4,151 total cover crop acres (440 new cover crop acres)
- 10 discussed challenges/benefits of conservation practices with landowners/tenants
- 17 networked conservation ideas with other farmers or farmer clients
 - o 5 successfully influenced two or more farmers
 - 7 successfully influenced one other farmer
 - 4 influenced no farmers

Lower Skunk River Field Day

Event Summary

Field Day: Lower Skunk River Field Day

Location: Hillsboro

Date: Wednesday, 11/28/2018

Time: 12:00 - 2:00 PM

Field Day/Workshop Topics

- ✓ Cover Crops
- ✓ Edge of Field Practices

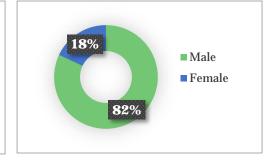
Field Day/Workshop Speakers

- ✓ Clark Whitaker (farmer)
- ✓ Liz Juchems (expert)
- ✓ Ann Staudt (expert)
- ✓ Miranda Haes (expert)

Description of Field Day/Workshop Attendees

49 total attendees*

- 22 farmers/operators
- 11 landowners
- 2 government agency staff
- 2 agricultural business or industry professionals
- 1 would like to farm



59 = average age of attendees

13 = number of attendees with livestock

*Total number of attendees at this field day/workshop – attendees could select multiple categories to describe themselves when completing the demographic card at sign-in. Count does not include event presenters, organizers or other service providers.

Questions Asked at Field Day/Workshop

Clark

Any changes in organic matter?

What is your termination plan in the spring?

Are you grazing or just harvesting forage from the cover crop?

Liz

How early do you have to put turnips in?

How about using a highboy in late August?

What does "livestock' mean on this sign in card? I have goats – does that count?

Does rye ahead of corn hurt the corn yield?

Ann

Any differences in types of woodchips used in bioreactors? How many woodchips does it take to fill a bioreactor?

Miranda

You're offering \$25/acre – what is the cost of cereal rye per acre?

Split application of N – is that open to everyone or geared toward those doing cover crops?

Lower Skunk River Field Day

Responses to Two Week Follow-up Evaluation*

*Because the field day occurred near the end of the 2018 growing season (November 2018), event participants were not mailed a two-week follow-up evaluation. Field day attendees were still asked to participate in the January evaluation (data below).

Lower Skunk River Field Day

Responses to Year-End Evaluation

26 Evaluations Mailed

13 Evaluations Returned

13 Farmers responded, farming an average of 771 ac.

- 10 fall seeded cover crops in 2018 on 2,302 total cover crop acres (122 new cover crop acres)
- 9 discussed challenges/benefits of conservation practices with landowners/tenants
- 10 networked conservation ideas with other farmers or farmer clients
 - o 3 successfully influenced two or more farmers
 - o 4 successfully influenced one other farmer