

# 2022 Summary Report Iowa Learning Farms In-Person and Virtual Field Days

# 2022 Iowa Learning Farms In-Person Field Days

Iowa Learning Farms hosted 26 in-person field days and workshops across the state on a variety of topics including cover crops, no-till/strip-till, perennial vegetation, soil health, grazing, wetlands, nutrient management, bioreactors, and saturated buffers. Through a multi-faceted approach to evaluation, Iowa Learning Farms collects information at each farmer-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.

Our multi-step approach to evaluation is described below.

- **Event evaluations** are completed by ILF team members, documenting the participants' level of engagement and questions that were asked, and helping us to improve future field days/workshops.
- **Comment and demographic cards** are filled out by participants at ILF-sponsored field days/workshops to gain a better understanding of who they are and why they are there. Demographic cards provide a snapshot of participants in terms of their age, gender, role in agriculture and information about their farming operation.
- **Follow-up evaluations** are mailed to participants of field days that happen before November 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.
- **January evaluations** are mailed in late December to only farmer and landowner participants to see what conservation practices they are implementing.

# 2022 Iowa Learning Farms In-Person Field Days

Field Day/Workshop Description	Total Attendees	Comment Cards <sup>1</sup>	Demographic Cards <sup>2</sup>	Follow-Up Evaluations Returned <sup>3</sup>	January Evaluations Returned <sup>4</sup>
January 19: Tron Scott Edge-of-Field Workshop,					_
Slater January 25:	26	19	20	10	7
Jordans Grove Farm Edge-of-Field Workshop, Marion	31	23	23	10	6
February 1: Perennial Vegetation Workshop,					
Washington February 2:	24	15	18	8	7
ILF Leadership Circle, Ames February 15:	41	NA	NA	NA	NA
Perennial Vegetation Workshop, Lewis	17	9	11	5	6
March 8: Perennial Vegetation Workshop, Prairie City	13	8	8	3	2
March 15: Perennial Vegetation Workshop, Calmar	15	11	12	5	6
March 23: Cover Crop and Soil Health Field					
Day, Grand Mound May 24:	44	28	25	15	13
Conservation On Tap, Coralville May 25:	16	9	9	2	3
Conservation On Tap, Waukee June 1:	15	7	8	3	3
Brent Johnson Perennial Vegetation Field Day, Manson	25	12	12	5	3
July 6: Soil Health and Grazing Field Day, Traer	42	25	27	8	9
July 8: Soil Health and Grazing Field Day,	44	25	2)	U U	9
Epworth July 27:	71	45	55	20	20
Perennial Vegetation/STRIPS Field Day, Zwingle	20	9	11	6	6
August 4: Perennial Vegetation and Cover Crop Field Day, Des Moines	41	18	20	9	5
August 9: Luke Bayer Cover Crop Field Day, Guernsey	65	48	49	19	22
August 24: Mark Kenney Perennial Vegetation Field Day, Nevada	28	20	19	9	7
August 25: Cover Crop and Soil Health Field			-/		,
Day, Melbourne September 7:	36	21	21	8	6
Dordt C-CHANGE Field Day, Sioux Center	165	27*	119	9	7
September 21: Cover Crop Field Day, Center Junction	30	21	21	12	5
	Jo			1	. J

November 15:					
John Kielkopf Cover Crop and No-					
Till Field Day, Fremont	27	18	19	Not sent	7
November 17:					
Tom Vaske Cover Crop and Strip-Till					
Field Day, Masonville	30	21	21	Not sent	8
November 22:					
Wetland and Cover Crop Field Day,					
Keota	27	13	13	Not sent	6
November 29:					
Randy Caviness Cover Crop and No-					
Till Field Day, Greenfield	26	17	18	Not sent	8
November 30:					
Conservation On Tap, Cumming	29	16	16	Not sent	3
December 1:					
Cover Crop Workshop, Winterset	25	15	14	Not sent	4
Total	929	448	589	166	179

<sup>1 -</sup> Comment cards were filled out by one participant per household at ILF-sponsored field days and workshops to gain a better understanding of who they are and why they are there.

2 - Demographic cards were filled out by all individual participants at ILF-sponsored field days and workshops. Demographic cards provide a snapshot of participants 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. Questions focused on

<sup>3 -</sup> Follow-up evaluations were mailed to participants at ILF-sponsored field days and workshops that happened before November. Questions focused on the clarity and accessibility of the information received, helpfulness of materials provided and asked what conservation practices participants were currently using. Overall response rate was 45%.

<sup>4 -</sup> January evaluations were mailed to only farmers and landowners participating in ILF-sponsored field days and workshops. These evaluations were sent in late December 2022. Overall response rate was 51%.

# January 19 | 5:30-7:30pm Tron Scott Edge-of-Field Workshop | Slater

# **Event Summary**

#### **Topics**

- ✓ Bioreactors
- ✓ Saturated Buffers
- ✓ Water Quality

#### **Speakers**

- ✓ Ruth McCabe (Heartland Coop)
- ✓ Keegan Kult (Ag Drainage Management Coalition)
- ✓ Liz Ripley (Iowa Learning Farms)

# **Quality of Field Day**

4.5 / 5 = Overall quality of field day/workshop

4.4 / 5 = Effectiveness of Conservation Professionals

4.2 / 5 = Effectiveness of Conservation Station Demonstration

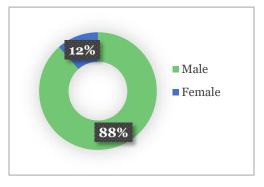
# **Description of Attendees**

Total Attendees\*: 26 Average Age: 54

Attendees with livestock: 7

• Farmer/operator: 17

- Landowner: 4
- New to farming: 0
- Would like to farm: o
- Government agency staff: 1
- Other: 2



<sup>\*</sup>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 includes event presenters, organizers or other service providers.

#### **Questions Asked**

What happens in the case that there is a change in elevation between the field and the stream (it goes up)?

Can you graze on these practices?

How large of tile can they be used with?

Will this (Blitz) go statewide?

How does a large rain event affect them? What if the creek floods for days?

So wetlands are the options for larger mains?

Is there a limit on how many you will put in for this project?

How is this working with Polk Co. NRCS?

Can you add more tile with these practices?

What is the minimum buffer width?

Is the seeding paid for?

If there are multiple outlets per field, do you get paid for all of them?

What counties are approved for the project?

18 Evaluations Mailed

10 Evaluations Returned

# Attendees were asked to describe their current farming practices:

9 are actively farming

o Total acres farmed: 15,331

• 7 rent land

o Total leased acres: 7,632

• 2 lease land to a tenant

o Total leased acres: 241

2 respondents have conservation measures built into their lease

• Conservation practices used on land owned/operated:

No-till/strip-till: 7

■ Total no-till/strip-till acres: 5,170

o Cover crops: 5

■ Total cover crop acres: 1,670

o Prairie strips: 1

Pollinator habitat: 3

Extended rotation: 1

o Rotational grazing: 2

Saturated buffer: 1

# Responses to Year-End Evaluation

15 Evaluations Mailed

7 Evaluations Returned

Respondents farm an average of 1,503 ac.

- 3 fall seeded cover crops in 2022 on 1,475 total cover crop acres (400 new acres)
- 3 discussed challenges/benefits of conservation practices with landowners/tenants
- 2 networked conservation ideas with other farmers or farmer clients, but noted they did not influence anyone

# January 25 | 5:30-7:30pm Jordans Grove Farm Edge-of-Field Workshop | Marion

# **Event Summary**

#### **Topics**

- ✓ Bioreactors
- ✓ Saturated Buffers
- ✓ Water Quality

#### **Speakers**

- ✓ Ruth McCabe (Heartland Coop)
- ✓ Keegan Kult (Ag Drainage Management Coalition)
- ✓ Liz Ripley (Iowa Learning Farms)
- ✓ Emery Davis (Indian Creek Soil Health Partnership)

# **Quality of Field Day**

4.6 / 5 = Overall quality of field day/workshop

4.7 / 5 = Effectiveness of Conservation Professionals

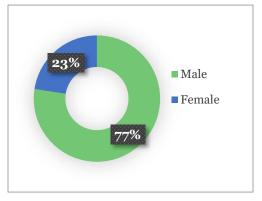
4.0 / 5 = Effectiveness of Conservation Station Demonstration

# **Description of Attendees**

Total Attendees\*: 31 Average Age: 59

Attendees with livestock: 7

- Farmer/operator: 13
- Landowner: 6
- New to farming: o
- Would like to farm: o
- Government agency staff: 1
- Other: 5



<sup>\*</sup>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 includes event presenters, organizers or other service providers.

#### **Questions Asked**

If you have a bioreactor, how do you know you need to make changes to the control structure gates?

In a high flow year, dilution is the solution?

Where do I get woodchips?

Are there types of woodchips that work better?

Does the soil type make a difference?

What's the price of these practices?

How did you pick a contractor?

Do tile sizes vary for these practices?

Is NRCS doing more to speed up the engineering process?

What do I do if the drainage area is 300+ acres?

What's the depth of the bioreactor? How shallow?

Is there a recharge cost for the woodchips?

How far from the creek are you with a saturated buffer?

Do the roots from the grass plug up the tile?

How deep are the saturated buffer laterals?

Can you graze or mow these areas?

How much soil is on top of the woodchips?

Is there a risk of the soil eroding away from the area next to the bioreactor if next to a stream?

23 Evaluations Mailed10 Evaluations Returned

# Attendees were asked to describe their current farming practices:

- 6 are actively farming
  - o Total acres farmed: 3,555
- 3 rent land
  - o Total leased acres: 1,570
- 5 lease land to a tenant
  - o Total leased acres: 1,020
- 1 respondent has conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - o No-till/strip-till: 7
    - Total no-till/strip-till acres: 1,095
  - o Cover crops: 5
    - Total cover crop acres: 290
  - o Prairie strips: 1

- Pollinator habitat: 4
- Extended rotation: 1
- Rotational grazing: 1
- Nutrient reduction wetland: 2
- Saturated buffer: 3

# Responses to Year-End Evaluation

15 Evaluations Mailed

6 Evaluations Returned

Respondents farm an average of 870 ac.

- 3 fall seeded cover crops in 2022 on 958 total cover crop acres (540 new acres)
- 4 discussed challenges/benefits of conservation practices with landowners/tenants
- 4 networked conservation ideas with other farmers or farmer clients
  - o 2 successfully influenced one other farmer
  - o 1 successfully influenced two or more farmers

# February 1 | 10:00am-12:00pm Perennial Vegetation Workshop | Washington

**Event Summary** 

#### **Topic**

- ✓ Perennial Vegetation
- ✓ Anaerobic Digestion

# **Quality of Field Day**

4.3 / 5 = Overall quality of field day/workshop

4.4 / 5 = Participatory activity during the first half of the workshop

#### **Speakers**

- ✓ Omar de Kok-Mercado (Iowa State University)
- ✓ Matt Woods (Iowa State University)
- ✓ Siobhan Fathel (Penn State University)

# **Description of Attendees**

Total Attendees\*: 24 Average Age: 64

Attendees with livestock: 10

• Farmer/operator: 11

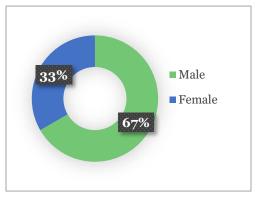
Landowner: 8

New to farming: o

Would like to farm: o

Government agency staff: 1

• Other: 1



<sup>\*</sup>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 includes event presenters, organizers or other service providers.

#### **Questions Asked**

What are your definitions of perennial vegetation?

How do you get young trees to regenerate and not get grazed off? Do you protect each tree?

Do you have a market for the nuts you grow?

How many years to have profit from chestnuts?

Do you use fire in your oak savanna and how often?

How wide are Prairie Strips?

Could grape vines fit into this?

Where do you get these resources on silvopasture?

When you say prairie, what species are you using? Any alfalfa or clover?

Are you having any of the prairie?

How many acres do you use? How many acres per goat or sheep?

Are you grazing into winter?

Do you fertilize at all?

What's your market for goats/sheep?

Do you have farmers reach out to do vegetation management on their farms?

Do we know if adding perennial vegetation to AD that the digestate will be better?

If you separate solids and liquids, wouldn't that change it to aerobic?

Could the digestate be further processed into compost?

What is the average herd size in PA?

Are there any practices that help capture methane from manure?

How many head of swine are needed to make AD feasible?

What % solids are needed?

Any change in the species over the years?

Why haven't markets (for perennials) taken off more?

You mow it once a year for harvest?

What is the value of the prairie bale?

What is the yield tonnage?

Any feed analysis on the prairie?

What do you do about the trees/mulberry in the plots? Do cool season grasses encroach on the other plots? What species are you growing? How many years until good establishment? What's the transportation radius? Feelings on leaving corn stalks vs. removing?

Tillage depth/recommendations to prepare the seedbed for establishment?

# Responses to Two Week Follow-up Evaluation

14 Evaluations Mailed 8 Evaluations Returned

# Attendees were asked to describe their current farming practices:

- 8 are actively farming
  - o Total acres farmed: 2,464
- 2 rent land
  - Total leased acres: 630
- Conservation practices used on land owned/operated:
  - No-till/strip-till: 6
    - Total no-till/strip-till acres: 2,062
  - Cover crops: 7
    - Total cover crop acres: 1,172
  - Prairie strips: 3
- 8 currently have perennial vegetation
  - Total perennial vegetation acres: 364
- Resources needed to establish and maintain perennial vegetation:
  - Technical guidance: 6 Economic information: 4 Species specific 0
    - information: 5
- Maintenance: 3
- Space for planting: 3

- 3 lease land to a tenant
  - o Total leased acres: 587
- 4 respondents have conservation measures built into their lease
- Pollinator habitat: 3
- Extended rotation: 1
- Rotational grazing: 2
- Saturated buffer: 2
- Bioreactor: 1
  - o Money: 6
  - o Time: 3

# Responses to Year-End Evaluation

12 Evaluations Mailed

7 Evaluations Returned

Respondents farm an average of 628 ac.

- 6 fall seeded cover crops in 2022 on 2,562 total cover crop acres (0 new acres)
- 6 discussed challenges/benefits of conservation practices with landowners/tenants
- 6 networked conservation ideas with other farmers or farmer clients
  - 2 successfully influenced two or more farmers
  - 2 influenced no farmers

# February 15 | 10:00am-12:00pm Perennial Vegetation Workshop, Lewis

**Event Summary** 

#### **Topic**

- ✓ Perennial Vegetation
- ✓ Anaerobic Digestion

#### **Speakers**

- ✓ David Bruene (Iowa State University)
- ✓ Matt Woods (Iowa State University)

# **Quality of Field Day**

4.6 / 5 = Overall quality of field day/workshop

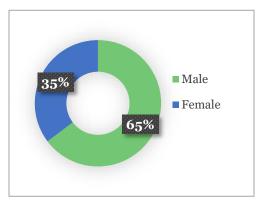
4.4 / 5 = Participatory activity during the first half of the workshop

# **Description of Attendees**

Total Attendees\*: 17 Average Age: 65

Attendees with livestock: 1

- Farmer/operator: 3
- Landowner: 7
- New to farming: 1
- Would like to farm: o
- Government agency staff: o
- Other: 2



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

How does the feed value of perennial vegetation compare to corn silage?

There was interest in using this for fuel—is that still happening?

Do you have any idea why DuPont left so quickly? Did they ever start production?

This farm used to have a Miscanthus plot for fuel use—it's gone now. Are they still looking at that?

Can you use perennials to crowd out undesirables?

Will it work to remove reed canary grass?

What height do you cut the prairie?

What are you growing (at COBS)?

One cutting per year?

Could you discuss the management of the clover and alfalfa?

Are you using Canadian wild rye? If it's in a monoculture, is that bad?

Is anyone measuring the carbon sequestration?

Any idea on how the organic matter has changed over time?

Did you make or buy your mix?

Impact on nutrients in the system?

Can you graze Prairie Strips?

What rate do you charge for hunting leases?

Do the deer co-exist with the cattle?

Do you have experience with grazing warm season mixes after small grains harvest?

Any economics on grazing cool season vs. warm season?

How many cuttings on the millet?

How do you manage your perennial pastures?

What types of grasses do you use?

How's the fertility?

Have you been tracking organic matter on your own farm?

Where does the phosphorus go in a 'closed' grazing system?

Are you seeing an increase in wildlife?

- 9 Evaluations Mailed
- 5 Evaluations Returned

#### Attendees were asked to describe their current farming practices:

- 2 are actively farming
  - o Total acres farmed: 3,850
- 1 rents land
  - o Total leased acres: Not provided
- 2 lease land to a tenant
  - o Total leased acres: 245
- o respondents have conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - No-till/strip-till: 3
    - Total no-till/strip-till acres: 600
  - o Cover crops: 1

o Rotational grazing: 1

Pollinator habitat: 1

Oxbow: 1

- Total cover crop acres: 160
- 4 currently have perennial vegetation
  - o Total perennial vegetation acres: 28
- Resources needed to establish and maintain perennial vegetation:
  - o Technical guidance: 3 o Economic information: o
  - Species specific
- Maintenance: 3

Money: 1 Time: 2

- information: 4
- Space for planting: 1

# Responses to Year-End Evaluation

- 8 Evaluations Mailed
- 6 Evaluations Returned

Respondents farm an average of 2,026 ac.

- 4 fall seeded cover crops in 2022 on 626 total cover crop acres (52 new acres)
- 2 discussed challenges/benefits of conservation practices with landowners/tenants
- 3 networked conservation ideas with other farmers or farmer clients
  - o 2 successfully influenced one other farmer

# March 8 | 10:00am-12:00pm Perennial Vegetation Workshop, Lewis

**Event Summary** 

#### **Topic**

- ✓ Perennial Vegetation
- ✓ Anaerobic Digestion

#### **Speakers**

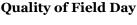
- ✓ David Bruene (Iowa State University)
- ✓ Matt Woods (Iowa State University)
- ✓ Omar de Kok-Mercado (Iowa State University)

# **Description of Attendees**

Total Attendees\*: 13 Average Age: 63

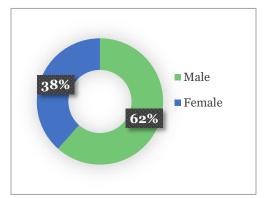
Attendees with livestock: 5

- Farmer/operator: 3
- Landowner: 6
- New to farming: 0
- Would like to farm: 1
- Government agency staff: 1
- Other: o



4.0 / 5 = Overall quality of field day/workshop

4.3 / 5 = Participatory activity during the first half of the workshop



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

How do you harvest the prairie?

What do you do with the harvested prairie?

What environmental impact does the harvesting of the prairie have?

Which did better, fertilized vs. non-fertilized?

Have you checked the biology between treatments?

When you compare soil of the prairie, is it against traditional tillage or no-till?

So your goal is to graze all year?

Can you discuss the role of genetics when using perennial grazing?

What's important in your operation?

How much land do you need per cow?

Are people buying pastures or crop ground to start grazing?

Species of perennials you recommend?

How many species are you aiming for?

Can we put animals on CRP?

You can graze EQIP land?

Can you explain what a savanna is?

What nut trees can you use?

Can you graft them (nut trees) onto native trees?

Can you graft an English Walnut to a local walnut?

Is there infrastructure in the state to support Chinese Chestnuts?

How do you harvest chestnuts?

What mix of tree crops do you recommend?

Where do you recommend planting trees for nut production?

Are people building AD systems here?

Is he marketing feedlot cattle?

Are they buying feedstock to feed the system?

# Responses to Two Week Follow-up Evaluation

- 8 Evaluations Mailed
- 3 Evaluations Returned

# Attendees were asked to describe their current farming practices:

- 1 is actively farming
  - o Total acres farmed: 200
- 1 rents land
  - Total leased acres: 20
- 2 lease land to a tenant
  - o Total leased acres: 300
- 1 respondent has conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - o No-till/strip-till: 2
    - Total no-till/strip-till acres: 400
  - Cover crops: 1
    - Total cover crop acres: 200
- 3 currently have perennial vegetation
  - o Total perennial vegetation acres: 58
- Resources needed to establish and maintain perennial vegetation:
- o Money: 2

- Species specific
- Maintenance: 3

o Time: 2

Prairie strips: 1

Extended Rotation: 2 Saturated buffer: 1

- information: 2
- Space for planting: 1

# Responses to Year-End Evaluation

- 8 Evaluations Mailed
- 2 Evaluations Returned

- 1 noted using no-till/strip-till in 2022
- o discussed challenges/benefits of conservation practices with landowners/tenants
- o networked conservation ideas with other farmers or farmer clients

# March 15 | 10:00am-12:00pm Perennial Vegetation Workshop | Calmar

**Event Summary** 

#### **Topic**

- ✓ Perennial Vegetation
- ✓ Anaerobic Digestion

#### **Speakers**

- ✓ David Bruene (Iowa State University)
- ✓ Matt Woods (Iowa State University)

# **Quality of Field Day**

4.6 / 5 = Overall quality of field day/workshop

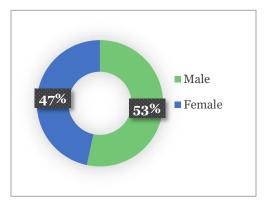
4.4 / 5 = Participatory activity during the first half of the workshop

#### **Description of Attendees**

Total Attendees\*: 15 Average Age: 65

Attendees with livestock: 5

- Farmer/operator: 4
- Landowner: 6
- New to farming: o
- Would like to farm: 1
- Government agency staff: 3
- Other: o



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

How labor intensive are the two systems (ISU and personal)?

What about specialty beef products?

Why don't they bring in goats to tackle CRP invasive species instead of burning them?

What can be done to improve the CRP to help with the soil quality?

When do you recommend grazing CRP?

Suggestions on management of trees along creeks?

How would you manage trees in grass seedings along waterways?

Resources to find seed mixes and other tools for successful grazing?

How often do you interseed your pastures?

Do you burn the prairie at all?

In the non-fertilized plot, are you seeing any N depletion in the soil?

Are you getting an organic matter increase in the soil under prairie?

Do you recommend nurse cropping when establishing prairie?

Don't some of those (prairie) seeds need to go through dormancy?

# 11 Evaluations Mailed 5 Evaluations Returned

# Attendees were asked to describe their current farming practices:

- 3 are actively farming
  - o Total acres farmed: 1,000
- 1 rents land
  - o Total leased acres: 30
- 4 lease land to a tenant
  - o Total leased acres: 783
- 2 respondents have conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - No-till/strip-till: 2
    - Total no-till/strip-till acres: 20
  - o Cover crops: 4
    - Total cover crop acres: 20
  - o Prairie Strips: 1
- 4 currently have perennial vegetation
  - Total perennial vegetation acres: 196
- Resources needed to establish and maintain perennial vegetation:
  - Technical guidance: 5 Economic information: 4
    - Species specific o Maintenance: 4
    - information: 3
- Space for planting: 2

- o Pollinator habitat: 1
- Extended rotation: 2
- Rotational grazing: 3
- Nutrient reduction wetland: 1
- Saturated buffer: 1
  - o Money: 4
  - o Time: 4

# Responses to Year-End Evaluation

- 9 Evaluations Mailed
- 6 Evaluations Returned

Respondents farm an average of 895 ac.

- 5 fall seeded cover crops in 2022 on 360 total cover crop acres (210 new acres)
- 2 discussed challenges/benefits of conservation practices with landowners/tenants
- 1 networked conservation ideas with other farmers or farmer clients and successfully influenced two or more farmers

# March 23 | 12:30-2:30pm Cover Crop and Soil Health Field Day | Grand Mound

# **Event Summary**

#### **Topic**

- Cover Crops
- Soil Health

- Jason Steele and J.D. Hollingsworth (NRCS)
- Virgil Schmitt (Iowa State University)

#### **Speakers**

Farmer Panel: Mike Paustian, Dennis Campbell, and Ken Waechter

# **Description of Attendees**

Total Attendees\*: 44 Average Age: 65

Attendees with livestock: 11 Farmer/operator: 15

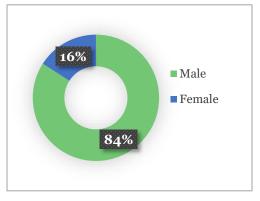
Landowner: 9

New to farming: 0

Would like to farm: o

Government agency staff: o

Other: 5



**Quality of Field Day** 

4.5 / 5 = Overall quality of field day/workshop

4.4 / 5 = Effectiveness of Farmer/Landowner Presenters 4.2 / 5 = Effectiveness of Iowa State University Presenters

4.4 / 5 = Effectiveness of Conservation Professionals

#### **Questions Asked**

What are you seeding?

Did you plant the radishes with the rye?

Have you tracked when it is the ideal time to terminate?

Do you put all your residuals in your termination pass?

You plant corn and beans into rye?

What is your planned order of operations with the roller, planter and sprayer?

What is your seeding rate for rye?

How tall do you let the rye get before you terminate?

Row cleaners vs. coulters on your planter?

The rye doesn't plug or wrap around the row cleaners?

Have you had to change your fertilization process?

How do you do cover crops with hog manure?

Is the structure difference of the soil partly due to the different soil types?

After rye, do you take a yield hit going to corn?

stTotal 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 include event presenters, organizers or other service providers.

28 Evaluations Mailed 15 Evaluations Returned

# Attendees were asked to describe their current farming practices:

- 8 are actively farming
  - o Total acres farmed: 4,300
- 7 rent land
  - o Total leased acres: 2,410
- 4 lease land to a tenant
  - o Total leased acres: 1,880
- 1 respondent has conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - o No-till/strip-till: 8
    - Total no-till/strip-till acres: 2,555
  - o Cover crops: 8
    - Total cover crop acres: 798
  - o Prairie Strips: 1

- o Pollinator habitat: 1
- Extended rotation: 4
- o Nutrient reduction wetland: 1
- Saturated buffer: 2

# Responses to Year-End Evaluation

23 Evaluations Mailed

13 Evaluations Returned

Respondents farm an average of 515 ac.

- 9 fall seeded cover crops in 2022 on 1,166 total cover crop acres (346 new acres)
- 11 discussed challenges/benefits of conservation practices with landowners/tenants
- 7 networked conservation ideas with other farmers or farmer clients
  - 3 successfully influenced one other farmer
  - o 1 successfully influenced two or more farmers
  - o 2 influenced no farmers

# May 24 | 6:00-7:00pm Conservation On Tap | Coralville

**Event Summary** 

#### **Topic**

- ✓ Conservation
- ✓ Water Quality

# **Quality of Field Day**

4.0 / 5 = Overall quality of field day/workshop

4.0 / 5 = Likelihood of participating in similar event in the future

#### **Speakers**

- ✓ Luke Jipp (Backpocket Brewing)
- ✓ Matt Helmers (Iowa Nutrient Research Center)
- ✓ Catherine DeLong (Iowa State University)

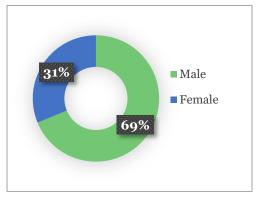
#### **Description of Attendees**

Total Attendees\*: 16

Average Age: 49

Attendees with livestock: 4

- Farmer/operator: 5
- Landowner: 2
- New to farming: 1
- Would like to farm: 1
- Government agency staff: 1
- Other: 2



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

Do you find that there is a seasonal effect to the water?

So you do not have a well and have to use the city water?

Does the city give you a heads up when they switch sources?

Are you testing the water every morning?

Where do you send your monthly test?

What is your favorite beer?

How do you come up with your flavors?

What happened with the locally grown hops from about 10 years ago?

Are you able to use any Iowa ingredients?

Have you heard anything about brewing with kernza?

What is a bioreactor?

Who determines the specifications on edge-of-field practices?

Is there an advantage to the farmer to install the bioreactor?

Are there any bioreactors lasting more than 10 years?

What is the best diversity mix for cover crops?

How does no-till impact water quality?

Is there a way to develop a cover crop seed mix that will help reduce the need to add nitrogen?

- 9 Evaluations Mailed
- 2 Evaluations Returned

#### Attendees were asked to describe their current farming practices:

- 2 are actively farming
  - o Total acres farmed: 2,400
- 2 rent land
  - o Total leased acres: 1,360
- o lease land to a tenant
  - o Total leased acres: NA
- 1 respondent has conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - o No-till/strip-till: 2
    - Total no-till/strip-till acres: 1,295
- 1 pursued more information
- 1 discussed benefits and challenges with other farmers or clients
- o Cover crops: 1
  - Total cover crop acres: 95

# Responses to Year-End Evaluation

- 6 Evaluations Mailed
- 3 Evaluations Returned

Respondents farm an average of 973 ac.

- 2 fall seeded cover crops in 2022 on 155 total cover crop acres (20 new acres)
- 3 discussed challenges/benefits of conservation practices with landowners/tenants
- 2 networked conservation ideas with other farmers or farmer clients
  - o 1 successfully influenced two or more farmers

# May 25 | 6:00-7:00pm Conservation On Tap | Waukee

**Event Summary** 

#### **Topic**

- ✓ Conservation
- ✓ Water Quality

#### **Speakers**

- ✓ DJ Norton (Kinship Brewery Company)
- ✓ Mark Licht (Iowa State University)

# **Quality of Field Day**

4.7 / 5 = Overall quality of field day/workshop

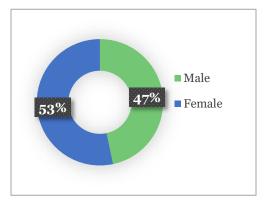
5.0 / 5 = Likelihood of participating in similar event in the future

# **Description of Attendees**

Total Attendees\*: 15 Average Age: 60

Attendees with livestock: 2

- Farmer/operator: 3
- Landowner: 5
- New to farming: o
- Would like to farm: 1
- Government agency staff: 1
- Other: 1



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

Who is your water supplier?

Do you see any seasonality in the water?

Who are your grain/malt suppliers?

Any supply chain problems?

When you get ready to brew a batch, do you run a water test on site?

Do the shipping delays where the hops get stuck in containers impact their quality?

Can you discuss using kernza for brewing and flaking it?

When you built Kinship, it was done so fairly greenly - can you talk about that?

What do you do with your spent grain?

How do we grow less corn?

Advice for cover crops on sandier soils?

Does the tenant usually pay or how is that done in the lease?

The current tenant is grazing the corn stalks - what does that do to the cover crops?

Are cover crops sustainable for organic farming?

What are the best options for spring cover crop growth?

How many pounds of camelina?

Could you mix camelina and rapeseed with oats?

When should you start planning for cover crops?

Are you putting on more seed with earlier dates?

When did you measure biomass?

Are the numbers of cover crop acres going up?

Is it impacting water quality?

- 6 Evaluations Mailed
- 3 Evaluations Returned

#### Attendees were asked to describe their current farming practices:

- 3 are actively farming
  - o Total acres farmed: 730
- o rent land
  - o Total leased acres: NA
- 1 leases land to a tenant
  - o Total leased acres: NA
- o respondents have conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - o Pollinator habitat: 1

Saturated buffer: 1

- o Rotational grazing: 1
- 3 pursued more information
- 2 discussed benefits and challenges with other farmers or clients

# Responses to Year-End Evaluation

- 5 Evaluations Mailed
- 3 Evaluations Returned

Respondents farm an average of 895 ac.

- o fall seeded cover crops in 2022
- 2 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
  - o 1 influenced no farmers

# June 1 | 5:30-7:30pm

# **Brent Johnson Perennial Vegetation Field Day | Manson**

**Event Summary** 

#### **Topic**

- ✓ Perennial Vegetation
- ✓ Water Quality
- ✓ Redefining the Field Edge

#### **Speakers**

- ✓ Brent Johnson (Farmer)
- ✓ Mark Licht (Iowa State University)
- ✓ Liz Ripley (Iowa Learning Farms)

#### **Quality of Field Day**

4.6 / 5 = Overall quality of field day/workshop

4.6 / 5 = Effectiveness of Farmer/Landowner Presenters

4.6 / 5 = Effectiveness of Iowa State University Presenters

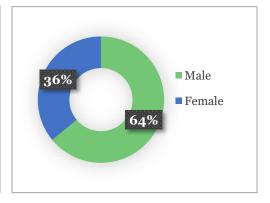
4.8 / 5 = Effectiveness of Conservation Station Demonstration

# **Description of Attendees**

Total Attendees\*: 23 Average Age: 51

Attendees with livestock: 3

- Farmer/operator: 6
- Landowner: 4
- New to farming: o
- Would like to farm: o
- Government agency staff: 1
- Other: 3



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

Can you explain more what the bottom jars are for?

What kinds of plants do you recommend for cover crops?

Have you thought about showing lawn grass in the rainfall simulator?

What are you hearing from farmers who use intense tillage?

Do you see younger generations being more open to changing tillage patterns?

What do you do when there is condensation in your home?

How do the different soil conservation practices get affected by drought (runoff/drainage)?

Did the seeding rate or mix vary?

What is the toughest sell when sharing this with farmers?

Do you measure the impact on P or OM?

What kind of timeframe are they looking at for profitability?

What is the scalability?

Is this a tool for the reduction strategy?

Was it spring 2020 when you seeded?

How did you get to the spot to mow?

Have you seen a change in profit?

Are you planting through it?

# 12 Evaluations Mailed5 Evaluations Returned

#### Attendees were asked to describe their current farming practices:

- 4 are actively farming
  - o Total acres farmed: 2,900
- 4 rent land
  - o Total leased acres: 1,740
- 2 lease land to a tenant
  - Total leased acres: 80
- 1 respondent has conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - No-till/strip-till: 3
    - Total no-till/strip-till acres: 300
  - o Cover crops: 2
    - Total cover crop acres: NA
  - Nutrient reduction wetland: 1

# Responses to Year-End Evaluation

- 8 Evaluations Mailed
- 3 Evaluations Returned

Respondents farm an average of 1,300 ac.

- 2 fall seeded cover crops in 2022 on 1,390 total cover crop acres (0 new acres)
- 2 discussed challenges/benefits of conservation practices with landowners/tenants
- 2 networked conservation ideas with other farmers or farmer clients
  - o 2 successfully influenced two or more farmers

# July 6 | 12:30-3:00pm Soil Health and Grazing Field Day | Traer

**Event Summary** 

#### **Topic**

- ✓ Soil Health
- ✓ Rotational Grazing
- ✓ Cover Crops

#### **Speakers**

- ✓ Brian Dougherty (Iowa State University)
- ✓ Angie Rieck-Hinz (Iowa State University)
- ✓ Josh Michel (Iowa State University)
- ✓ Denise Schwab (Iowa State University)
- ✓ Liz Ripley (Iowa Learning Farms)

# **Quality of Field Day**

4.8 / 5 = Overall quality of field day/workshop

4.8 / 5 = Effectiveness of Iowa State University Presenters

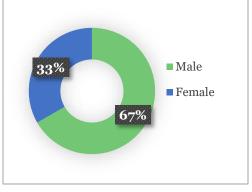
4.6 / 5 = Effectiveness of Field Portion

# **Description of Attendees**

Total Attendees\*: 41 Average Age: 45

Attendees with livestock: 17

- Farmer/operator: 21
- Landowner: 5
- New to farming: 0
- Would like to farm: o
- Government agency staff: 5
- Other: o



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

How do permeable pavers work?

Are they (permeable pavers) something that can be used on the farm?

What types of events do you go to?

How long does an alfalfa stand last?

How long until the roots get that deep?

Can you interseed alfalfa into a pasture?

How much seed do you recommend for seeding alfalfa?

How many years has this field been in no-till?

How many years with cover crops?

Would you expect more compaction on this clay knob compared to the lower part of the field?

Recommendations to prevent the compaction layer moving forward?

Does tile make the roots grow deeper?

What would the infiltration look like under intense tillage?

All the soil erosion is primarily due to a lack of residue?

Is 30% alfalfa the best for drainage in a waterway?

Why is the CEC lower in the pasture?

Nitrogen is low in this pasture - would it benefit to apply some?

For rotationally grazed pasture, how often and when would you fertilize?

What about adding alfalfa to grow the nitrogen for the pasture?

Kubiks – do you stock pile feed?

What should be your goal for pasture pH?

Does the underwear for the 'soil your undies' demonstration have to be cotton?

#### 25 Evaluations Mailed 8 Evaluations Returned

#### Attendees were asked to describe their current farming practices:

- 7 are actively farming
  - o Total acres farmed: 1,870
- 6 rent land
  - o Total leased acres: 442
- 3 lease land to a tenant
  - o Total leased acres: 470
- 3 respondents have conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - No-till/strip-till: 5
    - Total no-till/strip-till acres: 590
  - o Cover crops: 5
    - Total cover crop acres: 350

- o Pollinator habitat: 2
- Extended rotation: 2
- Rotational grazing: 4
- Nutrient reduction wetland: 1
- Saturated buffer: 1

# Responses to Year-End Evaluation

20 Evaluations Mailed

9 Evaluations Returned

Respondents farm an average of 600 ac.

- 5 fall seeded cover crops in 2022 on 824 total cover crop acres (80 new acres)
- 4 discussed challenges/benefits of conservation practices with landowners/tenants
- 5 networked conservation ideas with other farmers or farmer clients
  - o 2 successfully influenced one other farmer
  - o 1 successfully influenced two or more farmers

# July 8 | 12:30-3:00pm Soil Health and Grazing Field Day | Epworth

**Event Summary** 

#### **Topic**

- ✓ Soil Health
- ✓ Rotational Grazing
- ✓ Cover Crops

#### **Speakers**

- ✓ Brian Dougherty (Iowa State University)
- ✓ Angie Rieck-Hinz (Iowa State University)
- ✓ Josh Michel (Iowa State University)

# **Quality of Field Day**

4.6 / 5 = Overall quality of field day/workshop

4.5 / 5 = Effectiveness of Iowa State University Presenters

4.1 / 5 = Effectiveness of Field Portion

# **Description of Attendees**

Total Attendees\*: 64 Average Age: 51

Attendees with livestock: 35

• Farmer/operator: 38

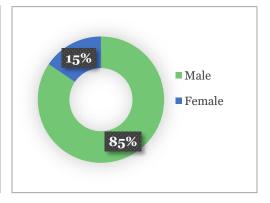
• Landowner: 11

New to farming: 1

Would like to farm: o

• Government agency staff: 6

• Other: 4



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

How many years of no-till does it take to get that type of soil aggregation?

Would adding cows speed that up?

How long until you get the soil biology to help break down stalks in a continuous corn system?

How do you avoid compaction with cattle grazing the stalks? Does it impact the plant roots?

Carbon goes in through the plant - what does that do for the soil?

How deep do you bury the underwear?

Why is the band still intact?

Can you bury the underwear at different times?

How much does manure add for nutrients?

How does tillage destroy organic matter?

With biomass sitting on top, how much of the manure oxidizes?

Why are we still using 6 inches for most soil sampling depths?

So this is more silty?

Will a healthy earthworm population turn the soil over in 10 years?

Will oats put down roots as deep as cereal rye?

How deep will earthworms go?

Do you mean thatch is a detriment?

Why is there not a lot of root growth for such an established corn crop?

What's the history of this field?

Why do you plant green?

# 43 Evaluations Mailed 20 Evaluations Returned

#### Attendees were asked to describe their current farming practices:

- 13 are actively farming
  - o Total acres farmed: 7,170
- 9 rent land
  - o Total leased acres: 1,775
- 5 lease land to a tenant
  - o Total leased acres: 1,030
- 2 respondents have conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - No-till/strip-till: 11
    - Total no-till/strip-till acres: 4,181
  - Cover crops: 14
    - Total cover crop acres: 2,980
  - o Pollinator habitat: 4

- Extended rotation: 5
- o Rotational grazing: 8
- Nutrient reduction wetland: 1
- Oxbow: 1
- o Saturated buffer: 1

# Responses to Year-End Evaluation

32 Evaluations Mailed

20 Evaluations Returned

Respondents farm an average of 516 ac.

- 17 fall seeded cover crops in 2022 on 8,778 total cover crop acres (600 new acres)
- 10 discussed challenges/benefits of conservation practices with landowners/tenants
- 13 networked conservation ideas with other farmers or farmer clients
  - o 1 successfully influenced one other farmer
  - o 10 successfully influenced two or more farmers
  - o 2 influenced no farmers

# July 27 | 10:00am-12:00pm Perennial Vegetation/STRIPS Field Day | Zwingle

**Event Summary** 

#### **Topic**

- ✓ Perennial Vegetation
- ✓ Prairie STRIPS

#### **Speakers**

- ✓ David Gossman (Landowner)
- ✓ Tim Youngquist (STRIPS)
- ✓ Liz Ripley (Iowa Learning Farms)

# **Quality of Field Day**

4.7 / 5 = Overall quality of field day/workshop

4.7 / 5 = Effectiveness of Farmer/Landowner Presenters

4.8 / 5 = Effectiveness of Iowa State University Presenters

4.8 / 5 = Effectiveness of Conservation Station Demonstration

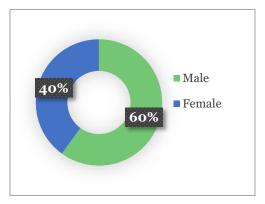
4.6 / 5 = Effectiveness of Field Portion

# **Description of Attendees**

Total Attendees\*: 20 Average Age: 68

Attendees with livestock: 3

- Farmer/operator: 4
- Landowner: 7
- New to farming: o
- Would like to farm: o
- Government agency staff: o
- Other: o



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

What is EQIP?

Can you describe the process of converting the prairie?

Can you share how things didn't work that you've tried for mechanically seeding?

How much is prairie seed?

Is the prairie in a cost-share program?

How do you plant your in-field strips?

Can you talk about your wood business?

How do you get the logs out?

Do you till the ground when you broadcast seed the prairie?

When you did the burn, were you worried about killing your hardwoods?

What is a compass plant?

I have switchgrass growing in a ditch next to a spring - will it clog it up?

How many prairie strips do you have on your farm?

Did you have to get rid of trees growing along the bank when converting to prairie?

What does your dad think of the prairie now?

Does this affect the carbon issue? Does prairie store carbon?

Did you terminate the cover crops?

Are you familiar with the simulator the folks at UW-Platteville designed?

- 9 Evaluations Mailed
- 6 Evaluations Returned

#### Attendees were asked to describe their current farming practices:

- 4 are actively farming
  - o Total acres farmed: 2,629
- 2 rent land
  - o Total leased acres: 1,202
- 3 lease land to a tenant
  - o Total leased acres: 382
- 3 respondents have conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - No-till/strip-till: 4
    - Total no-till/strip-till acres: 2,592
  - o Cover crops: 4
    - Total cover crop acres: 2,290

- o Pollinator habitat: 2
- Extended rotation: 4
- Rotational grazing: 1

# Responses to Year-End Evaluation

- 9 Evaluations Mailed
- 6 Evaluations Returned

Respondents farm an average of 895 ac.

- 2 fall seeded cover crops in 2022 on 360 total cover crop acres (210 new acres)
- 1 discussed challenges/benefits of conservation practices with landowners/tenants
- 3 networked conservation ideas with other farmers or farmer clients
  - o 2 successfully influenced one other farmer
  - o 1 influenced no farmers

# August 4 | 11:00am-1:30pm

# Perennial Vegetation and Cover Crop Field Day | Des Moines

**Event Summary** 

#### **Topic**

- ✓ Perennial Vegetation
- ✓ Cover Crops
- ✓ Water Quality

#### **Speakers**

- ✓ Ted Corrigan (Des Moines Water Works)
- ✓ Matt Carstens (Landus Cooperative)
- ✓ Matt Helmers (Iowa Nutrient Research Center)
- ✓ Jessica Barnett (Des Moines Water Works)
- ✓ Liz Ripley (Iowa Learning Farms)
- ✓ Tim Youngquist (Iowa State University)

#### **Quality of Field Day**

4.8 / 5 = Overall quality of field day/workshop

4.7 / 5 = Effectiveness of Iowa State University Presenters

4.8 / 5 = Effectiveness of Conservation Station Demonstration

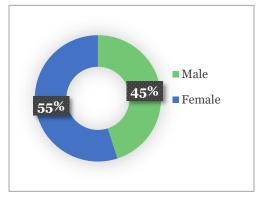
4.9 / 5 = Effectiveness of Field Portion

#### **Description of Attendees**

Total Attendees\*: 41 Average Age: 49

Attendees with livestock: 3

- Farmer/operator: 4
- Landowner: 7
- New to farming: 0
- Would like to farm: o
- Government agency staff: 8
- Other: 5



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

How much rain is that?

Can you explain again what is happening in the bottom jars?

What's the crops shown?

Can cereal rye be used for forage?

If you have multiple farms/properties, how do you choose the proper practice?

What year will we reach the INRS goals?

How has the data changed over the last 10 years?

What kinds of plants?

How tall are they?

What kind of signage will there be here?

Is anyone pro-geese?

# 18 Evaluations Mailed9 Evaluations Returned

#### Attendees were asked to describe their current farming practices:

- 4 are actively farming
  - o Total acres farmed: 6,655
- 2 rent land
  - o Total leased acres: 2,140
- 4 lease land to a tenant
  - o Total leased acres: 865
- 3 respondents have conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - No-till/strip-till: 5
    - Total no-till/strip-till acres: 6,655
  - o Cover crops: 4
    - Total cover crop acres: 1,125

- o Prairie Strips: 2
- Pollinator habitat: 1
- Rotational grazing: 1

# Responses to Year-End Evaluation

9 Evaluations Mailed

5 Evaluations Returned

Respondents farm an average of 453 ac.

- 3 fall seeded cover crops in 2022 on 476 total cover crop acres (200 new acres)
- 4 discussed challenges/benefits of conservation practices with landowners/tenants
- 4 networked conservation ideas with other farmers or farmer clients
  - o 1 successfully influenced one other farmer
  - o 1 influenced no farmers

# August 9 | 10:30am-12:30pm Luke Bayer Cover Crop Field Day | Guernsey

**Event Summary** 

#### **Topic**

✓ Cover Crops

#### **Speakers**

- ✓ Luke Bayer (farmer host)
- ✓ Jack Little (NRCS)
- ✓ Liz Ripley (Iowa Learning Farms)
- ✓ Brian Vander Wal (Drone Demonstration)

# **Quality of Field Day**

4.5 / 5 = Overall quality of field day/workshop

4.6 / 5 = Effectiveness of Farmer/Landowner Presenters

3.9 / 5 = Effectiveness of Conservation Professionals

4.5 / 5 = Effectiveness of Conservation Station Demonstration

4.3 / 5 = Effectiveness of Field Portion

# **Description of Attendees**

Total Attendees\*: 65 Average Age: 58

Attendees with livestock: 5

• Farmer/operator: 37

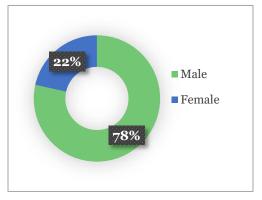
• Landowner: 10

New to farming: 2

Would like to farm: 1

Government agency staff: 4

• Other: 2



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

How much rye do you seed?

When do you aim to do your seeding?

Have you put any livestock on your cover crops?

What did you seed and when?

Thoughts on hairy vetch?

What do you think of cowpeas? After harvest with those? Fly on?

Is this your first spring with entirely Roundup?

What do you use for the second pass?

Does the drone detect trees and power lines?

Can you fly the drone under utility lines?

Does that tell you when it's empty?

How often do you have to change the batteries?

Can the drone follow the curve of the field?

How does it force the seed down?

Are you going to notice nitrate faster when there is tile?

What are the costs of the pavers?

How thick are the pavers?

Any communities using the pavers?

48 Evaluations Mailed
19 Evaluations Returned

# Attendees were asked to describe their current farming practices:

- 16 are actively farming
  - o Total acres farmed: 17,965
- 6 rent land
  - o Total leased acres: 2,612
- 8 lease land to a tenant
  - o Total leased acres: 1,663
- 8 respondents have conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - o No-till/strip-till: 15
    - Total no-till/strip-till acres: 5,696
  - o Cover crops: 15
    - Total cover crop acres: 3,705
  - o Prairie Strips: 1

- o Pollinator habitat: 4
- Extended rotation: 4
- Rotational grazing: 2
- o Nutrient reduction wetland: 1
- Saturated buffer: 2
- Bioreactor: 1

# Responses to Year-End Evaluation

39 Evaluations Mailed

22 Evaluations Returned

Respondents farm an average of 654 ac.

- 18 fall seeded cover crops in 2022 on 5,414 total cover crop acres (473 new acres)
- 14 discussed challenges/benefits of conservation practices with landowners/tenants
- 11 networked conservation ideas with other farmers or farmer clients
  - o 2 successfully influenced one other farmer
  - 5 successfully influenced two or more farmers
  - o 2 influenced no farmers

# August 24 | 10:30am-12:30pm

# Mark Kenney Perennial Vegetation Field Day | Nevada

**Event Summary** 

#### **Topic**

- ✓ Perennial Vegetation
- ✓ Water Quality
- ✓ Redefining the Field Edge

#### **Speakers**

- ✓ Mark Kenney (Farmer)
- ✓ Mark Licht (Iowa State University)
- ✓ Adam Janke (Iowa State University)
- ✓ Liz Ripley (Iowa Learning Farms)

# **Quality of Field Day**

4.6 / 5 = Overall quality of field day/workshop

4.4 / 5 = Effectiveness of Farmer/Landowner Presenters

4.8 / 5 = Effectiveness of Iowa State University Presenters

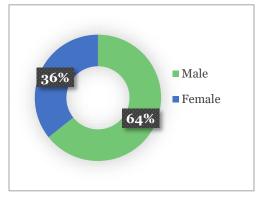
3.7 / 5 = Effectiveness of Conservation Station Demonstration

# **Description of Attendees**

Total Attendees\*: 28 Average Age: 51

Attendees with livestock: 2

- Farmer/operator: 7
- Landowner: 6
- New to farming: o
- Would like to farm: o
- Government agency staff: 4
- Other: 5



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

With "Redefining the Field Edge," how would that fit into CRP or other programs?

Do you have to have a corn base/cropping history for the cost share programs?

What size does the area have to be?

What is the management like – burning vs. mowing?

What are your thoughts on doing rotational grazing on perennial vegetation areas like this?

I've seen a lot of garter snakes this year. What factors might be affecting their resurgence? Any connections with perennial vegetation areas like this?

Are cottonwoods desirable in low-lying areas like this?

Can cottonwoods be a viable substitute for ash trees?

What kind of software do you use for the yield data and field profitability analysis?

Is the Ag Leader software compatible with all equipment types?

What do the two different rows of jars represent? I'm not sure I really understand what this is showing—can you clarify?

Why is there more runoff from the conservation tillage vs. intense tillage? Is that normal?

What is the Batch & Build project all about down in Polk Co.?

Is that [Batch & Build] being done in Story Co. also? How about Linn Co. over by Cedar Rapids?

How does the funding work for Batch & Build?

# 20 Evaluations Mailed 9 Evaluations Returned

# Attendees were asked to describe their current farming practices:

- 5 are actively farming
  - o Total acres farmed: 795
- 1 rents land
  - o Total leased acres: NA
- 5 lease land to a tenant
  - o Total leased acres: 905
- 4 respondents have conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - No-till/strip-till: 2
    - Total no-till/strip-till acres: NA
  - o Cover crops: 2
    - Total cover crop acres: NA
  - o Prairie Strips: 4

- o Pollinator habitat: 7
- Extended rotation: 3
- o Rotational grazing: 2
- Nutrient reduction wetland: 1

# Responses to Year-End Evaluation

12 Evaluations Mailed

7 Evaluations Returned

Respondents farm an average of 382 ac.

- 1 fall seeded cover crops in 2022
- 5 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
  - o 1 successfully influenced two or more farmers

# August 25 | 10:30am-12:30pm Cover Crop and Soil Health Field Day | Melbourne

**Event Summary** 

#### **Topic**

- ✓ Cover Crops
- ✓ Soil Health

#### **Speakers**

- ✓ Liz Ripley (Iowa Learning Farms)
- ✓ JD Hollingsworth and Jason Steele (NRCS)
- ✓ Loran Steinlage (Farmer)

#### **Quality of Field Day**

4.4 / 5 = Overall quality of field day/workshop

 $3.1 \, / \, 5$  = Effectiveness of Farmer/Landowner Presenters

4.4 / 5 = Effectiveness of Iowa State University Presenters

4.6 / 5 = Effectiveness of Conservation Professionals

#### **Description of Attendees**

Total Attendees\*: 36 Average Age: 57

Attendees with livestock: 6

• Farmer/operator: 11

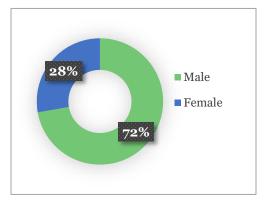
• Landowner: 7

• New to farming: 2

Would like to farm: o

• Government agency staff: 1

• Other: 3



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

Is grazing considered a termination method for cover crops?

How much luck do people have planting corn green into cereal rye?

Is wheat any better than rye for planting green?

Do you know if anyone here is growing small grains and how they found their market?

Should I use insecticide when I terminate rye?

Can you talk about how roller crimpers are changing over time?

What kind of tool are you using for interseeding?

At what stage are you interseeding cover crops into corn?

#### 21 Evaluations Mailed 8 Evaluations Returned

#### Attendees were asked to describe their current farming practices:

- 4 are actively farming
  - o Total acres farmed: 3,750
- 3 rent land
  - o Total leased acres: 2,200
- 2 lease land to a tenant
  - o Total leased acres: 405
- 1 respondent has conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - No-till/strip-till: 5
    - Total no-till/strip-till acres: 2,610
  - o Cover crops: 5
    - Total cover crop acres: 2,565

- o Pollinator habitat: 1
- Extended rotation: 1
- Nutrient reduction wetland: 1

# Responses to Year-End Evaluation

17 Evaluations Mailed

6 Evaluations Returned

Respondents farm an average of 860 ac.

- 4 fall seeded cover crops in 2022 on 1,430 total cover crop acres
- 4 discussed challenges/benefits of conservation practices with landowners/tenants
- 4 networked conservation ideas with other farmers or farmer clients, but did not influence other farmers

# September 7 | 6:30-8:30pm Dordt C-CHANGE Field Day | Sioux Center

**Event Summary** 

#### **Topic**

- ✓ Perennial Vegetation
- ✓ Anaerobic Digestion
- ✓ Carbon Economy

# Speakers

- ✓ Lisa Schulte Moore (Iowa State University)
- ✓ Jerry Flint (National Pork Board)
- ✓ Bryan Sievers (Farmer)
- ✓ Staci Bogue-Bucholz (GEVO)

# **Description of Attendees**

Total Attendees\*: 165 Average Age: 29

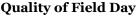
Attendees with livestock: 46
• Farmer/operator: 45

Landowner: 14New to farming: 8

• Would like to farm: 19

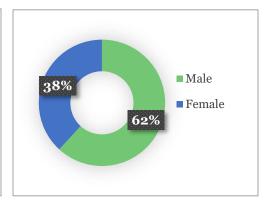
Government agency staff: 2

Other: 46



4.6 / 5 = Overall quality of field day/workshop

4.6 / 5 = Effectiveness of Panel Presenters



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

Who is setting the rules and can you explain the GREET model GEVO is using?

How does the carbon intensity score vary between renewable natural gas and ethanol?

How does your experience with policy/politics influence your choices?

As a pork producer, how do you view this impacting your future business decisions?

Are you going to look at how the crops are produced before buying them for your sustainable aviation fuel (SAF)? Are there premiums to be paid for lower ESG (environmental, social, and governance) scores – aka use of conservation

Are there premiums to be paid for lower ESG (environmental, social, and governance) scores – aka use of conservation practices like cover crops and no-till?

How are anaerobic digester systems different than wind turbines that break and are not in use before they are paid off? What role can Dordt and similar organizations do to support sustainable agriculture in Iowa and beyond?

27 Evaluations Mailed to non-student attendees 9 Evaluations Returned

#### Attendees were asked to describe their current farming practices:

- 3 are actively farming
  - o Total acres farmed: 3,680
- 3 rent land
  - o Total leased acres: 1,910
- 5 lease land to a tenant
  - o Total leased acres: 1,010
- 3 respondents have conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - No-till/strip-till: 5
    - Total no-till/strip-till acres: 990
  - o Cover crops: 4
    - Total cover crop acres: 460
- 2.7 / 5 Likelihood of establishing perennial vegetation
- 3.5 /5 Interest level in anaerobic digestion

- o Pollinator habitat: 1=2
- Bioreactor: 1

# Responses to Year-End Evaluation

19 Evaluations Mailed7 Evaluations Returned

Respondents farm an average of 650 ac.

- 6 fall seeded cover crops in 2022 on 520 total cover crop acres (140 new acres)
- 5 discussed challenges/benefits of conservation practices with landowners/tenants
- 4 networked conservation ideas with other farmers or farmer clients
  - o 2 successfully influenced one other farmer
  - o 1 successfully influenced two or more farmers
  - o 1 influenced no farmers

# September 21 | 5:00-7:00pm Cover Crop Field Day | Center Junction

**Event Summary** 

#### **Topic**

- ✓ Cover Crops
- ✓ Water Quality

#### **Speakers**

- ✓ Liz Ripley (Iowa Learning Farms)
- ✓ Erin Erickson (Maquoketa River WMA)
- ✓ Dave Lubben (Farmer)
- ✓ Wes Gibbs and William Roller (Jones County)
- ✓ Brad Mormann (Jones County Conservation)

#### **Quality of Field Day**

4.6 / 5 = Overall quality of field day/workshop

4.5 / 5 = Effectiveness of Farmer/Landowner Presenters

4.3 / 5 = Effectiveness of Conservation Professionals

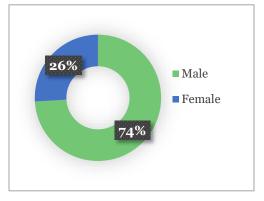
4.7 / 5 = Effectiveness of Conservation Station Demonstration

#### **Description of Attendees**

Total Attendees\*: 30 Average Age: 59

Attendees with livestock: 6

- Farmer/operator: 9
- Landowner: 9
- New to farming: 2
- Would like to farm: o
- Government agency staff: 5
- Other: 3



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

Any research on the impact of nitrogen on the soil structure itself?

What gravel size are you using for the pavers?

Can you explain why my neighbor burned down his rye? (Confusion about terminology – he thought he was actually burning it with fire)

What do you recommend for termination of rye?

Anyone using relay cropping?

Is there a way to get help making sure a tenant uses no-till?

How many acres do you farm?

Any changes to your organic matter following the cover crops?

How do you seed your cover crop?

What is your seeding rate?

Are you grazing your cover crop?

How do you convince other farmers that it's worth it to fence off the creek?

What type of fencing do you use?

Any thoughts on keeping or changing your cover crop mix?

What is the total cost of cover crops?

Do crimpers work on cereal rye?

Are there programs to help cover the costs?

Is there a place someone can go to learn about all the programs?

How much are you saving on herbicide and maintenance by using natives over the past 15 years?

Any fish structures in the lake?

21 Evaluations Mailed

#### 12 Evaluations Returned

#### Attendees were asked to describe their current farming practices:

- 6 are actively farming
  - o Total acres farmed: 2,616
- 2 rent land
  - o Total leased acres: 265
- 4 lease land to a tenant
  - o Total leased acres: 775
- 3 respondents have conservation measures built into their lease
- Conservation practices used on land owned/operated:
  - No-till/strip-till: 8
    - Total no-till/strip-till acres: 1,517
  - o Cover crops: 6
    - Total cover crop acres: 718

- o Prairie Strips: 4
- O Pollinator habitat: 5
- Extended rotation: 3
- Rotational grazing: 3

# Responses to Year-End Evaluation

- 11 Evaluations Mailed
- 5 Evaluations Returned

Respondents farm an average of 372 ac.

- 3 fall seeded cover crops in 2022 on 136 total cover crop acres (20 new acres)
- 2 discussed challenges/benefits of conservation practices with landowners/tenants
- 2 networked conservation ideas with other farmers or farmer clients
  - o 1 successfully influenced two or more farmers
  - o 1 influenced no farmers

# November 15 | 10:30am-12:30pm John Kielkopf Cover Crop and No-Till Field Day | Fremont

#### **Event Summary**

#### **Topics**

- ✓ Cover Crops
- ✓ No-Till

#### **Speakers**

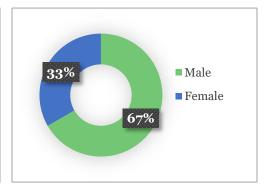
- ✓ Liz Ripley (Iowa Learning Farms)
- ✓ Rebecca Vittetoe (Iowa State University)
- ✓ John Kielkopf (Farmer)

#### **Description of Attendees**

Total Attendees\*: 27 Average Age: 55

Attendees with livestock: 8

- Farmer/operator: 13
- Landowner: 4
- New to farming: 0
- Would like to farm: o
- Government agency staff: 4
- Other: 3



\*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 include event presenters, organizers or other service providers.

#### **Questions Asked**

Did you collect water volume measurements with the suction lysimeters as well as the nitrate samples?

When was this seeded?

What is camelina?

Then you got a 4 inch rain?

How do you plant your beans in it?

This is rye?

Do you always aerial seed?

Is the plane pretty consistent across the swath?

Max weight for seeding rate?

Do you put any anhydrous on in the fall?

Any issues with roughness with anhydrous and the planter?

When do you start your cover crop planning?

Any difference between locally grown rye vs. Dakotas?

When you put the rye on before soybean harvest, have you had issues with the combine?

Do you plant your soybeans green?

Any changes in weed pressure in the soybeans?

14 Evaluations Mailed

7 Evaluations Returned

Respondents farm an average of 646 ac.

- 7 fall seeded cover crops in 2022 on 672 total cover crop acres (1 new acre)
- 6 discussed challenges/benefits of conservation practices with landowners/tenants
- 6 networked conservation ideas with other farmers or farmer clients
  - o 1 successfully influenced one other farmer
  - o 1 successfully influenced two or more farmers
  - o 2 influenced no farmers

<sup>\*</sup>Because the field day occurred in November 2022, event participants were not mailed a two-week follow-up evaluation.

# November 17 | 12:00-2:00pm Tom Vaske Cover Crop and Strip-Till Field Day | Masonville

#### **Event Summary**

#### **Topics**

- ✓ Cover Crops
- ✓ Strip-Till

#### **Speakers**

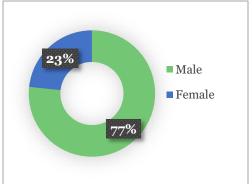
- ✓ Tom Vaske (Farmer)
- ✓ Brian Dougherty (Iowa State University)
- ✓ Alisha Sedlmayr and Angie Lemke (NRCS)

#### **Description of Attendees**

Total Attendees\*: 30 Average Age: 53

Attendees with livestock: 11

- Farmer/operator: 15
- Landowner: 5
- New to farming: 0
- Would like to farm: o
- Government agency staff: 1
- Other: 2



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

When do you seed your cover crops?

What is your seeding rate?

Do you do any custom work?

Do you seed/VT and then make your strips?

Any cover crop growth in the strips after you build it?

When do you terminate the cover crop?

Do you do strips for corn and soybeans?

Using a 20 inch planter?

Does the VT leave a compaction layer at your depth?

You use a ball and knife?

Do you refresh the strips in the spring?

Do you use a cover crop mix? You aren't using radish?

You're talking straight blades on your VT?

Did you start with strip-till or no-till?

What machine do you have now?

Are you using RTK?

Did you add the air seeder to your VT?

Do you apply nutrients with your strips?

What is your nitrogen application plan?

Do you dribble on N for side dressing?

Any livestock?

Do you leave any fire breaks in the cover crop?

Have you been able to cut your fertilizer since switching to strip-till?

Is your goal to maintain yield with less fertilizer?

Recommendations on planter modifications – spiked harrow or rolling baskets?

Do you think our latitude works against us for roller crimping?

With N tie up early in the season, will the symptoms look like other N shortages?

Doesn't Alison Robertson have some research on rye and disease?

How do you manage cover crops for water quality?

Do you see a difference in nitrate with no-till?

Doesn't the residue help with phosphorus?

Same yield reduction if you use starter fertilizer?

Difference on soil temps between early and late termination of cover crops?

What were the N sources at the Nashua plots?

How much more would just no-till break down in the slake test vs the no-till and cover crops?

Wouldn't the increased infiltration allow the fertilizer to move more quickly through the soil?

# Responses to Year-End Evaluation\*

18 Evaluations Mailed8 Evaluations ReturnedRespondents farm an average of 315 ac.

- 5 fall seeded cover crops in 2022 on 847 total cover crop acres (240 new acres)
- 4 discussed challenges/benefits of conservation practices with landowners/tenants
- 7 networked conservation ideas with other farmers or farmer clients
  - 4 successfully influenced one other farmer
  - o 2 successfully influenced two or more farmers
  - o 1 influenced no farmers

<sup>\*</sup>Because the field day occurred in November 2022, event participants were not mailed a two-week follow-up evaluation.

# November 22 | 12:00-2:00pm Wetland and Cover Crop Field Day | Keota

#### **Event Summary**

#### **Topics**

- ✓ Cover Crops
- ✓ Wetlands
- ✓ Water Quality

#### **Speakers**

- ✓ Liz Ripley (Iowa Learning Farms)
- ✓ Shane Wulf (Iowa Department of Agriculture and Land Stewardship)
- ✓ Denny Lyle (Landowner)

**Description of Attendees** 

Total Attendees\*: 27 Average Age: 59

Attendees with livestock: 3

• Farmer/operator: 9

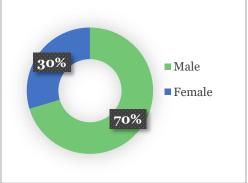
• Landowner: 6

New to farming: o

Would like to farm: o

Government agency staff: 1

• Other: 2



\*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 include event presenters, organizers or other service providers.

#### **Questions Asked**

Does that \$30/acre cost include fuel or just soil erosion? (Talking about RUSLE modeling)

How much soil builds back up if you use cover crops?

Do you get a lot of waterfowl?

Do you have fish out there?

Was your cover crop drilled?

What was the seeding rate?

What was the planting date?

When was the first rain after planting?

Is that your cabin?

Is this just one landowner on the easement?

Do you expect it to silt-in in a certain number of years?

Would you consider the sediment to be valuable in 80 years?

Did you seed wetland plants or a prairie mix?

Where else are you looking to build wetlands like this?

12 Evaluations Mailed

6 Evaluations Returned

Respondents farm an average of 711 ac.

- 4 fall seeded cover crops in 2022 on 574 total cover crop acres (138 new acres)
- 5 discussed challenges/benefits of conservation practices with landowners/tenants
- 2 networked conservation ideas with other farmers or farmer clients
  - o 1 successfully influenced two or more farmers
  - o 1 influenced no farmers

<sup>\*</sup>Because the field day occurred in November 2022, event participants were not mailed a two-week follow-up evaluation.

# November 29 | 12:00-2:00pm Randy Caviness Cover Crop and No-Till Field Day | Greenfield

# **Event Summary**

#### **Topics**

- ✓ Cover Crops
- ✓ No-Till

#### **Speakers**

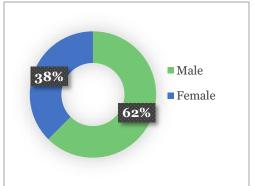
- ✓ Liz Ripley (Iowa Learning Farms)
- ✓ Hilary Olson and Ruth Blomquist (NRCS)
- ✓ Randy Caviness (Farmer)

#### **Description of Attendees**

Total Attendees\*: 26 Average Age: 63

Attendees with livestock: 6

- Farmer/operator: 10
- Landowner: 7
- New to farming: 0
- Would like to farm: 1
- Government agency staff: 2
- Other: 2



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

Any numbers on infiltration and water storage increase with no-till?

Wouldn't no-till help with cover crops rooting easier?

Was that \$30/ton value of soil per year?

Was that rye grown under 70 degree weather to get that growth in 10 days?

Which picture do we want to achieve? Both are positive?

If soils are tight, are farmers right when they say they need to till it?

Any research on forage/row crop rotations?

Do you consider alfalfa as cover crop?

Any research on root impacts of alfalfa on soil?

Difference between wheat and rye?

Best practices for grazing cover crops?

How soon can you turn them out?

Do different sized seeds stay well mixed for seeding cover crops?

12 Evaluations Mailed

8 Evaluations Returned

Respondents farm an average of 270 ac.

- 4 fall seeded cover crops in 2022 on 750 total cover crop acres
- 4 discussed challenges/benefits of conservation practices with landowners/tenants
- 6 networked conservation ideas with other farmers or farmer clients
  - o 3 successfully influenced one other farmer
  - o 1 influenced no farmers

 $<sup>^*</sup>$ Because the field day occurred in November 2022, event participants were not mailed a two-week follow-up evaluation.

# November 30 | 6:00-7:00pm Conservation On Tap | Cumming

#### **Event Summary**

#### **Topics**

- ✓ Cover Crops
- ✓ Water Quality

#### **Speakers**

- ✓ Kyle Doyle (Iowa Distilling Company)
- ✓ Mark Licht (Iowa State University)
- ✓ Matt Helmers (Iowa Nutrient Research Center)

#### **Description of Attendees**

Total Attendees\*: 29 Average Age: 52

Attendees with livestock: 4

• Farmer/operator: 4

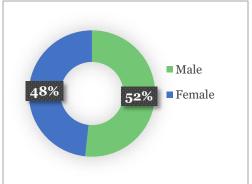
Landowner: 7

New to farming: 1

• Would like to farm: o

Government agency staff: 3

• Other: 4



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

Are you specific to a certain area for your grains used in the process?

What's the aging on your bourbon?

Are the areas being redefined primarily grass/hay?

Are there/will there be targeted outreach efforts to address hot spots for nitrate loss?

What are the financials for practices that may work better in certain areas than others?

Why are you for more cows on the land?

Is California going to be knocking on our door to grow more vegetables here?

What is our knowledge with soil health? Where do we need to go?

What is it going to take to get the organic matter back that has been lost?

Can you talk a little more about the Learning Farms? Do you have physical farms?

10 Evaluations Mailed

3 Evaluations Returned

Respondents farm an average of 237 ac.

- 2 fall seeded cover crops in 2022 on 190 total cover crop acres
- 2 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
  - o 1 influenced no farmers

<sup>\*</sup>Because the field day occurred in November 2022, event participants were not mailed a two-week follow-up evaluation.

# December 1 | 12:00-2:00pm Cover Crop Workshop | Winterset

**Event Summary** 

#### **Topics**

✓ Cover Crops

#### **Speakers**

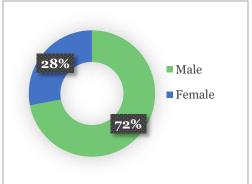
- ✓ Farmer Panel: Jon Peterson, Dennis McLaughlin, Randy Gamble
- ✓ Ruth Blomquist (NRCS)
- ✓ Alex Schaffer (Iowa Soybean Association)
- ✓ Anna Golightly (Madison County SWCD)

#### **Description of Attendees**

Total Attendees\*: 25 Average Age: 55

Attendees with livestock: 7

- Farmer/operator: 8
- Landowner: 5
- New to farming: 0
- Would like to farm: o
- Government agency staff: 4
- Other: o



<sup>\*</sup>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 include event presenters, organizers or other service providers.

#### **Questions Asked**

What is CEC? (cation exchange capacity)

Have you experimented with other cover crops besides rye?

What if you flew it on in August? Would you have too much growth that would affect soybean harvest?

Have you taken Haney tests on your farm?

Have you planted corn with no extra nitrogen yet?

How do you measure increased microbial activity?

When do you plant and terminate a spring cover crop?

What were some of the first benefits you saw in your soils when you first started?

Is there a color difference in the soils?

Is there any way to terminate rye besides chemicals?

Insurance just got approved for relay cropping this year - why did your current trial participants agree to do it in 2021?

Do you have a comparison of rye yield if you left rye in and never planted soybeans?

Could you relay crop with wheat?

What about maturity in the rye?

- 9 Evaluations Mailed
- 4 Evaluations Returned

Respondents farm an average of 250 ac.

- o fall seeded cover crops in 2022
- 1 discussed challenges/benefits of conservation practices with landowners/tenants
- 3 networked conservation ideas with other farmers or farmer clients, but indicated they did not influence other farmers

 $<sup>^*</sup>$ Because the field day occurred in December 2022, event participants were not mailed a two-week follow-up evaluation.

# 2022 Iowa Learning Farms Virtual Field Days

In 2022, Iowa Learning Farms hosted **7 virtual field days with 378 total event participants tuning in** (an average of 54 participants). The virtual format of the events allowed us to reach a larger audience both during the live events and through the archive views. Archival views are outstanding with 738 views for the 2022 series, as well as 2,312 new archive views of 2021 events and 2,742 new archive views of 2020 events for a total of 12,898 lifetime views of virtual field days as of January 3, 2023.

Virtual field days are a valuable outreach tool that provides an opportunity for attendees to participate in multiple events without the travel requirement and our previous evaluation reports have shown that attending multiple field days increases the likelihood of adoption of conservation practices. Based on a separate survey of previous in-person and virtual field day participants<sup>1</sup>, we were able to explore some additional differences and preferences between the groups. We saw that participants that attended both in-person and virtual events were likely to serve as opinion leaders and are actively engaged in seeking and sharing information with others. We will continue to offer a combination of both virtual and in-person field days to provide timely conservation information to farmers and landowners.

# **Virtual Field Day Format**

Virtual field days are one-hour events hosted in Zoom that feature a video from a field site and a live questionand-answer session with the presenters. An Iowa Learning Farms staff member acts as the host of the event, providing background information on Iowa Learning Farms and the topic of the virtual field day, and relaying questions from the chat to the presenters. The virtual field days are recorded and uploaded to YouTube following the event, which allows us to track archive views.

# **Virtual Field Day Promotion**

We promote each virtual field day the same way, utilizing a multi-faceted approach. A press release is sent out two weeks before the event to our statewide media contact list and ISU Extension and Outreach communications team. It is also promoted on our website and posted on our blog one week before the event. A reminder about the field day is sent out to the ILF email list as a special notice within 10 days of the field day.

# Virtual Field Day Certified Crop Adviser (CCA) Continuing Education Units (CEUs)

Board-approved CEUs for CCAs are available for attending ILF virtual field days. Participants who are seeking credits send an email with their name and CCA number by 5pm the day of the event. Their attendance is checked against the Zoom-generated usage list and added to the sign-in sheet that is submitted to the CCA board. Thirteen CEUs were awarded to twelve attendees in 2022.

# Virtual Field Day Evaluation Methodology

The virtual field day evaluations are created using Qualtrics and designed to be similar to both the cards that in-person field day participants would fill out at the event and the mailed follow-up evaluation. A link to the survey is emailed to the Zoom-generated usage list 2-3 hours after the event and a reminder is sent out again 2-3 days later. If the response rate is low, additional reminders may be sent out. The evaluation email also contains a link to the field day archive.

In 2022, we sent a year-end evaluation to participants who identified as a farmer or landowner during registration within Zoom. This evaluation was identical to the mailed evaluation that in-person event participants received. Follow-up emails were sent six times to encourage participants to respond. The email also contained a link to the entire field day archive.

The 2022 individual virtual field day reports can be found on the following pages.

<sup>1</sup> Witzling, L., Williams, E., Wald, D.E., Comito, J. and Ripley, E., 2021, Virtually the same? Understanding virtual and F2F farmer audiences for conservation outreach. Submitted to Journal of Extension.

# 2022 ILF Virtual Field Days

Virtual Field Day	Total Attendees	Archive Views <sup>1</sup>	Follow Up Evaluations Sent <sup>2</sup>	Returned
January 13: Road Detention Structures: Adapting Current Infrastructure for Flood Resiliency and Nutrient Reduction	55	134	54	14
February 3: Redefining the Field Edge to Improve Profitability, Wildlife Habitat and Water Quality	80	134	74	34
February 24: A Vision for Change: Farmers' Perspectives for Diversifying Iowa's Landscape	58	104	45	15
March 15: Creating Peace of Mind with Flood Mitigation in the Bee Branch Watershed	23	91	17	5
October 20: Exploring a Pumped Bioreactor System for Improved Water Quality	46	61	39	13
December 8: Utilizing Drainage Water Recycling To Improve Water Quality and Manage Weather Risk	62	77	52	18
December 15: From Nuisance to Asset – Establishing Saturated Riparian Forest Buffers on the Landscape	54	137	44	12
Total	378	738	325	111 <sup>3</sup>

<sup>1 –</sup> Views of the archived virtual field days and related videos on YouTube, as of 1/3/2023
2 – Qualtrics surveys were emailed to attendees following the live events, with reminder emails sent a few days later. Virtual field day presenters, ILF staff, and attendees who viewed less than 10 minutes of the virtual field days did not receive surveys.
3 – This is a 34% response rate and is excellent for an online survey format.

# January 13: Road Detention Structures: Adapting Current Infrastructure for Flood Resiliency and Nutrient Reduction

**Event Summary & Demographics** 

# **Speakers**

✓ Matt Frana (Upper Iowa Watershed)

54 Evaluations Sent14 Evaluations Returned

4.6 / 5 = Overall quality of the virtual field day

4.5 / 5 =Effectiveness of the speaker(s)

4.5 / 5 = Effectiveness of the technology used

#### **Virtual Field Day Attendees\***

Total Attendees: 55 Average Age: 54

States represented (besides Iowa): Illinois, Minnesota,

New York and Wisconsin

Farmer/operator: 1

• Landowner: 5

• New to farming: 0

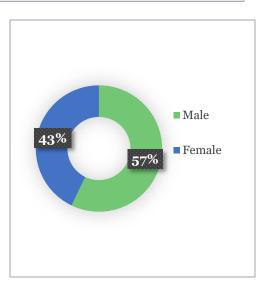
Would like to farm: 1

Government agency staff: 6

Student/educator: 2

Agriculture Business Professional: 3

• Other: 3



<sup>\*</sup>Attendees could select multiple categories to describe themselves when completing the evaluation.

#### **Ouestions Asked**

Cost of structure in the video?

Is there an ideal watershed size for these types of structures?

Do these projects have positive effects on the trout streams in NE Iowa?

Who did the engineering, as well as legal easement work?

You mentioned 2 of the projects had pools and the rest did not. What is the difference in design for a roadway project that does create a pool vs. no pooling? Are you letting water out in a period similar to a WASCOB such as 24 hours? What structure are you using to create that slow release?

What was the timeline for the overall project and then the site featured in the video?

What is the depth of the permanent pool?

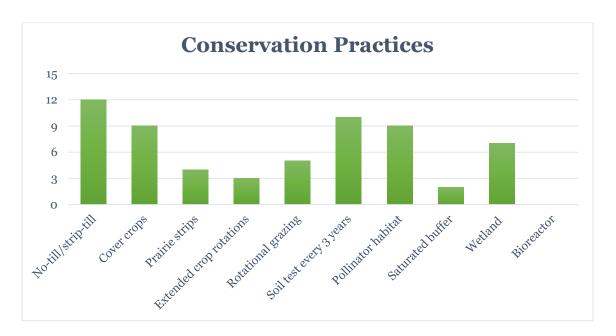
Any feedback from residents on the road changes?

Could you walk us through the cold-call process with landowners for these projects?

Overall, how receptive were landowners to projects on their farms?

Does Winneshiek County have any projects they are planning to do themselves in the near future after seeing the success of these?

	Actively Farming	Rent Tillable Acres from a Landlord	Lease Tillable Acres to a Tenant	Conservation Measures Built into Leases
Number of respondents	4	1	9	5
Total acres	2,960	560	2,217	NA



Respondents reported a total of 2,005 no-till/strip-till acres on which they have been using no-till/strip-till for an average of 12 years. Respondents reported a total of 3,300 cover crop acres.

# February 3: Redefining the Field Edge to Improve Profitability, Wildlife Habitat and Water Quality

**Event Summary & Demographics** 

#### **Speakers**

- ✓ Mark Licht (Iowa State University)
- ✓ Adam Janke (Iowa State University)

# Virtual Field Day Attendees\*

Total Attendees: 80 Average Age: 54

States represented (besides Iowa): Colorado, Illinois, Kansas, Maryland, Minnesota, Missouri, South Dakota, Wisconsin and Ontario, Canada

• Farmer/operator: 4

Landowner: 11

New to farming: 0

Would like to farm: o

Government agency staff: 14

• Student/educator: 5

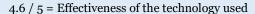
Agriculture Business Professional: 2

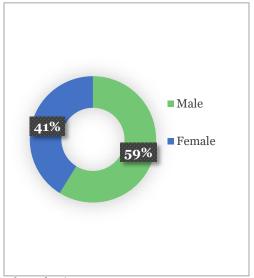
Other: 4

<sup>74</sup> Evaluations Sent
34 Evaluations Returned

4.7 / 5 = Overall quality of the virtual field day

4.8 / 5 = Effectiveness of the speaker(s)





<sup>\*</sup>Attendees could select multiple categories to describe themselves when completing the evaluation.

#### **Questions Asked**

 $Burning \ off \ prairie \ can \ be \ intimidating \ to \ some \ landowners/farmers. \ Are \ there \ companies \ that \ do \ this?$ 

On top of that, she expressed concern that not burning it makes her more vulnerable to unintended fires. Is that accurate? Do native perennials have any special characteristics for wildlife in terms of cover or food?

What are the cost savings on converting marginal land to perennials? What happens in the remaining part of the field in terms of yields, etc.? Will I make money on this?

Have you looked into concerns with losing crop base in the FSA programs? I have heard this is a concern from some farmers.

How does the increased nitrate load affect the native plantings?

Benefits to surrounding fields with increase in pollinators? I think I heard that there was a benefit to soybeans with increased habitat for predator species that control aphids???

Are there any studies showing increased pollination rates of adjacent crop fields (beans) with these buffers?

Are there any studies looking at wildlife damages in adjacent crop ground? I work with landowners with crop damages and a common scenario is row crop surrounded by either a buffer program or hay buffers. There is often the question of does that increase damage to the cash crop or reduce it or neither. Any thoughts on studying that?

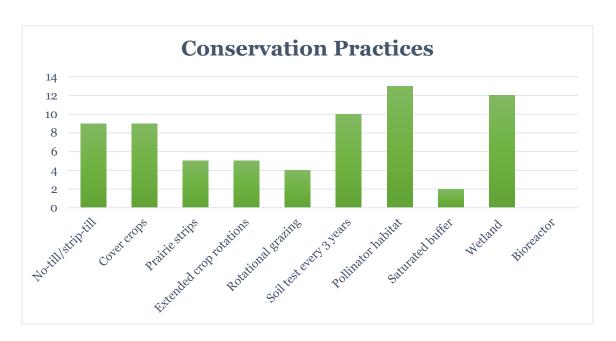
Is there any talk about using the tax system to help with converting these areas? In other words, instead of getting "rent", you get a break on property tax if you convert an area because you are no longer growing a cash crop on land? Since these areas are traditionally wet, does that make it difficult for the native seeds to establish/is reseeding often necessary?

Big supporter of increasing prairie on the landscape, but with potentially a lot of edge habitat to the crop fields, could using neonics make these areas sinks for pollinators?

Risk of the perennials creeping into the crop field?

Tips for communicating with custom spraying applicators?

	Actively Farming	Rent Tillable Acres from a Landlord	Lease Tillable Acres to a Tenant	Conservation Measures Built into Leases
Number of respondents	4	3	11	5
Total acres	1,961	1,346	1,052	NA



Respondents reported a total of 2,575 no-till/strip-till acres on which they have been using no-till/strip-till for an average of 14 years. Respondents reported a total of 1,582 cover crop acres.

February 24: A Vision for Change: Farmers' Perspectives for Diversifying Iowa's Landscape

Event Summary & Demographics

# **Speakers**

- Matt Russell (Farmer)
- Wade Dooley (Farmer)
- ✓ Seth Watkins (Farmer)
- ✓ Rob Stout (Farmer)
- ✓ Bryan Sievers (Farmer)

45 Evaluations Sent

15 Evaluations Returned

4.1 / 5 = Overall quality of the virtual field day

4.3 / 5 = Effectiveness of the speaker(s)

4.3 / 5 = Effectiveness of the technology used

#### Virtual Field Day Attendees\*

Total Attendees: 58 Average Age: 57

States represented (besides Iowa): Indiana, Missouri, Ohio

Farmer/operator: 5

Landowner: 6

New to farming: 0

Would like to farm: o

Government agency staff: 4

Student/educator: 1

Agriculture Business Professional: 1

Other: 3 \*Attendees could select multiple categories to describe themselves when completing the evaluation.



#### **Questions Asked**

What excites you most about this project?

Have you turned the cattle out on the vegetation yet?

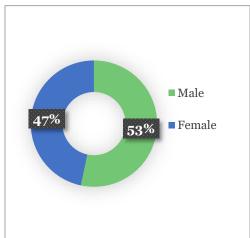
What incentives currently used are rewarding bad actors?

Bryan Sievers talked about organic matter content for improving soil from liquid manure. Are the improvements what he expected to see? Is it important to combine liquid manure with cover crops, etc. in order to see improved organic matter content?

How do you measure the nutrient content of the digestate?

What does the management look like for each of you in the first year of establishment of the perennial vegetation? Seed Change or Sea Change? Why the name?

Is there website for C-CHANGE?



	Actively Farming	Rent Tillable Acres from a Landlord	Lease Tillable Acres to a Tenant	Conservation Measures Built into Leases
Number of respondents	5	1	3	4
Total acres	2,695	30	100	NA



Respondents reported a total of 865 no-till/strip-till acres on which they have been using no-till/strip-till for an average of 10 years. Respondents reported a total of 2,045 cover crop acres.

# March 15: Creating Peace of Mind with Flood Mitigation in the Bee Branch Watershed

Event Summary & Demographics

#### **Speakers**

✓ Deron Muehring (City of Dubuque)

17 Evaluations Sent
5 Evaluations Returned
4.6 / 5 = Overall quality of the virtual field day

4.8 / 5 = Effectiveness of the speaker(s)

4.6 / 5 = Effectiveness of the technology used

#### **Virtual Field Day Attendees\***

Total Attendees: 23 Average Age: 50

States represented (besides Iowa): Kansas, Nebraska

Farmer/operator: o

• Landowner: 2

New to farming: 0

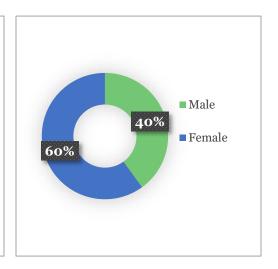
Would like to farm: o

• Government agency staff: 3

Student/educator: 0

Agriculture Business Professional: o

• Other: o



<sup>\*</sup>Attendees could select multiple categories to describe themselves when completing the evaluation.

#### **Questions Asked**

How many miles are the upper and lower Bee Creek project?

How many houses and businesses had to be relocated?

Have you gone back into the communities that are close to the trail and gage their level of satisfaction and if they are using the trail?

When will the tunnel under the railroad tracks be open?

Do you have any plans for informational signage as another piece of the puzzle with education/outreach?

In terms of water quality, all that green lawn could draw a lot of geese and a lot of geese waste which would hurt water quality. Has this been a problem?

Are there any concerns about pet waste and its impacts on water quality? Any plans for bag stations/trash cans to encourage picking up after pets?

How many properties were flooded in the 1999 and 2002 floods?

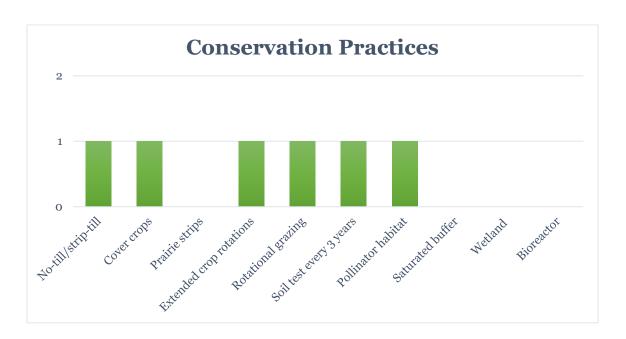
I am trying to find this project on the map - what is the creek called again?

What other projects is Dubuque doing in the community to help address flooding and water quality?

Is the gate automated or does the city control when it is used?

Any advice for other communities to help address flash flooding?

	Actively Farming	Rent Tillable Acres from a Landlord	Lease Tillable Acres to a Tenant	Conservation Measures Built into Leases
Number of respondents	О	0	1	1
Total acres	NA	NA	310	NA



Respondents reported a total of 16 no-till/strip-till acres on which they have been using no-till/strip-till for an average of 15 years. Respondents reported a total of 210 cover crop acres.

# October 20: Exploring a Pumped Bioreactor System for Improved Water Quality

Event Summary & Demographics

#### **Speakers**

- ✓ Lindsey Hartfiel (Iowa State University)
- ✓ Natasha Hoover (Iowa State University)

#### 39 Evaluations Sent

13 Evaluations Returned

3.9 / 5 = Overall quality of the virtual field day

3.9 / 5 = Effectiveness of the speaker(s)

3.9 / 5 = Effectiveness of the technology used

#### **Virtual Field Day Attendees\***

Total Attendees: 46 Average Age: 50

States represented (besides Iowa): Illinois, Minnesota,

Wisconsin

Farmer/operator: 2

• Landowner: 5

• New to farming: o

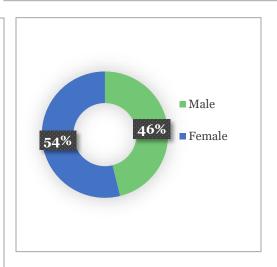
Would like to farm: o

• Government agency staff: 3

Student/educator: 4

Agriculture Business Professional: 3

Other: 2



<sup>\*</sup>Attendees could select multiple categories to describe themselves when completing the evaluation.

#### **Questions Asked**

What is the pumping cost per acre inch and cost per #of NO<sub>3</sub> removed?

Are there permitting/legal considerations with pulling water from a surface water body?

At its warmest, how much did the stream temperature vary from the tile drainage temperature?

How often does carbon (by way of chips) need to be added to the bioreactor?

How do you know that the carbon was sediment-bound rather than just carbon in the stream water?

What surprised you the most during this project?

What type of pump did you use for the project?

Were any in-field practices used?

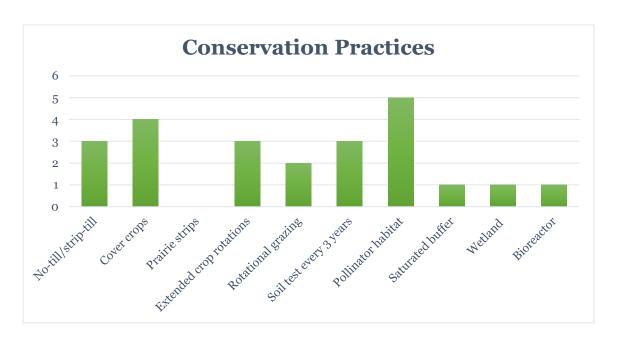
What may have led to the decline in chamber B's performance?

Plans to turn the pump back on this fall?

When was the original system installed?

For the bacteria removal – thoughts on what was happening there?

	Actively Farming	Rent Tillable Acres from a Landlord	Lease Tillable Acres to a Tenant	Conservation Measures Built into Leases
Number of respondents	2	1	3	3
Total acres	858	458	403	NA



Respondents reported a total of 632 no-till/strip-till acres on which they have been using no-till/strip-till for an average of 2 years. Respondents reported a total of 316 cover crop acres for fall 2022.

# December 8: Utilizing Drainage Water Recycling To Improve Water Quality and Manage Weather Risk

**Event Summary & Demographics** 

#### **Speakers**

- ✓ Matt Helmers (Iowa Nutrient Research Center)
- ✓ Chris Hay (Iowa Soybean Association)
- ✓ Mark Schleisman (Farmer)
- ✓ Shane Wulf (Iowa Department of Agriculture and Land Stewardship)

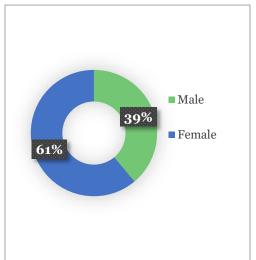
# Virtual Field Day Attendees\*

Total Attendees: 62 Average Age: 47

States represented (besides Iowa): Illinois, Kansas, Minnesota, Missouri, Ohio

- Farmer/operator: 3
- Landowner: 8
- New to farming: 0
- Would like to farm: 1
- Government agency staff: 6
- Student/educator: 3
- Agriculture Business Professional: 5
- Other: 3

<sup>\*</sup>Attendees could select multiple categories to describe themselves when completing the evaluation.



4.2 / 5 =Overall quality of the virtual field day

4.3 / 5 = Effectiveness of the technology used

4.3 / 5 = Effectiveness of the speaker(s)

52 Evaluations Sent18 Evaluations Returned

#### **Questions Asked**

How big is the pond/storage basin itself?

Size compared to watershed acreage being drained?

For creating storage with embankments, how are farmers navigating potential issues with Waters of the US rules/the Army Corps of Engineers?

What is the depth of this pond?

If one were to irrigate with, say, 5 acre-inches of water for a corn crop and nitrate levels in the irrigation water were 5ppm, how many pounds of nitrogen could one credit to the corn crop?

Could existing pond storage systems be retrofitted to add the irrigation capabilities?

Is there any concern of algae growth that could affect water downstream of the system?

Can this practice work anywhere in Iowa? Are there slope limitations?

Was the buffer seeded at this site? And if so, what was the mix?

How many sites in Iowa to date?

Are there concerns with sediment in the irrigation pump system?

Are there design considerations for receiving sediment with overland flow so they don't have to be dug out every couple years?

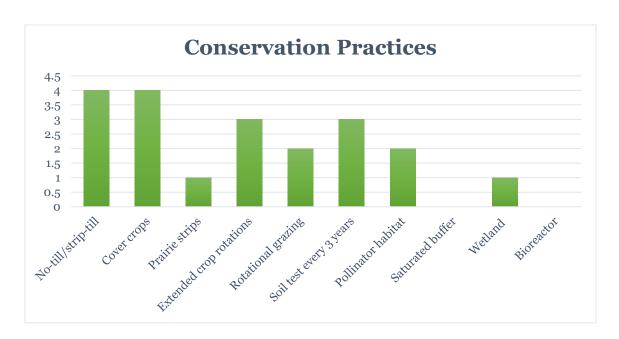
Did you have experience with irrigation before this project?

Do you do any fertigation on your fields?

Is there or has there been wildlife research or analysis on these sites?

Cost share availability options?

	Actively Farming	Rent Tillable Acres from a Landlord	Lease Tillable Acres to a Tenant	Conservation Measures Built into Leases
Number of respondents	3	2	5	2
Total acres	2,850	2,275	2,605	NA



Respondents reported a total of 380 no-till/strip-till acres on which they have been using no-till/strip-till for an average of 7 years. Respondents reported a total of 1,180 cover crop acres for fall 2022.

# December 15: From Nuisance to Asset – Establishing Saturated Riparian Forest Buffers on the Landscape

**Event Summary & Demographics** 

# **Speakers**

- ✓ Billy Beck (Iowa State University)
- ✓ Troy Heeren (Iowa State University)
- ✓ Gabe Johnson (Iowa State University)
- ✓ Jonathan Notch (Iowa State University)

44 Evaluations Sent
12 Evaluations Returned

4.6 / 5 =Overall quality of the virtual field day

4.7 / 5 = Effectiveness of the speaker(s)

4.5 / 5 = Effectiveness of the technology used

#### **Virtual Field Day Attendees\***

Total Attendees: 54 Average Age: 52

States represented (besides Iowa): New York, Ohio, Wisconsin

- Farmer/operator: 1
- Landowner: 4
- New to farming: o
- Would like to farm: 1
- Government agency staff: 4
- Student/educator: 3
- Agriculture Business Professional: 2
- Other: 2

<sup>\*</sup>Attendees could select multiple categories to describe themselves when completing the evaluation.



What is the width of this buffer?

What species of trees would be appropriate for a lower pH in the soil?

Do you also design understory species (like grasses or forbs) in the saturated buffer? Are there cons and pros of having, say, native prairie under the tree canopy?

Any issues with mammal browsing causing tree damage?

What are the symptoms of unmatched trees to soil conditions?

How soon do you see the impact?

Was this an established buffer? Did you have to take crops out of production?

Comparison of N reduction compared to non-forested saturated buffer?

How many seedlings per acre?

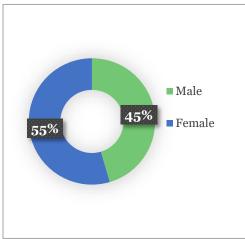
How many years of herbicide use are needed?

Did you seed between the trees?

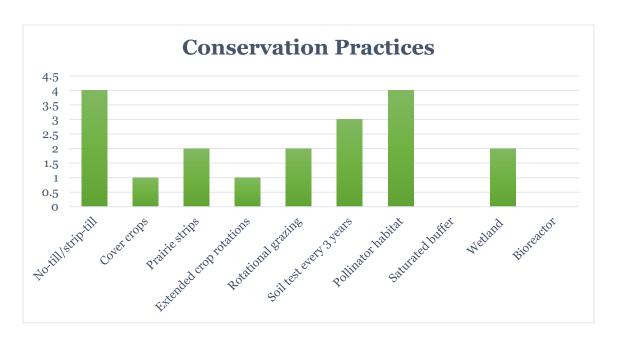
Timing of native grasses establishment vs. tree planting time?

At what point do you start thinning out the direct seeding?

Where is the site located?



	Actively Farming	Rent Tillable Acres from a Landlord	Lease Tillable Acres to a Tenant	Conservation Measures Built into Leases
Number of respondents	2	2	2	2
Total acres	300	NA	255	NA



Respondents reported a total of 455 no-till/strip-till acres on which they have been using no-till/strip-till for an average of 10 years. Respondents reported a total of 200 cover crop acres for fall 2022.