

A photograph of a field of tall green grasses and yellow flowers. A bird with brown and black mottled feathers is perched on a green stem in the center-left. The background is a clear blue sky. A white rounded rectangle is overlaid on the top half of the image, containing text.

# **STRIPS Cooperator Survey: 2018 Results**

Sociology Technical Report 1057 • May 2019





The research summarized in this report was conducted as part of the STRIPS project. STRIPS stands for Science-based Trials of Rowcrops Integrated with Prairie Strips. Since 2007, the long-term project has been measuring the impacts of strategically planting prairie strips in crop fields at the Neal Smith National Wildlife Refuge in Prairie City, Iowa. Results have shown that small amounts of prairie can yield disproportionate, multi-functional benefits to soils, watersheds, wildlife habitat and biodiversity.

Find more information about the STRIPS project online at <http://www.prairiestrips.org>.

Learn more about the Neal Smith National Wildlife Refuge at [https://www.fws.gov/refuge/Neal\\_Smith](https://www.fws.gov/refuge/Neal_Smith).

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## **Introduction**

The STRIPS (Science-based Trials of Rowcrops Integrated with Prairie Strips) project has developed collaborative partnerships with more than 35 farmers and landowners who have integrated prairie strips into their farm landscapes. One of the STRIPS project's guiding principles is to "create and maintain feedback loops for information sharing among team members, farmer/farm landowner adopters, and other stakeholders." A major goal of these feedback loops is to learn from cooperators who have adopted prairie strips so project staff can help current (and future) cooperators to successfully establish and manage prairie strips.

An important component of those feedback loops is an annual, on-line survey of STRIPS cooperators who have established prairie strips. The purpose of the survey is to learn about collaborating landowners' experiences with the establishment and management of prairie strips to help project staff understand (1) what positive and negative experiences they have had, (2) what information and technical assistance needs they may have, and (3) to learn from their ideas about how the STRIPS team can improve outreach and promotional efforts. The 2018 survey consisted of 10 open-ended questions and two yes/no questions (Q10-11):

### **Experiences with prairie strips:**

- Q1. What have been some of your positive experiences with your prairie strips this past year?
- Q2. What have been some of the challenges with your prairie strips this past year?
- Q3. What advice would you give someone who is getting ready to plant prairie strips?
- Q4. What have other people (e.g., neighbors, friends, crop advisers) said to you about your prairie strips, whether positive, negative, or questions?

### **How else can we help?**

- Q5. What are some of the questions you have about prairies and prairie management?
- Q6. What else can the Iowa State University STRIPS project do to help?
- Q7. What educational events that you attended this past year- formal or informal - have helped you to improve your understanding of prairie strips? In what ways were they helpful?

### **Prairie Strips Promotion**

- Q8. How did you first hear about prairie strips?
- Q9. What can Iowa State University do to more effectively promote prairie strips with farmers and landowners?
- Q10. Would you be interested in hosting a field day in 2019?
- Q11. Would you be willing to show your prairie strips to potential adopters in your area and share your knowledge and experiences?
- Q12. Do you have any additional comments?

The web-based survey was sent by email to 36 cooperators in late February 2019, and the survey remained open until late March. Eighteen cooperators completed the survey for a response rate of 50 percent. This document presents the responses to the questions.

**Q1. What have been some of your positive experiences with your prairie strips this past year?**

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ID	
1	We've seen a diversity of prairie plants, and of insects. Also have seen erosion control benefits.
2	Seeing some new plant species, beehives benefiting from the flower population. Increased number of pheasant population.
3	Having established over 120 acres of new strips in previously aggressive ag fields.
4	Really enjoyed working with Iowa State researchers and am experimenting with more durable seed mix for "traveled" buffer as well as mix for waterways.
5	No erosion below the strips even with 15-17" of rain in late Aug-Sept.
6	I joined [my current employer] in October and have not experienced them first hand. I have however enjoyed communicating with the network of scientists...
7	Working with Tallgrass Prairie Center, [...]. Working with ISU, continued learning from bird and bee studies and also received results of a plant species survey.
8	Expanded ID of species- both in seeding mix and not in seeding mix. The plant audit conducted by Lydia English. Observation of more bees, butterflies and other wildlife species. Reduced weed pressure in my 4-year old strips.
9	When spraying for thistles late summer, there were an amazing amount of monarchs sitting on the goldenrods. Also, this fall, for only 24 acres that we have in strips, my 2 sons and myself came across no fewer than 12 pheasants in a 45 minute walk. Also, a graduate student from ISU did a plant inventory, she found everything there on site that was in our seeding plan, except for 1, but found an additional 4 species that were not even on the seeding plan. Lastly, people that live in proximity to the prairie strips have told me how beautiful the flowers are, how they hear roosters cackling regularly, and I believe it may have been a catalyst to help land on another area of our lakes area adopt [prairie strips] as well.
10	When people hear what we are doing, they ask questions about it.
11	We are doing this as a demo by ISU.
12	I think they are beautiful as well as functional.
13	I would say the beauty of them. They are coming into their own and the diversity of species has been great.
14	Yes, more monarch butterflies----and seemingly more quail on farms---AND amazing beauty.
15	All the butterflies and bees that are in it.
16	Soil erosion where the strips are has been greatly reduced, I have seen lady bug populations increase which has lowered infestations like spider mites and other pests which can hurt soybean yields, there is very little invasion of the prairie strips into the crops. Its overall a very positive experience.
17	We have several strips...in their second year. They were put in place after we took out rows of Bush Honeysuckle, which are invasive.
18	During field days, people are very interested about the prairie strips and love the fact of native Iowa plants being used to try and help agriculture.

**Q2. What have been some of the challenges with your prairie strips this past year?**

ID	
1	[Prairie strips] make it more difficult for our operator, and for custom chemical applicator.
2	Canadian thistles.
3	Severe drought after late May. Weed pressure.
4	Brome grass- always.
5	None.
6	N/A
7	Controlling weedy invaders. Timing and persistence required.
8	As always, foxtail dominance along Strip borders due to herbicide drift from adjacent row crops. Rainy, cool fall limited site prep of next two strip installations.
9	Thistles, thistles, thistles.
10	Dry planting time, germination in question.
11	Establishment.
12	In the newer ones I have thistle and mareetail issues.
13	Making sure there are not too many weeds in them to continue maintenance.
14	Yes, brome invades in areas that were not burned---Canada thistles have been problem near crop field edges.
15	Getting a new strip established.
16	It's always challenge to plant, spray, and combine the crops but patience is the key.
17	You never want trees or shrubs cut. You want them pulled or dozed out.
18	Definitely spraying herbicide and keeping control of weeds on the edges of the prairie.

**Q3. What advice would you give someone who is getting ready to plant prairie strips?**

ID	
1	It's ideal for ease of farming to have [prairie strips] run straight, rather than on contour. Be patient! Establishment takes a couple of years. Mow weeds often the first and second years. Hand weeding could be helpful in some cases. Also, the vegetation will change from year to year.
2	Don't wait, get it done, seek out guidance if this is the first seeding, plant seeds very shallow, less than 1/4" deep.
3	Don't skimp on site prep and mowing for establishment. Be patient.
4	Kill the brome back at least 3 times prior to seeding or start in field that had been in soybeans prior year.
5	Please, go ahead and do it. Best thing I ever did.
6	Keep in mind size of your equipment and how you want to farm not just for today but for the future as well.
7	Learn which weeds to control and do it or hire someone to do it for you.
8	Learn all you can about site selection, site prep, seed mixes and seeding practices- by reading published articles, talking to several experts, etc. seek financial assistance from Trees Forever, NRCS, IDALS, etc. Don't expect to get it right the first time, be patient, be committed to maintenance.
9	Plant in the fall after harvest, mow 3 times first year, 2 times second year, then let it go and burn as per the plan.
10	Take advice from those who have done it. Listen to ISU staff who have been working with this program. Give it time to develop.
11	Use frost seeding and fire.
12	Start with a clean field.
13	Mark them off with GPS then actually run a planter between the strips to mark them well.
14	Site prep is very important-be patient-each year will get better after establishment year.
15	Try to get a nearly weed-free place to seed.
16	It's very important to place your strips in areas that will help with soil erosion but also make sure your planter and spray equipment spacing will work well with where the strips are placed.
17	If you want them to germinate and come up faster, broadcast seed them in the winter.
18	Be sure to plan the placement of the [prairie] strips and know that's where you want them.

**Q4. What have people (e.g., neighbors, friends, crop advisers) said to you about your prairie strips, whether positive, negative, or questions?**

ID	
1	Occasional questions. Custom chemical applicator has been cooperative.
2	Not too much, very few neighbors left in the neighborhood.
3	1) Very progressive and intriguing 2) looks like a bunch of weeds 3) Make sure the strips match up with the equipment needs of the producer.
4	All positive- great for wildlife.
5	Crop advisor has been very interested in them. Neighbors think I'm crazy, I think.
6	Pheasants Forever really enjoyed seeing the pheasant community on the farm tract that the strips are on.
7	Not much, I don't know if they consider it.
8	People are impressed when they learn about my strips, but most people aren't really knowledgeable. Most positive responses are from non-farming environmentally-minded people.
9	Mostly positive all around, a few questions about drainage and how it affects their land.
10	They are curious to see how it develops and if any benefits are gained. FS has reached out to us to use it as a demonstration/field day area.
11	No comments.
12	I have not received any comments.
13	They are not visible from the road but one new neighbor said when she saw the prairie strips sign on our corner, "I knew you were conservation minded!"
14	N/A
15	They are amazed at all of the wildflowers.
16	Do prairie strips really work? Is prairie better than grass strips? Does prairie invade your crop ground and cause yield loss? When should you move your strips? How long does it take to establish prairie strips? How often should you burn or bale the strips? Have I seen obvious advantages to having strips? If you bale prairie will cattle eat it?
17	N/A
18	N/A

**Q5. What are some of the questions you have about prairies and prairie management?**

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ID	
1	Will [prairie strips] become a sink that lures pollinators, which could be killed by insecticides on nearby fields?
2	Perhaps some guidance about CRP conversion to prairie species from brome grass?
3	N/A
4	Are there native early season grasses that will outcompete brome so we don't have to continue to spray every few years with glyphosate?
5	None.
6	I'm curious how we can make mechanical harvest easier for more added value products from the [prairie] strips.
7	Which herbicides to use for what and when.
8	Want to know more about effectiveness of prairie strips on hilly, complex, contour-planted fields- lots of point rows, some terraces/mini-dams, etc.
9	Any additional thoughts on thistle management would be appreciated.
10	None.
11	None.
12	N/A
13	Not much now 5 years into the project.
14	Worried about reliable seed sources---without invasives.
15	Is fall a better time to seed than spring?
16	I don't have any questions with ISU's help our strips project has been going on for [...] years and I feel it has been a success. I hope we continue to learn more in the future.
17	I don't have any. We plant dozens of acres on our wildlife areas every year.
18	Would the prairie strips make good waterways or would it be too much moisture to establish and maintain?

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**Q6. What else can the STRIPS project do to help?**

ID	
1	Keep getting the word out to others to build support in the agricultural community.
2	Keep up the good work.
3	Maintain channels to share information (websites/chatrooms/field days).
4	Publish seed mixes for different soils and soil conditions.
5	Just keep up the good work.
6	Help me align what species are good for forage or other value-added products.
7	You are doing great. Thanks!
8	Nothing. The team is excellent.
9	Make the science more understandable to a non-scientific person.
10	Keep doing what you're doing. Maybe more PR, news releases, social media, Facebook page.
11	You are doing what we need.
12	Best management practices.
13	More than anything continue to share information about the ongoing effectiveness of the strips and what you are finding out through your research.
14	Doing great.
15	Locator for custom seeding and good seeding mixes.
16	I feel moving the strips and having smaller strips will make it cost effective for farmers. I feel farmers will want to know what yields will be after the strips are moved. More research is needed in this area.
17	Promote dormant seedings.
18	Keep up the good work.

**Q7. What educational events that you attended this past year—formal or informal—have helped you to improve your understanding of prairie strips? In what ways were they helpful?**

ID	
1	Program by Laura Jackson at [...]. Good discussion of weed control.
2	The prairie strips cooperators field day, the discussion (most of it) about controlling thistles, offered some insight on how persistent thistles can be and to stick with the control process.
3	Soil health and cover crops seminars that have shown me how cover crops and prairie strips can complement each other greatly to meet resource needs.
4	Working with researcher when she was here taking samples was very educational.
5	Crop Advantage meeting.
6	N/A
7	N/A
8	STRIPS Cooperator Meeting, PFI annual conference.
9	The annual STRIPS meeting is always helpful. Also, The Okoboji Blue Water symposium was helpful. A field day that was hosted in my field.
10	None.
11	My only involvement is on farm. We have hosted some field day events.
12	N/A
13	Was not able to attend.
14	N/A
15	A prairie burn.
16	Nothing formal this year. I have gone a lot in the past. It's always interesting to hear what researchers and farmers have to say about strips. My understanding comes from first-hand experience. [...] years.
17	N/A
18	Field days at research farms and they were very helpful.

**Q8. How did you first hear about prairie strips?**

ID	
1	Neal Smith National Wildlife Refuge project.
2	A booth at the Conservation Districts of Iowa commissioners meeting in West Des Moines 4 or 5 years ago.
3	Through ISU demo site in MO.
4	Not sure.
5	Read an article in Wallace's Farmer.
6	It was years ago I heard about it. Perhaps at a trip to Neal Smith or a conference.
7	At the Leopold Center.
8	Read an article in Iowa Farm Today (I think) in 2013. Was one of the first people to contact Lisa Schulte Moore about participating.
9	Article in the Des Moines Register.
10	IACCB District meeting.
11	Requested area at the research farm.
12	Went to a field day, but I have a [prairie] strip that's [...] years old.
13	At an ISU seminar.
14	Lisa Schulte-Moore
15	From Lisa!
16	14 years ago when ISU and the Neal Smith wildlife refuge decided to start the project and I was chosen to be the strips project farmer.
17	We are involved in a watershed management program in [...] County.
18	Iowa State Research Farms.

**Q9. What can ISU do to more effectively promote prairie strips with farmers and landowners?**

ID	
1	Continue to coordinate with Practical Farmers of Iowa and other groups. Reach out more to Farm Bureau and commodity groups.
2	The million dollar question.
3	Radio and web advertising.
4	Work with local county conservation offices and NRCS offices to put on regional presentations during the winter when farmers are more likely to attend. That is still not a substitute for field days- which I am always happy to do.
5	Keep publishing stories.
6	Come use our strips...for field days.
7	Continue seeing opportunities to network.
8	Getting prairie strips listed as a qualifying practice in the 2018 Farm Bill is huge. Educating county NRCS agronomists will help. Continue to hold/collaborate with Cooperators to hold Field Days.
9	Make the process easier to go through, have specific meeting on the monetary benefits to the farmer regarding prairie strips. As a landlord, my own personal experience was that due to the timing of our prairie strips, the dollar per acre helped bring up the overall rent per acre when the cash rent to my tenant went down, as the rent per acre for the strips is about 15-20% higher than the cash rent to my tenant.
10	PR as mentioned previously. Facebook page dedicated to STRIPS would be cool to have people share stories.
11	Field days, NRCS.
12	Field days.
13	Highlight the research in publications and the press.
14	Keep up the charge.
15	Sponsor field days at established [prairie strips] around the state.
16	Possibly more field days, more magazine articles, reach out through social media.
17	Promote broadcast seeding in January and February.
18	News and field days.



**Q10. Host field day 2019?**

	Frequency	Percent
Yes	14	64%
Maybe	4	18%
No	4	18%

**Q11. Willing to show strips to potential adopters?**

	Frequency	Percent
Yes	17	94%
Maybe	1	6%
No	0	0%

**Q12. Do you have any additional comments?**

ID	
1	THANKS!
2	Not right now.
3	N/A
4	N/A
5	Thank you very much.
6	Let's work on researching the value-added products so the landowner isn't making the decision based on subsidies but rather a portfolio diversification.
7	N/A
8	I will hold a field day once my next set of strips are established.
9	I think this is still the answer to so many issues that the Midwest agricultural sector is facing in today's world; soil erosion, water quality, plant and wildlife diversity, increasing the percentage of wild spaces in the countryside, nitrate reduction. There is nothing else that I see currently or on the horizon that is as beneficial to all stakeholders in our Midwest way of life.
10	Can't wait until it matures to see wildlife benefits.
11	N/A
12	I am planning a field day [...].
13	Not at this time.
14	Pleased that prairie strips are getting more press.
15	Nope.
16	I would be happy to help ISU with a field day at the Neal smith Wildlife Refuge and talk to farmers and landowners like we have in the past.
17	N/A
18	N/A



Sociology Technical Report 1057 by J. Gordon Arbuckle Jr. with design and layout by Renea Miller.

The Science-based Trials of Rowcrops Integrated with Prairie Strips (STRIPS) has many project partners. These presently include Iowa State University College of Agriculture and Life Sciences, Leopold Center for Sustainable Agriculture, Iowa Department of Agriculture and Land Stewardship, Iowa Flood Center, Iowa Soybean Association, Prairie Rivers of Iowa, The Eastern Iowa Airport, The McKnight Foundation, Trees Forever, University of Iowa Biomass Fuel Project, University of Northern Iowa Tallgrass Prairie Center, USDA-ARS National Laboratory for Agriculture and the Environment, USDA Farm Service Agency, USDA Forest Service, USDA National Institute of Food and Agriculture, USDA North Central SARE, U.S. Fish and Wildlife Service, U.S. Geological Survey, Walton Family Foundation, Whiterock Conservancy, as well as over 35 private farmers and farmland owners. Our partner list is updated over time at [www.nrem.iastate.edu/research/STRIPS/content/partners](http://www.nrem.iastate.edu/research/STRIPS/content/partners).