

An aerial photograph of a field. The field is divided into rows of crops, likely corn, which are arranged in a grid pattern. In the center of the field, there is a strip of land that is overgrown with wildflowers and tall grasses. The wildflowers are primarily yellow, with some purple and white ones scattered throughout. The overall scene is a mix of organized agriculture and natural, wild growth.

# **STRIPS Collaborator Survey: 2020 Results**

Sociology Technical Report 1060 • April 2021





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).

#### **Suggested citation:**

Arbuckle, J.G. 2021. *STRIPS Collaborator Survey: 2020 Results*. Sociology Technical Report No. 1060. Ames, Iowa: Iowa State University Extension Sociology.

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## Introduction

The STRIPS (Science-based Trials of Rowcrops Integrated with Prairie Strips) project has developed collaborative partnerships with more than 50 farmers, landowners, and organizations that 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 collaborators who have adopted prairie strips so project staff can help current (and future) collaborators to successfully establish and manage prairie strips.

An important part of those feedback loops is an annual, on-line survey of STRIPS collaborators 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 2020 survey consisted of 10 open-ended questions and three yes/no questions (Q11-13):

### 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 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 ISU do to more effectively promote prairie strips with farmers and landowners?
- Q10. If you have recommended prairie strips to others, what motivated you to recommend them?
- Q11. Have you ever recommended prairie strips to other farmers and/or landowners?
- Q12. Post-pandemic (and/or maybe virtually), would you be willing to show your prairie strips to potential adopters in your area and share your knowledge and experiences?
- Q13. Prairie strips are now eligible for annual rental payments through the Conservation Reserve Program (CRP). Would you be interested in establishing CRP prairie strips?

The web-based survey was sent by email to 54 collaborators in early March 2021, and the survey remained open until late March. Twenty-four collaborators completed at least some of the survey for a response rate of 44 percent. This report presents the responses to the questions.

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

ID	
1	Still no erosion in the fields- they are working great!
2	I was unable to participate in the program because the FSA would not accept the seed I needed to use to protect a nearby remnant. I used the seed anyway and planted in a different configuration than NRCS would have required and am happy for that adaptation.
3	Reduced erosion in environmentally sensitive areas.
4	Our prairie strips were just seeded late last Fall, so no experiences so far.
5	[We] converted 2.2 acres along a dilapidated fence line and wet, grassy drainage areas above two ponds into a new, huge prairie strip. Also, the degree of diversity of grasses and forbs in our existing prairie strips became much more visible in 2020. I identified 5-6 more species that I hadn't seen in the prior 5 years.
6	NR
7	I enjoyed having one of your crew out to shoot drone footage of my STRIPS. Got about 25 new acres accepted into pollinator habitat....technically not STRIPS but will include some existing ones and other buffers that will get converted. Way bigger seeding project than I have ever done in one year.
8	Excellent growth and diversity in general
9	We have seen how the STRIPS control erosion. Not scientifically measured, but readily observed. The diversity of the prairie vegetation and insects is gratifying. Good use by birds and other wildlife. Positive questions and comments from neighbors and passers-by. Our STRIPS have been used as research sites by a number of students. Photos of our STRIPS have been used in several publications.
10	Seeing some of the prairie species growing in the STRIPS
11	NR
12	Observational increase in pollinator usage. Some slowing of surface runoff.
13	The abundance of certain flowers was stunning.
14	Adds well to the wildlife habitat on a public area.
15	One has been Tim's great work laying out the plan for our farm. Another has been getting this project off the ground (so to speak) six long years after reading Mark Bittman's NY Times article in which I learned about the existence of STRIPS.
16	Attraction of pollinators to my prairie strips
17	Burning strips helped with weed control
18	Good control of water erosion
19	Expanding participation through the new CP-43 practice.
20	I've seen more wildlife activity in the strips.
21	Watching the summer bloom. And then in the fall, shooting several rooster Pheasants.
22	Nice aesthetics with blooming flowers right next to the roadway. Good diversity too.
23	I didn't travel to Iowa much this year, so I didn't visit the farm. I did get to talk about them in quite a few Zoom meetings, including the PFI conference and other PFI meetings!
24	NR

Note: NR = no response

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

ID	
1	None.
2	Getting up to the very day I had everything prepped for seeding and being turned down was a challenge. My negotiations with both offices, NRCS and FSA were cordial and overall fine, but the last level of interpretation meant that I was unable to participate with my two acres. I paid for spraying out the cover crop in anticipation of being able to participate, but their inability to approve bulk prairie seed came down to a set of "requirements" for my seed provider that are completely impractical for him to meet.
3	NR
4	None
5	Invasive woody plants- mulberry trees and cottonwoods- gradually establishing. We have one section of an original prairie strip that still has a lot of brome grass, which we have not successfully eliminated.
6	NR
7	Brome....always brome.
8	Brome and reed canary competition.
9	Requires much care by custom chemical applicators to follow the contours and avoid over-spraying of STRIPS. Point rows can be a nuisance for the farm operator.
10	We had STRIPS implementation (14 acres) that took a lot of planning and work-- it was complicated.
11	Canada thistle continues to be an issue, although I'm making progress.
12	Negotiating around strips with equipment.
13	Did not burn because tenant planted corn on corn.
14	Making sure drift spray doesn't kill good species.
15	I can't speak to that directly. I live in California and have been stuck here all year because of the pandemic. In any case, I'm not involved in day-to-day issues in the same way that our farm manager and the operator are. From my point of view, all has gone smoothly this past year.
16	The newly seeded strip had a hard time getting started because of the drought.
17	Weeds.
18	Weeds.
19	Perception by landowners/farmers and certain individuals with FSA that prairie strips interfere with sub-surface drainage tile systems. Sometimes lackluster support by FSA CRP program administrators. Local contractors willing to custom plant small CRP tracts.
20	This year as in the past Canada thistles are an issue.
21	Some Canada thistles moved into the borders, especially adjacent to grass waterways.
22	Still a few Canada thistles, but fewer every year.
23	I think Canadian thistle continues to be a problem.
24	NR

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

ID	
1	Hurry up & plant them- they are wonderful!
2	I happily encourage everyone to participate in the program and encourage them to get their paperwork started early, stay in touch with the offices, work ahead of time with whoever is going to do the seeding. My circumstance with a native remnant population to protect is not likely replicated many other places.
3	Work with ISU on the initial planning, they were great.
4	Do it!
5	Talk to as many experts as possible in planning your strips. Take the required time and do the work to fully prepare the site prior to planting your prairie strips. Use a very diverse, appropriate eco-type seed mix. Be prepared to mow and care for the strips in Years 1-3 in order to get good establishment.
6	NR
7	Kill all the brome....at least 3 times before you seed....then go for maximum biodiversity and include lots of pollinators.
8	Need to do good site prep and periodic high mowing.
9	Think PATIENCE! It will take a couple of years to look like a prairie. Choose a diverse seed mix. Probably easiest to seed into soybean stubble, rather than corn.
10	Be totally prepared before you start planting. Calibrate your drill as accurately as you can.
11	Go for it. Don't expect much for the first two years.
12	Size according to equipment, but go a bigger in width than you think you need to afford loss on margins. Make sure you're doing your own spraying!
13	Use a planter to get the distance right between strips.
14	Make them wide as possible. Use them as an educational tool for neighbors.
15	Re the actual planting, I can't give advice.
16	Be aware that it may not look like you are getting a great stand the first year so be patient.
17	Stay at it. It takes time.
18	Follow planting instructions and first year maintenance.
19	Target headland areas with concentrated flow. Clipping the prairie strip during the first 2-3 years of establishment is key to reducing weed infestations.
20	Be patient growth is slow . Big differences 3 years later.
21	Pay particular attention to design them so it is easy to farm the adjacent cropland. This will help reduce disturbance in the strips, especially from the sprayers.
22	If you know your native species, you'll better appreciate the project. It won't look like a weed patch if you understand how natives are supposed to look.
23	Get the most diverse and locally-sourced seed mix that you can find and afford. I think it's made a big difference in the success of our plantings.
24	NR

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

ID	
1	Neighbors think I am nuts- but I'm used to it. Seed dealer wants to see them and thinks more people ought to have them!
2	Nothing has been said to me.
3	No real questions, just inquisitive.
4	Nothing yet.
5	Our friends love the prairie strips for the colorful beauty and the fact that they are providing healthy habitat for insects, birds and animals on our farm and in the area.
6	Like seeing all the wildflowers, appreciate the beauty of the grass, like hearing the pheasants cackle in the distance, like what it is doing to help the water quality of nearby Big Spirit Lake.
7	All positive....I take photos and post on Facebook throughout the season....people love seeing what is happening.
8	NR
9	Most comments have been positive, or curious. Some concerns with farm operator and custom chemical applicator about not being allowed to drive across the STRIPS.
10	Generally positive. Some thinking that they are curious, maybe somewhat whimsical, more trouble than the benefit provided.
11	NR
12	1. They look really good 2. How can we make our money back on taking that out of production? 3. Can STRIPS allow for lower input costs? 4. They look like a pain to farm around!
13	One neighbor loves them because they believe in establishing places for wildlife.
14	People just wonder what they are when they drive by and see them.
15	When I first brought up STRIPS to our then-farm manager, he knew little about the program. Later, I attended a Hertz seminar for farm owners and spoke to one of their administrators about STRIPS. He too was surprisingly uninformed ("You know more about this than I do."). Our current farm manager, however, is knowledgeable and enthusiastic. My family members are generally positive, and my friends tend to be enthusiastic.
16	They like the looks of the mature strips.
17	NR
18	Nothing.
19	They think headland prairie strips makes sense due to elimination of end rows and targeting EOF losses.
20	I haven't heard of comments lately.
21	NR
22	No comments or questions have been asked of me.
23	Our farm operator family continues to enjoy the beauty. They have only had positive things to say about them.
24	NR

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

ID	
1	I mowed the strips again last year in late summer. No serious problems and stands are still good.
2	None at this time.
3	None.
4	What are all of the steps we should take in the first two years of establishment?
5	I could use more hard data on the benefits prairie strips provide in a corn-soybean row cropping system. My farm operators and many farm operators have a hard time correlating the benefits when the strips are “set-aside” acres versus cover crops which are incorporated into the working acres.
6	Best practices for thistle control? In what way does it benefit the adjacent row crop fields, if at all?
7	Iowa suppliers of native seed do not seem to be doing well. I have had to expand into MN and WI for seed sources to get max biodiversity and hold down cost. Not sure what can be done to promote more suppliers and help keep seed costs down.
8	Still need to find good plant species mix to withstand winter heavy snows.
9	Can we expect soil health benefits we hope the STRIPS provide to extend into adjacent crop ground?
10	The first, second, and third year mowing regimen.
11	How do you keep brome from encroaching?
12	NR
13	None.
14	None.
15	I recently read John Madson’s outdated but wonderful book <i>Where the Sky Began</i> , which answered (or sort of) many of my botanical and historical questions (e.g., What do different types of grasses, corn included, interact with the environment? How do STRIPS differ from virgin prairie? How does today’s prairie ecosystem compare to that of ten, fifty, one hundred years ago?). As a non-specialist living at a distance, I’m also curious about the experiences of farmers, farm managers, agronomists, and other owners as changes occur, problems crop up, etc. It would be great if there a listserv or forum in which non-specialists could participate. Finally, I’m curious about a broader vision for the US prairie, given climate change, other efforts to mitigate the effects of monoculture, etc.
16	Is there a mix that will provide more forbs in later years? They look good in year 3, but by year 6 the grasses have choked many of the flowers out.
17	NR
18	NR
19	Which seed mixes can minimize potential issues with sub-surface tile drainage?
20	Is there any way to control volunteer trees?
21	NR
22	No questions.
23	NR
24	NR



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

ID	
1	Just keep helping others to establish them- thank you again, Tim!
2	Although there are not many populations of native remnants left, paying attention to the genetic library and considering whether to diversify by adding seed from within a reasonable range is something that can be debated by prairie experts and is worth being aware of. Bringing seed from out of range is so common but it's still cringeworthy as we learn more about how important the small libraries of native plants clinging to the margins may be to our future. The soil biology is so poorly understood in terms of how to restart healthier systems- keeping the issue of remnant populations at least in the mix for the STRIPS advisors would be great. The answer that was right for me may not be right for others, but being mindful of the existence of these plants and their insects dependent upon them is important to me.
3	Nothing.
4	Make a field visit later this summer.
5	Continue your research and sharing all new information to quantify the benefits of incorporating prairie into a whole farm cropping system.
6	Give additional info for mid-practice management burn is required, but the land is in a location that prohibits burning for one reason or another (property located too close to houses, inside city limits, farm buildings too close, etc.).
7	Now that things are opening back up you would be welcome to have a field day at my farm in Jackson county....just let me know.
8	Pleased with support and follow up from ISU.
9	Support to date has been excellent!
10	Help with species identification; we planted 38 species.
11	NR
12	Generate real world scenarios where producers can cut inputs.
13	Continue to do more research to promote the benefits.
14	Keep communication coming.
15	See my previous answer.
16	Keep promoting.
17	NR
18	Better seeding recommendations.
19	More research and fact sheets about factors to consider when installing strips in tile drained landscapes.
20	So far they have been very helpful in answering questions.
21	Convince USDA to properly provide financial incentives to producers. Recent changes in CRP programs have de-incentivized most of the CRP programs.
22	No help requested. Thanks for the support.
23	NR
24	NR

**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	Trips to farms with successful prairie strips, helpful to see the end result is well worth it.
2	The 2019 Prairie Strip Cooperator Meeting was excellent- question and answer with other strip adopters. Lydia English's plant audit session was helpful- time spent with her as she identified grasses and forbs; she generously answered my many questions.
3	Prairie field day helped me see how different prairie mixes have different challenges.
4	NA
5	none
6	Didn't attend any.
7	Practical Farmers of Iowa annual conference report on the status of the STRIPS project.
8	Wasn't able to get to your meeting- sorry. Attended several other agronomy field days in Missouri & Nebraska.
9	N/A
10	Annual STRIPS collaborator meetings, field days, time spent in my own STRIPS, observing them over the years.
11	
12	The ladies that were at my field day (Lydia English and Sarah Nizzi) have been great.
13	
14	Iowa Learning Farms Systems Thinking Workshop.
15	N/A
16	Practical Farmers of Iowa conference UNI Tallgrass Prairie Center workshops learn more prairie management tips.
17	Field days.
18	None.
19	

**Q8. How did you first hear about prairie strips? (if you have answered this question in previous years, please feel free to skip it)**

ID	
1	Read about them in Wallace's Farmer magazine. Saw videos.
2	NR
3	NR
4	At a Land and Water event at Drake University several years ago.
5	Read an article in 2013/2014 about the prairie strips research being done at ISU and that the project was looking for farm owners to install prairie strips on their farms. I emailed Lisa Schulte Moore immediately and volunteered to join the project.
6	NR
7	NR
8	NR
9	News story about initial project at Neal Smith NWR.
10	Lisa Schulte Moore presented at a U of MN event several years ago.
11	NR
12	NR
13	NR
14	NR
15	NR
16	NR
17	NR
18	NR
19	NR
20	Tim Youngquist introduced us to them.
21	NR
22	We heard about it through Tim Youngquist.
23	NR
24	NR



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

ID	
1	Field days- news articles.
2	NR
3	NR
4	Work to increase the incentives.
5	Focus on getting prairie strips installed on farms that are visible from major highways to gain more day-to-day visibility. My farm's prairie strips are in the middle of my farm, thus, they are not visible from the road. The only people that know about my prairie strips are those that hear about them by word-of-mouth or publicity. However, if people could see them every day while passing my farm, I think I would get more inquiries and people wanting to visit/see them.
6	Point out that it is now not only a benefit to the land and the soil, but is now also an economic benefit now that it is part of the CRP program. Also, if the practice eventually lessens the amount of pesticides and or herbicide application to adjacent farm fields. And, make a point of "Why try to farm the hard acres?" when all that does is bring down overall profitability of the farm.
7	Field days in cooperation with local NRCS and conservation offices. I think our county conservation department would be happy to host an evening presentation by ISU as well.
8	Keep up the good work. Educate about CRP option now.
9	Continue to cooperate with Practical Farmers and Iowa Learning Farms. Try to reach out to Iowa Farm Bureau, Iowa Soybean Association, Iowa Corn Growers.
10	Get more of them implemented in a wide geographic area and then allow farmers to come and check them out. Write articles in farm magazines. Educate farmers about how STRIPS are effective against high intensity rainfall events which are occurring more often
11	Field days if it again becomes feasible.
12	Continue with field days that demonstrate PRODUCER SUCCESS STORIES.
13	Get more buy in from all institutions.
14	Don't know. More field days.
15	You could publicize the program more widely to the general public. I don't know what percentage of farm owners live elsewhere, but I do know that Hertz, for one, does lots of owner seminars in the Southwest and California, and the one I attended was filled with owners from the San Francisco Bay Area. No one I spoke to (that administrator I mentioned included) knew about STRIPS, nor was it part of the meeting agenda. Another thing you could do, in my opinion, is work with more national and general interest publications to increase public awareness (e.g., Mark Bittman's NY Times article). I'd include women's publications (e.g., Martha Stewart).
16	Keep doing what you are doing.
17	Speak to the economics.
18	More PR.
19	Trainings for FSA and NRCS. There appears to be a large disconnect between the agencies that work directly with the farmers and the research/benefits associated with Prairie Strips.
20	Hopefully they improve water quality and could promote this.
21	Collaborate with NRCS/IDALS staff in local offices to "sell" the practice at the local level.
22	Not sure
23	I'm happy to see a growing connection to members of groups like the Iowa Native Prairie Network.
24	NR

**Q10. If you have recommended prairie strips to others, what motivated you to recommend them?**

ID	
1	Because they have worked so well!
2	I'm an enthusiastic prairie supporter and have long believed prairie plants used strategically can be extremely valuable on the landscape in urban and rural environments and everywhere in between. I've invested 48 years this spring into promoting prairie!
3	NR
4	NR
5	My strong belief that prairie strips will benefit any farm and that all farms should have a holistic conservation plan which incorporates a range of practices with prairie strips being one of those practices. Prairie strips are an especially valuable tool to counter erosion of the hilly land in SW Iowa.
6	I see the benefits first hand and want to share the good news.
7	All aspects of the conservation component....including the idea that they become a refuge to help limit herbicide resistance.
8	I like prairie approach as opposed to tiling and terracing.
9	Our positive experience with reduced erosion and runoff, and increase in wildlife and pollinator habitat.
10	NR
11	All the many benefits and they're beautiful.
12	The current condition of their fields and an expressed desire to slow erosion.
13	Beauty and erosion control.
14	Wildlife habitat.
15	It's a great and necessary program.
16	My love of them.
17	NR
18	Need for soil protection.
19	Disproportionate benefits for water quality, wildlife and biodiversity.
20	NR
21	I see their value to protect the soil, improve water quality, and increase diversity of insects and wildlife.
22	Knowing that native roots hold the soil and result in better water quality. They also provide good habitat and wildlife cover.
23	I want to see more prairie in Iowa, anywhere it can be encouraged.
24	NR

**Q11. Have you ever recommended prairie strips to other farmers and/or landowners?**

	Frequency	Percent
No	4	13.8
Yes	19	65.5
No response	6	20.7

**Q12. Post-pandemic (and/or maybe virtually), would you be willing to show your prairie strips to potential adopters in your area and share your knowledge and experiences?**

	Frequency	Percent
No	1	3.4
Yes	19	65.5
Maybe	3	10.3
No response	6	20.7

**Q13. Prairie strips are now eligible for annual rental payments through the Conservation Reserve Program (CRP). Would you be interested in establishing CRP prairie strips?**

	Frequency	Percent
No	2	6.9
Yes	4	13.8
Maybe	5	17.2
I already enrolled prairie strips in CRP	10	34.5
No response	8	27.6



Sociology Technical Report 1060 by J. Arbuckle with design and layout by Renea Miller.

The Science-based Trials of Rowcrops Integrated with Prairie Strips (STRIPS) is supported by more than 50 institutional partners. 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).