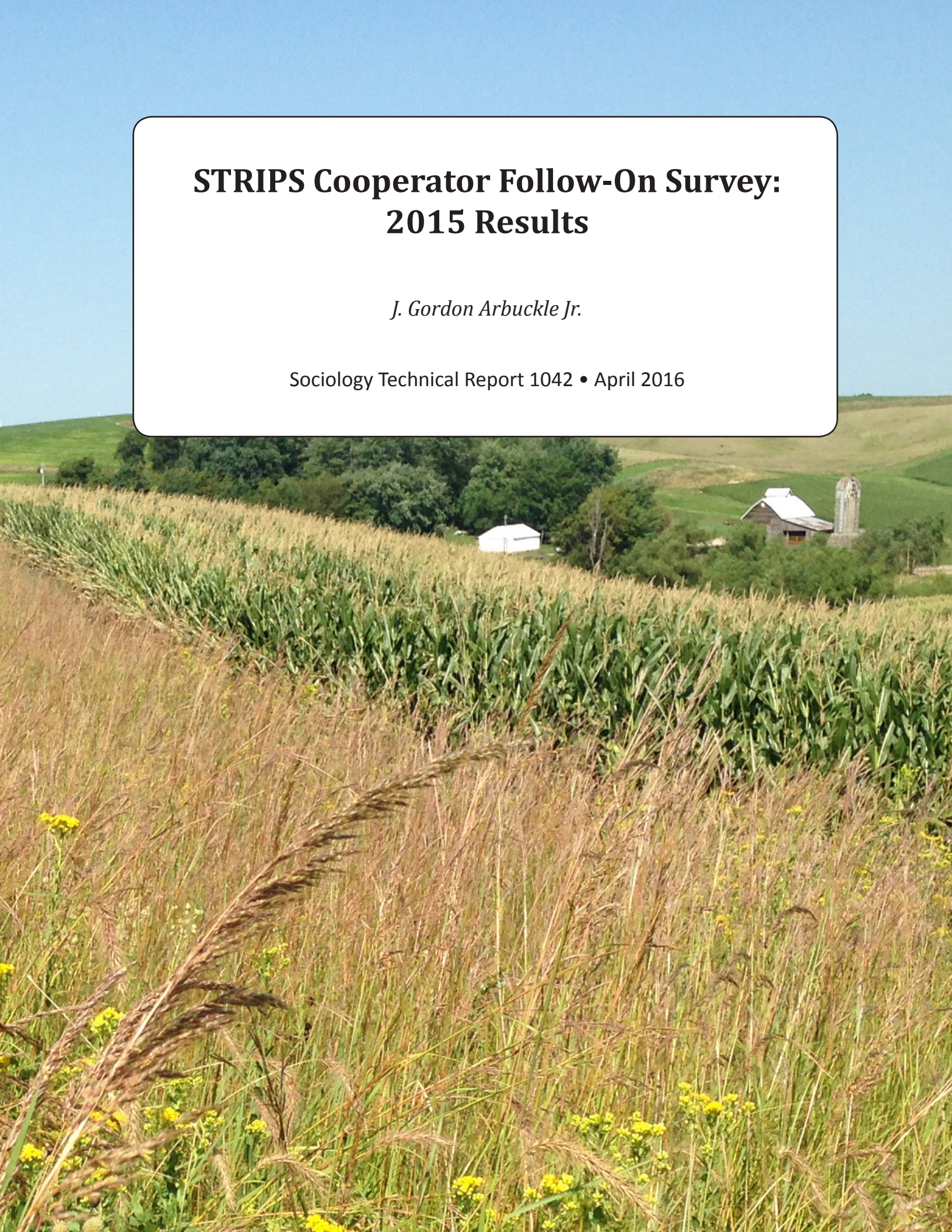
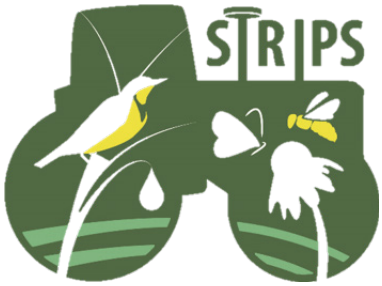
STRIPS Cooperator Follow-On Survey: 2015 Results

J. Gordon Arbuckle Jr.

Sociology Technical Report 1042 • April 2016





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 www.prairiestrips.org.

Learn more about the Neal Smith National Wildlife Refuge at www.fws.gov/refuge/neal_smith.

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Introduction

This survey was conducted to support the STRIPS project's guiding principle to "create and maintain feedback loops for information sharing among team members, farmer/farm landowner adopters, and other stakeholders." The overall purpose of the feedback loop is to learn from collaborators so project staff can help current (and future) collaborators to successfully establish and manage prairie strips. The purpose of the survey was to learn about collaborating landowners' experiences with the establishment and management of prairie strips to help project staff understand what (1) positive and negative experiences and (2) information and technical assistance needs they have. The survey consisted of six open-ended questions and one question asking cooperators if they would be interested in receiving periodic emails with prairie strips management reminders and tips. The questions were:

1. What have been some of your positive experiences with your prairie strips?
2. What have been some of the challenges with your prairie strips?
3. What would you do differently if you planted new prairie strips?
4. What advice would you give someone who is getting ready to plant prairie strips?
5. What are some of the questions you have about prairies and prairie management?
6. What else can the Iowa State University STRIPS project do to help?
7. Would you be interested in receiving periodic emails with management reminders and tips for your prairie strips?

The survey was sent by email to 25 collaborators in mid-August 2015, and a reminder was sent in early September. Ten collaborators completed the survey. This document presents the responses to the questions.

Q1. What have been some of your positive experiences with your prairie strips?

- Once established they seem to have increased biodiversity, particularly birds and pollinators. Cost effective compared to terraces. Helped in keeping contours in place. Aesthetically pleasing. Easy to move equipment through compared to a terrace.
- Positive Experiences: A couple of wildflowers have developed in the STRIPS, and there has been more wildlife activity.
- Learning the benefits of the prairie species for wildlife.
- The excitement of placing something new and beautiful on our farm that does work to help our soil. The people I have worked with have all been positive and enjoyable to work with.
- I planted one set of prairie strips about 18 months ago - they are doing great. I will be planting more next year and will be extending the concept to in field waterways as well.
- Less soil loss.
- Easy to install.
- I liked personally meeting with the STRIPS staff. The one-on-one interaction was great. I am new to the STRIPS project. I was very interested in the information that was presented at the stakeholder's meeting.
- Nice to see the prairie plants growing and replacing crops and invasive grasses—seems to be more butterflies—and songbirds—STRIPS are more aesthetically pleasing than terraces.
- I've seen some natives coming up the first year. Maintenance has been manageable.

Q2. What have been some of the challenges with your prairie strips?

- Dealt with rill and some ephemeral gully erosion in first two years. Patience while establishing a stand. Resistance from NRCS tech and some neighbors because it's a new practice. I think their feeling was my implementing a practice intended to help with wildlife and water quality, I was acknowledging a problem that they are in denial on.
- Keeping the weeds mowed down, and spraying around the strips.
- Not knowing if I'm managing the seeding properly, mowing on time, etc., setting the seeder correctly for proper amount of seed per acre. Follow-up along the way for management decisions.
- Getting their placement right, will have to adjust and replant this fall. Poor first year establishment.
- We had some washout at the end of two of the strips after a hard rain that needed some repair.
- Weeds.
- None.
- I think our prairie strips may need to be reevaluated. I would like to know what else [redacted] can do to get them thriving. They seem to be very weedy to me. I think prairie strips provide a great service for water quality and I would like to see us improve on our maintenance of the area if we can.
- Seems hard to kill brome and reed canary—will take time.
- There are lots of annual weeds, but I expected that. Tenant farmer who mows around crops has mowed natives pretty low. Hopefully the next mowing will be done by someone else.

Q3. What would you do differently if you planted new prairie strips?

- Spend more time looking at a soil map vs. only laying out contours. Use vertical tillage and a roller instead of a drill. And, use them as part of a system that also includes cover crops and some diversion terraces.
- Plant them in straight rows instead with the contour.
- Plant more forbs. Address concerns about potential herbicide carry over.
- Not have a cover crop and work the ground just a bit more to make for a better seed bed.
- The first time I think I had about 30-40 species in the mix–next time it will be closer to 150 and will be more of a pollinator mix. I will separate some of the species that like wetter areas and use those predominantly in the water ways.
- Nothing.
- Nothing, all went well.
- I was not here when the strips were installed but I feel maybe they should have been monitored more closely by my staff to keep the grass and weeds better controlled.
- Get a better kill on grasses before planting.
- Have tenant involved in meetings so he understands the establishment process.

Q4. What advice would you give someone who is getting ready to plant prairie strips?

- Work with Tim on layout. Talk with NRCS about making them part of CRP continuous sign up. Use a nurse crop so you can see where they are.
- Keep weeds mowed down and to monitor it closely to make sure everything is going as planned.
- Lots of research! Ask lots of questions of those in the know! Use caution, you only have one chance to seed expensive seed.
- Take the long view, do not expect quick results. Make sure the strips are wide enough to handle some spraying overdraft.
- Burn the old strips and then hit them with glyphosate twice before planting. I prefer to buy species separately and make my own mixes using wet sand and then hand broadcast–works very well that way. Mix some annual rye in to have it green up quick. The first year mow but leave narrow strips unmowed to allow the annuals to propagate. Then try to burn and do touch up spraying in the early spring every other year–preferably after a bean crop to make fire control easier.
- Mow enough to keep weeds from going to seed.
- Get a good seedbed prepared.
- No response.
- Be patient—it takes time to establish prairies—and don't over mow in establishment year.
- Be patient. Expect weeds and mowing control regularly the first 1-3 years. Learn your prairie seedlings and challenge yourself to identify them early.

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

- Burn management. Best mixes for different regions.
- N/A.
- Maybe a handy "how to guide" online or in print. Help with proper expectations. Most folks don't have experience with seeding. A list of custom seeders might be helpful.
- I am thinking that these will require more management than a block of prairie. Hopefully it will be worth it in the long run.
- Still looking for a native mix of short species that will stand up to occasionally being driven on.
- Nothing.
- Keeping it mowed to control weeds.
- I would benefit from having a maintenance guideline to use. It would be helpful to know the proper times to mow, install, and when to perform any other maintenance needs for the prairie strips.
- Will there be cost shares in future?
- What's the best management protocol for controlling reed canary grass?

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

- Have free beer at next year's meeting and keep up the good work.
- N/A.
- Not sure until I see some results from the seeding?
- At this point I cannot think of anything else.
- We need to move on to planting waterways to native mixes as well.
- No response.
- Doing a good job. Maybe feedback on the seeding.
- My interaction with STRIPS has been positive. Any questions that I have were answered in a timely manner.
- Keep us informed.
- Nothing at the moment.

Q7. Would you be interested in receiving periodic emails with management reminders and tips for your prairie strips?

Yes = 100%

Sociology

STRIPS

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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, US Fish and Wildlife Service, US Geological Survey, Walton Family Foundation, Whiterock Conservancy, as well as over 25 private farmers and farmland owners. Our partner list is updated over time at www.nrem.iastate.edu/research/STRIPs/content/partners.