

A needs assessment survey was conducted to investigate the level of knowledge, desire for supports, and demographics related to communication of prairie strips that exists among professional consultants. The survey asked potential workshop attendants information about their professional appointment, previous experience and familiarity with prairie strips use and communication, and preferences for workshop content and characteristics. Additionally, the survey informs these professionals about the development effort of prairie strips workshops and the opportunity to participate and communicate with the prairie strips team. Collected survey data will aid faculty, technical and Extension staff in workshop design and development.

### **Authors**

Rachael Whitehair is a master's student in the Department of Agricultural Education & Studies at Iowa State University. Contact rachaelw@iastate.edu.

Nancy Grudens-Schuck is an associate professor in the Department of Agricultural Education & Studies at Iowa State University. Contact ngs@iastate.edu.

Cover photo credit: Sarah Hirsh

lowa State University does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran. Inquiries regarding non-discrimination policies may be directed to the Office of Equal Opportunity, 3350 Beardshear Hall, Ames, Iowa 50011, Tel. 515 294-7612, email eooffice@iastate.edu

#### Introduction

Prairie strips is a new conservation Best Management Practice researched by an interdisciplinary team that uses the acronym STRIPS. The STRIPS team (see end note) was recently awarded grants from the McKnight Foundation and the Walton Family Foundation to train Technical Service Providers (TSPs), Certified Crop Advisers (CCAs), and other educators for certification in prairie strips design, establishment and monitoring. More certified technicians will allow more Iowa farmers and landowners to use this conservation tool. This is a three-part certification process. The three parts to obtain certification are listed below.

- Part 1: Attend a full day workshop
- Part 2: Create a website, article, or brochure on prairie strips for your business or organization
- Part 3: Help a farmer or landowner to establish prairie strips

To aid in workshop development, an electronic needs assessment survey was distributed to professionals who consult with farmers and landowners. The professionals were: (a) Extension professionals, (b) Certified Crop Advisors (CCA's), (c) Technical Service Providers (TSP's), (d) Certified Professional Agronomists (CPAg's), (e) Registered Independent Crop Consultants, (f) Prairie Seed Production and Sales Professionals, (g) 4R Nutrient Management Specialists (4RNMS's), (h) Watershed management groups, and (i) non-profit conservation staff. All professionals work in and/or serve Iowa, Illinois, and/or surrounding states.

The 2016 survey consisted of six 'select one' questions with scales and four 'check all that apply' questions. The authors, with assistance from members of the STRIPS Farmer and Landowner Subcommittee, aligned content and format. When suitable, questions were provided with an 'N/A-other' write in option to include unanticipated responses. Survey questions are listed below.

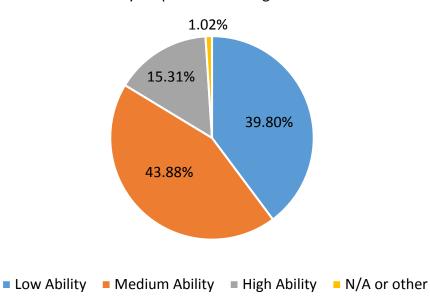
- How would you rate your knowledge and skills related to prairie strips? (select one)
- 2. Overall, how would you rate your level of confidence in providing a high quality consult on prairie strips for a Midwest farmer and landowner? (select one)
- 3. How would you rate your access to farmers or landowners who might be willing to adopt prairie strips? (select one)
- 4. In the last six months, with how many potential clients have you individually discussed prairie strips? (select one)
- About how many native prairie plants could you identify (common or scientific name)? (select one)
- 6. How familiar are you with laying out various conservation plantings on farmland and other landscapes? (select one)
- 7. Check all topics and materials that if covered in a workshop, would help you to consult on prairie strips. (check all that apply)
- 8. What would tempt you to attend a day-long workshop in Iowa on prairie strips consulting? (check all that apply)
- 9. What state or states do you serve? (check all that apply)
- 10. How would you describe your consulting? (check all that apply)

#### Administration

This census survey was distributed in April 2017 to a contact list of 419 professionals fitting the target audience. The software system Qualtrics was used to create, send, and analyze data tables and reports. Microsoft Excel was used to create all visual figures. Iowa State University human subject approval was received as Exempt IRB ID 16-594. All contact information for respondents was publically available. An initial survey request was distributed late February. Three reminder email announcements were sent between late February and mid-March. Ninety eight advisors participated in the survey for a response rate of 23 percent. Not all responses were complete. Participants were not required to answer every question to have submitted a valid survey response.

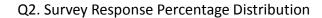
# Q1. How would you rate your knowledge and skills related to prairie strips? (select one)

Q1. Survey Response Percentage Distribution

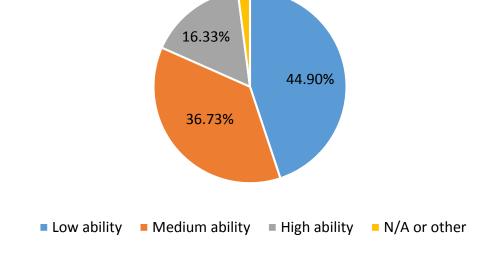


#	Answer	%	Count
1	High ability	15.31%	15
2	Medium ability	43.88%	43
3	Low ability	39.80%	39
4	N/a or other write in white box	1.02%	1
	Total	100%	98

Q2. Overall, how would you rate your level of confidence in providing a high quality consult on prairie strips for a Midwest farmer and landowner? (select one)

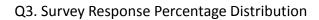


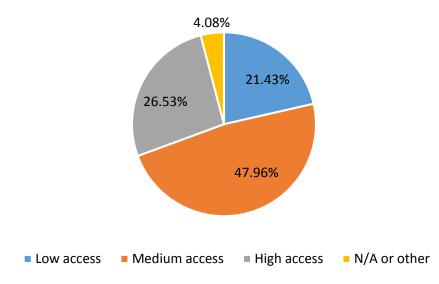
2.04%



#	Answer	%	Count
1	High ability	16.33%	16
2	Medium ability	36.73%	36
3	Low ability	44.90%	44
4	N/a or other write in white box	2.04%	2
	Total	100%	98

# Q3. How would you rate your access to farmers or landowners who might be willing to adopt prairie strips? (select one)

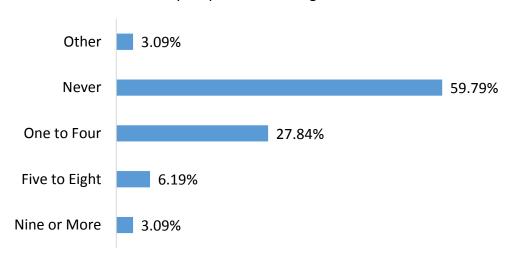




#	Answer	%	Count
1	High access	26.53%	26
2	Medium access	47.96%	47
3	Low access	21.43%	21
4	N/a or other - write in white box	4.08%	4
	Total	100%	98

## Q4. In the last six months, with how many potential clients have you individually discussed prairie strips? (select one)

Q4. Survey Response Percentage Distribution



#	Answer	%	Count
1	9 or more	3.09%	3
2	5-8	6.19%	6
3	1-4	27.84%	27
4	Never	59.79%	58
5	Other - write in white box	3.09%	3
	Total	100%	97

### "Other - write in white box" Responses:

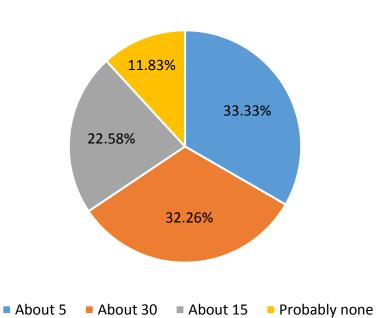
We're a prairie restoration company, I have no idea how many our consultants provided.

I just came to Iowa in November so I didn't really have the local knowledge to speak about it.

I live in a very flat part of the state and no one here knows about the strips. I have sold seed for strips installed 50 miles south of here.

# Q5. About how many native prairie plants could you identify (common or scientific name)? (select one)

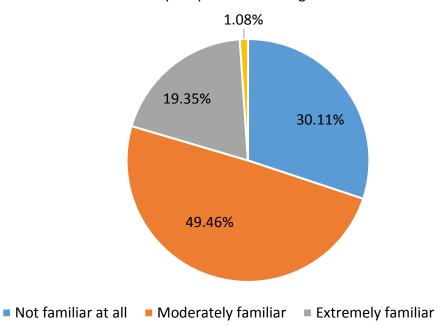
Q5. Survey Response Percentage Distribution



#	Answer	%	Count
1	About 30	32.26%	30
2	About 15	22.58%	21
3	About 5	33.33%	31
4	Probably none	11.83%	11
	Total	100%	93

Q6. How familiar are you with laying out various conservation plantings on farmland and other landscapes? (select one)

Q6. Survey Response Percentage Distribution



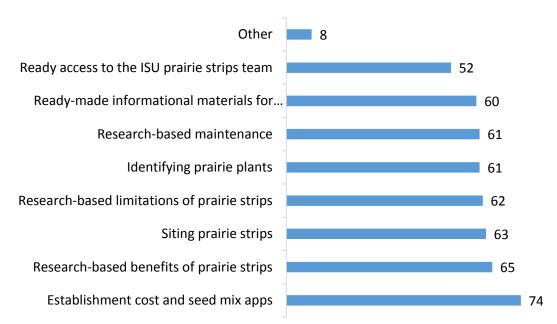
#	Answer	%	Count
1	Extremely familiar	19.35%	18
2	Moderately familiar	49.46%	46
3	Not familiar at all	30.11%	28
4	Which in particular? - write in white box	1.08%	1
	Total	100%	93

"Which in particular? - write in white box" Responses:

I have done prairie restorations but never put in CRP or STRIPS

## Q7. Check all topics and materials that if covered in a workshop, would help you to consult on prairie strips. (check all that apply)



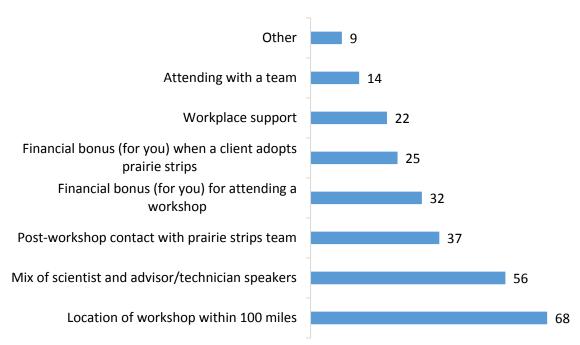


#	Answer	Count
1	Establishment cost and seed mix apps	74
2	Research-based benefits of prairie strips	65
3	Siting prairie strips	63
4	Research-based limitations of prairie strips	62
5	Identifying prairie plants	61
6	Research-based maintenance	61
7	Ready-made informational materials for clients	60
8	Ready access to the ISU prairie strips team	52
9	Other	8

Q7. Check all topics and materials that if covered in a workshop, would help you to consult on prairie strips. (check all that apply)
"Other - write in white box" Responses:
Adaptations to hill country
Needed equipment for install; site preparation
A proposed maintenance plan/schedule
Native grasses ID, especially.
Good seed source information
Layout, tradeoffs, conservation programs, comparing options of strips to contour farming alfalfa to alley cropping to no till plus cover crops
Best seeding methods and appropriate timing of seeding.
Government programs related to prairie strips
None of these

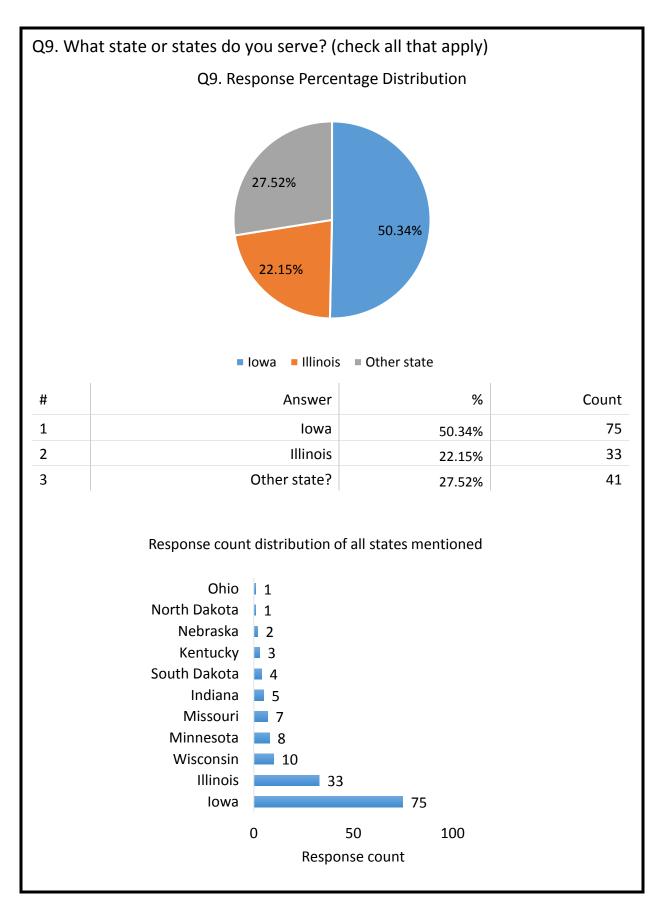
## Q8. What would tempt you to attend a day-long workshop in Iowa on prairie strips consulting? (check all that apply)



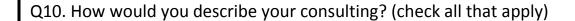


#	Answer	Count
1	Location of workshop within 100 miles	68
2	Mix of scientist and advisor/technician speakers	56
8	Post-workshop contact with prairie strips team	37
3	Financial bonus (for you) for attending a workshop	32
4	Financial bonus (for you) when a client adopts prairie strips	25
5	Workplace support	22
6	Attending with a team	14
7	Other	9

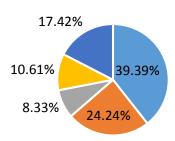
Q8. What would tempt you to attend a day-long workshop in Iowa on prairie strips consulting? (check all that apply) "Other - write in white box" Responses: I am in. You hold it and I will come If I actually did this type of consulting it would be of benefit. Continuing education credits **Professional Development Hours** Need a Web Meeting not a drive and waste of time at this point. Financial, CCA, Located on site of a farmer using strips that is willing/able to show cost/benefit analysis in a spreadsheet. Farmer speakers and landowner speakers talking about how they are working how do they feel about them, what their decision making process was in investing in them, would they do it again? How do they evaluate their contribution to the farm? Low cost of attendance Low investment cost to my business... free tuition etc.



Q9. What state or states do you serve? (check all that apply)
"Other state?" Responses:
Minnesota
Southwest Wisconsin
Indiana, Kentucky, Missouri
Indiana
South Dakota
Missouri, Kentucky, Indiana
Wisconsin, Minnesota, South Dakota, Nebraska
Missouri, Indiana, Kentucky
Wisconsin
Missouri
Indiana, Wisconsin, Missouri
South Dakota
Minnesota, Wisconsin
Missouri
Wisconsin
Working on TSP certification for Illinois and Indiana I Have a client that lined up for a
management plan in Illinois regardless of access to cost share dollars  Minnesota, South Dakota, North Dakota, Wisconsin
Wisconsin, Minnesota, Ohio, entire region
Minnesota
Missouri
Minnesota, Wisconsin, Nebraska
Wisconsin
Minnesota
Willingsoca



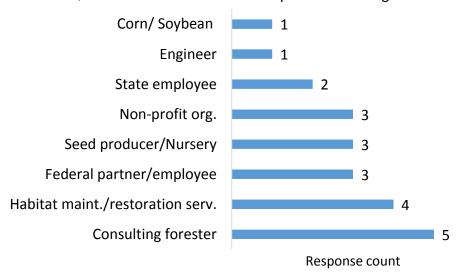
### Q10. Response Percentage Distribution



- Technical Service Provider
- Certified Professional Agronomist; Certified Crop Advisor
- Cooperative Extension
- Prairie seed sales
- Other

	Answer	%	Count
1	Technical Service Provider	39.39%	52
2	Certified Professional Agronomist; Certified Crop Advisor	24.24%	32
3	Cooperative Extension	8.33%	11
4	Prairie seed sales	10.61%	14
5	Other please write in box	17.42%	23

Q10. Summarized "Write-in" Response Sub-Categories



Q10. How would you describe your consulting? (check all that apply)
"Other please write in box" Responses (according to sub-category):
Corn/ Soybean (1)
In the Corn / Soybean business
Engineer (1)
Engineer
Non-profit org. (3)
Non-profit Land Trust
USDA partner, non-profit habitat organization
NGO watershed group with grants to do STRIPS
State employee (2)
State government
State employee
Seed producer/Nursery (3)
I have been in the seed business for 15 years, we grow, harvest seeds and sell plants. So I
so advise many farmers on CRP seeding
We have had a native plant and grass nursery for the past 15 years and have helped with
installation of 1000's of acres of CRP
Seed producer work with 60 species
- , , , , , , , , , , , , , , , , , , ,
Federal partner/ employee (3)
Write CAP138 plans nation wide
USDA partner employee/planner
USDA partner, non-profit habitat organization
Habitat maint / materials come (4)
Habitat maint. / restoration serv. (4)
Contracting services, seeding/burning/spraying  Esplaying Restoration Services
Ecological Restoration Services
Installation and maintenance contractor
Native plant propagation, residential landscape design
Consulting forester (5)
Agroecologist, Forestry Consultant
Forestry Consultant
Consulting Forester
Forest consulting
Consulting forester
Consulting forester



This survey was conducted as part of the STRIPS project. STRIPS stands for Science-based Trials of Rowcrops Integrated with Prairie Strips. The STRIPS team began studying the effects of installing prairie strips on row crop fields in 2007 at the Neal Smith National Wildlife Refuge in Prairie City, Iowa. Extensive ecosystem monitoring supports that installation of native prairie on a small portion of cropland can provide disproportional long-term benefits to pollinator habitat, biodiversity and soil and water integrity. For more information, see the STRIPS main web page at: <a href="https://www.nrem.iastate.edu/research/STRIPs/">https://www.nrem.iastate.edu/research/STRIPs/</a>. Members of the STRIPS Farmer and Landowner Subcommittee provided special assistance. Thanks to the McKnight Foundation for funding the needs assessment.

Project partners of STRIPS 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.