Improving Midwestern Agriculture’s Environmental, Social & Economic Footprint with Prairie Strips

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Enabled by a gift from the Bia-Echo Foundation, we endeavored to facilitate faster-paced adoption of prairie strips on farms across the US Midwest, beginning in 2021. Prairie strips are a proven farmland conservation practice that contribute to climate resilience and soil health, protect water quality, and enhance biodiversity. This final report details our success in expanding upon an existing programming by the Science-based Trials of Row-crops Integrated with Prairie Strips (STRIPS) team to achieve project goals. Our approach was to grow the capacity of STRIPS partners in the Midwest region to engage and equip members of the agricultural community, including underserved members such as women farmland owners, to implement prairie strips. We expected the program will improve conservation outcomes on tens of thousands of acres of farmland across the US Midwest. As we document with the following, indeed this has been the case!
OBJECTIVE ONE

Expand and formalize a regional partnership that delivers programming on prairie strips within seven Midwestern states.

We expanded and formalized partnerships to deliver programming on prairie strips within the states of Iowa, Illinois, Michigan, Nebraska, Minnesota, Missouri, and Wisconsin. Formal agreements were established with the following organizations in support of partnerships: Michigan State University, Missouri Prairie Foundation, Sand County Foundation, University of Nebraska, and University of Northern Iowa. We furthermore expanded our partnerships with Iowa Wildlife Federation, Minnesota Department of Agriculture, and USDA Farm Service Agency and Natural Resources Conservation Service.
OBJECTIVE TWO
Determine the educational and outreach needs of women regarding prairie strips.

Women for the Land Learning Circles
- Our partners at American Farmland Trust developed their curriculum for our four women-focused learning circles completed in 2022. The Learning Circles occurred across the upper Midwest and had 87 participants in attendance. The findings from the Learning Circles were summarized in this report.

Perennial Systems Conservation: Reaching Women Landowners & Women Landowner Resource Guides
- Following the completion of the Learning Circles, Brooke Rogers, Iowa State University, and Gabrielle McNally, American Farmland Trust, collaborated on two handouts targeted towards conservation providers working with women landowners, tenants and farmers. Physical copies of the guides have been available at STRIPS events and available digitally on the STRIPS website here and here.
OBJECTIVE THREE
Communicate the values of prairie strips across the Midwestern region.

Iowa, Missouri, & Wisconsin Farm Service Agency &
Natural Resource Conservation Service Trainings
- STRIPS collaborators worked together to develop and host seven professional development training courses. The training aimed to improve the knowledge of the prairie strip practice with both Iowa, Missouri and Wisconsin Farm Service Agencies and Natural Resource Conservation Services. Farmer and farmland owner cooperators had previously indicated lack of knowledge among some USDA Service Center office personnel as a barrier to implementing prairie strips. These trainings were designed to reduce this barrier.

STRIPS Research Panel at the 2023 Soil & Water Conservation Society Conference
- In celebration of STRIPS 15 years of research on prairie strips a team of panelists were selected to present at the 2023 Soil and Water Conservation Society conference held in Des Moines, Iowa. Dr. Lisa Schulte Moore, Iowa State University (ISU), kicked the panel off with an overview of the research and the scope of the prairie strips project. The remaining time of the session focused on the panelists discussing their prairie strips experiences. Panelists included: Dr. J. Arbuckle (ISU), Jon Bakehouse (farmer partner), Doug Davenport (retired, USDA NRCS), Craig Ficenec (Sand County Foundation), Randy Kolka (USDA Forest Service Northern Research Station), Dr. Marshall McDaniel (ISU), Andy Olson (University of Northern Iowa), Dr. Matthew Stephenson (ISU), Dr. Haleigh Summers (Sand County Foundation), and Tim Youngquist (ISU).

Outreach Event Highlights 2021–2023
- Joined 14 cooperator activities to continue to strengthening partnerships
- Presented at 43 on-farm field days with a special focus on prairie strips across the upper Midwest
- Developed and delivered 15 workshops
- Hosted 6 virtual webinars on the power of prairie strips
- 4 keynote speeches given on behalf of STRIPS
- Presented prairie strips research at 6 national conferences

Publication Highlights 2021–2023
- 1 case study on supporting women landowners and farmers in adopting prairie strips lessons learned from the Learning Circles
- 4 educational resources
- 9 farmer testimonials; see here
- 9 journal articles; a full list of journal articles published by the STRIPS team is available here
- Beyond publications the team led, we were:
  ◦ Appeared in 55 popular press articles
  ◦ Featured in 5 multi-media stories
  ◦ Appeared on 2 radio segments
OBJECTIVE FOUR
Facilitate the establishment of prairie strips on at least 21 demonstration farms across the seven-state region.

- The STRIPS team assisted in the seeding of 38 demonstration farms, throughout the Upper Midwest.

- Prairie strips enrolled through the USDA Conservation Reserve Program (CRP), as of November 2023, are covering over 18,987 acres, with over 3,986 acres added in fiscal year 2023. The most recent CRP update can be found here.

- CRP-43, prairie strips, have been established across the upper Midwest, with 8,068 acres in Illinois, 5,549 acres in Iowa, 1,826 acres in Minnesota, 945 acres in Nebraska, 892 acres in South Dakota, 693 acres in Indiana, 270 acres in Missouri, 154 acres in Wisconsin, 159 acres in Ohio, 108 acres in Michigan, and 3 acres in North Dakota.
OBJECTIVE FIVE
Evaluate program impacts.

We combined internal and external evaluation approaches to understand STRIPS program impacts.

- Formal event evaluation was conducted for the summer 2023 trainings conducted in partnership with Iowa USDA Farm Service Agency and Natural Resource Conservation Service. The evaluation report is available here. Two ratings accounted for 92.8% of participants, indicating a satisfied audience. The first question asked about the program “overall” and 55.8% rated the overall value of their workshop as “high value,” with 37% rating their workshop as having a “medium–high value “overall.”

- For external evaluation, we contracted with Cody Gusto and John Diaz of the University of Florida. They completed a 3-phase Delphi process, an overarching Program Logic Model for the project was developed and can be found here.

- Additionally, a presentation was created that shares the full results from the Delphi process, and there is a "Delphi Final Item List" summary that outlines all items that reached final consensus in that Round 3 Delphi.

- A full accounting of project outputs is available here.
PROJECT HIGHLIGHTS

We are thankful for Bia-Echo’s support! We consider this project to be a big success. Bia-Echo’s gift made many things possible that would not have occurred without dedicated funding. Thank you!
Featuring STRIPS Farmer Operators, Field Experts and Researchers:
Dr. J. Arbuckle, Jon Bakehouse, Doug Davenport, Craig Ficenec, Randy Kolka, Dr. Marshall McDaniel, Andy Olson, Dr. Lisa Schulte Moore, Dr. Matthew Stephenson, Haleigh Summers and Tim Youngquist