Wisconsin Survey – Prairie Strips

First, thank you so much for your time and feedback! We really appreciate your input.

For the last seven years, Iowa State University has studied what impact prairie STRIPS (***S****cience-based* ***T****rials of* ***R****ow-crops* ***I****ntegrated with* ***P****rairie strips*) have on water quality. The strips are planted in small, targeted regions of row crop fields (approximately 5-10% of cultivated area) typically at the toe of a slope.

The upshot they've discovered is, without sacrificing yield, **prairie strips reduce sediment and phosphorus run-off by as much as 90% and provide other significant ecological benefits** (builds soil health, increases natural predators of crop pests, and attracts pollinators and grassland birds). Prairie strips are now being tested on 30 Iowa farms.

This year, through a USDA SARE grant, Sand County Foundation (a national non-profit organization) in cooperation with the University of Wisconsin and the Valley Stewardship Network, will work with four farms in Wisconsin to adapt the experience of Iowa STRIPS into Wisconsin and the North Central Region.

We're seeking the input of Wisconsin row crop farmers, via this short survey, to help us in designing an effective Wisconsin prairie strips project.

Please know the survey results are anonymous and there are no right or wrong answers.

(Results in RED, from 30 farmers who responded in writing between 2018 and 2019)

Township: Counties represented include: Columbia, Crawford, Dane, Door, Iowa, Richland, Rock, Sauk, and Vernon

Total acres owned or rented: Average 394; Range 8 – 1,800; Median 200

What enterprise comprises the majority of your farm income: 12-Row crop; 12-livestock; 3-vegetable / fruit; 1-orchard; 1-ecotourism; 1-no farm income

Number of years farming: Average 24; Range 2 – 50; Median 24

1. *Do you have a nutrient management plan?*

   a. Yes (15)
   b. No (15)
   c. Please explain why

   Yes: Property tax relief; have to have a plan to qualify for NRCS
   No: have had no one to do one; because this will be the first year I am managing land; Small amount of acreage rented out, remainder in prairie.

2. *Describe what you are doing now to manage nutrients on your farm? (check all that apply)*

   a. Soil-testing (18 – 60%)
   b. No-till (13 – 43%)
   c. Reduced till (6 – 20%)
   d. Cover cropping (15 – 50%)
   e. Organic (11 – 37%)
   f. Grazing (11 – 37%)
   g. Other
      - Strip cropping. Keep steep ground in hay.
      - No-till forbs for sheep. Apply composted manure. Have chickens and ducks on pasture. Use a duck tractor.
      - composting manure, vertical manure injection
      - compost manure apply where needed
      - wetlands, prairie strips, streambank stabilization
      - mulch
      - introduced prairie block for pollinator foraging

3. *Approximately how much paperwork time (hours) and/or cost ($) do you spend annually managing nutrients?*

   16 responses; 0 – 80 hour per year

4. *Have you heard or read about Iowa's prairie strip conservation practice?*

   Yes (20) / No (10)

5. *What do you think are the biggest benefits of planting prairie strips? Check the top three.*

   a. reduce soil erosion in the field (26 – 87%)
   b. improve water quality leaving the field (24 – 80%)
   c. reduce crop pests (6 – 20%)
   d. provide habitat for wildlife (13 – 43%)
   e. alternative use of strip vegetation (bedding, forage, etc) (7 – 23%)
   f. demonstrate land stewardship (9 – 30%)
   g. other _____
      - would be interesting if prairie strips could attract deer and lessen impact to corn
      - biodiversity
      - planting rocky knobs to strips would reduce need to pick rocks after plowing
      - encourage strips at edge of field
      - soil health
      - build organic matter
      - bees
      - intrigued to have prairie plants and biodiversity

6. *What do you think are the biggest barriers to planting prairie strips? Check the top three*.

   a. loss of productive crop acres (19 – 63%)
   b. interruption of field operations (7 – 23%)
   c. time and expense in managing the strips (19 – 63%)
   d. spread of weeds to adjacent crops (2 – 7%)
   e. spread of pests to adjacent crops (1 – 3%)
   f. lack of support by landowner / short term leases (5 – 17%)
   g. concerns of neighbors (2 – 7%)
   h. other _____
      - Most farmers do not know their ROI
      - Lack of knowledge regarding equipment needed to plant or maintain strips
      - Cultural mindset
      - Seeing a lot more emphasis on yield and tillage than ever before
      - Strips would make cropping farm a little more complicated to manage.
      - Where to put strips, what species to plant, how to manage
      - Fencing cattle out of strip
      - Need for fencing to separate strips from grazing livestock
      - Hard to establish

7. *What questions do you think other farmers may have about establishing prairie strips on their farm?*

   - What type of tillage? When do you plant? Can you harvest seed and sell it?
   - How much time does it take to plant and manage strips? Winterhardiness? Longevity of the strip stand? Cost? What type of equipment is needed? Management ie. how much soil preparation? If contracting out - what is the reputation of the company or person doing the seeding?
   - What type of equipment is needed? What are the economics? What is the cost to do the seeding and how much extra time does it take?
   - Would need clear management instructions because natives are a whole different game; they are more sensitive.
   - Where to put them? How many to establish?
   - Can you show me the data that will demonstrate that I can install prairie strips while improving my bottom line each year? How will my custom applicators react to the challenges of spraying around prairie strips?
   - Cost
   - Why take acreage out of production? How do I make up the revenue?
   - How does it affect the bottom line?
   - Curious about practice and weeds in the strip
   - What ongoing management is required to maintain the strips? How susceptible are the strips to invasion by unwanted weeds?
   - How much does it cost?
   - Maintenance of the strips after they're in, and establishment efforts

8. *Do you think farmers would rather seed the strips themselves or have someone contracted to do the seeding?*

    a. Seed themselves (17 – 11%)
    b. Contract out the seeding (11 – 37%)

9. *What ideas or potential strategies do you think could help prairie strips become a widespread practice in Wisconsin?*

- Need to answer the economics: can they make the same amount of money with STRIPS as without them? Might want to market strips as a "perennial" cover crop
- Field days, design the cost share so farmers don't lose money planting them
- Show data across years
- Field day, demos, pay farmers to implement strips. Pay farmers land costs $150/acre; waive nutrient requirements during pilot period
- Need to figure out how strips can get planted with RTK
- Make case financially and in the face of extreme weather (erosion)
- Combine farmer testimonials with "how to" tutorials for installing and maintaining prairie strips.
- Offer money and help to put them in
- Promotions at seed fairs, farmer cooperatives, etc.
- If seed cost about the same as regular seed
- Have some farmers implement and show the benefits
- Demos on influential farms in each community
- Cost-share (not an important factor for us, but probably for others)
- Articles in local newspaper (Broadcaster), not electronically
- More education regarding prairie strips; offering funding to help implement strips
- Link it to cropping loans

10. *What information do you think farmers would want to hear about or see at a field day demonstrating prairie strips?*

- Basic agronomy information, including different options for establishing it. Need to see established prairie strip; see numbers of its impact on water quality.
- Show how strips are keeping soil in place; i.e. compare erosion from corn vs. strip. Can see soil loss; harder to visualize water loss.
- Equipment needed, planted strip and economics
- Bottom line economics and how to manage strips
- free lunch
- Stories of success using real data/charts/details
- Soil erosion proof and show the root depth. That was amazing
- Stories of success using real data/charts/details
- Soil retention benefits
- Ease fears of what it would look like
- How it helps, or at least doesn't hinder, the bottom line
- How it affects soil erosion, bottom-line field yield, and water quality

- Installation costs, maintenance effort/cost
- Average cost to plant, details about how to plant and maintain
- long term gains of no erosion
- Establishment methods and timelines, maintenance plans

11. *What agencies, companies or organizations should be involved in helping promote prairie strips?*

- Never take advise from someone trying to sell you something. Prefer NRCS, UW etc.
- NA
- Big agriculture, conventional farmers, good ol' boys
- Seed and fertilizer companies
- FSA and MOSA
- Seed and fertilizer companies
- Land and Water Conservation
- Albert Lea Seed
- Valley Stewardship Network, NRCS, Vernon LWCD, Prairie Enthusiasts?
- Agri-Center True Value Hardware
- NRCS
- Maybe the local coops
- Valley Stewardship Network

12. *What types of informational activities do you think farmers would find most useful? (Circle all that apply)*

a. Information in farm magazines (7 – 23%)
b. Winter Workshops (9 – 30%)
c. Social media: Facebook, twitter etc. (3 – 10%)
d. Grants/low-interest loans (15 – 50%)
e. How-to information fact sheets and handouts (13 – 43%)
f. Outdoor Field Days and Demonstrations (23 – 77%)
g. Farmer to farmer mentoring (16 – 53%)
h. On-line forum for farmers to share information (7 – 23%)
i. Other _____
    - Farm Bureau Newsletter
    - market idea to farmers; signage