

Redefining the Field Edge:

Improving Farm Profitability with Strategically Placed Prairie

What is redefining the field edge?

A land-use-change concept that alters a field's cropping boundaries, converting some parts of the field to perennial prairie vegetation.

Why redefine the field edge?

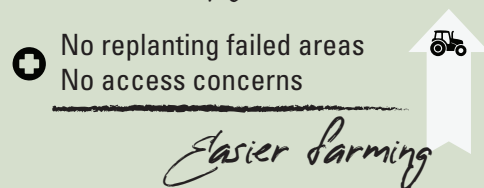
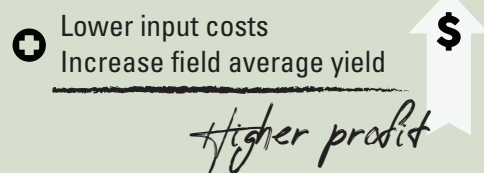
Many farms have marginal land currently in crop production that does not return a profit in most growing seasons—whether from frequent flooding, poor soil quality, excessive slope, or machinery access challenges.

Converting this land to perennial prairie vegetation, independently or through programs that pay the landowner a rental fee, benefits both the landowner and the environment. Sub-field plantings:



More Profit, Less Frustration

Profitability: How much a business or activity yields profit or financial gain, where profit is the difference between the amount earned and the amount spent producing something (ISU: *Ag Decision Maker – Understanding Profitability*).

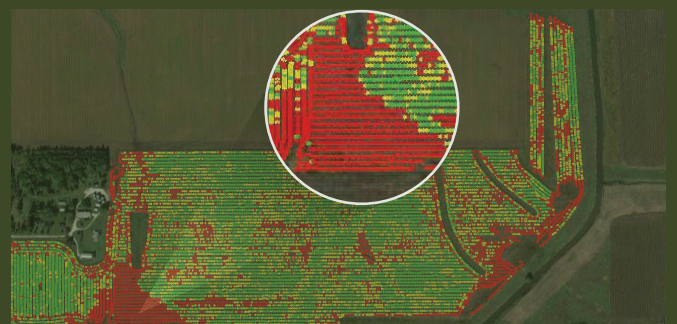


Determining Profitability

1. Determine input costs per acre—including seed, chemicals, fertilizer, equipment, land value, labor, etc.
2. Calculate revenue per acre based on yield monitor data and market prices.
3. Generate profit per acre by subtracting costs from revenue.

Identifying Potential Sites

Removing an unprofitable area from the crop field increases overall profits for the remaining acres by reducing total input costs and increasing average yield. A profitability analysis over multiple years will help identify any areas in the field that consistently show loss. Five or more years of data are recommended, to determine profitability under various weather conditions.





What if the land is rented?

When considering a land-use change, working together as landowner and tenant to gather information and address concerns will ease the transition to the new practice and minimize conflicts. Your local NRCS staff and Iowa State University Extension and Outreach field specialists are available to meet with you together to help answer questions, and to provide resources and technical assistance.



What management is needed?

Follow-up management is crucial for successful establishment. Periodic prescribed fire, grazing, haying, and mowing help to maintain plant diversity and benefits. Cost-share programs may include mid-contract management requirements.



BEFORE YOU PLANT

How do I start?

Consult with your local USDA-Natural Resources Conservation Service (NRCS) office, Pheasants Forever, or similar organization for technical assistance and resources to determine a site-appropriate seed mix, available seeding options, timing recommendations, and cost-share opportunities.

When do I start?

Establish prairie vegetation following soybean harvest to reduce the potential impact of residue volume and previous herbicide use.

What to expect after seeding prairie vegetation?

Prairie vegetation takes time and management to ensure the area is well established, providing adequate soil cover and wildlife habitat and outcompeting weeds.



Prairie seedlings will be small and patchy, with grasses appearing first. Growth is primarily underground to establish extensive root systems.



More prairie species will be visible as root systems become more established and outcompete weeds.



The area will begin to look like a cohesive prairie planting and will be established well enough to begin flowering.

What to Expect: Establishing Prairie Vegetation on Your Farm outlines a management timeline:

https://www.conservationlearninggroup.org/files/page/files/establishing_perennial_prairie_infographic_web.pdf



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