Prairie Conservation Strips On My Land:

Frequently Asked Questions


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STRIPS: Science-based Trials of Rowcrops Integrated with Prairie Strips

VISIT STRIPS in Jasper County:
Neal Smith National Wildlife Refuge
9981 Pacific Street, Prairie City, Iowa
(515) 994-3400, NealSmith@fws.gov

FIND more resources on the web:
The STRIPS research team website includes information on partners and participants, as well as upcoming field days and demonstration site locations. Find more at: www.prairiestrips.org.

The Leopold Center for Sustainable Agriculture has compiled various multimedia resources, including: A Landowner’s Guide to Prairie Conservation Strips, The Cost of Prairie Conservation Strips and Small Changes, Big Impacts: Prairie Conservation Strips. Find more at: www.leopold.iastate.edu/strips-research-team.

LEARN more about prairie restoration:
The following resources may be helpful: Incorporating Prairies into Multifunctional Landscapes by Meghann Jarcow and Matthew Liebman (available online from ISU Extension); The Tallgrass Prairie Center Guide to Prairie Restoration in the Upper Midwest, by Daryl Smith, Dave Williams, Greg Houseal and Kirk Henderson; and A Practical Guide to Prairie Reconstruction by Carl Kurtz.

FIND financial support:
The following Natural Resources Conservation Service (NRCS) programs offer financial and technical assistance to Iowa landowners. Learn more:
www.ia.nrcs.usda.gov/programs
  » Conservation Reserve Program (CRP) offers 10-15 year contracts
  » Environmental Quality Incentives Program (EQIP) may assist with prairies you plan to harvest or graze, depending on county.
  » Wildlife Habitat Incentive Program (WHIP) offers a maximum of $30,000 to install and maintain habitat on private land. Funds are limited and vary by state. Contact your local NRCS office for more.
You also can receive assistance from these programs:
  » U.S. Fish and Wildlife Partners Program works with landowners to restore wildlife habitat: www.fws.gov/midwest/partners
  » Resource Enhancement and Protection (REAP) gives small grants for soil and water protection: www.iowadnr.gov/Environment/REAP
  » Trees Forever funds community projects: www.treesforever.org
  » Pheasants Forever offers cost-share options: www.pheasantsforever.org
  » Plant Iowa Natives offers a seed suppliers directory under “Professional Services & Plant Materials”: www.tallgrassprairiecenter.org/plantiowanative/
Why should I put prairie strips on my land?

- Prairie strips increase plant diversity for birds and other wildlife.
- Prairie strips increase number of pollinators and insect pest enemies.
- Prairie strips increase and retain nutrients in your field.
- Prairie strips reduce soil loss and water runoff from your field.
- Prairie strips reduce sediment loss by 95% with only 10% land in prairie strips.
- Prairie strips reduce phosphorus loss by 90% with only 10% land in prairie strips.
- Prairie strips reduce nitrogen loss by 84% with only 10% land in prairie strips.

Possible to reduce sediment loss by 95% with only 10% land in prairie strips.
Possible to reduce water runoff by 40% with only 10% land in prairie strips.
Possible to reduce phosphorus loss by 90% with only 10% land in prairie strips.
Possible to reduce nitrogen loss by 84% with only 10% land in prairie strips.

Reasons to put prairie strips on your land:
- Reduce soil loss and water runoff from your field.
- Retain nutrients in your field.
- Provide wildlife habitat.
- Increase plant diversity for birds and other wildlife.
- Increase number of pollinators and insect pest enemies.

The map shows current and potential STRIPS research collaborators in 2014. Strips placement varies based on field type and maintenance needs. 1) Shown here is a general view of strips on a 600-acre property in eastern Iowa. 2) You also may see strips in action at the long-running experimental site at Neal Smith National Wildlife Refuge in Jasper County.
Cost reduction and income sources

Cost-share options

- Conservation Reserve Program (CRP) contracts through USDA Farm Service Agency, Natural Resources Conservation Service (NRCS)*
  - Contour buffer strips (Practice code 332)
  - Filter strips (Practice code 393)
- Seed supplier discounts

Added income

- Trees Forever www.treesforever.org
- Pheasants Forever www.pheasantsforever.org
- Grazing
- Seed production
- Potential ecosystem service credits
- Water purification and flood control
- Pollination
- Carbon sequestration
- Reduced nitrogen emissions to air and water
- Hunting
- Honey
- Game bird production
- Forage, bedding, biomass sales

1) Prairie seed contains numerous plant species, adding valuable bands of diversity to landscapes dominated by row crops.
2) In diverse, multifunctional landscapes, even if an individual species performs poorly due to yearly nutrient or water fluctuations, the community as a whole thrives, staying resilient when faced with climate extremes.

*Contact your NRCS district conservationist
What do I plant?

What kind of seed should I use?

Where do I start?

Seed drill planters

Many NRCS offices and some SWCD

Keep up with current events: Iowa Prairie Network

www.facebook.com/IowaPrairieNetwork

NRCS Iowa directory: Native Plant Material Sources

For Iowa and immediately adjoining regions

1.usa.gov/1mMa9xo

Native tallgrass prairie grass and forb seeds

Mix should contain both cool and warm season grasses and a combination of forbs to attract wildlife, including pollinators, attractive to wildlife, including pollinators, and upland game birds.

Black cool and warm season grasses and a combination of forbs to attract wildlife, including pollinators, attractive to wildlife, including pollinators, and upland game birds.

NRCS: Natural Resources Conservation Service

SWCD: Soil and Water Conservation District

FSA: USDA Farm Service Agency

What are some current and future income possibilities with prairie strips?

1) Strips of prairie between row crops create healthy, diverse habitat for numerous plant and animal species. They support species of ecological, commercial and recreational significance, including (1) native pollinators, (2) wildlife, (3) cattle and (4) game birds.

2) Prairie strips between row crops can create healthy, diverse habitat for numerous plant and animal species. They support species of ecological, commercial and recreational significance, including (1) native pollinators, (2) wildlife, (3) cattle and (4) game birds.

3) Prairie strips between row crops can create healthy, diverse habitat for numerous plant and animal species. They support species of ecological, commercial and recreational significance, including (1) native pollinators, (2) wildlife, (3) cattle and (4) game birds.

4) Prairie strips between row crops can create healthy, diverse habitat for numerous plant and animal species. They support species of ecological, commercial and recreational significance, including (1) native pollinators, (2) wildlife, (3) cattle and (4) game birds.

Planting options

Native tallgrass prairie grass and forb seeds

Mix should contain both cool and warm season grasses and a combination of forbs to attract wildlife, including pollinators, attractive to wildlife, including pollinators, and upland game birds.

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How do I put prairie strips on my land?

Where do I put strips?
- Depends on field size, slope and soil types; minimally at the foot of a slope, and also potentially upslope within the rowcrops.
- Areas of potential concentrated flow erosion should be protected by conservation practices such as grassed waterways. Where contour row curvature becomes too sharp to keep equipment aligned with rows during field operations, increasing the buffer strip width can help avoid sharp ridge points.

How much land should I put in strips?
- As little as 10% of the total acreage effectively treats the entire field.*
- *Actual amounts may vary depending on farm size, soil quality and existing conservation practices.

How wide should strips be?
- Variable; at least 15 feet, 30 feet minimum required for CRP credits.
- Strip width can vary based on anticipated water movement.
- Strip width is designed to accommodate equipment width.

Do I need to prepare the area?
- A soybean crop followed by a burndown herbicide is ideal.
- Depending on past land use, seed bed preparation may vary from normal tillage to work with larger equipment.

When is the best time to plant?
- Spring before crop planting, or fall after crop harvest.
- Seeding Calendar For Warm and Cool Season Grasses, from United Seeds: bit.ly/1fyo3kA

CRP: Conservation Reserve Program

Areas 1 and 2) In the first few years after planting, strips may not look much like prairie. They may contain weedy grasses or forbs (such as thistles). Depending on the size of the farm, weed suppression options include hoeing, mowing, spot treatment or burning to promote prairie seedling establishment.

3) Mature prairie plants outcompete weedy plants, and do not require much maintenance.

4) Prairie plants do not move into the crop fields, but become valuable adjacent habitat for pollinators and predators of crop pests.

Areas 3 and 4) In the first few years after planting, strips may not look much like prairie. They may contain weedy grasses or forbs (such as thistles). Depending on the size of the farm, weed suppression options include hoeing, mowing, spot treatment or burning to promote prairie seedling establishment.

3) Mature prairie plants outcompete weedy plants, and do not require much maintenance.

4) Prairie plants do not move into the crop fields, but become valuable adjacent habitat for pollinators and predators of crop pests.
What should I expect after prairie strips are planted?

Apart from prairie planting equipment (above), you should be able to establish and maintain prairie strips with standard farm equipment.

Year 1
- Strips will look weedy
- Mowing or burning required
- Some sediment may accumulate along uphill edge of strips

Year 2
- Strips will begin to look like tallgrass prairie
- Mowing will be required to give the young prairie plants a competitive advantage over weeds
- Weeds do not move into crop area

Year 3
- Strips begin to look like tallgrass prairie
- Recognition of prairie of grasses and flowering forbs
- Prairie vegetation established
- Weeds do not move into crop area
- Mowing or burning every other year will promote prairie vegetation
- Increased biodiversity
- Strips are self-sustaining, require minimal management

Years 4-6
- Strips will begin to look like tallgrass prairie
- Mowing will be required to give the young prairie plants a competitive advantage over weeds
- Weeds do not move into crop area

Years 7+
- Strips are recognizable prairie of grasses and flowering forbs
- Prairie vegetation established
- Increased biodiversity
- Strips are self-sustaining, require minimal management
- Mowing or burning every other year will promote prairie vegetation
- Increased biodiversity

What to expect after prairie strips are planted

Apart from prairie planting equipment (above), you should be able to establish and maintain prairie strips with standard farm equipment.
How much will prairie strips cost?

The cost of prairie strips

Site preparation and establishment costs
- Variable depending on site quality, generally includes herbicide purchase and application, seed purchase, seed drilling and cultipacking; in rare cases may include tillage

Annual and periodic management costs
- Annual mowing, baling or burning

Annual opportunity costs
- Annual land rent and/or foregone revenue

Taken together, the cost to a farmer of using prairie strips to treat the runoff from 9 acres of corn or soybeans is between $25 to $36 per year*

*Several cost-share opportunities are available; for example, the cost to the farmer can be reduced by up to 85% with Conservation Reserve Program (CRP) payments