



Prairies & Pints  
February 17, 2020  
Western Iowa's Prairies

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RURAL CREATIVE PLACEMAKING ART  
LEWIS & CLARK TODAY'S ROUTE BIKE ROUTE

WELLNESS INITIATIVES FRONTIER IOWA TRAILS NETWORK

TRAILS LOESS HILLS MISSOURI RIVER  
REGION PARKS TO PEOPLE

SOUTHWEST IOWA ART TOUR STORYTELLING

BICYCLE SAFETY LOCAL FOODS

PRAIRIE RESTORATION WEST NISH WATER TRAIL

HUNGRY CANYONS ALLIANCE SCENIC BYWAYS

WATER QUALITY NATIVE OAK RESTORATION

AgArts CAMPS GRANT WRITING

IMPROVING RURAL  
SOUTHWEST IOWA...



DOES  
THAT!

# Golden Hills Resource Conservation & Development

- **Mission:** To develop and promote sustainable cultural and conservation projects that enhance quality of life and preserve the assets of rural western Iowa.

## Land & Water Conservation



Watershed Management, Hungry Canyons Alliance, Prairie & Oak Savanna, SW IA Food & Farm Initiative (SWIFFI), Local Food Guide, & more.

## Outdoor Recreation & Tourism



Loess Hills Missouri River Region, WanderLoess, Scenic Byways, Artist in Residency, SW IA Art Tour, Biking/Hiking/Water Trails, Loess Hills Nature School, Explore Your Watershed Events, Hunting, & more.

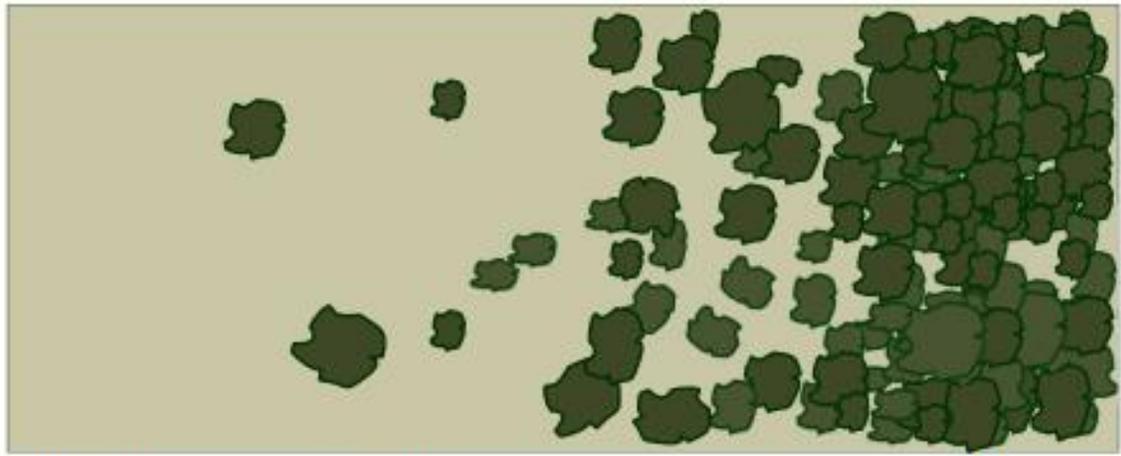
## Community Support



Grant-writing & administration, fiscal management & sponsorship, community organizing, & more.

# What is prairie?

“A grassland with few or no trees.”



Grassland:	Savanna:	Woodland:	Forest:
<0.5 tree/ha	0.5-47 trees/ha	48-99 trees/ha	>99 trees/ha
0.2 trees/ac	0.2-19 trees/ac	20-40 trees/ac	>40 trees/ac

Source: Anderson and Anderson 1975

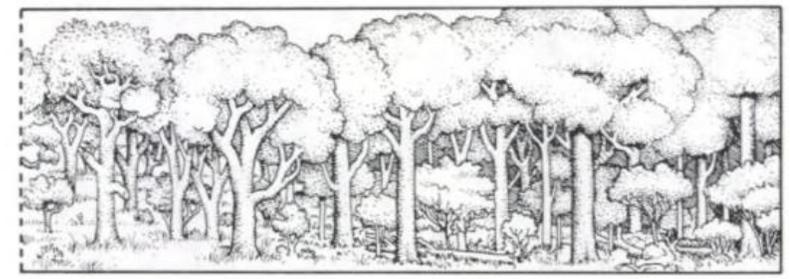
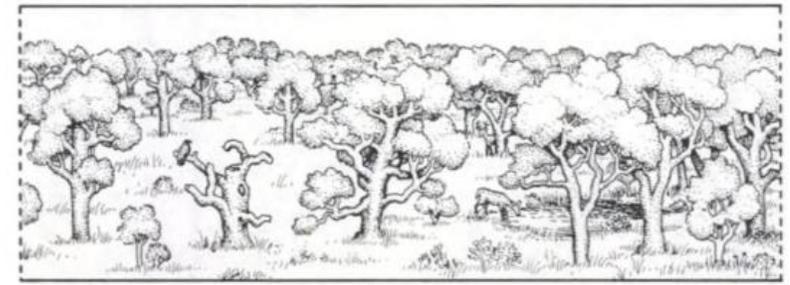
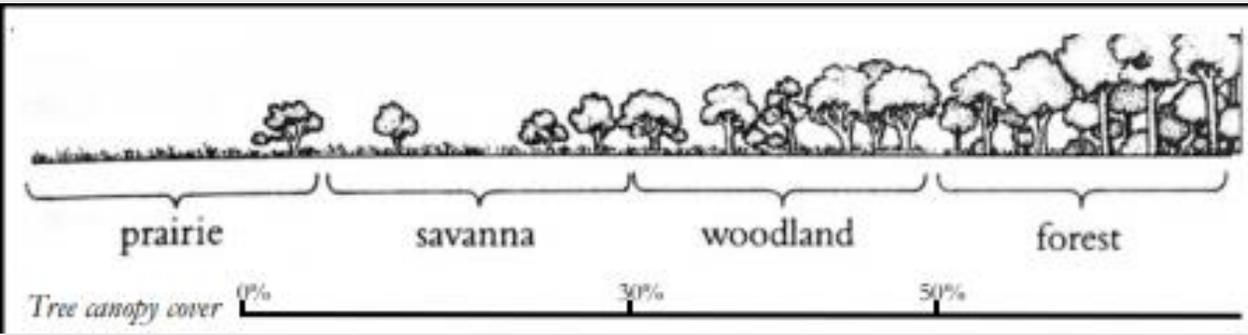


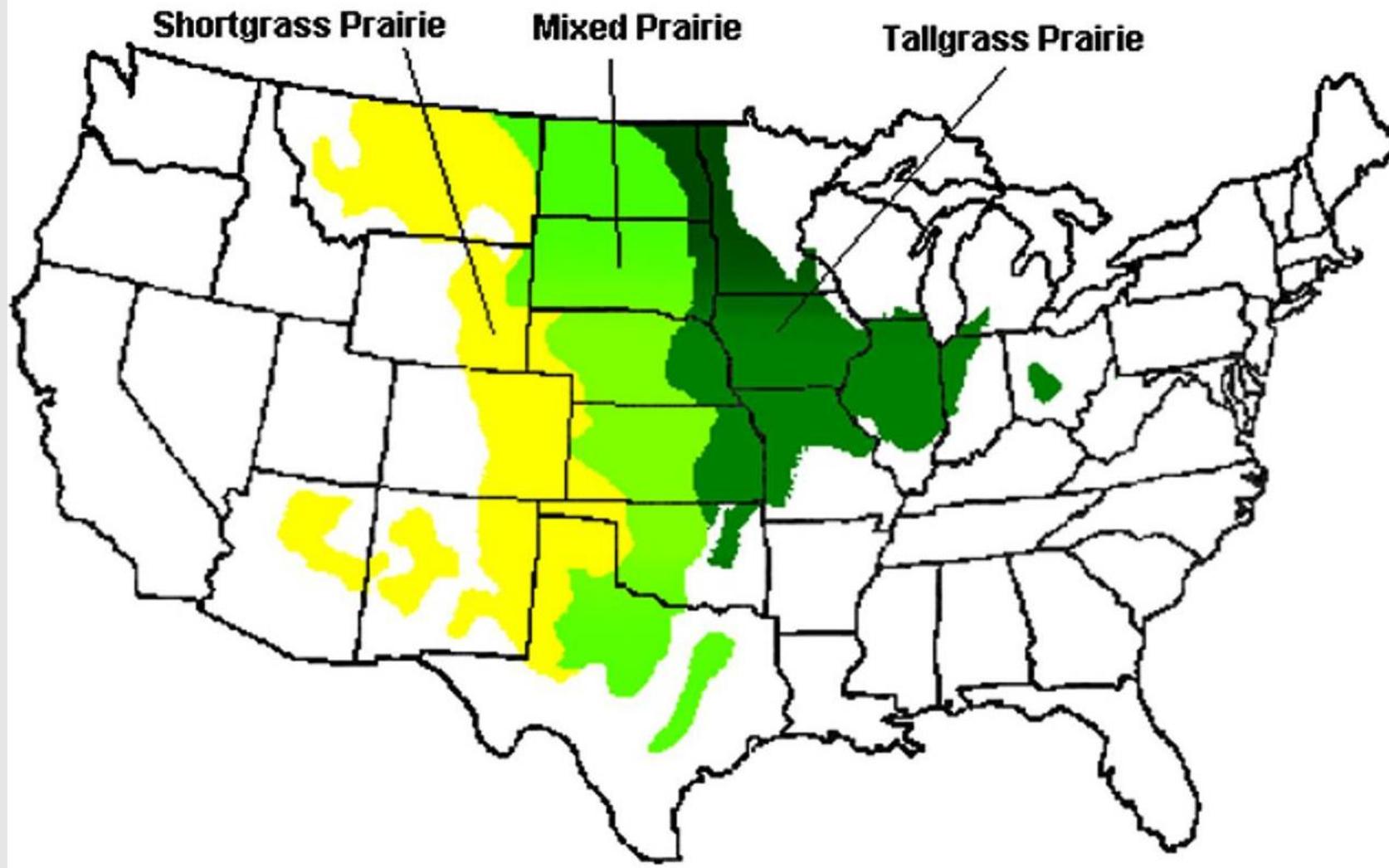
Figure 4.1. Prairie-forest continuum.

Source: [https://naturalresources.extension.iastate.edu/files/hidden-page/files/iowas\\_forest\\_ecosystems\\_color\\_handout.pdf](https://naturalresources.extension.iastate.edu/files/hidden-page/files/iowas_forest_ecosystems_color_handout.pdf)



Source: Packard & Mutel, **The Tallgrass Restoration Handbook: For Prairies, Savannas, and Woodlands**

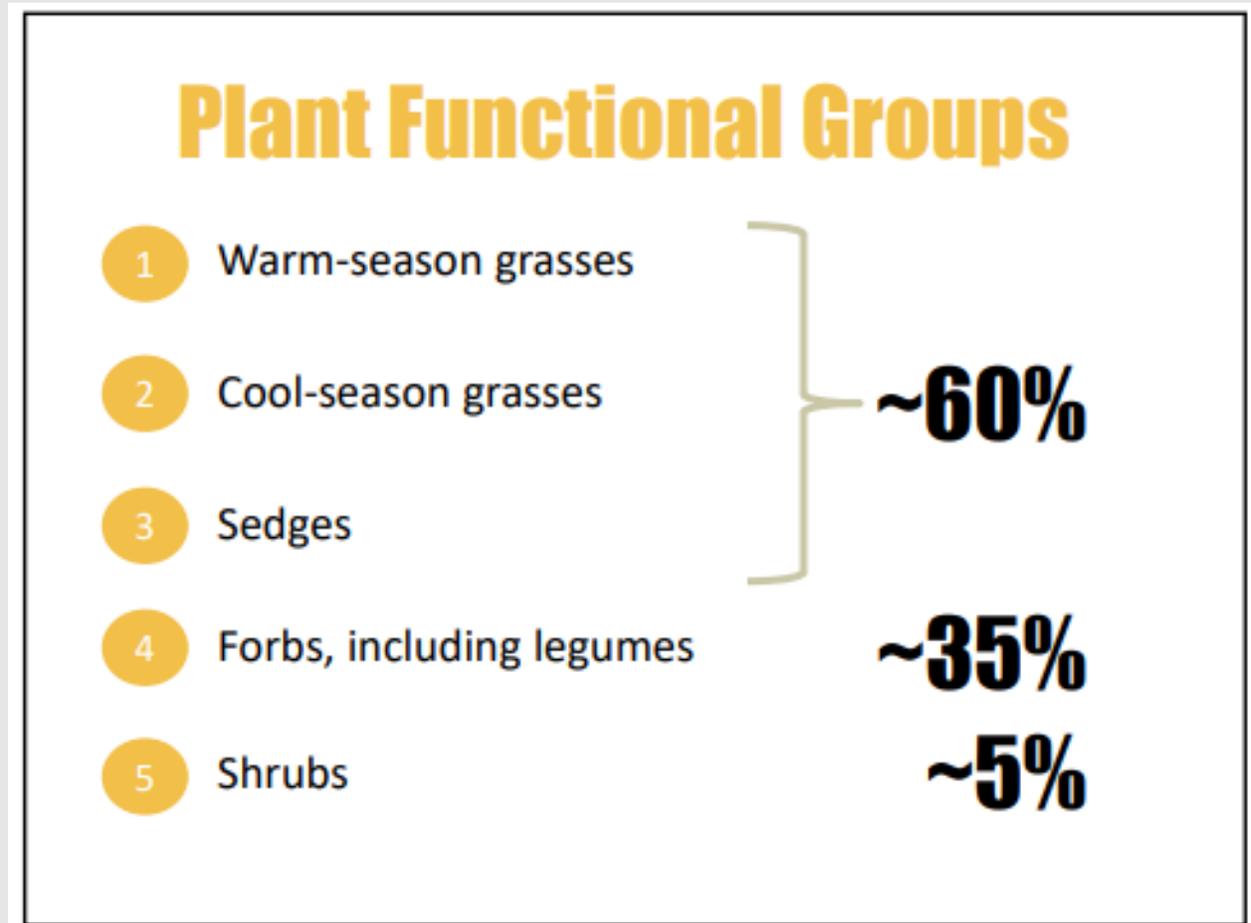
# *Map of Prairie-Dominated Native Ecosystems*



Source: <https://wildwillpower.org/amazing-resources-for-homesteaders/native-animals-who-need-recovery/prairie-restoration>

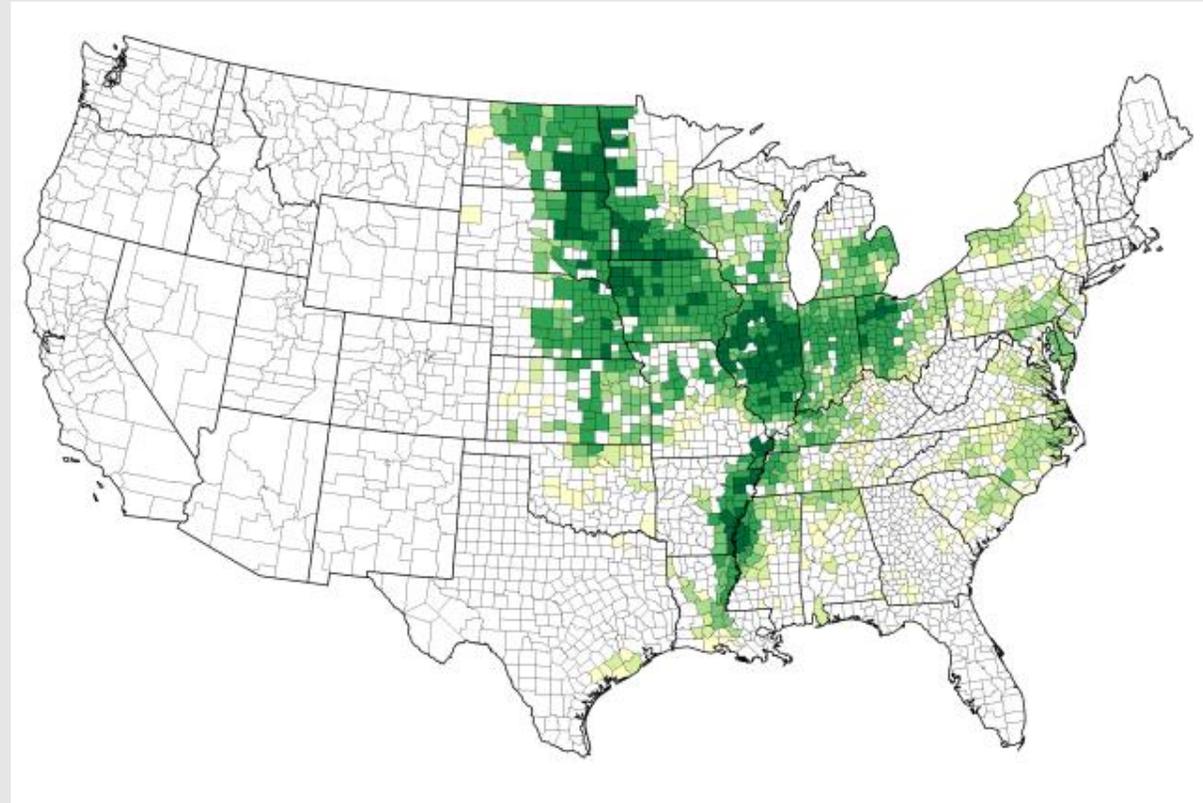
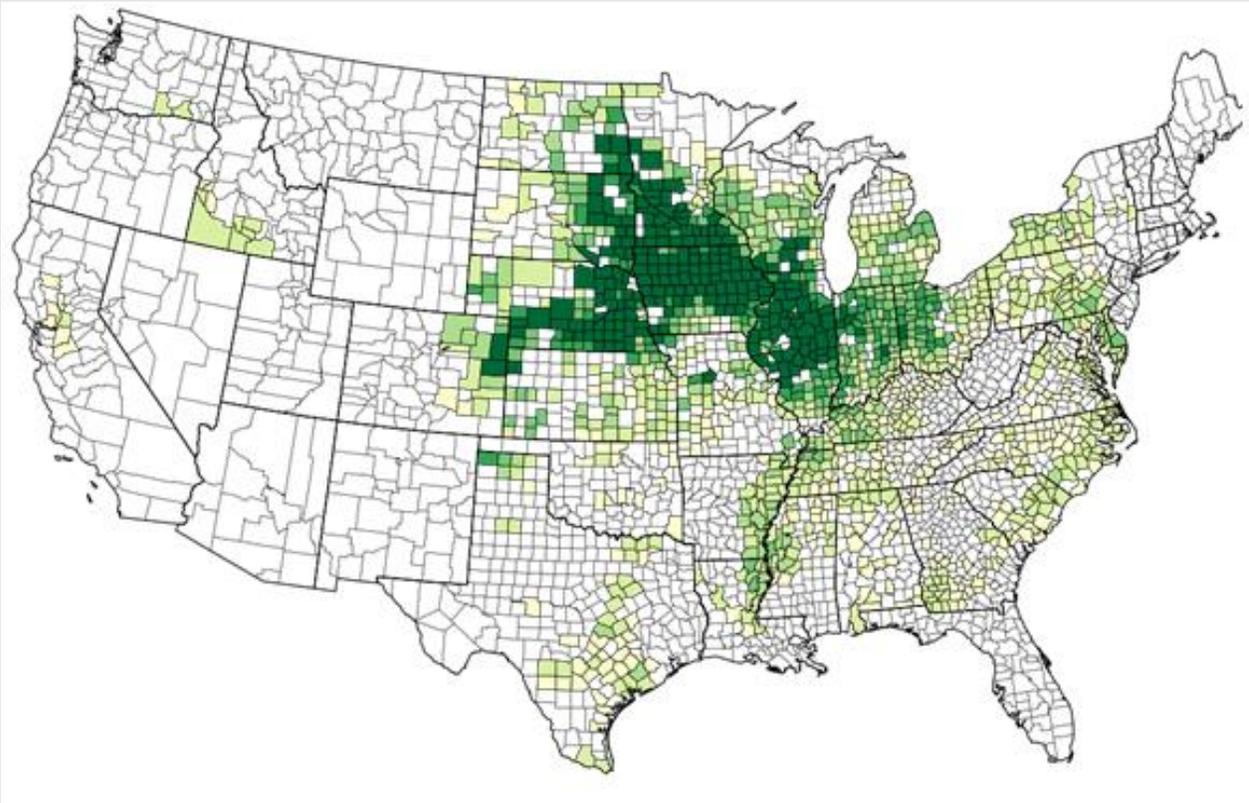
# Many grasses & forbs...

- >300 prairie plant species
- hundreds more species of fungi, insects, birds, mammals, reptiles, etc...

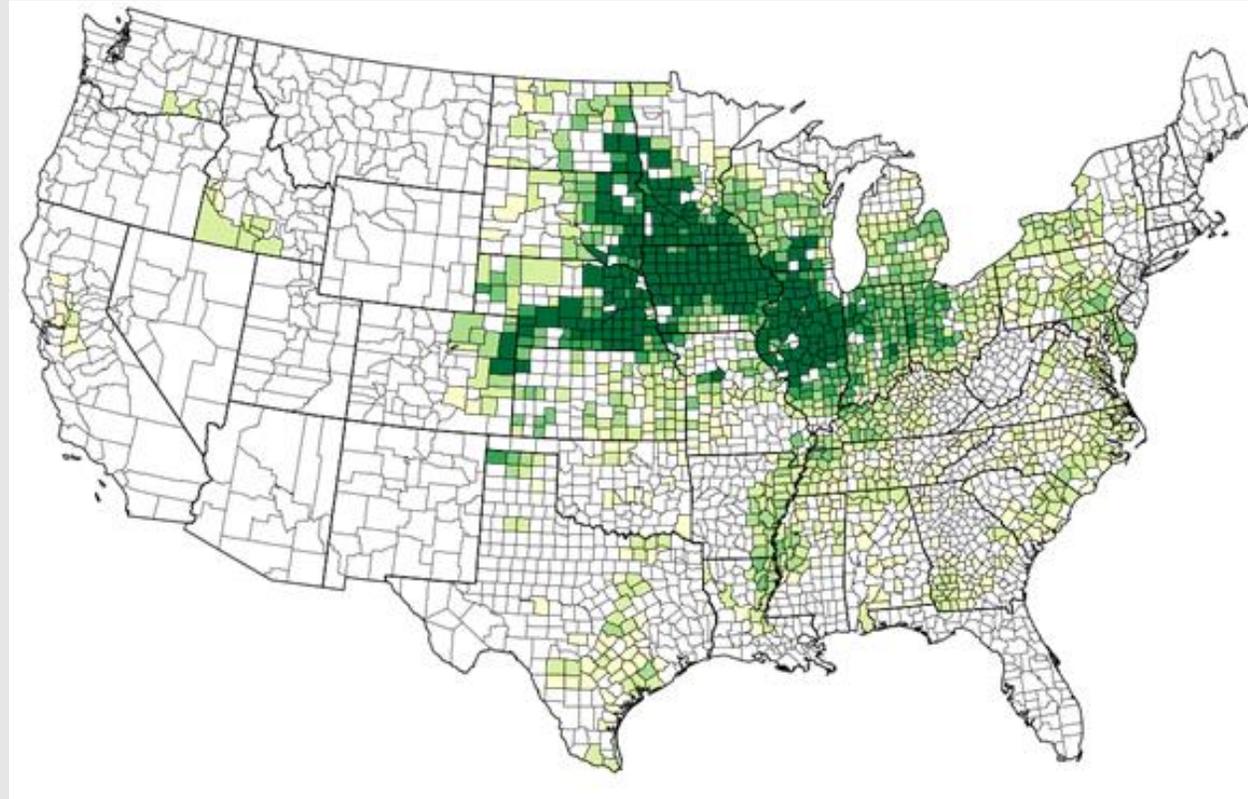
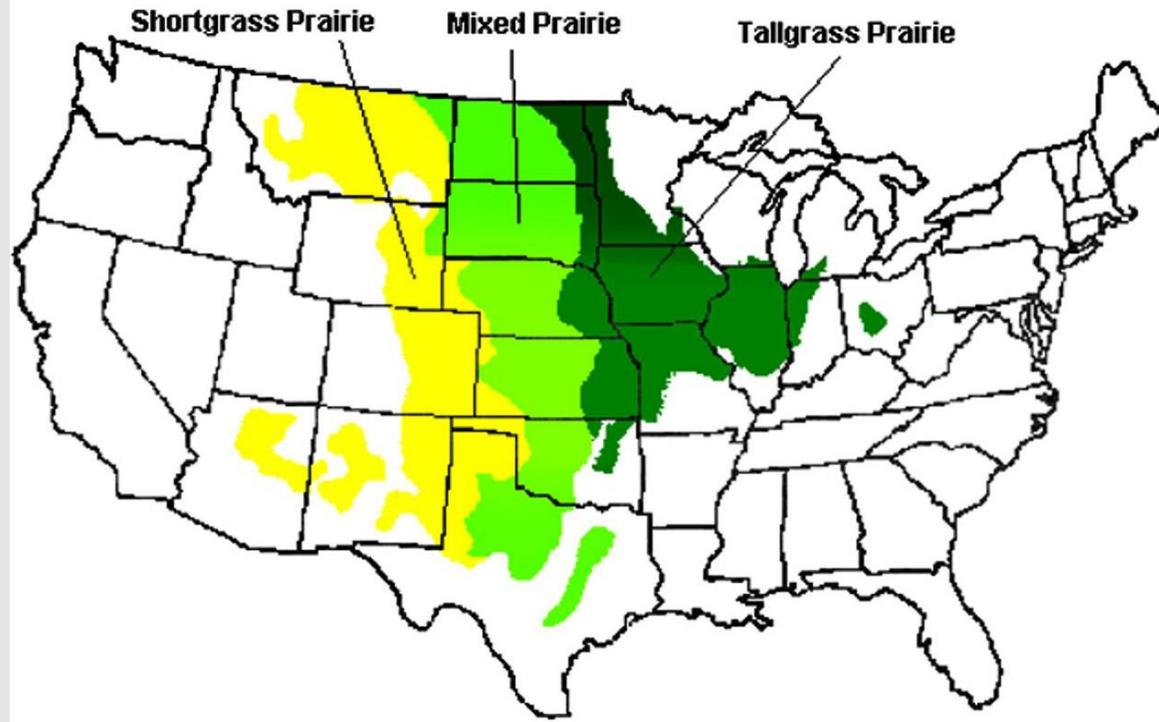


Source: [https://naturalresources.extension.iastate.edu/files/hidden-page/files/iowas\\_forest\\_ecosystems\\_color\\_handout.pdf](https://naturalresources.extension.iastate.edu/files/hidden-page/files/iowas_forest_ecosystems_color_handout.pdf)

...replaced by one tall grass (and a legume)



## Map of Prairie-Dominated Native Ecosystems



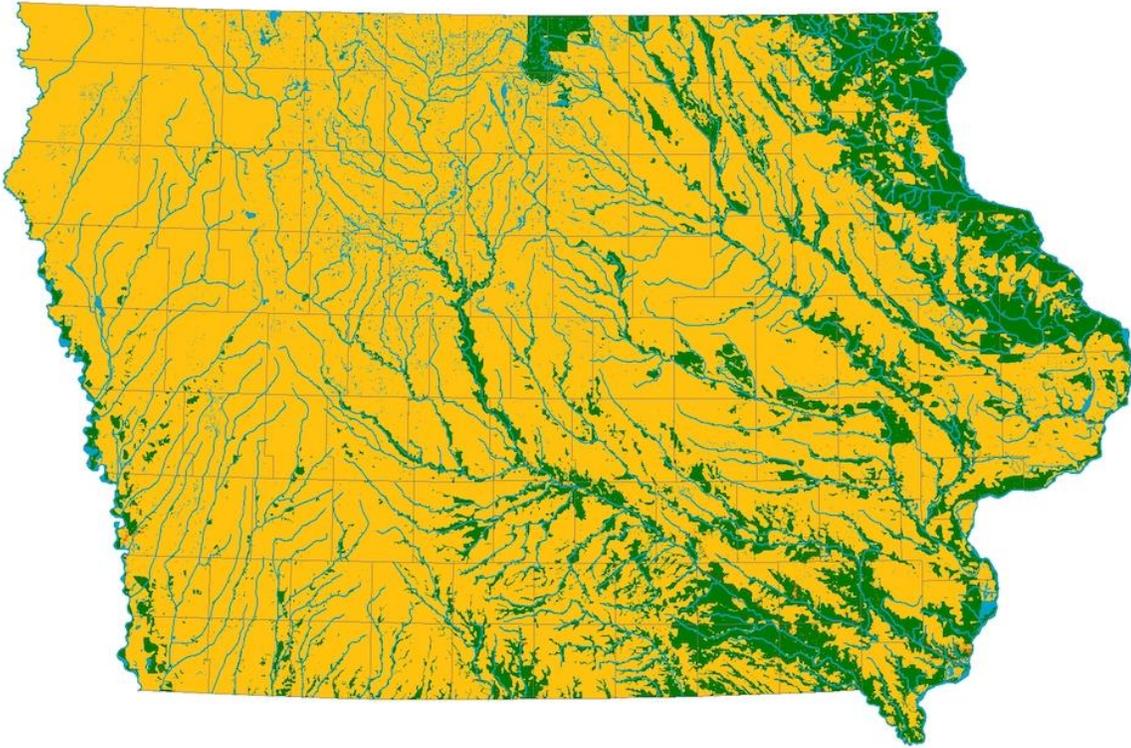
Source: <https://wildwillpower.org/amazing-resources-for-homesteaders/native-animals-who-need-recovery/prairie-restoration>

# Grazing & fire



Copyright Chris Helzer/The Nature Conservancy

**1830s-1850s (original land survey)**



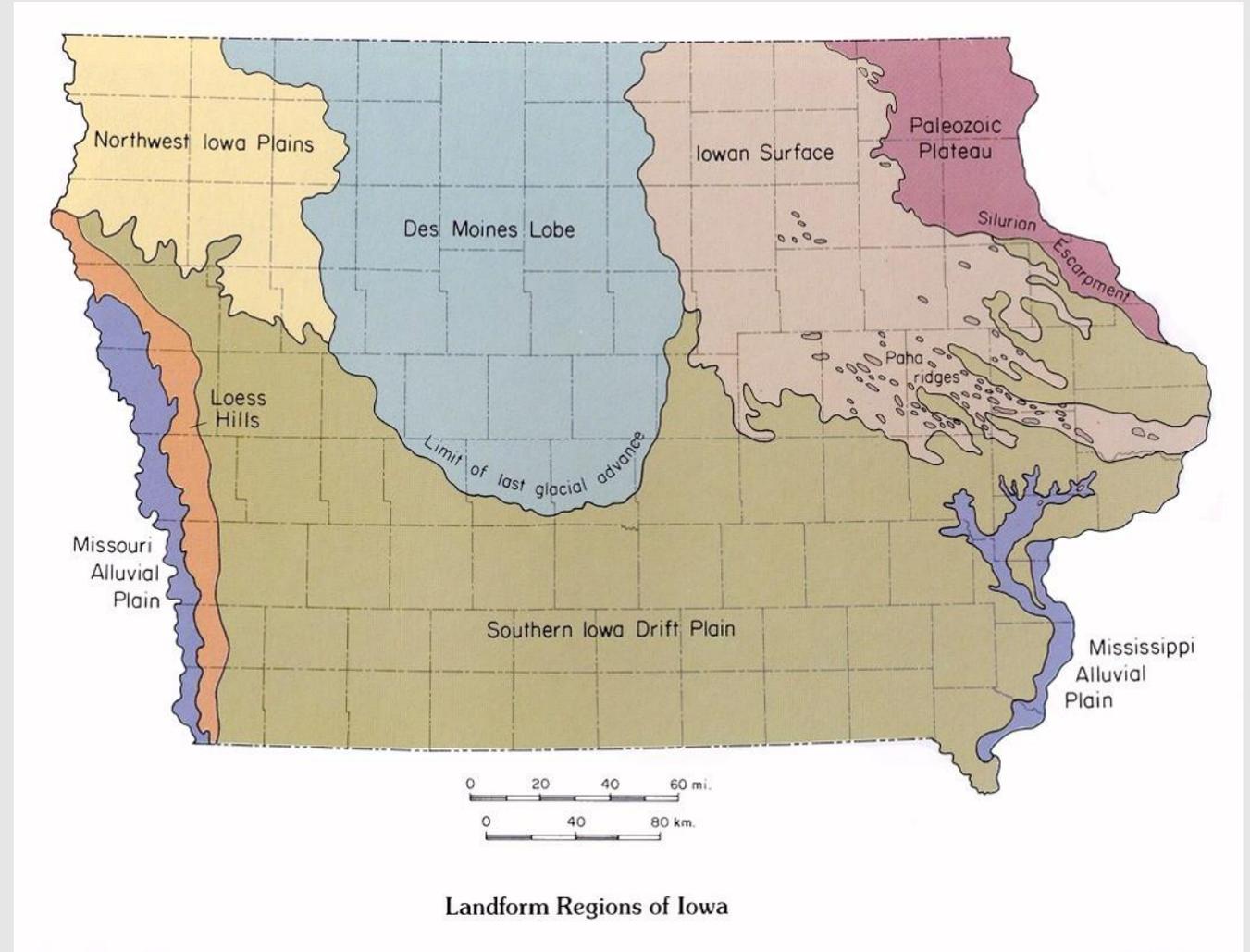
**2009 Land Cover**



Source: <https://www.inhf.org/blog/blog/remnant-prairie-a-closer-look-at-iowas-rarest-landscape/>

# Types of prairie

- Remnant, restoration, reconstruction
  - <0.1% of Iowa's prairie remains; >50% of that is in Loess Hills
- Landform/ecotype:
  - Wet, mesic, dry
  - Loess Hills, Missouri Alluvial Plain, Southern Iowa Drift Plain

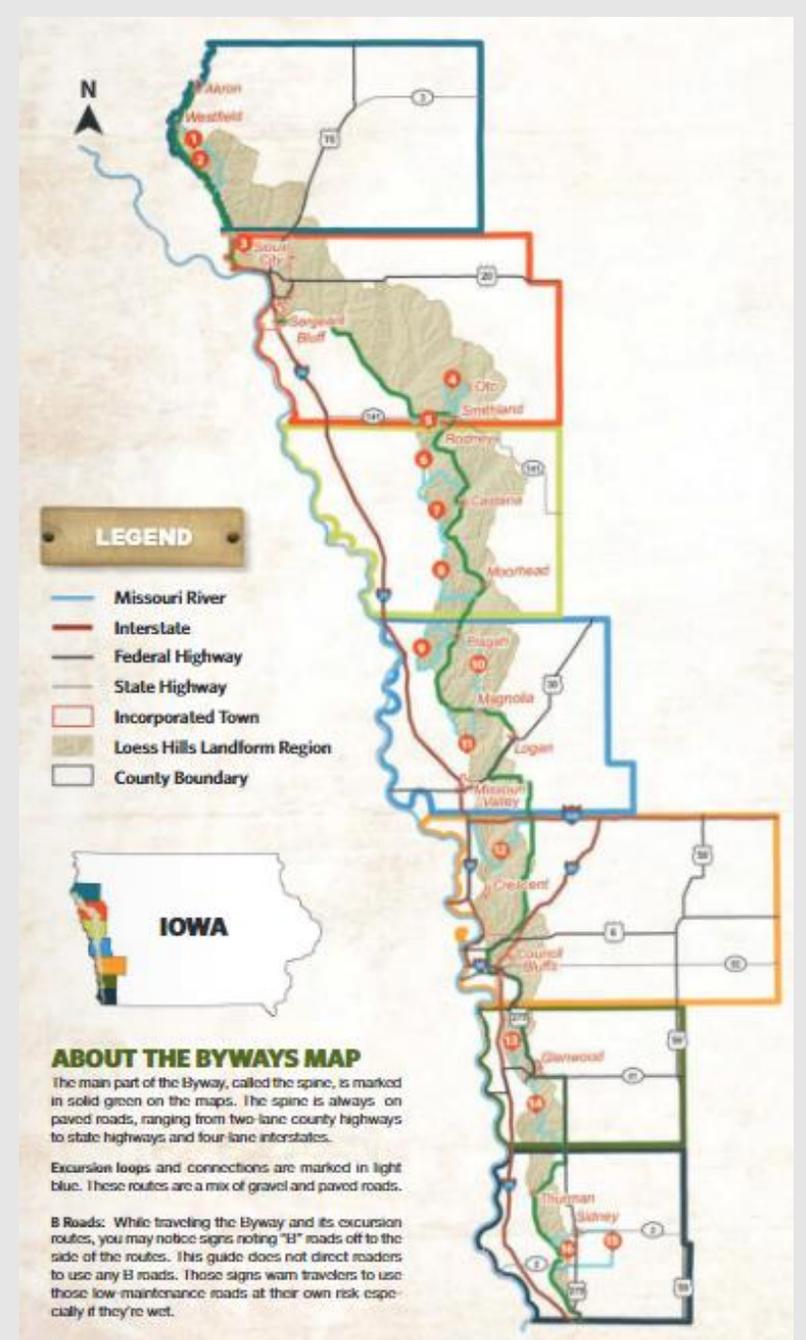


Map source: <https://www.ihr.uiowa.edu/igs/landscape-features-of-iowa/>

# Iowa's Loess Hills

- Iowa Scenic Byway - 1998
- National Scenic Byway designation - 2000
- 220+ mile spine & loops

[VISITLOESSHILLS.ORG](http://VISITLOESSHILLS.ORG)



# Special Landscape Areas

- 12 Special Landscape Areas (SLAs)
- “represent clusters of exemplary biological and geological features and capture approximately 80% of the remnant prairie in the hills”
- >30% of SLA acres are in some form of permanent protection
- 5% of landform permanently protected
- >6,000 ac. private land easements in LH

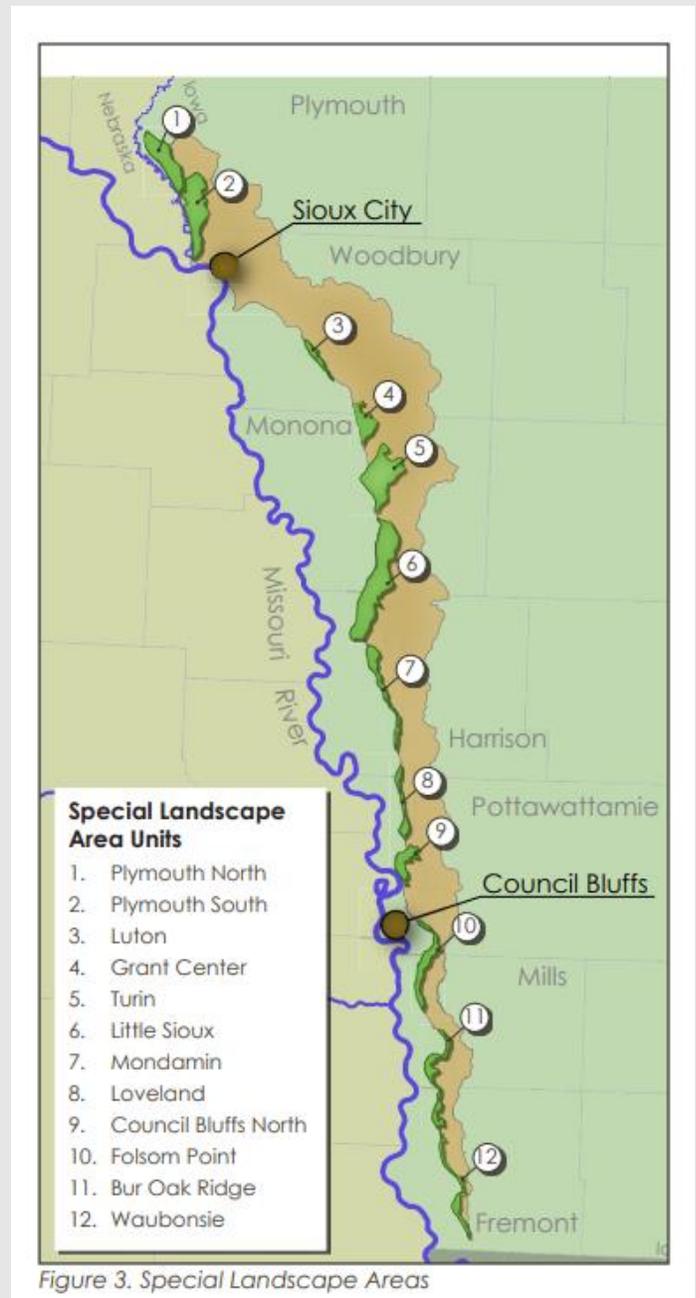


Figure 3. Special Landscape Areas

# Loess Hills Prairies Plymouth County

- [Broken Kettle Grasslands](#) (largest remnant)
- [Five Ridge Prairie Preserve](#)
- [Heendah Hills State Preserve](#)
- [Mount Talbot Preserve](#)



# Loess Hills Prairies Woodbury County

- [Stone State Park](#)/Mt. Talbot State Preserve
- [Sioux City Prairie](#)



# Loess Hills Prairies Monona County

- [Loess Hills Wildlife Area](#)



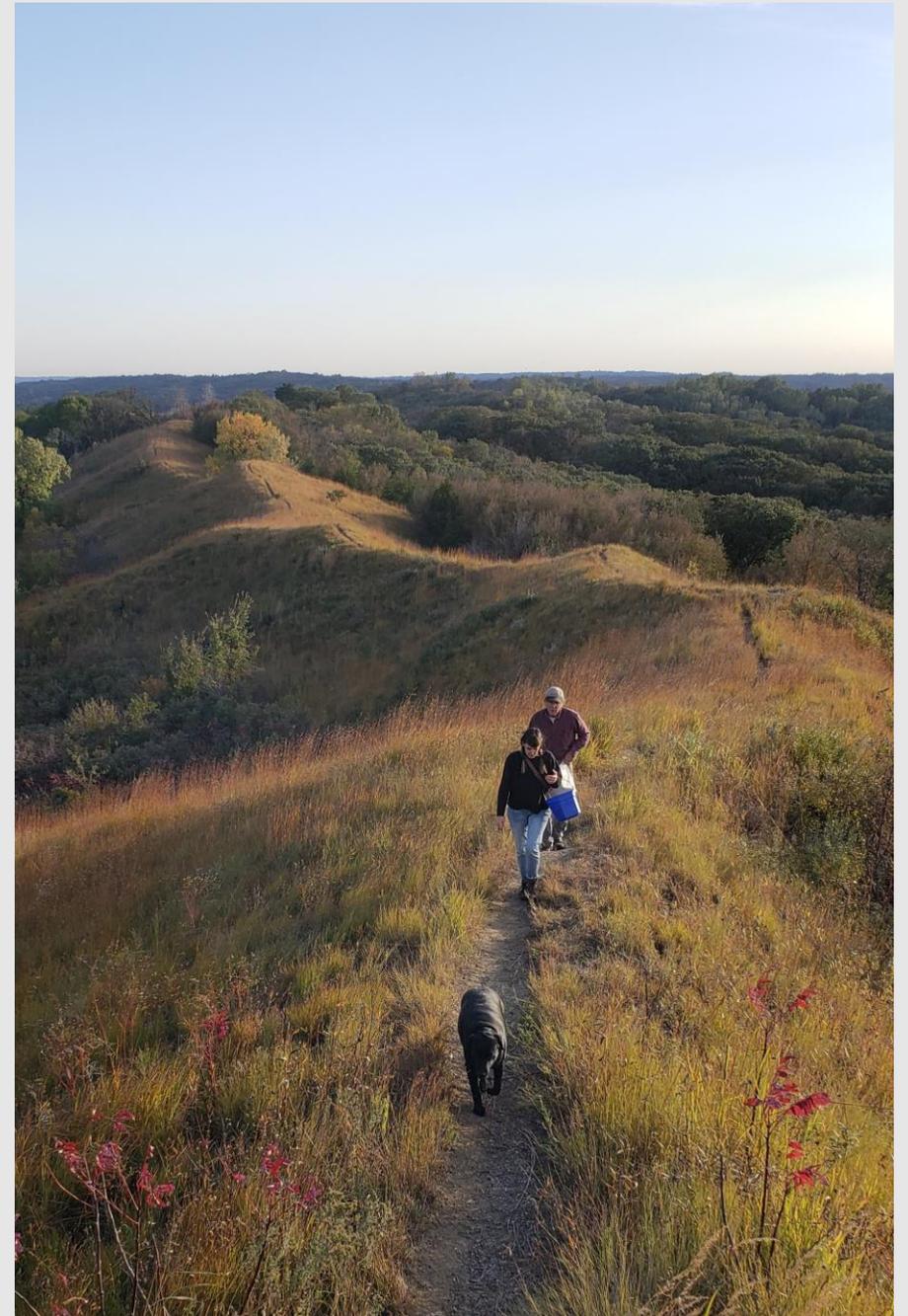
# Loess Hills Prairies Monona County

- [Turin Wildlife Management Area](#)



# Loess Hills Prairies Monona County

- [Loess Hills State Forest](#)
- [Preparation Canyon State Park](#)



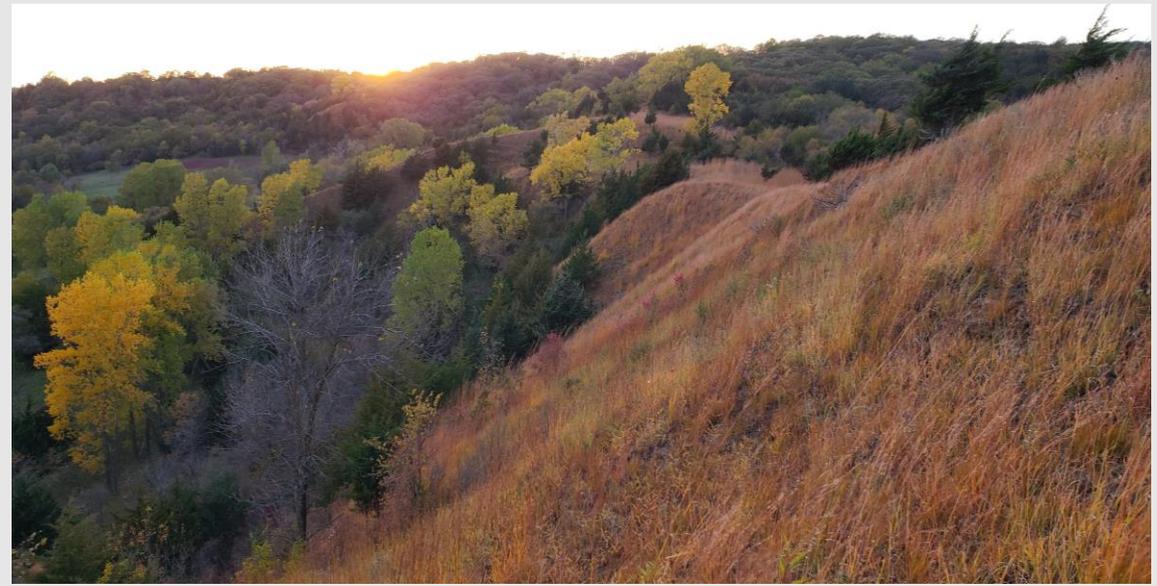
# Loess Hills Prairies Harrison County

- [Murray Hill Scenic Overlook](#)



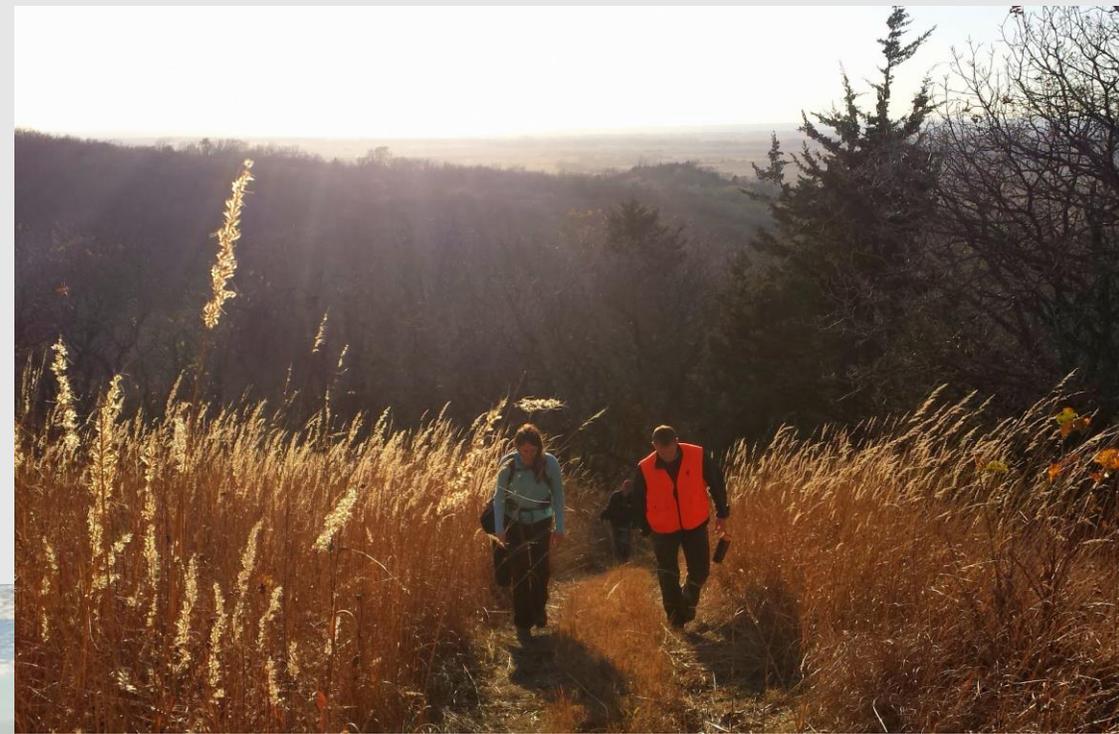
# Loess Hills Prairies Harrison County

- [Loess Hills State Forest](#) – Little Sioux Unit
- [Brent's Trail](#)



# Loess Hills Prairies Harrison County

- [Gleason-Hubel Wildlife Area](#)



# Loess Hills Prairies Harrison County

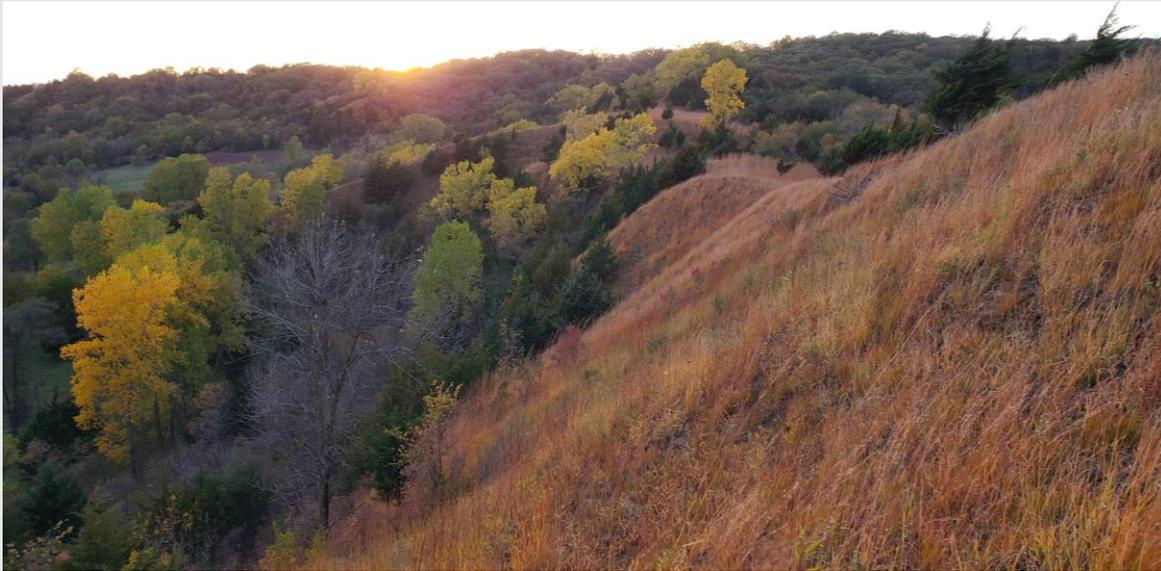
- [Loess Hills State Forest](#) – Pisgah Unit
- [Willow Lake Recreation Area](#)





# Loess Hills Prairies Harrison County

- [Loess Hills State Forest](#) – Mondamin Unit





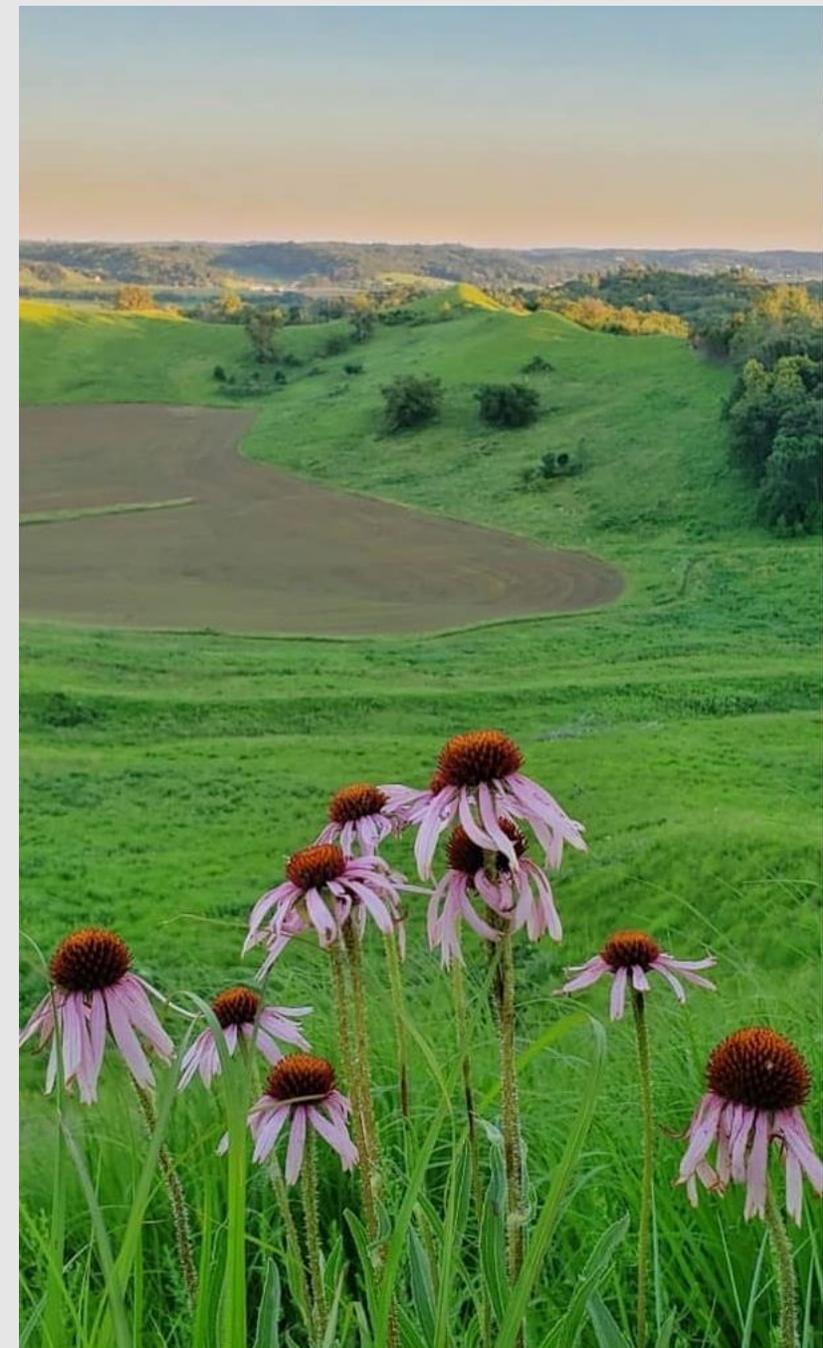
# Loess Hills Prairies Harrison County

- [Old Town Conservation Area](#)



# Loess Hills Prairies Pottawattamie County

- [Hitchcock Nature Center](#)



# Loess Hills Prairies Pottawattamie County

- [Vincent Bluff State Preserve](#)



# Loess Hills Prairies Mills County

- [Folsom Point Preserve](#)
- [West Oak Forest](#)



# Loess Hills Prairies Fremont County

- [Possum Hollow WMA](#)



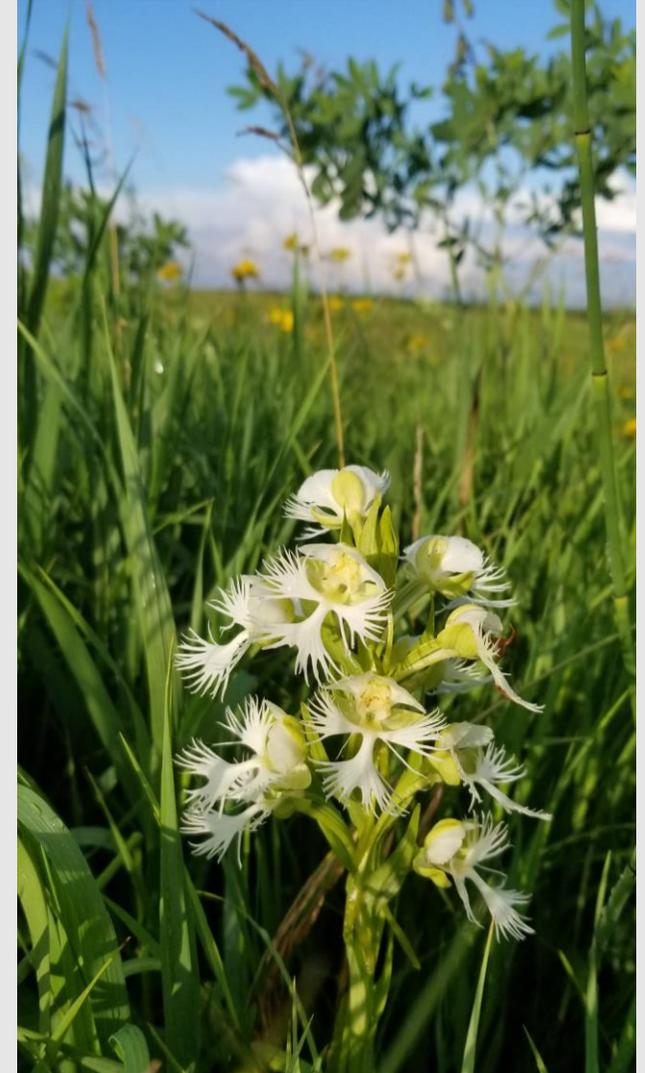
# Loess Hills Prairies Fremont County

- [Waubonsie State Park](#)
- [Slusher WMA](#)



# Other western Iowa prairies

- Dinesen Prairie State Preserve





# Other western Iowa prairies

- Wearin Prairie (PRIVATE PROPERTY!)
- Nishnabotna floodplain remnant



# Water Quality Initiative

- Raingardens & bioretention cells in Nishnabotna watershed
- Native grasses & forbs

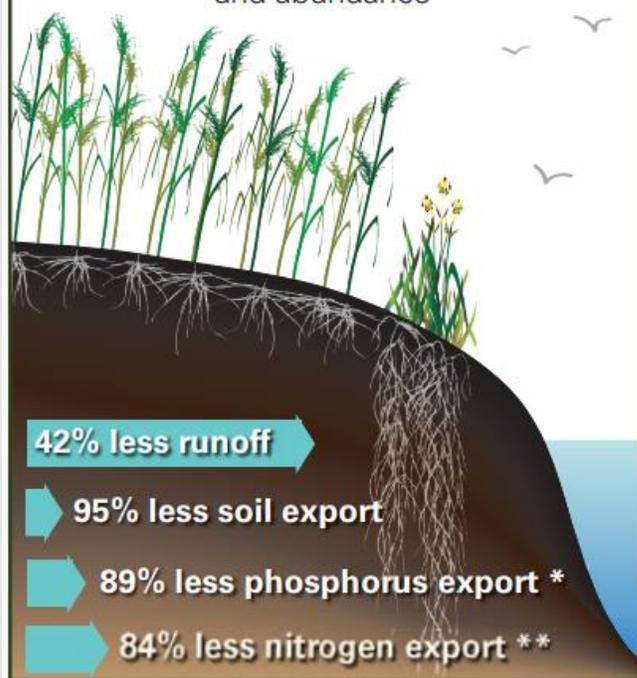


# Prairie Strips

- Eligible CRP practice

**What 10% in prairie strips can do:**

- Four-fold increase in native plant species
- Two-fold increase in pollinator species and three-fold increase in pollinator abundance
- Two-fold increase in bird species and abundance



42% less runoff

95% less soil export

89% less phosphorus export \*

84% less nitrogen export \*\*

The diagram shows a cross-section of a prairie strip. On the left, a cornfield is shown with shallow roots. On the right, a prairie strip is shown with deep, fibrous roots extending into the soil. A blue arrow points from the cornfield to the prairie strip, indicating the reduction in runoff. Below the diagram, four blue arrows point to the right, each containing a percentage and a description of the benefit.



# Upcoming Golden Hills Events

GOLDEN HILLS RC&D presents

## GROWING NATIVE OAKS

A field trip to Iowa Native Trees & Shrubs Nursery



Saturday, March 14, 2020

Learn how to grow oak trees and other native trees from Mike Bevins, one of the premier native tree growers in the Midwest.

RSVP required: email [lance@goldenhillsrcd.org](mailto:lance@goldenhillsrcd.org)

Full details at

[goldenhillsrcd.org/native-oak-project](http://goldenhillsrcd.org/native-oak-project)

Free and open to the public. Project made possible through a Specialty Crop Block Grant through Iowa Department of Agriculture & Land Stewardship.



Golden Hills RC&D and Iowa Western Community College present

## GROWING NATIVE PLANTS

Learn to propagate Iowa's prairie plants!



Iowa Western Community College - Council Bluffs

Monday, January 6

6:00-8:00pm

Monday, January 27

6:00-8:00pm

Sign up for one or two sessions. Pre-registration required. \$5 per class. Native plant enthusiast and grower Cait Caughey will teach techniques and best practices for starting native prairie plants using locally-harvested seed.

Full details and registration available at

[goldenhillsrcd.org/growingnatives](http://goldenhillsrcd.org/growingnatives)



Project made possible through a grant from Gilchrist Foundation & Specialty Crop Block Grant



# More IWCC classes & native plant sale!



# Upcoming IPN Events

## Prairies & Pints



Monday, March 16 7:00-8:30pm

Barley's Bar & Grill

114 W. Broadway, Council Bluffs

Presenter Graham McGaffin with The Nature Conservancy will discuss his trip to China's Loess plateau & how it compares to Iowa's Loess Hills

Event will include short presentation followed by Q&A and socializing. Free and open to the public.

Learn more at [iowaprairienetwork.org](http://iowaprairienetwork.org)

[facebook.com/IowaPrairieNetwork](https://facebook.com/IowaPrairieNetwork)



## Pasque Flower Walk



Saturday, April 4 10:00am-noon

Loess Hills State Forest - Pisgah Unit

Meet at picnic shelter at 1369 Geneva Place,  
southwest of Pisgah.

See one of the earliest-blooming flowers at a  
remnant Loess Hills prairie

Free and open to the public.

Learn more at  
[iowaprairienetwork.org](http://iowaprairienetwork.org)

[facebook.com/IowaPrairieNetwork](https://facebook.com/IowaPrairieNetwork)



# Events

- [Prairie seed harvests](#)
- [Native plant classes](#)
- [IPN Prairie Walks](#)
- [Loess Hills Prairie Seminar](#) – May 29-31 near Onawa
- [North American Prairie Conference](#) – July 20-22 in Altoona
- Iowa Prairie Conference – every other year

# Prairie Resources

- <http://www.goldenhillsrcd.org/>
- <https://www.iowaprairienetwork.org/>
  - [Find a Prairie](#)
- <https://tallgrassprairiecenter.org/>
- Visitloesshills.org
  - [Loess Hills Hiking Guide](#)

# Questions? Comments?

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