



Oak savanna along the upper reaches of the Sugar River



Southwest Savanna

ecological landscape

Attributes and Characteristics

This ecological landscape is characterized by deeply dissected, unglaciated topography with broad open hilltops, flat fertile river valleys, and steep wooded slopes. Occupying the south-facing slope of the Military Ridge, prairies and savannas were the dominant habitat types in this area prior to Euro-American settlement. Dry prairies covered the hilltops and graded into more mesic prairies, oak savannas and oak woodlands down slope. The river valleys were often a mix of hardwoods including oak, maple and elm. The dominant land use now is agriculture, although farms typically contain a combination of row crops, hay fields, and small woodlots.

Several good quality warmwater streams flow through the landscape and, although impacted by non-point pollution, support diverse fisheries as well

as some rare aquatic species. The wooded slopes along these rivers are often managed for oak-hardwood production. In some cases oak is being over-harvested and these areas are converting to cherry, red maple and hickory. “Relict” stands of pine occur on bedrock outcroppings along some stream systems.

Given its proximity to Madison, Rockford, Dubuque, and even Chicago, the area is experiencing rapid changes as former farms are split up into housing for commuters and recreation land for people that live outside the area.

Conservation Needs and Opportunities

From both a statewide and national perspective, a pressing conservation concern has been the dramatic decline over the past several decades of many grassland birds such as Henslow’s sparrow, loggerhead shrike, greater prairie chicken, and Bell’s vireo. Although data showing population trends for grassland mammals, reptiles, amphibians, insects and other species

Legacy Places

- BV Blue Mound-Blanchardville Prairie and Savanna
- BP Blue Mound State Park
- FH Fever River-Hardscrabble Prairie
- GR Grant and Rattlesnake Rivers
- MM Monroe-Muralt Prairie
- PC Pecatonica River and Grasslands
- PL Platte River
- YL Yellowstone Lake

Key characteristics:

- » Scattered prairie, oak savanna remnants, and prairie pastures
- » Concentration of rare and declining grassland birds
- » Broad open hilltops and river valleys with steep wooded slopes
- » High quality warmwater streams
- » Opportunities for large scale prairie and oak savanna restoration
- » Some coldwater resources in headwater streams

Size:

- » 1,950 square miles
- » 1,247,900 acres (3.5% of Wisconsin)

Population:

- » 93,000 (1.7% of Wisconsin’s population)

Notable species:

- » Grassland birds including: Henslow’s sparrow, Bell’s vireo, loggerhead shrike, short-eared owl, harrier, upland sandpiper, western meadowlark
- » Badger
- » Smallmouth bass
- » Slender madtom
- » Southern redbelly dace
- » Regal fritillary butterfly
- » Prairie bush clover
- » American fever-few
- » Big and little bluestem

Natural communities:

(See Appendix B for descriptions)

- » Dry-mesic prairie
- » Dry prairie
- » Oak opening
- » Oak woodland

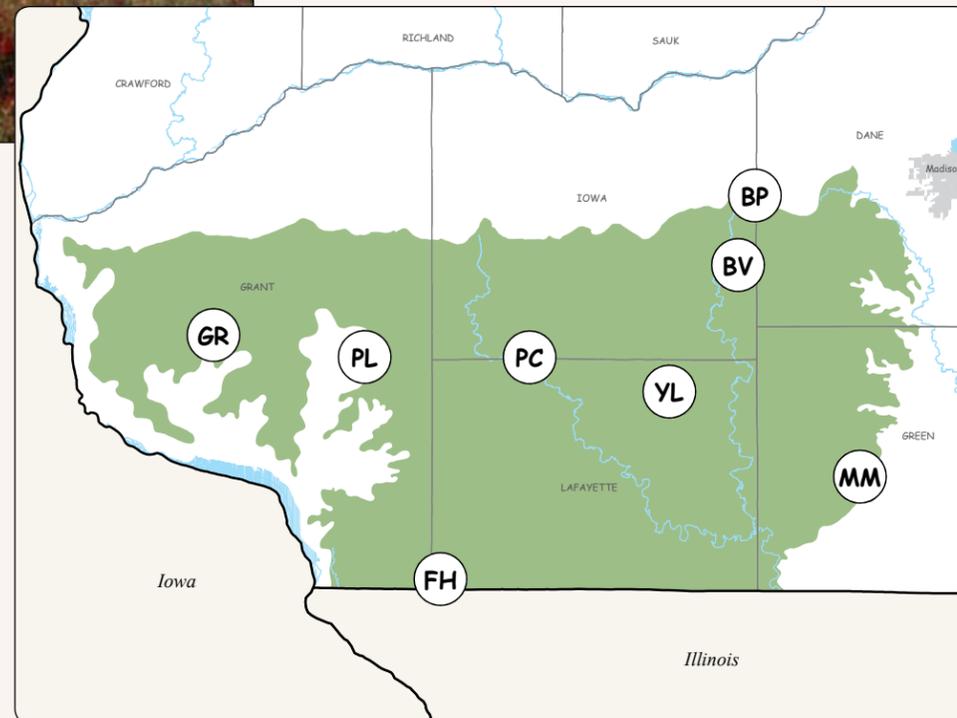


Figure 96: Legacy Places and public conservation lands of the Southwest Savanna

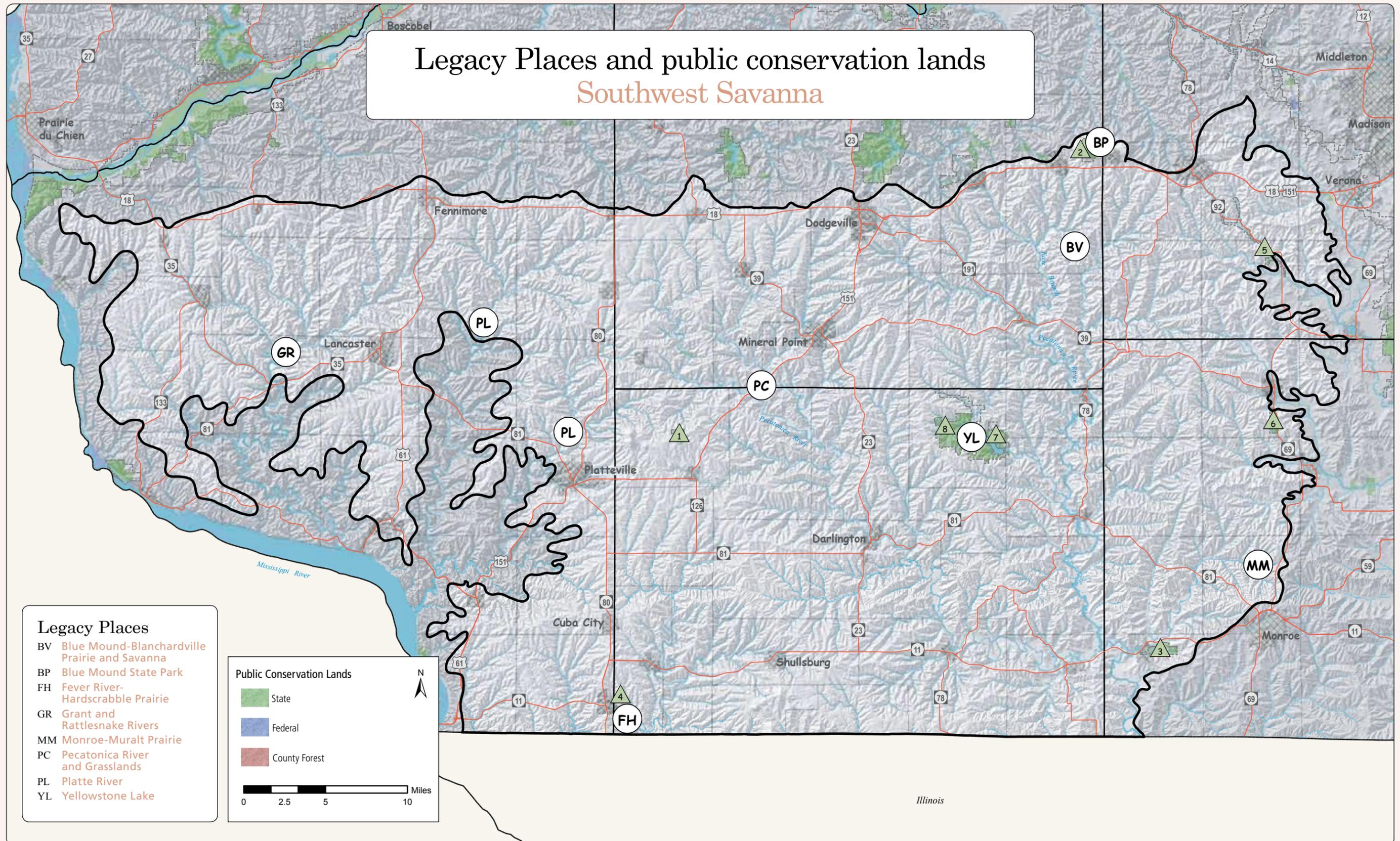
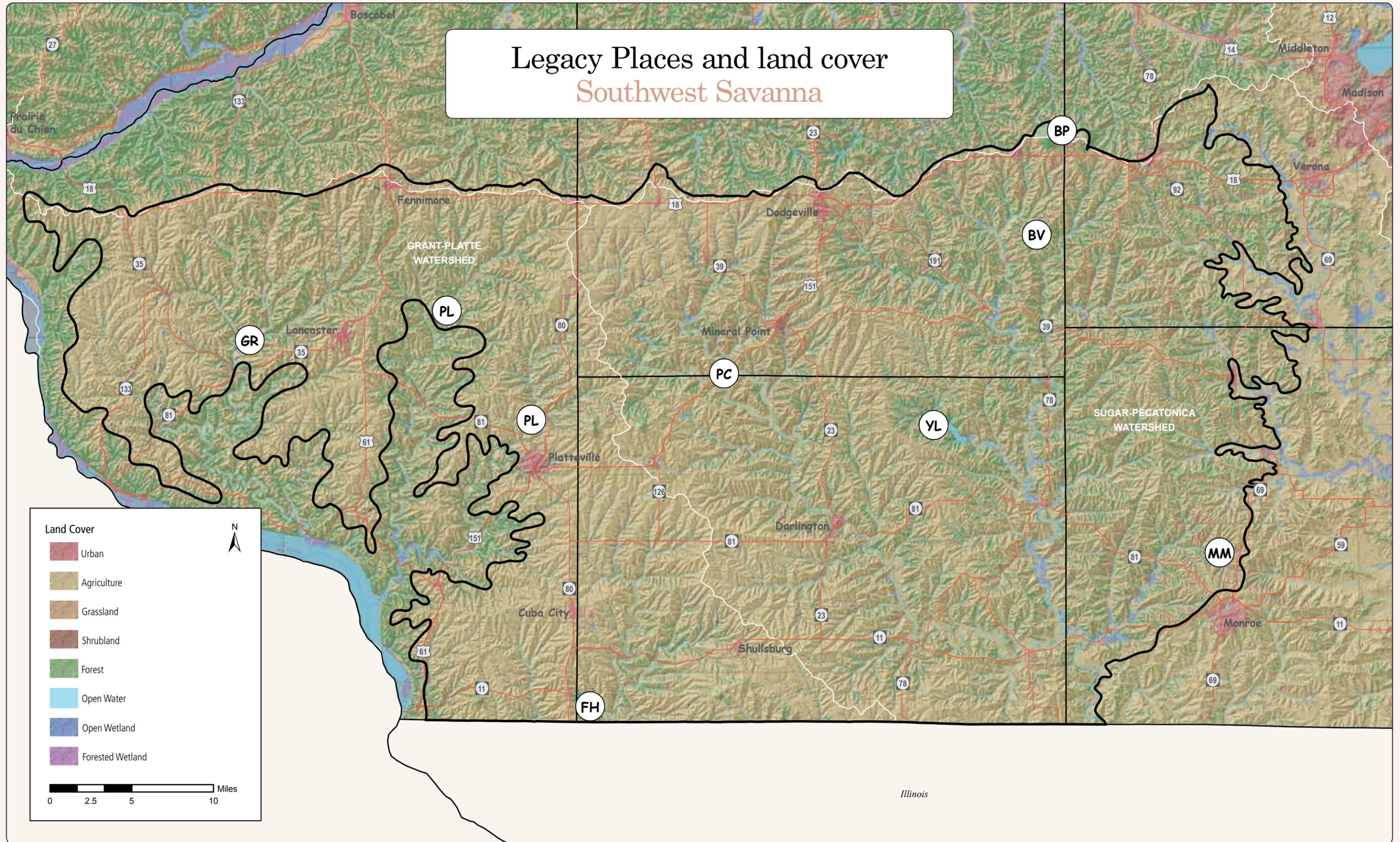


Figure 97: Legacy Places and Land Cover of the Southwest Savanna



Southwest Savanna ecological landscape

Public Conservation Lands

Map#	Property Name	Size (acres) ¹
State		
1	Belmont Mound State Park	250
2	Blue Mound State Park ²	970
3	Browntown-Cadiz Springs State Recreation Area	640
4	Hardscrabble Prairie State Natural Area	160
5	Mount Vernon Creek State Fishery Area	370
6	New Glarus Woods State Park	390
7	Yellowstone Lake State Park	730
8	Yellowstone Lake State Wildlife Area	4,210
	Miscellaneous Lands ³	1,935
Federal		
	None	
County Forest⁴		
	None	
TOTAL		9,655

¹ Actual acres owned in this Ecological Landscape.

² This property also falls within adjacent Ecological Landscape(s).

³ Includes public access sites, fish hatcheries, fire towers, streambank and non-point easements, lands acquired under statewide wildlife, fishery, forestry, and natural area programs, small properties under 100 acres, and properties with fewer than 100 acres within this Ecological Landscape.

⁴ Locations and sizes of county owned parcels enrolled in the Forest Crop Law are presented here. Information on locations and sizes of other county and local parks in this Ecological Landscape is not readily available and is not included here, except for some very large properties.

groups are lacking, it is believed that the full range of grassland species has plummeted. The primary cause of this decline has been the loss and fragmentation of prairies and oak savannas.

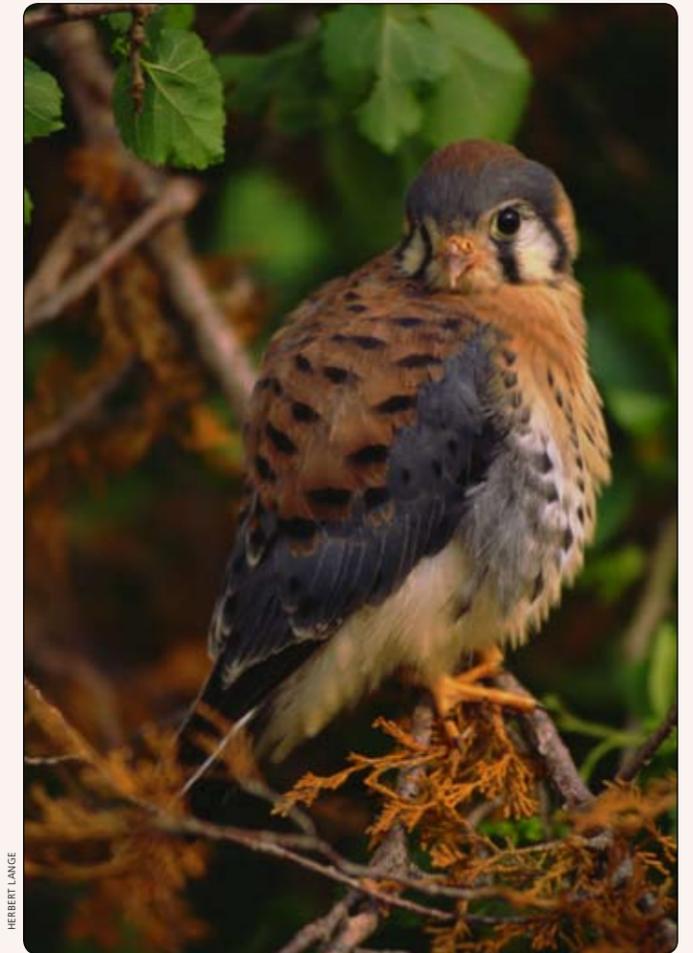
Some high quality prairie remnants remain on the rocky hilltops and slopes that are not suitable for farming. Although nearly all of the oak savannas have been converted to production agriculture or have transitioned to oak forests, a small number of remnants remain or are being restored in this ecological landscape. Prairie pastures are scattered through the area and a substantial number of farm fields have been enrolled in the federal Conservation Reserve Program. Together, these remaining lands comprise critical habitat for many rare grassland birds, invertebrates, mammals, and reptiles. Because of its soil, existing land use, and topography, the Southwest Savanna ecological landscape offers one of Wisconsin's best opportunities for the large-scale restoration of functioning dry prairies, dry-mesic prairies, and oak savanna, three of the state's rarest natural communities. Maintaining viable farming operations in the area would be a critical component in any overall protection strategy to restore functioning grassland ecosystems here.

A number of high quality streams flow through the ecological landscape. Several of the cold headwater streams support trout, with many of the larger streams and rivers supporting very

productive warmwater fisheries. Many streams and rivers in the area are impaired by non-point pollution and would benefit from continued efforts to establish buffers along streambanks.

Recreation Uses and Opportunities

With the eastern side of this ecological landscape adjacent to Madison, there is great potential for this area to help meet many of the types of outdoor recreation for which demand is rapidly growing. Hiking, cross-country skiing, camping, picnicking, bird watching, fishing, hunting, biking, paddling, and nature study, among other activities, could be accommodated here. Despite its closeness to Madison and the associated demand for recreation, there is relatively little public land in this landscape. Blue Mounds, Governor Dodge, Yellowstone Lake, and New Glarus Woods State Parks are all heavily used public properties. The Browntown-Cadiz Springs and Mount Vernon Creek Fisheries Areas provide some fishing opportunities. Two "rail-trails," the Pecatonica State Trail and the Cheese Country Trail are within this landscape and will be linked to the Military Ridge and the Badger State Trail, increasing their recreational opportunity. A trail from Darlington to New Glarus, via Yellowstone Lake, would likely be very popular. An off road biking trail has been established at Blue Mounds and it is likely that others would be equally well used.



American Kestrel (*Falco sparverius*)

Figure 98: Land cover of the Southwest Savanna

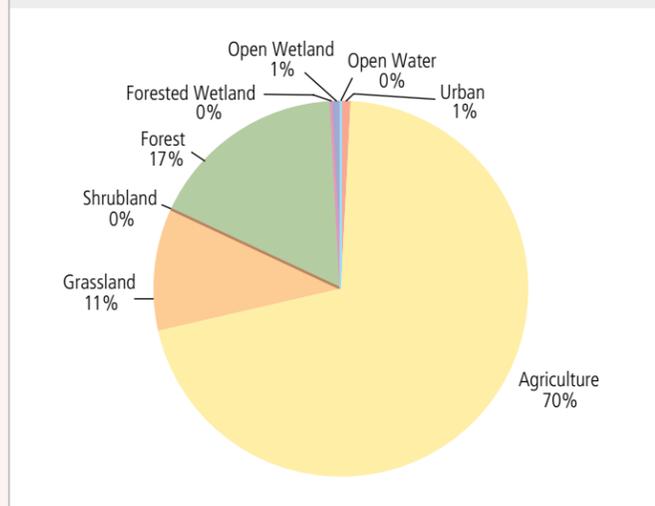


Figure 99: Public conservation and other land ownership in the Southwest Savanna

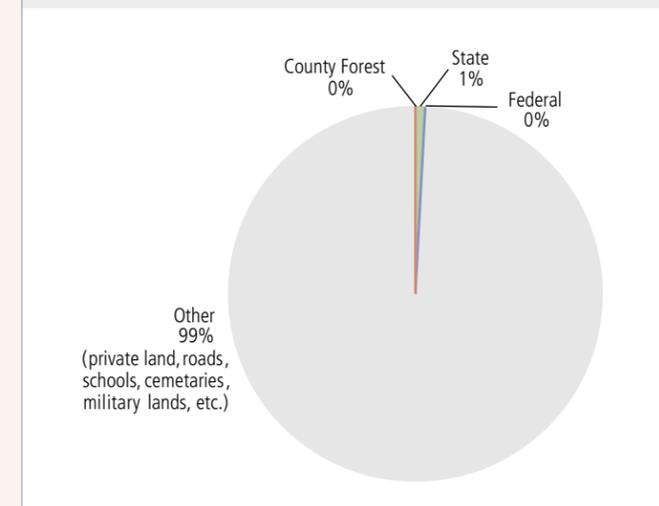
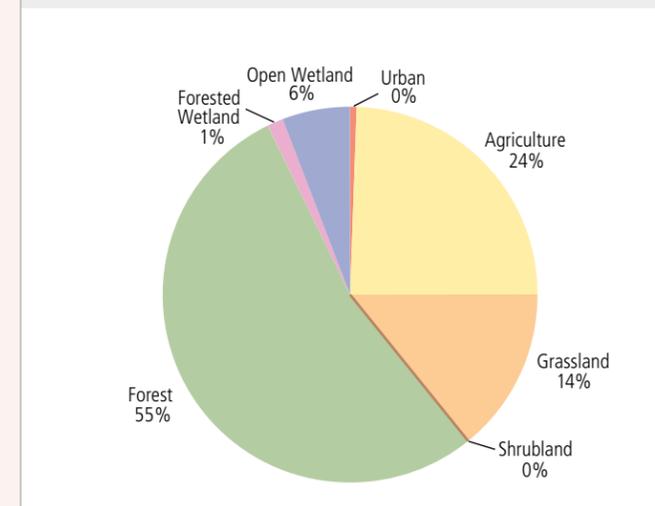


Figure 100: Land cover of public conservation lands in the Southwest Savanna



Eastern Hognose Snakes (*Heterodon platirhinos*), one playing dead

Legacy Places



View across the Pecatonica River valley

BV Blue Mounds-Blanchardville Prairie and Savanna

Size Large
Protection Initiated Moderate
Protection Remaining Substantial
Conservation Significance ★★★★★
Recreation Potential ★★★★★

Lying south of Blue Mounds, this area contains many high quality prairie remnants, some large prairie pastures, and many fields enrolled in the Conservation Reserve Program, all imbedded in a large, open agricultural setting. Many rare grassland species occur throughout the area, including Henslow's and grasshopper sparrows, sedge wren, loggerhead shrike, and upland sandpiper. Although there is significant development pressure here, there are still excellent opportunities to expand the small prairie and savanna remnants that exist by restoring some land that is not well suited for farming. Maintaining open space between these pockets of prairie and savanna will be crucial in keeping these remnants ecologically functioning. As such, conservation efforts would need to utilize strategies that help keep farming operations viable throughout the area.

The DNR recently conducted a statewide assessment of places that presented the best opportunities to restore functioning grassland ecosystems, based on the quality and uniqueness of existing grasslands, potential for creation of larger, linked sites, and how valuable they were for rare species. This is the highest-ranked site in the state. This area has also been identified as one of two grassland areas eligible for the U.S. Department of Agriculture's newly established Conservation Reserve Enhancement Program (CREP), which will bring significant federal funding to help maintain and restore grasslands. The Nature Conservancy and other private conservation groups are actively working with landowners in a variety of different ways to help maintain and restore grassland and savanna here.

Although this area is identified primarily for its prairie and savanna values, it also sits at the headwaters of the East Branch of the Pecatonica River. Efforts to restore native vegetation, particularly along headwater creeks, are expected to improve water quality and benefit the game and non-game fisheries that exist. Many of the trout waters in the East Branch watershed are popular with local anglers. With Madison 30 miles to the east, this area draws many visitors and offers an excellent opportunity to educate the public on the needs and opportunities for protecting some of the state's rarest natural communities.

BP Blue Mound State Park

Size Small
Protection Initiated Substantial
Protection Remaining Limited
Conservation Significance ★★★★★
Recreation Potential ★★★★★

Blue Mound State Park lies on the northern boundary of the Southwest Savanna ecological landscape. It contains some oak woodland and grassland areas that are a gradation between the grassland/savanna landscape to the south and the more heavily wooded oak woodlands to the north. Opportunities exist to expand the park to the north to include high quality oak forest representative of the area, as well as mesic maple-basswood forest that is rare in this ecological landscape. Expansion of protected lands to the south would provide a gradation from high quality grassland communities to oak woodlands, which is not readily found elsewhere in the state.

As a result of its close proximity to Madison, this property is heavily used for hiking, biking, cross country skiing, picnicking, camping, and nature study. The park's easy access to Madison also results in significant development pressure around the park.

FH Fever River-Hardscrabble Prairie

Size Medium
Protection Initiated Limited
Protection Remaining Substantial
Conservation Significance ★★★★★
Recreation Potential ★★

The Fever (Galena) River is one of the highest quality warmwater rivers in southwest Wisconsin. It supports an excellent and popular smallmouth bass fishery. Many tributaries are high gradient, cool water streams. The area's other notable feature is the collection of high quality prairie remnants concentrated in the lower sections of the river valley. Although smaller than some of the other grassland restoration opportunities in the Southwest Savanna ecological landscape, this area has several very diverse, rich prairie remnants. There are also some large pastures and several fields enrolled in the Conservation Reserve Program in this area that help support the many rare prairie insects, birds and mammals found here.

GR Grant and Rattlesnake Rivers

Size Medium
Protection Initiated Limited
Protection Remaining Moderate
Conservation Significance ★★
Recreation Potential ★★

In this ecological landscape, the headwaters of these rivers drain highly productive farm fields and grasslands. Small pockets of woods are found on the steeper slopes. Trout are present in several of the headwater streams with the lower reaches supporting various warmwater species. Water quality in this system has been affected to varying degrees by agricultural run-off. The area could support several low impact recreation activities.

Southwest Savanna ecological landscape



The delicate flower of Side-oats Grama (*Bouteloua curtipendula*), a native prairie grass

MM Monroe - Muralt Prairie

Size Medium
 Protection Initiated Limited
 Protection Remaining Substantial
 Conservation Significance ★★★★★
 Recreation Potential ★★★

Lying in central Green County west of the Sugar River, this area lies among rolling hills created by an old glacial moraine. It is primarily an open agricultural landscape with some pastures and fallow farm fields, but is experiencing rapid rural development. Some high quality prairie remnants occur on the rocky hilltops and slopes that are not tillable, and a small number of prairie pastures and oak savannas still exist. Wet-mesic prairies exist along the valley floors and many rare prairie plants and insects occur in pockets throughout the area.

This area presents a very good opportunity to combine the protection of significant amounts of farmland with large-scale prairie restoration. Connecting scattered prairie remnants with restored prairie, fields enrolled in the Conservation Reserve Program, or prairie pastures would provide substantial ecological benefits. Working with the farming community to find ways to keep an open, agriculture-based landscape would also be beneficial. Linking this area to the Albany Wildlife Area and the Sugar River Corridor would offer many recreational and educational opportunities within 40 miles of Madison.

PC Pecatonica River and Grasslands

Size Large
 Protection Initiated Limited
 Protection Remaining Substantial
 Conservation Significance ★★★★★
 Recreation Potential ★★★

This area contains high quality prairie remnants imbedded in a large, open agricultural landscape. Several prairie pastures and oak savannas still exist. The open hilltops are mostly cultivated or grazed, along with some scattered restored grasslands. Oaks dominate the steep-sided slopes. Lands adjacent to the numerous small streams are often cultivated or grazed, although some lowland wooded and shrubby areas exist. Some wet meadows and shallow water marshes are found along the floodplain in old meander channels and oxbows. Numerous

rare species are found in both the prairie remnants and the Pecatonica River and some of its tributaries. The Pecatonica River supports a limited number of trout in the headwaters and smallmouth bass in the lower stretches.

As with the other grassland areas identified in this report, working with the farming community to find ways to keep an open, agriculture-based landscape would need to be part of a successful protection strategy. Of the high quality farm landscapes in the state, this area is undergoing relatively modest land use changes and thus offers an excellent opportunity for the conservation and farming communities to work collaboratively to meet common goals. Its relatively close proximity to Madison and Dubuque could offer many recreational opportunities such as hunting, fishing, day hiking, and canoeing to a large number of people. Continued implementation of sound conservation practices would allow the trout, smallmouth bass, and warmwater sport fisheries to improve. Two trails, the Pecatonica State Trail and the Cheese Country Trail, occur here and linking these with the Military Ridge and the Badger State Trail would likely be very popular.

PL Platte River

Size Medium
 Protection Initiated Limited
 Protection Remaining Moderate
 Conservation Significance ★★
 Recreation Potential ★★

This ecological landscape contains the headwaters of the Platte River. Like those that feed the Grant and Rattlesnake rivers to the west, these cool-water tributaries drain a largely agricultural landscape. Small pockets of woods exist on the steeper slopes. Trout are present in some of the headwater creeks.

YL Yellowstone Lake

Size Small
 Protection Initiated Substantial
 Protection Remaining Limited
 Conservation Significance ★
 Recreation Potential ★★★★★

The southwestern part of the state has few large waterbodies and Yellowstone Lake, as the largest impoundment in the area, is a very popular recreation destination. Two state properties, Yellowstone Lake State Park and Yellowstone Lake State Wildlife Area, provide



American Badger (*Taxidea taxus*)

fishing, boating, hunting, camping, and many trail opportunities. Habitats found on these properties include grassland, existing overgrown oak savanna, oak woodland, and marsh, in addition to the lake. Protecting and restoring additional areas around these properties could provide a buffer as well as potentially link this area with either the Blue Mounds or Pecatonica grassland/savanna areas. A potential bike trail from Yellowstone Lake to Darlington and the Cheese Country Trail would likely be very popular.

Other Areas of Interest

Leopold's Riley Cooperative (Dane County)

In the early 1930s, Aldo Leopold was searching for a place to experiment with land management practices that would benefit game species. The area around Riley, where the Sugar River wound through a mix of cropland, pasture, oak savanna, woods and wetlands, caught his eye. Local farmers were having problems with trespassers shooting what little game remained. Leopold convinced the farmers and a group of townspeople interested in hunting to work cooperatively on management and oversight of the area. The "Riley Game Cooperative," as it was known, became a field laboratory for Leopold's developing ideas on conservation and habitat management in farming landscapes. Although housing has increased in the area, much of the area remains rural and could provide a unique opportunity to educate the public on Leopold's work and vision. The Military Ridge State Trail runs through the area.