

# Presettlement Prairie of Missouri

By  
Walter A. Schroeder



## Foreward

Where was the prairie in Missouri at the time of white settlement and what was it like? How did the early explorers, traders and settlers perceive the prairie? How did they explain its origin? Was the prairie a boon or a bane to settlement?

Walter Schroeder spent 12 years delving into these and related questions. By studying the written accounts of early visitors to the prairie and conducting a thorough analysis of the original notes of the Government Land Office survey of Missouri, Walter has compiled an accurate map of the state's presettlement prairie, has accumulated hundreds of references to the prairie's original condition, and has catalogued place names of prairies and their derivation.

Prairie is a Missouri resource. Once it was vast; now it is scarce and growing scarcer. The former prairie served Missouri well, providing the land base for this state's prosperous agriculture.

The amount of native prairie remaining in Missouri can only be estimated, but it probably does not exceed 40,000 acres, a fraction of a percent of the original prairie. Missouri's prairie remnants can continue to serve the state well—by remaining as prairie.

The Missouri Department of Conservation is committed to protecting the state's prairie heritage by acquiring and managing prairie lands, by advising owners of prairie on proper management, and by promoting the values of native prairie for wildlife habitat, forage production and public enjoyment. The Department also works closely with the Missouri Prairie Foundation and The Nature Conservancy, two private organizations that have made great contributions to prairie preservation in Missouri.

This publication can increase public understanding and appreciation of Missouri's prairie resource. It shows us what the prairie used to be and how it has all but vanished, as well as its importance as part of Missouri's cultural and natural history.

—Richard H. Thom

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by James R. Duncan

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1 *Big Bluestem*

2 *Indian Grass*

3 *Little Bluestem*

4 *Sideoats Gama*

5 *Sedge*

6 *Shooting Star*

7 *Coneflower*

8 *Cordgrass*

9 *Bulrush*



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By  
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## Contents

### Inside front cover

	Foreword
<b>1</b>	Introduction
<b>2</b>	Early Perceptions of the Prairie
<b>4</b>	The Land Survey in Missouri
<b>6</b>	Presettlement Prairie Map
<b>7</b>	Regional Descriptions
<b>7</b>	<i>Northwest Missouri (Map 1)</i>
<b>8</b>	<i>Grand-Chariton Region (Map 2)</i>
<b>10</b>	<i>Northeast Missouri (Map 3)</i>
<b>11</b>	<i>Missouri Valley (Maps 4 &amp; 5)</i>
<b>11</b>	<i>West-Central Missouri (Maps 4 &amp; 7)</i>
<b>12</b>	<i>Western Ozarks (Maps 5, 7 &amp; 8)</i>
<b>13</b>	<i>Ozarks (Maps 5, 7, 8 &amp; 9)</i>
<b>15</b>	<i>Southeast Lowlands (Map 9)</i>
<b>15</b>	<i>St. Louis Region (Map 6)</i>
<b>18</b>	Settlement of the Prairie
<b>20</b>	Destruction of Prairies
<b>21</b>	Prairie Names
<b>24</b>	Prairie Preservation
<b>24</b>	Acknowledgements
<b>24</b>	References Cited
<b>28</b>	Presettlement Prairie Maps



## Introduction

"Just as the sun was sinking below the horizon I entered one of those beautiful glades or natural meadows which are so often seen in this part of the New World, and never without producing an agreeable feeling.... The prairie spread out before me all its enchanting beauties, and fearful of passing too rapidly, I reined my horse. I gazed with delight on the smooth, soft grass, on the numerous flowers, on the scattered shrubberies of sumac, ... and on the close embowering woods...." (Brackenridge 1814).

Like so many others entering the presettlement prairies of Missouri, Henry Marie Brackenridge found them special. Although monotonous to some, the prairies evoked feelings of spaciousness and relief from the closed forests to the east. As the prairie flowers stretched out like an untrampled carpet, they changed from spring whites and pale blues to summer reds and fall yellows. Observers agreed they were beautiful.

The first visitors to the land get to name it. In Missouri, the French had that distinction. They called the grasslands of Missouri *prairie*, their word for a European meadow. Well before the end of the 1700s, the French had written "prairie" on their maps and had bestowed names on specific prairies around St. Louis (Prairie la Joye, Prairie des Noyers, Prairie les Biches) and along the waterways (Prairie du Feu, Premiere Prairie, Prairie des Saquis).

While prairie was grassland, it did not have to be treeless. Plum thickets, post oak, blackjack oak, sumac and isolated large trees were all part of the prairie.

As English-speaking people moved in, they adopted the word "prairie" to replace the English "meadow." There was some sense to this, since meadow as used along the Atlantic Seaboard and in the glaciated states had come to connote a wet grassland. But the first major grasslands encountered in Missouri, beginning just behind the tiny villages of St. Louis and St. Charles, were rolling and dry, with shrubs and brush. "Meadow" didn't seem to fit.

In Missouri, the word "prairie" was used for both wet (*prairie basse*) and dry (*prairie haute*) grasslands. The French also used *prairie naturelle*, apparently to distinguish a naturally occurring prairie from those prairie tracts which they fenced and used as common fields or commons (pasture). They used the word "prairie" to refer to their fenced commons (McDermott 1941).

It was understood, however, that any prairie had definite limits. A prairie did not stretch endlessly into the distance; the forest edge was visible on the horizon

(Stewart 1967). Because a prairie was bounded by forests, it was a geographically distinct tract of land identifiable with a name. When Lewis and Clark left the bounds of present Missouri in 1804, they abandoned the word "prairie" and began using "plains," or "great plains" for the endless sea of grass. This early distinction, however, did not last, and "prairie" was soon extended into the plains (Stewart 1967).

Both French and English speakers found "prairie" an unacceptable word for the grassy woodlands of the Ozarks. Only in a few areas, where trees were truly absent, was prairie applied. More often, "grassy" was the word for the narrow Ozark treeless hollows, and "bald" for the treeless knobs. Most commonly, the term "barrens" was applied to the more extensive grassy tracts in the Ozarks. Like their namesakes in Tennessee and Kentucky, the Ozark barrens were perceived as having thin, poor or rocky soil, or bedrock, and therefore unable to grow trees. Certainly, many of

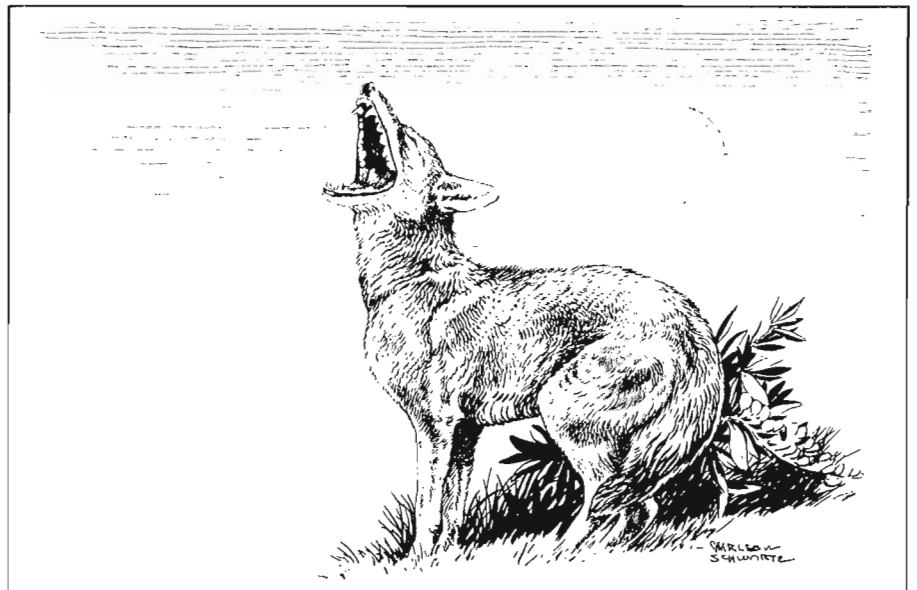
the Ozark barrens would have merited the word "prairie," but the Appalachian "barrens" prevailed. The surveyors extended "barrens" into western and northern Missouri, where it came to mean a brushier grassland than the relatively pure prairies in these regions.

"Glades" was used in the early 19th century in Missouri to refer to very small openings in the forest, usually on steep hillsides. Surveyors in the lower Osage River valley and in southwest Missouri used the word "glades." Its use never seemed to be confused with prairies. "Savanna" was not used at all in early 19th-century Missouri, and its use is rare today.

German speakers had no less difficulty in finding a term to refer to the grasslands. The Germans used at least four different terms for grasslands, which translate to English as "plain," "prairie," "meadow" and "grassland" (Duden 1980).

The confusion of terms becomes important when trying to determine the location of a particular environment based on

Wolves [the 19th-century use of this word included coyotes as well as wolves] were so numerous that one of the oldest pioneers of Nodaway County reportedly "paid his taxes, for many years, in wolf scalps."



the written records of persons with different cultural backgrounds.

## Early Perceptions of the Prairie

How did the prairie come to be? Early explanations of the origin of prairies were based on the wet meadows of the east. The theory was that the prairies were once lakes or at least flood plain-related in birth. After a certain period they became dryer, at which time the Indians maintained the grasslands with fire. The existence of a claypan soil layer was characteristic of many level upland and bottomland prairies. This claypan supported the theory of lake origin (Winchell 1864; Lesquereux 1865). Those who hunted or settled the prairies of Missouri and were most directly familiar with them universally attributed them to fires, either Indian-set or natural. R. A. Wells, a land surveyor in Missouri, noted in 1819 that Indians burned the land, and that "prairies...must be sufficiently dry to burn, at least once in two or three years, during the long, dry season, called *Indian summer*," otherwise young forest would appear (Wells 1819). Wells and others believed barrens and open woodlands also were fire-created, but more often barrens were interpreted as the product of sterile soil (Palmer 1921).

There was little early support for the belief that climate caused Missouri's prairies, except as climate affected fire conditions. The popular belief was that if fire could be controlled, the forest would take over, a fact that was clearly evident as early as 1819 in the St. Louis area (Wells 1819). The early settlers believed that some factor held back trees from the prairie, and as soon as the prairies were settled, trees would grow there.

Some prairie tracts, notably small forest-enclosed openings or irregularly spaced prairies, may have been old Indian clearings or fields (Sweet and Jordan 1928). The site of St. Louis was included in the large Indian urban complex built up around Cahokia in the Mississippi bottoms across the river. It is estimated that during the 12th century 25,000 Indians lived in this complex and were supported by agricultural production in the vicinity (Gregg 1975). Could the extensive, partially wooded, presettlement prairies of St. Louis have been the product of Indian agriculture?

The prairie consisted of more than grass, forbs, shrubs, brush and trees. Prairie came to mean a whole ecosystem,

with its special wildlife, insects, soils, and even its own perceived climate. It had real and imagined advantages and hazards for human life and occupation.

Since the prairies were approached first by persons who had lived in a forest environment, they were seen through the eyes of forest-dwellers. For example, careful note was made of the number, species and size of trees within the prairie, but few seemed to know—or care—about the kinds of grasses and wildflowers or soil characteristics. About the only differentiation was between coarse bottomland grasses and upland grasses. While surveyors and travelers noted such details as post oak brush, hazel, grapes, plum, wild hops and laurel on the prairies, grass was merely grass in expressions such as "tall grass," or more commonly, "prairie."

The early naturalists, however, began to find distinctions, so bluestem, slough-grass (referred to as *Spartina cynosuroides*), buffalo grass and other names began to appear. If land was judged on the basis of its vegetation, then all prairies formed one class of land, except where wet prairie was noted.

Prairies were rich with flowers. Early visitors on prairies rarely failed to comment on their abundance, their beauty and their everchanging aspect. Edmund Flagg fell into poetry as he walked from St. Charles to Portage des Sioux in 1836, across the bottom prairie near the junction of the Missouri and Mississippi rivers. In spring, he wrote:

"... the *viola*, primrose of the prairie, in all its rare and delicate forms; the *anemone* or wind-flower; the blue dewy harebell; the pale oxlip; the flowering *arbutus*, and all the pretty family of the pinks and lilies lie sprinkled, as by the enchantment of a summer shower, or by the tripping footsteps of Titania with her fairies, over the landscape.

"Summer comes over the prairies like a giant.... The *heliotrope* and *helianthus*, in all their rich variety; the wild rose, flinging itself around the shrub-oak like a wreath of rainbows; the *orchis*, the balmy thyme, the burgamot, and the asters of every tint and proportion, then prevail, throwing forth their gaudy, sunburnt petals upon the wind...."

And then in autumn: "All the *solidago* species are in their glory, and every variety of the *lobelia*; and the blood-red sumach in the hollows and brakes, and the *sagittaria*, or arrow-head, with its three-leaved calyx and its three white petals darting forth from the recesses of the dark herbage, and all the splendid forms of the

aquatic plants, with their broad blossoms and their cool scroll-like leaves, lend a finished richness of hue to the landscape, which fails not well to harmonize with the rainbow glow of the distant forest" (Flagg 1906).

Early accounts describe the abundance of game on the prairie. Bison were formerly the most conspicuous prairie animal, but their numbers in Missouri so rapidly dwindled in advance of settlement that the Lewis and Clark expedition in 1804 didn't spot any until near the mouth of the Kansas River (McKinley 1960). Deer, elk and even bear were found on the prairies, and most accounts associated them with points of timber (surveyors used the word "timber," not "forest") extending up prairie draws. A host of game birds, including turkey, prairie chickens, golden plovers, white pelicans, sandhill cranes and grouse, were reported on prairies regularly and were killed in enormous numbers for food and sport. Huge flocks of Carolina parakeets occupied points of timber in the prairies, and ducks, brant (blue and snow geese), geese (Canada) and snipe seasonally occupied the wet bottoms. "Small and pernicious rattlesnakes, called snappers" (Flint 1832) and turtles were commonly mentioned in presettlement prairies, as well as the scourge of the prairies, the greenhead fly.

"Only one must avoid the plains in July and August if one cannot in some way protect the horses from the flies. There are countless numbers of them there and one species that is an inch long and a half-inch in diameter. If a person must take a trip of several hours through uninhabited prairie land, he is in danger of losing his horses, as they become extremely exhausted by the bloodsuckers. If the trip cannot be avoided, which is possible almost everywhere, it is the custom to add the juice of wormwood, or of another bitter plant, to vinegar and to wash the horses with the mixture. Nets are not effective and covers are too warm. As soon as the prairies become inhabited, the flies decrease in number. This fact is attributed to the grazing domestic animals, which destroy the brood attached to the grasses" (Duden 1980).

More welcome were the honey bees which show as well as possible the close relationship between forests and prairies. Bee trees were found in the wooded valleys and ravines of the prairies. The bees had an ever present supply of nectar and pollen on the prairie where numerous plants bloomed throughout the bees' active season (McKinley 1964). The timber provided hive sites, shelter and other flowering



## The Land Survey in Missouri

The U.S. General Land Office conducted the land survey of Missouri to help in the sale of the public domain to settlers. The survey divided land into ranges, townships and sections by putting markers at section corners across the state. The survey is still the legal way of identifying land tracts in Missouri.

The survey began in Missouri in 1815 when the Fifth Principal Meridian was run from the mouth of the Arkansas River north through Missouri. Other range lines and intersecting township lines were run beginning in 1816. In 1816 township subdivision began, and in 1818 the government finally began selling the land (Jacobs 1971).

The Fifth Principal Meridian governs surveying in Missouri. It runs north-south through the towns of Troy and Washington, and through Big Spring on the Current River. Ranges are laid off in six-mile columns east and west of it (Figure 2). For example, Range 4 West (abbreviated R4W) is a six-mile wide north-south column of land 18 to 24 miles west of the Principal Meridian. Because all true north-south lines converge northward, ranges get narrower in a northward direction, and "corrections" must be made periodically to re-establish the six-mile-wide column.

Intersecting the range columns are east-west rows of townships. A township row is also six miles wide, and townships are numbered away from a base line. For Missouri, the numbering begins at a base line running through the mouth of the St. Francis River in Arkansas. Thus Township 44 North (abbreviated T44N), running through Jefferson City, is 264 miles (44 times 6 miles) north of the base line in Arkansas.

The intersection of a range column (N-S) and a township row (E-W) produces a "congressional township" of 36 square miles, or six miles square. In reality, because of surveying errors and the curvature of the earth, townships are rarely exactly 36 square miles. These congressional townships should not be confused with the political subdivision of counties called administrative townships, which have names such as "Liberty Township."

Congressional townships are subdivided into 36 "sections" of one square mile each (Figure 2). The sections of any township are always numbered in the same sequence, beginning with 1 in the north-east corner and ending with 36 in the southeast corner. If the area of a township

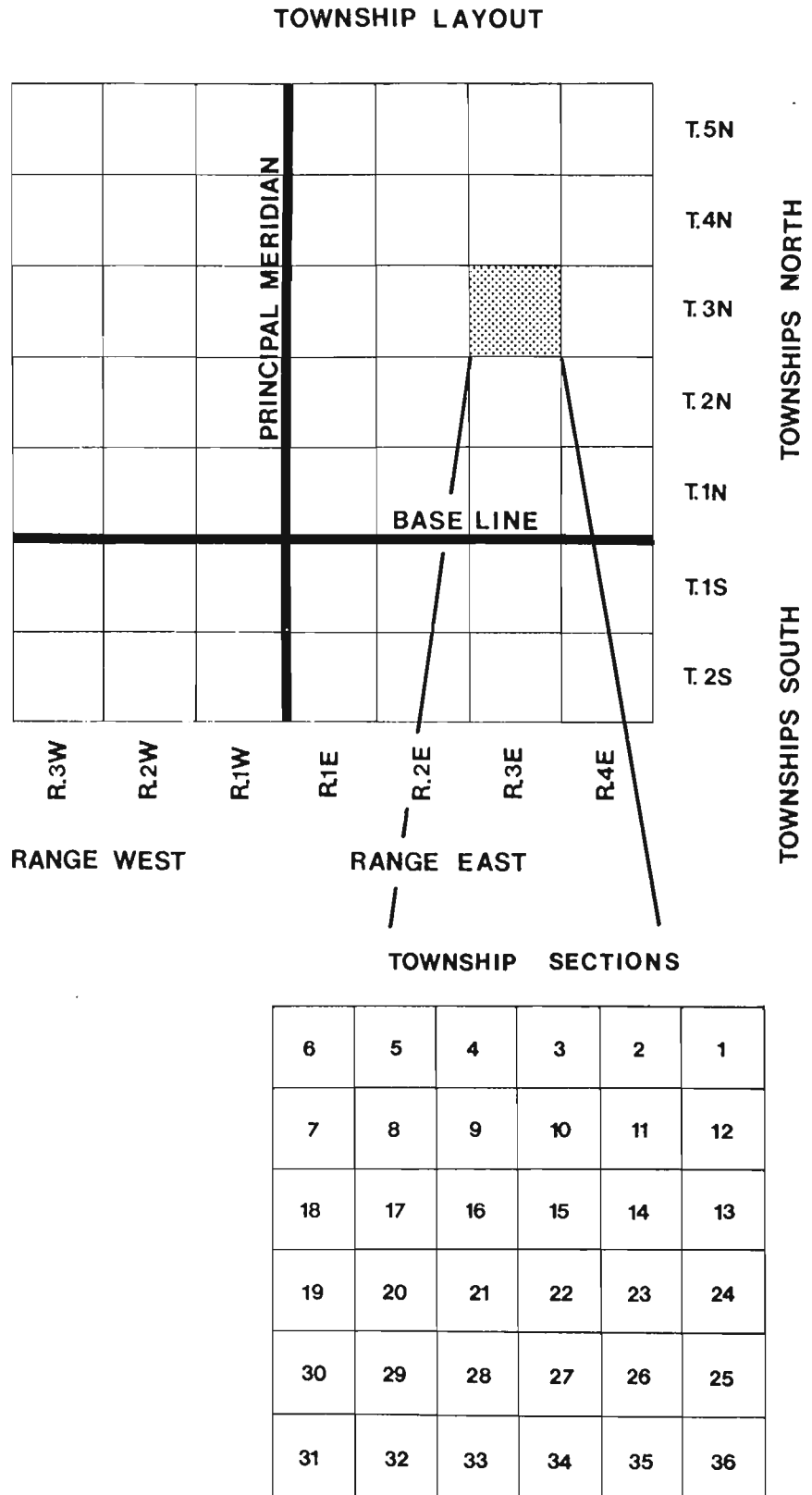


Figure 2. Division of the land into ranges and townships and divisions of a township into sections by the U.S. General Land Office survey.

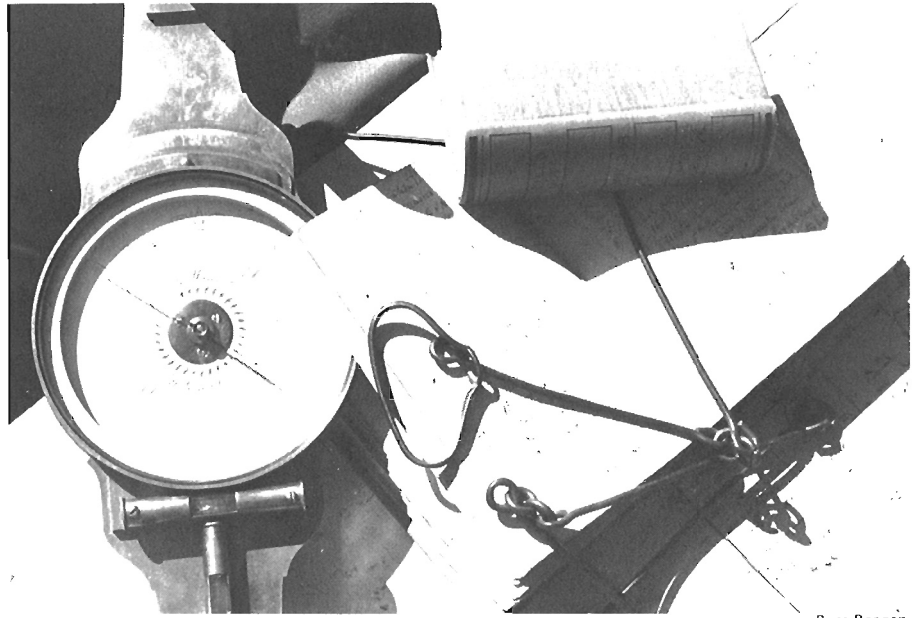
is more or less than 36 square miles, the westernmost or northernmost sections will contain the "error."

Sections are further subdivided into quarter-sections, or "quarters," 160 acres each. Further subdivision may be made by halves or quarters, but usually is not done by the U.S. Land Office survey.

When a tract of land was selected for surveying and subdivision, usually on the basis of pressure for settlement, the necessary range and township lines ("exterior lines") were run first. Afterwards the townships were subdivided into sections ("interior lines"). Sometimes the interior lines of a township were run several years after the exterior lines by a different survey crew. This creates a problem in precise interpretation of survey field notes. The last interior lines in Missouri were run in south-central Missouri in the 1850s, more than 35 years after the first survey lines. The progress of the survey generally followed the advance of settlement into different parts of Missouri.

The primary purpose of the survey was to subdivide the land into rectangular tracts which could be identified in the field by blazed trees or other markers and could serve as the basis for identifying land purchased from the public domain. The surveyors recorded in their field notes survey distances and all blazed trees, including their direction and distance from a corner or other point, species and diameter. In addition, they were required to record specific information about the terrain. This information was made available to settlers.

Surveyors who contracted to survey Missouri received varying instructions over the period of years the survey was conducted. As a rule, the following kinds of information were specified in the instructions of 1815: every major change of land cover; all rivers, creeks, springs and smaller streams with their width, directions, and nature of current; lakes and ponds; prairies, swamps and marshes; mill seats, salt licks and salt springs; stone quarries, coal banks and mineral deposits; precipices, caves; bottomlands and whether they were subject to flooding; soil quality; and buildings and cultivated fields. At the end of each mile a verbal summary of timber by species, undergrowth or other land cover, and suitability of land for cultivation was required (Stewart 1935). It wasn't until 1850 that new instructions required surveyors to record for prairies "the kind of grass or other herbage it produces." By that time, the survey was in its final stages in the Missouri Ozarks.



Russ Reagan

The compass at left was the basic sighting instrument of 19th-century survey crews. Chainmen dragged the metal chain along survey lines. At St. Louis, field notes were collected into bound volumes such as the two shown here. These volumes for Missouri are preserved at the Division of Geology and Land Survey in Rolla.

Plat maps were made from the field notes, but varied in accuracy and detail. On them are the names of the first purchasers of land from the public domain. The original handwritten field notes were hand copied in the 1930s. Both sets, originals and copies, are kept at the Division of Geology and Land Survey in Rolla. Microfilms of both sets are easily accessible to the public through the Missouri State Archives in Jefferson City or through the Division of Geology and Land Survey in Rolla.

Surveyors began subdivision of a township at a point on the southern township line between sections 35 and 36. They proceeded due north between 35 and 36, locating the half mile point, or 40 chains. There they set a post and located and marked two bearing trees. If it was prairie, or if there weren't any trees large enough or close enough, sod was mounded or a large stone set. Continuing on another half mile to a total of 80 chains, they established a section corner, set another post and located and marked four bearing trees, one in each compass quadrant. When the corner was in a prairie, sod was mounded or a stone set.

The surveyors then turned east on a random line between sections 36 and 25 to locate the point on the range line one mile north of the township corner, already marked when the range line was run. The surveyors then returned west on a corrected line between 36 and 25, locating and mark-

ing the half mile as usual and returning to the corner of sections 36, 25, 26 and 35. They then went north between 26 and 25, establishing the half-mile, then the section corner. Then they turned east to the range line and returned to the corner of 26, 25, 23 and 24. In this manner they worked north to the north township line between sections 1 and 2. They then returned six miles south to the south township line and began again to work northward between sections 35 and 34.

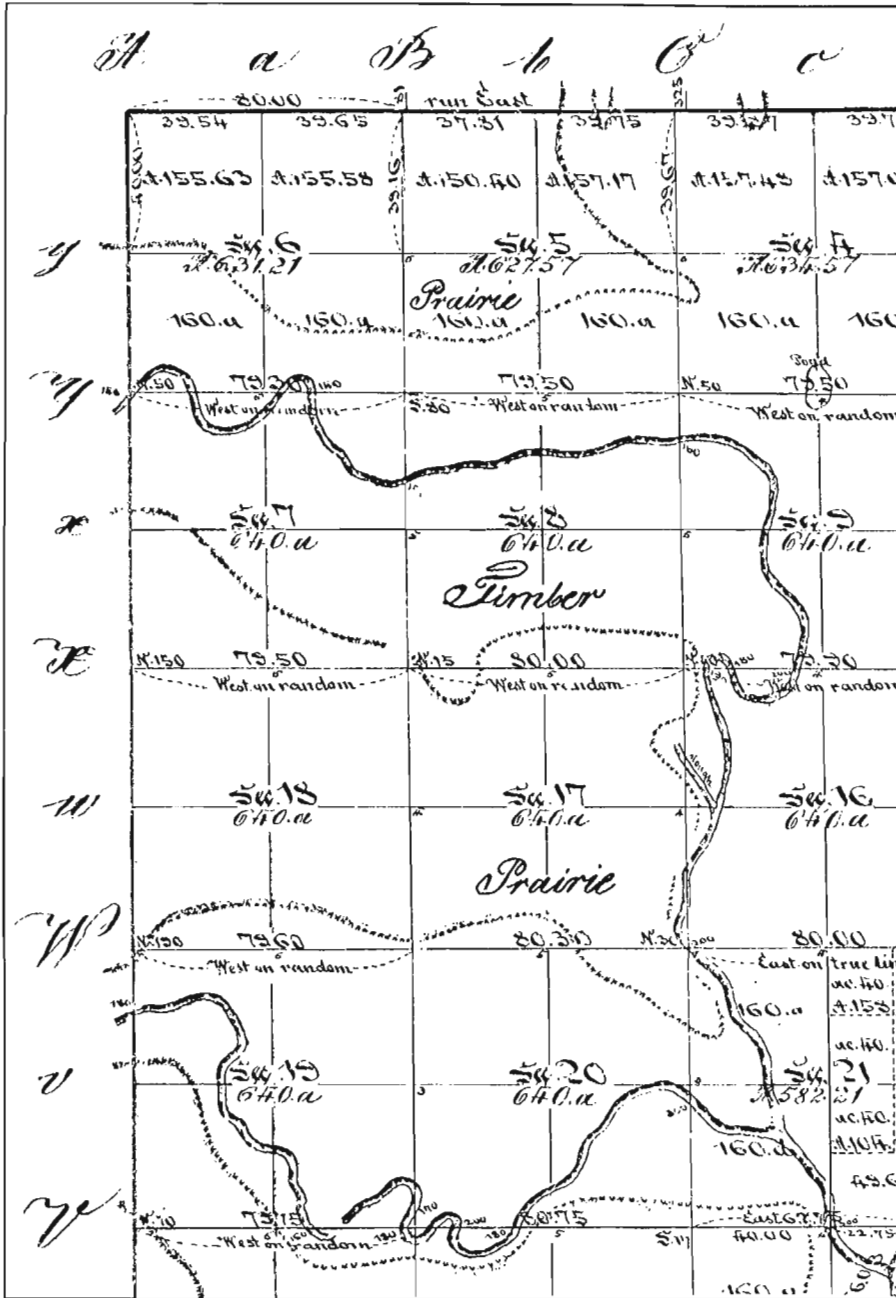
In this manner, the surveyors walked a minimum of 118 miles to finish a township. The process usually took six to 10 days, but sometimes longer, depending on the terrain, the weather, the cooperation of the survey party, and even squatter or Indian harassment. The first white men in many regions, the surveyors encountered all the hardships of the frontier wilderness (Agnew 1941). The words of one unhappy chainman, forced to walk one too many straight lines through the thick brush of Osage County barrens, appear in the field notes: "Land mountainous Stony Timber oak & hickory ungt [undergrowth] hazel & oak vines & Brier Brushy Dambnation said Arnold Chain carrier."

The field notes of the survey no longer are used to inform the public about the nature of the land. Nevertheless they do provide a systematic inventory of the natural environment and have been used extensively in attempts to determine present-day vegetation, especially forests.









After the field notes were delivered to St. Louis, a clerk constructed a plat (map) of each surveyed township based on the field notes. Plats showed all the survey lines and their exact lengths in chains and links. In addition, plats usually showed some terrain features.

County.) This asymmetry could be explained by eastward-moving fires which were stopped by the river channel firebreak (Clouser 1978). Big and little bluestem dominated the upland grasses; sedges and coarse swamp grasses grew in drainage-ways. Sumac, hazel and hawthorn occupied ravines and elsewhere (Shrader et al. 1953).

The immediate bluffs of Atchison and Holt counties had—and still have—a more xeric vegetation. Steep, southwest-facing slopes, especially, dry out to greater

depths and support a sparse growth of sideoats grama, little bluestem, sumac and other drought-resistant species (Shrader et al. 1953; Hawker 1978). The uniqueness of this flora was not noticed by the surveyors, but early explorers considered these steep-sided, conical loess mounds noteworthy in their journals (Maximilian 1906).

The Missouri River flood plain was as much prairie as it was timber (Bragg and Tatchl 1977). Timber occupied the sandy “new land” along the channel and narrow belts along flood plain tributaries, but

coarse swamp grasses and sedges prevailed over large tracts of heavy gumbo soil subject to flooding (Weaver 1965). In Holt County, fully 70 square miles of the Missouri River flood plain was prairie, and in Atchison County, about 95 square miles. At places, the Missouri River channel cut into prairie, with no intervening riverbank timber. These prairie bottomlands included considerable tracts of marsh or standing water. The entire east half of T61N, R39W was reported by the surveyor to be not worth surveying, because of swamp and overflow conditions (Murray 1961). Today, this half township is the marsh and wet prairie of Squaw Creek National Wildlife Refuge.

To Lewis and Clark, the prairies of the Missouri River flood plain in Buchanan County just downriver from St. Joseph had “the appearance of distinct farms, divided by narrow strips of woodland which follow the borders of the small runs leading to the river” (Logan 1979).

Early settlers on the prairies of Nodaway County found the prairie grass so nutritious that “deer would become so fat that when dressed and hung up they would look as white as a dressed sheep” (Anonymous 1882). The same historian also noted that “elk and deer horns were so thick that they looked like dry limbs scattered over the prairie.” Wolves were so numerous that one of the oldest pioneers of Nodaway County reportedly “paid his taxes, for many years, in wolf scalps” (Anonymous 1882).

#### Grand-Chariton Region (Map 2)

The interior of north Missouri, from the Platte River on the west to the divide between the Chariton and the Mississippi rivers on the east, is virtually coextensive with the basins of the Grand, the Chariton and Little Chariton, and their tributaries. It is a region marked by southward draining, closely spaced, subparallel streams, resulting in a general pattern of narrow, linear prairie, dividing ridges and linear, wooded stream valleys.

Only in the southwest part of the region, in Clinton and DeKalb counties, do the prairies open up to become more than narrow ridges averaging one or two miles across. In places, the land was so dissected that timber extended over the ridges. Such was Grundy County, which was described by early settlers as almost entirely timbered. On the ridges, the timber was more open than on the hillslopes. It consisted largely of clumps of hickory, oak and elm, and thickets of hazel and sumac, but still had “luxuriant growths of bluestem

and other native grasses." "This more open ridge land, although unlike the open grass-covered prairies [in counties] farther east and south, was spoken of as prairie land" (Sweet and Watkins 1916). In most of the counties, prairie occupied about half of the area, but prairie ranged from 38 percent of the area of Putnam County to 71 percent of the area of Caldwell County.

In 1820, Edwin James accompanied the Stephen Long expedition to the Rocky Mountains. As the party passed up the Grand River Valley, James noted (May 14) that the plains had been "perfectly denuded by the burning of the last season, and the annual growth of grasses and weeds had as yet risen but about a foot from the ground." There was "nothing to obstruct" their travel (James 1905).

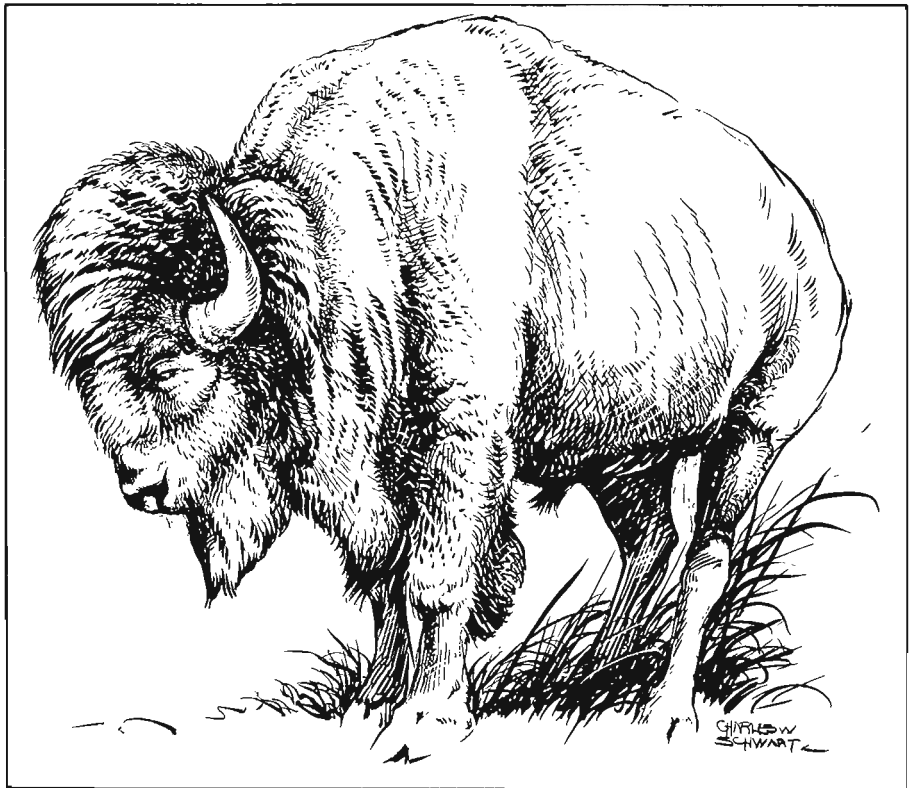
The upland prairies of Caldwell County also were reported to be burned over annually, "thus preventing young trees from gaining a foothold" (DeYoung and Jordan 1924). In May 1838, when surveying northern Caldwell and southern Daviess counties to establish Mormon settlements in then uninhabited country, Joseph Smith described it as "beautiful country, a majority of which is prairie and thickly covered with grass and weeds, among which is plenty of game, such as deer, turkey, elk,.... We had nothing to fear in camping out except rattlesnakes, which were a natural of this country" (Wilcox 1972).

In Linn and Macon counties, "holes" in the upland prairie were attributed to buffalo wallows. These holes held clear water before the prairies were plowed (McKinley 1957).

In places the hillier tracts were "barrens." Such a tract in Macon County (T60N, R16W) contained "a few scattering Post Oak or Black Jack trees of small growth, and the valleys or 'draws' between [are] often destitute of trees, and, in place of the reddish prairie grass which grows on the hills, have the 'Bottom Prairie' grass" (Broadhead 1873a).

Blue Mound in southern Livingston County (T56N, R24W) clearly shows the effect of slope orientation on natural vegetation. Blue Mound rises nearly 200 feet above the rolling upland. According to the Land Office survey, Blue Mound was timbered on the eastern slopes, barrens on the western slopes, and a grassland prairie on the south and southwest slopes.

In addition to the upland prairies, bottom prairies occurred regularly on the flood plains of streams, sometimes becoming so extensive that timber was restricted



... "holes" in the upland prairie were attributed to buffalo wallows.

to the riverbank and rougher valley slopes. Large areas of the broad flood plains of streams in the Grand-Chariton region supported a "luxuriant growth of coarse

wild grass" (Watkins et al. 1921). Sometimes these wet prairies occupied the entire bottomland, except for a timber strip fringing the banks of streams. Clay or gum-



Early settlers on the prairie of Nodaway County found the grasses so nutritious that "deer would become so fat that when dressed and hung up they would look as white as a dressed sheep."

bo soils prevented good drainage, and marshes and ponds abounded. These bottom prairies were highly valued for hay and would “winter cattle well, and leave them in good order at commencement of spring” (Broadhead 1873a). As late as 1945, several virgin wet bottom prairies remained (Shrader et al. 1945). Ponds in the wet bottom prairies were favorite haunts for muskrats. Their “huts on the larger ponds often number several hundred, and present the appearance, at a short distance, of a meadow covered with hay-shocks” (Broadhead 1873a).

Survey notes reveal a complex pattern of small lakes or ponds, wet prairie, intensely meandering creeks with and without riverbank timber, and dense timber only along the Grand River channel in northwest Chariton County in what is now the Swan Lake area. There was nothing but wet prairie at the present Swan Lake site.

*Northeast Missouri (Map 3)*

In northeast Missouri, south to the breaks along the Missouri River and west to the breaks of the Chariton, the prairies have three physiographic expressions. First, and dominant, is the Grand Prairie, the nearly level expanse which formed the upland, plateau-like drainage divide between the Mississippi and Missouri rivers. The Grand Prairie began in St. Charles and Warren counties where separate fingers of low ridge prairies merged as the timber diminished. Westward from here, the size of the prairie increased, occupying northern Montgomery, Callaway and Boone counties. It was in Audrain County that the Grand Prairie reached its grandest. Fingers of the Grand Prairie extended east and north into Lincoln, Pike, Ralls and Monroe counties. Losing width and levelness, the prairie continued north from Randolph along the major drainage divide to Adair and Schuyler counties, where it was called the Grand Divide.

Probably no prairie figured more prominently in the perception and understanding of prairies in early Missouri than the Grand Prairie. The Boonslick Trail, the first westward land route in Missouri, crossed its southern margins. When William Clark led his party along the trail in 1808 to establish Fort Osage, he described “plains of high grass” with “ponds.” Just before they reached the Loutre River, his party “Caught a large hard Turtle on a Whole of Water, Saw a great many Turkey, partridges, some grows [grouse] & Deer, in those butiful Prairies” (Clark 1937). Further on, in the Grand Prairie of Callaway

County, Clark “Saw Several Elk & fresh Buffalow Sign ... plenty of water in whols in dreans [drains] in the plain” (Clark 1937). Also along the same trail almost 30 years later, John Townsend “observed large flocks of wild pigeons passing over, and on the bare prairies were thousands of golden plovers; the ground was often literally covered with them for acres. I killed a considerable number. They were very fat, and we made an excellent meal of them in the evening. The prairie hen, or pinnated grouse, is also very numerous, but in these situations is shy, and difficult to be procured” (Townsend 1905).

Gottfried Duden, whose letters from Warren County were so important in attracting German immigrants to Missouri, obtained information on prairies firsthand from visits to the Grand Prairie. He observed that the “prairies themselves ... are ... for the most part, as fertile as the hills next to the river valleys.... Nothing is more erroneous than to call the meadows dry steppes or even wastes of sand. They are all highland prairies. But the black humus is at most places approximately one and a half to two and a half feet deep, and below it is a good mixture of clay, limestone, and sand. They are covered throughout the summer with the widest varieties of flowers” (Duden 1980).

The Grand Prairie was covered “by splendid growths of native blue stem, this often growing high enough ... to completely hide horses and cattle which were feeding on it” (Doneghue and Tillman 1911). In eastern Audrain County occurs

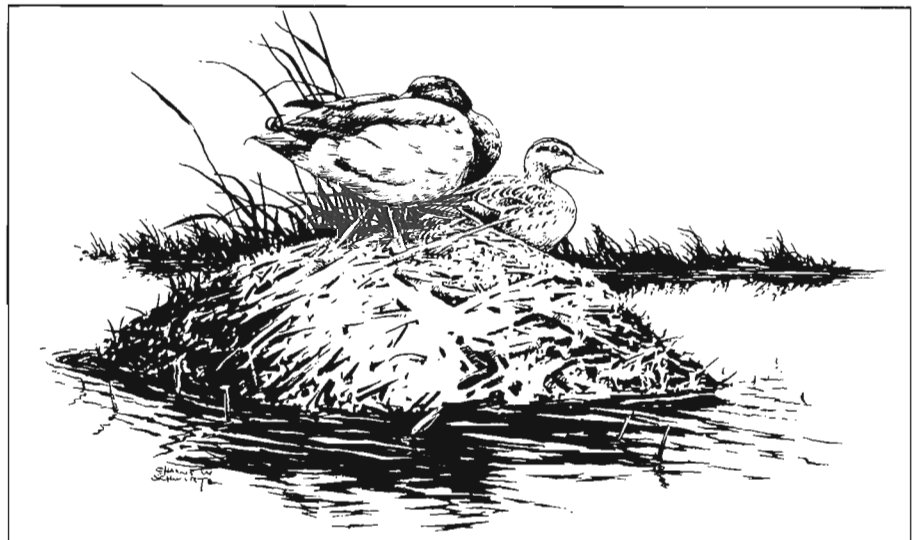
the place in northern Missouri where one can get the farthest from any timber mapped by the surveyors: section 27, T52N, R7W, lies 3.7 miles from the nearest points of timber.

The Grand Prairie was so fixed in the minds of early Missourians as a distinct region that in 1856 it was proposed as a separate county (Ramsay 1952). Though this proposal failed, Audrain County fairly well occupies the center of Grand Prairie. The name Grand Prairie today tends to be used mostly in Callaway County.

A second physiographic expression of prairie in northeast Missouri was the narrow upland or ridge prairie between the subparallel, southeast-flowing streams from the Salt River north to Iowa. These prairies, like those of the Grand-Chariton country, were narrow and elongated. This characteristic shape was expressed in names such as Ten Mile Prairie in Lewis County. Where valley sides were not steep, the prairies merged into timber through extensive tracts of barrens (Howell 1955) or “grassy woodlands” (Krusekopf and Cohn 1921). Occasionally the narrow uplands broadened into flatter tracts and the upland prairie was described as “level and wet.” Some upland prairies in Marion County were “of a swampy character, where water-loving weeds and grasses grow luxuriantly” (Britton and Vanatta 1911).

Traveling on the prairies of northeast Missouri in the 1840s, a Catholic priest complained of loneliness, thirst and getting lost. In Knox County, still on the upland prairies, his range of vision was “closed by

... “huts on the larger ponds often number several hundred....”



hazy-looking woods." He crossed "sedgy courses" on the prairie which were "the usual channels for drainage, when much rain or snow happens to fall" (O'Hanlon 1890).

A third physiographic expression of prairie in northeast Missouri is the wet bottom prairie in virtually every flood plain. Like the flood plains of the Grand-Chariton country, heavy clays created waterlogged conditions, with ponds and marshes in place of trees. Often prairies occupied the whole of the bottoms, except for a fringe of open woods adjacent to the river which extended to the foot of the valley slopes and often up them, connecting with the upland prairie (Broadhead 1873b).

The Mississippi River flood plain had several prairies, including one in the extensive bottoms and alluvial terraces of Clark County, one at the Salt River junction in northern Pike County, and all along the Lincoln County Mississippi River bottoms. Part of the wet prairie of Lincoln County still lay uncultivated in 1917 (Sweet et al. 1920).

#### Missouri Valley (Maps 4 & 5)

From St. Charles to Boonville, the Missouri River valley lies in the Ozarks and is almost without prairies, both on the flood plains and in the bluffs. Westward from Boonville, and especially upstream from Glasgow, prairies not only covered the hills adjacent to the river but also sometimes extended onto the flood plain where large tracts were wet prairie.

As explorers traveled up the Missouri River from St. Charles, the sight of the first prairie merited comment. Henry Marie Brackenridge noted the first prairie in the bottoms at Cote sans Dessein, opposite the mouth of the Osage (Brackenridge 1814). This prairie, also recorded by the surveyors, stands on a second bottom, above the usual floods. James Mackay in 1797 identified his first prairie, Premiere Prairie, on the right bank, "three leagues up from the mouth of the Lamine" (Abel 1923). William Clark noted prairies in the Howard County bottoms in 1808 which were settled and altered by early Boonslick squatters before the survey came through in 1818 (Clark 1937). John Bradbury first observed prairie at the mouth of the Grand River, and at this point thought it necessary to explain to his Eastern readers that "Prairie is the term given to such tracts of land as are divested of timber..." (Bradbury 1904).

Farther upstream prairies became more common than timbered tracts. Most



Courtesy USDA Soil Conservation Service

Prairie often occurred in the bottoms associated with streams. Bottomland or wet prairie, dominated by sloughgrass (rippgut, cordgrass), commonly graded into marsh vegetation of sedges, bulrushes and cattails and into open water. A few examples of these natural communities still exist in Missouri.

of the Wakenda Bottom of Carroll and Ray counties was luxuriant prairie, either wet (on impervious clays) or dry (on second bottoms). At the Lafayette-Jackson county line "Prairie strikes the river" (Clark 1937). This was the river end of Fire Prairie, the most famous Missouri River prairie. It was in the bluffs between Fire Prairie and the Missouri River that Clark established Fort Osage. All of northeast Jackson County was primarily prairie, in the wet bottoms of Fire Prairie Creek (the wide abandoned valley of a larger stream) and stretching into the adjacent uplands, where it merged into barrens. It was called a "brushy plain" or "open bottom with rich weeds 12 or 15 feet high" (Clark 1937), and was covered with "bottom prairie grass, *Spartina cynosuroides* [sloughgrass], above shoulder" (Broadhead 1912). At the western end of Fire Prairie lay a 100-acre lake and several small ponds.

Early travelers along the upland trail from Arrow Rock to Independence often first encountered wide, rolling prairies in Saline County and left descriptions of an upland, presettlement prairie. Westward from Arrow Rock was "Brushy prairie of high weeds & Hazle bushes mixed with low Bushes" (Clark 1937). Charles Joseph Latrobe was so struck by the beauty of the open prairies beyond Arrow Rock that he despaired...

"of being able to convey any idea ... of the glories of the autumnal flora, covering these immense natural meadows, like a rich carpet.... After

the early grass of spring begins to shoot up through the blackened surface of the scorched soil, it becomes spangled with a host of flowers, the prevailing colours of which are white and blue. These, as summer advances, give place to a race in which red predominates: and when the yellow suns of autumn incline over the west, their mild rays are greeted by the appearance of Millions of yellow flowers ... and everywhere among the long grass, the *Liastris*, or rattlesnakes'-master shoots up, and displays its spike of red flowers" (Latrobe 1835).

#### West-Central Missouri (Maps 4 & 7)

The west-central Missouri region, south of the Missouri River and west of the Ozarks, was Missouri's premium prairie region. It is sometimes called the Osage prairie or Osage plains of Missouri. Here prairies extended over all the rolling uplands. Timber was restricted to the valleys and, at that, often to riverbank fringes. Narrow strips of timber, called points, extended along drainageways into the upland prairies. From one point to another the prairie averaged four to five miles across. The place in Missouri where one could stand in prairie at the farthest distance—5.6 miles—from any mapped point of timber was in Section 35, T30N, R29W in northeast Jasper County. A few other places in west-central Missouri were more than five miles from points of timber. Over 60 percent of the land was prairie in the counties entirely within this region. Barton County had the largest percentage





Ozarks (Maps 5, 7, 8 & 9)

No one questions that the Ozarks region was timbered at the time of the survey, but how dense was the "forest" (Steiermark 1959; Beilmann and Brenner 1951; Cozzens 1937)? It was not as dense as the Appalachian wilderness, and this visual contrast did not go unnoticed in early accounts. Most familiar are Henry Rowe Schoolcraft's accounts of the open Ozark woods, replete with phrases such as "hills are stony and barren, covered with little timber and high grass" (Schoolcraft 1821). Presettlement timber of Reynolds County was "originally more or less open, with an abundant growth of grass covering the ground. ...all the western and southern portions of the county were grass-covered, open timberlands" (Krusekopf et al. 1921).

Curtis Marbut, relying on his own experience and that of the first settlers, wrote that "the greater part of the Ozark Dome ... was up to the middle of the 19th century a region of open woods, large areas being almost treeless. Except in the

roughest land ... the timber growth was not dense enough to hinder in any way the growth of grass. The whole region in its vegetation was more closely allied to the western prairies than to the timber-covered Appalachians." Marbut continued: "It was only in the main areas of Clarksville soil that the original timber growth was heavy, and there is abundant evidence that at least 40 percent of that area consisted of grass-covered, sparsely timbered rolling upland" (Marbut 1911).

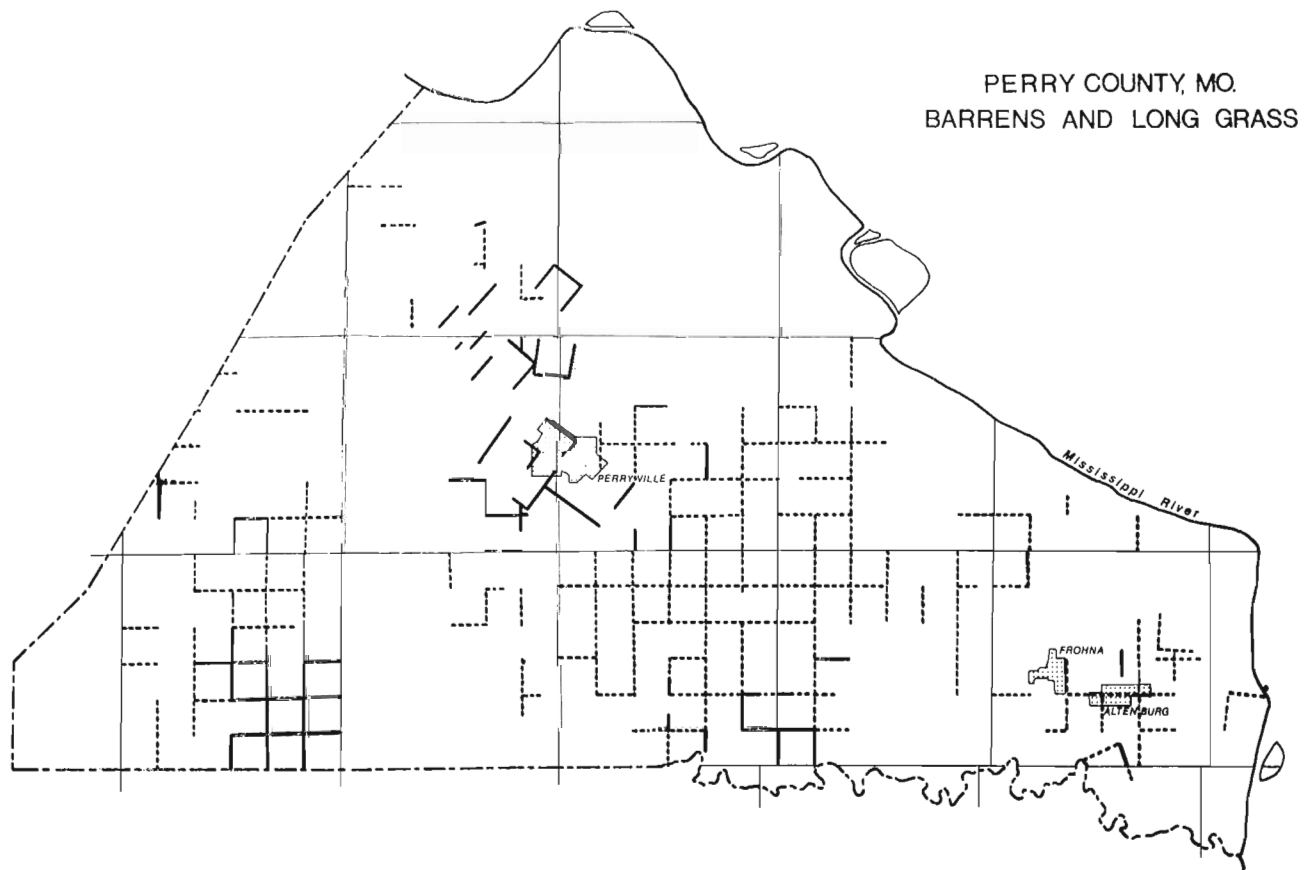
The surveyors rarely used the term "open woods," but in their notes the openness can be measured by the unusual distances from section corners to bearing trees. They noted the absence of undergrowth and brush throughout much of the Ozarks.

At what point would the trees of an open woodland become far enough apart so that "prairie" would be a more appropriate term? This is the great riddle in determining the presettlement prairie of the Ozarks. The answer depends on who

was describing the vegetation, their previous encounters with prairie, and their knowledge and understanding of the word "prairie." It is impossible to use data from land office field notes to reconstruct the density of trees in the most open Ozark landscape. The standards of modern vegetative sampling cannot be used because the surveyors did not note specific trees, but referred only to "scattering timber" or "no trees convenient" for witness trees. The surveyors used the term "prairie" sparingly in the Ozarks, compared to others such as Schoolcraft, Marbut, George C. Swallow and early settlers who named the land. For these reasons, the map of presettlement prairies in Missouri presents a conservative view of both the "treeless tracts" in the Ozarks and the pervasive distribution of grass, especially bluestem, throughout the Ozarks.

While the surveyors could not bring themselves to use the word "prairie" for extensive grassy tracts with only a scattering of trees or no timber, they did not hesitate

Figure 5. "Barrens" (solid lines) and "long grass" (dashed lines), as identified in the field notes of the U.S. General Land Office survey for Perry County, 1817-18.



to use "barrens." About five thousand miles of section lines in the Ozarks were described as "barrens." This landscape term, so widely used and understood well into the 20th century, is rarely used today. Has it disappeared as a land type, or has it been replaced by other terms?

"Barrens" was used in referring to a variety of grass-brush-timber mixtures. In Perry County, for example, some section lines in the barrens were described simply as "tall grass" and without any timber for witness trees. Some land of Perry County, however, was "sparsely wooded with Black jack, Post Oak and Black Hickory—forming what are termed oak openings or barrens" (Shumard 1873a). Figure 5 shows how much of Perry County, including the area around Perryville historically known as "The Barrens," was identified as barrens or tall grass by the surveyors. Although the survey was carried out by English-speaking Americans, it was done in an area of French settlement, and "prairie" could have been the term chosen for land description.

Sometimes "barrens" referred to areas of oak and hickory brush. In northern Gasconade County, for example, the surveyors wrote "alternately brushy barrens, bald knobs, excessively hilly, unfit for cultivation; growth in barrens post oak & b jack, undergrowth same ..."

Most commonly, "barrens" indicated stunted or large trees, usually scattered, but including considerable grass. In Maries County, "the hills between the Gasconade & Maries are mostly barrens, on which but a few trees grow except a stunted growth of Black-jack and Post Oak.... The county, near the head waters of Little Tavern and the Maries, consists also mostly of barrens, interspersed occasionally with small tracts of large sized trees. ...[In some other places] the county consists mostly of barrens, on which very tall prairie grass grows, causing them somewhat to resemble prairies" (Broadhead 1873c). In adjacent eastern Miller County, surveyors wrote "barrens," and 30 years later other surveyors could still write "Some portions ... partake more or less of the character of prairie lands, the trees being so scattering as to cause a dense growth of tall grass over the high country, and along the slopes" (Meek 1873a).

"Cedar glades" are considered today to be the "potential natural vegetation" of the White River Region of the southwest Ozarks of Missouri (Kuchler 1964). When Schoolcraft viewed the glade country before white settlement in 1818, he identified prairies but mentioned no cedars:

"... sometimes we crossed patches of ground of considerable extent, without trees or brush of any kind, and resembling the Illinois prairies in appearance, but lacking their fertility and extent. Frequently these prairies occupied the tops of conical hills, or extended ridges, while the intervening valleys were covered with oaks, giving the face of the country a very novel aspect, and resembling, when viewed in perspective, enormous sand-hills promiscuously piled up by the winds" (Schoolcraft 1821).

Western Ozark and eastern Taney counties (T23-24N, R16-17W) were surveyed in the winter of 1847-48 when cedars would be most conspicuous. Not once were the words "glade," "grass," or "cedar" used. One small prairie bottom was identified. For the most part, the surveyors did not characterize this region in terms significantly different from those used to describe adjacent regions. Timber was "scattering," "very scattering," or "scarce" and many section quarters lacked trees for witnesses. "Barrens" was used in the real glades; "brush" was not common in the field notes. By the time Marbut finished his soil survey a half century later, these hills were described as a mixture of cedars and grasses, and "cedar glades" was regularly used to describe the region (Marbut 1911).

Clearly an unknown amount of prairie or near prairie in the Ozarks was called "barrens" by the surveyors, but the term "barrens" also was used for land that was definitely not prairie.

Prairies in the Ozarks conveniently fall into two topographic types, upland prairies and valley or bottom prairies. The upland prairies, attributed to fires, occupied the less dissected parts of the Ozark Plateau. One rolling upland southwest of Lebanon "was covered with a thick growth of prairie grass, broken by scattered clumps of black-jack oak," or with "prairie grass, with only here and there a blackjack oak or post oak," or "a dense growth of prairie grass (bluestem) over 6 feet high with little timber ... except in scattered groves" (Long et al. 1912). George C. Swallow reported the upland between the Osage Fork and the Gasconade as "a broad and fertile district of undulating oak openings, interrupted by extensive prairies" (Swallow 1859). In southwest Laclede County (T33N, R17W), nowhere did surveyors use the term "prairie," but frequently trees within reasonable distance for blazing were lacking, and those used were 150 to 400 links (100 to 267 feet) distant. The survey notes record few instances of "undergrowth," or "oak brush," or "hazel brush," leading to the conclusion that most of the

land actually was in grass in this township.

Another major upland prairie lay in discontinuous segments on the divide between the Bourbeuse and the Gasconade and Missouri rivers. Lanes and Galloway prairies in Maries County and Douglass Prairie in Gasconade County were clearly identified as prairies, but "barrens" was the preferred term for the more rolling hills adjacent to the prairie. Prairie tracts also occupied the broad uplands between the Meramec and the Bourbeuse. From Rolla to St. James were "broad and fertile prairies" (Shumard 1873b), and Jake Prairie in northwest Crawford County consisted of "moderately rolling or level oak openings and prairie" (Shumard 1873c).

The entire western half of Dent County and parts of adjacent Texas, Phelps and Crawford counties were clearly prairie or partially prairie (Marbut 1910; Marbut 1911), but surveyors only recorded prairie at a few places, such as Licking in Texas County and Brown Prairie in southern Phelps County. Similarly, prairie tracts occurred along the upland in southern Texas, southern Shannon and Howell counties, but mostly were undocumented by the surveyors. The present town of Birch Tree in Shannon County was founded as Birch Prairie (Harper 1966), but surveyors did not record the prairie. In the level-to-gently rolling uplands of Howell County, the surveyors never used "prairie," "grass," nor "barrens," but nevertheless often could not find trees for witnesses at section corners, or had to sight them at distances of 150 to 300 links (100 to 200 feet) from the corner.

Most of Texas County "was covered with open timber, but there were prairie areas covered with a luxuriant growth of blue stem.... The prairies occupied the flatter situations and had only an occasional clump of trees. Examples of such areas are ... around Dykes and Raymondville" (Watkins et al. 1919).

In the northern and northwest parts of Ripley County, yellow pine predominated on all the drier and more cherty soils, with oaks and walnuts on the lower slopes. Throughout, however, "there was very little undergrowth, the open woods supporting a heavy growth of bluestem and other wild grasses" (Hutton and Krusekopf 1917).

Prairies also occurred in valley bottoms in the Ozarks. While the upland prairies have been well-known, these valley prairies or "prairie hollows" have gone practically unnoticed since Schoolcraft described "extensive prairies all along [the] banks" of the Osage Fork of the Meramec



Courtesy of State Historical Society of Missouri

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## Nineteenth-century land surveyor for the U.S. General Land Office.

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(Clendenen 1973; Schoolcraft 1821). Unfortunately, the surveyors failed to note these small prairies, except in counties such as Pulaski, Camden, Laclede, Wright and Douglas. Many of the broad hollows between Lebanon and Camdenton, such as Goodwin Hollow, "supported a heavy growth of prairie grass." "Some of the [valleys] are extremely beautiful, presenting long, undulating bands of rich prairie and woodland" (Shumard 1873d).

Around Marshfield in Wright County, "the prairie bottoms furnish excellent pasturage for cattle" (Shumard 1873e). Northern Crawford County was "intersected in every direction by numerous beautiful prairie valleys, limited by gentle hills from eight to one hundred fifty feet high...." (Shumard 1873c). As with the wet bottom prairies elsewhere in Missouri, the bottom prairies of the Ozarks were common and distinctive enough that a stratum was identified for them in the early geological surveys, and a separate soil phase was identified for them in the early soil surveys.

Two Ozark prairies were associated with locally distinctive rock and soil types. One of these, White Rock Prairie in McDonald County, lay in a topographic basin on Jefferson City dolomite along the Little Sugar River. The other prairie had no special place name and was on the sandy Hagerstown soils of the Farmington Basin in northern St. Francois and adjacent Ste. Genevieve counties. This "almost

treeless tract" (Sauer 1920) was identified in the account of an incident occurring shortly after 1798 when a band of Osage Indians attacked and robbed a traveling party of settlers "in the open prairie near Terre Bleue Creek, some nine miles north of the present town of Farmington" (Houck 1908). This prairie was much larger than the small tracts recorded by the surveyors in 1816-18.

### *Southeast Lowlands (Map 9)*

The southeast lowlands of Missouri, including loess-mantled Crowley's Ridge, were heavily timbered before settlement. Timber was "closed," with little grass. Open timberland or "glades," as in the extreme northwest corner of Dunklin County (Sweet et al. 1916), were not at all common. There were, however, conspicuous, true prairies within the heavily timbered region.

In no region of Missouri were prairies more clearly associated with distinct soils. All the true prairies occupied sandy alluvial terraces or ridges of well-drained soils, standing 10 to 20 feet above the adjacent wet lowlands. These narrow ridges are oriented north-south, forming low drainage divides between the numerous alluvial drainage systems.

Longest and most famous of these prairie ridges is the Sikeston Ridge, stretching north from New Madrid on the Mississippi, through Sikeston and into Scott County. The whole ridge, called "Big Prairie," was prairie according to early

travelers and settlers (Brackenridge 1814), but the surveyors identified only segments of it as true prairie. Major portions of the ridge were already in private ownership by the time of the survey, and timber may have already encroached.

East of the Sikeston ridge in Mississippi County, on alluvial fan materials, were broad prairies "occasionally interspersed with small groves of trees" (Missouri State Board of Agriculture 1871). Most of Mississippi County west of Charleston appears to have been prairie on the basis of its soils (DeYoung and Wildermuth 1924), but only portions of it were mapped as prairie by the surveyors. East Prairie, Long Prairie and Mathew's Prairie (present-day Charleston) are in this region.

To the west of the Sikeston Ridge lay Grand-West-Rosebrier prairies on another long north-south ridge. Stretching from Kennett north through Malden and into Stoddard County, the low, sandy ridge separates the St. Francis and Little River drainages. As with the Big Prairie on the Sikeston Ridge, surveyors identified much less prairie here than other contemporaries did.

Smaller scattered "openings" occupied the sandier soils of southern Butler County between the St. Francis and Black River systems.

### *St. Louis Region (Map 6)*

Because settlement was proceeding more rapidly at St. Louis than elsewhere in Missouri at the time of the survey, iden-

tification and description of prairies in the St. Louis region varied in the span of just a few years. A picture of extensive prairies in St. Louis City and County emerges from an interpretation of the Soulard surveys and the American rectangular land survey, supplemented by numerous accounts written by St. Louis residents and visitors.

Prairies occupied 38 square miles (61 percent) of St. Louis City and 86 square miles (17 percent) of St. Louis County. These prairies may be the "forgotten prairies" of Missouri, because most of them, especially the upland prairies, were beginning to vanish as early as 1821, and progressive urbanization subsequently has engulfed most of the region. Nevertheless, St. Louis could very well lay claim to the title of "first prairie city" of the United States.

Perhaps the first written indication of the major extent of prairies at St. Louis appeared on a 1767 map where the entire upland behind St. Louis north to the Missouri River was labeled *Prairie immense ou on mettra une multitude d'habitans* (huge prairie which will hold many settlers) (Musick 1941). Another French map, dated 1796, similarly indicates an upland prairie in St. Louis County north of a general line between the villages of St. Louis and St. Charles (Collot 1826).

St. Louis was founded in 1764. At Laclede's Landing, the foot of Market Street, the belt of timber bordering the Mississippi River was said to be narrower than usual. Prairie began at what is now Fifth Street (Broadway) and extended westward up to eight miles to include most of today's city. All this was not true prairie. In some places, it was distinctly bushy or brushy and in others, there were scattering trees. In still others, grassy parks and groves of trees intermixed. Some of the plats made by Antoine Soulard, the French surveyor for the Spanish administration, show that groves of trees (*arboleda*, in Spanish) occupied sinkhole depressions in an otherwise grassy sinkhole plain (Schroeder 1981). One French inhabitant testified at a hearing on land claims that:

"the spot immediately where the town now stands was very heavily timbered, but back of the town it was generally prairie, with some timber growing, but where the timber did not grow it was entirely free from undergrowth, and the grass grew in great abundance everywhere, and of the best quality; but where the inhabitants used to cut their hay was where Judge Lucas now lives [Locust and 13th], and between his house and the cottonwood-trees, it being all prairie" (McDermott 1952).

Around 1810, the general character of the country around St. Louis was "that of prairie, with scattered trees and interspersed clumps. On the summits of the ridges, the timber is generally red cedar (*juniperus virginiana*), on the prairie, post oak (*quercus obtusiloba*), black jack (*quercus nigra*), black walnut (*juglans nigra*), and shell bark hickory (*juglans squamosa*)" (Bradbury 1904). At the same time, Henry Marie Brackenridge, who was fluent in French, avoided using "prairie" to describe the land:

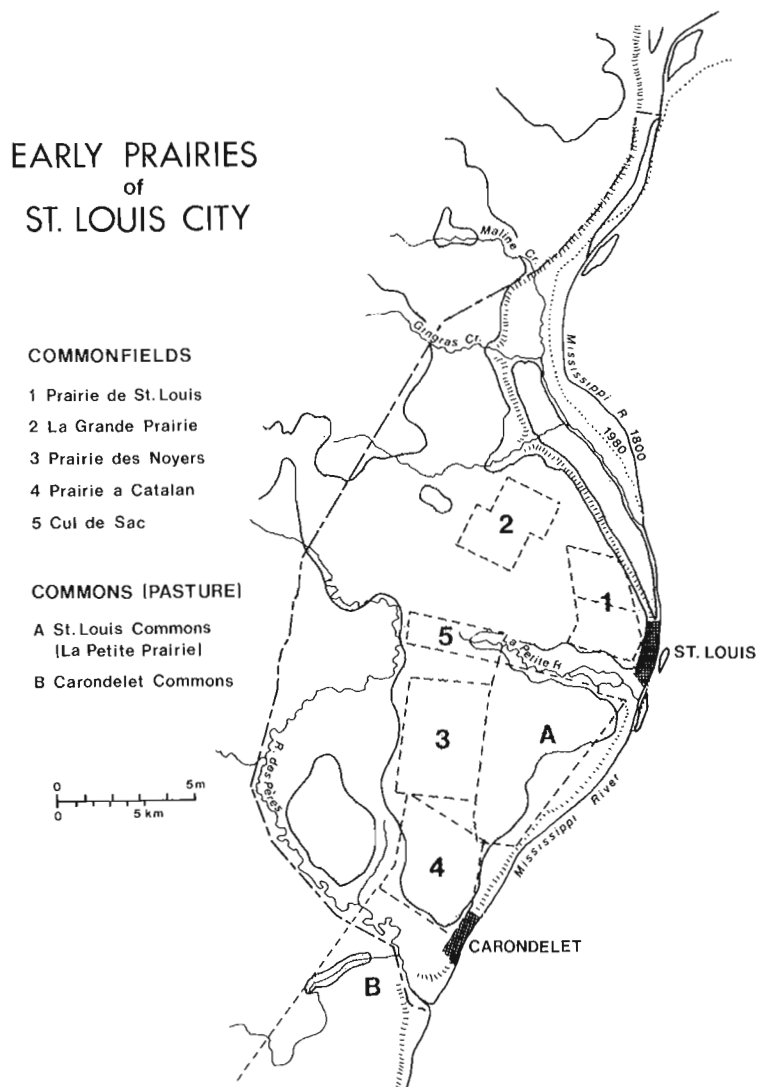
"Looking to the west, a most charming country spreads itself before us. It is neither very level nor hilly, but of an agreeable, waving surface, and rising for several miles with an as-

cent almost imperceptible. Except for a small belt to the north, there are no trees; the rest is covered with shrubby oak, intermixed with hazels, and a few trifling thickets of thorn, crab-apple and plum trees" (Brackenridge 1814).

Timothy Flint, who lived at St. Charles a few years later (1816-19), wrote that "the country about [St. Louis] is an open, pleasant, and undulating land of half prairie, half shrubbery. A little beyond the town, there is considerable smooth grass prairie" (Flint 1826).

Henry Rowe Schoolcraft passed through Carondelet on his return to St. Louis after visiting the lead-mining district of Missouri in 1818. Leaving Carondelet for St. Louis, "we entered upon an elevated tract of highland prairie, without forest

Figure 6. Early prairies of St. Louis City with the location of the French system of common fields and commons (pasture). Information from Soulard surveys 1796-1806, U.S. General Land Office surveys 1816-17, and contemporary written accounts.



trees, and covered by tall grass and shrubs" (Schoolcraft 1819). Four years later, a visiting German duke provided more information on the changing nature of vegetation along the St. Charles road leading away from St. Louis:

"At the beginning, after one has passed the last houses of St. Louis, the road to St. Charles leads for two English miles over hills overgrown with bushes of hazelnut, oak, walnut, and sumace. After that one travels through prairie for a distance covering about six or seven miles. This prairie, however, is not only a grass-covered plain but also supports a mass of tall weeds and low wooded plants. The ground seems to be very fertile and could easily be made suitable for agriculture" (Wilhelm 1973).

By the end of the 18th century, the French had identified by name at least six prairie districts within the prairie region of present St. Louis City (Figure 6). These six prairies formed either commons (pasture) or common fields (cultivated land) for the French (Peterson 1949). Immediately west of the village was the Prairie de St. Louis, a common field, bounded by Fourth (E), Jefferson (W), Market (S) and O'Fallon (N). Nearest the village, this prairie holds distinction as the first upland prairie in Missouri put to agriculture by white settlers. To the south of the wooded valley of La Petite Riviere (later called Mill Creek and now the low area occupied by the railroads and Union Station) lay La Petite Prairie. With scattering trees and groves, it served as a pasture (commons) for St. Louis. Aging Auguste Chouteau, who was present as a teen-ager when Laclede founded St. Louis in 1764, testified in 1825 at hearings on land titles in La Petite Prairie:

"In front of the whole of the land on the South of the Town where Mr Soulard now lives, there was a Bottom covered with heavy timber, which ended at the Creek just adjoining Judge Bent's place, and immediately back of this Bottom on the Bluff, was a Prairia which is the Place now spoken of and was called the Little Prairia" (McDermott 1952).

The largest true prairie of St. Louis City was La Grande Prairie northwest of the village. Laid off as common fields, it was bounded approximately by Grand (E), Newstead (W), Easton (S) and Carter (N), and included Fairground Park. In the south-central part of today's city lay the Prairie des Noyers (Walnut Prairie), bounded by Park (N), Chippewa (S), Grand (E) and Kingshighway (W). Tower Grove Park and the Missouri Botanical Garden are within this former prairie.

South of the Prairie des Noyers and behind the village of Carondelet was the Prairie a Catalan, named after an early French settler. Bounded by Compton (E), Meramec (N), Morganford (W) and Loughborough (S), and including Carondelet Park, it was the common fields for Carondelet. The sixth, smallest, and most wooded of the St. Louis prairies blocked off for fields or pasture was the Cul de Sac in the upper parts of the valley of La Petite Riviere, immediately east of Forest Park.

The southwest part of the city, between Chippewa (N), Kingshighway (E), Gravois (S) and the River des Peres (W), was prominently labeled on Soulard surveys as a *grande prairie naturelle*. In the northernmost parts of today's city, the survey lines now represented by Florissant Avenue and Riverview Boulevard were described by surveyors in 1817 as "prairie, with no timber" (Schroeder 1981).

At the turn of the 19th century, there was more bottomland along the Mississippi River north of downtown St. Louis than there is today. A large part of this flood plain was marked *prairie basse* (low or wet prairie) on pre-American surveys. Where Maline Creek and Gingras Creek emerged from the bluffs in north St. Louis City, they turned to flow along the base of the bluffs for over four miles. Here the bottoms were more than a mile wide and *prairie naturelle* covered half or more of the bottoms. While the upland prairies of the city were rapidly invaded by trees and brush, this bottom prairie persisted longer as a true prairie (Flagg 1906).

In St. Louis County, Florissant was in the middle of "one of the most fertile and valuable prairies in the country" (Stoddard 1812). Almost coincident with the saucer-shaped Florissant Basin, the Florissant prairie was the purest prairie described in early French and American accounts of St. Louis County. The prairie extended south of Florissant through present Lambert-St. Louis Airport to St. Ann. There, between I-70 and St. Charles Rock Road, lay the Marais des Liards (cottonwood swamp). Cottonwoods grew along the sluggish creek, but wet prairie was recorded by surveyors over hundreds of acres.

The prairie extended north from Florissant to the Missouri River bluffs near Fort Bellefontaine and southeast along Halls Ferry Road into the present city of St. Louis where it merged with La Grande Prairie. An unnamed but distinct prairie spread over the uplands around Spanish Lake in extreme northeast St. Louis County, overlooking the junction of the Missouri and Mississippi rivers. This prairie was variously described by French and

American surveyors as "*prairie naturelle*," "good prairie land," "*prairie et bois clair*" (open woods), "no timber" and "rich barren land" (Schroeder 1981).

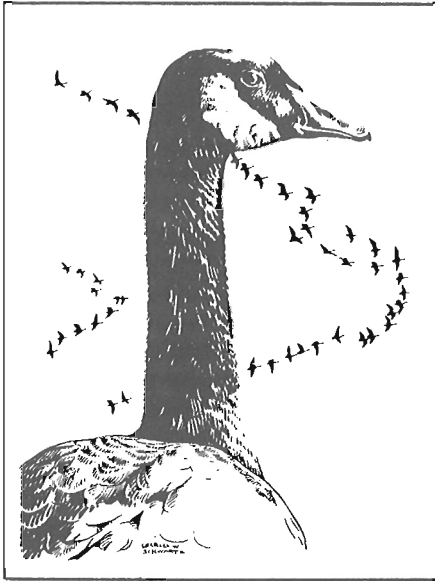
West-central St. Louis County, including University City, Clayton and Richmond Heights, west to Overland and Creve Coeur, was a mosaic of prairie, brush, woods and timber (James 1905). Although the pattern is complex, one generalization is noteworthy. Prairies occupied broad valley bottoms and slopes, while blackjack oak and, less commonly, other oaks occupied the ridges. Deer Creek valley, from Brentwood Boulevard west to I-244, was prairie. The survey lines now represented by Litzinger Road in Ladue and by Ladue Road in Creve Coeur were both described as prairie. The ridges around present Maryland Heights were in blackjack oak, while the valley swales were in prairie grass (Schroeder 1981).

The land between the River des Peres and the Meramec River ("South County" today) contained much less prairie land. The largest tract of upland prairie (*prairie haute*) lay on high ground in Affton. In the valley bottom of Gravois Creek, prairie was described as occupying two long stretches. In this respect, the valley resembled many prairie hollows of the Ozarks.

All of the long, eastern peninsula of St. Charles County is low, alluvial land formed by the Missouri and Mississippi rivers. Practically all of this bottomland was prairie, with timber fringing the rivers, on islands and in selected groves. It was called Point Prairie or Mamelles Prairie, possibly because it could be viewed in its entirety from the loess mounds—known as "les Mamelles" (the breasts)—at the eastern end of the bluffs at St. Charles. Henry Marie Brackenridge described the view from the Mamelles in 1811:

"To the right, the Missouri is concealed by a wood of no great width, extending to the Mississippi, a distance of ten miles. Before me I could mark the course of the latter river, its banks without even a fringe of wood.... To the left, we beheld the ocean of prairie, with islets at intervals. The whole extent perfectly level, covered with long, waving grass, and at every moment changing color from the shadows cast by the passing clouds. In some places there stands a solitary tree, of cottonwood or walnut, of enormous size, but, from the distance, diminished to a shrub. A hundred thousand acres of the finest land are under the eye at once, and yet in all this space there is but one little cultivated spot to be seen" (Brackenridge 1814).





"The total count for the day's shooting scored 168 ducks ... [and] 17 brant and geese, with one gun...."

The marshes and overflow lakes of the Dardenne Prairie in the bottoms of the Mississippi River north of St. Charles were still largely uninhabited as late as the 1880s when a hunter reported his success there: "I ... began shooting right and left ... as fast as I could load and discharge my muzzle loader.... The total count for the day's shooting scored 168 ducks ... [and] 17 brant and geese, with one gun...." (McKinley 1960).

This wet bottom prairie, which continued up the Mississippi River through Lincoln County, was judged unlikely to be settled because of lack of timber and spring water:

"A prairie bottom stretches from the mouth of the Missouri along the west bank of the Mississippi to sandy creek or bay, about sixty five miles, where our settlements in that quarter terminate; and the width of it is from four to six miles, and in some places it exceeds ten miles. The soil is of a luxuriant nature, and yields in abundance; but the want of wood and spring water, of which this prairie bottom is almost destitute, obliges settlers to plant themselves on the margin of the high grounds. The small village of *Portage des Sioux* stands on this bottom" (Stoddard 1812).

Timothy Flint lived at St. Charles and was familiar with the bottoms of both the Mississippi and Missouri rivers. He noted that wet prairie touched the Mississippi River for "most of the distance of 70 miles" upriver from its junction with the Missouri River (Flint 1826), but "Prairies are scarcely seen on the banks of the [Missouri] river,

within the distance of the first four hundred miles of its course" (Flint 1832). The contrast was confirmed over a century later on the basis of soil characteristics (Shrader and Krusekopf 1956).

It should also be noted that the Mississippi river bottoms in Illinois from East St. Louis south to Kaskaskia (the "American Bottoms") were mostly prairie into the 19th century (Collot 1826). No explanation has been offered for the difference in extent of prairies on the Mississippi and lower Missouri flood plains.

## Settlement of the Prairie

Prairies were a valuable resource to the first white occupants of Missouri, the French. The 18th-century French villages in Missouri, with the possible exception of lead-mining settlements of the eastern Ozarks, were located in or adjacent to prairies. While no written statements expressly note that prairies figured in the choice of sites for these villages, correlation is too strong to have been entirely coincidence.

At Ste. Genevieve, the French laid out their common fields in the Mississippi bottom prairie (Schultz 1810). The open hill country south of the village also became common land at New Bourbon. At St. Louis and Carondelet, the extensive prairies were blocked out in large tracts of both common fields and commons (pasture). Behind the village of St. Charles lay a prairie tract which became the Prairie Haute commons for the village. The common fields for St. Charles, like those for Ste. Genevieve, were laid out in bottom prairie downstream from St. Charles.

Florissant (St. Ferdinand) and Village a Robert, in north-central St. Louis County, occupied the most beautiful prairie known to the French. Parts of it were subdivided into common field strips and other parts were fenced into grazing commons. The prairies at St. Louis additionally provided security from Indian or British attack; it would be more difficult to mount a sneak attack of St. Louis through open prairie than through timbered country (Collot 1826).

The French used the prairies several ways. By fencing off tracts into a commons, they established an excellent pasture for cattle and horses. In fact, the French referred to their animals as *sur la prairie* ("on the prairie," meaning the stock was within the enclosed commons) (McDermott 1941). Other tracts, the common fields, subdivided into long, family worked strips, were

used for field crops. John Bradbury thought the French in Missouri had a good system:

"They have abundance of horses, cows, and hogs, all of which run at large on the prairies, as they have no inclosures but for the purpose of agriculture. They mow a little grass on the prairie, which they make into hay, and give it to their horses and cattle when the ground is covered with snow: at other times they leave them to provide for themselves.

"In the reclaiming of wild land, or the forming of a plantation from a state of nature, the trouble and labour is much less than in clearing a forest, as here the trees are not more abundant on the upland than would be necessary for fuel and for fences" (Bradbury 1904).

Many also praised the bountiful fruits of the prairies around French St. Louis, such as plums and strawberries, which are "in vast abundance on the prairies, and are very fine", (Bradbury 1904).

The French also used the prairies behind St. Louis for wood for fuel, fencing and lumber. Scattered, large trees on the St. Louis Commons were used for lumber, although these were insufficient at the time of the survey and most lumber came from Illinois or the Missouri River valley (Beck 1823). Rails for fencing came from smaller trees on the prairie, but as early as 1798 the growing scarcity of fencing materials was seen as contributing to the collapse of the French common-field system (Peterson 1949). Even wood for fuel, formerly cut from the prairies, had been exhausted within nine to 10 miles of St. Louis by about 1830 (Flint 1832).

Americans began entering Spanish Missouri in the 1790s, but not in large numbers until after the Louisiana Purchase of 1803. Immigration accelerated during the first decades of the 19th century. Legal land settlement (land purchased from the public domain) reached the western border of Missouri by 1821, the Iowa border more than a decade later, and the south-central Ozarks two decades later.

These old-stock Americans viewed Missouri prairies differently from the French. The Americans were more timber oriented and tended to take out land in the timbered stream valleys, avoiding the wider and wet alluvial bottoms (Sauer 1920; Drake 1850). The theme of timber-based pioneer settlement is well expressed in American history, but should not be interpreted to mean that settlers avoided the upland prairies. It is clear that early settlers did, in effect, use the prairies for stock grazing. Their cabins—and therefore the land they purchased for ownership—were



in the wooded valleys, but they used the bluestem prairies on the uplands as a sort of common range land. Because of the intricate pattern of timber and prairie throughout most of Missouri, the advantages of both timber and prairie environments could be obtained within short distances. Clearly, a cabin location on the edge of timber, accessible to the springs in the valley as well as the native grass of the uplands, was the preferred site (Jordan 1964).

The advantage of having both environments in close proximity was recognized in print as early as 1817, before Missouri statehood.

"This is probably the easiest unsettled country in the world to commence farming in. The emigrant has only to locate himself on the edge of a prairie, and he has the one-half of his farm a heavy forest and the other half a fertile plain or meadow. He has then only to fence in his ground and put in his crop" (Brown 1817).

A surveyor living at St. Louis before statehood noted that "around the margins of extensive rich prairies [in that vicinity] are numerous inhabitations, set a short distance in the wood, with cultivated fields in the prairies and prairie area between farms is a common pasture" (Wells 1819).

Although "the larger prairies were almost unoccupied" in northeast Missouri in the 1840s, the farms there "were proportionately composed of mingled woodland and prairie" (O'Hanlon 1890). It was noted in Clark County that the narrowness of prairies on the watershed divides made it possible that "each prairie tract may have a sufficient amount of wood land to furnish timber for fences and other needful purposes" (Shumard 1873f). A similar comment was made about northern Morgan County where the prairies "are so distributed with relation to the intervening woodlands, that an abundant supply of wood for fuel, and good timber for the construction of houses, fences, bridges, etc., can always be found at convenient distances" (Meek 1873b).

Except for the Grand Prairie in northeast Missouri, the prairies of Carroll and adjacent counties, and the great prairies of west-central Missouri, the prairies in the state were settled as soon as the neighboring timber was. The fact that they may not have been purchased as early as the adjacent timber does not mean they were not used. As range lands, they were significant in development of the early Missouri cattle industry.

Settlers avoided wet bottoms, whether prairie or timber, because of their reputa-

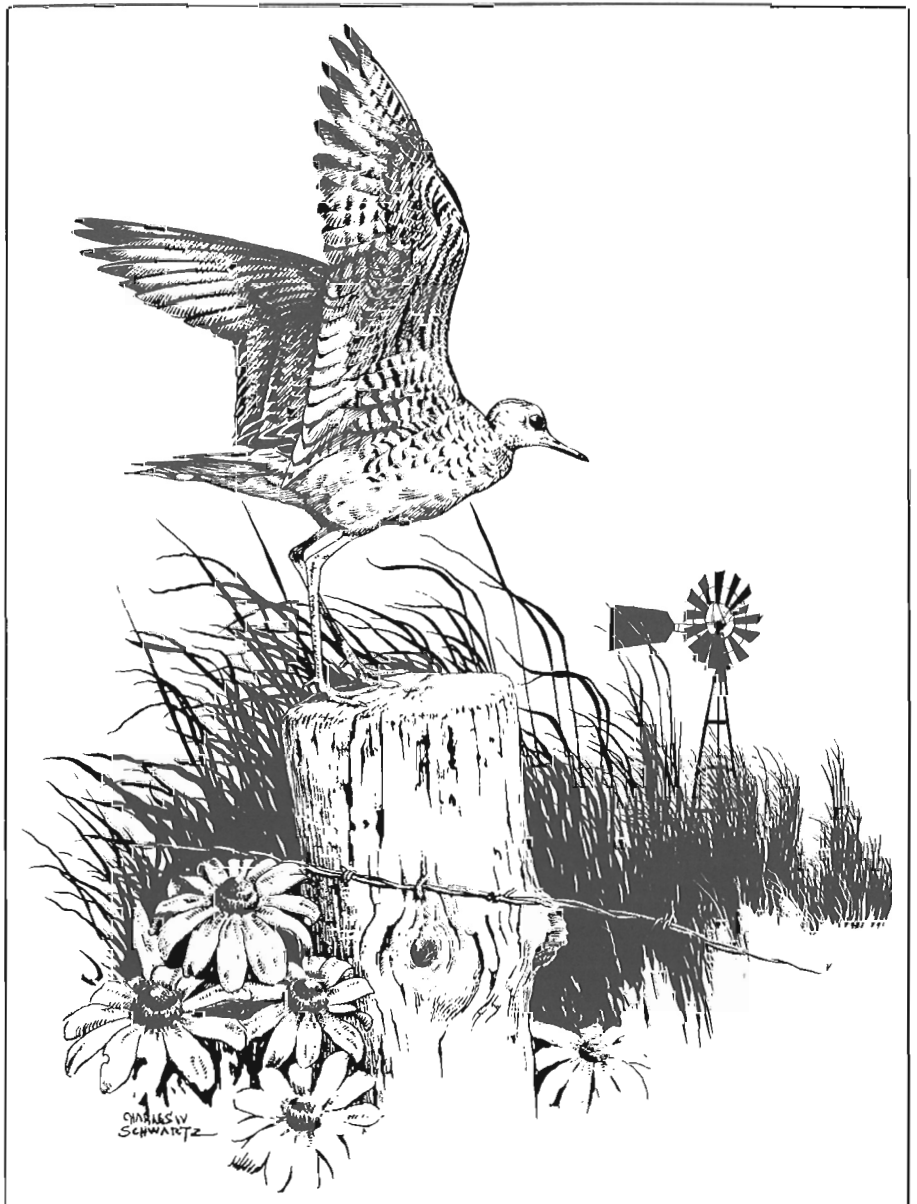
tion for producing fevers and respiratory ailments attributed to damp soils and decaying vegetation (Drake 1850). Nevertheless, the bottom grasses and sedges were used from the start for wintering animals. During the first few years of settlement in any part of the state, the bottom grasses served this function (White and Mills 1969; Sauer 1920; Bradbury 1904).

The open Ozark woodlands, with luxurious growths of bluestem, enticed settlers. One Ozark County settler recalled a country which was "covered with a lush growth of natural pasture grasses with an abundance of clear flowing water from the many springs. There was not much timber and no cedar, so it was a cattleman's paradise and the early pioneers of the Ozarks were cattlemen and they could

On the plains we encountered small troops of five or six deer, prairie hens, woodcocks with long tails which are called papabottes [upland plover or bartramian sandpiper] in Louisiana.

make a good living by allowing their cattle to roam the open range" (Brown 1973). At the lead mines in Washington County, Henry Rowe Schoolcraft noticed that the "growth of grass in the woods affords ample range for [the farmer's] cattle and horses, and they are constantly kept fat.... There is, perhaps, no country in the world, where cattle and hogs can be raised with so little trouble and expense as here...." (Schoolcraft 1819).

The unfenced prairies also were important for haying. At the experimental socialist community of Bethel on the Shelby County prairies, natural hay was gathered in the 1840s from the unenclosed prairie (O'Hanlon 1890). Elsewhere in Shelby County, the tall grass of the bottom prairies was cut and used for hay



(Broadhead 1873b). When the tall grass of bottom prairies was cut and cured, it was "different from upland prairie grass, being whiter when dry, and finer in appearance." It was "very much valued for hay ... and wintered cattle well" (Broadhead 1873a).

Hay was cut from the prairies and even from open timbered lands in Texas County (Watkins et al. 1919). In Cedar County, the "wild grasses that covered the prairies were found so valuable that in many cases they have been preserved after the range has been fenced into pastures" (Watson and Williams 1911). Timothy Flint observed that the cattle running wheat fields at St. Louis preferred the wild prairie grass on the margins of the fields over the wheat and cultivated grasses (Flint 1832).

From the earliest white settlement, and probably dating back into the Indian period, traces, trails and roads were laid out in prairies. The Spanish "King's Highway" from New Madrid north, followed the length of the prairie on Sikeston Ridge. All the trails leading out of French St. Louis followed prairies where they could. The *chemin qui passe au pied des cotes* (road at the foot of the bluffs) went north in the bottom prairie along the Mississippi River to the Chain of Rocks and beyond to the Missouri River. The roads to Florissant, to the Gravois River and to Carondelet passed through prairies. The Boonslick Trail left timber on the outskirts of French St. Charles and followed prairie ridges or the southern ragged edges of the Grand Prairie wherever possible. The Sante Fe Trail left timber at the edge of Arrow Rock and, except for timber points in the prairie, remained in the grasslands westward to Fort Osage.

Wagon trains were assembled on the narrow prairies on the south side of Independence, and the Santa Fe trail led southward on a prairie ridge. When Gasconade County was resurveyed in 1834, it was noted that since the first township subdivision in 1822, the new trails followed the prairie ridges (as at Owensville) or the barrens (as at Swiss), even though settlers' cabins were built in the narrow valleys below.

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## Destruction of Prairies

As long as grazing was not intensive, the prairies could persist. With the arrival of more people and commercialized farming, however, destruction of the tall grass prairies commenced. The prairies were destroyed mainly through three processes: plowing, overgrazing and fire control.

First to plow the Missouri prairie were the French at their 18th-century villages. At St. Louis and Florissant, the prairie did not have a heavy clay subsoil and, with only scattered trees, presented no major task to "breaking." As early as 1800, the plowing of the prairies contributed to replacement of the common field system of agriculture at St. Louis with isolated small farms.

Some observers were quick to realize that the prairie could be plowed and inhabited. From his experiences in Missouri in 1809-11, John Bradbury concluded "that it can be cultivated; and that, in process of time, it will not only be peopled and cultivated, but that it will become one of the most beautiful countries of the world" (Bradbury 1904).

Prairie land was plowed in Saline County in 1819, in Morgan County in 1830 and in Henry County in 1832 (McKinley 1960). Although unrecorded, plows must have broken the prairie at similar or earlier dates in other Missouri counties. Yet most of the prairie of Missouri was not plowed until after the Civil War. Even in Lincoln County on the Mississippi River, which was settled in the early 19th century, most upland prairie was not broken until the 1870s (Sweet et al. 1920).

While the narrow prairies and the edges of larger prairies could be plowed early, the interior of the larger prairies presented difficulties, especially with water

supply and with fencing. Osage orange hedges, planted as early as 1844 in Greene County, helped to solve the fencing problem; they eliminated the need for timber to provide rails for fences (McKinley 1960). The interior of the larger prairies of west-central Missouri remained unplowed into the 20th century.

To turn the wet bottom prairies into plowed fields required ditching and draining, which slowed their destruction. Drainage of the wet lands in Holt County began in the 1870s (McKinley 1960), but some may have occurred earlier. The upper Blackwater in Johnson County, with extensive prairie bottoms, was channelized in 1910 (Emerson 1971). Large-scale drainage of parts of the Grand River flood plain began in 1919 (U.S. Army Corps of Engineers 1932). The level wet prairie or marsh at Swan Lake in northwest Chariton County was drained about 1917 and planted in corn, but only produced one crop every five years. Artificial drainage was inadequate, and rain and seepage water continued to accumulate. In 1927, ducks were there "by millions, feeding on corn that could not be harvested the preceding fall (Phillips and Lincoln 1930). Drainage was abandoned, and the marsh returned.

In addition to plowing, overgrazing destroyed the native prairie grass. The native grass in the St. Louis prairies was

Bottomland prairie dominated by sloughgrass (*Spartina pectinata*). Now, as in early settlement times, these prairies often are used as hay meadows.

Courtesy USDA Soil Conservation Service



"soon killed by being close fed. An abundant crop of coarse and tall weeds takes its place" (Flint 1832). After 1840, overgrazing of prairie had the major effect of eliminating the native bluestem. Usually the native grasses were replaced by introduced bluegrass (McKinley 1960). At the time, bluegrass was considered highly desirable for pasture. In Cedar County, however, it was noted that "by judicious care the bluestem, which had been practically killed out by close pasturing, can repossess the land in a few years and yield as good crops as formerly" (Watson and Williams 1911).

A third cause of destruction of the prairie was elimination of fires. If fires were responsible for maintaining the prairies, as almost everyone thought, then fire prevention could allow trees to invade.

For safety or whatever reasons, fires were controlled first (probably in the late 1700s) around the French villages. One of the first U.S. surveyors in the St. Louis and St. Charles vicinity in 1819 noted the effect of fire control. He noted that the original prairie was covered with a growth of trees four to five inches in diameter near the towns where burning first ceased, and "gradually diminishing in size as you recede, until at length you gain the open prairies" (Wells 1819).

These views of the St. Louis prairies were confirmed by naturalist Edwin James, who wrote that "Since their occupation by permanent inhabitants, the yearly ravages of fire have been prevented, and a dense growth of oaks and elms has sprung up." He further noted that the autumn fires of 1819, "owing to the unusual drought, continued until very late in the season; ... large bodies of timber are so frequently destroyed in this way, that the appearance has become familiar to hunters and travelers, and has received the name of *deadening*" (James 1905).

The change from prairie to timber in St. Louis County in the early 19th century was rapid and was judged a good one. In 1837, Alphonso Wetmore reported that what used to be generally prairie in the uplands of St. Louis County was "covered with a young growth of fine thrifty timber.... There are some tracts of barrens where the timber is sparse. This important change is happily going forward in Missouri wherever the fires are kept out of the prairies" (Wetmore 1837). A traveler confirmed the destruction of the prairie when he wrote of the land behind St. Louis as "clothed in a dense forest of black-jack oak, interspersed with thickets of the wild-plum, the crab-apple, and the hazel. Thir-

ty years ago, and this broad plain was a treeless shrubless waste without a solitary farmhouse to break the monotony. But the annual fires were stopped, a young forest sprang into existence, and delightful villas and country seats are now gleaming from the dark foliage in all directions" (Flagg 1906).

A German visitor to St. Louis in 1838 felt obliged to reconcile the existing contradictory descriptions of the land around St. Louis as both prairie and timber. Considering the rapidity with which timber invades the prairie once fires are prevented, he concluded that both accounts are correct, depending on the year (Zimmermann 1914).

Fire prevention may have been aided by Missouri's first fire control law, enacted in 1824 as "An act to prevent the damages which may happen by firing of woods, marshes, and prairie" (McKinley 1960). Another later government document attributed the conversion of prairie to woodland in the St. Louis area to fire control, but also considered as a possible factor "the dispersion of the larger animals of chase ... since the arrival of the whites on the Illinois side" (McDermott 1952). This referred to the idea that the large grazing animals may have aided in maintaining the open condition of the prairie.

In Saline County, field work before the Civil War showed that while consumption of timber for construction and fuel was increasing with the population, it was not increasing nearly as rapidly as the increase in the growth of timber. "Where the fires are kept out, it is astonishing to see how soon trees spring up on these prairies. Beautiful young forests were observed in various parts of the county, consisting of trees from 8 to 10 inches in diameter, where, it is said, 10 to 15 years previous not a single bush was to be seen" (Meek 1873c).

Similar experiences were reported on the "great central plateau region" of Greene County, where the open prairie was rapidly invaded by timber "with the settlement of the county and the prevention of prairie fires" (Krusekopf and Hutton 1915). In neighboring Lawrence County the process of timber invasion was described in more detail:

"As the prairie lands were fenced and prairie fires were checked, the forests began to encroach on the prairies. Growth of hazel and sumac skirted the edges of the prairie, and here and there a lone hickory, a small clump of post oak, or a persimmon advanced onto the prairie, in many places following the courses of small streams. These trees were in time sur-

rounded by others, forming larger clumps which spread until extensive areas became forested" (Sweet and Jordan 1928).

Throughout the Ozarks, upland prairie, valley prairies, barrens and open woods all suffered from fire control. Curtis Marbut, whose family experienced the loss of Ozark grasslands, wrote:

"As soon as farmers began to build fences, houses, and barns on the uplands they began to control the annual burning of the grass. Young seedlings sprang up as usual, and if not burned for a year or so they were soon large enough to live through the average fire. The increase in population and the consequent increase in live stock probably helped this along by grazing portions of country so close that only a small covering of grass was left to burn in the autumn. The growth of brush spread with great rapidity, every locality being supplied with seed-producing trees of mature age. Within a few years the greater part of the region was entirely covered with a vigorous growth of young trees, mainly oaks. The change began to take place on an important scale immediately after the Civil War. Within thirty years the growth had spread to such an extent that no large areas of treeless grassy plains existed in the region. The last areas to disappear were the areas of thin Berryville soils of northern Arkansas and southwestern Missouri, mainly in Ozark, Taney and Stone Counties in the latter State, and Baxter and Marion Counties in the former.

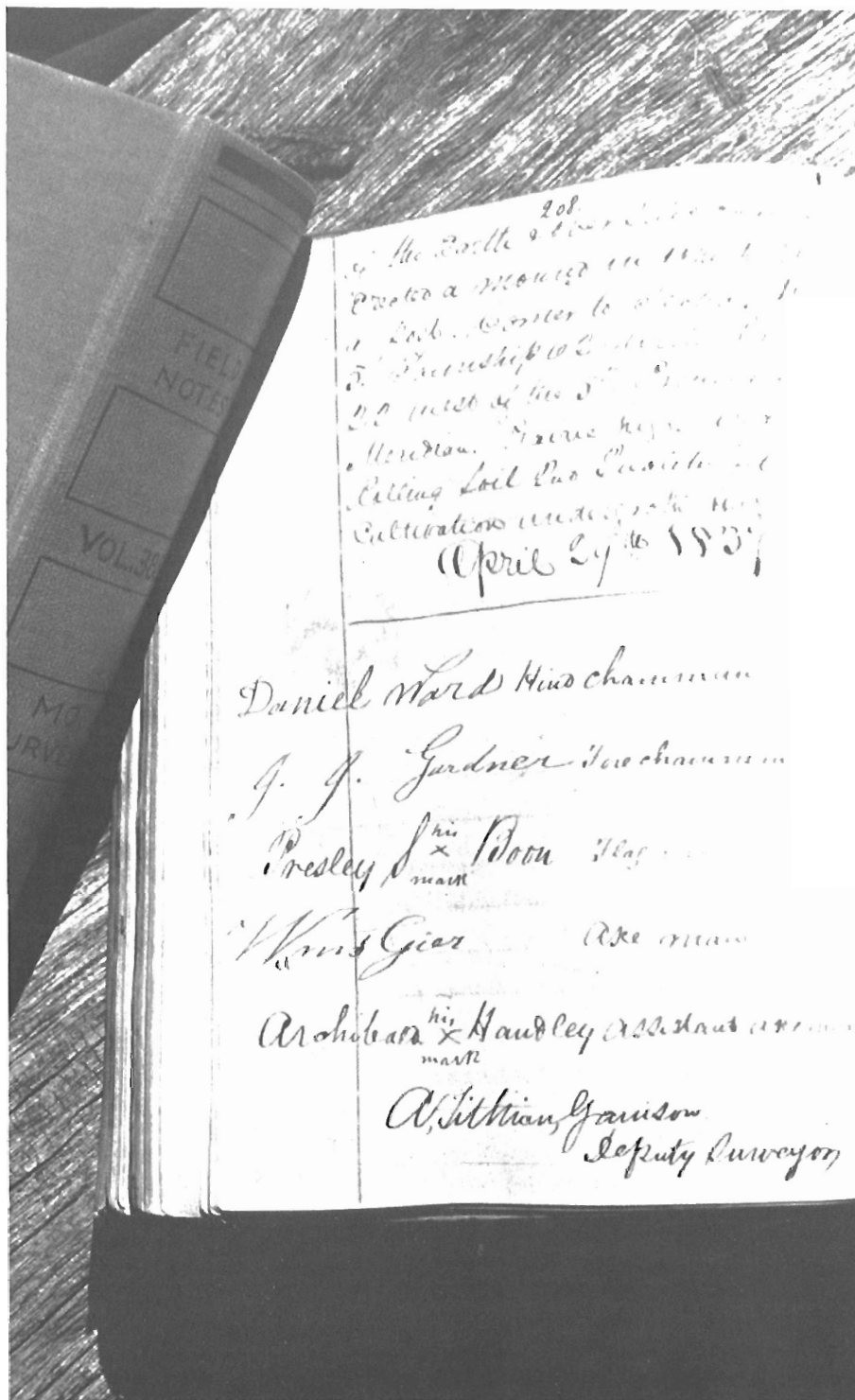
"Only one result could be expected from this. The tree growth made the growing of grass impossible. Where the small trees were thick enough to shade the ground entirely, the grass was completely killed out. Even where it was not killed out it was too thin to produce abundant food for stock.... The killing of the grass was not the direct result of the plowing up of the sod, but the indirect result of the cultivation of a small part of the upland [with its attendant fencing].... At the present time [1910] great areas of woodland support an extremely small number of cattle or sheep. The farmers felt the change in this environment, but they did not arrest it, nor did they undertake in a concerted way to supply the lack of summer pasture brought about by the change" (Marbut 1911).

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## Prairie Names

People use names to refer to places in the environment. These names show what features in the environment are important, and the choice of names indicates the perception and understanding people have of





Russ Reagan

A surveyor contracted with the General Land Office to survey a specific tract of land, usually several adjacent townships. When he completed the contracted survey, he signed the book of field notes and delivered it to the Land Office at St. Louis to be checked and accepted and to receive payment. The surveyor's crew consisted of a hind chainman, a fore chainman, a flag man, an axe man and an assistant axe man. The surveyor usually hired these frontiersmen of the vicinity and paid them from fees he collected for completing a survey. These men also signed the field notes, or made their marks with an X, as shown here. Other men were hired by the surveyor to keep camp for the entire party which might be in the field two or three months. These pages are from field notes for land described as "Prairie high & dry" in eastern Grundy County, surveyed April 29, 1837.

their environment. The lore of names promotes speculation and research into the cultural and natural history of a place.

Over 700 place names in Missouri are known to contain the word "prairie." Many of these names are for schools and churches, some no longer in existence, and others are for creeks and hollows, post offices, mines and townships. Nearly 300 of these place names are for prairies, which indicates how important the prairies were to early Missourians. After allowing for alternate names and translations, the locations of 194 different prairies have been determined with certainty.

We have a propensity to name the unusual. In the largely prairie regions of Missouri, the groves of timber were named, but where timber and prairie were more equally mixed, or where distinct prairie openings occurred in the timber, the prairies were commonly named. The greatest number of prairie names occurs in the western Ozarks and in the lower Missouri valley.

During the initial white settlement of an area, names were drawn from the natural environment. Some of these names were based on the topographic characteristics: Bald-pated Prairie (Atchison), Ridge Prairie (Saline), Three Mound Prairie (Polk), Valley Prairie (Polk), and three High Prairies (on the uplands of Dallas, Laclede and Webster counties). Some described the surface; for example, Mud Lick Prairie (Pike), Sandy Prairie (Scott), two Rock Prairies (Dade, Lawrence and Polk), a separate Rocky Prairie (also in Polk), White Rock Prairie (McDonald), and Yellow Rock Prairie (Carroll).

Other environmental names came from animals; for example, Elk Prairie (Phelps), Prairie les Biches (Elk Prairie, St. Louis), Beaver Prairie (Marion), Buffalo Prairie (Camden), Buffalo Head Prairie (Dallas), and two Fox Prairies (Clark and Lafayette).

Distinctive trees on the prairie furnished names; for example, Birch Prairie (Shannon), Seven Oaks Prairie (Laclede), Locust Prairie (Greene), Prairie des Noyers, (Walnut Prairie, St. Louis City), and Brush Prairie (Crawford). According to the surveyors' notes, much of the Ozarks could have been called Brush Prairie. Some prairies were named after a stream heading in them; for example, Brush Creek Prairie (Laclede), Panther Creek Prairie (Laclede), and Silver Creek Prairie (Newton).

Also among the earliest names are those taken from Indians. For example,

Prairie du Village Sauvage (St. Louis City), Sauk Prairie (Ray), Wakenda Prairie (Carroll), Kickapoo Prairie (Greene), and Indian Prairie (Franklin).

The shape of a timber-enclosed prairie was noted in some names; for example, Diamond Grove Prairie (Newton), Point Prairie (St. Charles), and no fewer than eight Round Prairies (Barton, Bates, Clark, Dallas, Jackson, Jasper, St. Clair and Vernon). The size was considered in some cases; for example, Grand Prairie, which included much of Audrain and surrounding counties, Big Prairie at New Madrid contrasted with Little Prairie downriver at Caruthersville, and Big Prairie at St. James contrasted with Little Prairie a few miles away. In other instances, directions differentiated nearby prairies; for example, North Prairie (Hickory) lay north of South Prairie (Polk), and East Prairie (Mississippi) was on the opposite side from West Prairie (Dunklin) in the southeast lowlands.

Some prairies stretched along upland divides for such distances that their lengths became prairie names. For example, two Four Mile Prairies (Dallas and Randolph), two Six Mile Prairies (Jackson, Henry and Benton), Nine Mile Prairie (Callaway), two Ten Mile Prairies (Henry and Lewis), Fifteen Mile Prairie (Hickory and Dallas), and Twenty-Five Mile Prairie (Hickory and Polk). Two Mile Prairie (Boone) was named for its consistent two-mile width as it stretched along an upland divide for over 20 miles.

Prairies were named from events as well. Premiere or First Prairie (Saline) was the first prairie sighted on the Missouri River as one traveled upstream. Fire Prairie (Jackson), which appears on a 1795 map in French as Prairie du Feu, allegedly was so named because of a prairie fire in which raiding Indians perished.

As settlers moved onto prairies, their names became associated with the prairie. More prairies bear settlers' names than any other kind of name. Among the dozens of them are Washburn Prairie (Barry), Howell Prairie (St. Charles), Jake's Prairie (Crawford), Douglass Prairie (Gasconade), Ham's Prairie (Callaway), Thrall's Prairie (Boone), Oliver's Prairie (Newton and Barry), Mathew's Prairie (Mississippi), Walker's Prairie (Moniteau), Edgar Prairie (Phelps), King Prairie (Barry), Joy's Prairie (Newton), Cline's Prairie (Scotland), Oyster Prairie (Lewis), Reevey's Prairie (Buchanan), Upshaw Prairie (Polk), Dark's Prairie (Randolph), and Balke Prairie (Benton).

Pennsylvania Prairie (Johnson) was named after a settler, Penn, but another

Pennsylvania Prairie (Dade) apparently was named after the state.

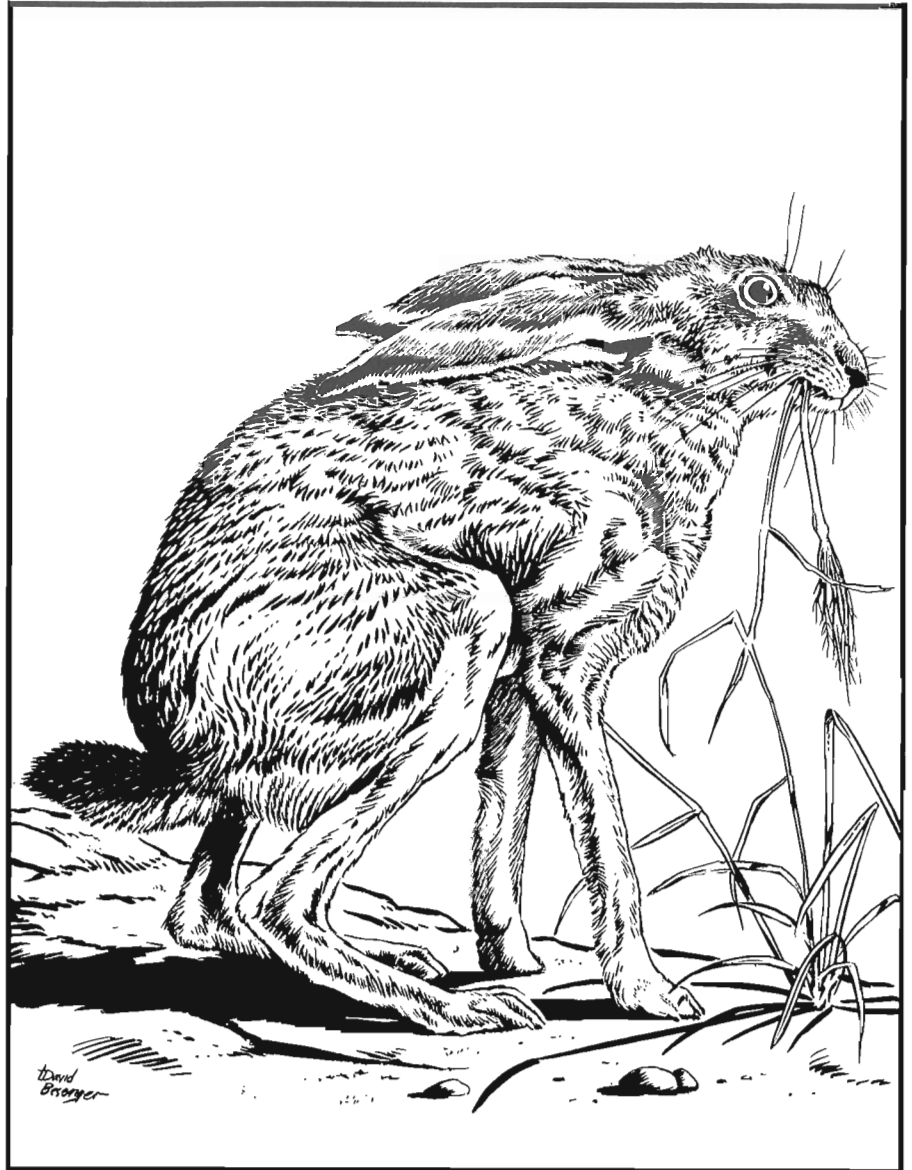
Later a prairie got to be known by a town on it, as Clarence Prairie (Shelby), Sarcoxie Prairie (Newton), Ravanna Prairie (Mercer), and Wheatland Prairie (Hickory). Bowling Green Prairie (Chariton), however, is far distant from the town of Bowling Green (Pike).

Some prairies have been favored with several names which bear no relationship to each other. Dog Prairie (St. Charles) has also been known as White's Prairie, Richland Prairie and Comegris Prairie, as well as Prairie du Chien. Barren Prairie (Douglas) was later known as California Prairie.

A few prairie names are euphemistic and may have been chosen to promote the prairie; for example, Empire Prairie (Andrew), Spring Garden Prairie (Miller), two Garden Prairies (Callaway and Scotland), and three Pleasant Prairies (Lafayette, Polk and Webster).

Finally, one name defies classification and creates speculation as to its origin: Shake Rag Prairie (Warren).

As the pioneer landscape of forests and prairies disappeared into pastures, cultivated fields and woodlots, so did many of the prairie names associated with it. Few prairie names remain in use today, although new names usually are given to prairie tracts designated for preservation.



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## Prairie Preservation

During the past score of years or so public interest in Missouri prairies has grown. Identification, preservation and management of remnants of virgin (unplowed) prairie and native grass restorations in former prairie areas are results of this increased interest and appreciation. Farmers and ranchers increasingly are recognizing the advantages of prairie for pasture, hay and erosion control. Biologists, landowners and the public also are more aware of the value of prairie as wildlife habitat and as diverse natural ecosystems.

Two private organizations, The Nature Conservancy and the Missouri Prairie Foundation, have contributed considerably to the preservation of Missouri's prairie heritage. The Nature Conservancy owns 11 prairie tracts totaling about 2,200 acres. Conservancy prairies are managed by the Missouri Department of Conservation under a lease agreement. The Missouri Prairie Foundation has acquired six prairies totaling about 710 acres, and three of these prairies are similarly managed by the Conservation Department.

The University of Missouri-Columbia owns the 146-acre Tucker Prairie which it uses as a prairie research area. This is the

only large public prairie north of the Missouri River. The Missouri Botanical Garden, and the cities of Columbia and Kansas City have established prairie restoration projects.

The Department of Natural Resources recently acquired about 1,400 acres of prairie in southwest Missouri as part of a new Prairie State Park.

The Department of Conservation has given high priority to prairie acquisition and protection. The Department owns at least 14 prairies totaling about 4,800 acres, in addition to managing prairies belonging to other organizations. The Department also advises private landowners on management of their prairies for forage production as well as for wildlife habitat, thus making privately owned prairies attractive enough to landowners to prevent their conversion to other uses.

Most of Missouri's remaining prairie is privately owned. It is with these private owners that the potential for protecting large areas of prairie exists.

By 1983, at least 31 prairies had been acquired and protected. A booklet, *The Public Prairies of Missouri*, is available from the Department of Conservation.

The prairies listed in the chart on the preceding page are open to the public.

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## Acknowledgements

I would like to extend sincere thanks to the many people who helped me with this publication. Gary Beahan, Missouri state archivist, and others in his office helped me locate archival materials. Personnel of the reference library of the State Historical Society of Missouri helped locate 19th-century material describing Missouri's environment. Robert Meyers, State Land Surveyor, Missouri Division of Geology and Land Survey, also provided invaluable assistance.

Paul R. Schroeder helped transfer information from my county maps onto a 1:500,000 scale map. Mike Haeffner of the Missouri Department of Conservation produced the cartographical work for this publication at a 1:1,000,000 scale.

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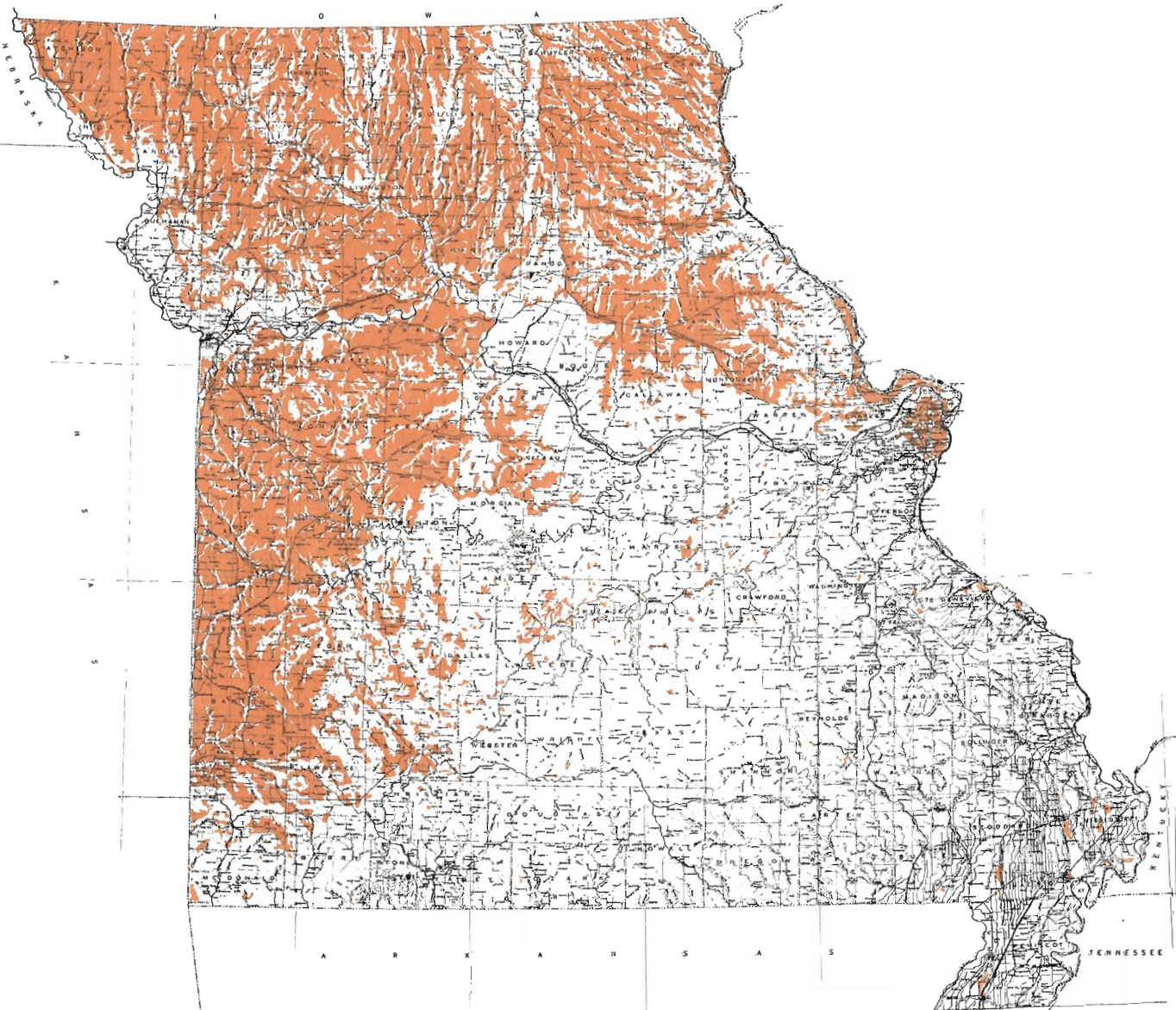


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# Presettlement Prairie of Missouri





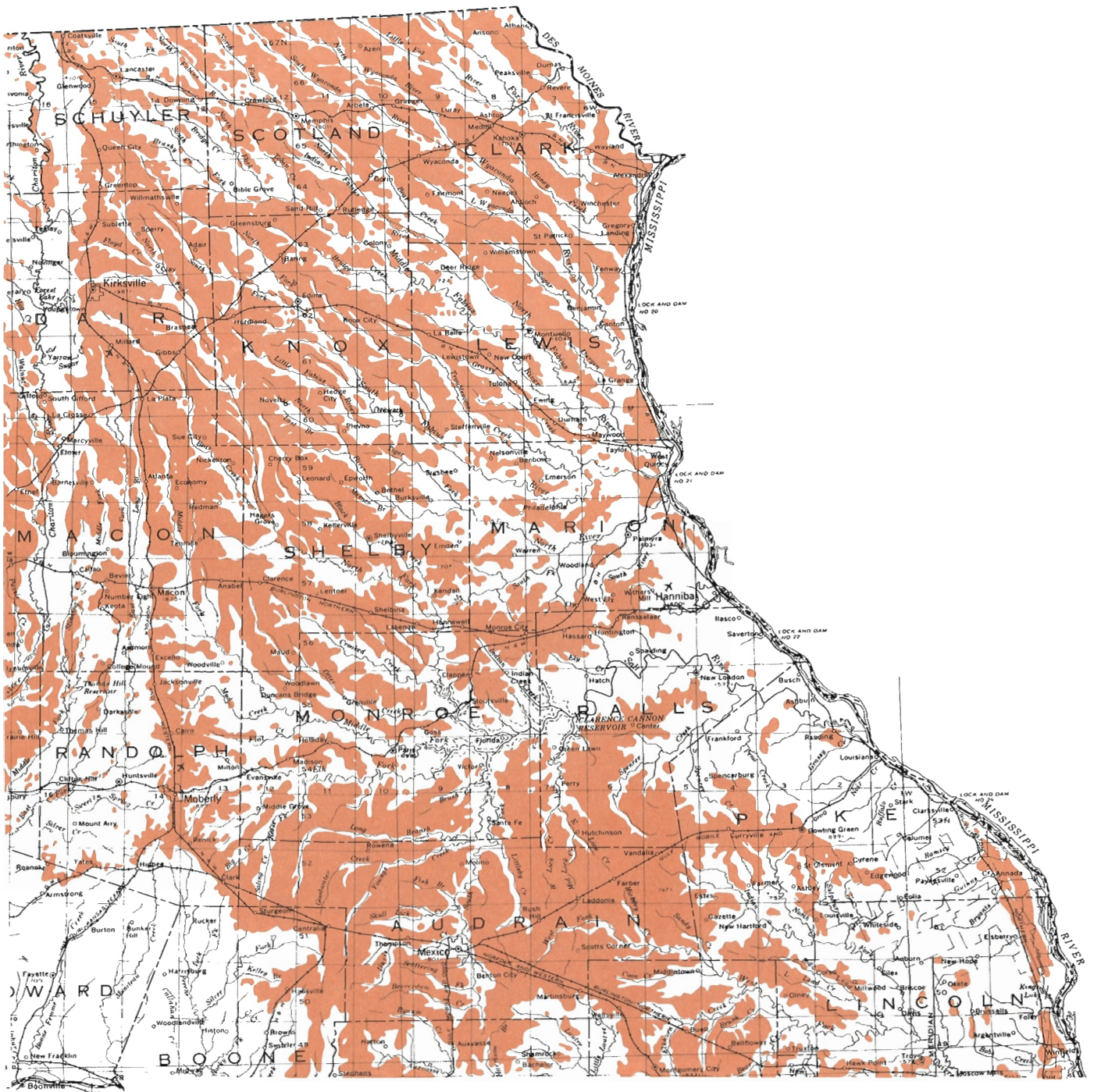






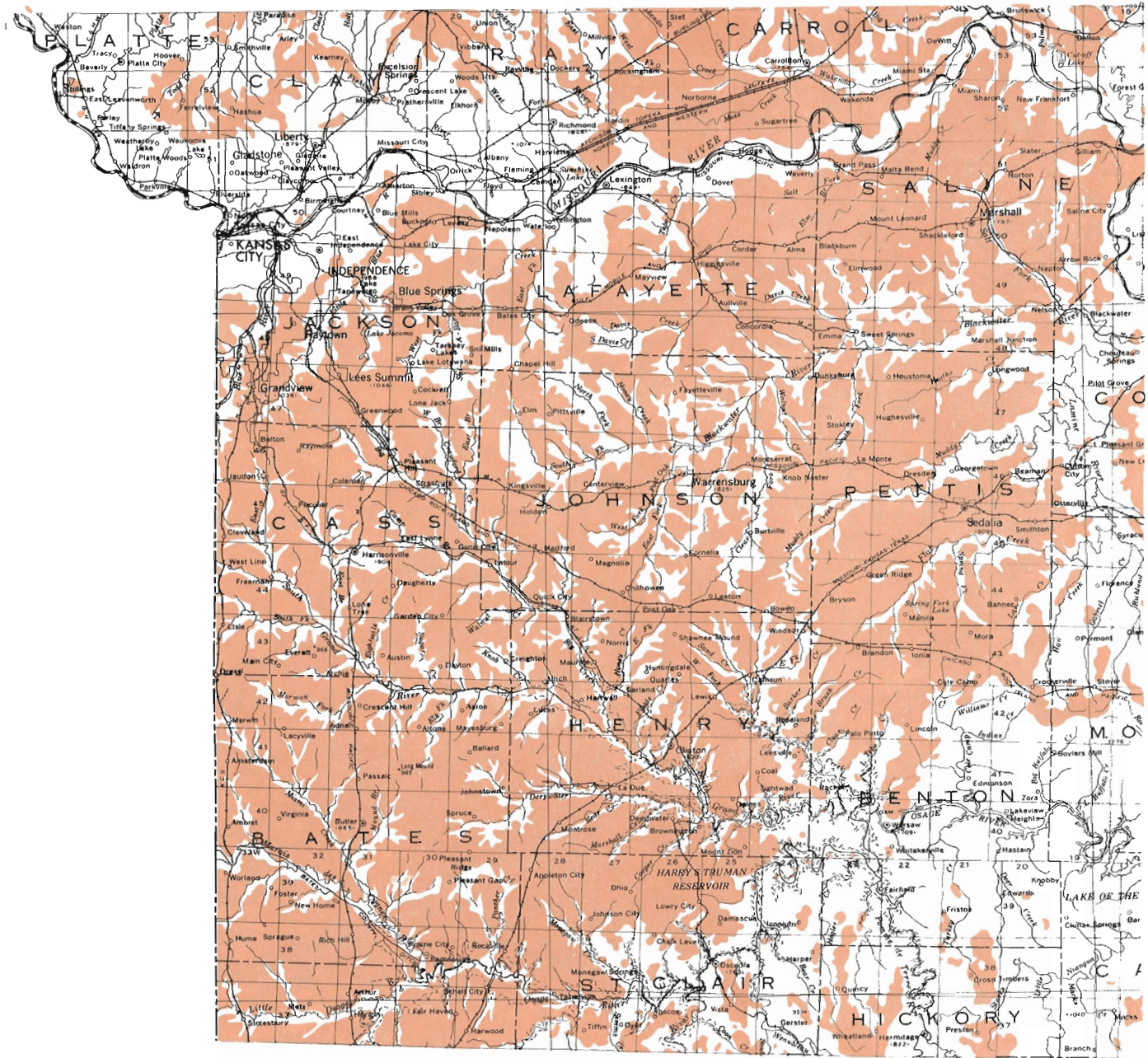


# Map 3—Northeast Missouri



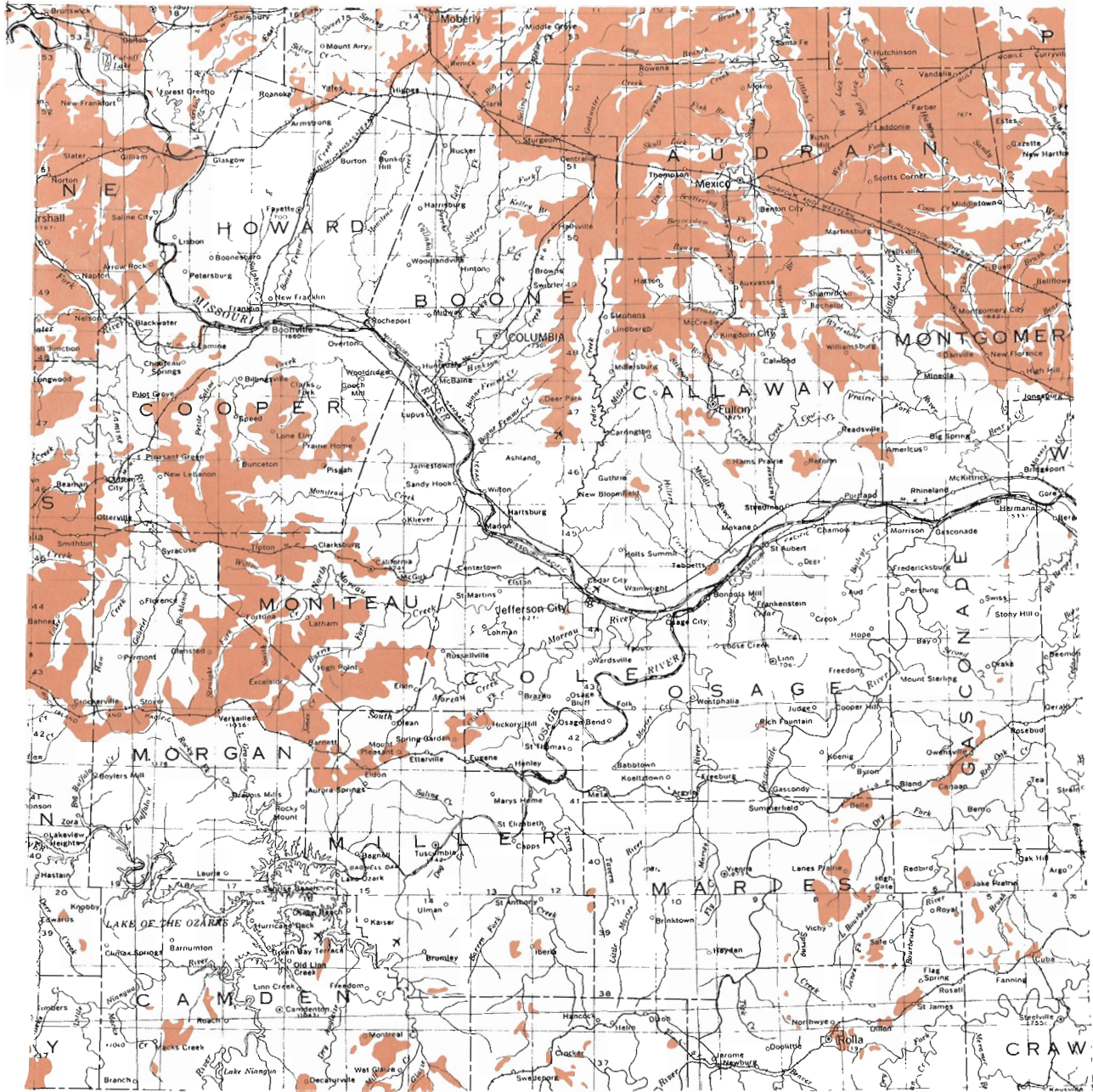


# Map 4— Missouri Valley & West-Central Missouri

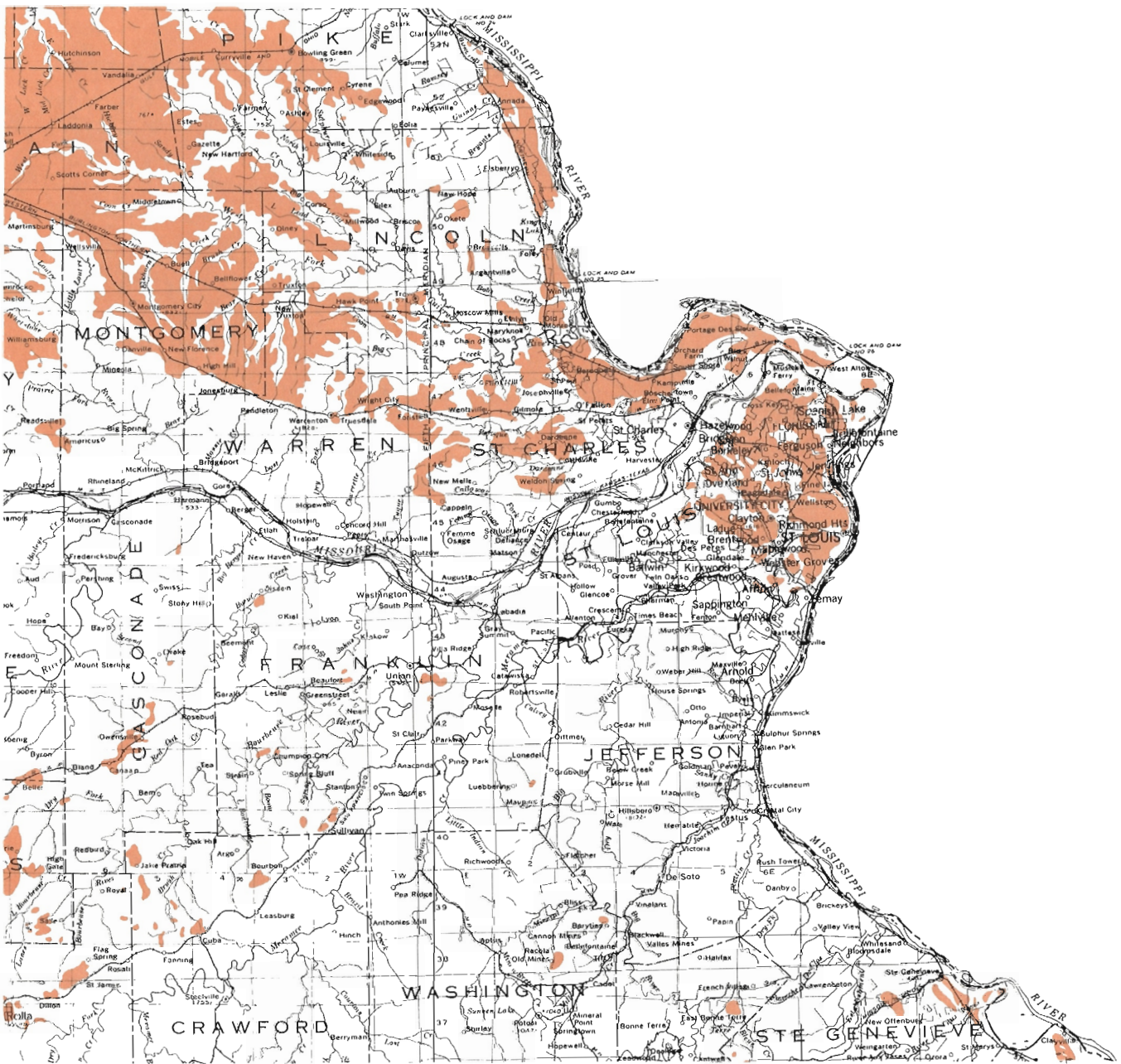




# Map 5— Missouri Valley, Western Ozarks, Ozarks

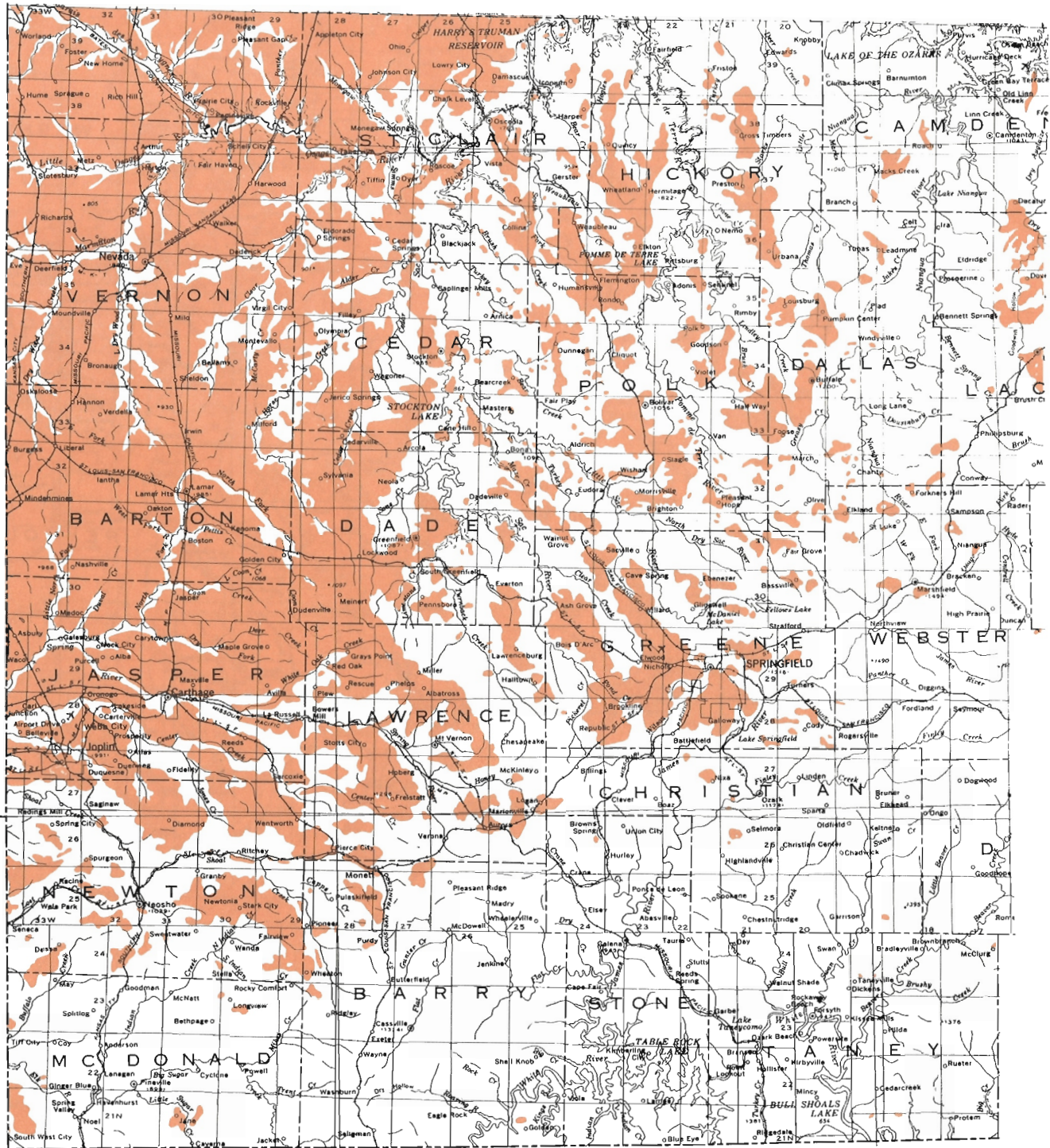


# Map 6—St. Louis Region



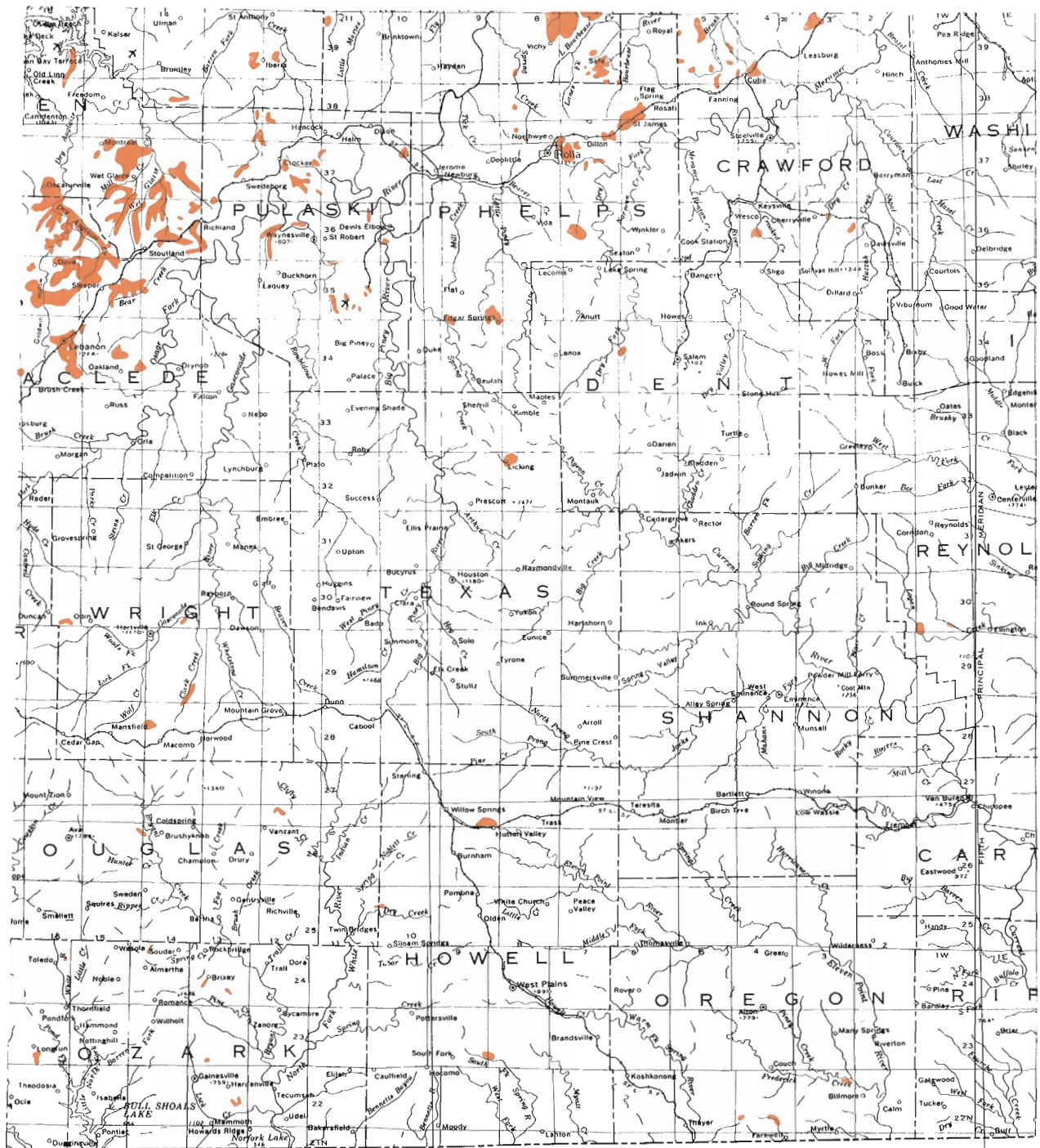


# Map 7 – West-Central Missouri, Western Ozarks, Ozarks



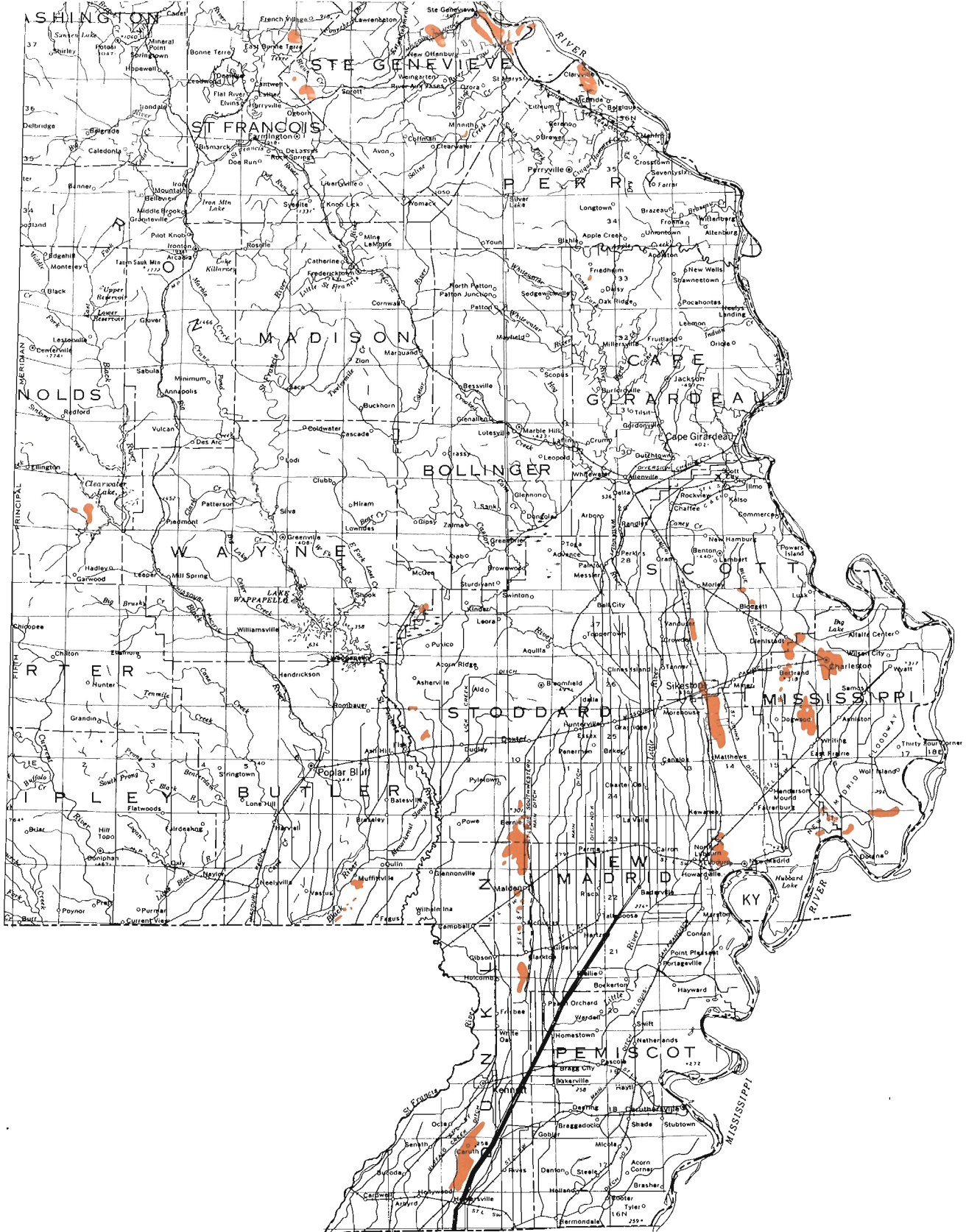


# Map 8—Western Ozarks, Ozarks





# Map 9—Ozarks, Southeast Lowlands



# Missouri Prairies

Prairie Name	Acres of Prairie	County	Owner	Managed By
1. Brickyard Hill	7	Atchison	MDC	MDC
2. Buffalo Wallow	180	Barton	MDC	MDC
3. Bushwhacker W.A.	665 (2 tracts)	Vernon	MDC	MDC
4. Catlin	148	Barton	MDC	MDC
5. Chapel View	304	Henry	MDC	MDC
6. Clear Creek	600	Barton/Vernon	MDC	MDC
7. Cordgrass Bottoms N.A. and Locust Creek	780	Linn	DNR	DNR
8. Diamond Grove	570	Newton	MDC	MDC
9. Dorris Creek	160	Barton	MDC	MDC
10. Dorsett Hill	14	Cass	MDC	MDC
11. Drovers	80	Pettis	MPF	MDC
12. Flight Lake	54	Vernon	MDC	MDC
13. Four Rivers W.A.	60	Vernon	MDC	MDC
14. Friendly	40	Pettis	MPF	MDC
15. Gama Grass Meadows	80	Vernon	TNC	MDC
16. Gay Feather	116	Vernon	MPF/MDC	MDC
17. Golden	301	Barton	MPF	MPF
18. Grandfather	60	Pettis	MDC	MDC
19. Helton W.A.	13	Harrison	MDC	MDC
20. Hi Lonesome	627	Barton	MDC	MDC
21. Hite	66	Morgan	MDC	MDC
22. Hunkah	160	Barton	TNC	MDC
23. Indigo	40	Dade	MDC	MDC
24. Jamerson McCormack Loess Hill	10	Holt	MDC/TNC	MDC
25. La Petite Gemme	37	Polk	MPF	MDC
26. Little Osage	80	Vernon	TNC	MDC
27. Marmaton Bottoms	180	Vernon	TNC	TNC
28. Mo-Ko	411	Cedar	TNC	MDC
29. Monegaw	270	Cedar	TNC/MDC	MDC
30. Mon-Shon	75	Barton	MDC	MDC
31. Mount Vernon	40	Lawrence	TNC	MDC
32. Niawathe	320	Dade	TNC/MDC	MDC
33. Osage	1392	Vernon	MDC	MDC
34. Paint Brush	234	Pettis	MDC	MDC
35. Pawhuska	77	Barton	TNC	MDC
36. Penn-Sylvania	160	Dade	MPF	MPF
37. Prairie State Park	1390	Barton	DNR	DNR
38. Redwing	105	Barton	MDC	MDC
39. Rippgut	124	Bates	MDC	MDC
40. Rock Hill Prairie	40	Benton	TNC	TNC
41. Schell-Osage Relicts	171 (8 tracts)	St. Clair/Vernon	MDC	MDC
42. Sheldon Cook Memorial Meadow	280	Barton	TNC	TNC
43. Sky	200	Cedar	MDC	MDC
44. Star School Hill	12	Atchison	MDC	MDC
45. Stony Point	640	Dade	MDC	MDC
46. Taberville	1410	St. Clair	MDC	MDC
47. Tarkio	13	Atchison	MDC	MDC
48. Tingler Lake	5	Howell	MDC	MDC
49. Treaty Line	153	Barton	MDC	MDC
50. Tucker	146	Callaway	UMC	UMC
51. Tzi-Sho	160	Barton	TNC	MDC
52. Wah-Kon-Tah	700	St. Clair	TNC	MDC
53. Wah-Sha-She	160	Jasper	TNC	MDC

DNR — Department of Natural Resources  
 MPF — Missouri Prairie Foundation  
 UMC — University of Missouri-Columbia

MDC — Missouri Department of Conservation  
 TNC — The Nature Conservancy

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