THE ROLE OF THE UNITED STATES ARMY IN THE
EXPLORATION AND MAPPING OF THE
KANSAS AREA: 1806 - 1845

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The military campaigns between the United States Army and the plains Indians of the trans-Mississippi West have been the subject of many books and articles, both popular and scholarly. Some writers have emphasized the romantic aspects of frontier military service; others have portrayed the soldier as a ruthless and persistent threat to the simple life of the noble Indian. Few have attempted critically and objectively to describe and interpret the broader role of the United States Army in the story of national development, that is, as an agent of colonization in the West.1 Fewer still have written from an historical-geographical perspective.

As early as 1893, Frederick Jackson Turner described the spatial movement of Americans west as a cultural succession of frontier types.

Stand at Cumberland Gap and watch the procession of civilization, marching single file—the buffalo following the trail to the salt springs, the Indian, the fur-trader and hunter.

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1 The first substantial contribution in this regard was the early work of Henry P. Beers, The Western Military Frontier 1815-1846 (1935). More recent book length publications include: Averam B. Bender, The March of Empire (1952); W. Turrentine Jackson, Wagon Roads West (1952); Francis P. Prucha, Broadax and Bayonet (1953); and William H. Goetzmann, Army Exploration in the American West (1959), and Exploration and Empire (1966). Developments in mapping the West are covered in Carl I. Wheat, Mapping the American West, 1540-1857 (1954). All are historians.
the cattle-raiser, the pioneer farmer—and the frontier has passed by. Stand at South Pass in the Rockies a century later and see the same procession with wider intervals between.²

Clearly, there are broad geographical implications in such a series of stages as outlined in the Turner thesis, both in the sequent occupance of a particular area and in the contiguous movement of these frontier types westward.

The United States Army: A Frontier Type

The United States Army belongs in this cast of western heroes.³ On most American frontiers a standing military force was a requisite to awe and, when necessary, oppose hostile Indian tribes. However, as noted by Francis P. Prucha, "The army cannot be assigned a single position in the parade to the West: its presence was felt in all stages of the pioneering process."⁴ Incipient agricultural settlements expanded under the nurture of the frontier forts. Traders and trappers often used the fort as a rendezvous and as a central place for fur traffic and Indian trade. Indian agents and missionaries frequently administered to needy Indians in the shadow of the fort. The troops themselves made a substantial impress on the surrounding physical landscape. Like the early white settlers and "civilized" sedentary Indians, they cut trees, cleared land and planted crops. They constructed fortifications and living quarters, built roads, surveyed lands, explored and mapped unknown or uncharted country, established Indian reservations, and acted as Indian agents. In addition, they furnished early settlers, traders, and local entrepreneurs with much business that stimulated and augmented the economic and social life of the nearby area.⁵

⁴Francis P. Prucha, Broadax and Bayonet (Madison: The State Historical Society of Wisconsin, 1953), p. viii
⁵Ibid., pp. viii-ix, and Averam B. Bender, The March of Empire (Lawrence: University of Kansas Press, 1952), pp. 107, 229.
As an instrument of the federal government, the Army acted as a two-edged sword, on the one side guarding the rights of the Indians; on the other, protecting the settlers from the depredations of warring tribes.

This study examines some geographical patterns and processes in the colonization of the trans-Mississippi West in which the United States Army played a contributory role: specifically, the exploration and mapping of the Kansas area, 1806-1845. In the history of the American West this period has been described as an "era of imperial rivalry" which preceded a flood of western pioneers across the Kansas area after the Mexican War and the settlement of the Oregon question.6 The Kansas area is defined as loosely bounded on the east by Missouri, by the Platte River on the north, the Cimarron River on the south, and by the Front Range of the Rocky Mountains on the west.7

In examining the activities of the Army in gathering and disseminating geographical knowledge of the Kansas area, three basic questions appear relevant at the outset: (1) How did the military evaluate the Kansas landscape for future colonization (a synthesis of military reports)? (2) Did contemporary civilian-led explorations and travels generally supplement or conflict with the evaluation of the military? (3) How geographically significant were the contributions of the military to the Kansas area? It is within the framework of these questions that this study is set.

Military Explorations and Reports Before 1830

American trans-Mississippi exploration officially began in 1804 with the much heralded expedition of Captain Meriwether Lewis and Lieutenant William Clark to the Pacific via the Missouri River. In his journal on June 24, 1804,

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7 During the period of this study, 1806-1845, the Kansas area was successively a part of the Louisiana Territory, Missouri Territory, Unorganized Territory, "Western Territory," and "Indian Territory." In 1854 the bulk of it became the Kansas Territory, and in 1861 the state of Kansas.
near the present site of Kansas City, Missouri, Lewis noted "the country on both sides being fine and interspersed with prairies, in which we now see numerous herds of deer, pasturing in the plains. . . ." Ten days later, travelling north of the Leavenworth, Kansas area, he wrote of the "extensive and beautiful prairie, interspersed with copses of timber, and watered by Independence Creek." Although skirting the Kansas area along the Missouri River, Lewis makes frequent comment on the "extensive prairies" in the western country.

Lt. Zebulon Pike's expedition through the Southwest in 1806 included a traverse across a part of the area now occupied by Kansas, and gave the American public an early written account of the general nature of the land (Fig. G1). In his book published in 1810, Pike reported that "I saw in my route in various places tracts of many leagues where the wind had thrown up the sand in all the fanciful forms of the ocean's rolling waves and on which not a speck of vegetation matter existed." Significant for later colonization, Pike also noted that "our citizens . . . will, through necessity, be constrained to limit their extent on the west to the borders of the Missouri and Mississippi, while they leave the prairies incapable of cultivation to the wandering and uncivilized aborigines of the country." Pike compared Kansas country with "the sandy deserts of Africa" and saw this arid domain acting as a permanent barrier to American expansion westward.

Lt. Pike's concept of a barren, sandy wasteland west of the Missouri River received substantial support in the widely circulated writings of Major Stephen H. Long and his scientist companion, Dr. Edwin James. Reporting on the journey from Fort Osage to the mouth of the Platte River in

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9 Ibid., p. 19.  
10 Ibid., pp. 11-32.  
12 Ibid., p. 28.  
13 Ibid., p. 27.
August of 1819, Dr. James described the Kansas River and adjacent countryside.

Its valley, like that of the Missouri, has a deep and fertile soil, bearing similar forests of cotton-wood, sycamore, and interspersed with meadows: but in ascending trees become more and more scattered, and at length disappear almost entirely, the country, at its source, being one immense prairie.  

Major Long's comments were similar, although somewhat less encouraging.

Much of the country situated upon its [Kansas River] forks is said to be possessed of good soil, but is rendered uninhabitable for want of timber and water. The bottoms are possessed of a light sandy soil, and the uplands are in many places characterized by aridity and barrenness.

Dr. Thomas Say, the party's zoologist, led an overland excursion west along the Kansas River to the Kansas Indian village, then northeast to the Missouri River, rejoining the main body at Fort Lisa near Council Bluffs (Fig. G1).

In ascending the Konzas River, one hundred, or one hundred and twenty miles from the Missouri, you discover numerous indications, both in the soil, and its animal and vegetable productions, of an approach to the borders of that great Sandy Desert, which stretches eastward from the base of the Rocky Mountains.

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16 Ibid., Vol. XIV, p. 212.
Speaking of the country southwest of the Missouri River between the Platte and Kansas Rivers, Dr. Say summarizes prospects for settlement:

The settlement of this region will be much retarded on account of the want of trees, these being confined to the margins of the water-courses, while tracts of valuable soil, of many miles in extent, have not a single tree or bush upon them . . . but it is probable, forests will hereafter be cultivated in those vast woodless regions, which now form so great a proportion of the country; and wells may be made to supply the deficiency of running water. 17

In his 1821 report to the Secretary of War, Major Long identified the 96th meridian as separating the uninhabitable region from the timbered and watered country (Fig. G1). He defined the barren region as lying generally between 96 and 105 degrees west longitude, thus limiting the expansion of agricultural settlement to about eighty miles west of the Missouri state line. 18 However, on his map of the region, published two years later (1823), Long placed the words "Great Desert" across the face of the country from the 99th to the 105th meridian--covering an east-west distance of over 300 miles, thus making the eastern edge of the "desert" about 200 miles west of the Missouri state line. The map indicated "Deep Sandy Alluvion" as the soil surface extending as far north as the Platte River, south to the North Fork of the Canadian and east to the 98th meridian. 19

As to prospects for future settlement of the general area surveyed in his exploration, Long concluded that:

. . . it is almost wholly unfit for cultivation, and of course, uninhabitable by a people depending upon agriculture for their subsistence.

17 Ibid., pp. 183, 213. 18 Ibid., Vol. XVII, p. 132
19 Dr. Say positioned the eastern border of the "Great Sandy Desert" about 100 to 120 miles west of the Missouri River. This would place his boundary at the 97th meridian, somewhere between Long's ambiguous markings at the 96th and 99th meridians.
Although tracts of fertile land considerably extensive are occasionally to be met with, yet the scarcity of wood and water, almost uniformly prevalent, will prove an insuperable obstacle in the way of settling the country.

It is not surprising, then, that many informed Americans of that day viewed much of the country west of the Missouri River as an unusable desert, fit only for wild Indians who had developed nomadic cultures compatible with an environment of meager resources.

The early explorations of the territory west of the Missouri River were led by Army officers. Information evaluating the western country reached the literate American public through the published reports and books of these men and their assistants. In their official reports, these officers presented a generalized view of the land from west of the Missouri River to the Rocky Mountains as a waterless and woodless prairie, or a vast sandy desert, concluding that extensive settlement by whites would and should not occur, and that the area would remain forever occupied by the Indian and the buffalo.

Goetzmann comments that "Long's description of the Great American Desert seems to have been an honest and significant assessment of the plains area as it appeared to his generation and those which followed down to the Civil War." In his book, The Great Plains, Walter Prescott Webb suggests that during the 1850 to 1860 decade, the tradition of the Great American Desert was at its peak. Many textbook maps which showed it were published in the early 1850's and continued to be used throughout the decade.

An early textbook description of the Missouri Territory is found in William C. Woodbridge and Emma Willard, Universal Geography, Ancient and Modern on the

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20 Ibid., p. 147.
21 Goetzmann, Army Exploration . . ., p. 44.
22 For a map example of the "American Desert," ca. 1850, see Sidney E. Morse, System of Geography for the Use of Schools (New York: Harper & Brothers, 1848), p. 12.
From longitude 96°, or the meridian of the Council Bluffs, to the Chippewan Mountains [Rockies] is a desert region of 400 miles in length and breadth, or about 160,000 square miles in extent.

The predominant soil of this region, is a sterile sand, and large tracts are often to be met with which exhibit scarcely a trace of vegetation.23

Other non-technical descriptions of the country, spread by lecturers, street talkers, and story tellers, generally supported the military's assessment of the country for occupancy by agriculturalists.

Civilian Travels and Reports Before 1830

At about the same time that Major Stephen Long was exploring the country west of the Missouri River, Major Jacob Fowler, an itinerant trader and trapper, was traveling through southwest Kansas (Missouri Territory) along the Arkansas River (Fig. Gl). Regarding prospects for future settlement, Fowler's October 1821 report on the area near the Great Bend of the Arkansas River was depressing, the country generally being "distetute of vegetation," the hills on the north "With Some projecting Rocks and Covered With vegetation mostly a Short grass."24 On the return trip east the following year he noted on the 21st of June that:

... the Cuntry threw Which We pased this day is leavel and Rich the grass tall and Has all the appeerence of Seasnable Rains. We Have In our openion layed down the Pawne River [= Walnut cr.]


as the line between the Wet and dry Weather or the long and Short grass.25

On the 1st of July 1822, Fowler was about 40 miles southwest of the confluence of the Kansas and Missouri Rivers. Here he sees the land as agriculturally promising. "Heare is a large Bodey of timber along this Crick and land of the Best Qualety for the Hole Cuntry is fit for Culteva- tion ... the timber Increses as We aproch the mesurey [Missouri]."26

In 1824, James Ohio Pattie crossed the Kansas area between the Platte and the Arkansas Rivers and related his travels in a narrative published in 1831 by Timothy Flint (Fig. G1). Pattie writes that after leaving Council Bluffs on July 30, 1824, they encamped on the Elkhorn, some 30 miles to the southwest. "The country is so open and bare of timber, that it was with difficulty we could find sufficient wood to cook with, even on the banks of the river where wood is found if at all, in the prairie country."27 On August 15, he recorded that the party pursued "a S.W. course, over the naked plains." And, several days later "We continued ... to make our way over the same weary plain, without water or timber ... ."28

The Woodbridge text, and the Fowler and Pattie narratives supported the generalized desert theme of the earlier military explorers. Thus it remained for subsequent explorations and surveys by both military and civilian parties to provide a more detailed and realistic view of the land, and slowly to correct the inaccurate generalization of a "Great American Desert."

25 Ibid., p. 161. Fowler was paralleling the Arkansas River about 5 to 10 miles from its north bank. The country described is between Lyons and Hutchinson, Kansas.
26 Ibid., p. 168.
28 Ibid., pp. 15, 20.
The Kennerly-McCoy Expedition of 1828

An important and definitive report on the Kansas area was to come from Isaac McCoy, a member of Captain George H. Kennerly's 1828 expedition into the "proposed Indian country." The Kennerly party was instructed by the War Department to examine the land west of the state of Missouri, together with that situated between the Platte and the Canadian forks of the Arkansas River. McCoy's description and evaluation of the territory, with the less extensive comments by Capt. Kennerly, and the accompanying topographers, Lt. Washington Hood and Mr. John Bell, was duly submitted to the Secretary of War. McCoy defined a north-south line which would mark the uninhabitable from the "habitable country" (Fig. G2).

This tract [proposed Indian Territory] would be six hundred miles long from south to north. . . . There is habitable country, of the average width, from east to west, of two hundred miles. . . . West, beyond the distance of two hundred miles, we may suppose the country to be uninhabitable, in consequence of the absence of timber, and, as reports say, the poverty of the soil.

McCoy's "Western boundary of habitable Land" was noted by government officials, and marked five years later on the Western Territories map which accompanied the 1834 Congressional Report No. 474, Regulating the Indian Department.

In locating his "habitable line" just west of the 98th meridian, McCoy disagreed with Major Long's 1820 notation at the 96th meridian. McCoy had shifted the boundary approximately 100 miles westward. It does, however, generally correspond with the eastern limit of the Great American Desert and the area of Deep Sandy Alluvion shown on Long's 1823 map. Perhaps McCoy used the Long report to establish his "habitable line." It is doubtful that on this early survey, he (McCoy) explored as far west and north as would have been
Fig. G2. — WESTERN TERRITORY and the "western boundary of habitable land," 1834.
required to examine the "line" by ground reconnaissance. 32

McCoy's report is valuable for other reasons. He was one of the first to dispel the desert thesis of Pike and Long and was much more optimistic for future settlement in the Western Territories. His main concern was the shortage of wood.

Timber is too scarce. This is the greatest defect observable. . . . But wood is not so scarce as most travellers through these countries have represented it. . . . These upland prairies, over which they look, rise higher than the tops of the trees in the bottom lands, and often twice or three times as high, and conceal from the sight most of the timber; while the traveller, ascribing to the lands a mile or two from him a degree of levelness which does not exist, supposes he sees almost every grove within the reach of his sight, and hence mistakes in the disadvantage of the country. 33

McCoy noted "there is much valuable timber, such as oak, ash, walnut, hickory, and mulberry" adequate to sustain a fairly dense population along the Kanza, Osage, and Neosho Rivers. 34 Realizing that he was not in agreement with current (ca. 1820) concepts as to the nature of the country, McCoy carefully remarked:

32 The reports of McCoy and Lt. Hood mention the following rivers: Kanza, Osage, Neosho, Verdigris, Arkansas, Illinois, and Canadian. All of these rivers could be easily traversed without going west of the 96th meridian. Capt. Kennerly notes in his report that "Finding that the deputations [Indians] were averse to going as far north as the instructions required, I was induced in some measure to change the contemplated route, and bear to the South." McCoy also comments on traveling south to Fort Gibson (on the 95th meridian). The missing map showing the route actually taken which was to accompany Congressional Report No. 87, 20th Cong., 2d sess., would, of course, clarify the point under discussion.

34 Ibid., p. 10.
I may not be so fortunate as to meet with many who concur with me in opinion relative to the country [south of the Kanza] under consideration... yet I hesitate not to pronounce it, in my estimation, very good, and well adapted to the purposes of Indian settlement. I think I risk nothing in supposing that no State or Territory in the Union embraces a tract of equal extent and fertility, so little broken by lands not tillable. ... 

In view of the natural meadows available and the obvious shortage of timber for fencing, etc., he then suggested that future inhabitants occupy themselves mostly with raising cattle, sheep, horses, and mules.

In their supplementary report, Lt. Hood and Mr. Bell referred to the presence of coal, thus reducing the settler's problem of local fuel.

Reports from the Santa Fe Trail, 1829 and 1831

Because of several Indian attacks and murders along the United States portion of the Santa Fe Trail in 1828, American traders petitioned the federal government for an escort of United States troops. The request was approved, and in the spring of 1829, Major Bennett Riley, with four companies, escorted the caravan across the Kansas area to the United States-Mexican boundary on the Arkansas River (Fig. G2). Lt. Philip St. George Cooke published much later his diary notes of the trip and sojourn on the Arkansas.

The battalion left Cantonment Leavenworth on June 5, 1829. After five days marching... we were encamped on the edge of the "Grand Prairie." ... The next morning we struck out boldly into the great prairies—a constant succession of rolling hills—here, and for more than a hundred miles beyond, variegated and beautified by wooded streams... 

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35 Ibid., p. 17  
36 Ibid., p. 18  
37 Ibid., p. 27.  
38 Philip St. George Cooke, Scenes and Adventures in the Army (Philadelphia: Lindsay & Blakison, 1857), pp. 41-93.  
39 Ibid., pp. 41-42.
The escort met the traders at Round Grove, about 26 miles southwest of the Missouri River bend, and proceeded west on the Santa Fe Trail the following morning. Lt. Cooke noted Council Grove as the approximate western limit of timbered creeks.

After marching fifteen or twenty miles a day, for five or six days, we arrived at the Council Grove: it is a beautiful piece of timber. . . . After leaving the Grove, the vast sameness of the prairies was seldom relieved by a fringe of trees, even on the creeks.40

In his book, Commerce of the Prairies, Josiah Gregg, the ubiquitous prairie traveler, recorded an 1831 trip to Santa Fe. Arriving at the general rendezvous area on May 26, 1831, Gregg provides an excellent view of Council Grove and the Kansas area to the Missouri River near Independence (Fig. G2).

This place is about a hundred and fifty miles from Independence, and consists of a continuous stripe of timber nearly half a mile in width, comprising the richest varieties of trees; such as oak, walnut, ash, elm, hickory, etc. This stream [Neosho] is bordered by the most fertile bottoms and beautiful upland prairies, well adapted to cultivation: such indeed is the general character of the country from thence to Independence. All who have traversed these delightful regions, look forward with anxiety to the day when the Indian title to the land shall be extinguished, and flourishing "white" settlements dispel the gloom which at present prevails over this uninhabited regions.41

Gregg suggests a vegetative and soil boundary to mark the western limit for agricultural settlement in the Kansas area:

Thus far, many of the prairies have a fine and productive appearance, though the Neosho

40 Ibid., p. 42.
River (or Council Grove) seems to form the western boundary of the truly rich and beautiful country of the border. Up to that point the prairies are similar to those of Missouri—the soil equally exuberant and fertile; while all the country that lies beyond is, of a far more barren character—vegetation of every kind is more stinted. . . . 42

Perhaps Gregg's greatest contribution to the geography of the early west was his map of "The Indian Territory, Northern Texas and New Mexico, showing the Great Western Prairies," which accompanied his 1844 edition of Commerce of the Prairies.

Significant aspects of the map were:

1. Gregg's concept of the "Great Western Prairies," replacing Long's "Great American Desert."

2. Differentiation between prairies and timber lands.

3. A more accurate delimitation of the several sandy areas and notation of the rivers and mountain ranges.

Report of the Commission of Indian Affairs, War Department, 1834

Concern for the removal of the eastern tribes to an area west of white settlement (west of the state of Missouri and the Arkansas Territory) continued to mount during the late 1820's and early 1830's. 43 In 1825, with the prodding of President Andrew Jackson, Congress passed the Indian Removal Bill. A special three man commission was appointed to supervise Indian affairs and to provide periodic reports on Indian resettlement west of the 95th meridian.

In 1832 and 1833, the commission, supported by the frontier military, busied itself collecting firsthand

information on the proposed Western Territory where the eastern tribes would be permanently located (Fig. G2).

By law, the Western Territory was defined as that area . . . bounded on the east by Arkansas and Missouri, on the north by the La Platte, and west and south by the Mexican possessions. . . . This territory is to be dedicated to the use of the Indian tribes forever, by a guaranty the most sacred known among civilized communities—the faith of the nation. 44

In their detailed report, dated February 10, 1834, the commissioners provided much information regarding the climate, soil, and agricultural potential of the land. They concluded their commentary on the land and asked the question: "is the country able to furnish them [Indians] a support in any other way than by the hunt; and particularly is it calculated for the purposes of agriculture?"

And this question the commissioners answer unhesitatingly in the affirmative. . . . They will also further say, that, with regard to the objections that have been raised against this country, on account of the scarcity of timber and water, it is as well watered, generally, as the States of Illinois or Missouri; and where springs cannot be readily found, water can always be obtained by sinking wells. It is true that wood is scarce on the prairies; but it is likewise true, that, if the fires are kept out of them a short time, they spring up with a growth of thrifty young timber. 45

A comparison is then made with earlier pioneer settlement in the open country of Kentucky and Illinois, noting that "The same has taken place in the barrens of Kentucky, and on the Prairies of Illinois, where may now be seen extensive groves of wood, on land which twenty years ago was an open prairie." 46

44 U.S., Congress, Report No. 474, p. 117.
45 Ibid., p. 84.
46 Ibid.
With coal for fuel, thorns and the honey locust for hedge fencing locally available, "this country will produce abundantly all the varieties of grain, vegetables, and agricultural products, which are raised in the States of the same latitudes east of the Mississippi, and on the Atlantic coast."  

Clearly, the concept of the Great American Desert was rejected by the commissioners, as no mention was made of "barren wastelands" or "deserts" in the area described as the Western Territory. The land was represented mostly as prairie, with numerous water courses skirted with wood, and quite suitable for agriculture.

**Military Expeditions, 1835-1845**

The journal of the 1835 dragoon expedition to the Rocky Mountains headed by Colonel Henry Dodge included a description of the country northwest of Fort Leavenworth, and also south along the Santa Fe Trail (Fig. G3).  

**June 1, 1835. . . . The country between Fort Leavenworth and the Big Nemahas . . . is sufficiently large and well adapted to afford them [Kickapoo Indians] all the necessities, and many of the luxuries of life. There is a sufficient quantity of timber for fuel and for building purposes. The soil is fertile, and will produce all sorts of grain; the pasturage good, and large numbers of cattle could be raised with but little labor.**

Colonel Dodge also noted a vegetational change in the approximate vicinity of Council Grove (96th meridian), as was observed earlier by Pike (1806), Long (1820), Cooke (1829), and Gregg (1831). On the return trip to Fort Leavenworth along the Santa Fe Trail the Dodge journal notes:

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47 Ibid., p. 84.
49 Ibid., p. 32.
September 3, 1835. . . . The grove [Council Grove] extends along the river Neosho as far as the eye can see, and is about a mile wide; it is composed of various sorts of timber, of a large growth, and its vicinity would afford several fine situations for a plantation, the soil being very fertile along the valley of the river. 50

The explorations of Brevet Captain John C. Fremont to the Rocky Mountains in 1842, and to Oregon and North California in the years 1843-44 were helpful to both western travelers and Kansas settlers (Fig. G3). Fremont published a detailed journal of both expeditions. Small and large scale maps were later completed by Charles Pruess, Fremont's topographical assistant. 51

The route of the 1842 expedition coincided with the main Oregon Trail from Independence, Missouri. Section I of Preuss's 1846 large scale map (10 miles to the inch) showed the arrangement of timber lands along the major water courses as far as the 98th meridian. Timber appeared most dense on the north side of the Kansas River valley, eastward of the main Oregon Trail crossing.

In his 1842 narrative, Fremont relates the following:

10 June 1842. From the belt of wood which borders the Kansas, in which we had passed several good-looking Indian farms, we suddenly emerged on the prairies, which received us at the outset with some of their striking characteristics.

18 June. We left our camp at seven, journeying along the foot of the hills which border the Kansas valley, generally about three miles wide, and extremely rich. . . .

50 Ibid.
51 Fremont's "Report" was published by a number of printers: e.g., 1845 - Wash: Blair and Rives (with maps); 1846 - Syracuse: L. W. Hall; 1850 - Buffalo: Geo. H. Derby & Co. The large-scale map, drawn by Preuss, titled Topographical Map of the Road from Missouri to Oregon Commencing at the Mouth of the Kansas in the Missouri River and Ending at the Mouth of the Wallah-Wallah in the Columbia was published in 1846.
21 June. . . . as we advance westward, the soil appears to be getting more sandy. . . .

22 June. The country has become very sandy, and the plants less varied and abundant. . . .

According to Fremont, the most favorable land both in fertility and timber along the route was east of the 96th meridian and near the Kansas River.

Fremont's 1843-44 expedition departed from Elm Grove on 31 May 1843. Initially, the route closely followed the 1842 trail along the Kansas River, then struck out west along the Smoky Hill Fork, and the Republican "through a country beautifully watered with numerous streams, handsomely timbered." The return trip followed the Arkansas River east from Bent's Fort, shifting northeast along the Smoky Hill Fork to the Santa Fe Trail.

The country through which we had been traveling since leaving the Arkansas river, for a distance of 260 miles, presented to the eye only a succession of far-stretching green grass and sparingly wooded along the streams with straggling trees and occasional groves of cottonwood; but here the country began perceptibly to change its character, becoming a more fertile, wooded, and beautiful region. . . . As we advanced, the country steadily improved; gradually assimilating itself in appearance to the northwestern part of the State of Missouri.


53 Ibid., p. 107.

54 Ibid., p. 289. Returning from the 1843-44 expedition, Fremont's notation of the vegetative and soil change was just west of the 98th meridian and very near the "habitable line" of Isaac McCoy. Does this suggest the influence of McCoy's evaluation on later explorers or was Fremont's judgment independently made?
Although Fremont's journal was illuminating and supplied sometimes missing information about the country, his main contribution from a geographical standpoint came from his maps. The map done by Preuss (Section I) gave future Kansas settlers their first large scale topographical view of the land along the Kansas and tributary waters.

In the summer of 1845, the excursion of Colonel S. W. Kearny with five companies of the 1st regiment of dragoons through the Indian country, initially traversed uncharted terrain (Fig. G3). It was hoped by Washington officials that "The presence of so fine a body of troops among the numerous bands of Indians scattered through that extensive region, cannot have failed to make salutory impressions upon them."\(^{55}\) Notwithstanding this primary purpose, reports of the expedition provided additional notation on the geography of the Western Territory, particularly along the Kansas portion of the Santa Fe Trail. Lts. Turner and Franklin, members of the Dodge party, recorded in their journal:

> The only grass in the country was that on the river (Arkansas) the surrounding hills being almost entirely bare. . . . . The latter part of the route was through by much the most beautiful country passed over; and a progressive improvement in soil was observed from the river to Council Grove, where the regular prairie country of the States is thought to commence.\(^{56}\)

The Council Grove area near the 96th meridian, again was used to denote an environmental divide.

**Conclusion**

During the 1806 to 1845 period, the United States Army played an important role in the exploration, survey, and mapping of the Kansas area. Of the major expeditions described in this study for which journals, reports, narratives, or maps were published, eight were headed by Army officers; only two by civilians. The legend of the Great American Desert, introduced by Lt. Zebulon Pike and articulated by Major Stephen Long,\(^{55}\) U.S. Congress, House, *Report of the Secretary of War*, Exec. Doc. 2, 29th Cong., 1st sess., 1845, SN 480, p. 196.\(^{56}\) *Ibid.*, p. 217.
was largely rejected and then reevaluated by later military explorations in the period 1830 to 1845.

The 1828 line of "habitable land" demarcated at the 98th meridian by Isaac McCoy, a member of Captain G. H. Kennerly's expedition, appears to have influenced strongly those government officials who dealt with the eastern Indian removals and resettlement on western lands in the 1830's and 1840's. McCoy recommended the Missouri River from the Platte to the Kansas River and then south along the Missouri state line as the eastern boundary for Indian country. This was later adopted by the federal government in the concept of the "permanent Indian frontier" at the 95th meridian.

As more geographical knowledge of the Kansas area was gained through detailed military surveys of routes and areas, and as a result of the writings of Josiah Gregg, the line of "habitable land" shifted east about 100 miles from the 98th to the 96th meridian. This more closely agreed with the earlier boundary suggested by both Lt. Pike and Major Long. On the Santa Fe Trail, Council Grove was identified by many military observers as the environmental boundary which separated the habitable and uninhabitable lands. The country west of this line, however, was no longer viewed as desert—but as a vast usable prairie, more appropriate for the grazing of domestic livestock than for crop production.

Not all of the important exploration and mapping of the Kansas area can be attributed solely to the military establishment. Josiah Gregg's 1844 map also refuted the Great American Desert thesis and instead substituted the "Great Western Prairies." Gregg differentiated the timber and prairie lands which identified more extensive tracts of timber than previously were supposed to exist. He also mapped more accurately those sand areas within the prairie country. Reports by civilian Indian commissioners and Indian agents were also important sources of geographical information, as were the diaries and letters of early missionaries.

Journals and narratives continually made reference to three fundamental aspects of eastern agricultural settlement: water, timber, and soil. The maps of Gregg (1844) and Fremont (1846) showed wood, water, and landforms. Fremont also provided the general public with the first accurate topographical sketch of the Oregon route and adjacent countryside in eastern Kansas.
Both military and civilian explorers, through their writings and maps, related to a waiting public those aspects of the physical and cultural landscape which would prove significant to the colonization of the area. It remained, however, for the Army surveyors and mappers who followed, to fill in many of the spaces of geographical knowledge left vacant by these earlier explorers of the Kansas area.