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Article Summary: Through the travels and reports of military men came many of the significant perceptions of the Plains during the early decades of the 19th century. The warnings of Army men about farming on the Plains recognized the existing limits of technology and agricultural knowledge.

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Photographs / Images: Lieutenant Zebulon Pike; Nebraska State Historical Society archeologists excavating the site of Pike's Pawnee Village in 1924; Drawing of a council between major Stephen H Long and the Oto in 1819

THE ARMY AND EARLY PERCEPTIONS OF THE PLAINS

By ROGER L. NICHOLS

From the explorations of Lewis and Clark in 1804 until the journeys of the dragoons during the mid-1830's, American soldiers crossed and recrossed the Great Plains. Serving as Indian negotiators, explorers, or mere garrison troops, the men lived and worked there long before pioneer settlers did. Not only were military men in the region prior to most civilian groups, they provided the first significant and accurate accounts of the Plains. Soldiers' early reports showed an ambivalence toward the area. They stressed negative aspects of the environment, but at the same time acknowledged positive features too. Army personnel discussed such things as regional climate, physical resources, and agricultural potential. In fact they considered the latter as the most significant as far as future settlement was concerned. Through their travels and reports military men provided much of the raw material from which grew significant perceptions of the Plains during the early decades of the 19th century.

The Army role as publicist for the West has received little attention. Although Lewis and Clark have been discussed in great detail, many other soldier-explorers have not. For example, Zebulon Pike is known as the "lost pathfinder," hardly a label that would encourage scholars to place much weight on his reports.¹ Stephen Long, a second Army explorer, got more hostile treatment. His use of the Great American Desert to describe the Plains brought charges that he employed a "false designation" for the region, and that his ideas created a "psychological barrier" which deterred others "from disproving his falsehoods."²



Lieutenant Zebulon Pike led an expedition to the Pawnee Village of present-day Webster County, Nebraska, in 1806.

Certainly Army reports contained errors and were critical of the Plains, but to denounce them as harmful to regional development or as incorrect ignores several things. First, early 19th century regional descriptions considered existing agricultural skills. For that day much of the Plains was virtually unusable. Second, the soldiers did note regions of agricultural promise, and indicated that grain production and livestock raising could support people on parts of the Plains. Third, until the Kansas-Nebraska Act created those territories in 1854, the region remained closed to white settlers. Finally, there is some doubt about the lasting impact of Army or other negative reports on later public opinion and subsequent action.

Prior to the Lewis and Clark Expedition, the federal government and the public as a whole had only a vague idea of what lay beyond the Mississippi Valley. Certainly these two Army explorers could not fill all the gaps of knowledge, but among the soldiers who described parts of the West, only Lewis and Clark traversed the northern Plains during the early decades of the 19th century. They moved up the Missouri in 1804, commenting frequently on the quality of the soil, the abun-

dance of vegetation, and the extent and variety of Indian agriculture.

Their report set the basic pattern for later military descriptions of the Plains. It recorded an ever-decreasing amount of water, vegetation, and, in some cases, of apparent soil fertility. For example, in central Missouri the travelers noted that "the Climate is delightful and the soil fertile in the extreme." When discussing the region inhabited by the Kansa Indians, slightly farther west, the soldiers claimed that it was "generally well watered and covered with excellent timber."³ By the time the expedition had struggled upstream as far as eastern Nebraska, however, the country offered less to praise, although even there the assessment remained favorable. The Omaha Indians occupied a country that was "generally level, high and open; it is fertile and tolerably well watered" the journalist noted.⁴

As the party continued to move north and west in 1804 Lewis and Clark reported that most of the Indian tribes of the Missouri practiced some agriculture. The Missouri, Pawnee, Arikara, and Mandan tribes all kept extensive gardens in which they raised corn, beans, squash, pumpkins, tobacco, sunflowers, and even watermelons at times. In addition, the good river valley soil supported several types of wild plums and berries.⁵ Clearly the explorers recognized the agricultural quality of the region at least as far as the Mandan Villages in North Dakota. Even when he noted the lack of timber on the Plains, Captain Lewis claimed that it resulted from "the fires which the natives kindle . . . at all seasons of the year," rather than from poor soil or insufficient moisture ⁶

Once the Missouri turned west and cut across the northern Plains beyond the Mandan Villages, however, the optimistic Lewis stopped such praise while his comrades began to denounce the region. Among the first signs of barrenness were the "salts" or alkali deposits which lay up to two or three inches deep in places. In the same area the usually rich river bottom land supported only a few scrubby cottonwoods. Whether this was because of the alkali soil or a shortage of water is unclear, but the journalists noted that one of the tributary streams, which was a half mile wide, joined the Missouri without "a single drop of running water."⁷ When the explorers neared the Judith River in central Montana, the lack

of trees had become so accepted that Lewis remarked that the sight of a few cottonwoods was "quite reviving after the drairy [*sic*] country through which we had been passing."⁸

From that point west to the mountains the various journal keepers united in complaining about the barren countryside. The prevalent vegetation—sagebrush, prickly pear, and greasewood—proved unusable as fuel. Lewis, who had few complaints the preceeding year, now depicted the northern Plains as "truly desert barren country."⁹ Joseph Whitehouse, one of the privates, claimed that the region bordering the Missouri was "too much of a desert to be inhabited or cultivated."¹⁰ Sergeant Patrick Gass joined these critics by noting that the country offered little but "scenes of barrenness and desolation."¹¹ John Ordway was perhaps the most vociferous member of the expedition, and except for a few game animals he found nothing of value or interest to report. In fact, he suggested that the region should be called "the Deserts of North America." No part of the northern Plains, he wrote, could "ever be Sitled [*sic*] as it is deficient of . . . water except this river."¹²

When these men returned to St. Louis in 1806, they would report much of what became the standard description of the Plains for the next several decades. Water, timber, and other vegetation decreased steadily as one traveled west. Barren regions, covered with chemical deposits, sand, or rock, would prevent future settlement. Their claims that the region could not be settled assumed what their readers understood. The lack of timber and shortage of water indicated that the would-be pioneer farmer should avoid the Plains.

How much impact the findings of Lewis and Clark had on public opinion at the time is difficult to assess. Certainly the explorers received ample personal attention and praise for their successful venture. On the other hand, getting their journals published proved a slow and trying procedure. When Meriwether Lewis died on the Natchez Trace three years after the expedition had ended, the journals lay virtually untouched. It was not until 1814 that a sharply edited version appeared in Philadelphia, and two years later William Clark had not yet gotten a single copy. The first edition included some two thousand copies, but of those some 583 were either lost or

destroyed as defective by the printer.¹³ For those who bought and read the account, the narrative offered an interesting and accurate picture of at least the northern Plains, but even this audience was limited at best.

On July 6, 1806, as Lewis and Clark led their men back down the Missouri, Lieutenant Zebulon M. Pike started west to explore the central and southern Plains. His party moved west along the Missouri, turning southwest to follow the Osage River into Kansas. Then it traveled west and north to the Pawnee Villages in eastern Nebraska, and south again to the Arkansas River. In October, 1806, Pike divided his command. He sent Lieutenant James B. Wilkinson and some of the men east down the Arkansas, while he led the rest west to the Rockies. There Pike met a patrol of Spanish soldiers who escorted his detachment south to Santa Fe. After some months of questioning, Spanish authorities took Pike's notes and maps, and led the American detachment back to Louisiana.

Despite the loss of his field notes, Pike prepared an accurate report and several maps from memory. Lt. Wilkinson also published a report which discussed the first half of the expedition. Together these offer a picture of the central Plains which later descriptions hardly alter. As had Lewis and Clark, Pike and Wilkinson noted the gradual increase in dryness, disappearance of vegetation, shortage of timber, barrenness of soil, and increasing deposits of salt and other chemicals atop the ground. After they had left the Osage with its verdant river bottoms, they reported traveling across "sandy country, almost destitute of herbage" between the Kansas and Platte rivers.¹⁴

On their way south from the Pawnee Villages in Nebraska toward the Arkansas both Pike and Wilkinson complained about the lack of water and vegetation. The latter wrote that he "halted on a naked stony prairie, without water or grass" for the horses. Nearing the Kansas he found two creeks "so strongly impregnated, [with salt] as to render unpalatable corn, when boiled in it."¹⁵ Sand, salt deposits, and coarse marsh grass seemed all the explorers found until they reached the Arkansas. There, a few cottonwoods grew along the north bank, but across the river they saw a "sandy, sterile desert."¹⁶

At the Arkansas the detachment split in half, but the leaders'

comments differed only slightly even though they traveled in opposite directions. Pike found salt crystals along the trail in the "low places where they had been water settled." At the same time Wilkinson reported the "shores of the river [Arkansas] to be completely frosted with nitre." Crossing the desolate countryside both officers commented on the shortage of trees. Even when they saw a single tree, it was likely to be "stinted [*sic*] in growth by the sterility of the soil."¹⁷ Clearly these men equated the shortage of timber with the other signs of poor soil they saw.

Pike's later report repeated the ideas his journal entries had included. It described the soil of the central Plains as mostly dry sand and gravel. Because the region was "barren . . . parched and dried up for eight months of the year," it lacked the moisture and "nutrition sufficient" for trees. Presumably these same shortages would limit most types of agriculture. When Pike commented on the sand hills and lack of vegetation, he predicted that the central Plains might "become in time equally celebrated as the sandy deserts [*sic*] of Africa."¹⁸

Despite these ideas which have received the most consistent attention from scholars, Pike did recognize that parts of the Plains could be settled. For example, he thought that the region from the Pawnee Villages in Nebraska to the south side of the Arkansas Valley could support "a limited population," at least in the river valleys. There prospective settlers might herd "cattle, horses, sheep, and goats, all of which" they could raise easily. Pike assumed that any region which supported vast herds of buffalo, antelope, and wild horses, might do the same for domestic livestock. Even the arid Plains soil grew "sufficient [fodder for such animals] both winter and summer," he claimed.¹⁹ These comments overlooked the difficulties which Pike's horses had subsisting on the wild grasses, but assumed that if the animals were not being ridden each day they would have been healthy. Certainly here is Pike's most telling suggestion for agriculture on the central Plains.

Pike's maps of both the central and southern Plains indicate the lack of timber and water, mineral-laden soil, and vast stretches of sand hills. Nevertheless, the maps also showed herds of wild horses on the Llano Estacado or Staked Plains of west Texas, and farther east near the headwaters of the Colorado of

Texas and the Brazos. To the north between the sources of the Red and Arkansas rivers the maps show "Plains used as Pasturage by the" antelope.²⁰ By showing that enormous numbers of grazing animals lived on both the southern and central Plains, the maps supported Pike's contention that those regions could be used for livestock raising, if not for more conventional agriculture.

In a recent article geographer Merlin Lawson suggested that the journal Pike kept while on his expedition across the plains offered a more optimistic view of the region than did his report published some years after the expedition. Lawson concluded that Pike had altered his findings because of political pressure against his commanding officer General James Wilkinson, and to avoid any suspicion that he, Pike, may have participated in any of the General's schemes.²¹ While this idea seems plausible, it overlooks at least one significant factor. Pike returned from his

Nebraska State Historical Society archeologists began excavating the site of Pike's Pawnee Village in 1924. Lieutenant Pike's famous visit to the Pawnee in 1806 resulted in the replacement of the Spanish flag by the American. There has been no reconstruction of Pawnee installations on the site.



Spanish captivity without his journals and so prepared his report and maps from memory and after conferring with other participants in the expedition. Certainly this helps explain discrepancies between the journal and Pike's published report. Whether the Lieutenant altered his reporting or not, his ideas reached the public in 1810, and seem to have received little widespread attention at the time.

After Pike's difficulties with the Spanish authorities in New Mexico, American interest in exploration waned, and no significant government-sponsored expeditions occurred for another decade. Following the War of 1812, however, President James Monroe and his expansionist Secretary of War John C. Calhoun revived official support for this work. In 1819 Major Stephen H. Long set out from Pittsburgh on the steamboat *Western Engineer* to explore the major streams in the West. He expected to navigate the Mississippi, Missouri, and their major tributaries, but steamboat technology proved too backward for such an ambitious undertaking. As a result the steamer struggled up the Missouri only as far as eastern Nebraska before halting.²²

Despite this failure Long got permission to explore the central Plains and Red River Valley the next year. In June, 1820 he led the most competent group of scientists and explorers yet gathered for investigation of the West. As were Lewis and Clark and Zebulon Pike, Long's companions were disappointed by what they saw. Traveling along the South Platte, the explorers crossed much barren territory. Edwin James, one participant, claimed that the Rocky Mountains formed "the shore of that sea of sand, which is traversed by the Platte."²³ His companions echoed that idea, and when traveling south along the front of the Rockies and east down the Arkansas and Canadian rivers, they experienced much hardship. Captain John Bell faced the need to recross the "dusty plain of sand and gravel, barren as the deserts of Arabia," between the mountains and the Missouri Valley without enthusiasm.²⁴

In late July, 1820, Long divided the detachment. Bell led one group east along the Arkansas, crossing the same region as Zebulon Pike had. Long led the others south in search of the Red River. Just how the explorers expected to recognize that stream if they found it remains unclear. Instead of the Red they turned mistakenly at the Canadian, and eventually followed

that stream. Traveling along it across the southern Plains, Long and his men experienced many difficulties. They lacked food, water, fuel, and forage for their horses. There was so little game in the region that the desperate explorers killed and ate a badger, a young owl, a hawk, and even a wild horse that walked into their camp.²⁵ By the time they reached Fort Smith several of the animals had died and many of the others were unfit for use. Certainly this harrowing experience affected the description of the central and southern Plains which Long and his fellow explorers prepared later.

In fact, throughout their ordeal Long's men recorded little that was favorable. Unlike Pike, they saw no herds of wild horses, and only a few deer, antelope, or buffalo. The Indians they met seemed to carry on little or no agriculture and were nearly as impoverished as the luckless explorers. His experiences along the Canadian River convinced Edwin James that few other Americans would want to travel west past the falls of that stream. He depicted the region beyond as offering nothing but "sandy wastes and thirsty inhospitable steppes."²⁶

Stephen Long agreed. In one of the most frequently quoted paragraphs in the annals of American exploration he wrote: "In regard to this extensive section of country, I do not hesitate in giving the opinion that it is almost wholly unfit for cultivation, and of course uninhabitable by a people depending upon agriculture for their subsistence."²⁷ He recognized the existence of some fertile land on the central and southern Plains, but was certain that the lack of water and wood would keep pioneers from cultivating such areas. Although modern scholars have criticized Long and his companions for their ideas, all the members of the 1820 expedition agreed that the Plains could not be used for farming then. Even Thomas Say, clearly the most mild-mannered and optimistic member of the party, labeled the area east of the Rockies as "totally unfit for the tillage of civilized man."²⁸ Not only did the 1820 explorers ignore Pike's earlier suggestion that the Plains be used for herding livestock, but they attacked the region with such vigor as to help discourage further government-sponsored exploration for the next twenty years.

Unlike Zebulon Pike, Long's party had no apparent reasons for creating a negative image of the central Plains. In fact there

were reasons for giving a positive description. Both President James Monroe and Secretary of War John C. Calhoun indicated their interest in extending American knowledge and influence into the frontier regions, and Long knew of their desires. In addition his personal pride and desire to get other assignments to explore in the West would seem to have caused him to present the most favorable picture possible about the regions through which he had just traveled. Clearly his reasons for heaping denunciation upon the Plains had nothing to do with any sort of political pressure as may have been the case with Pike.²⁹

Not all soldiers agreed with these negative descriptions, however, and the same summer that Long and his men crossed the Plains, the garrison at Fort Atkinson in eastern Nebraska began an extensive agricultural effort just a few miles north of present Omaha. There between 1820 and 1827 regular Army soldiers labored to feed themselves. In 1820, for example, they expected to harvest 10,000 bushels of corn, 8,000 bushels of potatoes, 6,000 to 8,000 bushels of turnips, and nearly 250 tons of hay. Within two years they raised beans, beets, cabbages, carrots, onions, parsnips, potatoes, turnips, and watermelons in the fort gardens. In addition large fields of corn, wheat, oats, and millet produced such ample crops that the soldiers had to build a large barn just to store the grain and forage during the winter of 1823. That same year the farm accounts show that the men cared for hundreds of cattle, hogs, and horses.³⁰ Certainly agricultural efforts of this scope indicated that 1820 style farming could succeed at least on the eastern fringe of the Plains.

Despite their large crops, the soldier-farmers encountered many difficulties. Clouds of grasshoppers often damaged or even ruined crops. In 1820, for example, the insects arrived "in myriads the last week in August, and stripped the turnips of their leaves." Nevertheless, the garrison was lucky, because if the pests had come a couple of weeks sooner they would have ruined the entire corn crop. The post commander reported that insects had destroyed the corn fields of one Pawnee band living farther west, and that for the preceding two years had eaten the crops at the Red River settlement of Pembina.³¹

Nevertheless, the soldiers' experience showed that insects

were but one of a series of natural disasters Plains farmers would encounter. Wide fluctuations in temperature, severe winters, early frosts, and a short growing season all tended to inhibit farming. On the other hand, the summer droughts and searing winds which blew east off the Plains seem not to have caused much trouble for the garrison. They lived and worked at the eastern edge of the Plains, where precipitation was dependable and sufficient, and each year the troops harvested large crops.

Colonel Henry Atkinson, sometime commander at the fort, sent a steady flow of information about post farming efforts to the East. For example, he shipped several barrels of Indian corn to New York and the Carolinas for agricultural societies there to plant, claiming that it was more hardy and drought resistant than eastern corn. He discussed crop yields and difficulties such as grass fires and insects. Some newspapers and periodicals printed items discussing Army experiences beyond the Missouri River.³² Thus, through the efforts of the Fort Atkinson garrison, Americans in the East and Midwest got some idea of agricultural possibilities beyond the Missouri—and the picture they got differed significantly from that drawn by previous Army activities and reports.

During the early 1830's Congress heeded the continuing requests for mounted troops to patrol the frontier and created the dragoons or cavalry. Recruited and trained in 1833, the horse soldiers crossed the southern Plains for the first time the next summer to seek peace with the Indians. In mid-June, 1834, they traveled west from Fort Gibson in eastern Oklahoma, and rode across an area with little water or timber. According to Lieutenant Thompson B. Wheelock, the country near the fort was fine. Soon, however, he reported light soil, little vegetation, and dry creek beds. After a week of riding south and west to the Canadian River, Wheelock characterized the region as having frequent and "excellent streams of water," as well as sandy, but rich soil, which he thought was "well adapted to grain."³³

As the dragoons rode farther west the country changed. By July 1, 1834, the horses and mules had weakened from eating the native grasses, and seventy-five animals were listed as disabled. Two weeks later after the soldiers had passed through the Cross Timbers, they rode out onto the rolling plains of



A council between Major Stephen H. Long and the Oto took place in 1819 at the Council Bluffs (west side of the Missouri River). This drawing is by the artist Samuel Seymour, who accompanied the Long expedition.

central Texas. There they saw a “highly beautiful country, tolerably well watered,” which supported “immense herds” of wild horses and buffalo.³⁴ If wild horses could prosper there, then it seems reasonable that domestic livestock might be raised in the same area, although Wheelock did not speculate on the subject.

When the dragoons visited the Pawnee Pict village on the Red River, they saw other evidence that agriculture could succeed on the southern Plains. The villagers kept well-cultivated corn fields which Wheelock described as “very extensive, reaching, in some instances, several miles.”³⁵ Nevertheless, only a week later the soldiers and animals suffered from the continuing heat and dry weather. They lacked water for the men and found the grass for their mounts “much destroyed by heat.” At one point the thirsty men and animals struggled past hills of gypsum which supported sparse vegetation. It is not surprising that after such experiences the leaders reported that much of the southern Plains offered few inducements to mid-19th century farmers.³⁶

The next year the dragoons traveled across the central Plains, and there they recorded the increasing sterility of the land as had earlier explorers. According to the expedition journal, the Nebraska Pawnee occupied a country which had a “rich and productive soil well adapted to the cultivation of . . . grain, and

one of the finest grazing countries in the world."³⁷ As they moved farther west, however, the soldiers recorded few more such words of praise. In fact, they traced the growing barrenness of the countryside. Beyond the forks of the Platte the travelers claimed that the land would not even support permanent residence by the Indians and by implication, was uninhabitable for whites too.³⁸

By 1835 individual soldiers and units of the United States Army had traversed the Plains from Dakota in the north to Texas in the south. Their reports follow a general pattern by locating sufficient water, timber, and fertile soil at the eastern edge of the Plains and along a few major river valleys. In addition they noted islands of good land where successful farming might be practiced. Despite these findings and the large-scale agricultural activity at Fort Atkinson during the 1820's, much of the time military men painted a negative picture. Some suggested that livestock raising be considered, but the almost universal difficulty their horses and mules had just surviving on the Plains certainly weakened this idea. Others noted that the region would support grain crops, but this proposal seems to have received little attention.

During the first four decades of the 19th century military observers presented much information about the Plains. Although much of it was negative, the soldiers did mention several ways in which some of the region might be exploited. In particular they told their countrymen that livestock raising and grain production seemed to offer the best chances for economic success, at least as far as agriculture was concerned. The question of which ideas about the Plains the soldiers contributed remains. Unfortunately, it is difficult to determine how much information filtered from government reports to the individual citizen. The published narratives of Zebulon Pike, Lewis and Clark, and Stephen Long circulated in eastern cities. Newspapers in both East and West discussed their explorations with interest and even occasional enthusiasm. Yet, there seems no way to establish a casual relationship between such reports and individual or general ideas about the Plains. For example, although much has been made of the Great American Desert idea as an inhibiting factor to westward expansion, there is little direct evidence that it had much impact upon migration to the

Plains. A strong argument can be made to show that the desert idea had little effect upon settlement.³⁹

There seems little question that soldiers helped to develop and spread the desert idea, but its impact is unclear. Federal Indian policy which excluded settlers from the Plains until the passage of the Kansas-Nebraska Act in 1854 proved more important. The ease with which pioneers became infected by the "Oregon Fever" and their lack of pressure on Congress to move the Indian boundary during the 1840's might be attributed to the desert idea.

Whatever the case, the warnings of Army men about farming on the Plains resulted from widespread travel and first-hand observation. Rather than misinforming the public, these descriptions recognized the existing limits of technology and agricultural knowledge. In fact, the experience of many farmers between 1870 and 1900 supported the soldiers' earlier contentions that most agriculture on the Plains was likely to be a risky business. To the extent that pioneers learned of such potential difficulties the soldiers who crossed the Plains during the early decades of the century performed a valuable service for their countrymen.

NOTES

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4. *Ibid.*, VI, 88.

5. *Ibid.*, I, 75, 181, 187, 214; V, 363; VI, 86-87; Meriwether Lewis and John Ordway, *The Journals of Captain Meriwether Lewis and Sergeant John Ordway*, Milo M. Quaife, ed. (Madison, Wisconsin, 1916), 149. Hereafter Lewis and Ordway, *Journals*.

6. Lewis and Clark, *Journals*, VII, 311.

7. *Ibid.*, II, 14.

8. *Ibid.*, II, 88.

9. *Ibid.*, II, 80.

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12. Lewis and Ordway, *Journals*, 219.

13. Lewis and Clark, *Journals*, I, xliv.

14. Zebulon M. Pike, *The Journals of Zebulon Montgomery Pike With Letters and Related Documents*, Donald Jackson, ed. (2 vols., Norman, Oklahoma, 1966), II, 5. Hereafter Pike, *Journals*. Lieutenant Wilkinson was the son of General Wilkinson.
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16. *Ibid.*, I, 336.
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18. *Ibid.*, II, 27.
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25. James, *Account*, XVI, 90-94, 96-97.
26. *Ibid.*, XVI, 111-113, 173.
27. *Ibid.*, XVII, 147.
28. Harry B. Weiss and Grace M. Ziegler, *Thomas Say Early American Naturalist* (Springfield, Illinois, 1931), 85.
29. Wood, *Stephen Long*, 59-63, 71-72, 121-123.
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32. Henry Atkinson to John C. Calhoun, December 8, 1820, Letters Received, Records of the Office of the Secretary of War, Record Group 107, National Archives. For examples of press interest in Army experience on the Plains see, *Niles Register* (Baltimore), August 19, 1820; *St. Louis (Missouri) Enquirer*, July 15, 1820, December 13, 1823; *Western Sun and General Advertiser* (Vincennes, Indiana), August 18, 1821; *Missouri Intelligencer* (Franklin), February 5, 1821.
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