Article Title: The Plains Forts: A Harsh Environment

Full Citation: John D McDermott, “The Plains Forts: A Harsh Environment,” Nebraska History 91 (2010): 2-15

Date: 7/28/2014

Article Summary: The US Army had an almost impossible task to perform during the last half of the nineteenth century. Fewer than 15,000 men guarded some 3,000 miles of frontier and an equal length of seacoast.

Cataloging Information:

Names: William Bisbee, George Holliday, Mrs Andrew S Burt, Mary Rippey Heistand, Gerhard Stullken, Edward W Johns

Military Installations: Fort Harker, Kansas; Fort Custer and Camp Poplar River, Montana; Fort Robinson and Fort Kearny, Nebraska; Fort Buford and Fort Union, North Dakota; Fort Phil Kearny, Fort Caspar, Fort Laramie and Fort Fred Steele, Wyoming

Keywords: quarters, blizzards, hail, mosquitoes, rattlesnakes, fleas, bedbugs, hard tack, dessicated vegetables

Photographs / Images: James F Wilkins’ 1849 rendition of Fort Kearny; the Battle of the Rosebud and “Winter on the Plains,” illustrations from Richard I Dodge, Our Wild Indians: Thirty-Three Years’ Personal Experience Among the Red Men of the Great West; soldiers of the Eighth Infantry inside barracks at Fort Robinson; a cavalryman from “Nebraska’s Own” Fifth US Cavalry at Fort McPherson; a soldier killing his mount for food during General Crook’s 1876 campaign against the Lakota; 1874 adobe officers’ quarters at Fort Robinson; 1883 log barracks at Fort Robinson; Fort McPherson building that served as officers’ club, store, and post saloon; soldiers believed to be at Fort Laramie; “Teaching Army Women How to Shoot,” illustration from a drawing by R F Zogbaum
James F. Wilkins' 1849 rendition of Fort Kearny, on the south bank of the Platte River near present-day Kearney, Nebraska. The first Fort Kearny, near present-day Nebraska City, operated 1846-48; the new post on the Platte served 1848-71. Wilkins wrote: "We passed Fort Childs or New Fort Kearny as some call it, and a miserable looking place it's being built principally of sod."

Wisconsin Historical Society WHi-1841
In perspective, the United States Army had an almost impossible task to perform during the last half of the nineteenth century. It had an effective strength of something less than fifteen thousand men, yet at the height of the Indian Wars it manned one hundred thirty-six forts, posts, camps, and cantonments, sixteen arsenals and armories, three training facilities for recruits, and one engineer depot. Troops guarded some three thousand miles of frontier and an equal length of seacoast. They scouted thousands of long, weary miles in uncharted territory. Besides its role as the agent of empire, the army physically attacked the wilderness, building forts, roads, and bridges, at times conducting extensive farming operations and gathering some of the first scientific data on the great hinterland. Troops guarded railroads and telegraph lines and escorted paymasters’ and quartermasters’ trains. They guarded parties engaged in surveying railway and boundary lines and public lands. Military posts were the focal points in the effort to protect succeeding waves of trail emigrants, miners, and settlers from actual or threatened attack by Indians and other unfriendly parties, to guard lines of transportation and communication linking East and West and points in between, and to act as a buffer between the Indians of the plains and their unlawful tormentors. Beyond this, the officers, their wives, and the soldiers of the frontier army were the arbiters of white civilization, possessing a strong need for expressing Euro-American values through such means as education, recreation, the arts, and relations with Indians and frontiersmen. Making the mission more difficult for the nineteenth-century army on the western plains was the environment: physical, meteorological, and harmfully occupied, and complicated and intensified by the strict regimentation of the army that rewarded sameness and frowned on innovation. Or to put it another way—their environment could be frustrating, unrelenting, noxious, infectious, and lethal. In coping with the environment in this sense, the men and women who served in and with the frontier army often resorted to humor to cover their fears and dismay.

The Battle of the Rosebud, June 17, 1876, in which Lakotas and Cheyennes fought General George Crook’s troops to a bloody draw. The artist captures the usual stereotypes of war between whites and Indians. For soldiers of the era, battle was a rare event. From Richard I. Dodge, Our Wild Indians: Thirty-Three Years’ Personal Experience Among the Red Men of the Great West (1884).
Officers who left posts in the East had a big adjustment to make when they came West, and their colleagues did not necessarily make it easier for them. In the late 1860s some advice for soldiers going to the frontier appeared in the *Army and Navy Journal*, the principal military newspaper of the period:

Altogether we have to advise each of the fellows who are to come here this fall, to do as follows:

1st. Make your will.

2d. Get your life insured. We could recommend a certain company on Broadway, but then people might think this was an advertisement.

3d. Bring enough money to pay your own funeral expenses.

4th. Have a first-class obituary of yourself prepared for insert in the *Army and Navy Journal*, by some New York Bohemian, for people out here haven’t the time or the genius to write them.

5th. Don’t ever expect to return, but say your adieus as you would if you had been selected for a “forlorn hope.”

6th. Get your regimental adjutant to intercede to prevent you being sent here. Argue that these fellows can’t be expected to have any desire for a return to society. They (we) might as well stay because they (we) are used to it.

You will find this arrangement will work beautifully, it being already in practice in about four artillery regiments.1

Officers going to the frontier had to travel light and be prepared to move to the next assignment quickly. In 1868 a veteran offered good advice to those going West. He recommended that each should bring with him a good mess chest, well furnished for four or six persons, a good roll of bedding, a mattress, a few comfortable camp chairs, and a trunk filled with a good supply of clothes for at least one year. Before leaving, he should give his measurements to a good tailor and

“Winter on the Plains—A Terrible Experience in the Teeth of a ‘Norther.” From Richard I. Dodge, *Our Wild Indians*. Dodge, a career officer, writes of a February expedition along the Republican River in which some of Capt. John Mix’s men were overcome with cold and refused to go on, even at the point of Mix’s revolver. “The captain finally put up his pistol, and falling upon them with the flat of his sabre, belabored them into the ranks, and brought all in safety to the post.” (p. 507)
bootmaker so that he could replenish his wardrobe by order at any time. Also recommended were a table spread or two, a few curtains, some cloth suitable for covering furniture, and a roll of carpeting. In conclusion, he stated that an officer would never regret bringing any small articles of luxury that his taste suggested, for he would find very little difficulty in taking them with him from station to station.

Quarters at frontier posts were never lush, especially in the beginning, and army regulations complicated matters. They provided that when an officer reported for duty at any post, he could select the quarters of any officer junior to himself for his residence. This could sometimes become a fast game of musical chairs. Here is a situation described at Fort Buford, in present-day North Dakota:

Recently a captain, next in rank to the senior captain at the post, arrived here to take command of his company, having been absent from it two or three years. He chose the quarters of a captain who was junior to him in rank. This captain in turn displaced another captain. He ranked out a first lieutenant, who turned out the quartermaster, also a first lieutenant. He chose the quarters of the adjutant, also a first lieutenant, and he ousted a second lieutenant. Before, however the adjutant had time to move, a first lieutenant of cavalry returned to duty at the post who outranked him, and who chose the quarters the adjutant had selected, the latter officer, therefore, had to choose again and thereupon took the quarters of a second lieutenant of cavalry who then displaced a second lieutenant of infantry, who in turn outranked a junior second lieutenant of the post. The removals are in process of execution, and within two weeks another first lieutenant will arrive for duty, and he outranks a half dozen of the officers now present, and is likely to set them moving again.

Another disadvantage was the lack of opportunities for men and women with varied interests. William Bisbee, who as a junior officer served at Fort Phil Kearny (Wyoming) in 1866, remembered the situation:

These earlier days of army life in the Indian Country west of the Missouri River and northwest to the Canadian border line, from the 60s to the 90s, were likened by one of my contemporary friends as “a waste of twenty-five years of our early existence,” and oblivion apart.
A cavalryman from “Nebraska’s Own” Fifth U.S. Cavalry at Fort McPherson, near present-day North Platte. NSHS RG0951-24
from civilizing participation or influences: no society affiliations, club associates or, in fact, any educational advantages: no libraries or lecture features, few books and oftentimes lapses of months, without newsprints or in touch with the outside world: no theatres or refining amusement halls of the present day life.\(^4\)

But army women were not daunted. They organized. As one wife put it,

We did not stagnate. Though we were far from civilization. A reading club was started by the ladies, and we kept up with the publications of the day: lectures were given by the officers and a good deal of undeveloped talent was brought out in some good private theatricals. A string band was formed in the regimental band and they gave concerts so that in the winter months there was always something to be done, and in the summer there were horseback riding, picnics, and excursions in the surrounding country.\(^5\)

The first thing one had to deal with in carrying out the mission was the natural environment. The Great Plains is part of a geographical habitat stretching from Canada to Mexico, bounded on the east by the 100\(^{th}\) Meridian and on the west by the Rocky Mountains. It is semi-arid, receiving less than twenty inches of rainfall a year. It is, generally speaking, scarce in wood and surface water, often windy, and registers extreme temperatures of heat in the summer and cold in the winter, creating a new context for the word “survival.”
Among frontier soldiers, the Wyoming climate was often a topic of conversation. A private soon to leave Fort Townsend in Washington Territory, to serve at a post in Wyoming, wrote a letter to a friend about his expectations, which was published in the *Army and Navy Register*. He wrote: “We are told that during the winter in Wyoming the snow is six and seven feet deep, and that the thermometer frequently runs down to 40 and 50 degrees below zero, and that during the daily blizzards it is necessary to carry heavy weights in [y]our pockets to keep from being blown away.”

Tongue in cheek aside, a mid-century Wyoming blizzard was nothing to make light of. For example, a detachment of the Eleventh Ohio Volunteer Cavalry went to South Pass late in 1863; upon their return through Platte Bridge Station, they ran into a bad snowstorm. The troops finally made it to Fort Laramie, but, as one of the party reported in a letter to his uncle, “two of the men were so badly frozen that they died in a few hours. Nearly every man froze either his feet, hands, or ears.” A soldier of the Sixth West Virginia Volunteer Cavalry serving at Fort Caspar in the winter of 1865-66, has left us a detailed account of what it was like to suffer from the effects of cold. Pvt. George Holliday went to the mountains with a party to cut wood that November. On the way back he took a short cut that ended up causing him to reach the post later than the rest of the party. His legs had no feeling below the knees. “I was soon met by some men who had came to help me in,” he wrote in a reminiscence. “The men at the camp had snow-water melted, turpentine ready, and the minute I arrived they ripped leggins, boots and socks, from top to toe, and peeled them off, and my feet, which were badly frozen, were put to soak in two large camp kettles of water. And, oh the pain I experienced...”
after the frost came out of those feet. Tongue cannot describe it. For six long weeks I lay in my bunk or hobbled on crutches, and did not have to haul any more wood that winter. But I was not the only one frozen that day. Several other men had their feet, ears, fingers and toes, badly frosted, from which they were laid up some time, and I may say in my own case now, after lapse of seventeen years, I still suffer from the effects of that freezing.”

Troops soon learned to prepare for the bitter cold. They began augmenting their own uniforms. According to Holliday:

We had been providing ourselves with the customary winter outfit of clothing, which consisted of a wolf skin, or buffalo cap, buffalo skin overshoes with leggins attached which reached to the knees and then, fastened by long buckskin strings, was allowed to hang down the side of the legs. Buffalo mittens, and the customary cavalry uniform, completed the costume. These “extras” had to be furnished by ourselves, and cost considerable.

Summer had its own enchantments. Besides sunstroke and dehydration, hail was a threat. Fort Laramie on the west and Fort Robinson on the south are not far from the center of hail activity in the United States. Records at Fort Laramie indicate that severe hailstorms destroyed gardens and repeatedly broke all windows on the north side of its many buildings. These ice pellets could also be lethal. The Army and Navy Register reported in 1888 that a hailstorm near Fort Custer, Montana, had been severe enough to knock a soldier off his horse, kill a large number of calves and colts, and literally beat to death an old Indian woman who had been caught while out gathering wood.

In the Southwest summer conditions were even worse because of the heat. One observer wrote in 1869:

I have even heard complaints made that the thermometer failed to show the true heat because the mercury dried up. Everything dries: wagons dry, men dry, chickens dry; there is no juice left in anything living or dead, by the end of the summer . . . mules,
it is said, can only bray at midnight; and I have heard it hinted that the carcasses of cattle rattle inside their hides, and that snakes find a difficulty in bending their bodies, and horned frogs die of apoplexy. Chickens hatched at this season, old Fort Yumers say, come out of the shell ready cooked; [and] bacon is eaten with a spoon. . . .11

If the climate was not bad enough, there were creatures that could make life miserable for the initiate. Mosquitoes earned the most exaggerated mention. According to one Wyoming victim, who referred to them as “Platte Valley birds,” they were “as blood thirsty as starved tigers.”12 “Bars are no protection,” a soldier declared, “as they easily tear them out, or lift up the edge and come under.”13

More seriously, however, the effects of numerous mosquito bites could be lethal. One soldier at a western post who went AWOL while under the influence was found dead the next day. Swarms of mosquitoes had bitten him mercilessly. An officer’s wife reported: “There he lay in the sagebrush, where liquor had overcome him. But the mosquitoes had gotten in their deadly work and had literally sucked the life from his body. It was bloated and practically bloodless—a bitter temperance lesson to the garrison men.”14

Another more dangerous discomfort was the rattlesnake. Lt. William Bisbee found them plentiful on his way to Fort Phil Kearny in July 1866, reporting that “killing the reptiles with whips and revolvers was one of our daily amusements.”15 One afternoon in 1879, soldiers at Fort Fred Steele, Wyoming Territory, killed seventy-three rattlesnakes a short distance from the post. Even more upsetting was the tendency of the serpents to seek shelter in human habitations. A soldier from Fort Harker, Kansas, told of killing three rattlesnakes found warming themselves by the fire in his log and sod cabin in February 1867.16

Fleas also seemed to abound, particularly in places where humans had lived for a time. Mrs. Andrew S. Burt, the wife of the commanding officer of Fort Laramie in 1888, pasted a clipping in her cookbook describing Dr. Hazen’s method for getting rid of fleas. It read:

Originally known as Fort Cottonwood, Fort McPherson was established in 1863 and closed in 1880. In its heyday this building served as officers’ club, store, and post saloon. NSHS RG951-15
Set a lighted candle in a dish of water in the middle of the room. The fleas, attracted by the light, will hop in, and in the morning, the dish will present the appearance of Pharaoh and his host drowned in the Red Sea. It is more effective than Persian or any other powder. It is strategy, my boy, and the fleas never learn it till it is too late.¹⁷

Mary Rippey Heistand had another means of treatment. At Camp Poplar River in Montana, the post was infested with sand fleas, the buildings having been built on the site of an abandoned Indian village. She described her method as follows:

Four or five times a day I have undressed myself when fleas were torturing me. It was my custom to spread a white blanket to stand on as I removed my clothing. I was thus enabled to see the annoyances—tiny only in size—against the white blanket, and on it their legs tangled and made them an easy prey in their turn. The process was slow, as I shook each garment before laying it aside. Sometimes when the insects came to light they escaped with an agility unequaled, jumping clear of the blanket. At one time I was put to bed with fever induced by these miserable insects. They had tormented me so that I scarcely knew what I was doing; my temperature arose and I collapsed. The physician pronounced my malady “flea fever.”¹⁸

A companion of the flea was the bedbug. One soldier in Nebraska found his match: “I was chasing bed bugs all night,” he wrote. “They would come around in the night with lanterns to find a nice place to bite you. They would not come singly but in battalions. Some were large and strong; they had hair on their backs.”¹⁹

In 1864, a soldier newspaper at Fort Union, North Dakota, printed this account:
We have seen them—seen them in battalions—seen them in divisions and in army corps, and they were of all sizes from the smallest, four which can stand on the head of a pin, up to the size of a mud turtle. We have seen them regularly organized—thoroughly drilled—and apparently in a good state of discipline; at first they would throw out a few foragers who would wait very quietly until we were asleep when they would draw what blood they could carry and go quietly off. For the sake of maintaining peace we submitted until they came in force one night and attempted to carry us off bodily . . . . Charge after charge they made which we successfully repulsed with a trifling loss of blood on our side. At length they changed their tactics, and one much larger than the others advanced to “Teaching army women how to shoot.” One disadvantage of frontier army life was the lack of opportunities for men and women with varied interests. Army wives often organized activities and outings. NSHS RG4356-4
the attack alone; . . . we were rapidly losing strength and thought our time had come—we remembered that our life was not insured, and all actions of it seemed to pass in rapid succession before us; thought upon our home and those dear ones that were anxiously waiting our return and we determined to struggle to the bitter end; at length fortune favored us and by a brilliant manoeuver we were enabled to place our opponent on his back and plunging a knife into him finished him. The rest were apparently thunder struck and stood unable to do anything but gaze, so taking advantage of their surprise we seized our blankets and once more fled.20

Food was sometimes a problem at frontier posts.21 Taking a great deal of criticism was the hard bread, used especially on patrols or campaign. Called “hard tack,” and usually baked in three-by-three-inch squares, the dense biscuit or cracker had great powers for survival and longevity. One soldier of the 1860s claimed that a friend had seen some that were stamped 1812 A. D.22 Following the Civil War many thousands of these were on hand, and the parsimonious army, suffering budget cuts, decided to use them until exhausted. In 1861, Gerhard Stullken of the Ninth Wisconsin Battery Light Artillery visited Fort Kearny, Nebraska, on the way to Denver, and drew a few barrels of hard tack. “It was hard and looked hard,” he wrote, [and] “it had probably lain here for years, and worms had eaten holes through it. This . . . was soldiers’ fare on the plains, hard tack and sowbelly, as we called it. Sometimes we would break the hard tack with the axe and soak them over night, then fry them in the morning and sometimes we would throw them in hot grease and fry them awhile; this would make them brittle so we could eat them. The crackers were about as large as a man’s hand and some were as hard as a shingle. I know; I took one along one morning on the march to nibble on the way. I chewed till I got tired, then threw it down and the cannon wheel went over it without breaking it. Soon after the cannon wheel went over an old buffalo head and crushed it all to pieces.”23

Another much discussed item of soldier fare was introduced into the army in 1856. Fort Laramie was an experiment station for testing the new product marketed by Chollet & Company and labeled “desiccated vegetables.”24 One army study explained, “As desiccated vegetables, the water is in large part removed, the bulk correspondingly reduced, and the liability to injury from variations of heat and atmospheric moisture overcome.” According to the study, vegetables were “thoroughly cleaned, sliced, dried in a current of heated air, weighed, seasoned, and pressed with a hydraulic press into compact form, sealed in tin cases and enclosed in wooden boxes.”25 A block of the concentrate one foot square and two inches thick weighed seven pounds and contained vegetables for a single ration for 112 men. Among those vegetables eventually available in desiccated form were potatoes, cabbage, turnips, carrots, parsnips, beets, tomatoes, onions, peas, beans, lentils, celery, and green peppers. The concentrate had amazing regenerative powers, and more than one novice found that soaking a generous piece in water made more of the vegetable than he wanted. This characteristic led to a story of a soldier eating his ration raw and nearly dying from swelling after taking a drink of water. During the Civil War, soldiers commonly referred to the mixed product as “desecrated” vegetables or “baled hay.” One officer who undesiccated his potatoes described the result as “a dirty brook with all the dead leaves floating around promiscuously.” Cooks achieved the best results by making soup of the vegetable, improving the taste by adding meat.26 As a result of testing, the commanding general of subsistence in 1858 recommended that desiccated potatoes and mixed vegetables be introduced as part of the ration, to be issued twice per week in lieu of beans and rice.27

One of the problems with the usual army diet was that it lacked fresh fruits and vegetables and other sources of vitamin C; consequently, scurvy was always a winter threat. A soldier writing in the *Cheyenne Daily Leader* described the effects of the disease:

> The feet of some swell to an enormous size, their flesh becomes soft and flabby, and assumes blue and yellowish tints, while if you press the part affected with our finger, on withdrawing it the impression will remain. Other patients become fearfully emaciated. Teeth fall out and gums become sore in every case.28

In 1859 Assistant Surgeon Edward W. Johns at Fort Laramie gave his patients watercress to treat the disease until all was consumed. Then he tried to give cactus juice to the troops, but they would take it only when mixed with whiskey.29
These, then, were a few of the problems that confronted the men who served at the many camps, outposts, stations, and forts on the Great Plains during the Indian Wars of the West. Why, then, did the men and the women who followed them serve in the frontier army, despite its trials and travails, its isolation and its usually incondite life? In the case of enlisted men, it might be one of many reasons, such as economic betterment, career training, a chance to learn the language, flight from criminal prosecution, disappointment in love, a desire to see the open spaces, or a free ride to the proximity of mining districts. During the Civil War, many were motivated by patriotism or a wish to take advantage of generous bounties offered by some states and localities. For officers, it may have been a family tradition, an opportunity to exercise leadership, the thrill of a wilderness adventure, a means of supporting a wife and children, a desire to act as an agent of white-European civilization.

Whatever the reasons, officers and enlisted men on the plains did their duty under difficult conditions, and we remember them for it.

Notes

1 CIAUS, Fort Riley, Kans., July 6, 1869, in Army and Navy Journal, July 17, 1869, 758.
3 “From Fort Buford,” Army and Navy Register, Sept. 5, 1885, 572.
5 Mrs. Luther P. (Jone) Bradley, “Recollections of Army Life,” 1868-86, Box 6, Luther P. Bradley Papers, USAHI, Carlisle, Pa.
6 DOXON, “Movement of the Twenty-First Infantry,” Army and Navy Register, July 12, 1884, 12.
7 Letter from J. M. Herriman, Fort Halleck, Mar. 16, 1863, Item MCOR-7, Dr. 1, Fort Laramie Collections, Fort Laramie National Historic Site.
9 Ibid., 73.
10 Army and Navy Register, July 28, 1888, 468.
12 Charles Brown, “My Experience on the Plains in 1861” (ms, Creighton University Library, Omaha), 50.
15 Bisbee, Through Four American Wars, 168.
17 Mrs. Andrew S. Burt, “Cookbook,” Fort Laramie Collections.
19 Hartford C. Clark Diary, Aug. 4, 1891, Indian Wars Widows’ Project Records, Record Unit 101, NPS Cat. No. 9015, JNEM Archives, Old Court House, JNEM, St. Louis, Mo.
20 Frontier Scout (Fort Union, N.Dak.), Aug. 17, 1864, 1.
22 H. H. McConnell, late 6th Cavalry, Five Years a Cavalryman: Or, Sketches of Regular Army Life on the Texas Frontier Twenty Years Ago (Jacksville, Tex.: J. N. Rogers & Co., 1889), 83-84.
26 Don Rickey, Jr., Forty Miles a Day on Beans and Hay. The Enlisted Soldier Fighting the Indian Wars (Norman: University of Oklahoma Press, 1963), 96-97.
28 Letter from a soldier from Fort Stephenson, Dakota Territory, Apr. 10, 1868, Cheyenne Daily Leader, June 2, 1868, 1.