CHAPTER THREE

The War on Vandalism

The United States Army Takes Control of Yellowstone National Park 1886–1906

The Canyon of the Yellowstone . . . is the artistic culmination of Nature's efforts there. She held them long in her safe-keeping, until she could give them as a precious possession to a great People.¹

—Arnold Hague, 1904

During the first eight months of 1886, a struggle over management of Yellowstone National Park took place in Washington, D.C. In the halls of Congress, politicians debated how to handle the controversies that swirled around the park, and passed an appropriations bill that did not provide any money for salaries of the superintendent and his assistants. Without these funds, the Interior Department was forced to request that the U.S. Army take over administration of the park. On August 6, 1886, Secretary of the Interior Lucius Lamar, under the authority of the Sundry Civil Appropriations Act of March 3, 1883, wrote Secretary of War William C. Endicott, requesting a detail of troops to aid in protecting Yellowstone from vandals and poachers who were killing the game and destroying the park's natural features. Three days later, Lieutenant General Philip H. Sheridan recommended to Endicott that Troop "M," First U.S. Cavalry, stationed at Fort Custer, Montana Territory, be ordered to the park under the command of Captain Moses Harris.² Thus began three decades of military control of Yellowstone National Park. While there were some setbacks throughout the period of army control, the military succeeded to a large extent in protecting the park's natural curiosities and much of its wildlife (albeit

only those species deemed worthy of protection at the time), and in building an infrastructure of administrative facilities that is still in use today.

Several factors contributed to the military's success. First, the army brought a proven management structure that encouraged accountability and responsibility. In his last annual report, the first acting superintendent during the military period (technically, all military superintendents were referred to as "acting superintendents" until 1907, when S. B. M. Young returned for his second stint as head administrator in the park and was called superintendent), Captain Moses Harris, wrote that "by the use of an organized and disciplined force, respect for the established rules and regulations and the rights of life and property can be maintained," and he believed this had been proven by the improved state of the park's affairs during his tenure.³ Second, the military, with more manpower, could achieve a parkwide presence. Anywhere from 34 to 136 men—a considerable increase over the handful of assistant superintendents on the payroll during previous administrations—were now stationed in the park at any given time. Third, the military already commanded respect from both Congress and park visitors. Finally, while not all military superintendents were equally successful, most were at least good managers of people. Thus outfitted, the military was in a good position to fight vandalism, to build the park's administrative infrastructure, and to adopt the sorts of wildlife and tourist management policies necessary to ensure success.

The Acting Superintendents

All that said, Captain Harris still had a tough assignment. The park faced many threats, especially after repeal of the act that had provided for enforcement of the park's rules under Wyoming law; vandalism, poaching, and arson had subsequently increased. 4 By all accounts, however, Harris was up to the job. According to historian Aubrey Haines, Harris "brought to the assignment the courage, integrity, and common sense that were needed to rescue the park from a difficult situation." Little is known about Harris's life prior to his enlistment in the U.S. Cavalry in 1857, but his record as a military figure revealed his abilities. He rose quickly through the ranks, received the Congressional Medal of Honor, and was made captain in 1864.5 Harris brought the qualities that had helped him succeed in the military to his post in the park. Considered "austere, correct, unyielding and a terror to evil doers," Harris was able, nevertheless, to appear fair, reasoned, and judicious. He was, moreover, a consummate diplomat, possessed of an ability to get along with the Department of the Interior. Senator George Vest called Harris "a gentleman of intelligence and justice and high character." Harris's annual reports demonstrated both a deep appreciation for the park and a philosophy about how best to preserve it that echoed that of the Holman Select Committee. "In my opinion," he wrote in 1887, "this 'wonderland' should for all time be kept as nearly as possible in its natural and primitive condition. No appliances of art and no expenditure of money can improve upon this condition."8

Harris's successor, Captain Frazier Augustus Boutelle, was not blessed with Harris's temperate qualities, especially when it came to diplomacy. Born in 1840, in Troy, New York, Boutelle also joined the military with the outbreak of the Civil War. He, too, rose to the rank of captain, and was cited for meritorious conduct during the Indian Wars. But controversy, not competence, marked Boutelle's brief assignment in the park, which began on June 1, 1889. According to Haines, "impolitic actions" were at issue; Boutelle criticized the secretary of the interior for failing to provide firefighting equipment in the park, and was resented for his opposition to the proposed installation of an elevator in the Grand Canyon of the Yellowstone River.9

Boutelle was replaced on February 16, 1891, by Captain George Smith Anderson. The first West Point graduate to hold the park's acting superintendent position, Anderson was, according to Haines, "one of the

most capable officers to manage its affairs." Born in 1849, on a New Jersey homestead, Anderson graduated fifth in his class from the U.S. Military Academy in 1871, and was assigned to the Sixth U.S. Cavalry as a second lieutenant. He distinguished himself at every turn during a career of challenging assignments that included serving as an acting engineer officer for the Department of the Missouri (1875), as assistant professor of natural and experimental philosophy at West Point (1877–1881), as U.S. Army captain (1885–1915), and as commissioner for a detail that took him to Europe (1889). Haines wrote that Anderson's experience and training as an officer, his European experience (which helped him to develop "his social graces"), and his "commanding physical appearance" all contributed to his success in the park. "His was a vigorous administration," Haines concluded, one "that left the Park in very good order at the time of his transfer to other service on June 23, 1897."10

Lieutenant Colonel Samuel Baldwin Mark (S. B. M.) Young came to Yellowstone from Yosemite National Park, where he had served as acting superintendent and, like Harris, posed "a terror to local wrongdoers," according to Haines. Born in 1840, in Pittsburgh, Pennsylvania, Young enlisted as a private just two weeks after the Civil War began. He also rose quickly through the ranks to brigadier general by the war's end, and was "brevetted three times for gallant and meritorious service in action." After the war, his achievements continued until he became lieutenant colonel in the Fourth U.S. Cavalry. A "large, blunt, rather positive man," according to Haines, who "knew exactly what he was about all the time," Young oversaw a successful, albeit short, administration of the park. 11 Divided between two brief periods, Young's stint in Yellowstone ran from June to November 1897, and then again from June 1907 to November 1908.

If Young's administration was short, so were the administrations of his four successors: James Brailsford Erwin (November 1897–March 1899), Wilber Elliott Wilder (March–June 1899), Oscar James Brown (June 1899–July 1900), and George William Goode (July 1900–May 1901). While these men had distinguished military careers, their tenures as acting superintendent were too short to have had much impact. Incompetence was not the issue. Rather, circumstances surrounding the country's foreign affairs, in particular the Spanish–American War and the military's expanding role in the Philippine Islands, led to troop displacements throughout the military establishment. Unfortunately, the park's interests were not served by this constant

shuffling of acting superintendents; as the troop commanders changed, so did the troops. Hence, there was little continuity at any level of park management.¹²

Stability returned to the park in May 1901, when Yellowstone's ninth military officer to serve as acting superintendent, Colonel John Pitcher, arrived in the park. 13 Born in Texas in September 1854, Pitcher entered the U.S. Military Academy in 1872, and became a second lieutenant upon graduation. His time in the military was spent in campaigns fighting American Indians and Filipinos. Pitcher, according to Haines, was blessed with favorable conditions in and around the park during his six years in office. Pitcher's "tour of duty . . . correspond[ed] with the golden years of the military administration," Haines wrote. "[T]hat aura," he concluded, "probably was due as much to the coincidence of many favorable factors as it was to his efforts." Pitcher's tenure as acting superintendent came to an end in July 1907, when he was transferred to another post.¹⁴

Military Infrastructure

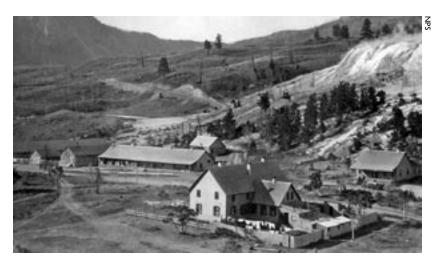
The military years saw the construction of two forts: a temporary one, Camp Sheridan, and one built to last and still standing today, Fort Yellowstone, as well as numerous outposts, called "snowshoe cabins." Both the forts and the outposts provided the necessary infrastructure for waging war against vandalism.

Upon their arrival in the park on August 17, 1886, Captain Harris and his 50 soldiers established a tent camp at the base of the terraces at Mammoth Hot Springs. On September 16 of that year, Captain Harris was allotted \$3,000 to construct barracks for his troops in the Mammoth area. Ever vigilant as self-appointed park protector, Arnold Hague reminded Acting Secretary of the Interior H. L. Muldrow that "great care should be exercised in the selection of the proper site and no buildings should be allowed to be erected at the springs without the approval of the Department of the Interior who still has the maintenance of the Park in their charge." Hague feared that the number of buildings and stables required for the troops could "easily cause irreparable injury to the formation unless carefully chosen." Shortly thereafter, Muldrow requested that Captain Harris submit his list of building sites to the Department of the Interior for approval, and advised him against selecting a site on the "hotel terraces" or near "any object or place of curiosity."16 Harris responded that he did not intend

to locate the structures near the hotel or the approaches to the Mammoth Hot Springs formations. Instead, he had selected a site on the west side of the road about two hundred yards south of the house recently occupied by former superintendent Wear, and about one half-mile from the hotel, where the buildings "would not be visible from the 'hotel terrace,'" nor "obstruct either the view or approaches to the Hot Spring formation." In this latter assessment, Harris was wrong; surely, he could have seen that the new Camp Sheridan buildings were to be situated right at Marble Terrace.

Camp Sheridan, named for General Philip H. Sheridan, was soon turned into adequate temporary quarters. By the end of 1886, Harris's troops had erected several frame structures—a 10' high, T-shaped barracks (130' × 24', with a 55' × 18' extension), a 10' high, 100' × 24' storehouse, a 10' high, 26' x 20' guardhouse, a 10' high, 150' × 26' cavalry stable, a 10' high, 50' × 25' quartermaster's stable, and a hospital—all clad in vertical board and batten.¹⁹ Although the army's quartermaster general was nominally responsible for the construction of army installations at the time, this was not the case at Camp Sheridan, probably because it was a small, temporary post. Instead, Harris supervised the work done at the fort.²⁰ By 1887, he had received funding for construction of a headquarters office and a double cottage for officers' quarters. Until that time, officers had been living in two structures built by the Department of the Interior: Philetus Norris's 1879 blockhouse on "Capitol Hill," and a frame cottage, described by Harris as being "considerably out of repair, small and uncomfortable."21 Edwin C. Mason, acting inspector general of the army, believed that because the buildings were owned by the Interior Department rather than the War Department, the army could not repair them.²² Constructed of rough lumber "with battened outside," all of the newly built structures at Camp Sheridan were "covered with a wash of lime and lamp black to improve as far as practicable their rough appearance."23 While their roughness was hard to conceal, they looked, as Mason reported, "neat and comfortable."24 By 1888, a stone magazine, an amusement room, and several unidentified buildings had been added to Camp Sheridan.²⁵

Because Harris viewed the arrangement whereby the military managed the park to be temporary, his estimations of appropriations were always made with that in mind. When he completed his first annual report and figured the appropriations required for the next fiscal year, he assumed, for example, "that the civil



Camp Sheridan, ca. 1900.

administration of the affairs of the Park would be continued" the next year. ²⁶ He therefore included a request for \$32,300, for salaries for one superintendent, one gamekeeper, ten assistant superintendents, one chief of police, twenty policemen, and one clerk. ²⁷ Likewise, when he prepared to leave the park in the hands of a successor in 1889, he prepared a budget for the return of civilian leadership. ²⁸

During his administration, Harris found this temporary and uncertain arrangement for managing the park increasingly troublesome. In his annual report for 1889, Harris wrote that the uncertainty associated with the situation precluded "the establishment of a military post ... of sufficient capacity for a garrison large enough to perform the duties of Park protection well and efficiently without risking any impairment of military efficiency in the force so employed." The troops, he pointed out, were overextended by a situation that "necessitate[d] the employment of temporary and less-effective means with a maximum of discomfort to the troops so employed." He referred to the situation as "an exceedingly anomalous condition of affairs which ought not to prevail indefinitely and as a matter of course." The authorities, Harris believed, should resolve the situation immediately. "The time would seem to be fully ripe for definite settlement of the question as to the means to be employed in the protection and government of the National Park," he wrote, inviting resolution of the matter, "and as my connection with the Park ceases with the rendition of this report, I deem it a suitable time to urgently invite your attention to the importance of this subject."29

By the time Harris's replacement, Captain F. A. Boutelle, arrived, the War Department had developed

plans to erect buildings in the park for a permanent post. While this move might seem to have alleviated the problem of troop discomfort, and to some extent resolved the question of whether or not the military occupation was temporary, it raised an equally vexing question: who really controlled the park? When, in October 1890, officials at the Department of the Interior learned of the War Department's plans to develop a permanent post, they immediately ordered Boutelle not to permit any work to proceed on the buildings without first submitting "an accurate description of the locality and grounds whose occupation is contemplated, with your own report as to the eligibility of the same" to the Department of the Interior for approval.³⁰ The War Department had been put on notice: the Interior Department was still, at least on paper, in charge of the park.

What kind of structures did the Department of War envision for the park? The designs they chose said a lot about their plans to stay or to go. From correspondence between the Office of the Chief Quartermaster and the Quartermaster General in Washington, D.C., it is clear that the army intended to build "good, permanent and durable buildings." But the chief quartermaster obviously had more than permanence on his mind when he asked to see the intended plans. He also advocated planning for the expansion of the Yellowstone post: "As this Park embraces quite a vast area in a section of country that is rapidly becoming settled, and is being visited by an increased number of tourists each year, it is thought to be the intention to provide buildings of a substantial character, and place them in a manner to admit of the proper location of others, which may be required in the future, in order to shelter additional Troops necessary in



Fort Yellowstone. 1897.

protecting the public interests in this park."31

In January 1891, Brigadier General Thomas Ruger, Commander of the Department of Dakotas Headquarters, recommended that the secretary of war request the Interior Department to sanction a tract of land for use by the military.³² "The tract should," he wrote, "... be somewhat larger than that merely required for placing the buildings near each other in regular order, owing to the fact that hollow spaces exist in places below the crust deposits of the surface formation in the park, and it may, in consequence, be necessary to scatter the buildings somewhat, depending upon experimental tests for foundations." Like the chief quartermaster, Ruger wanted to maintain the option of adding more buildings at a later date, to accommodate the structural needs of possibly larger future troop deployments.³³

The War Department also wanted permission to use and control the waters of Clematis Creek as a water supply for the garrison. The army planned to dam the creek and construct underground water pipes, and then to maintain control of the creek and adjacent land so as to guard against pollution of the creek. Finally, the War Department would need permission to "procure, in the vicinity, such materials, lumber, logs, rock, limestone, sand, etc.,— as may be required in the construction of the buildings."³⁴ The following month, Interior Secretary John W. Noble granted permission.³⁵

While Boutelle was instrumental in choosing the site for what was to become Fort Yellowstone, he did not remain in the park long enough to see any actual construction on the project. Plans and estimates were well underway when he managed the park, but it was not until after he was replaced by Captain George Anderson

in February 1891, that construction began.³⁶ The fort was officially established on May 11, 1891; construction of the approved buildings began that summer.³⁷

Before construction began, Anderson asked First Lieutenant George H. Sands to investigate the site. Sands confirmed that it was the "proper place for permanent military quarters." Sands's opinion, however, stood in stark contrast to that of one U.S. Geological Survey employee, who "advised against the site, since it was located on an old formation of the hot springs, which was perhaps not stable enough to support heavy buildings—" just as Ruger had worried.³⁹

By autumn 1891, these concerns had been put aside, and a total of twelve buildings had been constructed on the site chosen by Boutelle, located "on the eastern edge of the terrace, northeast of Capitol Hill and a short distance from the tourist facilities, about three-tenths of a mile northeast of Camp Sheridan." ⁴⁰ Several buildings were ready for occupancy in November of that year: an administration building, two duplexes of officers' quarters, a guard house, a barracks capable of housing 60 soldiers, a commissary storehouse, a quartermaster storehouse, a granary, a bakery, a stable, and two non-commissioned officers' quarters.

The design of these early buildings, according to historic preservationists R. Laurie Simmons and Thomas H. Simmons, was "typical of western military posts of the era, [being] of a generally spartan appearance with a few Queen Anne Style domestic elements, described by many as 'cottage style.'" The structures were one-to-two-and-a-half stories high, of "frame construction with drop siding and stone foundations, with evenly spaced double-hung sash windows, and prominent porches."



Officers' Row. 1896.

The guard house had "sweeping eaves and tiny cupolas, which would be repeated in later buildings." The buildings for the noncommissioned officers "were similar in appearance to middle class houses built across the country during the late Victorian era, and were notable for their columned porches with decorative friezes and balustrades, shingled gable ends, hipped roof dormers, and large paired windows." Many of these buildings are still standing today.

These additions to the new Fort Yellowstone pleased Anderson. "The post makes a sightly and attractive addition to the place," he wrote in his annual report in August 1892. The one drawback was its small size. Anderson wanted more buildings for the company, Troop D of the Sixth Cavalry, that had arrived in May to help manage the park. Until the new barracks were finally constructed in 1897, these soldiers summered in the Lower Geyser Basin and wintered in the old barracks of Camp Sheridan.

By July 1893, Fort Yellowstone had acquired a hospital, a residence for hospital personnel, and a large hayshed. In 1894, the park acquired its first stone structure to house the U.S. Commissioner called for by the Yellowstone Game Protection Act, or "Lacey Act," which had officially placed the park under federal jurisdiction and finally created a way for park personnel to arrest law breakers and bring them to trial. The building was "a one-and-a-half-story sandstone dwelling with gable-on-hip roof with through-the-cornice dormers and a full-width columned porch." Its design was "restrained and dignified," according to Simmons and Simmons. 44 John W. Meldrum served as the first U.S. Commissioner,

staying on the job and in the house for 40 years, until June 1935.⁴⁵ At roughly the same time, construction began on the jail at Mammoth Hot Springs.

By the middle of the 1890s, the issue of the fort's size still had not been resolved. In April 1894, Captain Anderson continued to appeal for funds to construct more facilities for his troops. Noting in a letter to the adjutant general that army management had "proven so generally satisfactory that a return to the old Civil Government [was] not at all probable," he asked permission to vacate the unsuitable, temporary structures at Camp Sheridan and build quarters near the new post, Fort Yellowstone. The distance between the two sites, particularly during long winters, proved to be a disadvantage, he wrote. Citing lack of funds, the adjutant general refused this request. 46

By 1897, the War Department's attitude had changed, and the additional barracks (to house the second detachment detailed to Yellowstone) became a reality. Colonel S. B. M. Young, acting superintendent at the time, oversaw the contract negotiation and the construction, but left the park shortly thereafter, in November 1897. Along with new barracks came the concomitant housing needed for commanders: two duplex officers' quarters and two noncommissioned officers' quarters. An additional stable, a post exchange, and various service buildings were also added. The frame structures resembled the earlier post buildings, and were equally characteristic of the time. The barracks, for example, had a "hipped roof with flared eaves which sheltered a full-width wrap-around porch, . . . multiple hipped roof dormers, and . . . alternating brick chimneys and cupolas."47

Little construction took place at the post during the next four years, as acting superintendents came and went. With the exception of a small morgue built near the hospital (both since demolished), no buildings were constructed during this period. In 1899, Captain Oscar Brown proposed adding an entrance gate and station house at the North Entrance. Captain Wilder, Brown claimed, had argued for the addition of these structures in a report written to the department on April 19, 1899. The interior secretary, however, did not approve the \$1,200 Brown thought he would need for the project. 48 Brown also sought funds to build four-and-one-half miles of fencing along the northern boundary near Gardiner, Montana, in hopes of protecting the winter range of antelope and mountain sheep and keeping the town's horses and cattle from entering the park.⁴⁹

When Captain John Pitcher took over as acting superintendent in April 1901, construction of administrative facilities resumed. Pitcher found Fort Yellowstone to be "one of the most neatly built and attractive-looking little posts in the country," but like those before him, he found it "too small for the growing needs of the park." He recommended that the fort be enlarged to accommodate a squadron, and called for the construction of a house for the commanding officer (acting superintendent) suitable for entertaining the park's many distinguished visitors. ⁵⁰ Even if he did not achieve all he wanted in this arena, Pitcher accomplished a great deal over the next few years.

With the help of Engineer Officer Hiram Chittenden from the U.S. Army Corps of Engineers, who had served in the park under Captain Anderson, Captain Pitcher oversaw the construction of many of the Mammoth-area features we recognize today: the landscaped and improved plateau known as the parade ground, the office of the Army Corps of Engineers (known as the "pagoda"), and the North Entrance arch (a.k.a. Roosevelt arch), through which many of Yellowstone's millions of visitors have entered Wonderland.

Construction of buildings was within the purview of the construction quartermaster (with input from the acting superintendents), so it was unusual for an engineer officer, whose duties since the 1883 Civil Appropriations Bill had centered around the construction of roads and bridges, to be associated with the creation of administrative properties. But as David G. Battle and Erwin N. Thompson pointed out, "the engineer officer had considerable funds, equipment, and labor" at his dis-



Hiram Chittenden. 1910.

posal, and he "often could, if he were interested, stretch his responsibilities to include undertakings that at most posts would be done under the quartermaster's direction." Chittenden "was just such a man."51 Chittenden's good relationship with Pitcher, his creation of a new water system and reservoir, and his enterprising, creative genius helped him add significantly to the improvement and attractiveness of the headquarters area. 52 Chittenden recognized and appreciated the mark he left on the park, but his ambivalence toward "improving" the park was evident in his writing: he had transformed nature out of necessity, he maintained, and thus had tried to strike an appropriate architectural tone. "This [the Mammoth area] is the only point in the Park where an extensive transformation of natural conditions by the work of man has been permitted," he wrote of the headquarters area in his 1905 history of the park. "Yet it was unavoidable here, and in yielding to this necessity," he argued, "the effort has been made to provide a substitute that would be in harmony with the natural surroundings, and would be in itself a feature of interest."53

In the very dry summer of 1901, a lack of water at headquarters for both the hotel and the fort prompted Chittenden to construct a 1.8-million-gallon reservoir, complete with a ditch connecting Glen Creek to a

reservoir below Marble Terrace, and to pipes connected to the existing system. This system made the Mammoth Hot Springs plateau irrigable, and added permanence to the headquarters area. Chittenden suggested constructing "proper sidewalks" to complement the rebuilt and realigned roads at headquarters.⁵⁴ Colonel Young had been hesitant to improve the plateau, as the area was just outside the military's grounds at Mammoth, but with Chittenden's return to the park in 1899, and a landscape plan that had been produced pro bono by Massachusetts landscape architect Warren H. Manning, work began on the improvement of the plateau.⁵⁵ As historian Linda Flint McClelland has noted, there was a movement in landscape architecture at the end of the nineteenth century to "conceal construction scars, to blend built structures with natural vegetation, and to screen undesirable objects from view."56 Manning, who was part of that movement, may have had such motives in mind when he drew up plans for the parade ground. However, it was not part of Manning's approach, at this time, to restrict designs to the use of indigenous plants. Thus, lawn and shade trees—even, as Haines noted, "extensive groves and semiformal walks to scenic points"—were part of Manning's plan, which formed the basis for future work, but was never fully executed.⁵⁷ The actual results were scaled down to fit budgetary and environmental constraints.

In 1902, Chittenden followed through with his plans to improve the plateau directly in front of officers' row and the concession area. According to Battle and Thompson, he "realigned the roads, laid 8,337 feet of concrete sidewalk . . . , developed a series of irrigation ditches and water sprinklers for both the plateau and the post itself and cleared the debris from about 40 acres of ground," which was then graded, enhanced with manure and loam, and seeded with grass.⁵⁸ Shade trees were planted, some in the fall of 1902, and the rest in the spring of 1903.⁵⁹ The residence and barn of well-known Yellowstone photographer Frank J. Haynes, which were located on the plateau, were moved in 1902, with Haynes's cooperation, adding to the improved appearance of the headquarters. 60 Chittenden supervised improvement of the area around the officers' quarters and barracks, as well; lawns were planted and ditches were dug for the maintenance of shade trees. 61 According to Major Pitcher, the newly planted lawns at Mammoth did much to control the blowing sand and dust that had previously been a source of much complaint in the Mammoth area.⁶² By 1904, the irrigated grounds at

Mammoth promoted a good growth of turf, and park officials planted more shrubbery. Pitcher believed that within two years, the turf would have a sufficient hold to decrease the necessary amount of irrigation water.⁶³ These improvements in landscaping were made possible by the reservoir and water system that the Army Corps of Engineers had begun to develop under Chittenden in 1901, which provided "adequate water for all the domestic needs of the fort and the concessioners, with water to spare for irrigation and power generation."⁶⁴

Power generation was exactly what Chittenden next addressed. Using overflow from the reservoir and water from the hot springs at Mammoth, he constructed a water-powered electric light plant—with a capacity of 100 kilowatts—approximately 300 yards from the fort. He called this new powerhouse "in every particular first class and as good as any in the United States for its size." Upon its completion in 1902, the fort was converted from oil to electricity, which added measurably to the appearance of the headquarters area.⁶⁵

Another of Chittenden's projects was the U.S. Engineer's Office—a distinguished, resilient building that exemplified the attractive pragmatism of the military's involvement in the park. Chittenden chose the site—north of the plateau and the army post—where the handsome structure still stands today. This second stone building to be built in the park (the U.S. Commissioner's house/office, constructed in 1894, had been the first) was designed by the firm of Reed and Stem of St. Paul, Minnesota, and built of gray sandstone with "distinctive green roof tiles and . . . bellcast eaves [that] lent the design an exotic appearance, earning it the nickname 'the Pagoda.'" The engineer's residence, a frame structure behind the office, was also built at this time.

The year 1903 also saw the construction of another Yellowstone mainstay: the masonry arch at the park's North Entrance. The North Entrance had become very important after the Northern Pacific Railroad extended its park branch line to Cinnabar, Montana (a few miles north of the railroad's eventual terminus in Gardiner), in 1883. Furthermore, Mammoth Hot Springs had become ever more firmly established as the business and administrative headquarters of the park. Thus, Chittenden and Pitcher thought it "fitting . . . to provide some suitable entrance gate at this point." According to Chittenden, in his report to the chief engineer on the "Improvement of Yellowstone National Park" for 1903, a suitable entrance would also spruce up an otherwise drab part of the park. The arch was important, wrote Chittenden, "because



President Theodore Roosevelt laying the cornerstone at the dedication of the arch. 1903.

the natural features of the country at this portion of the boundary are about the least interesting of any part of the Park, and the first impression of visitors upon entering the Park was very unfavorable."

Once completed, the arch certainly gave visitors the feeling of entering a different space, even if the country on both sides remained the same. Constructed of columnar basalt—what Chittenden called "lava rock"—the arch bears part of the park's original mandate, "For the Benefit and Enjoyment of the People," spelled out on a tablet above the keystone, and the words "Yellowstone National Park," and "Created by Act of Congress, March 1, 1872" on tablets on either side of the opening.⁶⁹ President Theodore Roosevelt was present on April 24, 1903, at the Masonic ceremony held to dedicate the arch and lay the cornerstone. He gave a rousing speech lauding the beauty and democratic nature of the "great national playground," and reminded the audience and the country that the preservation of such a treasure was in their hands. "The only way that the people as a whole can secure to themselves and their children the enjoyment in perpetuity of what the Yellowstone Park has to give," he warned, "is by assuming the ownership in the name of the nation and jealously safeguarding and preserving the scenery, the forests, and the wild creatures."70 The arch was completed in August 1903, and relatively quickly after that, it began to be referred to by many as the Roosevelt Arch.71



The Roosevelt Arch. 1905.

The arch cut an impressive figure against the stark backdrop of the sagebrush flats. Chittenden and Pitcher softened this effect somewhat by tinkering with the arch's immediate environment. Wing walls extended to the park's boundary, and a "small park [was] laid out within [the] loop at [the] terminus of [the] Government road." "Arch Park" was fenced and "ornamented with [a] small pond provided with running water." Officials seeded the park and planted trees. Furthermore, the road from the arch "to the bluffs of the Gardiner [sic] River [was] newly built over an even plain, . . . planted with shrubbery on both sides."72 "The whole effect," wrote Chittenden in his report to Brigadier General G. L. Gillespie, "[was] to give a dignified and pleasing entrance to the Park at the point where the great majority of visitors enter[ed] it."73

During the summer of 1904, the "barren and unsightly waste" flat area in front of Gardiner and at the park's North Entrance (referred to today as "the triangle") was transformed into "a beautiful green field." Pitcher thought it presented "a very pleasing picture to the tourists as they enter the park." Under Chittenden's direction, the 50-acre field, fertilized with manure, was planted in alfalfa, and plans were made to erect a strong fence nearby to store food for winter use by antelope and other game animals, if needed. Chittenden thought the field would yield 100 to 200 tons of hay. The main ditch, built in 1903 to bring water from the Gardner

River to the field, was enlarged in 1904. Chittenden attributed the heavy cost of the ditch work to constructing an escape ditch for storm and snow water to prevent the destruction of the alfalfa field. The escape ditch carried the water around and beyond the railroad station, built beyond the Roosevelt Arch, releasing it in the valley below. Chittenden's estimate of costs for the fieldwork during 1904 was \$2,100.74

To improve the arch area further, six of twelve sequoia trees shipped to the park by the Interior Department, "with a view to their propagation in the park," were planted near the arch in 1905. Pitcher believed that if the park were "successful in growing these trees, they [would] in the future be a matter of great interest to the tourists."75 The recent creation of Sequoia National Park in 1890—a spot where tourists gathered just to admire the great trees—was undoubtedly the incentive behind this experiment. Pitcher's interest in transplanting sequoias to the Yellowstone area was also in keeping with landscape designers' ideas at the turn of the century. While the sequoia was not native to Yellowstone, it was an indigenous American species, and the idea of propagating native American species—as opposed to exotic species from overseas—was popular at the end of the nineteenth century.⁷⁶ It would be another three decades before park officials realized that species not native to the region did not belong in a national park. Pitcher's sequoia experiment failed; while native to America, the species could not adapt to the Yellowstone area's arid conditions. Much to Pitcher's chagrin, and despite great efforts and a professional gardener who followed all the instructions attached to the trees, the twelve small sequoias died.⁷⁷

To learn more about the region's weather, the chief of the U.S. Weather Bureau, Professor Willis L. Moore, suggested that a weather station be established on Capitol Hill at Mammoth Hot Springs, with a substation at Lake. Pitcher readily agreed. In 1903, a "handsome frame building" was constructed between two other newly built structures: the Army Corps of Engineers' office and the Yellowstone Park Transportation Company's stables. The weather station was used for several decades.⁷⁸

By 1904, the issue of the fort's size had arisen again. For Pitcher, the fort was just too small to be both comfortable and functional. It "was built and equipped," he lamented to the secretary of the interior, "for the accommodation of two troops of cavalry, but it is now garrisoned by three." The park required the manpower of three garrisons, and really should have four, Pitcher

argued. The problem was that additional troops would require additional quarters. Pitcher was aware that the existing fort had been designed to allow for expansion, and that "the plans for the necessary buildings [were] on file in the War Department." He tied his request for more space to issues of aesthetics and national pride. "This post is seen and visited by many distinguished people from all over the world," he wrote, "and for this reason, if for none other, it should be made a model post in every way."⁷⁹ There were other reasons, of course, to expand the post: the protection of the park depended on the military's being able to use as many men as possible to police the territory, and four troops were better than three. Also, the army would benefit, as better military instruction could take place "in and about the post, which would be of benefit to the men, and also give our many visitors some idea of what is being done in the Army in the way of drill and instruction."80

Pitcher's request was not granted immediately, causing him to repeat his complaint and concomitant request for additional housing for troops throughout his last three years as acting superintendent. In his annual report for 1905, for example, he advised the secretary of war that when the fort was established in 1892, there were about 4,000 visitors, in contrast to the more than 26,000 visitors counted that year. The population of the surrounding region had also increased dramatically, and the army's protection and conservation activities had grown. Finally, he directed the secretary's attention to the fact that since 1903, the army's board of general officers, the commanding general of his department, and the chief of the general staff (in 1904) had all recommended the enlargement of Fort Yellowstone.81 Unfortunately, Pitcher would leave the park before his wish was granted.

Between 1903 and 1905, additional structures were built in the park; they were just not the ones Pitcher was looking for. In 1903, the U.S. Fish Commission constructed "a small frame building at the West Thumb of the Yellowstone Lake, for the purpose of eyeing the eggs of the black-spotted [cutthroat] trout."82 In 1904 and 1905, a new post exchange was built to replace the old one, which was deemed too small by Pitcher and the various inspectors general who had visited the post over the years.⁸³ This new post exchange was well-built, and included a much-needed gymnasium and library, even if the inspector general who saw it under construction was disappointed that it was not "a more splendid structure built of stone."⁸⁴ The assistant adjutant general from the



Fort Yellowstone Post Exchange. 1917.

U.S. Army Headquarters Department of Dakota in St. Paul, Minnesota, agreed: "It is respectfully submitted," he wrote to Pitcher, "that at this station, the one which is probably seen by more foreigners than any other, save, perhaps, West Point, a more dignified shelter for the troops of the country would be in better keeping with the hundreds of thousands of dollars which are annually spent on the improvement of the park." Specifically, he regretted that the new post exchange was of frame construction. "This seems to me to be a mistake," he equivocated, "with good stone for building purposes within reasonable distance."85 His disappointment was in keeping with the War Department's notion of the normative nature of structures built at military posts. Already "[b]y 1893," wrote the authors of the Context Study of the United States Quartermaster General Standardized Plans, 1866-1942, "the Secretary of War noted that in 'all posts which give the promise of permanency it has been the aim of the Department to construct buildings of brick, stone, or other enduring material and of solid workmanship."86 While not built entirely of stone, the exchange was of solid enough workmanship to last for more than a century. Visitors can still see it today when they tour Fort Yellowstone.

The exchange's design, consistent with other post architecture of the time, was Colonial Revival, a style that, as the *Context Study* explained, was popular "as a wave of patriotism, combined with an increasingly mature national awareness and a desire to return to the 'good old days' swept the country." Just as "the middle class was attracted to Colonial Revival buildings, new in

the 1890s and 1900s," the report continued, "so were the architects who designed them for the Army and the members of congress who appropriated funds for their construction." The exchange was one story, with a raised brick foundation and frame, lap-sided walls, and a wooden-shingled, hipped roof. Its T-shaped plan allowed for a rear wing that housed the gymnasium. The most prominent feature of the building, according to Battle and Thompson, whose study of the fort buildings serves as the leading reference on the subject, is "a colonnaded entrance portico centered on the east elevation. The pediment of this portico," they continued, "was covered with wood shingles, with a circular window centered on it." **

As the authors noted, the post exchange was an important building for the troops stationed in Yellowstone during the area's long winters.⁸⁹ The facility provided a welcome source of entertainment and relaxation during what must have been a difficult period of privation. But if the life of a soldier stationed at the fort carried with it particular challenges, so did the life of a soldier stationed in one of the many outposts scattered throughout the park.

Soldier Stations and Snowshoe Cabins

Even with the presence of Camp Sheridan, and later, Fort Yellowstone, it would have been impossible for the army to police the park effectively without a system of outposts built throughout Yellowstone. Work

on constructing this additional protective front began during Superintendent Patrick Conger's tenure, but did not proceed in earnest until the army took control of the park and began building, throughout the park, a system of soldier stations and snowshoe cabins—named so after the snowshoes (actually long wooden skis) that soldiers and guides wore to maneuver through snow. Soldier stations were manned year-round, while snowshoe cabins were used only by soldiers on patrol. These cabins were built about ten miles, or a day's trek, from one another throughout the park, which allowed soldiers to cover quite a bit of territory without having to carry too much gear.

Within a couple of weeks of arriving in the park, Captain Moses Harris began work on a system of protective measures still in use today: year-round, regular patrols from outposts throughout the park. Harris immediately stationed detachments at all of the sites that former Superintendent Wear's assistants had occupied—Norris Geyser Basin, the Lower Geyser Basin, the Upper Geyser Basin, the Lower Falls of the Yellowstone, Riverside, and Soda Butte on the Cooke City Road. While bad weather forced Harris to withdraw most of his men to Camp Sheridan during that first winter (the men stationed at Soda Butte remained at their post), he very soon established a winter-use program for the cabins.

Similar to park rangers today, Harris's men stationed at these outposts received orders to protect the park, its wildlife, and its visitors. In his annual report for 1887, Harris reported that the troops at the detached stations had been instructed not only to enforce all rules and regulations of the Department of the Interior, but also "to discover and prevent the spread of forest fires, to protect visitors to the Park from any abuse or extortion by stage drivers or other persons, and generally to preserve respect for law and order." ⁹¹

To help him and his men negotiate the unknown territory of the park, Harris used one of his predecessor's assistants as a scout and guide. He had wanted to hire three guides—C. J. Baronett, William McClellan, and Edward Wilson—but received the authority and funding, in 1886, to hire only one at a time. 92 First, Harris hired C. J. "Jack" Baronett. When Baronett resigned in the summer of 1887, Harris hired Edward Wilson, whose "zealous and untiring... discharge of his duties" greatly impressed all the acting superintendents with whom he worked until his suicide in July 1891. 93 According to Haines, Wilson "made the first winter patrol for protective purposes (1888), thereby proving that winter travel

in the back-country was practicable."94 Indeed, after Wilson's experience, soldiers used these early stations and the later snowshoe cabins year-round as bases for backcountry excursions.

By the fall of 1890, Harris's replacement, Captain F. A. Boutelle, had plans to extend the outpost system by building additional cabins where necessary. He envisioned a series of cabins from which soldiers could pursue their efforts to protect park resources. Indeed, Boutelle was responsible for creating the network of snowshoe cabins found throughout the park today. Interior Secretary Noble approved the building of six additional cabins, but authorized Boutelle to spend no more than \$100 on each one. ⁹⁵ In a decision that would come back to haunt the department, Noble denied Boutelle's request for \$75 for sleeping bags, on the grounds that they were too expensive. He asked Boutelle to look into purchasing ones that would "answer the purpose" for "considerably less." ⁹⁶

Shortly after Boutelle was replaced by Captain Anderson on February 15, 1891, President Benjamin Harrison set aside the nation's first timber reserve, the Yellowstone Timber Land Reserve, a large area that wrapped around part of the park and extended 25 miles to the east and 8 miles to the south. Because Anderson bore responsibility for providing the same protection for this new reserve as he did for the park, he felt it was important to establish a new outpost near the park's southern boundary, close to the junction of the Lewis and Snake rivers. The park's large elk herds, and the increase in settlements near Jackson, Wyoming, and Henry's Lake, Idaho, also influenced his decision. Anderson sent a crew to the area during the spring of 1892, to build a "hut" (a regular station) and stables at Polecat Creek, just south of the park boundary, and to supply the station with sufficient hay for use during the winter of 1892–1893.⁹⁷ In his report of 1892, Anderson mentioned that he would keep the station at Polecat Creek "garrisoned by a dismounted party, with snowshoes, all winter," because, as he put it, he "fully realize[d] that poaching in that vicinity need[ed] increased attention." He also mentioned that he had added an outpost at West Thumb and a year-round station in the Riverside area.98

Despite the army's efforts to stop poaching, the slaughter of game persisted. The problem was not necessarily the number of outposts, or the number of men stationed at them; rather, it was finding the right men for the job. "My great trouble," Anderson wrote, "is to

get uncommissioned officers to put in charge of [the soldiers] who are able and disposed to cope with the class of men who form the poaching population. . . . I need at least two more scouts for this purpose."99 The use of scouts—men experienced in the ways of the mountains and familiar with poachers—was essential to the success of the snowshoe cabins as protective devices. As Haines wrote, "The scouts passed along the lore of their way of life, the use of skis, how to dress and what to carry on patrols, where to travel and what to look for, and, occasionally, how to get out of a tight scrape." Haines believed that these scouts were essentially training "a nucleus of rangers for the civilian National Park Service when it took over administration from the army."100

Indeed, regular soldiers on duty at headquarters sometimes lacked necessary preparation for their mission. For example, in 1899, when a lieutenant colonel of the Sixth Cavalry visited the fort as acting inspector general, he noticed that "a number of the men, particularly the recruits, need[ed] . . . more of the individual [cavalry] drill." The officer attributed this need for remedial work to "the nature of the duties at this post, and the limited time for instruction, . . ." and recommended that, "as far as practicable, only well instructed men be assigned to the troop at this post." While they were on the whole good men, he noted, they were rather young and inexperienced.¹⁰¹

In his annual report for 1894, Captain Anderson greatly regretted that he did not have the manpower to protect the park and the new timber reserve and still have his men "perform all of their ordinary military duties." He also decried the fact that he still had only one citizen scout to aid in all this protective work. He felt that a station near the mouth of Thorofare (then "Thoroughfare") Creek would be a great help in this effort, but didn't feel it was feasible at the time due to his limited personnel and the site's long distance from the supply source at Mammoth Hot Springs. 102 Remoteness was also a problem with the outpost on the Snake River, which had proven less successful than Anderson had hoped. "It is too far away to be easy of supervision," he wrote. "It is located in a part of the country much frequented by hunting parties, and the section under its protection is too extended and too rough to permit very effective scrutiny."103

By 1895, things had improved, and Anderson was well pleased with the park's system of outposts and the work done by the men stationed at them. While the work was hard, "involving much riding in summer,

exposure to heat and to cold, much snowshoe work in winter, and the incurring of many dangers," a "better class of soldiers" was drawn to the station life, Anderson reported, and they were eager to apply for "this sort of service." Anderson recognized that it was the "freedom and the ease of the life that [made] this duty very popular." That same year, Anderson added one station for winter use by one sergeant and three men near the Mud Volcano area. "The object of this new station," he explained, "was the protection of the bison that winter in the Hayden Valley." 105

Anderson also received authorization in 1895 to use park appropriations for "improvement in the employment of additional scouts." This approval may have been the result of Anderson's increasing impatience with the lack of funds available for administration and protection of the park. Since the failure of Congress to appropriate funds for the administration of the park in 1886, acting superintendents were only allowed to expend incoming lease revenues. In 1894, Anderson was allowed, as he put it, "the munificent sum of \$250," which was nearly all used for cleaning up trash and other detritus left behind by roadside campers. He even had had to use his own funds to pay for his soldiers' meals, because both the War Department and the Department of the Interior refused to approve funding. Anderson placed the blame squarely on the shoulders of the Interior Department, as the expense "was incurred in the proper 'management' of the Park," even if, as the department argued, the "bills were incurred by people in military service." "A consequence of such [Department of the Interior] rulings," Anderson seethed, "must be to dishearten and discourage any superintendent, who, no matter what his enthusiasm may be, will naturally feel averse to paying a tax on his own efficiency."106

By 1897, visitation to the park, which had been down for several years due to the 1893 depression and railroad strikes, increased again, and all of the troops were kept on the park's main roads to prevent traffic accidents. The increase in visitors prompted Colonel Young, Anderson's successor, to ask for one additional troop of cavalry or one company of infantry. Because the army ignored this request, Young had to abandon "two important summer outposts." Luckily, the fire threat was not high during the 1897 season. In a letter to the interior secretary that July, Young asked for money to construct three additional outpost cabins, some temporary shacks for snowshoe parties, and provision boxes for the temporary shacks. 108

Despite the continued lack of staff, Young made at least one major contribution to the station system: he instituted a method of recordkeeping for each of the outposts, a tradition still in place today. Soldiers were required to keep a logbook with an accounting of the day's events, including numbers of miles traveled; numbers of men used; destination of travel; type of travel (snowshoes, skis, horseback or foot); number, location and kind of game seen; and weather statistics. They then had to compile and send to headquarters a monthly report based upon this accumulated data. ¹⁰⁹ Furthermore, Young gave his men instructions regarding use and care of the snowshoe cabins:

All persons are enjoined to use the rations in the snowshoe cabins only in case of necessity; never under any circumstances to waste any of them and to always to leave the cabins and their contents secure and in good condition. The ax and shovel must be left inside, the comforts hanged [sic] up, the cooking utensils left clean and dry and the food in its box secure from mice, etc. Enough dry wood for one night should always be left in the cabin.¹¹⁰

Young's successor, Captain Erwin, lauded the protective system put in place by his predecessors. "The system of enforcing [the rules and regulations] by means of soldiers stationed at nearly regular distances on the usually traveled routes, and who patrol these routes . . . and . . . who are always present at the most interesting points, preventing their desecration and the destruction of the natural phenomena, has been established for some years, and no better could be devised," he wrote in his 1898 annual report. Soldiers also recorded information about visitors to the park. Such records helped the administration to track and monitor tourists' movements.

In 1899, nine stations were in use (at Norris Geyser Basin; the Lower Geyser Basin; the Upper Geyser Basin; West Thumb; Lake Station, near the Lake Hotel; the Grand Canyon; Soda Butte; Riverside; and Snake River). ¹¹² Captain Brown, who replaced Captain Wilder (who had replaced Erwin), proposed adding two more: one "in the extreme northwestern corner of the park" (what would become Gallatin Station in 1910), "and the other in the southwest corner" (what would become Bechler River Station in 1910). "Under the present conditions," he argued in his proposal to the interior



Norris Soldier Station, pre-1908.

secretary for an additional \$1,912.50, "these sections where there is much game must be protected by the detachments from Riverside and Snake River, respectively, which are too distant to do this efficiently." In the meantime, he was able to "modify dispositions" somewhat for the winter of 1899 by "abandoning the Thumb and Upper Geyser Basin as stations [and] changing the number of men at others." Furthermore, he intended to "establish within a few days [of writing his report] a new station about 10 miles northeast of [Mammoth], on the east side of the Yellowstone River, to cover what is known as the Hellroaring country." 114

To facilitate patrolling from these well-spaced stations, "a number of snowshoe cabins [were] constructed at about a day's trip apart." According to Brown, these snowshoe cabins and the supplies they contained—"a small amount of food . . . together with bedding, fuel, matches, cooking utensils, etc."—were indispensable. Without them, as he put it, "trips of only one day at a time, or at most only two or three days, could be made from permanent stations, as the travel has to be made on skees [sic], . . . and such short scouts would leave a large part of the game country entirely unprotected."¹¹⁵

Patrolling the park from these outposts—stations and cabins alike—differed markedly depending on the season. In the summer, anywhere from three to ten enlisted men and one noncommissioned officer were positioned at each station. During these busy tourist months, they patrolled primarily along the park's main roads. During fall and winter, the number of men at each station varied, as did the areas they patrolled. Brown noted that "frequent trips" were made from the stations and cabins "by small detachments, accompanied by the

civilian scouts"; there were "from two to four of these parties out continually during the hunting season." They scouted areas "where the game usually range[d] and where the poaching would most probably be done." According to Brown's "Instructions for winter patrolling," which included a list of snowshoe cabins used at the time, soldiers were supposed to take certain routes into the country around their cabins on a regular basis, so as to patrol the park effectively. By 1900, there were 21 cabins, including the following: Coulter Creek Cabin, Boundary Creek Cabin, Lewis River Cabin, Park Point Cabin, Astringent Creek Cabin, Proposition Creek Cabin, Trappers Creek Cabin, Trout Creek Cabin, Willow Creek Cabin, Hellroaring Creek Cabin, and Bartlett Cabin. 117

Captain G. W. Goode, who replaced Brown in July 1900, decided to retain use of the Thumb station late into the fall, to monitor hunting parties returning from the Jackson Hole area, and to cover the areas thought critical by Brown by putting a "detachment with a civilian scout at Knowles cabin [near Crevice Creek] to watch the Hellroaring country, and have the southwest corner of the reservation frequently scouted from the Snake River station during the fall and winter." Like Brown, Goode found the cabins highly useful: "they are most effective as a means of protection during the fall and winter," he wrote, "the scouts being enabled to cover practically the entire reservation and penetrate to localities which would otherwise be inaccessible at a time when poachers are at work." In his recommendations, Goode made a strong case for the stations Brown had wanted, plus some others. His proposal included a station near the southwest corner of the park (on the Bechler River), one at the southeast corner (on Thorofare Creek), one near the northwest corner (on the Gallatin River or Fan Creek), one where the southern boundary crosses the Snake River—"present Snake River station to be abandoned," he wrote—and one at the town of Gardiner, Montana. 118

Goode appreciated the contributions made by civilian scouts—"their work, in conjunction with that of the local magistrate, has been . . . the salvation of the game," he wrote—and he recommended increasing their number to ten. These civilian scouts "know the country and are trained woodsmen in all seasons," he reasoned, "whereas the soldier, as a rule, is replaced before he has time to become proficient in such duties." In essence, Goode argued for a permanent force of expert park employees who could enforce the rules and provide

assistance to visitors no matter which acting superintendent was in office. Goode advocated providing "suitable quarters" for scouts at Fort Yellowstone and the Lower Geyser Basin, and dividing the park into districts "to be constantly patrolled . . . after the manner of game wardens."¹¹⁹

When Captain Pitcher replaced Goode as acting superintendent in May 1901, he and Chief Engineer Chittenden, whose men also used the stations, recommended enlarging and improving them to be "as neat and comfortable as possible." These changes were necessary, Pitcher wrote, "for the men who occupy them suffer many hardships, especially during the winter, when they are entirely cut off from the outside world for several months."120 Pitcher and Chittenden also recommended adding stations so the total number was "12, and possibly 13." At \$2,000 each, including outhouses, and considering the substantial distances across which many of the building supplies would have to be transported, Chittenden figured that the project would cost \$25,000.121 But a shortage of carpenters during the following year prevented any major improvements to the stations, and without authorization to enlarge stations and add new ones, Chittenden's men could do little more than repair the present station houses, which they did between 1901 and 1903. In 1902, Chittenden's men tore down the soldier station on the Snake River and removed it "to a point where the road crosses the boundary of the park."122 In 1903, Chittenden wrote that a new station house and stable would be built at Gardiner before the end of the year. 123 He also told Pitcher in September of that year that in 1904, he would erect "three good buildings at Tower Falls, and one in the Gibbon Canon."124

Three new station houses were built in 1904 and early 1905: one at the Thumb of Yellowstone Lake, one east of Sylvan Pass on the East Entrance road, and one at Soda Butte, along with an officer's "dog house" and barn. Chittenden had planned to build the Soda Butte station nearer to Cooke City, Montana, before the snow closed down operations for the year, but did not. 125 His men also constructed "small quarters for officers' use" at eleven of the stations. 126

When the inspector from the Adjutant General's Office visited Yellowstone in September 1904, he recommended rebuilding the post's sheds and corrals "in a neat and substantial manner, suitable to the surroundings," and reserving a small amount of money "to improve the interior finish [of the patrol stations] and render the lodges cheerful in winter." The inspector maintained

that the men who lived in the stations were "isolated for at least six months in the year, and [therefore] extra allowance should be made for their comfort and contentment."127 In September 1905, an inspector again noted some deficiencies in the stations: the station at the Upper Geyser Basin had a latrine and bathroom built out over the same stream from which, just 50 yards below, the men procured their drinking and cooking water. There was also a problem with the water supply at the Tower Fall station, and because the structure there was old, with a dirt roof, the inspector recommended building another station where there was more water. He also recommended extending telephone lines to every station, and had one final complaint: "The enlisted men on patrol duty along the roads wear shirts and no coats while on said duty." In the days before a cooler summer wardrobe was added to the uniforms of military officials, this complaint proved difficult to remedy. 128

Wildlife Policy and Tourist Management

During the twenty-odd years this chapter covers, acting superintendents enforced a number of policies, including those passed down from the Department of the Interior and Congress and those of their own making with respect to wildlife, fire, and visitor management. These policies affected both the natural and the built environment as small steps were taken toward providing better public access to sites so visitors could appreciate the park's unique features. For example, additional trails and comfort facilities were built during this time, as were a fish hatchery, enclosures for game animals, and informative signs. Finally, active management of the park began, as the acting superintendents undertook control of both a rudimentary budget and a vital force of men in charge of protecting the park and its visitors.

While decisions regarding wildlife and tourist management and a public access infrastructure took longer to evolve, protective policies affecting the park's thermal features were developed right away. For example, one of the first decisions Captain Harris made was to forbid free-roaming livestock in the park, as the danger that livestock posed to thermal features had been evident as early as 1883, when John Dean, an assistant superintendent to Patrick Conger, had observed that the "cattle belonging to the Park Improvement Company [were] giving much trouble and doing considerable damage by

running over the formations." "The Company should have a herder with them at all times," he wrote that July. 129 Because the problem remained unresolved in 1886, Harris chose to act. "I have . . . found it necessary to forbid the turning loose of stock to graze in the vicinity of the Hot Springs and Geyser formations," he wrote in his first annual report. "This practice," he added, "was not only a source of annoyance to visitors, but of much injury to the formations." 130

Of course, Harris had more to worry about than just free-roaming stock when it came to the defacement of thermal features. Tourists, in search of souvenirs and a "good time," habitually marred the park's curiosities. Harris had little patience with these "shallow-minded visitors" who took pleasure in etching their names into the formations, and broke off pieces to take home. "It may be said without exaggeration," he reported in 1886, "that not one of the notable geyser formations in the Park has escaped mutilation or defacement in some form." Another favorite pastime of offenders was disrupting eruptions of the geysers by throwing sticks, logs, and other debris into them.¹³¹ "Nothing short of the arrest and expulsion from the Park of a number of these offenders, who have the outward appearance of ladies and gentlemen, will probably be effectual to stop the practice," Harris lamented in 1887. 132

In fact, arrest and expulsion was the only recourse available to Harris and his troops for these and other offenses in those days prior to the Lacey Act, and Harris relied on the practice as "indispensable to the proper protection of life and property." He felt it was effective to have "some punishment, or at least inconvenience," follow any violation of the rules and regulations, and faithfully attempted to make those rules and regulations known. "By a liberal distribution and posting of the published rules and regulations and by timely admonition and warning," he wrote in 1889, "it has been the endeavor to prevent the commission of offenses rather than to seek opportunities to inflict penalties." 134

With the Lacey Act still seven years away, Harris pleaded for "an established form of government for the Park," with "such legislation as shall define the jurisdiction of the Territorial courts within the Park, so as to permit the same powers which they now have with reference to other reservations, and the enactment of a stringent law for the protection of [for example] the game." Harris did not benefit from such legislation while he was acting superintendent, and he regretted it: "The inadequacy of mere rules and regulations, unsup-

ported by any appearance of force or penalties for their infraction soon become apparent," he declared, "and there has been hardly a report rendered relating to the Park during the 18 years of its existence in which the necessity of some further provision of law for its preservation and government has not been urged." ¹³⁶

In addition to "some definite and well-considered scheme of government," Harris also wanted more troops. 137 This appeal was answered in July 1888, by Secretary of War Endicott. Beginning that summer, an additional company of soldiers, the Twenty-second Infantry, under the command of Second Lieutenant T. M. Moody, were on duty in the geyser basins and other points throughout the park. Harris told the secretary of the interior that the additional force would "greatly facilitate the enforcement of the established rules and regulations" in areas of the park "previously unguarded." 138

Troops patrolling the park and stationed at the outposts were responsible for many tasks. Protecting the park from vandalism was just part of their regimen. They also had to watch out for fire and poachers, and were responsible for a rudimentary form of wildlife management. As Haines noted, the military officers in charge of the park's welfare around the turn of the century became actively involved in "The Yellowstone Crusade," the "new policy of absolute protection of the Park's wildlife." The acting superintendents were largely responsible for this crusade. Historian Paul Schullery has acknowledged that several were conservation-minded, noting that some "were made honorary members of the Boone and Crockett Club and became eloquent spokesmen for the conservation movement." 140

Harris's interpretation of the policy of "absolute protection" amounted to feeding elk along the roadways and instigating close observation of buffalo "for several years to determine with any certainty the number of these animals, [and] whether or not they are diminishing in numbers." Unlike his successors, Harris did not include a predator control component in his approach. While he believed there were animals "not worthy of protection, chief among which is the skunk," Harris did not succumb to popular worries that carnivores were decimating the park's herds of elk or bison. "[T]he fears of those who think the game animals may be exterminated by the carnivora may be considered as without present foundation," he wrote in 1888.

Harris also did not favor the introduction of wildlife to the park, even with the goal of augmenting its diminishing numbers of bison. When he was invited to purchase bison and place them in the park as part of an effort to conserve the quickly disappearing species, he declined, replying: "It is not the policy of the government to endeavor to make this Park attractive, by making a collection of domesticated animals, but rather to preserve the reservation in its natural condition and to promote the existing game animals so that they may breed in security." ¹⁴³

Harris was so successful in deploying troops to protect the park that by the end of his tenure as acting superintendent in 1889, the park had a system of well-equipped and well-mounted patrols to protect its wonders and wildlife. At one point, a visiting Harvard scientist, Charles Sargent, complimented the military presence and suggested that "the guardianship of all the nation's forests should be confined to the Army and that forestry should be taught at West Point." ¹⁴⁴

When Captain Boutelle took over from Harris, he found the park in good order. "Harris's management has left matters in the Park in so healthy a condition that little trouble is apprehended in its government," he wrote in his "Supplemental Report" in the summer of 1889. Because the winter snowfall had been light, and the spring early and dry, Boutelle's immediate concern was a lack of firefighting equipment. Boutelle maintained that a raging fire could wreak havoc on a watershed and resulting water flow to the surrounding area, and he feared the worst. He was also concerned about potential harm to the beauty of the park. Accordingly, Boutelle sought an appropriation to cover the cost of clearing all downed timber at least 100 yards from either side of the roads and trails. He also advocated the creation of a system of regularly controlled camp sites located at intervals of a few miles. These, he felt, would facilitate regular patrols and make it easy to ensure that campfires were extinguished. His wishlist also included two additional water wagons, more rubber buckets, axes, and shovels.145

Unfortunately, Boutelle did not receive the extra equipment he needed in time. After a private citizen paid \$40 for the purchase of rubber buckets—"Would that Congress would take such an interest in the protection of the Park before it is too late," Boutelle chided in his annual report for 1890—Boutelle pressed his request for "two tanks and the necessary number of draught animals for the transportation of water." "Congress should deal generously with [the park]," he wrote. "Language and art have so far failed to properly paint the beauty of the Grand Canon," he reminded the secretary of the interior; "a single fire would seriously mar its grandeur by



Soldiers with captured poacher Ed Howell and Howell's dog. 1894.

destroying its fringe of forest."¹⁴⁶ When Boutelle looked at a forest, he saw a water storage system. For him, the forest fire that wiped out timber spelled drought to all those "dependent upon a generous flow of the streams after the cessation of spring rains."¹⁴⁷ Hence, Boutelle desired to expand the system of snowshoe cabins for fire control as well as protection from poaching.

If Harris's position on wildlife management favored the "preservation" aspect of the park's mandate, Boutelle's position was strong on the "enjoyment" angle. With just a small appropriation, for instance, Boutelle felt he could erect a roadside enclosure for elk, deer, and antelope, to be viewed by passing visitors. "The only expense attending [the animals'] support," he wrote, "would be a little hay for winter." ¹⁴⁸ In 1890, to offset the game's habit of seeking "the high points during the fly season," he proposed an elk enclosure on Swan Lake Flat, and a bison enclosure in Hayden Valley so that "all [tourists] may at least see a sample."149 Boutelle also believed that predator populations should be reduced by extermination, and sought permission from the secretary of the interior for his troops to take part in an extermination plan. 150 "While they [predators] may be something of a curiosity to visitors," he wrote, "I hardly think them an agreeable surprise."151 Secretary Noble opposed Boutelle's plan to kill predators: "Upon further reflection, I have to say that I deem the killing of animals of any kind, whether savage or others, in the Park, will be a step in the wrong direction. You are directed not to permit the same under any circumstances," he wrote to Boutelle in August 1890.¹⁵²

While Boutelle's plan to reduce predator numbers was quashed, his interest in capturing wild animals for human viewing and enjoyment bore fruit—though not in the way he intended. During the fall of 1890, Secretary of the Smithsonian Institution Samuel P. Langley took up correspondence with Interior Secretary Noble about the prospect of supplying animals from Yellowstone National Park to the National Zoological Park in Washington, D.C. Noble asked Boutelle to carry out the plan of sending animals forthwith. "I may add," Noble penned to Boutelle, "that it is in my opinion a most desirable thing to do for the good of the people and one in which I shall take great pleasure in having hearty co-operation in." He would, he wrote, supply monies from the contingency fund to offset any hardship incurred in the capture and transfer of the animals. "This will accomplish one of the purposes for which the Yellowstone Park was established," he concluded. 153 Indeed, supplying animals for distant zoos was part of what historian James Pritchard referred to as "the older natural history approach to understanding wildlife in the park." The practice of supplying "excess" animals to zoos, and for restocking range outside the Yellowstone region, was continued until well after the National Park Service was established in 1916. 154

Another proposal of Boutelle's, and one upon which he acted very soon after arriving in the park, was the introduction of non-native fish into park waters. Boutelle's plan received a favorable response from Colonel Marshall McDonald of the U.S. Fish Commission. In his history of the park, Haines wrote that McDonald's



Bison heads confiscated from poacher Ed Howell. 1894.

"interest in Boutelle's proposal stemmed from his fledgling organization's need of a proper outdoor laboratory in which to exercise its science." McDonald was interested in developing "a sport fishery in what was then the only area of wild land under federal management." Boutelle's mission was very similar: he wanted to improve fishing within the park and throughout the region fed by the waters originating in the park. Thus, in addition to the possibility of "pleasure-seekers" being able to enjoy fishing "within a few rods of any hotel or camp," Boutelle believed that "the stocking of these waters [would] add vastly to the breeding-grounds of the tributaries of the Missouri and Snake Rivers and add immeasurably to the food supply obtained from those waters." 156

Colonel McDonald began his fish-stocking project almost immediately. Seven thousand young, non-native trout were put in the west and middle forks of the Gardner River above Osprey Falls, the Firehole River above Kepler Cascades, and in the Gibbon River above Virginia Cascade. ¹⁵⁷ By the end of July 1890, McDonald hoped to have 150,000 trout and salmon planted in the park's rivers and lakes. An eager angler himself, Boutelle appreciated having park waters stocked with fish. It was "very desirable that all waters of this pleasuring ground for the people should be so filled with fish that all who come may enjoy the sport," he wrote. ¹⁵⁸

One area of wildlife policy upon which Boutelle and Harris agreed was the need for legislation supporting enforcement of the park's rules and regulations. As Harris had before him, Boutelle chastised the Department of the Interior for failing to create a legal framework for

dealing with problems as they arose in the park. "The most embarrassing features of Park administration," he wrote just after taking office, "appear to be the want of any law except such as is vested in the Secretary of the Interior in establishing rules and regulations." Boutelle complained that this rendered the superintendent unable to distinguish legally between offenses as diverse as "breaking a small piece off a formation" and "carrying away a tourist's trunk." Boutelle had no suggestions at that time to remedy the situation; he merely wanted to "suggest that something should be done." ¹⁵⁹ In the following year, he recommended that Congress provide a civil commissioner "before whom . . . lawbreakers may be brought and properly punished."

When Captain George Anderson came on duty in February 1891, he encountered the same troubles Harris and Boutelle had experienced: tourists continued to deface thermal features and disrupt geysers, poaching remained an issue, and there was still no framework within which to deal satisfactorily with legal issues. By the time Anderson left, however, two of those three problems were resolved.

In his first report, Anderson complained bitterly about tourist vandalism. "The most ceaseless vigilance is needed to prevent tourists from mutilating the beautiful formations in the Park," he declared. "I do not believe," he quipped, "10,000 men could *entirely* accomplish it." While the ladies were the most notorious specimen hunters, according to Anderson, men had a bad habit of their own, namely "the persistence with which [they] will write their unlovely names on everything that is beautiful

within their reach. This form of barbarism is confined almost entirely to men, and, if we may judge from the writing, to the boorish and illiterate." ¹⁶¹

To deal with poaching, Anderson wanted to prohibit firearms completely within the park, "leaving with the superintendent the right to make carefully considered exceptions." He also made no secret of his frustration about the lack of legislation to back the park's rules. "It is a serious matter that so simple and muchneeded a statute as the one granting legal force to park regulations can not be passed," he complained. "It can antagonize no interests," he reasoned, "except those of the poachers, with whom no friend of the park can have sympathy." 162

The law for which Anderson and others had clamored for so long finally came about due to a poaching scandal that forced Congress's hand. In March 1894, the "fortunate capture" of notorious poacher and scofflaw Ed Howell, whose numbers of illegal takings were enormous, brought the poaching issue to the front pages of newspapers and to the attention of the American people. As Anderson noted in his annual report for 1894, the "feeling aroused in the minds of the public by [Howell's] act[s] of vandalism stirred Congress to prompt action, so that on May 7 an act for the protection of game in the Park received the President's signature." The Lacey Act, named for Iowa Representative John F. Lacey, created the framework necessary for punishing poachers. As Anderson noted, the Howell affair was, in one sense, "the most fortunate thing that ever happened to the Park, for it was surely the means of securing a law so much needed and so long overdue."163 The Lacey Act made illegal "all hunting, or the killing, wounding, or capturing at any time of any bird or wild animal, except dangerous animals, when it is necessary to prevent them from destroying human life or inflicting an injury." It also authorized punishment for other crimes committed in the park and gave exclusive jurisdiction of the park to the United States. Thus, 22 years after the park's creation, the secretary of the interior was finally able to publish rules and regulations with legal backing.¹⁶⁴

Anderson continued Boutelle's policy of supplying animals for the National Zoo in Washington, D.C. In 1894, however, after passage of the Lacey Act, he stopped shipment temporarily, awaiting authorization from the Interior Department to continue—authorization he received shortly thereafter. While animals were awaiting shipment to the nation's capital, Anderson noted, they provided a great source of interest and enjoyment

for tourists.¹⁶⁵ Because he had received some money for enclosures (\$300 in 1892), he drew up plans for a more elaborate structure and asked Secretary Noble for additional funds.¹⁶⁶ The acting secretary of the interior apparently thought the price tag for this new enclosure too high, however, and in 1894, Anderson reported that "nothing would probably be done in the matter."¹⁶⁷

Corralling some animals for viewing and sending others off to zoos were not ways to guarantee the continued well-being of native species, and it was not long before Anderson realized that the park's bison herd was in danger. In 1892, he acknowledged the difficulty of preserving their numbers, but promised to "devote my best energies to it."168 According to his reckoning, the herd had numbered about 400 until 1894, when, as he put it, the animals had "been more carefully watched and more accurately counted than ever before," and only numbered about 200.¹⁶⁹ When their population had not apparently increased in the following year, Anderson proposed to spend \$3,000 in appropriations to construct an enclosure and feed as many bison as could be driven into it during the upcoming winter. In this way, Anderson believed that the park would be able to "retain a small herd and keep them nearly in a state of nature."170 This plan failed, however, when gamekeepers failed to capture the few animals that entered the enclosure as they waited for more to arrive.

By 1896, Anderson's optimism about the bison had waned dramatically. He was only able to ascertain the existence of "25 or 30, and possibly 50." His chances of saving the herd, he lamented, were doubtful. "The forces of nature and the hands of man are alike against them," he wrote sadly, "and they seem to be struggling against an almost certain fate." ¹⁷¹ In addition, poachers continued to take bison scalps as quarry, speeding the population's decline. But with the conviction of some poachers in 1896, Anderson felt better. "The effect of these trials and convictions has been most salutary," he wrote, "and depredations will hereafter be less numerous. . . . Poachers will be more cautious in the future, as they are well aware that they will not again escape with so slight a punishment." ¹⁷²

While bison numbers dwindled, the introduction of non-native fish, especially trout, into the park's streams, rivers, and lakes was, according to Anderson, an unmitigated success. Over the course of his tenure as acting superintendent, Anderson requested that more fish be introduced, or "planted." In particular, he desired to see black bass introduced into some of the park's lakes.

Although several attempts were made, none succeeded. The non-native trout did take, however, and as Anderson reported in 1894, it was "the general verdict of all who have fished here that no better fishing can be found anywhere in the world." Until 1895, Anderson did not advocate any restrictions on fishing, which he felt was "sufficiently limited by climatic conditions." That year, however, he proposed to limit the minimum length of trout caught to six inches. The size restrictions appeared in the *Instructions to Persons Traveling Through Yellowstone National Park* printed in 1897: "All fish less than 6 inches in length should at once be returned to the water, with the least damage possible to the fish," the rules read. Also, anglers were instructed to collect no more fish than they needed for food.

The introduction of fish into the park's waters might have led to good fishing, but not all have agreed over time that the program was a "success," or even a good idea. While it would be some years before park officials began to see the fish planting program as a problem, it is now clear to historians and ecologists that the program, as Haines put it, was "not well coordinated and [was] . . . ill-conceived, if not [indiscriminate]—particularly the introduction of exotics at the expense of native species." Haines referred to much of the program as "an impairment that must now be corrected through selective fishing."176 In his environmental history of Yellowstone, Paul Schullery wrote that "[t]he 'Johnny Appleseed' mentality of many land users, whether managers or the public, has done irreparable harm to native landscapes." "Aquatic ecosystems," he continued, "are exceptionally vulnerable to invasions of nonnative species."177 Schullery added that these early efforts on the part of "park enthusiasts for recreational fishing resulted in the serious alteration of the fauna of many of Yellowstone's watersheds[:] the native fish populations were disastrously damaged by overharvest and by the introduction of nonnative species; [and] some native species were extirpated."178

Anderson shared Boutelle's concern for protecting the park from fires, and ordered that patrols leave regularly from cabins and stations to check for signs of conflagration. "The system of daily patrols from my numerous outposts has done much to prevent fires," he proclaimed in 1895. "My rule is to have a man start every morning from each of these stations, carrying with him a bucket and a shovel with which to thoroughly extinguish any smoldering embers that may be found in the abandoned camps of tourists," he explained.

"These patrols continue on their way until they meet similar patrols from the neighboring station, when, after a short halt, they retrace their steps in the afternoon to their own proper home." By the middle of the season in 1895, soldiers had arrested numerous violators of the rule to extinguish all fires, and with the force of law behind them, officials made twelve convictions. Anderson cited the thoroughness of his system as the source of these good results. 179

Acting superintendents Young, Erwin, Wilder, Brown, and Goode also made policy decisions that affected carnivores, aquatic fauna, and bison in the park, and they, too, were appalled by tourists' penchant for defacing park property. Colonel Young, for example, noted in 1897 that visitors seemed to suffer from a "mania for carving and writing names on guard rails, benches, etc., placed for the safety and convenience of visitors." "It is contemplated," he wrote wryly, "to erect a large bulletin board for the convenience of visitors next season affected with this insane passion, with columns for name and address, and a heading, 'All fools and idiots required to register here only." 180

With respect to predators, Colonel Young believed that coyotes were especially destructive of young antelope, and he thus advocated poisoning them. With this move, he acted against the better judgment of "a few friends of the park," who contended that "if the coyote is exterminated the gopher in time would eradicate the grass from the winter valley ranges." "I do not concur in this opinion," Young retorted, "and, request authority to reduce the number [of coyotes] so that they will not hunt in packs."181 Captains Erwin, Brown, Goode, and Pitcher agreed with this policy. By 1904, Pitcher also believed it was necessary to exterminate cougars from the park; in that year alone, fifteen were killed. 182 Of the next year, Pitcher wrote that carnivores such as "mountain lions, lynx, and coyotes" were "destroyed whenever the opportunity affords." As he put it, predator control was "a matter of business and not of sport." Only scouts and "certain good shots among the soldiers" were allowed to conduct the killing. Pitcher did not favor providing a general permit to kill predators, believing it "would result in endless trouble in the matter of protection of other game."183

Young and his immediate successors also supported the non-native fish introductions. In fact, Young and Erwin suggested that a fish hatchery be built in the park, and a few government men be trained in artificial propagation of trout. ¹⁸⁴ This view was not shared by the

U.S. Fish Commission, but Erwin persisted. He believed that the park's position as a "reservoir drained by the principal rivers of the Atlantic and Pacific oceans," made it "the most appropriate and suitable place in the United States" for a hatchery. As his predecessors had done, Erwin called for adequate appropriations to maintain the park both as a "pleasuring ground" for tourists and as source and supply of "natural phenomena." It "will be seen," he wrote:

that the park as a game and fish preserve has not its equal in the world; the variety is great, and it is eminently fitted to sustain this variety under the protection of the Government. An increase in appropriation means an increase in the means and facilities of protection, and as a national game preserve, which not only holds secure the remaining wild animals and game birds of this country, but enables them to breed and multiply, thus supplying the needs of neighboring States, it is deserving of an increased fund for this purpose.¹⁸⁵

With the fish planting program well underway, calls for a hatchery continued. Finally, in 1902, "a fish egg collection station was authorized."186 While the head of the U.S. Fish Hatchery in Spearfish, South Dakota, selected a site on "Willow Creek" (today's Obsidian Creek) for the park's first hatchery, the West Thumb site (mentioned earlier) was chosen instead. 187 D. C. Booth, superintendent of this fisheries station for the U.S. Bureau of Fisheries, reported great success at collecting eggs, shipping them elsewhere—even as far as North Wales—and planting fry. In 1906, Captain Pitcher oversaw improvements at the U.S. Bureau of Fisheries buildings and grounds at West Thumb. The hatchery building got new windows, a cornice, and cedar shingle siding, which was left to weather while the trim was painted white. A log cottage and barn were also built on the premises. 188

While the park's exotic fish thrived, its native bison teetered on the brink of extinction. By 1897, the population had dwindled to around 24. 189 Publicly, Second Lieutenant Elmer Lindsley, who was in charge of the outposts and scouting duties during that period, hoped that with the poaching under control, bison numbers could increase. Privately, he remained skeptical. "Whether they will still decrease on account of natural causes only time can tell," he reported. 190 Acting Superintendent Erwin

was convinced that genetics were the problem, and recommended purchasing a few good bulls "to prevent the extermination of this herd from the evils of inbreeding." ¹⁹¹ In 1901, Captain Pitcher echoed Erwin's call for new blood. He also guessed that the herd consisted of no more than 25 animals, and advocated starting a new herd and keeping it corralled, "turning the animals loose gradually as the herd increase[d]." ¹⁹²

Congress provided \$15,000—half of what Pitcher estimated he would need—for the purchase of 30 to 60 bison and the construction of an appropriate enclosure for them. 193 This enclosure was larger and more substantial than the one Anderson had envisioned. Furthermore, Interior Secretary F. A. Hitchcock created the position of park gamekeeper, and in July 1902, the post was filled by Charles J. "Buffalo" Jones, a "crotchety" sort who got along well with Pitcher in the beginning, but ended up alienating him and others before resigning in September 1905. 194 While they were still on good terms, Jones and Pitcher set up a spot for the corral close to Mammoth Hot Springs, and purchased 15 to 18 cows from the Allard herd of Flathead Agency in Montana, and three bulls from the Goodnight herd of Texas. They also built a smaller corral near Pelican Creek, where the calves of the wild herd could mingle with purchased animals. Pitcher believed it would be necessary to familiarize the bison with humans so they did not flee the park when the summer season arrived. He also wanted to "feed and handle the new herd of buffalo in the same manner that domestic cattle are handled in this country," he wrote, "and before turning them loose to brand them 'U.S.' in such a way that they can always be identified as United States property."195

By 1904, the new herd of bison numbered 39, and by 1906, 57. In that year, the young bison were moved to a spot on the Lamar River (at the mouth of Rose Creek), where it was possible to raise hay and keep them until, as Pitcher put it, "they have become thoroly [sic] at home." "After this has been accomplished," he continued, "they will be gradually turned loose, and it is believed that they will not wander far from the haystack which will at all times be kept on hand ready to be fed out to them." The older bison would remain at Mammoth, and in this way the herds would be divided "so that in case of sickness or disease of any kind in either band it would not necessarily be communicated to the other." Pitcher had a log cabin built for the gamekeeper at the Lamar River site, and a roughly one-square-mile parcel of "fine grazing land" enclosed for the bison. 196



Antelope feeding in hay field on Gardiner Flats. 1904.

Thus began what would come to be known as the Lamar Buffalo Ranch.

The idea of feeding game animals was not new. Harris had entertained it, as had other acting superintendents. By 1906, several species were being fed artificially, especially during the winter. An alfalfa field at the North Entrance, for example, was, according to Pitcher, the salvation of the antelope herd.¹⁹⁷ In conjunction with the alfalfa field, Pitcher had a four-mile-long wire fence erected along the park's northern boundary to keep antelope in and domestic stock out. 198 Deer and mountain sheep were also fed. Pitcher thought it not unusual or even logically inconsistent to feed wild animals in this way. In fact, he thought it perfectly within the purview of park policy. "In order to be successful in keeping wild game on any reserve," he wrote in 1905, "it is absolutely necessary either to preserve their natural feed . . . or to supply them with hay. . . . [E] ven where the natural supply of feed is preserved it is well to have a supply of hay on hand, in order to help out the weaker animals each spring . . . when the old grass is nearly all gone and before the new grass is ready for use. . . . " Another benefit of this policy, according to Pitcher, was its effect on animal behavior around humans: "[the feeding] has rendered them exceedingly tame and caused them to recognize man as their friend instead of an enemy," he wrote. 199

Pitcher did not favor close relations between all animals and humans, however. He found the situation at the hotels and camping sites where bears lingered, waiting to be fed, very dangerous. "It is a difficult matter to make some of the tourists realize that the bear in the park are wild," he wrote in 1902, "and that it is a dangerous matter to trifle with them." To warn tourists, he published and posted an official circular that

prohibited "the interference with or molestation of bear or any other wild game in the park, etc." It also forbade feeding bears "except at regular garbage piles." Pitcher wanted these prohibitions incorporated into the park's regulations so that violators could be brought before the U.S. Commissioner assigned to the park.²⁰⁰

A Public-Access Infrastructure

As it turned out, acting superintendents and their troops had more to manage than animals. It was becoming increasingly clear that managing people—and their garbage—was a full-time job. In 1887, for example, Captain Harris asked Congress for money to clean up the park. Whenever he could justify it, he told the secretary of the interior, he ordered his troops to clean up the geyser and hot-springs grounds, roadsides, and camping grounds, but he acknowledged that these acts were "a labor of love," rather than part of his men's official duties.²⁰¹ The modest sums he requested (\$3,000 in 1887 and 1888) were not asking too much, he asserted: "No other public pleasuring ground . . . of ever so humble a character, is maintained without the expenditure of a dollar for decency's sake," he chided in 1888. "Eminent men from all parts of the civilized world, scholars, law makers, divines, and soldiers come here, attracted by the fame of this land of wonders, and by the invitation implied in its dedication as a National Park, to have their senses offended and their enjoyment of nature's most wonderful and beautiful gifts destroyed by the presence of unsightly filth and rubbish."202 Funds for such purposes, however, had not been granted since 1886, and would not be forthcoming for several more years.

Harris also wanted to improve information dissemination—in particular, to provide sign boards warning park visitors about dangerous places, and displaying the names of geysers and other points of interest. He unsuccessfully requested appropriations for this purpose and "generally to keep in order and in a decent condition this large reservation which has been by law declared 'a pleasuring ground for the benefit and enjoyment of the people.'"

Harris's men also had to protect tourists from the twin perils of park tourism: the fickle forces of nature and commerce. Tourist numbers grew markedly during Harris's tenure—about 6,000 people visited the park during the 1888 season—and seeing to their safety and comfort was no small undertaking. Troops, with their

"polite but firm and decided manner," had to ensure that visitors were safe both from the dangers of a wilderness experience and from exploitation by those who provided lodging and transportation in the park. Military order number 37, for example, disseminated on June 2, 1887, commanded troops "to protect visitors to the Park from any abuse or extortion by stage drivers or other persons."203 Harris himself inspected the park's accommodations to determine whether service was adequate. In his 1887 annual report, he urged the secretary to require that park lessees provide better accommodations for visitors.²⁰⁴ While he praised the lessees when their services were commendable, Harris remained alert for missteps on the part of private enterprise. In one of the first statements on record warning against potential avarice on the part of private concessioners, Harris wrote: "... I have been very forcibly impressed with the danger to which [the park] is subjected by the greed of private enterprise. All local influence centers on schemes whereby the Park can be used for pecuniary advantage. In the unsurpassed grandeur of its natural condition, it is the pride and glory of the nation; but, if, under the guise of improvement, selfish interests are permitted to make merchandise of its wonders and beauties, it will inevitably become a by-word and a reproach."205

Later acting superintendents worried less about problems with private enterprise and more about problems with tourists. Anderson's tenure in the park saw a decrease in the number of tourists entering the park. He attributed the decline, in part, to the 1893 economic depression and national rail strike, but reckoned that economic conditions could not be solely to blame, because the European-bound steamers were full of American tourists. Instead, he felt the general American public was either unaware of the park itself, or unaware of the ease with which it could be reached. Several times. he complained to the secretary that Americans did not know about the park, whereas foreigners did. He cited as an example the fact that information about the park was being taught in German public schools, and suggested producing a publication that would make "the mass of the people . . . realize what a store of wonders and beauties they have within their boundaries."206 He wanted the publication to be written by a government employee and distributed for free.²⁰⁷

By 1897, travel to the park had increased such that more careful and exacting accounting measures were needed. An official with the U.S. Geological Society told the secretary of the interior that if all people entering the park were registered and required to carry an entry permit to be shown throughout their travels, those entering with bad intentions might be discouraged. In 1898, Captain Erwin set up a system, involving outposts, to register visitors as they entered and traveled through the park. He then compared the numbers with those from previous years to see if the park was fulfilling its mission of being a "'pleasuring ground for the benefit and enjoyment of the people." Not taking into account the anomalous year 1897, when the Christian Endeavorers came through the park on their way home from San Francisco (boosting park attendance to 10,680), park visitation was increasing satisfactorily, Erwin concluded. Indeed, the numbers rose to more than 6,500 in 1898.

Unclean campsites had long been a significant problem in the park, and with so many people touring and camping in the park, the trouble worsened. While Captain Boutelle had favored the creation of a system of regularly controlled campsites, Anderson was reluctant. In June 1892, Secretary Noble instructed him to "establish proper camping places" on roads connected to the main road. Recognizing that people would otherwise choose to camp in scattered locations, Noble believed that prepared campsites might encourage usage.²¹⁰ However, Anderson opposed a proposed system of semipermanent campsites, citing the potential that the sites would become "ill-kept, unsightly structures, [and] fit breeding places for vermin of all kinds."211 He felt that camping parties were the "source of many annoyances in park management," found them negligent in leaving campfires and careless about cleanliness, and stated that they were, in many cases, the worst offenders of specimen hunting and disfigurement of the park's features.

By 1895, Anderson's irritation at camping parties abated somewhat, after he initiated a registry system whereby he could better track their whereabouts.²¹² By 1896, he granted a license to W. W. Wylie, of Bozeman, Montana, to establish four "permanent camps," which he found preferable to the previous situation, in which transportation operations had created camps that were unsightly and difficult to supervise.²¹³

Colonel Young also grappled with how best to deal with campers. In 1897, he stationed troops at frequent intervals along the roads, "to prevent accident and imposition and preserve good order." But these guards could hardly manage the huge fields of spontaneous campsites that had sprung up throughout the park. These fields of campers were too hard to monitor, he felt, as it was difficult to "fix the responsibility of unclean camps and

unextinguished fires on the proper parties." Young's solution—to forbid free camping in the park for longer than two nights and to forbid camping or grazing stock at all between Gardiner and Mammoth—might have seemed drastic to some, but his reasons were sound. First, his solution would "prevent undue monopoly of the choicest camping places;" second, it would preserve winter feed for game. The area between Mammoth and Gardiner had become so popular that its cover of grass, vital to the antelope and mountain sheep that wintered there, was all but gone.

Young also took measures to improve safety, as well as the park's appearance relative to campers. In the "Instructions to Persons Traveling through Yellowstone National Park," he forbade camping "at a less distance than 100 feet from any traveled road," and the hanging of any article "liable to frighten teams" within that area. Furthermore, he ordered that "[c]amp grounds must be thoroughly cleaned before they are abandoned, and such articles as tin cans, bottles, cast-off clothing, and other debris must be either buried or taken to some place where they will not offend the sight." 214

Such stringent measures for dealing with careless campers were temporary, however. As a long-term solution, Young, like Boutelle, proposed setting up permanent camping areas. In a "Supplemental Report" issued three months after his annual report, Young told the interior secretary that he had recommended to park concessioners the Yellowstone Park Association (YPA) and the Yellowstone Park Transportation Company (YPTC) "a proposition to establish permanent camps, suitable in neatness, comfort, and convenience for a large number of visitors who desire to experience that mode of an outing in the park."215 Instead of YPA or YPTC taking on the camping concession, however, W. W. Wylie, with permission from the Interior Department, established permanent camps at Apollinaris Spring, the Upper Geyser Basin, Yellowstone Lake, and Canyon. The Wylie company also operated lunch stations at a point midway between Norris and the Lower Geyser Basin, and near Yellowstone Lake.²¹⁶

Even after these changes, campers remained a concern. Acting Superintendent Erwin noted that they were his troops' primary people of concern in regard to policing and protecting the park.²¹⁷ The situation did not change much over the next few years. Though many people chose to see the park "The Wylie Way," staying at the Wylie camps, others still camped on their own, with their own supplies. By 1906, when Captain

Pitcher managed the park, soldiers were still cleaning up the campsites of these latter visitors. When he realized that campers were not going to dispose of their refuse properly, Pitcher asked his men to dig holes "in order to afford camping parties places to dispose of cans and refuse." He hoped to make "suitable signs" that winter "to instruct campers where to make their disposals."

Camping was not the only issue raised by growing numbers of tourists. The lack of visitor facilities allowing public access to the park's wonders was another. In 1897, Colonel Young requested that a commission composed of a U.S. Geological Survey employee, a private citizen, and an Army Corps of Engineers officer be appointed to advise park officials on the selection of saddle trails that would enable visitors to view the wonders and scenery of the park.²¹⁹ U.S. Geological Survey Director Charles D. Walcott reported to the secretary of the interior that it would be "a great addition to the Park to have a good horse trail constructed to some of the prominent peaks and points of interest." He suggested a trail from Mammoth Hot Springs to the summit of Bunsen Peak, and then down the Gardner River past Osprey Falls; another to the top of Electric Peak that involved the outposts; and a third from the Canyon area to the summit of Mount Washburn.220

In 1900, Captain Chittenden of the Army Corps of Engineers, who was making great strides improving the park's system of main roads, also began planning side roads and trails in order to improve visitor access to points of interest. He had side roads built that year, for example, to Lone Star Geyser and Inspiration Point, and improved one to Great Fountain Geyser. In addition, Chittenden devoted time to clearing existing trails that had long been neglected and that, in many cases, were blocked by fallen timber. The trails were used mostly by patrols, but some camping parties also used them to reach sites well off the main road. Neither Chittenden nor the acting superintendent had any plans for extending the trails in 1900, but Chittenden felt that the existing trails should be maintained.²²¹

During his years in Yellowstone, Captain Pitcher made great strides toward providing better visitor facilities. By the end of 1904, his men had repaired all of the mileposts along the main road, and corrected new mileposts on the Mammoth-to-Grand Canyon road via Tower Fall. Several informative signs noting, for example, points of interest relating to the Nez Perce trek through the park in 1877 were also erected.²²² Pitcher also had a new, half-mile side road built to the two petrified trees

located about 17 miles from Mammoth Hot Springs, on the road to Tower Fall. Plans were made to enclose the trees with iron fencing mounted on a wall, but only one tree was so enclosed; the other was destroyed by vandals. South of Mammoth, an unloading platform for stagecoaches (about 100' in length) was built at Apollinaris Spring. The entire area was cleared of dead and fallen timber. The spring was "boxed up, and conveyed into a suitable well, constructed of rough stones, with drinking cups attached for public use." Blind drains were covered with gravel, and gravel footpaths between the loading platform and the spring were constructed.²²³ Two 50' coach platforms were built at Mud Geyser, one for loading and one for unloading. Another 50' platform was built at the head of the newly built Upper Falls stairs, and large platforms with viewing seats were placed at the bottom.²²⁴

Pitcher rightly sensed that many interesting places were inaccessible to those unable to manage rock climbing, or to those who did not feel secure unless they were walking or standing on a well-built structure. Thus, he built a new Lower Falls stairway, 360' in vertical height and 700' long, with numerous seated landings along its descent, as well as a 150' stairway and a small seating platform at Grand View. Inspiration Point also got a new stairway with a viewing platform, and a small unloading platform at its top. At Artist Point, a viewing platform was erected on top of existing rocks, with a stairway leading to an unloading platform.²²⁵ All new stairways were built with heavy, 4' wide planks with an easy rise, "in order to allow people to ascend and descend who can not go unassisted."226 At Mammoth, a stairway was built to the floor of Devil's Kitchen (cave), and "an attractive well" was built near Orange Spring Mound.²²⁷ By the end of the 1906 season, Pitcher planned to have all the newly built structures stained a color that would "blend in with the surrounding rocks, in order that they may not detract any from the beauty of the canyon."228 This early call for harmony between the built and natural environments, first championed by the Army Corps of Engineers, would echo through the years as park officials grappled with the notion of building in what was supposed to be a haven of natural beauty.

In addition to new viewing facilities, new outhouses were built. Anderson's administration had made some improvements in this area. In 1892, he had built, along the tourist routes, "conspicuously marked retreats for ladies and gentlemen," and installed "fresh and

legible" signs for improved public access.²²⁹ Later, during Pitcher's administration, outhouses were built at Apollinaris Spring, Gibbon River, DeLacy Creek, Mud Geyser, and Dunraven Pass.²³⁰

Conclusion

Between 1886 and 1894, the military's acting superintendents, like their civilian predecessors, were challenged to protect the park without sufficient legal authority and funds. Despite this lack of support, acting superintendents developed a permanent headquarters for park administration and a series of outposts for increased park protection. They initiated year-round patrols from these strategically placed permanent outposts, which significantly helped protect park wildlife. They also set in motion a series of policies with respect to nature, wildlife, and tourist management with which future administrations would have to come to terms; they began stocking the park's rivers with fish, exterminating carnivores, supplying zoos with animals, and monitoring wildlife. In addition, Camp Sheridan's Acting Assistant Surgeon G. L. Cline continued Philetus Norris's work by compiling a meteorological record for the park.²³¹ This effort was continued with the weather bureau built at Mammoth Hot Springs in 1903.

Additional advances in the area of park protection were made between 1894 and 1906. After 22 years, the park was finally given authority to punish violators of rules and regulations by the passage of the Lacey Act, which prompted an increase in the number of patrol cabins, and new methods in park patrol, both in the backcountry and on well-traveled routes. In efforts to protect vegetation and reduce fire threats, a system for campsite usage was established. A concerted push for protection of game ensued during these years, as park officials became aware of the tenuous situation of the park's bison population and took steps to reinvigorate it. Also, the first fish hatchery was constructed, and efforts were made at the North Entrance to provide protection and food for the antelope and elk herds. Furthermore, to provide visitors with expanded opportunities for viewing and appreciating park wonders, saddle trails, secondary roads, stairways, and other amenities were created. These actions laid the foundation for park management in the new century.