

“Nature is the Supreme School-Teacher”

The National Park Service in Yellowstone National Park 1917–1929

The creation of the National Park Service on August 25, 1916, brought major changes to Yellowstone. Reorganization of the park’s management from military to civilian governance, although not actually complete until the end of 1918, allowed the administration once more to focus on Superintendent Norris’s three original pillars of park management: protection, improvement, and scientific study and education. Before the new civilian administration could begin to manage, however, it needed to craft a management team and ranger force. Once this force was in place, the administration was ready to take on the challenges of the park’s fifth decade. And challenges there were.

Between 1917 and 1929, numerous issues confronted the new administration. First, Yellowstone’s civilian managers had to accommodate record numbers of a new kind of visitor—one who toured the park by automobile. Second, in this new era of park reorganization, any new accommodations or other improvements had to harmonize with the park’s beauty, not detract from it. Third, in addition to accommodating new tourists, the park’s new civilian managers had to educate them. While the park superintendent was no longer alone in trying to protect, improve, and educate—the NPS now coordinated measures and provided assistance to the individual parks—the superintendent was responsible for making day-to-day decisions and responding to the needs of the public.

Much of the NPS’s work toward improving the park for visitors and protecting its resources was guided by the idea that the park was to become an “all-summer resort.” The goal was to “convince the general traveling

public that it [was] worth while to spend more than five or six days in [this] great playground.” To that end, much was done each year to entice the public to visit and stay in the nation’s oldest national park. “Yellowstone Park has tremendous recreational advantages that are only just beginning to be appreciated,” wrote Horace M. Albright, who as assistant to Stephen Mather, the director of the NPS in 1917, stood in Mather’s stead as acting director when Mather was unable to assume the duties of director due to illness. While dreams of “the establishment of golf links and tennis courts” would fall by the wayside as the park’s focus shifted from recreation alone to recreation and education, other projects took shape.¹ The park’s free, or “public,” automobile camps were improved and expanded, and museums and educational institutions were built. Landscape architects continued to inform park managers’ decisions about how to design Yellowstone’s cultural landscape.

The New Decision-Makers

The first two years of Yellowstone’s new civilian administration were made especially difficult for several reasons: Congress failed to appropriate money for the newly created NPS, there was political unrest in Montana over the removal of troops from the park, and wartime conditions prevailed across the United States following the nation’s entry into World War I on April 6, 1917. According to Aubrey Haines, the park was fortunate to have Chester Allinson Lindsley, who had worked as a civilian clerk in the park since 1894, to assume the role



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Superintendent Horace M. Albright. 1920.

of park “supervisor” and guide the park through the first period after the transfer to civilian administration.

Born on January 25, 1872, Lindsley was hired by Acting Superintendent George Anderson to serve as civilian clerk at Fort Yellowstone in the autumn of 1894. “He served in that capacity under all the succeeding military superintendents,” wrote Haines, “providing continuity of administrative activities (which would otherwise have suffered from the frequent and complete changing of the detachments stationed in the Park).” From October 1, 1916, until June 28, 1919, Lindsley served first as acting supervisor then as acting superintendent of the new civilian administration of the park. Once Horace Marden Albright was appointed superintendent in 1919, Lindsley became assistant superintendent. In 1922, Lindsley transferred to the Post Office, where he served as postmaster for the park until his retirement in 1935.²

Horace Albright was one of Yellowstone’s most important shapers. Born in Bishop, California, on January 6, 1890, he graduated from the University of California’s law school in 1912. In June 1913, he became a confidential clerk to the secretary of the interior and worked on the creation of a national parks bureau. After completing graduate work in 1914, Albright worked as assistant attorney and close advisor for Stephen Mather, who was then “assistant to the secretary responsible for the national parks.” Haines wrote that Albright played “a considerable, perhaps even crucial role in the passage of the National Park Service Act of 1916, and as assistant director (and acting director in 1917–1918) of the new organization, he shepherded it through the initial years.”

Albright was superintendent of Yellowstone National Park from June 28, 1919 until January 12, 1929, at which point he took over from Stephen Mather as director of the NPS. He retired from the Park Service in 1933, to become general manager and director of the United States Potash Company, but retained an active interest in NPS affairs until he died on March 28, 1987.³

A Management Structure and Infrastructure

The 1916 National Park Service Act authorized civilian administration of the nation’s parks. In line with this decision, the secretary of the interior authorized removal of the military detail from Yellowstone National Park and creation of a civilian ranger force. Thus on October 1, 1916, with the “hearty cooperation” of the War Department, the Department of the Interior took over Fort Yellowstone. The troops stationed there were sent for duty at the Mexican border.⁴ The new ranger force—“composed partly of scouts long connected with the administration of the park, and partly of certain soldiers who, because of their special qualifications and intense interest in the development of the park, were discharged from the Army to join [the NPS]”—was on duty through the winter of 1916–1917, but then had to “disband because of adverse legislation.”⁵

The “adverse legislation” was a 1917 sundry civil bill that purposely did not provide any funds for protection of the park. This omission necessitated “the recall of the Cavalry to the park” and the “regarrisoning” of Fort Yellowstone.⁶ Congress, in 1917, “on the facts then before it,” decided “that Fort Yellowstone ought not to have been abandoned by the War Department, and that it could be better protected by soldiers than by rangers.” In fact, local residents, resenting the loss of income they expected would result from the departure of the army, had encouraged Montana’s congressional delegation, in the person of Senator Thomas H. Walsh, to take before Congress a petition to “again police the Yellowstone National Park with officers and soldiers of the regular army to the end that it shall be well protected.”⁷ Thus, 450 men belonging to the Seventh U.S. Cavalry returned to the park and again took up residence in the fort facilities.

This halting transition from military to civilian leadership created more problems in the development of an administrative force and ranger corps in Yellowstone

than it did in other parks. In 1917 and half of 1918, for example, the Department of the Interior controlled concessioners, supervised admission of automobiles to the park, took care of wild animals, and oversaw water, electric, and telephone systems in the park. The U.S. Army Corps of Engineers oversaw all road and trail construction, and protection of the park was “intrusted to the soldiers” and the War Department. Acting Superintendent Lindsley was “supposed to be the executive of the park, yet he ha[d] no control over the improvement or protection of his reservation.” “He can not even open the park at the beginning of the season,” complained Director Mather in 1917, “yet the Park Service is charged by the traveling public with every failure to make conditions for touring satisfactory.” In all other national parks, except Crater Lake, the director continued, the NPS’s mandate to supervise, manage, and control the nation’s parks was exercised by the Interior Department alone, not in combination with the War Department and Army Corps of Engineers.⁸

Acting Superintendent Lindsley wasted valuable time and energy negotiating with the park’s other controlling agencies. In January 1918, an issue arose concerning the use of officers’ quarters at the fort. In a letter to the assistant director of the NPS, Lindsley referred to the chief of engineers as “utterly selfish” and disingenuous, as the latter tried to control all the officers’ housing at Fort Yellowstone for use by his own employees.⁹ Lindsley also contested the ownership of one particular building. While it was clear that the furniture in the building belonged to the Interior Department, the building’s rightful owner was unclear. As Lindsley noted, the building had been “officially invoiced to [the Interior] Department when the post was abandoned and [had] never been officially returned.” Thus, “the question of ownership [was] in doubt,” and Lindsley felt “warranted in making strenuous objections to the occupancy [by the army engineers’ office] of this building.”¹⁰

Further, when Major Verrill, the district engineer, advised Lindsley that he intended to build a “fire-proof garage and certain residence quarters for members of his office force and engineering staff,” NPS Director Stephen Mather asked the acting superintendent to “advise the District Engineer that all of the land in and about Mammoth Hot Springs is subject absolutely to the control of the Department of the Interior, and that no structures of any character can be erected anywhere in the park except upon the authority of this Department.”¹¹ The issue became quite contentious, forcing the secretary of

the interior himself to demand that the park’s administrators work “in harmony with engineers” so as not to block the proposed garage.¹² First Assistant Secretary of the Interior Alexander Vogelsang wrote to the secretary of war insisting that the proposed structures “harmonize in general with the appearance of the other improvements” in the area, and that the Interior Department be given the opportunity “to inspect and pass upon” any plans and specifications.¹³

Fortunately for both the army and the NPS, the army’s return was not long-lived.¹⁴ Assisted by the officers of the army, who were “especially anxious to rid [themselves] of the duty of maintaining old fort Yellowstone and providing for the protection of the park,” Director Mather gathered additional data relating to the “inadvisability of using troops in the protection of national parks, devoting considerable attention to the cost of maintaining a military force in [an] isolated post where there was no opportunity for troop drill or other army work.”¹⁵ Furthermore, “public disapproval of such nonmilitary use of troops when the nation was at war created dissatisfaction that even a stubborn Congress could not overlook.”¹⁶ Thus, on July 1, 1918, troops were authorized to withdraw from the park. Fort Yellowstone was officially turned back over to the NPS on October 31, 1918, when the army left the park for the final time.

Once the 1918 Sundry Civil Appropriations Act placed the NPS “in complete control of the administration, protection, and improvement of the park,” the tense situation was relieved. Director Mather heralded this move as “not less important than the organization of the new ranger force.” To underscore his authority, he also made the former U.S. Engineers’ Office, also known as the “Pagoda,” constructed by Hiram Chittenden in 1903, the official headquarters of the National Park Service in the park.¹⁷

After the park was returned to civilian governance, work began assembling its new ranger force. Compared to the large number of soldiers (450) that had been assigned to police and protect the park, the number of assigned civilian rangers (50) was small.¹⁸ Mather made much of the fiduciary appeal of replacing army troops with NPS rangers: “The military force necessarily had to maintain a semblance of army organization in the park,” he wrote, “hence its outposts were garrisoned with squads of men, only one or two of whom regularly patrolled each district. Under the new organization, rangers are assigned in pairs to districts and each is required

to do patrolling work. Thus the cost of protecting the park has been reduced enormously.”¹⁹ The new ranger force of 1918, “composed largely of members of the force developed in 1916,” was efficient, cost-effective, and capable of protecting the park, he emphasized. The rangers—described ideally as one chief ranger, four assistant chief rangers, and 25 rangers of the first class, supplemented by 25 “temporary rangers, traffic officers, and automobile checkers” in the summer, were “all hardy men of the mountains, skilled in forestry, and woodcraft, accustomed to the hardships of the severe winters, trained in the use of snowshoes and skiis [*sic*], and thoroughly familiar, in most cases, with the entire park area.”²⁰ The chief scout during the army’s last days, James McBride, was appointed the first chief ranger in October 1919.²¹

By 1920, a year after he became superintendent of the park, Horace Albright had organized Yellowstone’s operations into ten departments: (1) the administrative department, consisting of the assistant superintendent and purchasing agent who “handle[d] matters in the general headquarters office . . . attending to the multitude of . . . matters naturally appertaining to a large Government office and required by the laws, rules, and policies governing the NPS”; (2) the engineering department, with a resident engineer who supervised “the

road maintenance and construction and other physical improvements”; (3) the protection department, with the chief ranger who was “in charge of the protection of the park, the operation of the buffalo and hay ranches, the care of wild animals, the fighting of forest fires, and similar activities”; (4) the information department, with a park naturalist who was “in charge of the information office and all scientific work carried on in the park, either under the Park Service or by scientists working in the park under authority from the Department”; (5) the mechanical department, with a master mechanic who supervised and controlled the mechanical shops; (6) the property and transportation department, with a master of transportation who had “charge of all freighting operations”; (7) the electrical department, with a chief electrician; (8) a mini-department consisting of the chief lineman in charge of the telephone lines in the park; (9) the sanitation department, with a master plumber; and (10) the painting department, with a master painter.²² In 1921, Albright consolidated activities and supervision of the chief lineman, thus reducing the number of departments to nine: Administrative, Engineering, Protection, Information, Mechanical, Electrical, Property/Transportation, Sanitation and Painting.²³

By 1922, the ranger organization, which, Haines noted, stressed “the line-of-authority of a military organization,” was led by Chief Ranger Samuel T. Woodring, a veteran of the Spanish–American War and former army packmaster. Woodring had only one year of ranger experience when he was promoted to chief ranger, but as Haines wrote, he was a natural leader and an able organizer.²⁴ In 1922, Albright commented that Woodring oversaw the protection department with “great efficiency.”²⁵ Woodring worked with three assistant chiefs (one for each of the three ranger districts: north, south, and west—by 1926 there were four assistant chiefs); from 24 to 27 park rangers (both first-class rangers—those in charge of the important stations in each district—and the permanent park rangers under the first-class rangers); and from 42 to 58 temporary rangers who served during the travel season.²⁶

By 1925, the permanent rangers were selected on the basis of a series of civil service rules and a civil service examination. Seasonal ranger positions were filled by appointment. According to Haines, the position was so “glamorized” that a form letter was issued to warn “young men,” who anticipated “a sinecure with nothing resembling hard work to perform,” or a “pleasant vacation amid the beauties and wonders of Yellowstone



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United States Engineer Office (center), also known as the “Pagoda,” ca. 1915.

Park, with very frequent trips about the park and innumerable dances and other diversions to occupy one's leisure hours," and who had hopes "of making and saving considerable money," that the situation really was otherwise.²⁷

The routine of a ranger's day in the 1920s was "sharply differentiated between a short summer season, with problems created by a massive visitation, and a long 'off' season (much of it winter) in which the protection of the Park and its wildlife [was] the principal occupation."²⁸ Activities in a ranger's day included checking automobiles at the several entrances, patrolling for speeders, informing the public about the park's natural features, lecturing on subjects of interest to the public, wildlife management, protective patrolling, and housekeeping at one of the cabins or stations during the off-season.

The rangers used the army's former soldier stations and snowshoe cabins while patrolling the park, protecting its wildlife, and managing—helping, informing, and policing—its visitors. By the mid-1920s, as the park's focus on recreation was modified to include an equal emphasis on education, the ranger's role as educator under the direction of a new park naturalist grew, as did the park's Department of Information. The built environment changed, as well: community rooms, or meeting places where lectures and other educational sessions could take place, were added to the NPS's free public automobile camps, and a series of museums was built.

Enhancing the Built Environment

The buildings added to the park's administrative infrastructure during the late 1910s and 1920s were primarily snowshoe cabins, ranger stations, campground meeting rooms, and museums. In the new civilian era, landscape engineers and landscape architects played important roles in crafting the built landscape. In 1905, when he revised his chapter devoted to the park's administrative history, Hiram Chittenden suggested that no continuing outlay be devoted to "beautify and adorn" the park. "Nature has attended to these matters herself," he wrote. "The further policy of the government in regard to the Park should be strictly negative," he continued, "with the sole object of preserving it unimpaired, as its founders intended, for the 'benefit and enjoyment' of succeeding generations."²⁹ A decade later, landscape architects agreed: "The [landscape architect as] national

park designer cannot, of course, design the mountains," wrote Henry Vincent Hubbard, Harvard professor of landscape architecture. "But, if he is from long and humble study an interpreter of natural beauty, he can present the mountains to the observer effectively."³⁰ But as more and more people visited the park, and as the NPS decided that educating the visiting public was a priority, adding to the park's administrative infrastructure became essential.

To minimize the impact of the new buildings on the park's scenic and natural features, the NPS asked its landscape engineers to build structures that harmonized with their environment. "All of the improvements in the parks must be carefully harmonized with the landscape," NPS Director Stephen Mather wrote in 1918, "and to this end engineers trained in landscape architecture and fully appreciative of the necessity for maintaining the parks in their natural state must be employed to supervise and carry out all improvement work. New improvements must be planned carefully and comprehensively in advance of execution."³¹ Mather's words fit nicely with Secretary of the Interior Franklin Lane's seminal NPS policy letter of 1918 (drafted by Albright during his stint as acting director of the NPS during Mather's illness). "In the construction of roads, trails, buildings, and other improvements," the letter declared,

particular attention must be devoted always to the harmonizing of these improvements with the landscape. This is a most important item in our program of development and requires the employment of trained engineers who either possess a knowledge of landscape architecture or have a proper appreciation of the esthetic value of park lands. All improvements will be carried out in accordance with a preconceived plan developed with special reference to the preservation of the landscape, and comprehensive plans for future development of the national parks on an adequate scale will be prepared as funds are available for this purpose.³²

In their studies of landscape architecture and the national parks, historians Linda Flint McClelland and Ethan Carr provided detailed discussions of the role landscape architects played in the development and maintenance—improvement and protection—of our national parks. "Beginning in 1918," according to McClelland, the NPS hired landscape architects to "plan

and design park villages, campgrounds, roads and trails, and facilities and to provide advice on issues affecting the scenery of the parks.”³³ Landscape architects not only helped parks provide access to visitors, they also helped them preserve the very scenery those visitors were seeking. As Carr wrote, landscape architecture was critical to “successfully develop[ing] parks in ways that would assure the preservation of scenic qualities.”³⁴ In 1917, Frank Albert Waugh, a professor of landscape architecture at Massachusetts Agricultural College, rhetorically asked, who better to deal with national parks “except the men best trained in the love of the landscape and in the technical methods by which it alone can be conserved, restored, improved, clarified, made available and spiritually effective in the hearts of men and women?”³⁵

According to McClelland, landscape engineers “forged a cohesive style of naturalistic park design . . . rooted in the fundamental twofold philosophy, first, that landscape be preserved, and second, that all construction harmonize with nature.” This design style held to several principles: “Construction was to disturb the ground as little as possible. Improvements were to be of native materials and rustic in character. Obtrusive development was to be avoided altogether or placed in inconspicuous locations and screened from public view.”³⁶

The first landscape engineer appointed by Mather was Charles P. Punchard, Jr. A student of landscape design at Harvard University, and a partner in his own firm, Punchard at the time of his appointment was in charge of landscape development for all of the public parks in Washington, D.C. Through this work, Punchard gained experience dealing with both politics and the restrictions of a government budget that would prove useful after he entered the employ of the NPS.³⁷ He was, as Mather wrote of him, “of the ability and willingness to take a very practical view of the problems to be solved, and to attack them always with full appreciation of the limitations of the park appropriations and the relation of these problems to other features of improvement of the park system.”³⁸ The other part of this new “field engineering” division of the NPS was civil engineer George E. Goodwin, who served as chief engineer and point person for “surveying, contracting, and building park roads and trails.”³⁹

Punchard described the role of an NPS landscape engineer in an article he wrote for the journal *Landscape Architecture*, “Landscape Design in the National Park Service.” The landscape engineer “is a small fine arts commission in himself,” he noted,

for all plans of the concessioners must be submitted to him for approval as to architecture and location before they can be constructed, and he is responsible for the design of all structures of the Service, the location of roads and other structures on the ground which will influence the appearance of the parks, ranger cabins, rest houses, checking stations, gateway structures, employees’ cottages, comfort stations, forest improvement and vista thinning, the preservation of the timber along the park roads, the design of villages where the popularity of the parks has made it necessary to provide certain commercial institutions for the comfort of the tourist and the camper, the design and location of the automobile camps, and so on through the many ramifications of all these problems.⁴⁰

By all accounts, Punchard was very successful in his short tenure as landscape engineer for the NPS—he died less than two and one-half years after his appointment. As McClelland noted, Punchard was a troubleshooter with a gift for concealing unsightliness and cleaning up messes already part of the cultural landscape in older parks such as Yellowstone.

Punchard’s goals for cleaning up Yellowstone followed his assessment of the park’s appearance during the summer of 1919, and amounted to the first efforts at planned landscape improvement for the park. He outlined his suggestions for improving “some of the more important parts of the park” in a ten-page memo to Albright. His approach was to work “in the vicinity of the important centers first, and as these sections assume[d] the appearance desired and the most important improvements [were] made, continue to work out from these centers along the roads and in time accomplish the desired result.” “Many of the suggestions I shall make,” he wrote,

are matters of policing and maintenance which have escaped the attention of the persons in charge, and although many of them may seem small and unimportant in themselves and perhaps could be done away with in the light of larger and more conspicuous undertakings, nevertheless, collectively they are of the greatest importance in the general appearance of the park, and when they are once attended to and the work well done, the area will require very little atten-

tion from year to year for maintenance.⁴¹

Punchard provided a detailed analysis of the park's appearance and specific suggestions for improvement.

He recommended starting at Mammoth Hot Springs, clearing the area to make it more attractive and to lessen any danger of fire. He suggested mowing in front of the hotel, cutting all dead wood out of the trees on the parade ground, and removing "old stumps and branches" from the "old geyser craters." Furthermore, he felt, removing the old employee buildings along the road from Liberty Cap to the Mammoth Camp, and building new quarters in the row of buildings formerly used as quarters for the non-commissioned officers behind the stables would go a long way toward improving the appearance of the area. He also suggested remodeling many of the unused buildings in the fort area "for dwelling purposes," thus reducing the higher cost of new construction.⁴²

Punchard also recommended developing "the Gardiner [North] Entrance to the Park . . . at an early date and follow[ing] up until it has been made as attractive and interesting as possible." In this, Punchard concurred with Director Mather, who believed in marking park entrances "with appropriate gateway structures," to give "the American tourist" the "sense of pride and thrill of pleasure that are inspired . . . as he passes through imposing pillars or arches that announce to him that he is entering a great playground that belongs to him and to all America."⁴³ The proposed construction of an office building at the North Entrance in 1920 would be "a step in the right direction," Punchard thought.⁴⁴ He also designed the East Entrance in 1919, but its construction was delayed because of a lack of funding; as McClelland pointed out, the construction of gateways often depended upon special appropriations. Punchard's design for the East Entrance "featured a portal of massive local logs which was in scale and character with the surrounding forest and modeled after the Mount Rainier arch."⁴⁵

Punchard received permission from the U.S. Weather Bureau to remove an old snow gauge and other weather instruments from the parade ground because they were no longer used, and were "unsightly." He also had a solution for enhancing the Wraith Falls area, where the vista had been created by cutting "many trees" that still lay on the ground. Punchard suggested that they be chopped up and used as firewood for campers, who would otherwise have cut wood improperly near the

camping areas. Other vistas needed cleaning up, as well: the observation stations and platforms in the Canyon area were, according to Punchard, "unsightly and unattractive." He suggested replacing them with ones constructed of lava rock or formation stone, and providing some protection from the sun for "people desiring to spend considerable time at these observation points."⁴⁶ He wanted all "inadequate and unattractive" structures removed and replaced with "more attractive," appropriately integrated structures. For example, he argued, the seating accommodations at Old Faithful Geyser should be replaced with rustic equivalents.⁴⁷

Punchard also was not loathe to recommend policing the movements of tourists. He argued, for example, for "so protect[ing] areas that tourists can not reach them," and erecting structures that might even "mar [a feature] materially," because "some such precaution is necessary, [as long as] the . . . method is as satisfactory and inoffensive as it is possible." For example, visitors sometimes tended to drive right up to the edge of pools and other features, and thus threaten these features' beauty, integrity, and very existence. Punchard himself had seen "visible evidence of an automobile having been driven within *one inch* of the edge" of Morning Glory Pool.⁴⁸ Constructing unobtrusive barriers around such features was considered a lesser evil than allowing visitors to destroy them.

The following year, Punchard found that the park had a "healthy appearance," in contrast to what he had seen the year before. Both park staff and concessioners had made an effort at improvements, he noted in a letter to Albright. In the same letter, he made recommendations for the colors of paint to be used by the NPS and



Warning sign at Old Faithful. 1920.

YNP PHOTO ARCHIVES, YELL #23951

its concessioners.⁴⁹ Log buildings, for example, should be painted a dark brown, and roofs of the ranger stations should be stained green.⁵⁰ Painting the sprinkling tanks located along the roads a light green color would harmonize them with adjacent foliage, he argued, and the ones located in open spaces, such as on Swan Lake Flat, should be painted a light grey.⁵¹ The newly built filling stations had an attractive design, he argued—so attractive, in fact, that “it seem[ed] a pity to erect a flaring, bright red pump in front of them.” “Competition being eliminated,” he wrote, “there is no reason for extensive or original advertising schemes to obtain business.” He believed that the stations should be painted a dark green, grey, or dark brown.⁵²

Some buildings were to be painted so as to make them as inconspicuous as possible. Others were to be painted to harmonize with the color scheme of what Punchard called a “village.” For example, when asked to comment on the painting of buildings in the Mammoth area—or Mammoth Village, as he called it—Punchard suggested using a grey paint or stain to match the color of Harry Child’s house, which was built in the vicinity of the hotel he operated. The roofs then should be stained or painted green, Punchard argued. While he liked the idea of painting Fort Yellowstone’s red tile roofs green to match the Engineer’s Office building used as park headquarters, he did recognize that, as he put it in a letter to Albright, “in doing so we would be destroying an expensive tile roof and [thus] might arouse some local criticism.”⁵³

Punchard also weighed in on the policy, adopted by the NPS in 1920, of using standardized directional signs for all parks. The new signs, having a white field with green lettering, were of metal and thus considered indestructible; they were to be mounted on posts “instead of being affixed to growing trees.”⁵⁴ In Yellowstone, an order for 465 of the new signs was sent to the Hardesty Manufacturing Company.⁵⁵ As they were consistent with the color scheme he advocated, Punchard approved of the signs, and specified that they should be raised to at least five feet above the ground for easier recognition by passing motorists.⁵⁶

Scenic views were so important to Punchard that he recommended using a curb in place of a higher barrier along the Canyon rim drive, “because it will be of sufficient height [one foot above the grade] and strength to keep cars from jumping over and will be low and not obstruct the natural appearance of the rim, as much as a series of posts might.” “[I]n the Grand Canyon,” he

concluded, “the less conspicuous the barrier is made, the less it will interfere with local conditions.”⁵⁷

Local conditions were also critical when building and landscaping around the park’s soldier—now called “ranger”—stations and snowshoe cabins. The condition of these outposts was deplorable. Mather stated as much in his 1919 annual report: “Most of the ranger stations were built many years ago for the summer housing of troop detachments,” he wrote. “They are not fitted for the use of rangers, and several of them are in such dilapidated condition that it would be false economy to repair them instead of constructing new buildings.” He wanted to build “new ranger stations and information offices in connection therewith at Upper Geyser Basin, Yellowstone Lake, and Grand Canyon” in 1920.⁵⁸ Punchard agreed that the ranger stations needed considerable work. In 1919, he told Albright that several stations should be relocated to improve traffic control—the stations at Old Faithful and Norris, in particular. He made a strong case for rethinking the entire system of ranger stations.⁵⁹ Work on new stations was not begun until the summer of 1921, shortly before Punchard passed away in November; in the meantime, existing ones were painted and refurbished.

While work on the stations was put on hold, work did begin on the snowshoe cabins. Mather had complained that these cabins were “old, in bad repair, poorly located, and unsatisfactory from every standpoint.” Of all national parks, Mather argued, Yellowstone, “where the weather conditions are more severe in winter than in any other member of the system,” should have “dry, sanitary quarters” for its ranger force, which needed “the means of overcoming the effects of exposure while on long patrols in below-zero weather.” Mather communicated the gravity of the situation when he wrote: “This is frankly an appeal in the interest of humanity.”⁶⁰

With Albright’s coaxing, Mather made such a forceful plea for help that the NPS received adequate funding for seven new cabins—four replacing older ones—and for repairing four others. A new cabin was added to the fleet of snowshoe outposts at Frost Lake, near the east boundary; at Harebell Creek, on the south boundary; and near the park’s Northeast Entrance. Older cabins were replaced at Cascade Creek, on the south boundary; at Lewis Lake (actually, the new cabin was built on Aster Creek instead of again being “badly located near Lewis Lake”); at Park Point; and on Thorofare (now called Thorofare) Creek, in the park’s southeast corner. They were built of “peeled logs, well-chinked



Harebell Snowshoe Cabin. 1932.

with mud,” with doors and window shutters made of “2-inch plank to provide protection from bears.” The floors were of poles “flattened on three sides,” and all but two had roofs of “rubberoid, laid over hewed poles and covered about 6 inches deep with earth.”⁶¹ Cabins at Sportsman Lake, Buffalo Lake, Grayling, and West Line (south of Riverside) received new roofs, floors, doors, and window shutters. That year, Albright reported, nineteen snowshoe cabins were “rationed or otherwise supplied for winter use.”⁶²

The Harebell and Thorofare cabins are still standing. The cabin at West Line, now called South Riverside, was built by the army, but received its last major overhaul in 1920. The new cabins, now represented by the cabin at Harebell Creek, exhibited the design characteristics later associated with Rustic, or Rocky Mountain, architecture—alternatively referred to as pioneer, or vernacular, style—and were simply the easiest and cheapest kind of cabin to build in areas far from the beaten path. Cost was clearly a factor; Congress had placed a limit of \$1,500 on any park building “unless special appropriations were granted.”⁶³ These structures were also designed to use native materials, so as to be harmonious with their surroundings—a clear goal of the landscape architects of the time.⁶⁴ The use of these materials ensured that the buildings would look natural, and thus like attractive outgrowths of the surrounding environment.

The cabin design for these snowshoe outposts was uncomplicated. They were one-room, chinked log structures (18.8' × 16.2') with overhanging roofs (1' along the sides and the back and 4' in the front) to prevent snow buildup on the concrete foundation and possibly

to keep a supply of wood dry. The building materials for the cabins—except the two six-light side-hinge windows, one on each side—were by and large available at the site. There were modifications to this one-room model. The Thorofare Creek Cabin was built to accommodate two rangers for the whole winter, and was thus longer (16' × 30'), with two rooms: a kitchen and bedroom. The old cabin it replaced was used thereafter as a stable.⁶⁵ The front porch and wooden shingles this cabin now boasts were added in 1932, as part of a process to standardize backcountry cabins.

Before the advent of landscape engineers in the NPS, “park superintendents or civil engineers designed buildings for a park or approved the work of architects or builders hired by concessionaires.”⁶⁶ After 1918, landscape engineers were involved in the process. Mather made their involvement mandatory in 1919, when he stipulated that “[l]ocations for buildings of all kinds, whether they are to be erected by the Government or by the business interests catering to the needs of the public, are selected by the superintendents of the parks in conference with the landscape engineer on the ground, and all timber of the parks necessary in construction of such buildings is selected and marked for cutting by these officers.”⁶⁷ Requiring the involvement of a landscape engineer relieved pressure from some superintendents and annoyed others, but it most certainly added time and some measure of inconvenience. In 1922, Mather wrote to all park superintendents, admitting that this new provision added time to the process—he asked that requests for project approval be sent two or three months ahead of time—and that it removed some sense of authority

from the superintendents. He reminded them, however, that landscape engineers played an invaluable role in ensuring that structures “fit into the park environment in a harmonious manner,” and that the superintendents would “be held responsible to the Director for the faithful adherence to the details of the design as worked out” with the landscape engineer.⁶⁸ Superintendent Albright wrote a short perfunctory note back: “I am glad to advise you,” he wrote to Mather, “that in conference with Landscape Engineer Hull [Punchard’s replacement], . . . I advised him of the work that ought to be done for Yellowstone Park . . . and as far as I know the Yellowstone landscape needs are receiving full consideration.”⁶⁹

Besides being involved with siting and designing buildings, Punchard worked on the expansion and improvement of automobile camps in Yellowstone. These camps were separate from the facilities previously run by two separate concessioners, W. W. Wylie and the Shaw & Powell Camping Company, which were consolidated into the Yellowstone Park Camping Company in 1917, during the major reorganization of concessions that took place when the NPS took over management of the park.⁷⁰ The park had operated auto camps since 1916; already in 1917, officials had noticed a substantial increase in the number of tourists entering the park by automobile and making use of the camps.⁷¹ In 1919, Mather reported that Punchard had spent considerable time on the “extremely important task” of locating and improving these automobile camps. For Mather, the potential revenue from automobiles entering the parks represented a significant addition to the NPS budget—money that could then be used for the road improvements. “[T]he increase in automobile revenue,” he wrote in 1917, “means better highways in the [Yellowstone] park.”⁷²

Automobiles would raise money, Mather argued, and more importantly, they would allow everyday Americans to visit their national parks.⁷³ To Mather’s way of thinking, automobiles democratized the parks by allowing Americans of all socio-economic levels to visit them. In 1921, Mather observed, “the advent of the automobile with the opportunities for its use freely in all the parks in the past five years has been the open sesame for many thousands.”⁷⁴ Yellowstone stood to benefit from these new tourists, as well. “The private camping outfit of the motorist,” Mather wrote in his *Annual Report* to the interior secretary, “has gained for the Yellowstone widespread recognition of its great resort possibilities.”⁷⁵ To accommodate these new thousands, Yellowstone, in his view, needed to expand and improve its automobile

camps—and that is what Punchard and Albright set about doing. “Plans already outlined by the landscape engineer of the service and the superintendent,” Mather wrote, “call for the improvement and maintenance of over 50 large camp grounds reasonably adjacent to the park roads.”⁷⁶ In his 1919 *Annual Report*, Albright referred to a “crying need for the immediate construction of several large new automobile camp grounds” and called for “progressively extend[ing] and improv[ing] year by year” this improvement schedule, so that “as soon as possible not less than 50 major camps should be made available.”⁷⁷ By this time, approximately 25,000 people (60 percent of visitors) annually toured the park in their own cars, and with their own camp equipment.⁷⁸ This “complete camp system” for Yellowstone National Park did not materialize for quite some time, but work on it began in earnest the very next year when, according to Albright, “excellent progress was made.”⁷⁹

Work during those early years consisted of getting “a good supply of pure drinking water, and adequate sanitary toilet facilities” to the major camps. New sites on the knoll near Canyon Junction (formerly the site of a Wylie Permanent Camp at today’s Brink of Upper Falls road entrance) and at the Upper Geyser Basin, “in the thick timber on the opposite side of the road from Old Faithful,” received water and sanitary earth closets. The established site at Mammoth Hot Springs (northeast of the power house) proved to be more popular with tourists than the site at the old barns (in front of Marble Terrace), which was abandoned. The power house site also received more toilets and a better water supply.⁸⁰ In July 1920, Punchard suggested that Albright consider installing flush toilets, especially for the Mammoth automobile camp. “The time is coming,” he admonished. He also recommended “[c]amp-fire talks, the installation of letter boxes and perhaps at some time when conditions demand, the erection of a small branch store in these camps where a few staples can be carried, and a campers’ register kept.”⁸¹

Punchard was also heavily involved with construction projects at the concessioner-run private camps. He had advocated a “group system of cottages, with central toilet facilities” for the Mammoth Camp (Mammoth Lodge) of the Yellowstone Park Camping Company, and in 1920, was happy to see the plans coming together. He was critical of the architectural style, however. A visit to Glacier National Park had convinced Punchard that a Swiss-chalet type of architecture was fitting for the camp, and he shared that information with both the

concessioner and the NPS: “It [the Swiss chalet type of architecture] would be . . . [a] particularly interesting setting and a thoroughly satisfactory type to adopt from the point of view of the concessioner and the Service,” he wrote to Albright in July 1920.⁸²

On August 1, 1920, Mather appointed Daniel R. Hull to be PUNCHARD’S assistant. When PUNCHARD died of tuberculosis in November of that year, Hull became the senior landscape engineer and served as the NPS’S “principal planner and designer” until 1927. Mather lamented PUNCHARD’S passing and, in his report to the interior secretary, paid tribute to PUNCHARD’S “sterling worth,” his “proven ability,” “splendid enthusiasm,” and “rare personal qualities” that had “won for him the respect and affection of all with whom he came in contact.”⁸³ In February 1921, Hull in turn acquired an assistant landscape engineer, Paul Kiessig.

Hull graduated from the University of Illinois in 1913, with a bachelor of science degree in agriculture—specifically horticulture, and then in 1914 from Harvard with a master’s degree in landscape architecture. At the time of his appointment, he was working in Milwaukee, Wisconsin; before that, he had been employed as a landscape engineer in San Francisco, and as a camp and hospital planner during World War I. According to McClelland, Hull “had fine drafting and architectural skills, which supplemented PUNCHARD’S strong philosophical outlook.” “Unlike PUNCHARD,” McClelland wrote, “[Hull] wrote few reports, and those he did were brief.” “There is little question, however,” she continued, “of the achievements of the landscape program during his tenure.” Kiessig also graduated from the University of Illinois with a degree in agriculture, but three years earlier than Hull. He worked for the NPS for two years, after which Thomas Vint, hired by Hull in November 1922, took over as assistant landscape engineer. Vint was trained as a landscape architect at the University of California at Berkeley.⁸⁴

By 1921, two new ranger stations were complete. PUNCHARD’S design plan for these and any other new ranger stations rested on a conceptual reorganization of the park’s modus operandi: he advocated combining new ranger stations with community rooms for campers. Albright, too, wanted stations “large enough to accommodate several park rangers, a divisional highway engineer, and a large information office in which maps, national park circulars of information, and other data useful to the public [would] be made accessible to tourists.”⁸⁵ Mather had called for something similar, a combination ranger



YNP PHOTO ARCHIVES YELL #32495

Mammoth Automobile Camp. 1929.

station/information center in 1919. PUNCHARD’S design for a community room/ranger station would bring the ranger and his information right to the public.

Funding for building the ranger station/community centers was secured by the end of the summer of 1920. Mather thanked the House Appropriations Committee, and even gave credit, in his annual report of 1920, for the conceptualization of the new stations to the chairman of the committee. “That these stations should contain large central rooms, to be maintained as information headquarters and community centers for campers, was the farsighted suggestion of Chairman Good, of the House Appropriation Committee,” he wrote.⁸⁶ The plan, as Haines described it, was to keep interpretation of the park’s natural features “low-keyed and entertaining.” These ranger station/community rooms were thus a way to personalize and demystify learning about the park. “This rustic hall [the community room],” Haines wrote, “adorned with elk antlers, sheep horns, and bison skulls, served an information purpose by day: a place where visitors could get their bearings and any other help they might need. In the evening it became the scene of a folksy gathering by a log fire. There, visitors could listen to a ‘lecturer’ talk about the Park and join in group singing. It was a personalized experience with great appeal,” he concluded.⁸⁷

Planning the buildings was not without controversy and disagreement. Records of these arguments illustrate how involved Mather was with the minutiae of his job as NPS director, and also how useful it was to have an expert in the field of landscape architecture involved with planning NPS structures in Yellowstone. In April 1921, Acting Landscape Engineer Hull sent Mather a plan and prospectus for the “rangers’ quarters

and community rooms” to be built at Canyon and Old Faithful that summer. The layout, as Hull described it, was “developed along simple lines keeping in mind the requirements of the structure” and was “one of two requested by Superintendent Albright.”⁸⁸

Mather responded to Albright, basically approving the layout, but suggesting revisions for Albright’s and Hull’s consideration. He wanted a fireplace “flush with the wall of the room, or nearly so,” and not recessed, as Albright and Hull had planned, so more heat was thrown out “far enough into the room.” He also wanted a provision for heating the rangers’ dormitory. “I would like to have the rangers have their own complete privacy,” he noted, “but surely when they return to their quarters after a hard day’s work, perhaps chilled and wet, a fireplace or stove will be as much a necessity in their quarters as in the community room.” He suggested floor plan changes such that the rangers could use “the same chimney of the community room fireplace for a fireplace in [their] dining room.”⁸⁹

Hull responded to Mather’s suggestions by defending the original plan: “The problem of a fire place for heating is one which always presents difficulties,” he wrote, “but from my observations at the various camping company camps in Yellowstone, I believe the solution indicated on our plan would be quite satisfactory,” he argued. “If the night is cold, and the fire a large one,” he explained further, “the ingle nook would be too warm, but the larger room should be quite comfortable for dancing, and I think the unobstructed floor area might be an advantage. With the smaller fire which would be burning ordinarily, heating the room would not be the primary motive, and in that event, I do not believe the recessed opening would be objectionable.” With respect to the fireplace for the rangers, he also disagreed with Mather’s suggestion: “In this layout we have assumed of course that the community room would be used only during the park season while the rangers’ quarters would likely be used throughout the year. In this connection a chimney has been provided in the end of the kitchen store room which will give flue connections to the three main rooms of the rangers’ quarters. Stoves I think would be more satisfactory here than an open fire.”⁹⁰

Albright also had ideas about the design of the ranger station/community centers. Regarding the proposed Old Faithful Ranger Station, Albright wanted the design to reflect the architecture of Old Faithful Inn, with the use of “special windows, dormers and brackets under the rafters; these perhaps to be of bent limbs of Lodgepole

trees.” The design should also “impart something of the character of the central building of Old Faithful Camp, possibly through using the stairstep method of cutting off the ends of the logs.” Albright preferred peeled logs and told Hull so; logs with bark tended to attract vermin, he explained, and eventually the bark would come off anyway.⁹¹

While it was necessary to secure the best bid for constructing the stations, Albright knew who he wanted to build them—Merritt I. Tuttle of Fromberg, Montana. “Very frankly,” Albright wrote, “. . . there is only one man in this region who can build these log structures just as we want them to be built[: Tuttle].” Albright reminded Mather that Tuttle had built “the splendid central building of the Lake Camp,” today’s Lake Lodge. Albright also noted that it was Tuttle who had “erected the new dining room and kitchen of the Canyon Camp, which [Mather had] inspected . . . [as well as] Camp Roosevelt.” Tuttle was, according to Albright, “not only a builder, but an architect,” and he had “far more artistic sense and more appreciation of woodland values than any ordinary architect or builder.” He had, Albright added, “vast experience in building log structures,” and “a deep affection for the park itself.”⁹²

Tuttle was awarded the contract for two ranger stations/community centers.⁹³ But further disagreements were at hand—this time with Landscape Engineer Hull—over the placement of the stations/centers. Correspondence regarding this issue illustrated the power that landscape engineers had been given, as well as the kinds of considerations taken into account when locating structures in the park. A concerned Albright wired Mather on July 27: “Hull and I are in Friendly but direct conflict over location of new ranger stations at Canyon and old faithful,” Albright complained. “[H]e wants them back in trees where they cannot be seen[.] I want them out in the open[:] if the buildings are attractive why hide them[?] [I] have held up work on canyon station and wired Hull but he will not change his decision and I will not agree to his site[.] please wire your decision as contractor has sixteen men waiting.”⁹⁴ A “terribly disappointed” Albright had wired Hull the day before to say that he did not like the location of the Canyon station under construction: “No chance of our getting tourists to see it and use it,” he had written. “Am convinced must have it in open where everybody can see it. . . . Rangers discouraged. Please wire permission to change site. . . . Also wire permission to use shingles. Shakes will cost three thousand dollars. Must close contract.”⁹⁵

Perhaps Mather was thinking of this dispute when he addressed the issue of how differences of opinion between landscape engineers and park superintendents should be handled in a letter to all superintendents in January 1922. “In such cases where a friendly difference of opinion exists,” he wrote, “the matter can be referred to the Director for the final decision, and the decision when given will constitute no reflection on the judgment of either—it is simply that there were two possibilities and the best one in the Director’s opinion was followed.”⁹⁶ As it was, the issue between Hull and Albright regarding the location of the Canyon station/center was resolved in Hull’s favor—the station was built at the Brink of the Upper Falls. Albright’s opinion of Hull improved immensely after resolution of this affair. “I am so thoroughly delighted with the work that Mr. Hull has done in the Yellowstone,” he wrote in a letter to Mather, “I feel more than ever, if that is possible, that his work is second to no other in the NPS. In this respect I frankly confess to a revision of some views that I had last fall,” referring perhaps to the issue over siting of the Canyon station/center.⁹⁷ In a letter to Hull in October 1922, Albright went out of his way to emphasize that structures built in the park were in accordance with Hull’s input regarding design and location. For example, when describing plans for building the Lake ranger station/community center, Albright noted that the structure was “built according to your plans and specifications and on the site selected by you.” For every building he described in that report, Albright confirmed that it had been built according to Hull’s plan and on Hull’s recommended site.⁹⁸

In October 1921, Albright wrote to Paul Kiessig concerning the construction of a barn near the Canyon station/center. In that letter, he emphasized that he was

very pleased with the outcome of the building. “The entire improvement at the Canyon constitutes a thing of beauty,” he wrote.⁹⁹ Mather was also pleased with the outcome, and proudly described the “community buildings” in his report to the secretary. They “consist of quarters for the rangers and a large community room for the visitors,” he wrote. “The structures are built of logs, the community rooms for social gatherings and information headquarters containing huge fireplaces and other comforts.”¹⁰⁰ Albright also praised the structures at Canyon and Old Faithful. “Architecturally,” he wrote to Hull, “they are the peers of the finest buildings in the park.” He also conceded that Hull had been correct in the locations he had chosen for both buildings, which he “observed to be right.”¹⁰¹

Plans for a ranger station/community center at Lake were underway in 1922, as were plans, using identical floor drawings, for a station/center at Cooke City, Montana, and a fish hatchery at Trout Lake. The Tuttle, a father-and-son duo, would construct the Lake ranger station/community center, while Chief Ranger Woodring and First Assistant Chief Ranger Trischman would build the Cooke City station and the hatchery. The Bureau of Fisheries and the NPS split the costs for the hatchery.¹⁰²

The Lake community center/ranger station, according to Mather, was “a triumph in woodland architecture, being built of logs and having its community room octagonal in shape with perfect jointing of logs.”¹⁰³ Albright, too, was pleased: “You will be greatly pleased with the work on this building,” he penned to Hull, who was in California at the time. “It has been done in a most creditable manner and with the most careful consideration of landscape values.”¹⁰⁴ Both Mather



YNP PHOTO ARCHIVES, YELL #31716

Old Faithful Ranger Station. 1929.



YNP PHOTO ARCHIVES, YELL #31713

Old Faithful Ranger Station fireplace. 1923.



YNP PHOTO ARCHIVES; YELL #311680

Lake Ranger Station. 1923.

and Albright were especially pleased with the “indoor campfire” in the octagonal community room. “The Lake Station has become one of the talked-of structures of the park,” Albright proclaimed in his annual report for 1922.¹⁰⁵

When all three community center/ranger stations were painted, the color scheme worked out a little differently than proposed. The outside walls were to be stained a dark color with diluted creosote, while the windows, doors, trim, inside walls, and shingles were to be a light color.¹⁰⁶ When Albright notified Hull that the outside walls actually came out lighter than the trim, Hull was unconcerned: “Our chief desire is to kill the new effect of the buildings,” he wrote back to Albright, “and if the wall color is dark enough for that, we can let the other work out as it may.”¹⁰⁷ Only the ranger station/community center at Lake still stands. The station at Canyon “fell a victim to progress in 1959,” as did the station at Old Faithful, to make room for a visitor center in the 1970s.¹⁰⁸

In addition to the ranger station/community centers, several other examples of Rustic Style architecture were constructed in the park during Hull’s first year as landscape engineer. In particular, Hull was involved with the Upper Slough Creek ranch house, which was intended to house the assistant buffalokeeper during a time when the park was expanding its haying operations to include the Slough Creek meadows; two snowshoe cabins, one on Hellroaring Creek, the other on Fox Creek; and a ranger station on Crevice Mountain. Each of these structures remains as visible evidence of the type of architecture considered to be in keeping with the

park’s landscape: the structures were a harmonious fit to both their environment and their function as part of the National Park Service’s protective mission.

During the spring of 1921, Albright corresponded and held discussions with Hull regarding the type of log architecture that was appropriate for “out-of-the-way” places in Yellowstone. Hull favored an “old time log cabin effect.” Albright suggested that Hull study the design of the cabins built by park rangers, arguing that the rangers’ design “admirably fits their needs and it certainly harmonizes with the environment.” His examples were a ranch house built by Warren “Peck” Hutchings at what was by then called the Lower Slough Creek horse (or hay) ranch, “some five miles off the Cooke City road and



YNP PHOTO ARCHIVES; YELL #122423

The log work on the corners of the Lake Ranger Station. 1923.

twelve miles by road and trail from Camp Roosevelt,” and a “hurriedly built” cabin constructed near the south boundary in the fall of 1920.¹⁰⁹ Both projects were log constructions picturesquely located in the backcountry. Albright mentioned to Hull that such designs should be used for any new structures built in “the distant isolated sections of this Park,” because rangers had to work on such projects and materials had to be readily available on site.¹¹⁰

Albright also told Hull that a new Slough Creek hay ranch (what became known as Upper Slough Creek hay ranch) was being planned for the upper regions of the Slough Creek valley. He wanted to be able to use a design similar to the cabins he had mentioned by way of example, for he believed that all buildings and corrals belonging to the new ranch should be constructed of logs, as it “would make a picturesque log establishment that ought to be very interesting to travelers on the Slough Creek Trail.” “If the cabins that I have described, strike you as worthy of adoption without fundamental modifications,” he wrote to Hull, “I wish you would wire me to that effect, and if the modifications desired do not require too elaborate an explanation, perhaps you could include them in a telegram.”¹¹¹

By June 1921, plans were underway to construct the cabin at a site recently turned over to hay production for the park’s elk population—the Upper Slough Creek hay ranch. “A log cabin and log barn will be constructed on Slough Creek about four miles above the present hay ranch [Lower Slough Creek hay ranch] at a site where it is proposed to put up additional hay for winter use of the elk,” wrote Albright in his monthly superintendent’s report for June 1921. “The house is to be about 16 × 30 feet, and the barn about 40 feet long by 18 feet wide. Both floors and ceilings will be of boards, and the roofs will be of boards covered with rubberoid.” As Albright noted, Hull had approved the design plan.¹¹²

Just before the cabin at Upper Slough Creek was built, a “substantial log cabin was built on Hellroaring Creek” in March and April by “the regular ranger force” to replace the cabin built by Captain Erwin in 1898, which had become uninhabitable.¹¹³ The 15' × 32', two-room cabin and 12' × 27' log stable were, according to Albright, “better built and considerably superior to the ordinary snowshoe cabin” —a necessity, he claimed, “in view of the fact that last winter it was found desirable to keep two or three men in this station for a large part of the winter to herd back the elk, to keep them inside the park, and in the vicinity of the Slough Creek feeding

grounds.”¹¹⁴ One noteworthy feature of the Hellroaring Cabin was that it lacked an extended front porch, as did the one at Thorofare.¹¹⁵

In August 1921, park ranger Harry Anderson and his crew built another “very substantial and comfortable” snowshoe cabin, this one at Fox Creek.¹¹⁶ From an architectural standpoint, the Fox Creek Cabin is considered “interesting and somewhat unique” for its “dovetail notches at the corners and the cleat daubing technique between the logs.”¹¹⁷ One design difference between these cabins (both the snowshoe and the herder’s) built in 1921, and those built both before and after was the use, in 1921, “of two purlins between the ridgepole and wall as compared to just one in the earlier examples.”¹¹⁸ Thus, the herder’s cabin at Slough Creek, which was also referred to as the Lower Slough Creek Patrol Cabin, as well as the Hellroaring and Fox Creek Snowshoe Cabins, contained an extra purlin.

The ranger station at Crevice Mountain was also built in August 1921. Thomas H. Lewis of Jardine, Montana, constructed the three-room, T-shaped building, which was called a ranger station even though it did not serve the “public contact function” other ranger stations did. Albright referred to the cabin as “one of the more picturesque in the park.”¹¹⁹

Whether Hull conceptualized, or just approved the design rangers came up with for the cabins built in 1921, is not known. Other structures that Hull did design and were constructed during 1921, but no longer stand, are a shelter and fire lookout on Mount Washburn—both built of native rock and timber—and a new stone checking station just inside, and compatible in design with, the North Entrance arch. (The Washburn lookout was replaced in 1940, and the North Entrance checking station was replaced in the late 1930s.) This 1921 checking station was built to replace the “unsightly tent arrangement” that had formerly greeted visitors arriving from the north.¹²⁰

Other park improvements during the summer of 1921 addressed the needs of the ever-increasing number of automobile campers. New automobile camps at Lake Outlet (Fishing Bridge) and Mammoth Hot Springs were added, while the site at Canyon was extended for nearly one-half mile across the Canyon-to-Norris road. The first camp at Lake Outlet received a new cement reservoir that stored water from a nearby spring to provide water to the campground via a 4,000-foot galvanized-iron pipe and eight faucets located in the camping area. The water supply for Camp Number 2, constructed on the east

side of Fishing Bridge, was more than one mile away; a large concrete tank was built that stored the spring-fed water before distributing it to camp's eighteen faucets. Earthen toilets were installed at both sites. The extended Canyon Camp offered three faucets for camper use; two earthen toilets were installed there, as well. Albright recommended to Mather that two new big camps be built, one at Tower Fall and the other at West Thumb, and that numerous smaller ones be scattered around the park.¹²¹

The year 1921 also saw a change in the color scheme at Mammoth. The trim on the stone buildings on Officers' Row received two coats of white paint, and the window sashes were painted black. The remaining quarters on Officers' Row were painted a light grey, with light green roofs; the chimneys were painted a terra cotta color. While Albright considered the change an improvement over the dark red roofs and chimneys—"it harmonizes much better with the surroundings than did the old colors with a dark red roof," he wrote—this clearly represented a departure from historic colors.¹²²

In the Lamar Valley, work on the buffalo ranch operation moved forward as park officials erected a drift fence, constructed of heavy logs, from Opal Creek to the rim of Mount Norris and down the Lamar Valley to the ranch proper at a cost of approximately \$1,000. The 7-foot-high "worm" fence had 22-foot panels with a two-section floating boom anchored with cables over the river crossing. The ranch also received a new blacksmith shop.¹²³

During a July 1921 visit to the park when he was especially busy with the ranger station/community centers at Canyon and Old Faithful, Hull brought along the well-known landscape architects Frederick Law Olmsted, Jr., and Harlan P. Kelsey. After their tour of the park, Hull gave Albright numerous suggestions for improving the park's appearance, including the removal of elkhorn fences around ranger stations, particularly at West Thumb and West Yellowstone. He advised Albright that "[s]imple, natural condition should be maintained rather than freak exhibits of craftsmanship."¹²⁴ Hull's views on this issue were part of a larger move away from the embellishment of park structures. He and others considered the use of adornments, such as antlers, "as an impractical and undesirable affectation," preferring "more sturdy, functional, and unadorned structures." According to historian Linda McClelland, this "movement away from ornamented designs reflected the emergence of the 'form follows function' principle of the twentieth

century, urged by [Modern architects] Louis Sullivan and Frank Lloyd Wright."¹²⁵ Hull's views aside, antlers continued to adorn buildings in the park through the 1930s and, unofficially, long after that at selected patrol cabins.¹²⁶

By 1922, the NPS's new Landscape Engineering Division had profoundly influenced the park's development at both the concessioner and government levels. All plans were reviewed by the division to ensure that sites and buildings "fit into the park environment in a harmonious manner."¹²⁷ Furthermore, the division began developing standardized plans for some park buildings, including a standard-type comfort station for auto campgrounds, three of which were built in Yellowstone in 1922—one at Lake and two at the Old Faithful auto camps.¹²⁸

In 1922, approximately 50,000 motorists camped in the park's public campgrounds. The improved, expanded system now offered facilities at Madison Junction, Tower Fall, and West Thumb in addition to those at Mammoth, Old Faithful, Canyon, and Lake. The expansion of the system relied on increased coordination of the sanitation work between the park, the U.S. Public Health Service, and the Smithsonian Institution, which was directing mosquito control in the park. Sanitation work was extensive, and consisted of reservoirs and pipelines for the auto camps, sewage systems, disposal plants, sedimentation tanks, bacteriological analyses of water and milk, and the beginnings of drainage and other work for mosquito control at Old Faithful and Lake.¹²⁹

In addition to the nearly 50,000 campers, another 50,000 tourists visited the park in 1922. Such record numbers put pressure on the park's trails system, as horse and pack trains logged a record number of miles. The NPS built an additional 88 miles of trails, including the Howard Eaton Trail in honor of pioneer guide and famous game conservationist Howard Eaton (of Eaton Ranch, Wyoming), who died on April 5, 1922. By the end of the season, Albright could proudly proclaim that the park had 781.5 miles of trails, and that greater landscaping considerations were given to the trails built in 1922 than ever before.¹³⁰

Remodeling the ranger station at Tower was the top landscape project for the 1923 season. Because of cost, Albright wanted to remodel the existing 1907 station instead of building a new one. He asked Hull to work up a design that conformed to the new Haynes Picture Shop, which he felt was "very artistic and . . . one of the prettiest structures in the Park."¹³¹ In his 1923 annual

report, Albright noted that the old ranger station would be rebuilt later that year, in October.¹³² Work actually got underway in September 1924, when Albright noted in his monthly report, “The old Tower Falls Ranger Station was rebuilt to make it conform in appearance to the other buildings in that section. A porch was built across the front, a false stone foundation laid around the buildings, the roof was extended 18 inches at the ends, and log rafters placed and the old shingles replaced with 24 inch shakes.” The doors were also replaced with ones made of “2 inch plank with heavy iron hinges and latches.” What really gave the station a different look, one more similar to the structures that surrounded it, was “[a] false log frame [that] was placed around the building to give it a paneled appearance.”¹³³

A variety of other buildings were added in 1923, and auto camps were overhauled and expanded. New additions included a 16' × 26' log mess building at the Lewis River maintenance camp, a standard 12.5' × 22' comfort station and a similarly sized laundry facility at the Mammoth Automobile Camp, and four regular comfort stations of similar size at Canyon. Plans were made to build “a frame barn with log trim” at Dunraven Pass and “a combined winter ranger quarters and summer mess hall at Old Faithful.”¹³⁴ At the auto camps, in conjunction with the U.S. Public Health Service, Yellowstone’s sanitation department completed a new water system at the camp at Tower Fall, improved the water supply to Mammoth’s and Old Faithful’s auto camps, started work on the new water system at Canyon, and opened up new areas with toilets and a water supply at Madison Junction and at “the two mile post inside the park’s east line.”¹³⁵

In 1924, flush toilets were installed at Canyon (31 toilets), Lake (8), Fishing Bridge (16), and Tower Fall (8). Five comfort stations were built that year— “two at Fishing Bridge camp, one at Lake auto camp, one at Tower Fall, and one at West Thumb.” Dunraven Pass received a new, log-trim, frame bunkhouse “for use of snow crew in the spring and maintenance crew in summer,” and a log-trim, frame ranger station and information office.¹³⁶

The East and West entrances received new checking stations, actually combined entrance and ranger stations. The idea originated with Chief Ranger Woodring, who supervised their construction. Acting NPS Director Arno Cammerer praised the design of the checking stations. “I cannot resist the impulse immediately to write you a letter of congratulations on what I consider

to be one of the finest achievements in small structure work in the Parks,” he wrote to Albright in 1924. “It is a corker and the fact that your own men built it makes it doubly interesting.” “[I]t is the type of building that will give great credit to the NPS,” he concluded.¹³⁷ The West Entrance station was intended to be permanent, while the East Entrance station was merely “a temporary expedient until a permanent structure can be designed and built.”¹³⁸ A new ranger/entrance station was built in 1932 to replace this 1924 structure.

Two new snowshoe cabins were built in 1924, as well: a 30' × 16' two-room cabin at Heart Lake (to replace the one built in 1901), and a smaller, one-room, 18' × 15' cabin at Cache Creek.¹³⁹ The snowshoe cabin at Heart Lake was constructed of unhewn, peeled, and stained logs with saddle-notched corners. The wood shingle roof was front-gabled, but without intermediate purlins; its ridge pole was decorative and V-notched. The roof hung out over the front of the cabin by six feet, thereby creating “a large open one bay porch, in the Rocky Mountain Style.” The Heart Lake Cabin represented “the snowshoe cabins built in Yellowstone National Park after creation of the NPS but before adoption of standard plans.” It illustrated the “evolutionary changes in cabin design that occurred during the 1920s,” and was “one of three 2-room snowshoe cabins built during the 1920s.”¹⁴⁰ Chief Ranger Woodring also personally oversaw the construction of this cabin.¹⁴¹

The Heart Lake Snowshoe Cabin exhibited several important design differences from cabins built earlier in the park. Its extended front porch was deeper, “which required vertical log posts to support the extended wall purlins,” and its roof, rather than being of “hewn log poles covered with ‘rubberoid’ and then a layer of dirt,” was made of wood shingles over lumber sheathing that was in turn supported by log pole rafters.¹⁴² The cabin at Cache Creek was “almost identical in design to the first cabins built by the park in 1920.” In fact, it did “not exhibit the evolutionary design changes seen on the cabins constructed in the intervening year, or the Heart Lake Snowshoe Cabin” constructed in the same year.¹⁴³ Albright wrote, in his monthly report for August 1924, that the cabin was “of the standard size and equipment.” It was designed “to facilitate winter patrols in an important game district and [made] easily accessible a region heretofore remote and difficult to cover.”¹⁴⁴

Pressure on the auto camps continued in 1925, as over 90,000 visitors used their facilities. Water pipes, sewer systems, and comfort facilities were expanded at

a number of sites. Furthermore, a new campground equipped with all the latest comforts was constructed at West Thumb; its water came from Duck Lake.¹⁴⁵ At West Thumb, referred to as “Thumb of Lake” by Albright, rangers built a new, three-room log summer station using a design provided by Hull. Hull had recommended to Albright in March of that year that the design be the same as for the log building scheduled to be built at the Belton entrance to Glacier National Park. He had recommended “using log trim frame construction instead of logs.”¹⁴⁶ This plan had to be altered, however, due to a lack of funding. In its place, a three-room, L-shaped snowshoe-cabin-type structure was built. The L-shaped “footprint [was] created by two intersecting gabled components, joined by a wood-frame breezeway.”¹⁴⁷

A unique, two-room snowshoe cabin was built that year at the mouth of Blacktail Deer Creek.¹⁴⁸ Built by rangers under the supervision of the chief ranger, the Blacktail Deer Creek Snowshoe Cabin was unique for where its main door was placed—on a longitudinal rather than latitudinal side. According to a survey of snowshoe cabins done in 2001, “[t]he cabin’s [unique] design may have been influenced by its location along the Yellowstone River, one of the more temperate snowshoe cabin locations in the park. The extended gable porch found on the other cabins, which protected the front door from snow buildup and provided for wood storage,” the report continued, “may not have been required here.”¹⁴⁹

The most important landscape project in the park in 1925 took place at Apollinaris Spring, where Hull worked together with H. B. Hommon, sanitary engineer of the U.S. Public Health Service, to improve sanitary conditions at the spring and actually create a landscape by “building a spring effect using large rocks. . . .”¹⁵⁰ Hull came to the park that June to personally supervise and direct the project.¹⁵¹ Choosing limestone slabs from the Hoodoos near Mammoth Hot Springs, Hull’s crews fashioned new approaches to the spring. Large blocks of obsidian and granite boulders were used in wall construction. Hommon designed the watercourses and plumbing, working out a system whereby the public could consume the water before it was collected for use in a sprinkling tank. Hull designed the landscape plantings. A concrete basin was constructed around the spring to provide for overflow from another spring discovered during the project.¹⁵²

At the end of the month, Superintendent Albright called Apollinaris Spring “the most beautiful piece of landscape work that has been done in the national



YNP PHOTO ARCHIVES, YELL #29793-3

Superintendent Albright on the steps of Apollinaris Spring, 1925.

parks as far as I know.”¹⁵³ Park visitors also appreciated the new work. Many, as Albright noted later that summer in a letter to Hull, were seen photographing the springs and then climbing “up through the shrubbery . . . look[ing] at the concrete reservoir, monkey[ing] with the valves, and in general regard[ing] this beautiful piece of landscape work as a child would regard an elephant cage in a circus.” This enthusiasm occurred much to the detriment of the landscape plantings, which were ruined and “tramped . . . up worse than ever before.” Albright hoped that “nature during the fall, winter, and spring [would] so restore natural conditions around the spring as to satisfy the curiosity of the tourist and cause him to let the situation alone.”¹⁵⁴ While the spring development came in “over-expenditure” by \$264.66 (total cost was \$1,464.66), Albright felt “it was worth it.”¹⁵⁵ Not only was the spring area more beautiful, it was also much more sanitary: “[O]f course from the standpoint of sanitation, it is equally as effective [as from the standpoint of beauty],” Albright wrote to Hull after the latter had returned to California, “because without doubt the old Apollinaris Spring was the most unsanitary thing we had.”¹⁵⁶



NPS PHOTO ARCHIVES, YELL #124701

Two men, one a park ranger (right), at Apollinaris Spring, 1925.

More recognition for the spring's development project came in 1926, when Superintendent Albright received high praise from Gilbert Stanley Underwood, graduate of Harvard University with a master's degree in architecture and Union Pacific Railroad's architect of several lodges in national parks such as Zion, Bryce Canyon, and the Grand Canyon's North Rim, as well as the Union Pacific Dining Hall in West Yellowstone, Montana.¹⁵⁷ In a letter to Albright, Underwood wrote:

I am tremendously impressed with the fine character of the rock work and of the scheme in general. Now if you can only develop the handkerchief pool in some sort of fashion which will eliminate the rather unpleasant symmetry and smooth concrete finish, you will have two very wonderfully developed waterscapes in Yellowstone. My heartiest congratulations on, not your efforts, but your attitude toward the right sort of atmosphere in the Parks [*sic*] development.¹⁵⁸

Not all national park superintendents received such praise from the NPS's landscape engineers. Around the time he left office as Hull's assistant, Paul Kiessig wrote an essay explaining to the general public why landscape engineers were essential to the existence of national parks, and why it would perhaps be better if park superintendents were trained in landscape engineering. In response to the question often asked of park landscape engineers, "Landscape Engineering in the National Parks? Why paint the lily?" he responded that landscape engineers

could actually help keep the nation's parks beautiful. "Keep" was the operative word. "It is not a landscape engineer's purpose to add anything to nature's achievement," he wrote, "but to restrain the human inclination to desecrate and destroy, and where human construction is necessary, to keep it as unobtrusive or inoffensive as possible. It is not easy for most of us to understand why the intelligent human species needs this restraint," he added. "But it does."¹⁵⁹ Before publication, he sent a copy of his article to, among others, Albright and Arno B. Cammerer, who, at that time, was assistant to Mather and would become director of the NPS himself in 1933.¹⁶⁰

In his note to Albright, Kiessig apologized in advance for saying something that might offend Albright. When he advocated choosing park superintendents from the amongst the ranks of landscape engineers so as to preserve parks in the scenic sense, he assured Albright, he was not meaning to criticize Albright. "What I have said about [superintendents] applies less to you than anyone else we came in contact with. You at least did not profess landscape judgement and were always openminded," he acknowledged. In fact, Kiessig felt Albright might even agree with him: "I think you may see too that nearly every project a superintendent undertakes has some bearing on the plan or appearance of the park."¹⁶¹ If Albright agreed, he did not let on. "In the position of Superintendent of a National Park," he responded to Kiessig, "I do not see how the training of a landscape engineer could possibly fit him for the intricate and detailed executive work of one of these places." He granted Kiessig one

point, however. "Aside from the position of National Park Superintendent there are very few, if any, positions in Government service requiring executive ability and business experience as well as an appreciation of things beautiful and keen sympathy with the policy of complete conservation," he told Kiessig.

Albright also took umbrage at Kiessig's use of photos of Yellowstone's "mistakes" in the built landscape to illustrate his points: "I think it would be very unfair to use pictures of structures and improvements erected in the National Parks prior to the establishment of the NPS," he complained. "No one dislikes Fort Yellowstone and many other structures in Yellowstone National Park worse than I do, not alone from the landscape point of view but from the standpoint of economy and utility, but the work is done and represents a heavy investment and must stay for many years to come." He did admit, however, to making one "landscape mistake of not very much importance" since he had been superintendent: "the establishment of the walks in Black Sand Basin." But he defended his decision as one of necessity in the face of disaster: "I waited for a year to get promised suggestions from the landscape Department," he wrote, "while people waded in water to their shoetops. Something had to be done so I started the cheap method of laying down concrete curbs and filling in between with formation material."¹⁶²

Black Sand Basin housed Handkerchief Pool, the problem area to which architect Underwood had referred in his letter praising the work around Apollinaris Spring. The pool was already popular around the turn of the twentieth century, when tourists—and even the troops protecting the park—would put handkerchiefs down the pool in hopes of watching them come gushing out again a few minutes later, washed clean.¹⁶³ Kiessig shared Underwood's dismay with Albright's decision to lay concrete around the area. "No doubt increasing traffic made necessary some provision for the concentrated treading here," he wrote, "but certainly this is not a happy solution. . . . [L]andscape advice would have been of some advantage here. The nature lover's reaction to the improvement is probably like that he would get from a stuffed deer. The vitality here is pretty well lost."¹⁶⁴ After defending his decision to "improve" the Black Sand Basin area, Albright ended his letter to Kiessig on a positive note: he felt that superintendents would get easier to work with as time went by. "[F]rom now on the Landscape Engineering Department is going to have absolutely nothing to worry them so far as co-

operation from the superintendents and concessioners is concerned," he concluded.¹⁶⁵

Albright remained true to his word. He relied on Hull more and more to help him make such decisions as, for instance, which trees to cut so as to open up a vista or make room for a structure. For example, in 1925, Albright had Hull "[m]ark the trees that [were] to be cut in front of the Lake Hotel and around the Lake dormitory . . . [as well as those] to be cut in making the fire lane between the Lake camp grounds and the Lake Hotel." Albright wanted Hull to make two marks: "one plain mark that the wood-choppers can distinguish and one secret mark only known to the rangers in order that the wood-choppers may be prosecuted in case they cut more trees than we want them to cut."¹⁶⁶

Albright's tenure as superintendent clearly marked a high point in the symbiotic relationship between landscape engineers and park superintendents in their joint effort to conserve and preserve the parks. Albright is known to have defended landscape engineers in the face of controversy and condemnation from higher positions.¹⁶⁷ He also acknowledged, before a crowd of fellow superintendents at the annual superintendents' conference in November 1922, the important role that Hull, as landscape engineer, had played in Yellowstone's improved appearance.¹⁶⁸

In November 1922, Hull hired Thomas Chalmers Vint to be a second assistant in the Landscape Engineering Department. When Kiessig left the department in early 1923, Vint remained as the only assistant, a position he filled until 1927, when he took over from Hull, who left the office when operations moved from Los Angeles to San Francisco (also home to the offices of the divisions of civil engineering, education, forestry, and sanitary engineering).¹⁶⁹ Vint became the third chief landscape architect of the Landscape Division, the newly created "group of specialists whose job [it] was to advise the director and park superintendents on matters related to park development and management." Vint had graduated from the University of California at Berkeley with a degree in landscape architecture in 1920. He amassed a dossier of experience in the landscape field before joining the NPS, where he learned the ropes by acquiring "field experience working out practical and aesthetic solutions" for the nation's parks.¹⁷⁰ McClelland wrote that the reorganization of the Landscape Division helped "the landscape architects of the service, and particularly Vint . . . [to assume] official responsibility over location, character, and quality of all park construction."¹⁷¹

Vint hired several assistants to help him, including Ernest A. Davidson, “whom [Vint] assigned to work in Glacier, Yellowstone, and Mount Rainier,” and Kenneth McCarter, who was assigned to the field. Vint wanted his staff to be “capable in landscape matters, the design of buildings and structures, community planning, and the design of bridges.” Their training was “in the general principles of landscape architecture and city planning [with] . . . a general knowledge of the fundamentals of architecture.”¹⁷² He described the work of his division in this way:

The work of the Landscape Division . . . is a different character than the general practice of the landscape profession. Although landscape work predominates in the work, it merges into the field of architecture. We have little use for landscape men whose experience is limited to the planting of shrubbery and allied to landscape work. There is little planting done within the National Parks and what is done is limited to the transplanting of native shrubs and trees, so the general commercial stock is not used. The work has to do with the preservation of the native landscape and involves the location and construction of communities, buildings, etc. within an existing landscape.¹⁷³

While Vint could not be everywhere and do everything—and thus had a growing and wide-ranging staff of capable assistants—he did keep in constant contact with his crew, and he personally oversaw as many projects as he could.

“By July 1929,” wrote McClelland of Vint’s tenure with the NPS, “Vint had transformed the Landscape Division into a design office with an increasing emphasis on general planning. . . . The division was involved to some degree in all phases of park development.”¹⁷⁴ Vint had six assistant and two junior landscape architects by this time. He felt, moreover, that the division had made “good landscape men” out of the park superintendents, and good “national park men” out of “even the best-trained landscape architects.” He assigned his assistants to various parks for the purpose of overseeing projects. In June 1929, Vint appointed Kenneth McCarter to his field position in Yellowstone National Park.¹⁷⁵

Vint had visited Yellowstone in 1926, along with Hull, who was at that point still chief landscape engineer. They had read of plans to build a combined equipment storehouse and bunkhouse at the Lower Slough Creek

hay ranch. Engineer A. W. Burney had drawn the plans, and Chief Ranger Sam Woodring had suggested the location for the building.¹⁷⁶ While in the park, Vint and Hull must have approved the plans and perhaps added suggestions for siting and design improvements.¹⁷⁷ The combined storehouse/bunkhouse was a 16' × 30', two-story “Rustic Vernacular Style building,” designed both to harmonize with the built and natural environments and to serve as a practical solution to real storage and lodging problems at the Slough Creek ranch.¹⁷⁸ Its log structure rested directly on the cement foundation (there was no foundation on the north side, the section that was to be used to store equipment) and extended to the second story (11'), which was used as “a bunkhouse or sleeping quarters for the hay crew during haying season and for storing equipment during winter months.”¹⁷⁹ Those using the bunkhouse entered via a small, uncovered porch on the building’s south side.¹⁸⁰ A second structure, which Vint called a “new stable 20 × 40 to accommodate twenty head of horses, hay and grain storage,” was also built at the Lower Slough Creek hay ranch in 1921. As Vint wrote, the new structure would allow the NPS to “dismantle” the old stable and corral in the area.¹⁸¹

In 1927, the Lamar buffalo ranch received a new, two-story “hay and horse barn.”¹⁸² This magnificent barn (52' × 32' × 28') joined the ranger station built in the area in 1915. Constructed of logs with saddle notches and chopper-cut ends, the building rested on a stone-faced concrete foundation and incorporated five fifteen-light awning windows along each side elevation. The gambrel roof had exposed log rafter and purlin ends and wood shingles, which were doubled every course. Both gambrel ends contained double and pedestrian doors of vertical board construction and “massive wrought-iron strap hinges.”¹⁸³

Four new snowshoe cabins were also built in 1927: at Fawn Pass, Mary Lake, Crystal Spring, and Shoshone Lake. All of the cabins, consisting of one story and one room, were uniform in design, a design that broke slightly from tradition. Their extended front porches were deeper, and their roofs were of wood shingle over lumber sheathing, except over the porch, where the roofs were of round poles laid with the slope of the roof, and they had windows only on the front and back walls.¹⁸⁴ Albright found the cabins “attractive in appearance, securely and stoutly built and splendidly adapted to the uses intended.”¹⁸⁵ The cabin at Crystal Spring was bigger than the others.¹⁸⁶ The cabins at Fawn Pass and

Mary Lake still stand, and the cabin at Crystal Springs was moved to Three River in 1993, and to its present location at Three River Junction in 1995. Concurrently, a cabin was built by the U.S. Forest Service along Dailey Creek; it was later added to the park when a portion of the Gallatin National Forest was transferred by Congressional action to Yellowstone in March 1929. This cabin was constructed at low cost, and was not intended to be a permanent structure.¹⁸⁷ When it became one of the park's snowshoe cabins in 1929, the Dailey Creek Cabin served the northwestern corner of the park.

Other landscape issues in 1927 centered around cleanup and planting in various areas of the park, and improvement of the park campgrounds. In 1924, John D. Rockefeller, Jr., had visited the park and been impressed with the need for cleaning up the roadsides. Asking to remain anonymous, he "authorized the expenditure of sufficient funds to clear up as much of the road south from park headquarters . . . as could be accomplished" that season.¹⁸⁸ Rockefeller, to whom Albright referred in correspondence as "the eastern friend of the park," again supplied funds for roadside cleanup in 1927. In addition to the cleanup that year, Ernest Davidson and Thomas Vint supervised extensive plantings in the Gardiner and Mammoth areas.¹⁸⁹ Improvements to the campgrounds included building comfort stations and installing sewer systems, earth toilets, and tables. As more and more people took to visiting the nation's parks as campers, these areas required constant expansion and modernization.¹⁹⁰

It was also at this time that Rockefeller, who had initiated major roadside improvement projects in national parks, influenced the future of NPS architecture. During his visit to Yellowstone in 1926, he discussed "the need of a commission to develop a special type of national park architecture and supervise plans for the development of the parks." Rockefeller, who believed he could get the country's best architects and engineers to serve on the commission, offered to fund the entire cost.¹⁹¹ Over the next few years, many noted architects and landscape architects visited the park.

For example, landscape architect Harold Caparn visited the park in 1926, to give his "professional opinion on a boundary dispute along the Bechler River." He used the visit to make suggestions for improving "the landscape character of the . . . observation decks along the Grand Canyon of the Yellowstone." McClelland wrote that "Caparn urged that the wooden stairways, ramps, and railings that had been installed about 1920

be replaced with earthen paths and masonry parapets of native stone."¹⁹² Assistant Landscape Architect Davidson sketched plans to replace the wooden structures in the Canyon area with rockwork. These plans, according to McClelland, were the "first consideration of the area from a 'landscape standpoint.'" While Davidson's plans were not followed immediately, they were included in the 1932 master plan for the area, and finally implemented in modified form in the mid-1930s.¹⁹³

Vint and his staff worked on several plans for standardized park structures between 1927 and 1929. Structures such as "patrol cabins or comfort stations," McClelland wrote, "could follow a common design that was repeated throughout the park. The same design might be used again and again in one park, provided the external characteristics of the structure fit harmoniously into the natural setting."¹⁹⁴ Comfort stations were standardized in 1927, and in 1929, housekeeping cabins were standardized after Albright asked Vint's division to "make a special study of housekeeping cabins and draw up plans for a cabin suitable for the automobile tourist in the national parks."¹⁹⁵

During 1928, one mess house and three bunkhouses were constructed for use by road maintenance crews at Madison Junction, Norris Junction, and the Lewis River. The mess house at the old Norris road camp still stands, though it has been modified—the old front porch on the south elevation has been enclosed. It is one and one-half stories, frame, and on a concrete foundation.¹⁹⁶ Directly adjacent to the mess house at Norris was the bunkhouse, a one-story, wood-frame, rectangular structure, which is also still standing.¹⁹⁷ Two "standard" snowshoe cabins were built as well, at Cascade Creek and at Fishing Bridge, but only the one at Fishing Bridge still stands.¹⁹⁸ The cabin—a "classic [NPS] Rustic design: one-story, log construction, with a simple rectangular footprint disrupted only by the open, inset porch entry"—was modified and moved in 1932, as part of the park's first master plan.¹⁹⁹ Finally, a "standard duplex" ranger station was built at the South Entrance to house "the permanent rangers stationed there all year round for fire and game patrols and [the] temporary summer ranger checkers."²⁰⁰ The building was replaced in 1941, after a destructive fire in 1940.²⁰¹

In 1929, a one-story, log bunkhouse was built near the Lamar Buffalo Ranch Ranger Station (1915) and horse barn (1927) to house rangers working with the bison that fed in the area during the winter. The rectangular building had a large dormitory on the east

end that was separated from the lounge/winter kitchen on the west end by a bathroom and three private bedrooms. This rustic structure was built on a foundation of concrete with stone facing. The logs had ventral saddle-notching and chopper-cut ends. The front-gable roof featured exposed purlin ends and wood shingles, doubled every sixth course. After 1963, the interior of the bunkhouse was remodeled so it could serve as a mess hall and classroom facility for researchers and later, the Yellowstone Institute.²⁰²

The major construction project at decade's end was a museum at Old Faithful—one of what would be four trailside museums in the park, to be discussed later in this chapter. Before these museums were even dreamed of, however, Albright was hard at work on an educational component for the park.

For the Benefit—and Education—of the People

When the NPS took over management of the parks, its mission in Yellowstone, in addition to protecting the park's natural and cultural resources, was to provide opportunities for recreation and the enjoyment of nature. The park, after all, was considered a playground for the American people, and offered "tremendous recreational advantages that are only just beginning to be appreciated," as Mather wrote in 1917.²⁰³ The more people who enjoyed the park, the more time and money they would spend there, and the more they would support the NPS. Mather understood this when he wrote, in 1918, "One of our chief duties is declared to be the encouragement in the national parks of all outdoor sports, except hunting and other activities which may impair the parks or injure their wild life. . . . Recreational use of the parks is to be stimulated by any means possible."²⁰⁴

Recreation, however, was only part of Mather's vision for the parks. He was also convinced that parks had tremendous educational value. Both Mather and Albright recognized this value and sought ways to maximize it. "From the standpoint of education," Mather continued in his 1918 annual report, "classes in science are to be afforded special opportunities to study in the national parks, and museums containing specimens of their flora and fauna are to be established as funds are provided for this purpose."²⁰⁵ By 1919, both Mather's sense of how the parks could be used for educational purposes and his efforts to promote the idea of parks as

educational places was becoming clearer. In that year's annual report, he called the parks underutilized by schools and universities and by individual scholars and scientists. He was "extremely anxious that steps should be taken in several of the largest parks next year [1920] to demonstrate the practicality of conducting studies of the natural features at reasonable expense to students availing themselves of the opportunities for the field laboratory work that the parks afford." He also cited Columbia University's addition of a national parks study course to its curriculum as a model for other institutions to follow, and mentioned the LeConte Lectures at Yosemite, campfire talks at numerous parks, the publication of a natural history series, and the establishment of park museums in several parks, one of which—albeit a very rudimentary one—was housed in Yellowstone's park headquarters.²⁰⁶

Albright also had a strong interest in promoting Yellowstone's educational value. According to researcher Denise Vick, in her study, *Yellowstone National Park and the Education of Adults*, Albright had a particularly keen interest in developing the educational component of park operations. In fact, Yellowstone served a leadership role in the area of educational programming. Vick wrote that while Yosemite National Park might have been important for the development of educational ideas and programs, it was "in Yellowstone that the idea of an integrated educational component for the Park Service was fully developed."²⁰⁷ Thus, before education became a system-wide priority, officials at Yellowstone were making real attempts to educate visitors.

The story of Yellowstone's efforts to educate its visitors began with its attempt to inform them. From the time the NPS took over management of the park, the superintendent's office had housed an information desk where visitors could purchase U.S. Geological Survey contour maps and obtain other information on the park free of charge. "The Government information circular is a very popular pamphlet, of inestimable value to travelers," wrote Albright in his first annual report in 1919. "It is in great demand and its publication and free distribution should under all circumstances be continued." But the park had no sector specifically charged with disseminating information to visitors until the following year. Thus, during the summer season of 1919, tourists used the services of photographer and concessioner J. E. Haynes, who maintained "a free information bureau for the benefit of the public."²⁰⁸

In 1920, Albright set up an information bureau

under the charge of Milton P. Skinner, whose life story was tightly interwoven with that of the park. Skinner had first served as a guide while employed by the Yellowstone Park Association at the Upper Geyser Basin in 1896. He later became involved with an effort to interest the secretary of the interior in establishing an educational service and museum in the park, an effort that succeeded in generating interest but no money. In early 1919, however, in “one of his first official acts as superintendent of Yellowstone National Park,” Horace Albright asked Skinner to organize an educational program for the park and appointed him park naturalist—the first in the history of both the park and the NPS.²⁰⁹ Skinner immediately set about opening the information office and preparing and posting “monthly bulletins on birds, animals, flowers, and geology . . . in all public places in the park.” The office was supplied with “photographs, a ground relief map . . . a collection of wild flowers on the walls . . . a few geological specimens for exhibition . . . [and] maps, pamphlets, and circulars for free distribution and for sale.” Albright called the public’s response “astonishing.” Approximately 10,100 visitors used the bureau in 1920, and “appeared very much pleased with the service rendered.” In addition to distributing general informational circulars, pamphlets, and maps, information officers disseminated Skinner’s popular monthly bulletins, the “Yellowstone Nature Notes.”²¹⁰

In 1921, Skinner’s small information office was expanded and moved to its present location in the former bachelor officers’ quarters at Fort Yellowstone (now the Albright Visitor Center).²¹¹ This information office also doubled as the park’s first museum (the one to which Mather referred in his 1919 annual report). Albright mentioned the museum in his own 1921 annual report, saying that it would be developed “as fast as funds can be spared for the purpose.”²¹² Over the three years he served as park naturalist, Skinner collected numerous specimens for display in the museum, and by the time he resigned in September 1922, the collection was so extensive that Skinner deemed the space too small and began using a room behind the office as museum space.²¹³ Albright lauded the display exhibits, noting in his annual report, “To make the exhibits as interesting as possible, far more than the usual care was taken in the preparation of the descriptive labels.”²¹⁴

Yellowstone’s first museum was established, as were most early national park museums, to “aid tourists in gaining an understanding of the geology of the [park] and to assist them in identifying flowers, trees, birds, and

animals.” The displays essentially informed visitors by showing them “what the [park had] to offer and what [could] be seen there by the observant visitor.”²¹⁵ The idea of adding historical exhibits that would illustrate “the pioneer days of the West and the changes that have taken place since the times of the early explorers,” appears to have come from American writer and long-time park visitor Emerson Hough. Among other exhibits Hough suggested was one focused on early transportation in the West: the park could exhibit examples of an ancient Indian travois, a stagecoach, an early pack saddle, a bicycle, old snowshoes, and other equipment showing “changes in transportation since the development of the West began.” Intrigued by the idea, Mather suggested the park solicit contributions of items for use in such an historical exhibit.²¹⁶

Albright touted a “further most valuable feature of the Information Service and one which was highly appreciated by tourists,” in his annual report for 1920: “the giving of free half-hour talks or lectures by Park Ranger Isabel Bassett Wasson three times daily” in the Mammoth area.²¹⁷ A graduate of Wellesley College and Columbia University, Wasson had impressed Albright when he heard her speak on geysers and hot springs during the summer of 1919.²¹⁸ He had thought her then “a splendid public speaker . . . [with] the ability to hold a large audience while discussing scientific problems.”²¹⁹ When Albright hired Wasson, she became “the first seasonal park ranger to be hired in the park by the NPS to give lectures.”²²⁰ The title of Wasson’s lecture that year was “How the Yellowstone Came to Be.” It was a “short discussion of the geological formation of the park expressed in non-technical language,” Albright wrote. This and other topics of interest to the traveling public were covered in Wasson’s lectures that first year.²²¹

Mather referred to such programs as “Camp fire educational talks.”²²² “Like other quests of knowledge,” Mather wrote, “an intelligent study of nature is greatly assisted by direction. Many persons who visit the parks are thoroughly responsive to their influences,” he continued, “but they lack the incentive born of knowledge to delve into a real understanding of things.” Such lectures and guided tours were designed to stimulate that incentive, according to Mather.²²³

When Wasson was unable to return to the park in 1921, Albright hired park ranger Mary Rolfe to give the daily, free, half-hour lectures on the park’s natural features. These lectures occurred on the porch of the Mammoth Hotel and later in the evening at the Mam-

moth Camp.²²⁴ Rolfe, according to Albright, was “a fine enthusiastic girl, who tried very hard to please,” but her lectures, he felt, “were considerably more technical than [Wasson’s].” “[N]ot having [Wasson’s] training as a teacher of geology,” Rolfe, he believed, “had some difficulty presenting her subject.”²²⁵ However, he deemed the park’s educational work “satisfactory on the whole.”²²⁶ Indeed, the educational program of the 1921 season was extensive: a total of 83 lectures were delivered at the hotel, 77 at the camp, 54 in the public campground, and 66 at other points in the park.

Specially trained park rangers also began providing guided trips to different points in the park. Thus was born the idea of NPS rangers, rather than park concessioners, being the park’s official guides. As Albright put it, he began using rangers as official guides “to furnish visitors with accurate information [and] to do away with the tipping practice . . . thus preserv[ing], as far as possible, the dignity of the park as one of our greatest national play grounds.”²²⁷ “The furnishing of guides from the ranger force,” Albright wrote in his monthly superintendent’s report for June 1921, “is a new idea, this service having been furnished heretofore by the hotels and camps.”²²⁸ During the 93-day travel season, 32,068 tourists took a total of 703 guided trips. Albright recorded that the “service was very popular with the public, and brought many expressions of praise from travelers.”²²⁹ In addition, rangers also provided useful information and distributed maps and pamphlets at the checking stations and “loop” ranger stations.²³⁰

When Rolfe was not rehired for the 1922 season, temporary park ranger Frank E. A. Thone took over and delivered 232 lectures to about 60,000 tourists on “the park, its geology, flora, fauna, history, etc.” at Mammoth Hot Springs.²³¹ Visitors also made use of the other educational programs offered in the park. Nearly 30,000 people visited the information office and museum at Mammoth Hot Springs that year, and close to 40,000 tourists were guided by rangers “over the formations” at the Upper Geyser Basin or at Mammoth Hot Springs while they listened to talks about these and other natural features.²³²

The recently completed ranger stations/community centers at Old Faithful, Canyon, and Lake were also used as venues for these lectures. According to Haines, these facilities were perfectly suited to the “low-keyed and entertaining” approach to education that the park initially adopted out of an “official fear lest suggestion of lessons and study would keep people away from the



NPS PHOTO ARCHIVES YELL #128954

Two park rangers. 1922.

Parks.”²³³ Later, the NPS would confirm this soft-pedaled emphasis in a statement of its philosophy regarding education in its general plan of administration for the education division:

[W]e are engaged in a specialized field of education in which our main objective is not primarily to raise the intellectual standard of our visitors in the academic sense. . . . Our function lies rather in the inspirational enthusiasm which we can develop among our visitors—and enthusiasm based upon a sympathetic interpretation of the main things that the parks represent, whether these be the wonder of animate things living in natural communities, or the story of creation as written in the rocks, or the history of forgotten races as recorded by their picturesque dwellings.²³⁴

The next park naturalist, Edmund J. Sawyer, appointed in March 1924, was an artist and ornithologist who, with the help of Jack Haynes, kept the Mammoth museum afloat until NPS officials had completed the

larger-scale education program on which they were working, with specific objectives and a methodological plan of action.²³⁵

Progress on the education front at the national level had been steady since 1917. In 1923, Ansel F. Hall, park ranger, educational officer, and first park naturalist at Yosemite National Park, was appointed chief naturalist of the National Park Service, and put in charge of educational programs in all the national parks. In 1924, Frank R. Oastler, a physician from New York and a member of the National Conference on Outdoor Education, was hired as a collaborator and consultant to work with Hall on “an organizational plan for the educational division.”²³⁶ An actual division of education became a reality in 1925, and took its place on the NPS’s administrative chart at a level equivalent to the Engineering and Landscape divisions.²³⁷

Great strides in educational development were made across the national park system following the creation of the Education Division in 1925, including the establishment of a programmatic approach to educating the public. Education was also one of the two major topics discussed at the 8th National Park Conference in November 1925. The NPS’s new educational focus crystallized that year, when Secretary of the Interior Hubert Work ranked “education with recreation as a NPS objective.”²³⁸ In his annual report, Mather quoted the secretary’s comment that “[n]ature is the supreme school-teacher as well as the master textbook. From nature can be learned the scheme of creation and the handiwork of the Great Architect as from no other source.” The secretary had also described the educational effort as “a new mission . . . which opens up a new field for the propagation of knowledge never before realized.”²³⁹

The other important factor in the growth of the NPS’s educational emphasis was the development of a museum program. Museums were essential to educating visitors because they both helped inform visitors about what they would see as they traveled the park and answered questions about what they might have already seen. In effect, museums prepared visitors to “use . . . parks and their resources as instruments of instruction.”²⁴⁰ Visitors who used parks as places of instruction—as classrooms essentially—would be inclined to linger, Mather believed, and their visits would be more enjoyable. “Knowledge creates interest,” he wrote in his annual report, and “[i]nterest adds to enjoyment.” Furthermore, he argued, a “museum is a most valuable factor in drawing visitors, in awakening their interest,

and in prolonging the length of their stay. . . . It serves the visitors, and it serves the community as well.”²⁴¹

Museums were not to be the showplaces they were in urban areas, however. They were merely venues for learning about the real source of interest: the park’s natural areas. “The national parks themselves are the real museums of nature,” Mather wrote in his 1925 annual report, “and the park museum in each will simply serve as an index to the wonders that may be studied and enjoyed on the ground by the observant student of nature.” In this sense, park museums served a specific, circumscribed role. “[T]hey are to be regarded as places to stimulate the interest of visitors,” Mather wrote, “in the things of the great outdoors by the presentation of exhibits telling in a clear, consecutive way, the story of the park from its geological beginning through all branches of history up to and including the coming of man and his works. All extraneous material is to be excluded.”²⁴²

In fact, a museum had been opened in Yellowstone that year: the Buffalo Jones Museum, housed in the log cabin built by buffalokeeper C. J. “Buffalo” Jones at the show herd area at Mammoth Hot Springs. Exhibits included photographs and specimens relating to the life of Buffalo Jones, and to the early history of bison in the park.²⁴³ Behind the buffalo museum and near the buffalo corral, a zoo was established where animals were displayed for visitors’ enjoyment and education. Ansel Hall, in his annual report for 1926, noted that animal exhibits were part of the NPS’s educational program, specifically mentioning zoos (“mammals in captivity”) and “attracting and taming animals” as acceptable educational activities for national parks.²⁴⁴ In 1927, there were “15 adult buffalo bulls, a yearling bull, a calf, a small band of adult elk, the captive bear Juno, a calf elk, a fawn, [and] an antelope kid,” at the Yellowstone National Park zoo.²⁴⁵

Assistance from the Laura Spelman Rockefeller Memorial and the American Association of Museums was crucial to the agency’s educational plan to construct numerous museums in many NPS units. The memorial first granted money for constructing a museum in Yosemite National Park in 1924; the museum was completed in 1926. At that point, with the exception of the bison-specific Buffalo Jones Museum, Yellowstone was still making do with what Albright referred to as “some interesting exhibits at the headquarters information office, which with some chagrin, we call a ‘museum.’”²⁴⁶ When Albright observed how helpful the museum at Yosemite was to visitors’ understanding of that park’s

natural features, he wrote the interior secretary to garner support for obtaining funding through the American Association of Museums. "The Museum is interpreting the Yosemite to the people in a very effective way," he wrote, "and not only are our visitors leaving it with a wider knowledge of the park and its natural features, but, unquestionably they are leaving it with a greater reverence for this great playground which is reflected in their recreational use of it." Albright wanted a "museum at headquarters, branches at other points, and good equipment" to be "on a par with the Yosemite."²⁴⁷

Albright also asked Chauncey J. Hamlin, president of the American Association of Museums, for help constructing "small local museums" at Yellowstone to ensure that those visiting the park "receive information which will make their sojourn educationally as well as recreationally profitable."²⁴⁸ At about the same time, Interior Secretary Work also asked the Laura Spelman Rockefeller Memorial for help with "a complete educational unit" that would in turn "serve as an example and index for all future educational development in the other parks." In particular, he requested funding for "a small outdoor auditorium and museum at Old Faithful, a general museum, reading room, and educational center at Mammoth Hot Springs, small trailside museums . . . 'shrines' placed at points of vantage throughout the park," and other minor expenses.²⁴⁹ Work's idea of using small museums "advantageously placed and equipped for the definite purpose of giving popular instruction" fit Hall's and Oastler's concept of creating museums with branch—or "trailside"—museums associated with them, as outlined in their 1925 administration plan for the education division.²⁵⁰

During the summer of 1928, Frank Oastler compiled a study entitled, "Report on Educational Survey, National Park Service." In it, he explained that parks were not set aside for recreation alone, and that the full value of parks could be presented through education, which would "enable those who visit the National Parks to obtain an accurate interpretation of the natural phenomena . . . of an unusual character not found elsewhere." Oastler called for creating branch museums to be located at significant points, and observation stations at particular sites for the purpose of demonstrations. He believed that the proposed museums should inspire and stimulate investigations; be used for reference and scientific investigations; and provide information such as published guides, visual education, and scientific material. Oastler cautioned that the museums should

in no way detract from the "main exhibit which is the park itself and its story."²⁵¹

In 1928, the Laura Spelman Rockefeller Memorial, which had first given money to the American Association for Museums for a museum in Yosemite National Park in 1924, provided the full \$118,000 requested by Secretary Work for construction of the park's new museums, with two stipulations: first, that any balance unexpended as of December 31, 1929, revert to the memorial, and second, that no public announcement be made of the gift.²⁵² Horace Albright's "deep personal interest" in the value of park museums and his personal relationship with John D. Rockefeller, Jr., and family likely contributed to the memorial's decision to fund the four museums in Yellowstone.²⁵³

With these funds, the trailside museum concept flourished in Yellowstone—even without the existence of a main museum. As Haines pointed out, these branch museums were intended to "provide a 'hook-up between an object or spectacle charged with dynamic information and a mind that is receptive to informational impulses.'"²⁵⁴ They were to be located "at points where some special features of natural history can best be demonstrated."²⁵⁵ Hence, each branch museum was to have a theme. At Old Faithful, the theme was thermal activity; at Norris, geology and mineralogy; and at Madison Junction, history. The museum to be built at Fishing Bridge would specialize in fauna and some geology.²⁵⁶

The first museum to be started was the one at Old Faithful, designed by Herbert Maier, architect for the American Association of Museums. Construction on the \$8,500 building began in August 1928, and while it was scheduled to be completed before the end of the year, it was not until 1929 that the museum was "ready for occupancy." Vint, McCarter, and noted landscape architect Ferruccio Vitale, of the U.S. Commission of Fine Arts, were in the park that summer to settle on the exact location of the museum.²⁵⁷ Albright praised the structure, saying that in his judgment, it was "finer than the one at Grand Canyon and far finer than the one at Yosemite." "The rock and log work is superb," he concluded.²⁵⁸ Before the museum was finished, architect Maier decided to use a brown stain instead of experimenting with grey stains for the exterior.²⁵⁹ In 1929, the museum, known as the Museum of Thermal Activity, opened to the public and remained operational until it was torn down and replaced with a new visitor center in 1971.²⁶⁰

Maier also designed museums for Madison



YNP PHOTO ARCHIVES, YELL #44321

Madison Museum. 1930.

Junction, Fishing Bridge, and Norris Geyser Basin. The smallest of the three was the museum at Madison, built in 1929. A one-story, T-shaped structure with a gabled and shingled roof, it had “[b]attered rubble masonry” reaching to sill height and double-coursed shingles covering the rest of the structure. Finishing touches included gable ends finished “with tree shapes and diamond patterns sawn into the boards,” and a “wrought-iron sign stating ‘trailside museum’” hanging over the front entrance. Outside, a “flagstone terrace enclosed by low walls” extended out from the museum and overlooked the confluence of the Madison and Gibbon rivers. Two plaques embedded in natural stone memorialized important elements of Yellowstone’s history and legend. One commemorated Stephen Mather, who resigned in 1929 due to health problems, and the other commemorated the fireside discussion purported to have taken place among members of the Washburn/Langford/Doane expedition in September 1870, that was long claimed to have generated the Yellowstone Park idea (the veracity of this story has come to be questioned).²⁶¹ Albert Good, author of a catalogue of park architecture, referred to the Madison Museum as “[m]inor in size, but not in its contribution to park architecture.” He especially lauded the museum’s natural look and its ability to draw the inside out and the outside in. “The pitch of the roof and the texture of the selected logs conspire with the rakish buttressing of the well-scaled rock work to deserve unqualified acclaim,” he wrote. “The spacious ‘landscape’ window serves to project the outdoors into the museum

interior, an illusion to be sought wherever the objective is the interpretation of surrounding Nature.”²⁶²

The museum at Norris, also started in 1929, has been called “the most architecturally imposing” of the three. The one-story, rectangular structure featured an open-air foyer in the center that led to a flagstone terrace overlooking the geyser basin, and stone steps leading down to it. The wings of the building were used for exhibit, office, and living space. Shingled, hipped roofs covered the wings, while a shingled gable roof—the main roof—covered the foyer. The exterior consisted of stone walls with “extreme batters which emphasize[d] the fluid, irregular shapes of the boulders” below and double rows of wood shingles above. The interior of both the Norris and Madison museums consisted of “exposed . . . massive posts with their knots and growths worn smooth by the thousands of visitors who run their hands across them each summer as they pass through the building.” A wrought-iron sign reading “Norris Museum” was hung over the front entrance.²⁶³ The Fishing Bridge Museum, planned in 1929 but built in 1930–1931, will be discussed in the following chapter.

Maier’s museums were, according to Laura Sulliere Harrison, architectural historian and author of *Architecture in the Parks*, significant contributions to national park architecture for two reasons: “First, the buildings are the best structures of rustic design in the National Park System,” and second, “because of their exaggerated architectural features and organic forms, the buildings served as models for hundreds of other

buildings constructed throughout the nation in state, county, and local parks under the auspices of the NPS during the work relief programs of the 1930s.²⁶⁴ Harrison contended that “Maier’s buildings were perfect solutions for an architecture appropriate to the outdoors: informal, through their use of natural materials and horizontal lines, but loaded with a strength of design and heavy-handed expression that subconsciously suggested the smallness of man in relation to nature.”²⁶⁵ Maier accomplished this effect through design elements common to both traditional bungalow structures—his “battered stonework, clipped gables, and low, horizontal emphasis,” for example—and a new architectural notion of fitting structures into the nature of their immediate surroundings. As Harrison explained, Maier’s buildings “responded to their sites . . . and appropriately fit the contours of the landscape.” “[I]n Maier’s buildings,” she wrote, “the onsite and locally-available materials were left more in their natural condition, reflecting the scale and roughness of the surrounding wilderness.” She listed the design attributes that helped achieve this “response” and “appropriateness:”

The enormous logs of the Yellowstone museums were peeled but not sawn, and their rustic knots were left in place giving a tactile richness to the building form. The boulders of the heavily battered walls were left in their natural shapes. Their massive sizes and irregular shapes were emphasized, like the irregularities in nature . . . Maier banked all three museums into the gentle contours, and provided observation terraces that were at least half the size of the interior floor spaces. He even provided tree wells in the terraces to accommodate the larger specimens that existed on the sites prior to construction. The terraces encouraged visitors to spend more time outside enjoying the local features and, hopefully, to reflect on what they had learned and seen in the museums.²⁶⁶

Maier’s buildings best exhibit the notion that structures of any kind in a national park should harmonize with nature to the point of being almost unnoticeable. Maier himself claimed that buildings in national parks were “necessary evils,” and argued that “even the finest building . . . is somewhat of an intruder.”²⁶⁷ As Harrison wrote, Maier’s success lay in his ability to minimize “that intrusion by maximizing the use of indigenous building



NPS PHOTO ARCHIVES YELL #44325

Norris Museum construction. 1930.



NPS PHOTO ARCHIVES YELL #44327

Ranger and visitors viewing exhibits at Norris Museum. 1930.

materials in a way that seemed as if the building had just grown of its own accord on the site.”²⁶⁸

While branch museums had become a reality, Superintendent Albright still wanted a “big headquarters museum” to house the displays on exhibit at the old bachelor officers’ quarters at Mammoth Hot Springs.²⁶⁹ In his 1928 annual report, Albright wrote that the site for the Mammoth museum had “been temporarily located and [would] . . . be built upon next spring.”²⁷⁰ Plans were upended, however, when Vitale suggested that “everything . . . at Mammoth Hot Springs ultimately be scrapped and replaced by a new plan” in the NPS’s attempt to “develop a general plan for the reconstruction of the Yellowstone Park headquarters.” Albright argued in favor of keeping the fort as the headquarters: “The more I think about the proposition, the more I think it is of tremendous interest to the public to have here in the

park an old army fort, and that we could do a lot worse than keep the old fort,” he wrote to Acting Director Arno Cammerer in August 1928, against the creation of a new plan.²⁷¹ “I am frank to say . . .” wrote Albright, “that I have no particular enthusiasm for the new plan, largely for the reason that I think it is going to be a good many years before anything can be done in the way of carrying it out. The investments here are simply too heavy to consider as being subject to expensive change in any reasonable period of time.”²⁷² His practical concerns were real—and as it turned out, correct—and work on the headquarters museum was postponed indefinitely.

In the meantime, Albright suggested that the Landscape Department work out “a general design of the future buildings to be erected at Mammoth Hot Springs and adopt a type of architecture and build along the lines laid down by such design, rather than count on ultimately replacing all of the buildings we have at these headquarters.”²⁷³ But his suggestion—even with Cammerer’s tentative approval—did not go forward. “If insuperable difficulties occur whereby certain buildings [such as the museum] must be up in the public interest before such a plan is finished,” Cammerer wrote back to Albright, who was then both superintendent of Yellowstone and assistant field director of the NPS, “they may be permitted on approved locations ‘temporarily’ with the understanding that if any changes are desirable as regards to site when the new plan has been approved, it will be done later.”²⁷⁴ The NPS chose to postpone construction of the museum, which disappointed Albright: “I still hope we can get the situation here cleared up so the big museum can be erected here next summer,” he wrote to a museum supporter in 1928. “We certainly need that building very, very badly.”²⁷⁵

Another educational facility built in the park in the 1920s was the new fish hatchery at Yellowstone Lake. This facility, which was largely constructed with private funds from one V. N. Corey, was designed by the NPS’s Landscape Division, and included what Albright called some of the best log work he had ever seen. In a report on the construction of the new museums and hatchery, Albright stated that it was built with “special consideration for the needs of the educational division” in that it would “be possible to take large crowds through the building under the guidance of a ranger naturalist, without in any way impairing the operations of the Bureau of Fisheries.”²⁷⁶

Another way for visitors to “hook up” to the park’s spectacles was through ranger-led guided tours.

Visitors had been receiving NPS ranger-guided tours of the Old Faithful and Mammoth formations since 1921. In 1924, when Albright hired experienced teacher and naturalist H. S. Conard of Grinnell College, Iowa, to direct activities and field trips at Camp Roosevelt, their options for guided tours expanded to the Tower area as well.²⁷⁷ As nature guiding became an educational priority in 1925, the rangers who led these tours became known as ranger naturalists, a title that was codified in 1926, when the first *Ranger Naturalists’ Manual* was published.²⁷⁸ The manual, considered “an accomplishment of great importance,” was intended to help ranger naturalists and park rangers with their guiding and lecturing responsibilities, and was compiled by Jack Haynes, who continued to serve as unpaid acting director of the park’s museum.²⁷⁹

In the 1927 edition of the manual, Albright referred to the ranger naturalists as “the faculty of the biggest summer school of nature study on earth—a school of 200,000 pupils!”²⁸⁰ According to historian Paul Schullery, these ranger naturalists did “more to shape the public impression of rangers than all the rest [of the rangers], because each of these men . . . talked to thousands of tourists, contributing much to the image of the ranger as both self-reliant woodsman and expert naturalist.”²⁸¹

It soon became clear to Chief Naturalist Hall that ranger naturalists were only able to serve roughly 80 percent of the park’s visitors—“this in spite of the fact that they were conducting parties of as many as 200 over the formations [at Old Faithful, for example] at one time.”²⁸² Hall then instituted three projects which in turn set in motion a whole system of nature and self-guiding trails: the “complete labeling of the [Mammoth] Formation Trail . . . [t]he complete labeling, in the same manner, of the Black Sand Basin Trail . . . [and] [t]he construction and maintenance of a Nature Trail to Observation Point, Solitaire [*sic*—Solitary] Geyser, and other points of interest.”²⁸³ By 1929, enough trails were in place for ranger naturalist Newell R. Joyner to write of the system, “Self-guiding trails have been established on the formations at Mammoth and Old Faithful and on the nature trails at those places. Self-explanatory signs are placed so that they are a help to those who find it impossible, or who do not care to accompany the Ranger Naturalist who conducts the guide party. These self-guiding trails are another effort to render all the service possible to the guests of the park.”²⁸⁴

By 1928, three additional developments colored



Norris Museum. 1930.

the education picture at Yellowstone: the creation of a Committee on Study of Educational Problems in National Parks, with the well-known biologist John C. Merriam as chair; the appointment of Dorr G. Yeager as head naturalist and chief of educational programming in the park, replacing E. J. Sawyer; and the agreement that Carl P. Russell, park naturalist from Yosemite, would help with educational programming in Yellowstone. Merriam's committee underscored the idea that "the purpose of national parks is to be found in their inspirational and educational values," while Yeager, an early graduate of the Yosemite School of Field Natural History (a naturalist training program established in 1925), oversaw the construction of the park's premier trailside museums and stayed active in the park for three years.²⁸⁵ Russell, a naturalist at Yosemite National Park, was dispatched to Yellowstone at the recommendation of Hermon C. Bumpus, chairman of the American Association of Museums, to advise, among other things, on exhibit installation at the new trailside museum at Old Faithful. Bumpus intended for Russell, who was considered the museum specialist in the education division, to help with "several problems connected with the general educational program, such as the strengthening of the lecture system, the improvement of the field work, and the creation of facilities the better to meet the needs of those visiting the park in their own cars, accompanied, as many are, by younger members of the family."²⁸⁶ Albright was thrilled at the prospect of having Russell, who did not actually start work in Yellowstone until 1929, on site in the park, and considered Russell's work "as being of

very high order and absolutely indispensable [*sic*]."²⁸⁷

In the summer of 1928, Frank Oastler completed a survey of educational needs in Yellowstone. He found that the most important story at the park was its geology, followed by its wildlife. Oastler suggested that a main museum be built at Mammoth, trail museums at Clematis Gulch (at Mammoth), Grand Canyon, and Camp Roosevelt, and an observation station at Capitol Hill. He recommended an auditorium and library to complement both the Mammoth and Old Faithful museums, and noted that the park was currently exhibiting historical objects as well as natural history displays, in the form of an old stagecoach situated outside the small museum at Mammoth.²⁸⁸ Oastler also recommended wildflower gardens, with labeled beds, at each important point; he disliked the "zoo" approach but recommended that "every effort be made by planting food, salt, seed, bird baths, etc. in certain places to attract wild life about the areas where the people gather." He also encouraged the construction of nature trails.²⁸⁹ Most of these ideas bore fruit.

By 1929, guided tours had been added at Lake (1926), Canyon (1928), Fishing Bridge (1929), and West Thumb (1929). That year alone, 87,192 visitors were instructed by means of these tours.²⁹⁰ The lecture service was expanded by then to include "twelve lectures . . . daily at the main points of the loop": three at Mammoth, two at Old Faithful, one at West Thumb, two at Canyon, two at Lake, one at Fishing Bridge, and one at Tower. In addition to these lectures, a ranger naturalist gave several talks throughout the day on Mount

Washburn.²⁹¹ The ranks of ranger naturalists had also grown. During the summer months, park naturalist Dorr Yeager and his head ranger naturalist were joined by sixteen ranger naturalists and one park ranger.²⁹² Even with an increase in the number of ranger naturalists and the existence of self-guiding trails, there were still too many tourists trying to fit into too few guided tours. Thus, each year park officials called for more money for more ranger naturalists.

Protection

While ranger naturalists were responsible for the education of visitors, park rangers were responsible for protecting the park's resources, chief among which were wildlife and park thermal areas. The protection department also established and implemented policies regarding the protection of the park's natural and cultural features. The first decade of NPS administration saw little change in the park's position on wildlife preservation. The tame bison herd was still tended on the reserve on the Lamar River, and hay was still harvested for its use and for feeding herds of elk, deer, and pronghorn. Predators—in particular mountain lions, wolves, and coyotes—were still being exterminated, while bears were considered a major park attraction and were thus exploited for tourist pleasure.

When the NPS took control of Yellowstone's wild residents, its position regarding wildlife closely resembled that of the military: to protect game species from the rigors of winter, predators, and the encroachment of human habitation, and in doing so, to create herds of wildlife unafraid of the human presence. "We may now invite the traveler to visit Yellowstone," Mather wrote in 1917, "... where there is . . . opportunity for communion with nature, its wild flowers, its trees, and its rippling streams, where wild animals, gentle and unafraid, are to be seen in abundance, and where all is fresh and calm and beautiful."²⁹³ Mather's "gentle and unafraid" wild animals were herds of deer, antelope, elk, and bison. They were most certainly not the wolves, mountain lions, and coyotes that also called the park home, but rather were targeted for extermination. Thus, the park's policy of wildlife protection included game animals and, at least most of the time, bears. "The killing of wild animals, *except predatory animals when absolutely necessary*, is strictly forbidden in Yellowstone Park by law," Mather wrote in 1917.²⁹⁴ Park officials felt it was "absolutely necessary"

to kill predatory animals, as evidenced by the numbers of predators killed during this time and the comments accompanying these statistics. "An intensive campaign to destroy predatory animals, such as the wolf, coyote, and mountain lion, has met with gratifying success," Mather wrote in 1918, a year when 190 coyotes and 36 wolves were taken.²⁹⁵

Predatory species were exterminated primarily because Superintendent Albright, his superiors, and his rangers believed that those animals did "much damage to other game."²⁹⁶ Their job, they believed, was protecting wildlife even if that wildlife had to be protected from the natural process of predation. In an era before ecosystem relationships were well understood, their view was not unusual. But there was something else at work: politics. Put simply, wildlife protection was popular. "The development and protection of the wild animal life in the park, which was only considered of secondary interest for many years, has become [*sic*] to be generally known as a feature of utmost importance to the public," Albright wrote in 1918. "Our animals are becoming tamer and more is seen of them from year to year."²⁹⁷ Albright's positive spin on the notion that the park's wild animals were becoming "tamer" is indicative of the vastly different value system and management philosophy espoused by the NPS at the time, compared to today.²⁹⁸

According to former NPS employee C. C. Presnell, predator control was not questioned in the agency until about 1930. To that point, he wrote, "a great majority of people, including NPS officials took it for granted that complete protection of wildlife involved elimination or drastic control of all predators. The term 'extermination of predators' appears often . . . in official business."²⁹⁹



"Pete" the mule deer begging for food at a Mammoth Hot Springs residence. 1920.

YELL #43915

Thus, while some ecologists outside the park were beginning to revise their thoughts about predator control and coming to very different conclusions from Albright's and Mather's about the value of predators in ecosystems, the NPS continued to support predator control in order to remain true to Albright's and Mather's understanding of the park's mandate.³⁰⁰

By 1926, this policy was relaxed to include mildly stated concerns about possible extermination, but the end result remained the same: "It is contrary to the policy of the service to exterminate any species native to a park area," Mather wrote in his annual report, "but it is necessary to keep several of the predatory animals, such as wolves, mountain lions, and coyotes, under control, in order that the deer, antelope, and other weaker animals may not suffer unduly from their predations."³⁰¹ Albright's term as director of the NPS (he followed Mather in the position from 1929 to 1933) resulted in no immediate change in either the park's policy or practice of extermination: "While no species of animal indigenous to a park is ever exterminated," he wrote, "those that prey too heavily upon the weaker animals are reduced in number, in an endeavor to retain as nearly as possible the balance of nature."³⁰² The "balance of nature" idea, popular with many ecologists of the 1920s and 1930s, would prove to be a double-edged sword in Yellowstone.³⁰³ As is indicated by Albright's use of the term as a justification for continued tinkering with predator-prey relationships, it would lead, on the one hand, to decades of interventionist wildlife management, including the removal from the park of 26,400 elk between 1923 and 1968 by means of live shipping and direct reduction, out of concern that they were overgrazing the park's northern range.³⁰⁴ On the other hand, it provided the seeds of later, more sophisticated ecological thinking that served as the basis for putting a complete halt to the killing of predators and elk (and bison) reductions and, much later, for actually restoring a major predator—the wolf—to its rightful place in the park. But in Albright's time, the "balance" remained clearly tipped toward the game species.

Meanwhile, the park's herds of bison and elk grew. By 1922, officials believed that there were "surplus" bulls in the managed bison herd. Two years later, the herd had grown to 780 head and the NPS was looking for ways to "dispens[e] of buffalo meat in large quantities" (today's population hovers around 4,000 animals).³⁰⁵ Though park officials were by this time convinced that the growing size of the park's elk herds threatened the

"balance of nature," they remained concerned that the herds were vulnerable. Thus, the park increased its efforts to turn land to hay-raising and the NPS increased pressure on Congress to extend the park's boundaries, thereby creating additional winter range. Haying continued in the Lamar Valley, both at the buffalo ranch and at Slough Creek, with additional acres irrigated there as well as on the 45-acre tract at the North Entrance.³⁰⁶ In 1925, private citizens, organized into the Gallatin Game Preservation Company (GGPC), contributed \$50,000 toward the purchase of lands north and west of Gardiner, Montana. This land was intended for use as foraging ground for the "dwindling" pronghorn and elk populations. Because the group knew that any plan Superintendent Albright might propose to extend the park's boundaries would likely be hindered by government bureaucracy as well as local politics, the GGPC, which had already purchased one large ranch, planned to turn the land over to the park. It was hoped that the government would purchase an equally large section of land. This purchase involved the Reese Creek and Stephens Creek areas.³⁰⁷

In March 1926, President Calvin Coolidge signed "An act to make additions to the Absaroka and Gallatin National Forests and the Yellowstone National Park and adjacent lands, and for other purposes," which enabled the GGPC to turn over land already purchased to the government and supported the NPS's efforts to add more land to the park for pronghorn and elk preservation, to cultivate hay, and to establish winter feeding grounds. The previous November, the W. M. Hoppe ranch (approximately 1,000 acres) had been purchased, and nearly 135 tons of hay produced.³⁰⁸ The GGPC continued to raise funds for the addition of more land in this area. The effort to extend the park's boundaries was successfully completed in 1929, when the park "was enlarged by 78 square miles through boundary revisions on the north and east."³⁰⁹ These boundary adjustments were made at the recommendation of the President's Coordinating Commission on National Parks and National Forests.³¹⁰

At the root of such attempts to improve the park's herds of game species lay a simple equation: more animals equaled more tourists. Frank Oastler, in his survey of educational opportunities for Yellowstone, recognized the value of guaranteeing visitors a vista replete with grazing animals. Thus he suggested that a "hidden fence" be constructed in the Lamar Valley near Mount Washburn to enclose buffalo and elk for visitor viewing.³¹¹ Accord-

ing to Schullery, Albright implemented this suggestion and “arranged for the construction of several miles of carefully placed corral in the Antelope Creek drainage on the lower north slopes of Mount Washburn.” “Much of the fencing was obscured by trees, giving the effect of open range,” he added.³¹² Furthermore, throughout this period, bison continued to be kept in captivity at Mammoth Hot Springs as a popular tourist attraction.

Superintendent Albright’s efforts to protect game species extended to another creature, one that has come to be recognized as the symbol of Yellowstone—the bear. Albright knew that the public’s fascination with the bear enhanced visitation to the park. Thus, he considered it a species to be “protected” and controlled only when human life or property was threatened. “I doubt if anything in the park creates a more lasting interest and pleasure in the minds of most tourists,” wrote Albright in 1918, “than does a small herd of elk or a few scattering deer seen along the road; a herd of bison in the pasture at Mammoth, or on Lamar River, where the main herd is kept; a porcupine along the roadside, which the driver will be careful to avoid, if his car is not equipped with puncture-proof tires; and best of all, the bears, which frequent the camps and hotels, where they beg for food, although they are already so fat that they can hardly climb a tree if startled.”³¹³ The park superintendent considered it good news when bear numbers or sightings were up; bears were clearly regarded as a “never-ending source of pleasure to the tourists.”³¹⁴

Albright’s attitude led to the institution of one of the park’s most historically notorious activities: the staging of bears feeding at garbage dumps around the park. In 1921, Albright wrote in his annual report, “[t]he garbage dumps at Mammoth, Old Faithful, Lake, and Canyon were used as [feeding sites], and were regularly visited by people from hotels and camps.” While there

was an obvious need to keep bears from harming any tourists—hence the positioning of park rangers armed with rifles at the dumps during “visiting hours” —tourists were encouraged to watch the show. In 1925, special bear feeding platforms were constructed at each dump ground to facilitate viewing of these NPS-sanctioned events.³¹⁵ Bear watching, Albright recognized, was “one of the most interesting features of the park,” but it was an inherently risky business.³¹⁶ By the 1930s, as bears’ wariness of humans decreased and their dependence on human foods increased, park officials admitted that Yellowstone had a serious “bear problem.” But the bear shows continued until 1941, when they were finally ended for good.³¹⁷

Conclusion

The beginning of a new decade heralded change for Yellowstone. In 1929, Stephen Mather resigned as director of the NPS, and Horace Albright returned to Washington after ten years in the park to take over as the new director. Roger Toll, superintendent at Rocky Mountain National Park, replaced Albright at the helm of Yellowstone’s administration. Furthermore, October 1929 saw the beginning of the Great Depression, which had a tremendous impact on Yellowstone (and the entire nation) for twelve years. But even with these radical changes, the management of the nation’s first park forged ahead. With its solid foundation in educational programming, Yellowstone was positioned to remain an important component of the nation’s recreational arena. And with experience gained in planning and aesthetically coordinating the park’s built environment, park officials were prepared to make continuing adjustments to the park’s cultural landscape.