Chapter Two:

The Development of a Fire Management Structure

The founding of the National Park Service in August 1916 heralded a new era for both the national parks and national monuments. While Congress had established the initial national parks – Yellowstone, Yosemite, General Grant, and Sequoia – with specific objectives in mind, the passage of "An Act for the Preservation of American Antiquities," known as the Antiquities Act of 1906, transformed the proclamation process. It allowed the president to establish national monuments from the public domain with the stroke of a pen. The Act placed few restrictions on what kinds of sites could be included in the monument category and neglected to provide resources for administering the new areas. The result was a numerical explosion in park areas after 1906, complicated by the remarkable diversity of the new areas preserved. Not only did the park system contain spectacular and expansive natural areas like the first national parks, it now included archaeological areas, natural curiosities such as the petrified forest of Arizona and diverse properties that held countless natural and cultural treasures.[72]

The array of park areas posed an important challenge for Stephen T. Mather, the businessman turned civic exemplar who took the reins of the National Park Service at its birth. Born July 4, 1867, Mather was raised in California during an exciting era. He matriculated from the University of California in Berkeley in 1887, a devoted adherent of the fraternity Sigma Chi and among the many in the era who inhaled the heady fumes of public service that had begun to entice the privileged classes. Mather first worked as a journalist under the storied Charles A. Dana at the *New York Sun*, leaving the newspaper to seek his fortune in the development of American borax. He took charge of promotion for borax king Francis Marion Smith, creating the Twenty-Mule-Team brand and making a name for himself in the nascent public relations and advertising community. Mather had a knack for publicity and for keeping a product in the national eye. Following a nervous breakdown that briefly institutionalized him in 1903, Mather left Smith's empire to join an old friend in a new borax mining endeavor. Eleven years later, he had become sufficiently wealthy to retire and pursue his other passion: public service.[73]

Even before he became successful in public relations, Mather had been known as someone with a strong desire to accomplish civic goals. An inveterate joiner, he belonged to nearly every major civic, social, and charitable organization in every city he inhabited. His fraternity remained important to him all his life and expanded to a range of other activities. Mather seemed the classic good citizen; he was involved in so many civic activities that it was hard to find an organization of any significance to which he did not

[72] Hal K. Rothman, *Preserving Different Pasts: The American National Monuments* (Urbana: University of Illinois Press, 1989); Alfred Runte, *National Parks: The American Experience* 2d ed. (Lincoln: University of Nebraska Press, 1987); "An Act for the Preservation of American Antiquities," 16 USC 431-433, June 8, 1906.

[73] Robert Shankland, *Steve Mather of the National Parks* (New York: Alfred A. Knopf, 1970), 1-41.

belong. In love with California and among the state's greatest cheerleaders in the early twentieth century, Mather connected especially to the outdoors, so remarkable in his native state. This fascination drew him to the national parks.

Mather's involvement with the national parks began with an apocryphal story that illustrated much about the cozy nature of the American ruling class at the start of the twentieth century. One of Mather's college classmates, Sidney Mezes, advised President Woodrow Wilson, leading to the appointment of a coterie of Californians – and indeed University of California graduates – to high posts during Wilson's presidency. One of them, Franklin K. Lane, who had been at Berkeley at the same time as Mather, became Secretary of the Interior. Acquainted with the new secretary, Mather wrote him a scathing letter after a visit to the national parks. Lane purportedly responded, "Dear Steve, if you don't like the way the national parks are being run, come on down to Washington and run them yourself." Mather in fact accepted an offer from Lane, beginning at the Department of the Interior in 1915 as a special assistant with national parks as the primary part of his portfolio.[74]

Eighteen months later, Wilson appointed Mather the first director of the new National Park Service. Mather had come to see American nature as the extraordinary characteristic of the nation. Leading the National Park Service offered him a way to illustrate the importance not only of the physical continent, but of the principles of Bull Moose Republicanism that he had embraced in the 1912 election season. By 1916, Mather was a dedicated Progressive, among the many who believed that government could and should provide for the common good in the United States.

The reality he encountered quickly made hash out of the idealism he brought with him. Mather inherited a complicated situation. Little direct management of the national parks had taken place since the Army renounced its commitment to the task in 1914. Mather had a very limited staff in the nation's capital and few people in the field. Nor did he have a plethora of resources available to him. Chosen because he had an extraordinary way with people, voluminous connections, access to resources, and unmatched dedication, he faced a task equal to his prodigious skills.

For all his marvelous attributes, Mather was not a scientist, and fire management was very low on the Service's initial list of priorities. In part, this stemmed from the minimal role fire played in the national parks, but the chief reason for Mather's lack of interest was the array of issues that faced the new agency. Mather was a Progressive to the core and he reflected its values, which included the concept that actions such as flood control, predator removal, and fire management were all difficult responsibilities best left to specialists. Mather had to sell a new idea to Congress, arrange for funding for park management, foster the creation of travel networks so he could build a national constituency for the National Park Service, administer cranky and sometimes tendentious congressional representatives and their local friends, and otherwise establish his foundling agency as a player in the federal land management bureaucracy.

The fires of 1910 had begun to fade in memory, and when Mather looked across the federal bureaucracy, he saw the post-Gifford Pinchot Forest Service actively embracing fire suppression as a core agency mission. Pinchot's successor, Henry Graves, considered fire protection to be 90 percent of his agency's mission. Pulled by his fledgling agency's many needs, Mather likely never considered any kind of proactive fire

[74] Shankland, *Steve Mather of the National Parks*, 7, 53-54; Runte, *National Parks*, 109-110.

management regime. His official correspondence shows evidence only of reaction to crisis. Despite the incipient rivalry between the Forest Service and the National Park Service, Mather was content to leave the difficult obligation of firefighting to the Forest Service.[75]

Even that agency was only beginning to learn about the enormous challenge it had chosen to make its own. The science of fire management remained in its infancy, and the Forest Service recognized that it could do little about major fires. The Big Blowup of 1910 forever shaped the Forest Service's vision of fire. The inadequacy of existing fire strategies and the inability to genuinely impact major fires struck hard at the core of the sense of duty and worth that early foresters held. When they looked around, they could see real reasons for the agency's weakness when faced with major fires. The lack of technology for transporting vehicles and pumping water, the vast array of federal open space in the West, and the incredible need for dollars and labor to make any kind of a dent in a major fire simply was beyond the reach of any federal agency throughout the 1920s. To its credit, the Forest Service thought long and hard about fire. It continued to experiment with light-burning and allowing some natural fires to burn into the 1920s but became primarily a fire-fighting agency as it built the disasters of 1910 into its creation myth.[76] In contrast, the early Park Service invested much less of its intellectual energy and fiscal resources in fire. Not a single staff member had fire control or management in their job description.

The nascent Park Service made early tactical mistakes. Its efforts to attract the public had the adverse affect of increasing the risk of fire. Since Yellowstone in 1886, anyone who managed a national park area recognized that people caused most of the fires that required an organized response. Under Mather, the Service's goal was to attract visitors, often as many people as could arrive by the conveyances of the day. NPS efforts were devoted to ensuring that people had access to exciting natural and cultural sites, were comfortable in the parks, and brought home souvenirs that memorialized their stay. Abundant visitors were the focus. In contrast, the Forest Service was prepared to deny access to its lands as a way of controlling people and with them, the fires that agency so dreaded. As Mather built a constituency for the national parks, he inadvertently encouraged precisely the conditions that led to fires. People came to the parks in greater numbers and visited more places inside their boundaries; among the countless other ways they had an impact on parks, they made campfires and tossed aside cigarettes. Fires outside the backcountry grew in direct proportion to the increase in visitation but the Washington office of the National Park Service looked past the issue.[77]

---

[75] Samuel P. Hays, *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1880-1920* (Cambridge: Harvard University Press, 1959), 1-5; Stephen J. Pyne, *Fire in America: A Cultural History of Rural and Wildland Fire in the United States* (Princeton: Princeton University Press, 1982), 295-96; Mather's official files in NARA RG 79.3.2 for this period show no mention of fire.

[76] Pyne, *Fire in America*, 295-97; Hal K. Rothman, ed., *"I'll Never Fight Fire With My Bare Hands Again": Recollections of the First Forest Rangers of the Inland Northwest* (Lawrence: University Press of Kansas, 1994), 1-16, 110-36; Harold K. Steen, *The U.S. Forest Service: A History* (Seattle: University of Washington Press, 1976), 37-59.

[77] Pyne, *Fire in America*, 296-97; David Carle, *Burning Questions: America's Fight with Nature's Fire* (Westport, CT: Praeger, 2002), 11-26; Runte, *National Parks*, 102-04; Shankland, *Steve Mather of the National Parks*, 92-99, 133-42.

At the same time, individual park managers found themselves responding to fire with whatever means were available to them. Especially in the Sierra Nevada and in the Northern Rockies, each summer brought fires that necessitated a response. Problems with communication, transportation, and the inevitable lack of resources placed park superintendents alone in the agency in their battles against fire. They turned to local residents and other federal agencies in their immediate vicinity because these were neighbors with whom they shared problems. In this respect, individual National Park Service units achieved a level of autonomy that they were not generally permitted in more mundane affairs.

As a result, fire remained a local issue for the first decade of the National Park Service's existence. Washington expected individual parks to deal with fires that occurred inside their boundaries or in their immediate vicinity. Superintendents reported fires and how they dealt with them, but underscoring any communication was the stark reality that they addressed fire only with the resources they had on hand. As a result, most developed strategies to offset the lack of fire fighters and dollars. Superintendents cultivated local residents and worked with area Forest Service rangers to develop response systems. In most cases, the response was positive. Everyone recognized that survival at the edges required interdependence. Fire demanded cooperation. In real fires, only full-fledged cooperation provided a chance of retarding the destructive progress of a blaze.

For most of the national parks, the 1916 founding of the National Park Service had done little to change fire management realities, and absent the soldiers who shouldered so much of the fire-fighting burden, the new agency was forced to make do. The exigencies of World War I contributed to this situation as early budgets were limited, but even after the end of combat in 1918, the resources available to the Service did not grow in proportion to its obligations. New parks and larger visitor numbers spread limited resources ever more sparsely across the national park landscape. This complicated every mandate and goal the new agency possessed, for the National Park Service effectively was forced to do more each year without a substantive increase in available resources.[78]

The NPS's fiscal circumstances and a lack of general understanding of the demands of fire and its implications for the park system combined to keep fire protection on the periphery of the agency's thinking. Nor did the Service make a special effort to change its fire management situation. Fire protection and preparation remained an afterthought. As a result, National Park Service standards did not measure up to the protection the Army once provided. Myriad reasons contributed to this shortcoming. Unlike the Forest Service, which received congressional authorization in May 1908 to overspend its budget on fire fighting, the Service had to fight fire from its general appropriation. There were no specific earmarks in advance of fires. Financial conditions remained abysmal. No individual park had a fire budget or staff member specifically devoted to fire management in any form. Personnel was spread thin across many responsibilities, and few in the Service, save Colonel John R. White, who joined the agency as a ranger in Hawaii and became superintendent at Sequoia and General Grant

[78] Runte, *National Parks.*

national parks for more than two decades, had any experience with fire or inclination to think about it.[79]

The federal appropriations process did not yield positive results for fire protection in the park system. The war years were hard, although Mather was able to transcend many of the problems that befell other federal agencies. His relationships with members of Congress and his ties to influential people across the country mitigated the impact of war on his fledgling agency. Although Albright recalled the "agony of appropriations" as an annual spring rite, the agency did as well as could be expected. In spring 1918, the peak of American involvement in Europe and with no end to combat yet in sight, the Park Service received $754,195 in a lump sum annual appropriation. In his memoirs, Albright complained that the budget provided no special funds for new roads and only a little money to improve El Portal Road in Yosemite. "For fire fighting, not a penny was allocated," he remembered many years later.[80]

This situation reflected not only Congress' parsimony, but the agency's hierarchy of requests as well. The few remaining papers that address the National Park Service's budget requests show no evidence of a specific request for fire fighting. Mather primarily focused on access; he thought about roads and contracts with visitor service providers, leaving more direct resource management questions to subordinates. In the 1910s and 1920s, the Service still struggled with the need to expand. Its energy and effort was directed toward land acquisition ahead of protection of lands already in the national park system. Without resources to support on-the-ground activities, much of the work that assisted in fire protection –clearing and brush removal in particular – was limited to local efforts. The small size of the Service and its vast responsibilities contributed to a distinct division in its operations. Superintendents acquired de facto autonomy, but without resources at their disposal, they faced difficulty in giving it meaning. In theory, park superintendents had considerable discretion. The small fixed appropriations for most translated into limited action.[81]

The dominant technological advance of the age posed another kind of problem. At the founding of the National Park Service, railroads were critical to the Service's formulation of its future. Rails would bring the visitors who elected the officials who funded the park system and their ability to reach national parks topped the early National Park Service's list of goals. Major national parks such as Glacier and Yellowstone were well served by the steel rails either within the parks or near their boundaries. Yet trains and the sparks they threw off remained a prominent cause of fire. In some situations, such as the Inland Northwest during a dry summer, a railroad as much as fifty miles away could represent a serious threat to a park. The rapid spread of fire made rails a catalytic factor. Fires accompanied rail lines with a certainty that was frightening, and park superintendents watched nearby rails with trepidation.[82]

---

[79] Carle, *Burning Questions*, 236-38; Lary M. Dilsaver and William C. Tweed, *Challenge of the Big Trees: A Resource History of Sequoia and Kings Canyon National Parks* (Three Rivers, CA: Sequoia Natural History Association, 1990), 151-69.

[80] Horace M. Albright and Marian Albright Schenck, *Creating the National Park Service: The Missing Years* (Norman: University of Oklahoma Press, 1999), 276-79.

[81] Confidential Files of Horace Albright, arranged by subject, 1916-1933, NARA, RG 79.3.2; Joseph W. Ernst, *Worthwhile Places: Correspondence of John D. Rockefeller, Jr., and Horace M. Albright* (New York: The Rockefeller University, 1991), 3-15; 24-28.

[82] Rothman, *"I'll Never Fight Fires with My Bare Hands Again,"* 103-36.

Parks faced other kinds of fires, natural and human-induced. When lightning ignited a powerful fire in a remote area, it required less reaction from the National Park Service. Such fires simply burned until they consumed all the available fuel or were extinguished by precipitation or blocked by geographical barriers. When fires were closer to people, often because carelessness had been their cause, parks relied on fear of the fire's spread to catalyze organized response. Everyone in the fire's path tended to pitch in to slow, divert, contain, or suppress fire. With limited tools and fewer resources available to counter fire, any blaze had the ability to leap out of control and damage everyone's property. In the late 1910s and early 1920s, national park areas did the best they could when they faced fire. When fire spread and outstripped the sorely limited resources, the National Park Service called on the Forest Service for whatever assistance that agency could offer.[83]

The National Park Service failed to develop an overarching fire policy of any kind, and as a result, the response to fire varied from park to park. Those with considerable timber and significant histories of fire devoted greater resources to thinking about fire though most lacked the money to make a substantial investment in any kind of prevention program. But most park superintendents and custodians addressed fire as if it were an unexpected event instead of an endemic condition, reflecting the reality that most managers did not plan for any kind of annual fire management. Without a line item budget for fire, any resources allocated for suppression came from those initially allocated to other activities. NPS officials in Washington provided little guidance or structure. Early park managers recognized that no matter what they did, if fire reached the level where it demanded significant reallocation of resources, no manager had to do more than make a token effort to slow a blaze. The most common agency response to a major fire in those years was to look to the skies and hope for rain.[84]

As long as most park fires were small and local, this haphazard management system proved adequate. As soon as a fire got loose, it exposed the limited nature of existing practice and the philosophy of benign neglect that underpinned park fire management. The buzz that Mather and his associates created – inspired by a combination of promotional publications, speeches, and the aggressive posture of Congress in proclaiming new park areas – made insufficient action an even graver failing. If the agency had gaps in its practice in its first few years, its inability to respond to fire held a prominent place on its lists of shortcomings.

From August 1916 until the summer of 1919, the National Park Service was simply fortunate: no major blazes took place inside national park areas. The small fires in the parks were handled by zealous application of every available resource. Mather was able to promote the parks, build support for them, deliver influential people to a range of

---

[83] Pyne, *Fire In America*, 353-56; Carle, *Burning Questions*, 238; Harold K. Steen, *The United States Forest Service: A History* (Seattle: University of Washington Press, 1976), 129-31, 176-79.

[84] A thorough review of agency files in NARA, RG 79.7 reveals no examples of proactive fire planning. Albright's two memoirs, Albright and Cahn, *The Birth of the National Park Service*, and Albright and Schenck, *Creating the National Park Service*, contain a total of five references to fire, all but one of which are comment on the impact or aftermath of specific fires. No correspondence of Mather in the NARA, RG 79.3.2 or 79.7 suggests any proactive approach to fire. The small collection of his papers at the Bancroft Library at the University of California, Berkeley, only peripherally address the early years of the NPS. Although it is difficult to prove a negative, the author is quite convinced that the National Park Service had no comprehensive fire strategy in its early years.

areas, and otherwise further the objectives he and Secretary Lane established without ever facing the reality that hounded the era's Forest Service managers: a fire would expose both a lack of control of the physical world and the elaborate fiction of protection from which federal agencies derived their significance. For three years, the National Park Service only recognized fire when it could be melded with other functions. Yellowstone, the crown jewel of the system, served as the example. In 1917, the Service maintained miles of fire trails in the park for horseback and auto tours. Clearing the roads served a dual purpose: it allowed the transportation of men and equipment in the event of a fire and more importantly, it permitted visitors to see the park's most scenic parts.[85]

In 1919, the first indication that the National Park Service strategy would not work much longer became evident. By then, Glacier National Park had developed a cumulative fire problem. Each year since its establishment in 1910, the northwest Montana park faced fires, sometimes large ones. The park had a complicated history that included the exclusion of the Blackfeet people and the elimination of their usufruct rights, their legal right to use lands for hunting and ceremonial purposes, that they ceded to the government for a national park. Glacier was full of timber and people, some still angry at its creation. The influx of timber companies, which began almost immediately after the 1910 fires, added another potential fire source. By the end of the decade, northern Montana was full of timber operations small and large, and many had become mechanized. Railroad lines that traversed the region, some large such as the Burlington Northern, others simple log-hauling roads, increased the possibility of incendiary incidents. Sparks from an engine or any of the railroads could ignite dry brush, posing an ongoing and widening threat.[86]

As activity increased, the number of acres of timber lost to fire rose each year, as did the cost of suppression. In 1917, fire consumed more than 7,000 acres of park timber and fire-fighting costs totaled $11,968. On July 23, 1917, sparks from a Great Northern Railway engine ignited blazes near Belton Hills and Rock Hill in the Flathead National Forest. The fire spread into Glacier National Park, causing one-tenth of the damage the park sustained that summer. The park paid for its fire damage out of its budget, later providing evidence in court against the railroad when the federal government sued to recover costs of fighting the fire. Two years later, more than 50,760 acres of timber burned, at a cost of $46,000 from the park budget. Most of the fires resulted from railroad sparks even though the Great Northern Railway aggressively cooperated to minimize the threat. In addition, Glacier Superintendent Walter W. Payne claimed depreciation on park equipment of more than $10,000, a result of the fire's destruction of machinery and the locations in which it was stored. In 1920, the cost rose to $81,849, a sum that exceeded the park budget for the year.[87] The increase in cost suggested dramatic changes in the patterns of fire in the area that promised only greater trouble.

---

[85] Department of the Interior, *Report of the Director of the National Park Service to the Secretary of the Interior, for the fiscal year ended June 30, 1917* (Washington, D.C.: GPO, 1917), 34.

[86] Superintendent's Annual Report, Glacier National Park, 1911, 7; Superintendent's Annual Report, 1916, 8, NARA, RG 79,7.7 Glacier National Park, Superintendent's Annual Reports, 1910-1983.

[87] Superintendent's Annual Report, Glacier National Park, 1919, 22; W. W. Payne to The Director, December 30, 1919; George Goodwin to Director, September 9, 1920, NARA, RG 79.7, Glacier National Park, , Box 22; Mark D. Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (New York: Oxford University Press, 1999), 88-95.

Fire posed the same threat it had in the late nineteenth century, exacerbated by increased population and better technology. Without development of a comprehensive agency structure, response remained localized. During the years the Army guarded the national parks, carelessness caused most human-induced fires; major fires often resulted from the sparks caused by railroad wheels. By the late 1910s, a prevalence of railroad engines and even a few automobiles added another contributing cause. Park responses stayed much the same. Labor remained scarce and parks often had to import day labor from nearby communities to fight fires. The park almost always had to bear the cost, with the general budget typically the source. Fire fighting took up "the greater portion of the energies of the working force as well as the funds available for improvement work during the past summer," Superintendent Payne wrote in Glacier's 1919 annual report in a typical example of sentiment.[88] Superintendents looked at their predicament and the absence of a budget and recognized that creativity was essential if they were to combat the growing problem of fire with any effectiveness.

Technological solutions were at the top of the National Park Service's list. Compared to the slim chance of additional appropriations for personnel, new technology seemed a better alternative to park superintendents. By the early twentieth century, some rudimentary fire equipment had become available. In the early 1920s, the famous Pulaski hand tool, the vaunted combination of a mattock and an axe, remained the standard fire-fighting tool, but a revolution that relied on more complicated pumping equipment already had begun in earnest. The Forest Service tested pumping equipment – developed for urban fire fighting – in the field, and Canadian timber companies developed nominally "portable" pumps. Western parks in Canada adopted the technology and it soon crossed the border to Glacier National Park. The machines pumped water from an available water source – a stream, river, or lake – and horses pulled them from place to place. To the National Park Service, this was an important advance and officials eagerly pursued the idea. Superintendent Payne at Glacier enthusiastically endorsed the equipment. Properly applied, he believed, the pump would diminish the impact of campfires that got out of control.[89]

The technology had severe limits; horse-pulled engines required more than simple storage. The utility of the machine depended on a corral full of horses and nearby pasture, close enough to quickly round up the animals when the call came, but large enough to allow them to graze and run to stay healthy. Without the animals in the early automotive era, crews could not bring the equipment to a fire in a timely fashion. Payne asserted that even these rudimentary pumping engines were an improvement over anything the park possessed. He hoped the Service would purchase enough to supply a number to Glacier National Park. The NPS did not provide equipment in 1920, but planned to seek an appropriation the following fiscal year.[90]

The National Park Service found that fire fighting demanded cooperation with nearby national forests. The Forest Service had long promoted such cooperation, encouraging private timber protective associations in the Northern Rockies and supporting other ways to assure a strong response to fires. Other federal representatives,

---

[88] Superintendent's Annual Report, Glacier National Park, 1919, 22; Superintendent's Annual Report, Glacier National Park, 1920, 16, Glacier National Park Archives, Glacier National Park, MT.

[89] W. W. Payne to Director, May 17, 1920, NARA, RG 79.7 Glacier National Park, Box 22.

[90] Ibid.

especially the area's grizzled foresters, contributed resources and expertise every time a major fire started. This powerful presence helped negate the sometimes half-hearted enthusiasm of local residents. Park superintendents recognized the interrelated nature of fire fighting and followed the Forest Service lead, even as the two agencies grappled for control of federal land management. Superintendents complemented their peers at the Flathead, Blackfeet, and Lewis and Clark National Forests.[91] The Service joined an existing model of cooperation.

After a significant fire at Glacier in 1921, the National Park Service did as much as it could to develop a fire protection system there. Consistent recommendations emanated from the park, asking for more rangers for patrols in the summer, advocating construction of fire patrol and boundary trails, and employing fire guards in especially bad years. By 1922, lookout cabins were on the priority list, as was a cross-park telephone line to alert people in case of fire. In 1923, Glacier built telephone lines to Huckleberry Mountain, Riverview Mountain, and Indian Ridge – now called Numa Ridge – and established lookouts. In 1925, the park purchased twelve pumps, its first genuine capital outlay for fire protection, and the new equipment proved an effective response to the ongoing fire problem.[92]

Fire remained an ongoing problem throughout the national parks, a combination of individual behavior, lack of resources, and lack of statutory authority to enforce standards limited the response of the National Park Service. Even in the early 1920s, the Service lacked an appropriation to fight fire. Each year, at the end of the fire season, national parks presented their bills for fire fighting to the Washington office, which sought special congressional appropriations to restore much needed operating dollars to the parks. This cumbersome system resulted from the fact that Congress had yet to contemplate a formal structure for managing fire on federal lands.[93]

Only in 1922 did the National Park Service receive its first direct appropriation for fire fighting, a $25,000 lump sum for the entire system. The Service's budget had remained small because of the errant presumption that the parks would pay for themselves that existed since the founding of Yellowstone. This assumption made asking for a base budget, much less an additional appropriation, a difficult task. The small sum of $25,000 seemed an inconsequential amount after the spate of recent fires, but it paralleled what had become a congressional pattern of after-the-fact deficiency spending to solve specific problems in parks. In 1920 alone, when the entire NPS operating budget was $907,070, Congress appropriated $25,000 for fire prevention above Yellowstone's base budget of $250,000. The same year, Glacier National Park received $62,000 in deficiency spending above its regular allotment of $85,000. Even as the NPS operating budget grew to $3,027,657 in 1925, the $25,000 allotment was a congressional stopgap, a way to appear to address a growing problem and to eliminate the consistent parade of

[91] Superintendent's Annual Report, Glacier National Park, 1918, 35; Superintendent's Annual Report, Glacier National Park, 1919, 22; Superintendent's Annual Report, Glacier National Park, 1923, 8, Glacier National Park Archives, Glacier National Park, MT; Hal K. Rothman, "'A Regular Ding-Dong Fight': Agency Culture and Evolution in the Park Service-Forest Service Dispute, 1916-1937," *Western Historical Quarterly* 20 2 (May 1989), 141-61.

[92] Superintendent's Annual Report, Glacier National Park, 1921, 21; Superintendent's Annual Report, Glacier National Park, 1923, 15; Superintendent's Annual Report, Glacier National Park, 1925, 11, Glacier National Park Archives, Glacier National Park, MT.

[93] Pyne, *Fire In America*, 266-72.

deficiency spending requests. The limits on it were clear: the money could only be used to fight fire, not to engage in fire prevention strategies, practices, and tactics. Inadequate even in a year with few fires, the sum represented an important first step.[94]

The $25,000 sum became the standard allocation during the rest of the first half of the 1920s, an annual addition to the NPS's small budget that allowed the Service to mitigate at least some of the impact of fire. In most years, it did not cover its total expenditures for fire fighting, and large fires still necessitated specific after-the-fact legislation to recoup costs. However, a line-item appropriation in the annual budget represented a different way of thinking about the impact of fire on the park system.[95]

The small national appropriation assured that as late as the mid-1920s, the National Park Service spent dollars from park appropriations to fight fires. Fire remained a local responsibility, fought with the existing budget and whatever workpower a superintendent could cajole from the surrounding area. NPS rangers often fought fires outside park boundaries, not only to keep fires away from parks, but also to create a community of interest that allowed park officials access to non-NPS firefighters when a park needed them for a fire within its borders. The agency also paid cash for outside fire fighters, but finding resources was a difficult process that invariably drained the pool of money for other park activities. Maintenance on roads and trails halted when blazes demanded workers, and the dollars allocated for such activities disappeared into the smoke of any major fire.[96]

The lack of national resources left an inordinate amount of discretionary decision-making at the local level. In general, the early National Park Service was a hierarchical organization. Communications between superintendents and the NPS's upper echelon often resulted in attempts to impose national-level solutions on local problems. Unlike the Forest Service, which encouraged decentralized authority and local adaptations, senior NPS officials favored policy emanating from its core and implemented in individual parks. But without financial resources to support these directives, superintendents exercised much greater leeway than Washington cared to admit. Responding to fires, this deviation from Service norms was even more pronounced.[97]

The lack of resources devoted to fire complicated an already difficult situation. In the 1920s, the Service had already divided fire management into two competing models. The first, fire exclusion, required suppression; the second, fire use, involved light burning. In choosing between these, the National Park Service faced an important dilemma. The Service could look to its own heritage, with the Army, or to the Forest

---

[94] *Fourth Annual Report of the National Park Service, 1920* (Washington, D.C.: Government Printing Office, 1920), 278-301; *Report of the Director of the National Park Service for the Fiscal Year ended June 30, 1927* (Washington: Government Printing Office, 1928), 104-17; Barry Mackintosh, *Visitor Fees in the National Park System: A Legislative and Administrative History* (Washington, D.C.: National Park Service, 1983), 2-10; John Ise, *Our National Park Policy: A Critical History* (Baltimore: Johns Hopkins University Press, 1961), 619-24.

[95] Arno B. Cammerer to Secretary of the Interior, September 15, 1922; Arno B. Cammerer to Secretary of the Interior, June 11, 1924, NARA, RG 79.7., Glacier National Park, Box 23.

[96] Superintendent's Annual Report, Glacier National Park, 1924, Glacier National Park Archives, Glacier National Park, MT, 8.

[97] Ronald A. Foresta, *America's National Parks and Their Keepers* (Washington, D.C.: Resources for the Future, 1984), 21-37; Hal K. Rothman, *Preserving Different Pasts: The American National Monuments* (Urbana: University of Illinois Press, 1989), 67-92; Harold K. Steen, *The United States Forest Service: A History* (Seattle: University of Washington Press, 1976), 76-78, 98-99.

Service, which had absorbed and remade the military example. At the local level, some superintendents departed from both models and employed light burning. Under this model, parks managed fire as best they could, choosing practices based on the application of their very limited resources. Officials might selectively let fires burn, as much a result of the lack of funds for firefighting as for any ideological reason.

At the national level, the Park Service naturally leaned toward the Army-Forest Service suppression paradigm. Their only model for such management practices was the military and Forest Service experience in the national parks. The U.S. Army had served as important stewards beginning in 1886 and the military approach to fire-fighting had been the dominant paradigm. In both the California parks and Yellowstone, soldiers formed the backbone of fire-fighting manpower. To the early National Park Service, this policy made considerable sense. Its problem was finding a way to replicate the Army's approach without having the resources of the War Department at its disposal.

Sequoia National Park provided a rare testing ground for alternative ideas about fire. As a species, sequoias offered a natural counter to the idea that suppression was a sound management alternative. The big trees had existed for millions of years and fire was essential to their propagation. When the National Park Service implemented a suppression approach, underbrush no longer burned regularly, increasing the fuel load surrounding the trees. Fires that had once nurtured the sequoias suddenly became capable of damaging them. An important symbol of the national park ideal, the sequoia was peculiarly vulnerable to management efforts that did not take the species' ecological context into account. From the first moment the NPS stopped a fire in the sequoias, well-intentioned Service officials inadvertently endangered one of the symbols they and the American public most cherished.

Superintendent Col. John R. White of Sequoia National Park became the Service's most vocal proponent of light-burning. White watched the light-burning controversy with interest throughout the 1920s, engaging in a vigorous debate with Horace Albright, himself an unabashed proponent of suppression. The two squared off with vigor, both pointing to their experiences as justification for their perspective. White found himself with what was in essence an unfunded mandate, to which a little bit of burning in a controlled way was an effective and inexpensive solution. The powerful Albright was both a product of the age in which fire was an enemy and a canny bureaucrat who recognized the need to toe the line on policy if he wanted to secure some of the benefits for his agency. Raised in the California desert, Albright was as hard as the climate that produced him. He was not one to brook dissent on such an important topic, and with his vast influence and reputation for punishing opponents, much of the Service rallied around him for political as well as ideological reasons. Charles Kraebel at Glacier National Park weighed in, calling light-burning an "ogre," after Albright himself called the practice "unsound and fraught with an enormous amount of danger." Isolated, White persisted, asking for a new look at the idea. He even tried a number of controlled burns at a time when suppression was the rule in fighting park and forest fires.[98]

White became an advocate of controlled burning, applying it within Sequoia whenever possible. He watched the aftermath of the disastrous California fires of 1924 –

[98] Arno B. Cammerer to Colonel White, September 8, 1924; Horace M. Albright to Sir, September 15, 1924; John R. White to Arno B. Cammerer, September 20, 1924, Fire Records, 1904-1930 Man – U – Box 275, Folder 2, Sequoia National Park.

which largely missed the national parks – and recognized the flaws in the National Park Service's suppression strategy. White complained in 1926 that suppression practices contributed to the worst fire in the region's history, a 120-square mile blaze that destroyed ten square miles of park timber that year. The "forest floor is thick laid with a mass of combustible pine needles, branches, logs, and snags," he insisted in his 1926 annual report, "which makes a fire almost impossible to control." White devised his own remedies, national policies to the contrary. In at least one instance, White ordered his men to burn an area – much to their consternation – and with a staff of rangers, the first intentionally ignited controlled burn in the park system was a success.[99]

White held a minority perspective. The institutional power of the Forest Service and its role as the lead agency in firefighting gave it primacy, subordinating all other points of view to suppression. State-level decisions confirmed this pattern. In 1923, a California government agency ruled against light-burning. The 1924 Clark-McNary Act, which allowed federal assistance and grants of aid for fighting forest fire, effectively turned fire protection into the basis for cooperative forestry and federal-state relations, and light burning disappeared from discussions about fire management. Chief Forester William Greeley regarded the Clark-McNary act as his finest moment, for it cemented the Forest Service's leadership in the field, gave that agency control of considerable resources for forest and fire management, and assured some measure of federal control over what went on in U.S. forests. The Act provided rapid results. In 1928, the Forest Service received $1 million for the prevention and suppression of forest fires.[100]

Throughout the 1920s, the National Park Service worked to standardize management, creating not only an administrative infrastructure but independent specialized divisions as well. The Washington, D.C., headquarters grew in strength, with Albright as its chief legislative liaison even as he served as superintendent of Yellowstone. Without an intermediate layer of management, superintendents communicated directly with the nation's capital, bringing local problems squarely into the view of Service leadership. The NPS's only field office, in San Francisco, handled facilities development, adding the beginnings of what became interpretation and resource management in the early 1920s. Californians were prominent in development of interpretation and resource management. The appointment of Ansel F. Hall, another University of California graduate, as the Park Service's first chief naturalist in 1923, began a process of promoting innovative park-level staff to leadership positions. Naturalists often were assigned responsibility for fire management at the park level, and Hall was set up to be the counterpoint to the well respected White.[101]

By the mid-1920s, the National Park Service's response to fire was pulled between policy and operational realities. The Service had committed to the ideal of cooperation inspired by the Clark-McNary Act, in the process ceding the dominant

---

[99] Superintendent's Annual Report, Sequoia National Park, 1926, 10.

[100] Act of June 7, 1924 PL 68-270, Ch 348, 43 Stat 653; Laws and Legislation, 1924: Clarke-McNary Act, U.S. Forest Service Headquarters Collection, Forest History Society, Durham N.C.; William G. Robbins, *A History of National, State, and Private Cooperation* (Lincoln: University of Nebraska Press, 1985), 85-104; Pyne, *Fire in America*, 353-57.

[101] Shankland, *Steve Mather of the National Parks*, 262; Donald W. Swain, *Wilderness Defender: Horace M. Albright and American Conservation* (Chicago: University of Chicago Press, 1970); William C. Winkler and Merrie H. Winkler, "Ansel F. Hall, 1894-1962," in William Sontag, ed., *National Park Service: The First 75 Years* (New York: Eastern National Park and Monument Association, 1991), 21-22.

position in fire suppression that national parks had held under the Army to the Forest Service in return for access to that agency's increasing skill and the vast resources that stemmed in no small part from the Clark-McNary Act. Albright's power and standing guaranteed that the National Park Service would choose his view over White's. It was one thing to swear loyalty to the principle of suppression, joining the family of federal agencies and state governments committed to following the Forest Service's lead. Implementing such a policy on the ground was a far more complicated task.

Still, individual parks made strong progress in light burning. Under John White, Sequoia National Park implemented a full-fledged fire regime. He directly countered existing National Park Service policy, initiating what amounted to controlled burns on a number of plots and experimenting with the strategic use of fire throughout Sequoia. This served as one model, a direction that made the headquarters leadership more than a little uncomfortable. Not only did it challenge NPS policy, it ran directly against the dominant current in the Forest Service, where the decisions about allocating resources the Service desperately needed were made. White was able to engage in a clear violation of National Park Service policy for two distinct reasons. First, he commanded great respect within the agency, his service dating almost to the founding of the Service; second, he had the good sense to keep the knowledge of his practices within a small circle, many of whom were at least ambivalent about suppression as a goal.

The countervailing force, the place where the NPS followed the Forest Service's pattern, was Glacier National Park, which by 1926 seemed to be prepared to grapple with fire. In the course of the decade, a combination of factors, including funding, equipment, and technology, had changed this park from a place where fire had been a consistent problem to one where the Service had mustered the limited resources it had to fight fire and officials believed they had a plan to successfully battle it. Even the replacement of Superintendent Walter Payne with Charles Kraebel, a veteran of the Forest Service, reflected a new National Park Service aggressiveness about fire. Kraebel promoted himself as knowledgeable about fire, engaging in debate with well-known authors about the efficacy of light burning. A new era seemed ready to dawn, but whatever confidence developed was shattered in August 1926, when the worst fires to hit the Inland Northwest since 1919 began.[102]

By the beginning of August, Glacier National Park already had wrestled with a number of fires. Summer weather conditions mirrored those of 1910, with extended high temperatures, little moisture, and significant winds. Most federal managers were nervous, and the behavior of some local residents worsened an already tense situation. In June, a fire from a logging operation run by George W. Slack of Belton, Montana, spun out of control. To fight it required park pumps and two rangers. In forceful language, Kraebel informed Slack that "the entire responsibility of [the fire] rests with you," that Slack had to provide workers to control of the fire until it was "dead out," and that Slack would be expected to pay the fire-fighting costs. Slack ran a salvage operation within the park on contract and had been negligent in complying with his obligations. The fire seemed one

[102] John R. White to Arno B. Cammerer, September 30, 1924, Fire Records, 1904-1930, Man – U – Box 275, Folder 2, Sequoia National Park; Superintendent's Annual Report, Sequoia National Park, 1925, 4; Charles Kraebel to Arno B. Cammerer, September 3, 1924; Charles Kraebel to The Director, telegram, August 15, 1925, NARA, RG 79.7, Glacier National Park, Box 23.

more consequence of a sloppy operation and in a season with elevated risk of fire, a particularly dangerous one.[103]

By the end of July, fires had created a crisis in park management. Blazes started in five separate locations in Glacier, spreading so rapidly that by August 1, 19,000 acres of timber were burned or in serious danger of burning. Among the sites were fires along Fish Creek, on the North Fork of the Flathead River and on the Blackfeet National Forest, west of the park boundary. The earliest of these originated in the national forest on July 7 and jumped the park boundary five days later. Kraebel responded with the resources at his disposal, but not as vigorously as people in the area had hoped. Some residents expressed their ire. One of them, W.A. Boz, held a personal grudge against Kraebel. Boz's relationship with Montana Senator Thomas J. Walsh, an early nemesis of the Service, earned his complaints a serious hearing. In response, the Department of the Interior dispatched Horace M. Albright, Mather's right-hand man and at the time, superintendent of Yellowstone, to Glacier to take charge of fire fighting inside the park. On August 3, Albright filed his first report from the blaze. He announced the establishment of eight fire camps with a force of 425 men. As always, the adept Albright demonstrated rapid control of a situation that only days earlier seemed almost beyond hope.[104]

Even as Albright established the solid administration for which he was known, a new fire started. Slack, the logger who had been reprimanded earlier in the year, continued to operate within Glacier. On July 31, with a high wind blowing, the gasoline tank on one of Slack's trucks exploded, igniting a fire that spread quickly in the high winds. It crossed Fish Creek, and reached Lake McDonald, one of the primary features of the park. Albright feared that it would ruin that scenic section of Glacier although the terrain it contained was "the most difficult [he] had ever seen" for fighting fire.[105]

This particular fire devastated the land it burned, much as had the initial fire in the Blackfeet National Forest. It was as "intensely hot," Albright noted, as the one that had started in the national forest. The understory, the combustible material that built up on the ground in the absence of sporadic fire, was particularly thick, mute testimony to the success of localized fire suppression since 1910. "The timber is thick and heavy, and the ground is covered with brush, down timber, and deep humus of pine needles and rotten leaves," Albright observed.[106] Although no one at the time recognized the connection, the Lake McDonald fire graphically illustrated the inherent problem of suppression. Success in fighting all fires thickened the understory and created a more powerful fuel load, guaranteeing a hotter and more destructive fire when an area finally did burn.

Albright recognized the danger of the Lake McDonald fire and mustered all the resources that could be spared. He drafted 100 men from construction crews, moving them to the west side of Lake McDonald on August 5. In the next twenty-four hours, they trenched the fire to the summit of Howe Ridge, blunting its advance. At the same time, high winds – the most powerful that many long-time Montanans recalled ever

---

[103] Charles Kraebel to George Slack, June 6, 1926, NARA, RG 79.7, Glacier National Park, Box 23.

[104] Arno B. Cammerer to Stephen T. Mather, July 31, 1926; Department of the Interior, Memorandum for the Files: For Immediate Release, August 3, 1926; Arno B. Cammerer to H. A. Noble, August 3, 1926; Horace M. Albright to The Director, August 4, 1926, NARA, RG 79.7, Glacier National Park, Box 23.

[105] Horace M. Albright to The Director, August 4, 1926; Horace M. Albright to The Director, August 14, 1926, NARA, RG 79.7, Glacier National Park, Box 23.

[106] Horace M. Albright to The Director, August 4, 1926.

experiencing – drove the West Huckleberry fire down the north slope of Apgar Mountain until it merged with another branch of the Lake McDonald fire. The meeting of the two fires, Albright told Mather, "compelled considerable readjustment of our fire fighting organization." Digging trenches in front of these fires required the redeployment of a number of the men and took almost four days to accomplish. By August 14, Albright felt he had the majority of fires under control. Only a little trenching work remained, he reported, and nearly all the fires were contained. Rain would accomplish the rest.[107]

The Glacier fires in 1926 were a disaster for the National Park Service. Not only did more than 50,000 acres of timber burn at a cost of almost $230,000 even as the NPS employed 3,583 men to battle the blazes, but the Service also found itself on the political defensive. Many elected officials on the northern plains already evinced strong anti-federal government sentiments, a legacy of earlier struggles about federal reservation of land as well as of conflicts with Mather's agency. Attacked by the powerful Senator Walsh, the fire situation challenged the dependability of its park superintendent, an experienced Forest Service man, and even the adroit Albright. A complicated ecological event landed in a distinctly political context. Worse, the Service had to fight these fires without even the promise of resources. The National Park Service had only $38,000 in its budget for fire management in the entire system.[108]

The gaps in the National Park Service's fire management system were never more apparent. For years, superintendents had complained of the inadequacy of fire strategy, to little avail. This new fire considerably altered the equation. Even Mather's most trusted deputy could not keep the situation entirely under control. Service leaders recognized that they faced an adversary with unparalleled ability to disrupt the best plans officials could design. Fires threatened the national parks not only as natural spectacles but challenged the Service's credentials as a professional organization capable of administering such areas. Unlike political or personal adversaries, fire did not respond to simple mollification, could not be buttonholed in congressional corridors, or programmed according to annual budgets.

From the wreckage of the 1926 fires at Glacier National Park came the desire to create a new National Park Service system to administer fire. When it burned in the summer of 1926, the fire set off a chain reaction that led to the Service's first fire management system. This second major fire season forced it to rethink its fire strategy. The 1926 fires acted on the NPS as the 1910 fires had on the Forest Service; they galvanized it into a systematic response. While individual parks always had lacked the resources to adequately fight major fires, the 1926 fire season elevated that problem to a national issue, something that the Service could not expect to solve on its own. NPS leaders no longer could simply return fire to park superintendents. They were forced to recognize it as a primary issue for agency-wide policy makers. The fires also highlighted NPS vulnerability not only to political leaders – something the Service well knew after being in existence for a decade – but to local constituencies and the media. These lessons contributed to a more sophisticated response to fire in general.

After a decade in which fire was subsumed in the National Park Service's systematic programs of constituency building, capital development, and land acquisition,

[107] Ibid.

[108] "Fire History of Glacier National Park (Based on extracts from Glacier National Park Master Plan and other records), NARA, RG 79.7, Glacier National Park, Box 23.

it finally faced fire in cold, hard way: it could not be dealt with as a local episodic problem. Instead, it was a system-wide endemic issue that required leadership at the national level. After 1926, fire management demanded much more than a piecemeal response and the Park Service responded with new approaches.

The National Park Service turned to Chief Naturalist Ansel F. Hall, who took on the role of Chief NPS Forester after the 1926 Glacier fires. The adept Hall had risen quickly in the Service. Hall graduated from the University of California with a degree in forestry in 1917 and served as park naturalist at Yosemite from 1920 until his 1923 promotion to chief naturalist at 29. Even before becoming chief naturalist, he had begun an extraordinary career in institutional development, raising private funds for the Yosemite museum and showing the creative leadership that became the hallmark of his career.[109] The selection of the capable Hall as chief forester illustrated the new importance of fire management to the Service.

Such a designation combined different needs for the National Park Service. Albright had advocated a more specialized NPS management structure, with experts in specific areas of significance. The new approach to fire, the recognition that it was system-wide and endemic, required a general manager on the national level. Still, Hall had many responsibilities in the Service, limiting the amount of time he could devote to fire management. Placing forestry under the naturalist division made sense, but it also subsumed fire management to other activities. Within two years, Hall recognized that fire management was beyond the capability of NPS naturalists. By some accounts, his emphasis on collecting material culture and designing museums helped prompt his recommendation to Mather in 1928 to create a position called "fire-control expert."[110] This job, different from forestry in some ways, reflected not only the growing specialization of the NPS but Hall's recognition that fire management required a great deal more time and energy than it had received.

The move to find a forestry specialist for the National Park Service accelerated after Sequoia Superintendent White reopened the light burning controversy. In August 1928, in the aftermath of a fire that crossed national forest, national park, and state lands, White wrote the *Los Angeles Times,* congratulating the newspaper for resisting sensational reporting on the impact of the fire on the national park. The state of California suppressed the fire after three weeks, its work complicated by a backfire White and his men set. White trumpeted the instance as a positive example of light burning. At about the same time, an important California timber business, the Red River Lumber Company, announced that it planned to resume light burning.[111] In an era when superintendents communicated directly with the NPS's leadership, White had initiated an important challenge to accepted policy from the local level. In an instant, fire in the national park system had become more than a management issue; it was also a public issue of considerable import.

Even more telling, an investigation into the 1928 fire revealed that the National Park Service had been an active participant in fighting the fire, not the detriment that

---

[109] Winkler and Winkler, "Ansel Hall," *National Park Service: The First 75 Years*, 21.

[110] Shankland, *Steve Mather of the National Parks*, 259-262; Swain, *Wilderness Defender: Horace M. Albright and American Conservation*; Winkler and Winkler, "Ansel Hall," *National Park Service: The First 75 Years*, 21; Pyne, *Fire in America*, 298.

[111] Shankland, *Steve Mather of the National Parks*, 262; Pyne, *Fire in America*, 112.

some news sources reported. Initial newspaper reports claimed that because of White's belief in light burning, the NPS had not responded to the fire with all of its capabilities. In truth, the investigation showed, the Service aggressively fought the fire inside and outside Sequoia's boundaries, and it spent more per acre doing so than any of its counterparts. Still, White's beliefs attracted negative attention and seemed to affect his rangers' morale. Albright often fired people for public disagreements with National Park Service policy, but White dated from the earliest days of the Service and remained a proven administrator. Rather than level his wrath at a dependable man who had been an important part of the NPS so long, Albright simply assured other agencies that White's emphasis on light burning did not reflect NPS policy.[112]

The creation of the Forest Protection Board in 1927 further isolated White and his viewpoint. The 1924 Clark-McNary Act created the context for greater federal-state cooperation through the Forest Service and the board was established in 1927 to coordinate fire management activities among federal agencies. Dominated by the Forest Service and its increasing fire hegemony, the board became the primary federal policy-making body for forests. Other agencies easily bent to the Forest Service's perspective. Not only had that agency made great strides in fire suppression under Chief Forester William Greeley during the 1920s, but the Forest Service still held the only blank check for fire fighting. With his calls for light burning, White made the NPS look unruly and out of touch, threatening the image Mather and Albright sought for the Service. Colonel White's lone voice was drowned in the Forest Service's rise to leadership in fire fighting and the National Park Service's acquiescence.

With the controversy raging, the National Park Service looked for someone with a strong background in fire management and the ability to explain and address the different facets of this contentious issue. Most of the nation's fire expertise was housed in the Forest Service, throughout the 1920s a common place for the NPS to seek specialized professionals. With California figuring so prominently in the light-burning controversy, Service officials focused on finding someone with experience in the Golden State. They settled on John D. Coffman, supervisor of the California National Forest, now the Mendocino National Forest, home to numerous light-burning advocates. An experienced forester and forest manager, he brought a compendium of skills and knowledge that the NPS had not previously possessed. And he had successfully squelched light burning, an attribute that increased his desirability to the Service. If anyone could mend the NPS's tattered reputation about fire, it was someone of Coffman's stature.[113]

Coffman found little to impress him when he became the sole Fire Control Expert in the NPS. The National Park Service had devoted little of its resources to creating a permanent response to fire. As late as 1929, the Service's entire fire corps consisted of Coffman, a special fire organization at Glacier National Park that was one more result of the 1926 fire, and a sole fire guard at Sequoia National Park. Although he actively developed larger administrative functions, in particular making the NPS an important

[112] Horace M. Albright to M. B. Pratt, November 1, 1928; Superintendent, Sequoia National Park to H. M Albright, November 8, 1928; J. D. Coffman, Memorandum Re: Colonel White's Letter of November 8, November 12, 1928, Fire Records, 1904-1930, Box F2, Sequoia National Park.

[113] Shankland, *Steve Mather of the National Parks*, 262; Pyne, *Fire in America*, 112; Carle, *Burning Questions*, 135-37.

presence in the Forest Protection Board, Coffman faced the same problem that had vexed the Service since it began. Treated as a local rather than as a national issue, fire did not command limited resources. Congress did not allocate sufficient funds to manage fire in the parks and the Service's national leadership persisted in seeing fire as a local problem that episodically flared to higher levels. Although Coffman's hiring was an important symbolic gesture, he alone could not reverse what were really four-decade-old trends. The dollar figures remained ludicrous; in 1928, the year Coffman was hired, the NPS received $30,000 to manage fire on its 6,133,614 acres. Unless, as White argued in 1926, the Service could secure appropriations "before rather than after needs arise," it seemed unlikely that Coffman's expertise alone could solve the issues that the NPS faced.[114]

Still, Coffman built the beginning of an organizational structure to address fire. In 1928, he produced the first Forest Protection Requirements report, a document necessitated by the National Park Service's membership in the Forest Protection Board. On the ground, his efforts focused on problem parks, Glacier especially. Neither the California parks nor Yellowstone suffered great fires in the late 1920s. Nor did other parks experience severe fire seasons during this generally wet time, providing the NPS's first fire boss with a little breathing room. Coffman could focus on his greatest problem, Glacier, where his special fire force manned four lookouts on the park's western side while he considered a fifth lookout on Mt. Brown. The Forest Service's Moran ranger station provided training for NPS fire guards and lookouts, providing another measure of cooperation between the two feuding agencies. In early summer 1929, park guards and lookouts detected and suppressed thirty-seven fires, a major accomplishment. Despite the obvious limitations, Coffman recognized progress from his efforts. The primary obstacle to greater success remained basic lack of resources that limited the effectiveness of his endeavors.[115]

Coffman also introduced fire planning to the National Park Service, a major step forward. He transferred Forest Service planning procedures, which evolved from regional forester and Forest Service stalwart Coert duBois's classic *Systematic Fire Protection in the California Forests*. Coffman brought the Forest Service's implementation model to the Park Service. The NPS had accepted the ideas in principle before that time, but had not acted on them in any systematic way. The duBois model was a plan for efficiency: it told how to do better what the Service decided to do, not what it ought to do. In this way, policy followed from procedures. The Forest Protection Board mandated the development of fire control plans, and in an effort to show its sincerity about membership in the organization, the National Park Service ordered fire control plans for all its parks.[116]

Glacier became the National Park Service's focal point, for no park in the 1920s provided a better example of the need for fire planning. At the time the Service hired Coffman, Glacier had become the NPS's major fire park, and its issues dominated the thinking of the Service's new and enthusiastic fire specialist. In interviews many years

---

[114] Yearly Report of Superintendent (Col. John R. White), 1926, Man – L – Box 3, Sequoia National Park Archives; Pyne, *Fire in America*, 270, 298.

[115] "Fire History of Glacier National Park (Based on extracts from Glacier National Park Master Plan and other records), NARA, RG 79.7, Glacier National Park, Box 23.

[116] Pyne, *Fire in America*, 298; Coert duBois, *Systematic Fire Protection in California* (San Francisco, CA: USDA Forest Service, Pacific Southwest Region, 1914).

later, Coffman recalled the time as exhilarating. He believed that Glacier served as a template for the issues of fire in the national parks, and that if he could solve the problem of fire there, he could create a model that would apply throughout the park system.[117] Essentially a one-man fire program, Coffman focused his efforts on Glacier National Park because its situation seemed to him both most critical in the need for response and most characteristic of the problems he found his new agency facing.

In spring 1929, Coffman and Chief Ranger F.L Carter drafted a fire control plan at Glacier National Park, the very first such effort in any national park area. The document outlined an organizational structure, with the park's chief ranger as its fire chief and each district ranger responsible for prevention within his area. All lower-echelon fire crewmembers reported to the district ranger. A dispatcher at the park headquarters initiated action on all fires and kept track of the disposition of crews and fire-fighting equipment. The plan dictated reporting requirements, emphasized the need for cooperation with other agencies, and provided instructions for maintenance of communication sets and other equipment.[118]

That plan proved a model for the National Park. Beginning in 1930, Coffman initiated the fire plans at other parks. Remarkable attention to detail accentuated the gravity of the issues addressed in the plan, the emphasis on structure reflected both the military character of the early National Park Service and the inherited legacy of the Forest Service's need for close administration of its decentralized agency. The tight organization the plan demanded spoke volumes about the need for precision and dependability when fire struck. For the better part of a decade, in Coffman's estimation, the Glacier plan stood as the Service's best.[119] It served as clear proof of the impact Coffman had on agency fire policy.

The reality of fire differed greatly from even the most meticulous plans, and another serious fire at Glacier seriously challenged Coffman's structure. In August 1929, just a few months after the plan had been adopted, a fire broke out in slashings cut by the State Lumber Company on private land ten miles from the park boundary. The fire began at 4:40 pm on Friday, August 16, and was reported almost instantly. Thirty-five men promptly fought the fire, a number that quickly increased to 165, but they could not stop it in the dry conditions and high winds. Wind proved the catalyst for the fire's rapid spread, negating the efforts of men on the fire lines and pushing the fire beyond the trenches they had dug. The NPS watched carefully during the first few days, its rangers visiting the fire camps outside Glacier. As late as August 18, most agreed that the fire would not reach the park. That expectation proved too optimistic. "The wind blew hard all Sunday night," Coffman recounted in his summary of the fire, and on August 21, five days after it began, it jumped the park boundary.

A crown fire "of the most destructive type," Superintendent J. Ross Eakin later wrote in his annual report, the Half Moon fire was "beyond human agency to stop." Immediately, the call went out for reinforcements. Coffman arrived at Glacier on August 23 to bring administrative and front-line experience. The NPS hired temporary fire

[117] John D. Coffman, interview by Herbert Evison, October 29, 1962, Herbert Evison Papers, Western History Collection, Denver Public Library, Denver, Colorado.

[118] Glacier National Park Fire Control Plan: Instructions for the Fire Protection Organization, NARA, RG 79.7, Glacier National Park. Box 976.

[119] John Coffman interview, October 29, 1962.

fighters but could not stop the blaze. It burned through the park, missing the headquarters building by a half mile, but burning buildings at Apgar and scorching about two miles of shoreline at Lake McDonald. In the end, the fire raged for more than two weeks. "Despite desperate efforts to check it," Horace Albright observed, the fire proved its "particular viciousness." Only after a rain in early September did the fire die down enough to allow fire crews from other parks to begin to return to their regular duties. Finally, on September 5, Glacier declared the fire under control. In the final damage assessment, as much as 50,000 acres of timber inside the park burned and an equal amount of damage outside its boundaries was reported.[120] Fighting the fire cost more than $120,000 and required more than 700 firefighters at the peak.

The analysis of the Half Moon fire represented a new dimension in the Service's response. Coffman took the lead, authoring an authoritative twenty-page report that included a chronology, the various perspectives, and the most solid analysis of a fire the NPS had yet produced. By the time the blaze began, the National Park Service had successfully suppressed twenty-nine fires inside Glacier and another fourteen beyond its boundaries in 1929 alone. Coffman was "justly proud" of this record and regarded this as proof of the NPS's efficiency. In his view, suppression required "quick detection followed by quick attack with an adequate number of firefighters." The Service met that test all year; Coffman believed that the failure of the private timber company to provide rapid response was the factor that allowed it to spread to Glacier.[121]

Coffman strongly defended the Service. Understaffed, National Park Service crews concentrated on protecting government property, particularly the park headquarters. This decision drew the ire of private landowners inside Glacier's boundaries. Some even demanded payment for the work they did to protect their own property. Coffman persuasively argued that landowners outside the park provided their own fire protection, often hiring firefighters from the same pools of labor that the National Park Service utilized. He saw no reason landowners inside Glacier should expect preferential treatment and saw even less justification for their claims of reimbursement. Superintendent Eakin made a convincing argument that the destruction of the park headquarters, a $200,000 investment, would have crippled the National Park Service's fire-fighting response. "Had Headquarters burned," he insisted, "we would have been practically helpless to combat the fire after the high wind subsided . . . . Had I scattered our forces and lost Headquarters, my position would be untenable."[122]

Even more, the National Park Service learned important lessons about the power of the fire. Half Moon was truly stunning, a fire that fed on itself and spread as a result of brutal weather conditions. It had been quickly detected, but even rapid reporting did not allow a more comprehensive response. Instead, Half Moon mirrored the fires of 1910 and 1926 at Glacier, in which people did what they could, but only the rain on September 2 dampened the fire and made control possible.

---

[120] Superintendent's Annual Report, 1929, 1; Fire History of Glacier National Park: Based on extracts from Glacier National Park Master Plan and other records, 2; Horace M. Albright to Walter Newton, October 25, 1929, NARA, RG 79.7, Glacier National Park, Box 254.

[121] John D. Coffman, "Review of Half Moon Fire – 1929," NARA, RG 79.7, Glacier National Park, Box 254, 1-17.

[122] Ibid., 18-20; J. Ross Eakin to the Director, October 12, 1929, NARA, RG 79.7, Glacier National Park, Box 254.

Half Moon illustrated the agency's primary problems: catastrophic fire remained impossible to contain and its impact negated many of the positive results of planning and preparatory work. Coffman's strategy worked with small fires. But all the preparation in the world meant little when faced with an enormous and out-of-control fire. Without better technology, more resources, more people, and better planning, the National Park Service could not manage large fires. Even more, fires that began outside park boundaries asked difficult questions of NPS managers. The Service had to determine whether it should fight fires beyond its borders as a preemptive strategy. Half Moon reaffirmed that the Service could easily handle small-scale fire on a daily basis; it challenged every NPS assumption about how to deal with catastrophic fire.

In the aftermath of the 1929 Glacier fire, the National Park Service looked for guilty parties to help defray the cost as the park tried to cope with the physical and psychological damage such a large fire caused. The dilatory nature of the response of the State Lumber Company prompted the NPS to consider suing for damages. The company asserted that it had fought the fire as well as it could, even surrounding one fire. Its crews built ten miles of fire line and John R. Stolze, on behalf of the company, insisted that the company's presence was an asset rather than a detriment when faced with fire. In the end, Coffman agreed that the chances of the Service recouping any of its costs were so slim as to make a lawsuit impractical.[123] Superintendent Eakin was the most affected. He had invested a good portion of his resources in establishing a firefighting organization that had succeeded for much of a difficult year. Suppression could work, Eakin and Coffman were certain, but only when the Service could apply its techniques directly to the fire before it exceeded a certain size.

Even as the National Park Service dealt with the aftermath of the Glacier fire, larger economic changes altered the climate in which it operated. The stock market crash of 1929 hurt funding prospects. Within a year, the federal government slashed expenditures, cut programs, and otherwise sought to staunch the flow of dollars. National parks were not immune. The National Park Service's popularity with the public stood it in good stead, but the funding to support programs could not be found, and it entered a difficult time. The Service's role in society seemed frivolous when almost a quarter of the nation's population was out of work. Even the National Park Service's celebrated political cachet did not serve it well after the stock market crash. The loyal Albright, a staunch Republican all his life, was rebuked by Ted Joslin, a White House staff member, when he quietly informed him that his informal poll revealed that Hoover would lose the election. Stunned, Albright realized that in such times, even a popular agency such as the NPS had to expect cuts in its resource base.[124]

By this time, the Service had accepted suppression and fire exclusion as agency policy. Dissent still existed, but it had been confined, isolated, and explained to other agencies. The Service's institutional structure had coalesced during the 1920s, and fire control policy became one dimension of that maturation. At the same time, fire exclusion was fantasy. No agency, not even the Forest Service, could fight every major fire and no one could really do much about major blazes. Available resources were directed to the

[123] John R. Stoltze, "Commentary on "Half Moon" Forest Fires;" Horace M. Albright to Walter H. Newton, October 25, 1929, NARA, RG 79.7, Glacier National Park, Box 24.

[124] Swain, *Wilderness Defender*, 206-08.

places with the highest value, but even those resources were not always sufficient to stave off disaster.

The National Park Service accepted a secondary role in fire suppression, subordinating itself to the Forest Service. The Forest Protection Board served as the vehicle that made this otherwise awkward relationship between the two agencies function. The Forest Service controlled the board and the mutual aid agreements that stemmed from it. The National Park Service easily took a lesser role in this process. When the NPS needed fire expertise, it went to the Forest Service; when it hired for its own fire positions, it filled them by luring away Forest Service staff. As a result, the agency's position developed into a reflection of the Forest Service's.

Yet the same dilemmas remained, made worse by the Depression of 1929. The National Park Service lacked the resources to fulfill the mandate it laid out for itself. Unlike the Forest Service, which by the 1930s had a broad enough institutional base to assure more than a tepid response in most circumstances, the NPS had no depth to plumb, nowhere near the fiscal reach of the Forest Service when it sought short-term labor such as casual firefighters. This poverty turned out to be a disguised blessing, although one that the Service leadership did not recognize at the time. Because the NPS could not suppress fire with the vigor it wanted, fire and the ecological benefits it brought persisted in many places in the national park system. The lack of resources to fight fire prevented an overzealous response.

The lack of agency resources and the prominence of the Forest Service confirmed the foresters' position as the lead federal agency in firefighting. The National Park Service ceded any claim it had to a position of primacy, willingly acquiescing to the ascendance of the USFS. Through cooperative fire protection, it established national hegemony and the Forest Service became the voice of fire management. For its part, the National Park Service wished fire would simply go away. Since fire was an endemic condition in the parks, the Service moved to quell it and with it, any unfavorable publicity it generated. The model for NPS strategy was the Forest Service, which used its many friends in Congress to stake out a claim to most of the firefighting resources in the country. The rivalry between the two agencies, so vituperative in the transfer of lands, was muted in fire policy as the National Park Service accepted a secondary role.

By the time Franklin D. Roosevelt was elected president in November 1932, four years after Coffman had been hired, the National Park Service could point to significant improvement in its understanding of how to address fire, but as a result of the Depression, no overall improvement in its ability to respond. The agency had become a follower rather than a leader. With White's lone voice advocating controlled burning, suppression remained the order of the day, but the agency could not even claim to be able to fight major fires. The first sixteen years of National Park Service history taught hard lessons about fire: try as it may, the Service could not fulfill its goal of suppressing fire with the resources available to it