This article recognizes the development of American Indian forest and wildland firefighters in the Southwest United States and their important contributions to firefighting nationwide. It provides an historical look at the purpose behind the original creation of Indian fire warriors and why the firefighter was—and remains—so important to American Indians individually and in tribal communities.

S
ince 1948, thousands of American Indians in the Southwest have fought wildland and forest fires. These men and women are modern day fire warriors, risking health and, at times, lives to defend forest resources across the nation. Although the risks are high, the work strenuous and dangerous, and the pay is low, many Indian men and women battle fires each year. While high unemployment rates encourage men and women to do so, many American Indians fight fires as a matter of pride.

Little effort was made to manage or preserve the nation’s (or tribal) timber resources until the early twentieth century. In March 1909, Congress authorized the United States Indian Service to implement measures to preserve “living and growing timber,” remove “dead timber, standing or fallen,” and to “advise” the Indian tribes in caring for their forests. Armed with this authorization, Interior Secretary Richard A. Ballinger established the Indian Forest Service, which immediately established fire patrols and fire cabins on several reservations in the north. After installing 1,500 miles of telephone lines, most Indian fire lookouts were linked with fire control agencies. In 1913, the Indian Service, lacking the funds, manpower and expertise to implement a prevention program, entered into a cooperative agreement with United States Forest Service (USFS) to prevent and suppress fires bordering Indian and USFS lands.1

While fire protection and suppression were the cornerstones of USFS policy in the 1920s, private and Indian land holdings continued to lag in developing effective fire protection. J.P. Kinney, Chief Forester for the Indian Service, argued that although the federal government was trustee of Indian lands, it did not provide adequate funds for fire suppression. In 1927, Congress allocated $50,000 of tribal trust fund monies for emergency fire protection and appropriated an additional $50,000 for fire suppression on Indian lands. Fire prevention nonetheless remained secondary to suppression due to insufficient funds to manage tribal timberlands and the lack of organized and trained Indian forest firefighting crews. In 1930, the Indian Service reorganized its Forest Service as the Division of Forestry and Grazing, adding thirty-five million acres of Indian grazing land to the seven million acres of tribal timberland for which it already had land management and fire control responsibility.2

During the depression, Franklin Roosevelt established the Emergency Conservation Work program—better known as the Civilian Conservation Corps (CCC)—to help protect national timber and grazing lands. When federal agencies expressed apprehension over administering the CCC in Indian Country, the Indian Service secured approval to maintain its own CCC Indian Division.

BY DAVID H. DEJONG
In the program’s first year, a staggering $9,570,000 was made available for conservation work in Indian Country, three times what the Indian Service had requested as part of a five-year plan in 1927. Between 1933 and 1942, when the program was discontinued, the CCC Indian Division built nearly 100 fire lookout towers, installed 7,500 miles of telephone line, and built 600 cabins to help detect and prevent forest and range fires. Large forested areas that had previously been inaccessible were opened by trails, significantly reducing the time required to reach fires. In addition, two Indian forest fire training schools were established. Two-thirds of the conservation work in the first year of the program was done on reservations in Arizona, New Mexico, Montana, and South Dakota. Despite the accomplishments of the CCC Indian Division, the Indian Service fire suppression budget did not permit training Indian fire crews. When World War II preempted the depression-era programs, funding sources diminished; many roads, fuelbreaks, hazard reductions, and other fire prevention measures in Indian Country fell into disrepair.

When the war ended, the USFS, through its wartime liaisons with civil defense and military agencies, found new means to replace those funds lost with the advent of war. For the first time, the USFS was able to organize and train firefighting crews with fire control viewed as “a paramilitary service of national defense.”

Fire itself was typed as the enemy. To control fires in Indian Country, the Indian Service extended its cooperative agreement with the USFS in 1952 and developed a new one with the National Park Service.

**MODERN DAY FIRE WARRIORS**

The opening of new wilderness areas to the public by the CCC and increased tourist traffic to national scenic areas greatly added to the threat of fire in the post-war years. On the Mescalero Apache Reservation, in south central New Mexico, increased tourist traffic—along with drought conditions—resulted in increased fire damage to tribal timber. Responding to the crisis, A.B. “Bert” Shields, a ranger for thirty years on the Mescalero Reservation, sent out word in the spring of 1948 that he was organizing a trained Apache firefighting crew. “I hope to help you fellows organize into a group that will make history in the Southwest,” Shields told nineteen Apache men, most of whom were World War II veterans. In announcing his intentions, Shields told prospective firefighters to “bring along another man you think might have what it takes to be a red hatted fire eater.”

The newly organized crew met weekly to train, practice line-building routines, and experiment with firefighting tools in
Within a variety of terrain. Within months, the Red Hats received their first fire call. “We were in a timbered canyon of yellow pine where the fire was running through the tops of the trees.” Apache firefighter Rufus Lester recalled.

The boys built their line while Shields watched the flames from a ridge. We couldn’t see the fire, but we could sure hear it roaring towards us. Shields shouted orders for us to stay on the line, but at the last minute we got scared, dropped our tools and ran. Of course the line held. Shields was pretty disgusted. Pretty soon all of us sheepled Indians came back to pick up our tools. He didn’t have to say a word.

The Apaches never again panicked, demonstrating complete faith in their fire lines. On a different day, when strong winds swept the flames into a narrow canyon “with such ferocity that the sector boss yelled for [the Red Hats] to retreat,” Lester “quietly told his men: ‘I guess we hold it here.’ The line held.”

In 1949, the USFS used the Red Hat crew on a fire in Lincoln National Forest, lying adjacent to the Mescalero Reservation, and found them “to be very good.” By 1950, the Red Hats won acclaim for their work on the Bonito and Weed-Mayhill fires in New Mexico’s Lincoln National Forest. That same summer the Red Hats commanded a sector of the 17,000-acre Capitan fire in Lincoln National Forest that scorched the paws of the now infamous bear Smokey.

Within two years, the Red Hats were called to battle fires throughout Forest Service Region 3 (Arizona and New Mexico). In 1950, crews from Mescalero and Hopi were dispatched to battle a fire in California, the first time Indian crews were sent outside of their home region. When they arrived in San Bernardino National Forest, they faced a new type of fire environment: “brush so thick a man couldn’t walk.” On arrival, the Indian firefighters were sent to the roughest terrain—the steep, rocky hillsides. Ranger John Hayward, who accompanied the Indians to the fire site, opined that “a white man would have given up when he learned how hard it was to cut that brush, but those Indians kept chopping and digging until I wondered if they ever took time to breathe.” Later that summer, when the crew was sent to the Jimjam fire in Trinity National Forest, in northern California, six Apaches were taken by helicopter “to the inaccessible head of the fire” and within thirty minutes had built a controlling fire line. The rest of the crew worked fourteen hours clearing a line to the firehead.

In 1954, the Red Hats were awarded the Interior Department’s top honor for meritorious service by distinguishing themselves “for gallant performance in service and for conservation and prevention of destruction of our natural resources.” In customary fashion, Lester turned to his Apache comrades and told them firefighting was not a one-man job. “It was you who worked and trained for the job and performed that job when the need was there.” The Red Hats had earned a reputation, one contemporary...
writer observed, as forest firefighters “only a cut or so below super-

man.”9

Although the Red Hats were the first organized Indian crew, they were not the last. In 1949, a Hopi crew was established and, in 1951, a joint USFS/Indian Service training program prepared Navajo and Pueblo Indians for emergency fire suppression. The program provided training in safety precautions, first aid, use of tools and fire fighting procedures.10 That same year the Zuni Thunderbirds were formally organized, although they had previously fought fires as an untrained adjunct unit. Within several years, 250 Indians from Zuni, 50 from Taos, 25 each from Jemez, Zia, and Cochiti as well as 100 Hopis had completed the course. In 1952, the USFS, National Park Service, Indian Service and Bureau of Land Management coordinated their efforts to organ-

ize and train Indian fire crews, with representatives from each agency meeting annually to discuss common challenges and improvements in fire suppression procedures.

Indian firefighters from Arizona and New Mexico quickly won fame. For their efforts in Trinity National Forest, the Red Hats were decorated with praise from the district ranger. “This type of crew is far and above any other crew used on the fire,” the ranger explained. “Their discipline, fire camp manners, and general behavior make them an outstanding crew, not even consid-

ering their fire fighting efforts. As for line construction, I personally would prefer one 25-man Indian crew to any other three 25-man crews.” In 1954, the Zuni Thunderbirds were rewarded for their training and received a unit citation from the US Department of Agriculture for “meritorious services as unusually skillful, hardy and courageous” firefighters. Due to their dedication and hard work, other crews referred to the Thunderbirds as “human bulldozers.” The Thunderbirds were the first called to so-called project fires—or fires too large to be handled locally—in Arizona and New Mexico.11

Demand for Indian fire crews led to the organization of other crews, some of which fought fires with little or no training. A Zuni firefighter recalled the days of unorganized crews as a time when the firefighters “didn’t have no helmets, no nothing. We were just wearing our clothes and hats.” Whoever walked the quickest on the fireline became crew foreman. A Taos firefighter remembered that all you had to do was “know how to swing the axe and use the shovel.” Even without training, unorganized Indian crews proved to be excellent firefighters.12

By 1951, the first year of large-scale employment of Indian firefighters, some 2,000 fire warriors from the Southwest were battling fires. That same year they were organized as the Southwest Indian Forest Firefighters (SWIFF), with each crew
consisting of 21 trained firefighters, three straw bosses and one crew leader. Clarence Collins, chief of fire control for USFS Region 3, praised the Indian crews but believed that no more than 750 firefighters should be organized until an exact need could be determined. By 1961, requests for organized SWFF crews could not be filled, despite the fact that there were 1,500 Indians approved as firefighters.13

By the early fifties, Indian crews from Region 3 were flown to battle fires in Montana, Idaho, Colorado, California and Washington, in addition to Arizona and New Mexico. With Indian crews in demand, and because of the success of the SWFF Indian crews, other tribes sought to organize crews. In 1953, crews were organized from the Crow, Northern Cheyenne and Blackfeet tribes in Montana. Following the lead of SWFF, 1,200 firefighters from seven reservations in Montana and Idaho created an organization known as Montana Indian Firefighters (MIF) in 1955. After a disastrous fire season in Alaska in 1957, the Bureau of Land Management organized crews among the Indians and Eskimos of Alaska, as well.14

Wherever Indian fire crews were organized, they were deemed among the best due, in part, to a deep sense of pride and their *esprit de corps*. A veteran Taos firefighter recalled an experience when his crew was sent to battle a blaze in Idaho. Upon arrival, the crew was told they would be transported 86 miles into the wilderness along with an Alaska Native crew from Ft. Yukon. "The crew representatives were laughing," the Snowball firefighter recalled, "because the [USFS] officials were talking about who was going to last out there [in the wilderness], the Indians and the Alaskans.... It was a compliment and made me feel good."11

Because of their accomplishments in defending the land against destructive fires, American Indian firefighters developed a deep sense of pride in their work. Blackfeet firefighter Joe Bar explained in 1987:

> *As long as I can remember, Indian firefighters have taken pride in fighting fires. They didn’t want to be second best, they wanted to be number one in this field. Not only does firefighting bring prestige and pride, but it also...creates employment for men and women. It helps our economic situation by bringing money home to pay rent and buy clothes for the families.... The Tribe stands 100 percent behind us and expects us to act as tribal emissaries.16*

Pride in their work, in turn, was a big factor in the success of Southwest Indian firefighters. Tribal leaders considered their actions a reflection of the tribe. They sought to do a good job, and they did. A legacy of fire knowledge, pride and a competitive spirit helped establish the quality of firefighters. Good-natured inter-tribal jesting enhanced this competitiveness. The Hopis, very serious and quiet, were battling a fire in the Mount Wilson Wilderness Area in northwestern Arizona. Charlie Shamte, a Mescalero firefighter "led the remarks of the laughing and bois-

The Mescalero Red Hats, as was true of other Indian crews, viewed firefighting as modern day warfare. The Apaches believed how one approached the fire site was important. One did not walk to the battle site; one trotted in military fashion. As they trotted, the Red Hats sang war songs to help them maintain the pace. A logger returning from the 1950 Capitan fire in New Mexico found the Red Hat approach admirable. "We had a long uphill hike before we reached the fire line. Me and my crew was so puffed when we got there we couldn’t do a lick of work ‘till we got our wind. But you should have seen those Red Hats. They dogtrotted all the way up the mountain and fell to line building the minute they hit the fire."20

Because of the historical relationship that American Indians had with fire, spiritual and ceremonial practices were often encountered at the fire site. When a crew of Navajo Scouts was called to battle a 40,000-acre blaze in Gila National Forest in the 1950s, they first listened to their leader sing and say a prayer. While USFS officials questioned the timing of the ceremony, Pat Murray, USFS liaison to the Scouts, explained: "You can’t hurry an Indian. He has to know the why, where, when and how about this firefighting business."21

Indian ceremonies seem to have more than once proven successful. In the 1950 Gaston fire, in San Bernardino National Forest, a fire jumped the firebreak and sped up a hill. An Apache crew attacked the fire but seemed to make no progress in containing it. In near desperation, the Apaches withdrew from the fire and began singing. When they returned to the fire, it continued to spread for a few minutes and then, for no apparent natural reason, it "lay down and was easily controlled." When Forest Ranger W.L. Graves asked what had happened, he was told the firefighters made medicine with their songs, causing the fire to lie down naturally.22

On another occasion, a Hopi crew was battling a fire in Southern
California when it decided to hold a rain ceremony. Within two hours there was “a veritable cloudburst.” All that remained of the fire was a mass of “steaming mud.” Later, the Zunis and Apaches held a rain ceremony while battling a fire in Idaho. Ranger Paul Weld was elated with the result: “Our sector was the only place that got a shower the next day.” On another fire in California, Zuni firefighters carved religious symbols and figures on the alder trees lining the creek where the fire line was located. When they were reprimanded for defacing the trees, the Thunderbirds justified their actions by pledging “fire would not cross a line that was guarded by the symbols and figures.” The fire line held.

In later years, the spiritual aspect of firefighting—particularly among younger firefighters—diminished, although some ceremonies are still evident among firefighters. A Mescalero Apache remarked that while older firefighters were “very religious [and] there were a lot of prayers and songs,” today’s firefighters have it “within themselves, not really showing it.” In addition, some crewmembers carry sacred medicine with them to the fireline as a source of protection. In a 2001 interview, Randy Pretty on Top, a Crow firefighter from Montana, spoke for many American Indian firefighters when he said fire fighting today is a lot “like the old warrior society” of yesteryear when physical strength and spiritual power enable tribal societies to defend themselves against the enemy.

The tactical fire policy of the USFS—and indirectly the Indian Service—changed after the mid 1950s. While the USFS emphasized manpower as the predominant method of suppressing fires prior to the middle fifties, it emphasized mechanization and fire research after. New strategies and weapons were introduced to aid in the battle against wildland and forest fires. Airplanes and helicopters were used to drop chemical retardants and water on fires, and helicopters were used to drop specially trained fire crews near fire lines. Increased mechanization resulted in bulldozers, chainsaws, four-wheel drive vehicles and other resources invading the fire scene. In the 1990s, Global Positioning System (GPS) mapping and aerial reconnaissance were added to the fire fighting strategies. Yet, despite mechanization and technical improvements, the principal burden continues to fall on the firefighters in the field. On the major fires in the West, that burden continued to fall on American Indian firefighters. In 2001, Jim Stires, chief of the Bureau of Indian Affairs’ branch of fire management, argued Indian fire fighters were still “at the top of the list as the most desired fire fighters.”

When SWFF Indian crews were organized, they were in high demand throughout the West. The money earned from fighting fires constituted an important source of cash-income to the firefighters. Since many Indian firefighters worked as ranchers or artists, or were unemployed, the fire call could be easily accommodated. This readiness factor, combined with working in a rugged environment that many Indians were used to, as well as...
the manpower shortage in the post war years, made Indians a logical choice. Indian firefighters were initially attracted to their work because of economics. “Firefighting employment was welcomed [in the mid-fifties],” Ruben Romero, a Tiwa from Taos Pueblo and a firefighter since 1955, explained in a 1990 interview, “because of the high unemployment at the time…. When the green [USFS] truck drove up, we were attracted to it like flies.” Romero knew that “firefighting to the Indian was money” even though his heart told him it was much more than that. “It was necessary for the preservation of the old Indian ways.”

Bleak economic conditions on the reservations served to push many Indians into firefighting. The demand for manpower and the attractiveness of cash income pulled them. In 1950, the first year in which Indian crews were used outside of Indian Country, the Mescalero Apaches earned $10,000 fighting fires. The following year, the gross earnings of the Apaches, Hopis and Zunis exceeded $100,000. During the 1953 fire season, the Red Hats brought home over $40,000. By 1954, SWFF Indian crews were earning $500,000 per year. That figured rose to $1.5 million by 1961. As a source of employment, firefighting also helped restore and enhance self-esteem.

In 1961, after nearly a dozen years of discussion, the USFS further modified its tactical policy by training a rapid deployment firefighting force known as an Interregional Fire Suppression Crew. These rapid deployment “hotshot” crews were made up of non-Indian USFS personnel and were trained to suppress fires on short notice anywhere in the United States. An elite and highly trained and self-sufficient crew, the hotshot crews arrived as a package, bringing with them their own tools and supplies. Within two years, there were nine such crews, each of which consisted of forty highly trained firefighters.

Corresponding with the increase in hotshot crews was a decline in SWFF Indian crews. The manpower shortage experienced by the USFS after World War II, which at one time hampered fire suppression efforts and led to the utilization of SWFF Indian crews, had been largely overcome. The added expense of sending Indian crews outside of their home region was also no longer cost-effective. To reduce costs and attack fires more quickly, fire suppression efforts focused on the closest-first policy, meaning crews closest to a fire were the first dispatched. The use of USFS hotshots, the increased utilization of non-Indian seasonal firefighters, prohibitions against retaining SWFF crews on standby for more than two weeks and several slow fire seasons all led to a declining use of SWFF crews.

The declining use of Indian crews also had other points of origin, including the introduction of fitness tests in the 1970s. Fighting fires, in the words of fire management specialist Jim Abbott, “is one of man’s most strenuous jobs. Working on steep terrain and in a hot, smoky environment demands maximum energy output.” As a safety precaution, the USFS established mandatory physical fitness standards in 1975, with all firefighters subject to the new standards. To measure physical endurance and stamina, firefighters were required to take—and pass—a five-minute step test.

When Indian crews were first organized, firefighters came from a cultural and social background that required a “different lifestyle … [with men] … more involved in physical labor.” When many veteran firefighters began leaving the SWFF program in the late sixties, they were replaced by younger, less physically fit firefighters. By 1970, the composition of fire crews had changed. Where once firefighters were predominately over the age of 25,
they were now overwhelmingly under 25. With the mandatory step test, many Indian firefighters were dropped from their crews. By the mid-1970s, the number of Indian firefighters significantly declined. Among the Taos Snowballs, many firefighters—or would-be firefighters—found employment in the War on Poverty programs. A widespread demand for Zuni-made jewelry precipitated a number of Zunis to forgo the hazards of firefighting. As permanent job opportunities increased, firefighting lost its importance as a wage-earning activity. By 1970, Zuni no longer supported a firefighting crew. Hopi fire crews declined when tourism became more profitable than firefighting. Among the Mescalero Apaches, morale declined, and changing economic conditions and declining interest in firefighting led to the demise of the Red Hats. While a hundred men could be assembled at Mescalero on short notice in the 1950s, the Red Hats ceased to exist by 1973.

The changing economic scene in the late sixties and the passage of the Civil Rights Act of 1964 led to additional changes in the Indian firefighting program. In 1973, largely to comply with the equal employment opportunity standards mandated by the federal government, women were for the first time admitted to the ranks of firefighting. The following year, an all-woman crew was organized on the White Mountain Apache and San Carlos Apache reservations. Other tribes incorporated women into their regular crews. Women firefighters are “just as good as men,” Walt Sixkiller, fire management coordinator with the Indian Bureau’s Albuquerque Area Office noted, “and their production is as good.”

As economic conditions and opportunities deteriorated in Indian Country in the early 1980s, a number of tribes sought to reactivate their crews. In 1981, the Jicarilla Apache requested basic fire training from the Bureau of Indian Affairs for activating a SWFF crew on the reservation. Two years later, Acoma Pueblo requested assistance in initiating a crew. Blessed with a decrease in wildland fires in the west, however, federal agencies were not looking to add crews. Calendar year 1982 marked the first year in a decade that the twenty-two SWFF Indian crews were not assigned to fires outside of Region 3.

Max Peterson, Chief of the USFS, explained in a 1982 memo to New Mexico Representative Manual Lujan why additional crews were not being approved. Additional crews would reduce the number of assignments for existing crews, Peterson pointed out. If crews averaged fewer than two assignments per season (between 1970 and 1981, 110 SWFF crews were sent on 193 assignments, clearly fewer than two per crew), it would not be worth “the time and expense for either the individual or the [US] Forest Service for testing and training.” If additional crews were needed, Peterson promised, tribes that had traditionally participated in SWFF would be given preference.

The diminished demand for crews remained through the first half of the 1980s. Then, in 1985 and continuing until the end of the decade, the Southwest experienced an increased number of destructive forest and wildland fires that required mobilizing additional fire crews. There was even a renewed demand for the highly trained and specialized, labor-intensive Type I hotshot crews. Apache hotshot crews were organized on the Mescalero, White Mountain and San Carlos reservations, with the San Carlos hotshots being an all-woman crew. Other hotshot crews were organized among the Blackfeet Tribe in Montana, the Warm Springs Tribes in Oregon and several Alaska Native tribes.

**The Legacy of Fire Warriors**

Today more than 6,000 American Indian firefighters continue to battle forest and wildland fires across the United States. More than 1,600 are SWFF Indian firefighters from the Southwest who represent 78 different crews. The largest contingent of American Indian firefighters today comes from the Montana Indian Firefighters, who number more than 3,500. Approximately one out of five forest and wildland firefighters today is an American Indian or Alaska Native. Firefighting remains a much-needed source of income for Indian firefighters. Firefighting wages represent approximately one-third of the income Indian firefighters earn each year, meaning firefighting remains a big part of employment on the reservations.

The inherent danger in fighting fires remains today and was epitomized in the June 1990 Dude Creek fire in central Arizona’s Prescott National Forest, a fire that claimed the lives of six firefighters. James Moore, a member of the Navajo Scouts firefighting crew, recalled seeing a “tidal wave of fire” come down upon the firefighters. Fellow Scout Eldon Jones described how the fire seemed to race down on the firefighters. In addition to the six lives lost, the fire consumed 45 square miles (over 28,000 acres) of Tonto National Forest.

It was a strong work ethic and a fierce pride in a job well done that led to the organization of American Indian firefighters. Fewer than two-dozen Mescalero Red Hats joined the ranks of trained firefighters in 1948. Since then thousands of American Indians have been recruited and trained to battle fires throughout the United States. In addition to those fire warriors battling forest and wildland fires, hundreds of other American Indians and Alaska Natives are maintaining important environmental connections to the land by working in tribal forest management programs.

The legacy of the Indian fire warriors, while having its genesis in the Southwest, resulted in American Indian crews being organized in Montana, Alaska, and the Rocky Mountain region. Individual crews were also organized among the Red Lake Chippewa in Minnesota; the Seminole of Florida; the Cheyenne, Arapaho, Cherokee, Choctaw and Kiowa nations of Oklahoma; the Alabama-Coushatta of Texas; the Cherokee of North Carolina; and the Passamoquoddy Tribe in Maine. The legacy of SWFF Indian crews today is aptly summed up by Jim Stires, national head of the Bureau of Indian Affairs branch of fire management based at the National Interagency Fire Center in Boise, Idaho. “We have some real high level, sophisticated computer modeling to understand fire behavior” today, Stires explains. “But if a veteran Indian firefighter told me what a fire was going to do, I’d believe him over the computers.”

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**Notes**

1. 35 Stat. 783. In 1889, the first national policy affecting tribal timber was enacted. The Dead and Down Act (25 Stat. 673) authorized the sale of “Dead timber, standing or fallen...for the sole benefit of such Indian or
Indians." In 1908, the Indian Forest Service and the USFS signed a cooperative agreement with the USFS establishing firefighters and forest protection corps on four northern tribal forests. The agreement was canceled in 1909. Ballinger and Gilford Pinchot, head of the USFS, differed in forestry goals and over the fact that the USFS had to include Indian labor in its forestry management program. “United States Congress, Joint Committee to Investigate Interior Department and Forestry Service,” *Investigation of the Department of Interior and of the Bureau of Forestry*, Senate Document no. 719. (Washington DC: Government Printing Office, 61st Congress, 3rd Session, 1911), 1192. Indian foresters were responsible for fire prevention and suppression on an average area exceeding 80,000 acres, considerably more than the 50,000 acres for which USFS personnel were responsible. Alan S. Newell, Richmond L. Clow, and Richard N. Ellis, *A Forest in Trust: Three-Quarters of a Century of Indian Forestry 1910–1986* (Seattle, Washington: Historical Research Associates, prepared for the Bureau of Indian Affairs, Division of Forestry, 1986), 3–4. The Indian Service lacked resources and expertise largely because of Congressional parsimony and the tenuous nature of the Indian Service, which was frequently the target of elimination. The Indian Service also made cooperative agreements with the U.S. Department of Agriculture (to run agricultural research stations), the U.S. Reclamation Service (to build and operate irrigation projects) and the USFS. The Indian Service was notorious for attracting less than qualified personnel. In 1909, the Indian Service contracted with the Public Health Service for a variety of health care services, including medical experts to operate the Indian health program.


13. The “‘I’ was dropped in 1953 when Hispanic crews were added to the program. Clarence K. Collins, “Indian Firefighters of the Southwest,” *Journal of Forestry* (January 1962) 60(1): 88.


19. Collins, “Indian Firefighters of the Southwest,” 89, notes that SWFF Indian crews were also paid more than the unskilled pick-up firefighters. Fewer crew bosses, fireline supervisors, and firefighters were needed when SWFF crews were used, thus lowering transportation and food costs.


21. Guck, “Apaches on the Warpath,” 2. Ceremonial fire was important for symbolic and natural effects. The kindling of fire and the process of creating fire were also highly ceremonial among American Indians. Old fires had to be ceremonially extinguished before a new one could be kindled. Among the Hopi, for example, two ceremonies—the Greater and Lesser New-Fire ceremonies—were held each year. The former was one of the most important ceremonies among the Hopi, with its flames regarded with absolute reverence. The Navajo Fire Dance is another example of the ceremonial importance of fire. This dance was a spectacular all night event concluding the Mountain Topway Ceremony and was reserved for the fire god Hastezini. To kindle fire for the ceremony, a fire drill had to be crafted from a cedar tree that had been struck by lightning. After the ceremonial participants left the site, spectators come forward to pick up charred fragments of cedar bark and bathe their hands in the flames to ward off “the evil effects of fire.” See Jesse Walter Fewkes, “The Lesser New-Fire Ceremony at Walpi,” *American Anthropologist* (July–September 1901) 3(3): 438, 445; Washington Matthews, *The Night Chant, a Navaho Ceremony* (New York: AMS Press Inc., reprint, 1978), 26; Washington Matthews, *The Mountain Chant* (Washington, D.C.: Bureau of Ethnology, Smithsonian Institute, 1887), 442. The Fire Dance was not uniquely Navajo, as many tribes, including the Apaches and Pueblos, had a similar ceremony.


23. K.O. Wilson, “Operation Redskin,” *Fire Control Notes* (July 1952) 13(3): 3. Guck, “Red Hats on the Warpath,” 13. Christopher, “Peace Pipes on the Warpath,” 54, also notes a successful raindance among Zuni firefighters during the 1951 Little Bear Creek fire in Arrowhead, California. For Zuni firefighters, the mythical Thunderbird, a deity to which the Zuni pray, serves as the unit namesake. See G.B. Cordova, “Weekly Report,” (USFS Region 3, copy on file at the University of Arizona Native American Research and Training Center, Tucson, 30 May 1990) 10–11. The Thunderbird is a “father-protector” and is associated with rain. When “the Thunderbird flaps its wings...it causes thunder and brings the rain that aids in extinguishing the fire enemy.”


27. Hunt, “The Peaceful Warpath,” 52. This figure includes all SWFF crews, not just SWFF Indian crews. In 1989, SWFF Indian crews from...

28. Stephen J. Pyne, Fire on the Rim (New York: Weidenfeld and Nicolson, 1989), 166. Pyne, Fire in America, 100, notes that some Indian crews rebelled when they were sent not to fight fires but to mend fences in National Park sites.


30. Younger Indian firefighters were more likely to imbibe alcoholic drinks, creating even more difficulties. If a firefighter was inebriated, the entire crew could be sent home. Some Zuni crews were disbanded due to crewmembers having been “sent home drunk.” See Joe, “Zuni Firefighters,” 19. Hunt, “The Peaceful Warpath,” 61, noted “If a member becomes intoxicated or even drinks intoxicating liquor while on a fire his ID card will be permanently canceled.” Personal Telephone Interview with Fernando Abeita, Albuquerque Area Fire Management Officer, 24 August 1990. Many Indian communities had once excluded younger Indian men from firefighting through traditional internal controls.


33. The 22 SWFF Indian crews came from Hopi (2), Navajo (6), San Carlos Apache (6), Zuni (3), Jemez (1), Santo Domingo (3), and Taos (1). Each was assigned to short engagements in the Southwest during 1982.

34. Memorandum from R. Max Peterson to Representative Manual Lujan, January 22, 1982 (copy on file at the University of Arizona Native American Research and Training Center, Tucson).

35. Hotshot crews are limited to the amount of funding available and fire occurrence. The BIA, however, does not view the creation of hotshot crews as one of its fiduciary responsibilities. Regional and national limits also restrict the number of crews. A hotshot crew from the Warm Springs Reservation in Oregon became the second self-supporting hotshot crew in the nation, in 1987, contracting for all of its work. See Holly M. Gill, “Warm Springs Hotshots,” Fire Management Notes (Spring 1989) 50(1): 14. In 1990, the Chief Mountain Hotshots (Blackfeet Nation) were organized in Montana. In 1999, the crew received the distinguished National Safety Award for zero time lost to accidents and zero vehicle accidents. http://www.blackfeetnation.com/home%20Page/chief_mountain_hotshots.htm (accessed on 24 February 2004). Alaska Native crews come from Chena, Denali, Midnight Sun and Tazlina.


38. Struckman, “Indians play pivotal role in fighting nation’s wildfires,” 2.