Chapter 8 - The Postwar Years: 1945-60

Compared to the activity and excitement of the New Deal years, and the hard work and sacrifice of the war years, the 15 years after World War II were a time of relative tranquility for the Southwestern Region, a period of relatively little change. For the most part, the foresters who were there in the 1920's and 1930's were the foresters who were there in the 1940's and 1950's. And the lifestyle and the work had changed little. Indeed, it seemed to some that the Southwestern Region was a world that time had left behind.

Lean Years

The older foresters, who had tended the forests while the young men went off to war, waited in eager anticipation for the young men to come back. But only a few returned. Many had died in the war; many who came home chose the city or a college education under the GI Bill. Even had they wanted to come to the forests to resume their work, or to begin new careers, there was little opportunity to do so in the first decade after the war because there were very few new jobs with the Forest Service. These were lean years, as they had been during the war, and marked contrast to the surge of activity and accomplishment characteristic of the New Deal years between 1933 and 1940. Postwar inflation and unemployment contributed to lean Federal budgets. The Cold War, and soon the Korean War, made defense again the Nation's spending priority. In a very real sense, the Forest Service in the Southwestern Region and elsewhere served as a caretaker until better times. Even into the closing years of the decade of the 1950's, personnel and facilities in the region were much what they had been in the 1930's.

Pest Control and National Grasslands

This interesting period can be characterized by a number of important events, surrounded by a greater host of lesser things. Probably the two most important happenings were the passage by Congress of the Forest Pest Control Act in 1947, which generated a new emphasis on the control and management of forest insects and diseases, and the transfer in 1954 of the Land Utilization Project lands from the Soil Conservation Service to the Forest Service. By this act, the Southwestern Region assumed management and control of the unique national grasslands of Oklahoma, Texas, and New Mexico. This placid era closes on a note of some new legislative urgency that set the tone of activity, planning, policy, and management for the next several decades. In 1960 Congress approved the Multiple Use-Sustained Yield Act. That act symbolically ended the old era and marked the beginning of the new.

Population Zooms

To be sure, the new era already had begun quietly. The population of New Mexico almost doubled in the decade from 1950 to 1960, while the population of Arizona tripled. By 1960 New Mexico had a population of 951,000, up from 532,000 in 1950, and Arizona had 1.5 million, up from the 500,000 of 1950. The Sunbelt was becoming a reality. But all of that seemed so terribly far away in 1945.

During World War II the Forest Service in the Southwestern Region fought at best a holding action to maintain the level of accomplishment that had been reached in the 1930's. It was extremely difficult, however, to maintain the trails, fire breaks, and facilities, or even to protect the forests against the hazards of fire. The shortage of manpower during the war forced the region to employ youths as firefighter and maintenance crews. Arthur J. "Crawford" Riggs recalls those days with some affection.

Riggs grew up in New Mexico. His father ranched in the Sacramento Mountains near Roswell, and then in the Magdalena country, southwest of Magdalena. Crawford was sent to Holbrook, AZ, to stay with his brother Alfred while he attended high school. In the summer of 1923, Crawford worked with the Forest Service under a "green" ranger, Landis "Pink" Arnold, whom Crawford got to know very well and who learned from Crawford much of his horsemanship and knowledge of livestock. Paul Roberts was forest supervisor at Holbrook, and was a good friend of Crawford's brother. In any event, Crawford learned a lot about counting sheep and fighting fires that first summer. ¹

Crawford remembers that his first fire was at Wildcat Canyon. Still in high school, he was sent into Holbrook to recruit a firefighting crew and outfit them with food and supplies. By the time he had finished that first fire, he said, he felt like a "pretty old hand at the business." In those days, he said, you still did everything on horseback, and carried your McLeod (a hoe-like firefighting tool), an axe, a canteen of water, and emergency rations. He recalls fighting eight lightning fires in one day. There was no way to call for help. "We had to do it ourselves," he said.²

In 1928 Riggs got his first regular job with the Forest Service, scaling logs on the Sitgreaves National Forest near McNary. In February 1930, he received his first appointment as ranger at the Punkin Center Ranger Station on the Tonto National Forest. He then went to the Reynolds Creek District, and from there to work for the experiment station near Tucson. In 1935 he went to the Prescott, then to the North Kaibab, working under Walter Mann, and then, in 1941, to the Mimbres District on the Gila National Forest.³

High School Boys Hired

During the war the Forest Service used high school boys for fire lookouts and standby fire crews. One such crew was at the Mimbres. The oldest crew member was 17 and the youngest 14. Clarence Tipton, the old cowboy in charge of the crew, trained and worked them. The boys worked harder than many men, Riggs said. Tipton divided them into groups and had them competing with each other, and according to Riggs, they performed in an outstanding manner. Riggs also remembers that the first smokejumpers ever used in the Southwestern Region were used in 1946 in the Mimbres District. ⁴ In May 1950, in the Capitan Mountains of the Lincoln National Forest, a crew of firefighters found a badly burned and hungry motherless bear cub. This little cub became "Smokey" and found a permanent home in the National Zoo in Washington, DC.

Zane G. Smith, whose son later became the Pacific Southwest regional forester, was on the Cibola National Forest when the war ended. Shortly thereafter he went to Recreation and Lands in the Regional Office. He recalled that during the war, and for some time thereafter, things had pretty well come to a halt. Gas rationing had stopped the movement of a lot of foresters, and few visitors came. Although visitation began to increase rapidly in 1946, there was no real change in the pace of activity among the Forest Service personnel. Funding remained very lean for some time. Smith recalls that the region had only \$28,00 to maintain all recreation facilities, do the necessary clean-

up, and haul away the garbage. In 1947 an inspector from the Washington Office was convinced that there really was a serious problem developing, and he called back and got an additional allocation of \$5,000 for recreation in the Southwestern Region.⁵ Generally, however, funding for recreation, salaries, and operations remained woefully behind the developing needs.

Meanwhile, a few foresters began returning to their duties after military service. Ed Carr, who had been captured during the Battle of the Bulge and spent his last year as a German prisoner-of-war, returned in January 1946. He was assigned to the North Kaibab, where the snow was still deep. He brought his wife, Fran, and their baby, and there was no place for them to live but in the old Jacob Lake Ranger Station, which had been built in 1907 and had been abandoned for many years. Edward Groesbeck helped him repair the place, close up the cracks, and get moved in. Fran Carr had to melt snow over a fire to get water to bathe the baby. Housing for foresters' families remained notoriously ancient and dilapidated for many years, but the foresters and their families approached the world very matter-of-factly. There was a job to do, and there was no one else to do it, so they did it.

Public Pressures Grow

As people began to move into the Southwest, pressures on recreation, on the land, and on the Forest Service began to grow. At first it was hardly noticeable, but by the mid1950's, they had become almost insurmountable. The small hamlets surrounded by National Forest System lands began to grow and expand. Residents came to the Forest service for special use permits to occupy, develop, and use the national forests. Pressures grew to exchange private lands for public lands in order to round out boundaries, or establish more orderly growth patterns, but the procedures for land exchange were slow and cumbersome, and the personnel few.

The demand for summer homes, resorts, and even subdivisions within and adjacent to national forest land grew. Within the decade after World War II, Zane Smith counted 47 subdivisions going in within the perimeters of the Payson Ranger District on the Tonto National Forest. More roads were needed, and better maintenance of those that existed. Fires became more frequent and hazardous. Power and utility companies needed rights-of-way across public forest lands. Water supplies became more critical. Public lands sometimes became public garbage dumps. The world about them was changing, but the personnel, the activities, and the Forest Service in the Southwestern Region seemed to be changing little, other than to become increasingly mired in a kind of bureaucratic and budgetary malaise.

Personnel Stable

Personnel ranks were remarkably stable in the years from 1945 to 1960. Three regional foresters headed operations in that 15-year period. They were Phillip V. Woodhead, who served from June 1945 through June 1949; C. Otto Lindh, who served from 1949 to late 1955, and Fred Kennedy who served until 1960. Edwin French, who joined the region in 1924, headed the legal affairs office for most of the era. The operations branch was under George Kimball from 1936 to 1950 and Mayhew H. Davis from 1950 to the early 1960's. Dahl J. Kirkpatrick supervised silviculture for the region from 1950 through 1964, except for about four years when C. Otto Lindh was in charge. Grazing was headed by Darrel M. Traugh for a few years, then by Clifford E. McDuff from 1950 through 1963. Erwin A. Schilling headed the lands department, except for a few years after 1957, when it was headed by Zane G. Smith. Howard B. Waha (1937-52) and Earl R. Huber

(1952-61) headed engineering. Rex King was in charge of public relations from 1935 to 1950, when it was combined for a time with watershed management, before being reconstituted as information and education in 1961. A. Allen McCutchen was in charge of personnel management from 1946 through 1957; Wayland G. Koogler (1941-46) and Wilford L. Hansen (1950-60), who was succeeded by Lowell Woods (1960), headed the division of watershed management. The accounting office was under Homer P. Nichols from 1947 through 1952 and Lewis Darby in the years following. The regional office and the forest supervisors' staffs were characterized by continuity and longevity of personnel in the postwar years before 1960.

Robert Ewing was in charge of the Apache National Forest (with headquarters in Springerville) from 1938 through 1951, when he was succeeded by John C. Baird (1951-56) and Kenneth Daniels (1956-59), who was followed by E. Lavelle Thompson. Louis F. Cottam, Walter L. Graves, and Robert E. Courtney each had four-year terms as supervisor of the Carson National Forest, beginning in 1945. Francis J. Monighan, who succeeded W. Ellis Wiltbank as supervisor of the Cibola National Forest in 1949, remained as head until 1963. The Coconino had more rapid turnover in the 1940's and 1950's, with Clifford E. McDuff, Kenneth A. Keeney, and Ralph W. Crawford each serving as supervisor. Clarence Merker supervised the Coronado National Forest from 1942 until 1951. William H. Woods (1951-57) and Norman P. Weeden (1957-61) followed him.⁹

The Crook National Forest, which was parceled up among other forests in 1953, was supervised for ten years by William H. Woods (1941-51) and then by Allan G. Watkins. The Gila was directed by many supervisors with short terms, including Claude McKenzie, Wilson M. Beveridge, Edwin A. Tucker, G. Lee Wang, Russel E. Rea, and Richard C. Johnson, but that kind of turnover was very unusual. After relatively short terms by Leonard R. Lessel (1946-51) and Russel E. Rea (1951-54), the Kaibab was supervised by Floyd M. Hodgin, who remained through 1965. Charles E. Moore supervised the Lincoln from 1938 through 1953, and then was followed by Donald D. Cutler and Everett R. Doman. Jacob C. Nave headed the Prescott from 1935 through 1948, and then was followed by Clifford E. McDuff for one year, Wilson M. Beveridge from 1949 through 1957, and Richard C. Johnson until 1960.

G. Lee Wang directed the Santa Fe National Forest from 1944 to 1947, and was succeeded by Kester D. Flock (194751) and Clarence A. Merker (1951-61). On the Sitgreaves National Forest, with offices in Holbrook, AZ, Francis J. Monighan was supervisor from 1941 to 1949, followed by Kenneth A. Keeney and Frederic N. Newman for short terms before Clarence K. Spaulding assumed the duties and served until 1963. Francis L. Kirby (1935-60), Carlyle J. Lillevig (1946-52), and Fred O. Leftwich (1952-59) provided leadership on the Tonto National Forest, with headquarters in Phoenix, for 25 years. ¹¹

Supervisors Worked Way Up From Rangers

The forest supervisors most often worked their way up to their posts from the position of ranger. Many of these men began their careers in the Southwestern Region in the 1930's. Many moved to supervisory positions in a number of different national forests within the region, and in and out of staff positions in the regional offices. They were part of a cadre of well-trained, experienced foresters who considered the region their home and who tended to think of themselves as part of one big family. This attitude was generally shared by the rangers, staff, and professional personnel who worked with the Forest Service in the region. Most spent their entire working career with the Forest Service, and most of that career within the Southwestern Region.

In most of the ranger districts, staffs remained very small and included a ranger, an assistant ranger (sometimes), a clerk, and unofficially, the ranger's wife and family. Work and fire crews were usually hired on a seasonal basis. By the end of the 1950's, staffs were expanding, facilities and housing were improving, and the more primitive ranger stations were being replaced or retired.

Research

One area that did experience a new injection of activity and purpose soon after World War II was silviculture and forest insect and disease research. In 1947 Congress approved the Forest Pest Control Act, which directed and funded new research activity relating to the prevention, control and suppression of forest insect pests and tree diseases. ¹² In some respects, the Southwestern Region pioneered in forest research, but most of that early research was related to forest and timber management procedures. In the 1950's and after, under the influence of the 1947 Forest Pest Control Act, greater attention began to be directed to forest insects and diseases.

G.A. "Gus" Pearson, who directed research programs in the region for many years, recalls the creation of the Nation's oldest forest experiment station, the Coconino Experiment Station, established on January 1, 1909. It was soon renamed the Fort Valley Experiment Station, and then became a branch of the Southwestern Forest and Range Experiment Station in the 1930's. Pearson recalls that one of the first projects of the Station was to determine why yellow [ponderosa] pine failed to restock after cutting. Cutting plots were established on 2,000 acres, and there were additional experiments in natural reproduction, planting, nursery work, and slash disposal. Research, however, was not the great concern of the Forest Service in the early years, and even by the close of the 1930's, the Fort Valley Experiment Station rarely operated with more than three or four technical staff people. ¹³

Insects and Diseases

Since 1947, impressive developments have occurred in research on forest insects and diseases, within and outside the Southwestern Region. There are many agents that have been destructive to ponderosa pine, other conifers, and aspen in the Southwest over many decades. In the 1920's, mistletoe damage was reported to be severe and widespread over the entire Coconino National Forest, and on the Tusayan, now the Kaibab National Forest, mistletoe damage affected the poorer sites most severely. On the Mount Taylor Division of the Manzano (Cibola) National Forest, tent caterpillars infested a large area of aspen, and mistletoe infection was severe. On the Jemez Division of the Santa Fe, the spruce budworm infestations caused heavy defoliation in Douglas-fir, white fir, and spruce. Epidemics of the Black Hills beetles were intermittent, but severe on the Kaibab between 1920 and 1926.

One of the reasons for greater attention to forest pest and insect control was the success achieved in insect control prior to World War II. With labor plentiful and inexpensive during the Depression, cutting and burning infected trees proved an effective and cost-efficient control practice. As labor became more expensive, ways were sought to control insects through more economical means, such as treatment with chemicals. By the 1950's, insects and environmental factors were recognized as more serious threats to the welfare of the forests than humans and animals. In the 1950's, insect damage seemed to be increasing throughout the forests of the Rocky Mountains and the Southwest. Pine engravers (*Ips pini*) reached epidemic proportions in

New Mexico. Pine bark beetles were responsible for a majority of losses in ponderosa pine in New Mexico and Arizona. Fir engravers (*Scolytus ventralis*) were epidemic in white fir stands in the Sandia Mountains on the Cibola National Forest. Western balsam bark beetles (*Dryocoetes confusus*) were attacking and killing corkbark fir in the alpine timber type in both Arizona and New Mexico. The spruce budworm (*Choristoneura fumiferana*) had reached epidemic status on 870,000 acres of mixed conifer and spruce-fir forests in New Mexico. For the first time, DDT was used with aerial spraying to control the devastation. Even heavy flights of the pine butterfly (*Neophasia menapia*) were reported on the Coconino Plateau in Arizona, the largest concentrations ever reported in the Southwestern Region.¹⁷

The most successful counterattacks to infestation appeared to be selective cutting and occasional spraying with insecticides in infested areas. Management plans in the various working circles, such as the Sacramento Working Circle, provided for the removal of trees infected with mistletoe, and the conversion of timber stands to even-aged stands in order to discourage infestation in older trees that might spread to younger growth.¹⁸

Southwestern dwarf mistletoe, which lives on ponderosa pine and Douglas-fir, is a major forest parasite in the Southwestern Region. Eradication of infestations has proven impossible. Research has indicated that the only way to get rid of dwarf mistletoe is to get rid of its host, the ponderosa pine. Living with mistletoe infestation is strongly preferred. However, control through selective cutting and harvesting does produce real economic dividends. Removal of heavily infested trees will slow infestation. In part, because of studies made in the 1950's indicating that forest fires have been effective sanitizers of trees infected with dwarf mistletoe, fires are now regarded as possibly beneficial to forest development. Regional studies of dwarf mistletoe made between 1954 and 1957 have been updated by now region. wide studies conducted in 1984.

Trunk rot, which became a problem of some concern to the 1950's and 1960's, has now been identified as probably the second most injurious disease in timber stands. It particularly affects conifers, especially ponderosa pine. Thinning the older, "overmature" trees assists markedly. In the control of the disease. Western red rot, armillaria root rot, and fomes root rot affect overmature trees and tend to infect younger trees nearby. Selective harvesting and cutting retard infestation. ²²

In the past four or five decades, the western spruce budworm has become one of the most chronic and persistent forest pests, and perhaps one of the most noticeable to the general public. Budworm larvae feed on the new foliage of the Douglas-fir in particular, and within a few years can almost completely defoliate trees and cause growth loss, deformity, and mortality. Cone and seed production are also severely retarded. Foresters and entomologists have tended to credit the serious outbreaks of more recent decades to the "lack of intensive management combined with intensive fire protection programs and past logging practices."²³

Records indicate that four major outbreaks of the pest occurred on the Carson National Forest beginning in 1922. The pest was next reported at outbreak levels on the Santa Fe National Forest in 1924 and on the Cibola in 1941. Later, infestations became epidemic on the north rim of the Grand Canyon in 1950. In 1952 and 1953, outbreaks occurred on the Lincoln National Forest and the Apache National Forest. By 1959 budworm infestation in the Southwestern Region covered 619,920 acres and reached a high of 1,029,780 acres in 1961 before it began to decline. A fifth serious outbreak developed throughout much of the susceptible mixed conifer type in the region in the 1980's.

Chemical Pesticides

Chemical pesticides were introduced for bud worm control in the 1950's. DDT was used in 1950,1953-56,1958, 1962, 1963, and 1966. Experiments with DDT and dimethoate were made in 1963, and in 1966 malathion wag introduced. In recent years, use of these chemicals has met with widespread public disfavor. (All uses of DDT, except for public health emergencies, were banned January I, 1973.) Selective harvesting and timber management practices minimize the occurrence of and the impacts resulting from budworm outbreaks. Most recently, biological pesticides have been introduced, such as "Bt," the bacterium *Bacillus thuringiensis*, which infects and kills many insect pests. Results have thus far been mixed. Some of the highest and some of the lowest control efficiencies have been recorded. Silvicultural practices, such as planting resistant conifers, thinning, and removal of host overstories to favor even-aged management, still seem to be the most effective means of managing the budworm. Fortunately, not all insects and pathogens are as destructive as the budworm.

The spruce beetle(*Dendroctonus rufipennis*) is one of the most notorious forest pests in the Southwest. The spruce mortality reported in 1904 in the White Mountains of Arizona was likely caused by the spruce beetle, but a positive recording in the area was not made until 1948. Heavy infestations in the White Mountains caused timber losses between 1948 and 1953, but spruce beetle activity declined significantly thereafter until new outbreaks developed between 1967 and 1971. Interspersed spruce beetle infestations occurred in different areas of most of the national forests in the 1950's and 1960's. Suppression efforts included many instances of selective logging and slash disposal. In the early 1960's and afterwards, cutting combined with treatment of infestations using solutions of ethylene dibromide in fuel oil improved suppression efforts.²⁶

Infestations of the white fir needleminer (*Epinotia meritana*), which was most noticeable in the area around Alpine and Nutrioso, AZ, sometimes resulted in heavy defoliation, often up to 50 percent, but caused little permanent damage. Losses of less than 3 percent in infected timber are now estimated. No control actions are recommended, despite the superficial appearances that the white fir needleminer causes defoliation and damage comparable to the budworm.

Porcupines, deer, chipmunks, mice, rats, and ground squirrels can cause damage, but ordinarily no controls are pursued. Metal bands on trees in tree orchards or high-value stands can usually discourage porcupines, which can be highly destructive to timber stands. ²⁷

Reseeding Grasslands and Reforestation

One of the most effective management practices that has derived in good part from the research work of people like Gus Pearson has been in the area of reseeding grasslands and reforestation. Such work was particularly effective in the Southwestern Region during the 1950's. The Loveridge Cliff General Integrating Inspection report of 1945 advised reseeding and revegetation of large areas of the region." It is our feeling that the Region has underestimated reseeding possibilities in making its postwar plans," the report stated. But by 1948 considerable progress had been made. A general integrating inspection completed on the Santa Fe National Forest in June 1948 by A.A. McCutchen and C.E. McDuff noted that the Santa Fe was pushing for reseeding work on a project basis and that a "good job is being done." 28

The region developed an ambitious program to eradicate the various species of juniper on large areas of the Kaibab National Forest in 1953. Junipers were removed and grasses reseeded simultaneously on a tract of approximately 15,000 acres. Inspectors recommended that the

program be continued on up to 200,000 acres, from which it was believed that junipers could economically be harvested, and the land reseeded. Similar projects were recommended for the Gila National Forest, but the areas involved were much smaller. ²⁹ It is in the nature of forestry that much of the work of the 1950's can only now be clearly evaluated. Indications are that these programs were very successful, and have provided incentive and evidence for the reforestation programs on the Tonto, Apache, and Carson National Forests, among others, in the 1970's and 1980's.

Watershed Management

Watershed management and vegetative management to enhance water yield is another area of activity and inquiry that began in the Southwestern Region in the postwar era. The Loveridge-Cliff inspection of 1945 urged increased concern for and attention to erosion control and watershed management. The inspectors noted that a 1940 study indicated that 4.8 million of the 20.5 million acres of land in the region were in a serious state of erosion. The region, the report said, "is faced with a watershed rehabilitation job of major proportions." Too many forest officers demonstrated too little concern over erosion, or assumed that nothing could be done about it. Moreover, many of the approximately 137,000 erosion control dams installed in the region by the CCC in the 1930's had been lost because of the failure to control livestock in the areas around them. Despite these problems, the report stated that "stream improvement work in Region 3 is the best observed in any Region."

William D. Hurst, who arrived in 1966 to assume the job of regional forester, attributes improvements in water quality and the enhancement of water quantities in the Southwest to close cooperation between National Forest System managers and Forest Service researchers working in the area of watershed management.³¹ One of the earliest investigations into watershed management developed under the USDA's plan of work for 1913, which specified that forest investigations should be conducted to "determine the effect of forest cover on run-off and erosion."³² In 1932, the first major watershed management research was begun on the Tonto National Forest, where the Sierra Ancha experimental watersheds were established. ³³ In the postwar era, the growing demand for agricultural water supplies from the Central Arizona watersheds stimulated renewed study of methods to increase the water supply from forest lands, which supplied most of the region's water.³⁴

About 1955, major experiments were conducted on 4.2 million acres of ponderosa pine lands in Arizona to investigate the effects of vegetative changes on water yield, soil, forage, wildlife, and recreation. The studies also proposed to examine the effect that such vegetative changes had on the risk from fire, insects, and disease. Four treatments were pursued: (1) clearcutting, (2) three-quarter thinning, (3) one-quarter thinning, and (4) one-third stripcutting and thinning. Using these applications, mean winter streamflow was found to increase by 34, 22, 16, and 21 percent, respectively. It meant a water supply sufficient to irrigate 6,500 more acres of cotton per year, or to support the domestic use of 32,600 additional families. Side benefits were determined to be a stimulation of timber growth despite reduced density and improved habitat for deer and elk.³⁵



Figure 12. Field officers checking on watershed conditions in Pecos Wilderness, Santa Fe National Forest, 1954.

Although studies indicate that the application of intensive forest management practices to mixed conifer forests, and vegetative manipulation in chaparral, pinyon-juniper, ponderosa pine, and mixed conifer and riparian stands can increase water yields, the economic returns and the physical volume of water resulting can vary widely with forest types and rainfall. Moreover, multiple use considerations do not encourage devotion to the single purpose of watershed enhancement. ³⁶ Symbolically, the 1950's did mark a period in the development of insect and disease control, as well as in the concern over regional water supplies and ecological systems.

National Grasslands

One new responsibility that focused the region's attention on concerns relating to water supply, vegetative manipulation, reseeding, and land renewal was the assumption of control over the Land Utilization Project Lands located in New Mexico, western Oklahoma, and the Texas Panhandle from the Soil Conservation Service. An administrative unit, known as the Panhandle National Grasslands, with headquarters in Amarillo, TX, administered the grasslands until 1970. Except for the Cado and Cross Timber units, which were transferred to the Southern Region, the lands were placed under the administrative control of the Cibola National Forest in 1970, and have since been established as a distinct administrative unit with ranger districts under the authority of the Cibola, styled the national grasslands.

These lands were acquired by the Soil Conservation Service from the Resettlement Administration under the authority of the Bankhead-Jones Farm Tenant Act, which provided funds and programs for the removal of submarginal farmland from cultivation during the Depression. Perhaps no lands had become so submarginal as those of the Texas-Oklahoma dust bowl of the late 1920's and early 1930's. Farm families suffered heavily in the droughts and slowly starved. Under the Bankhead Jones Act, the Federal government purchased their lands and advanced the families money to move to irrigated lands south of Lubbock at Ropesville, Texas. 37

Although the Soil Conservation Service made good progress in land leveling and reseeding, the outbreak of World War II virtually halted efforts to rehabilitate the area, which had historically been rich natural grasslands before farmers had moved into it in the 1920's. During World War II, thousands of acres were made available to the military for bombing practice. Walter J. Caserta, who had been a supervisor of the lands for the Soil Conservation Service, indicated that, even in

the 1950's, machine gun bullets and occasionally a 3-inch recoilless rifle shell could be found in the Kiowa District of the grasslands.³⁸

Curiously, the rains hit this former dust-bowl area in 1941, and the region harvested one of its best-ever wheat crops. Rains continued in 1945,1946, and again in 1951, and many of the reservoir and lake projects constructed by the Soil Conservation Service were washed away. Caserta recalls that when talk developed about turning the grasslands over to the Forest Service, he was one of those who was given the option of remaining with the Soil Conservation Service, or with the land. He chose to follow the land. As a result, in 1954 Caserta was welcomed into the Forest Service, retaining his position and title as supervisor of the Panhandle National Grasslands. Caserta is one of many who believes that the work of the Soil Conservation Service, and of the Forest Service, has stabilized what he described as "wild lands." It now boasts fine grasslands, reservoirs, and farmlands. Lands that were once virtually useless have now become useful for a variety of purposes, such as recreation, grazing, hunting, fishing, and cultivation.

Multiple Use-Sustained Yield Act

Just as the grasslands became increasingly useful for a variety of purposes, so the Forest Service came to the greater awareness in the 1950's that its business went far beyond growing and harvesting timber and nurturing the Nation's forests. Those forested lands were for the use of the people, and the uses that were being imposed upon the forests had become far more diverse and intensive in the 1950's, especially so in the Southwestern Region.

Only a few decades earlier, the forests were primarily used for grazing, timber cutting, and wood gathering by neighboring residents as well as on an intensive scale in same areas (the Prescott National Forest near Jerome and the Carson National Forest near Red River). As Zane Smith indicated, the national forests by the 1950's were encountering a new level of use, and there was growing competition among users for the allocation of their resources. It was not so much that the kinds of uses had changed, but that the intensity of use had increased markedly since pre-World War II days. Although the intensity of use had increased most heavily In the Southwestern Region, the conditions were much the same throughout the National Forest System. In part, because of the recognition of this increased demand, Congress in 1960 passed the Multiple Use-Sustained Yield Act.

The act authorized and directed the Secretary of Agriculture to develop and administer the renewable resources of the national forests, including outdoor recreation, watershed, range, timber, and wildlife and fish resources, in such a way that they would be available in perpetuity. It meant that no one demand should take precedence over another. The forests are not exclusively for the growing and harvesting of timber, nor for the use of recreationists, nor as habitat for wildlife, nor for cattle grazing, nor for watershed development. All of these factors and interests should be considered concurrently, and presumably a fair and equitable allocation of the resources should be made so that the resources were always available. In some respects, the Multiple Use-Sustained Yield Act facilitated the work of the Forest Service in arbitrating or allocating the uses of the forests. In other respects, it imposed difficult, if not sometimes impossible, demands upon the Forest Service in justifying its allocation of resources.

The Multiple Use-Sustained Yield Act ended the traditional Forest Service role of concentrating on the production and preservation of forest products, and imposed upon the Service the obligation to balance the many competing interests against each other. In one sense, it made the

work of the Forest Service easier, in creating definitions that could be used to allocate resources among users. In other respects, it made the work of the Forest Service enormously more difficult in theoretically making each interest of equal value. Thus, recreation had co-equal value with timber harvesting, grazing, and watershed development. Watersheds could not be developed without consideration of the impact that such development might have on timber production, grazing, or recreation. To be sure, all of these things had previously entered into consideration in the allocation of forest resources, only now such considerations were legislatively mandated.



Figure 13. Ranger checking operations on a pumice mining claim, Santa Fe National Forest, 1957.



Figure 14. Forest officers inspecting an oil well drilling operation, Carson National Forest, 1960.

Although the years between 1945 and 1960 had been quiet years, they had in many ways been very constructive ones. The Southwestern Region was learning to handle the problems imposed by modern urban life. Real advances were made in silviculture practices, in pest and disease control, and in watershed improvement, utilization, and development. The acquisition and development of the national grasslands created a new dimension in the operations and activities of the Forest Service in the region. Meanwhile, despite all of this, the lifestyle and the work of the typical forester, whether ranger, forest supervisor, or staff, had changed little, and in some respects this was comfortable and good. For those who worked there, despite the sometimes decaying facilities and the thin budgets, life was truly good. A fierce loyalty and sense of community characterized the personnel of the Southwestern Region in the postwar years. The people of the Southwest approved of their lifestyle, and Forest Service personnel could feel tremendous satisfaction in the knowledge that they were working and living in harmony with their neighbors and the community. Effective management of the national forests meant

cooperating with other interests, governments, and agencies. Of necessity, effective management sometimes involved conflict.

Reference Notes

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