

LIFE ON THE WARREN RANGER
DISTRICT, 1932 - 1936
AN EXCERPT FROM
MEMOIRS OF A U.S. FOREST RANGER
BY A. E. BRIGGS



FOREST SERVICE PACK STRING PASSING THROUGH WARREN

Edited By
Peter Preston
for the
HERITAGE PROGRAM
PAYETTE NATIONAL FOREST
U.S. DEPT OF AGRICULTURE
INTERMOUNTAIN REGION

JANUARY 1996

LIFE ON THE WARREN RANGER
DISTRICT, 1932 - 1936
AN EXCERPT FROM
MEMOIRS OF A U.S. FOREST RANGER
BY A. E. BRIGGS



FOREST SERVICE PACK STRING PASSING THROUGH WARREN

Edited By
Peter Preston
for the
HERITAGE PROGRAM
PAYETTE NATIONAL FOREST
U.S. DEPT OF AGRICULTURE
INTERMOUNTAIN REGION

JANUARY 1996

LIFE ON THE WARREN RANGER DISTRICT, 1932-1936
an excerpt from
MEMOIRS OF A U.S. FOREST RANGER
by A. E. Briggs

edited by
Peter Preston

TABLE OF CONTENTS

INTRODUCTION	1
ARRIVAL AT WARREN, 1932	4
HIDEOUT COUNTRY.....	10
THE COMMUNICATION SYSTEM.....	11
LOOKOUT QUARTERS	12
PACK STRINGS	15
FIRE CONTROL PROBLEMS	21
CIVILIAN CONSERVATION CORPS	23
WINTER TRANSPORTATION AND DEEP SNOW	29
SNOWSHOES FOR HORSES AND MULES	30
AIR TRANSPORTATION IN FIRE CONTROL	31
SOUTH FORK TRAIL	35
RATTLESNAKE COUNTRY	37
MOONSHINERS AND FEDERAL AGENTS	39
SNOWBOUND ELK HUNTERS	43
THE END OF THE WARREN ASSIGNMENT	45
GENE BRIGGS AFTER WARREN	46
REFERENCES CITED.....	47

COVER ILLUSTRATION: Forest Service pack string passing through Warren en route to the backcounty, which was a annual event each spring, and the return each fall (see text, page 19). This photo, taken by Don Park, then a Chamberlain fire guard, is of Warren on May 27, 1927, looking to the west along Main Street. On the left is Hattie (Mrs. Ivan) Sloan's Boarding House; in the center background is the Warren Hotel; on the far right is the "Gas-Oil-Grease" sign in front of Otis Morris' combination gas station-store-post office. Of these buildings, only the Warren Hotel, built in 1912, remains standing, but is now in poor condition.

INTRODUCTION

Following this Introduction is an extract of the autobiography of A. Eugene (Gene) Briggs, who published in 1963 Memoirs of a U.S. Forest Ranger. A portion of his autobiography covers the time period when he was District Ranger at Warren, Idaho, on the old Idaho National Forest, from February 1932 to February 1936. During his tenure, Warren was still a rough mining community and Ranger Briggs' observations add another look at the history of Warren and of the relationship of the U.S. Forest Service to a backwoods community.

My interest in Gene Briggs' description of his four years on the Warren District has much to do with members of my wife's family living in Warren during the same period and their mutual community relationships. My wife, Sally, the daughter of Don Park (who is noted in the Briggs autobiography) spent her childhood years of the late 1940's living with her great uncle Brad Carrey at Warren during the summers. The Briggs autobiography notes the Carrey and Briggs families being close friends. Although my wife, Sally, was quite young during her Warren years, she has vivid recollections of living there and I have used her recollections in my editorial comments on the Briggs autobiography.

Sally's family has a long history in Warren and various members were employed there by the Forest Service in the early days. Sally's great grandmother, Mary Blackwell Carrey Dustin, migrated from Oregon to Warren in 1905 with her second husband Bailey O. Dustin. Bailey Dustin's stepson, Tom Carrey, was hired as a contract packer when the Idaho National Forest was established in 1908. Bailey Dustin was appointed "ranger" (equates currently to Forest Guard) at Warren in 1909. Also in 1909, Sally's grandmother's first husband, Ted McCall (the town of McCall was named for his father, Tom McCall), was appointed "ranger" for the Chamberlain District. Bailey Dustin's youngest stepson, Brad Carrey was "ranger" on the South Fork District in 1917. Among her family members, only Sally's father, Don Park, completed a life's career with USFS, from 1924 to 1963. And I was included, too, as Assistant Ranger on the old Krassel District (1955-57) prior to a U.S. Air Force career. Thus, there have been four generations of Sally Preston's extended family who have been employed by the old Idaho National Forest or its successor, the current Payette National Forest.

Gene Briggs started his career with the USFS on November 18, 1924, at the age of 30. Having successfully completed the "Rangers Shortcourse" at the University of Montana School of Forestry, he was appointed District Ranger on the Grays Lake District on the Caribou National Forest in southeastern Idaho. This was during the era when USFS appointees had to furnish their own riding horse, a pack animal, tack for both, and a bedroll.

It was common practice in the late 1920's for Rangers who were lacking in fire control experience to be assigned as a "detailer" to a fire control job on another Forest within the Intermountain Region, to gain on-the-job experience. Gene Briggs' District on the Caribou National Forest, in southeastern Idaho, had a low incidence of fires, so he was one of those lacking in experience. In late July, 1931, Gene got his call to fire detail on the old Idaho National Forest, headquartered at McCall, Idaho. S.C. "Charlie" Scribner was Forest Supervisor at that time. Detailed to assist Scribner as Senior Fire Control Officer was Clarence N. "C.N." Woods, who was Chief of Operations and Fire Control from the Intermountain Regional Office at Ogden, Utah.

The winter of 1931 had been short and lacked the usual snowfall, which made the summer of 1931 a disastrous fire season. It was a season of multiple "project fires", a project fire being one involving multiple crews of hundreds of men, a large administrative staff, and major logistics problems. Such was the situation when Ranger Briggs was called to the Idaho Forest to be one of the crew bosses on a project fire on the breaks of the Salmon River, extending upriver from Campbell's Ferry. Ranger Briggs walked to the fire from Dixie, on the north side of the Salmon, and established his fire camp in the bottom of the Salmon River canyon.

At their Salmon River fire camp, Ranger Briggs and crew were without means of communication. On the fourteenth day of the fire, Briggs and his crew were "found" by C.N. Woods and Don Park. Don, who had been fire guard in the area for the prior six years and knew his territory like the back of his hand, was "detailed" to serve as guide and "horseholder" for C.N. Woods as he went about his task of directing operations. It was agreed that Briggs' fire camp should be moved to Elk Springs, which was about two miles up from the canyon bottom on the old Three Blaze Trail (I recently wrote a short history of the Three Trail, noted in the bibliography).

Upon arrival at Elk Springs the following day, Ranger Briggs found the new camp had been stocked with supplies and equipment, probably by packer Al Stonebraker, who worked from his ranch in Chamberlain Basin. Gene was met at the camp by C.N. Woods, his horseholder Don Park, District Ranger Dan LeVan (on whose District the fire was burning), and C. J. "Chet" Olsen, who was the fire boss. (Chet Olsen later became Regional Forester for the Intermountain Region and remained life-long close friends with Dan LeVan, Don Park, and others, as a result of the 1931 fire season). The Elk Springs fire camp was officially acknowledged the following year with a formal trail sign "Briggs Camp", which remained there until it was replaced by a new sign in 1954. It may still be there.

In early September, 1931, the fire on the breaks of the Salmon River was essentially quenched by an eight-inch snowfall. Gene Briggs went home after being on the fireline almost 45 days. He proved himself to be a very capable and resourceful leader. Within a short time Ranger Briggs received notice to attend an after-fire Board of Review in McCall in October. During the course of the meeting it became evident to Gene that he was being selected for transfer to the Warren District. Gene was to take the fire-prone Warren District and aging incumbent Warren District Ranger Charley Gray was to take the less stressful district vacated by Briggs.

Gene fought the transfer verbally and by letter and was on the verge of resignation from the USFS, citing "my primary objection was the prospect of subjecting my family to oblivion and burying them up in the snow bound, semi-ghost town of Warren for several years, where there was no school or doctors, and where the environment was anything but desirable." At a subsequent Board of Review in Ogden in December the combined forces of Regional Forester Charles Rutledge, C.N. Woods, and Idaho Forest Supervisor Charlie Scribner convinced Gene Briggs to accept the Warren District in light of concessions being offered about living conditions; e.g., he and his family were to have winter quarters in McCall.

And so it was that Ranger Gene Briggs, his wife Hiley, and fourteen year-old daughter Georgia, arrived in Warren in June, 1932. The Warren District had just been reformed to incorporate the former Ranger Districts of Warren, Burgdorf, and South Fork. The following text is a verbatim extract of Gene Briggs' autobiography for his four-year tenure on the Warren District. I have taken the liberty of correcting a few misspelled names and have added some editorial notes to clarify people, places, and events. The reader should keep in mind that in that era, especially in isolated outposts such as Warren, the USFS Ranger was looked upon as an almost god-like representative of the U.S. Government. In addition to being legally the State Game Warden, the Ranger was often looked upon as the quasi-sheriff, domestic arbiter, and counselor in all manner of community life. Such was the Ranger's job that Gene Briggs undertook.

Peter Preston, Editor
Mathews, Virginia
January 1996

ARRIVAL AT WARREN, 1932

We reached the Warren Ranger Station on the Idaho National Forest about June 1 and found the seasonal employees already at work repairing telephone lines and trails in preparation for the fire season ahead. These men, some fifteen of them, would later take their assigned positions on lookout points and guard stations as the season advanced and the fire danger increased.

[The Idaho National Forest, which was established in 1908, was consolidated with the Weiser National Forest in 1944 and renamed the Payette National Forest (Hockaday 1968:28)]

The Warren Ranger District embraced an area formerly administered by three District Rangers. The Burgdorf, Warren, and South Fork of Salmon Districts had been consolidated and placed in charge of one District Ranger, with key guards or Assistant Rangers located at Burgdorf and South Fork Ranger Stations. The District embraced approximately 28 miles of the lower reaches of the South Fork of Salmon River Canyon, and some 34 miles of the south side of the main Salmon River Canyon, in addition to many deep, rugged canyon tributaries. It was a rough, heavily timbered area.

There were eight primary fire lookout points within the District which were manned during the fire season. They were Bear Pete, War Eagle, Steamboat, Pilot Peak, Smith Knob, Carey Dome, Maxwell Point, and Cottontail Point. There were six emergency lookout points scheduled for manning during critical fire danger periods. Nearly all of the men had served at least one year as lookouts and guards at the points to which they were to be assigned for the current fire season and were experienced and familiar with the trails, telephone lines, and the country surrounding their assigned points.

Warren was the scene of one of the earliest placer and quartz mining operations in Idaho. Early prospectors found gold along Warren Creek in the 1870's [Gold was discovered at Warren in 1862]. Chinese placer miners soon followed in sizeable numbers and worked the creeks and meadows. It was said they recovered a lot of gold but were unable to work the goldbearing materials to bed rock because of their crude tools and methods. Many years after the Chinese quit the diggings, three dredges were moved in and recovered gold in good quantities by working the ground much deeper than the Chinese had previously worked it. One dredge had already moved in and began operations, and two others were in process of being moved in.

[The first dredge began operation on September 11, 1931, with Fred Shiefer as dredgemaster. Fred was born in 1898 at the site of the South Fork Guard Station and died in Boise in 1995 at age 97. This dredge and the two that followed in the

summer of 1932 were responding to the high demand for gold in the wake of the Great Depression (Helmets 1988:1931-1932). A result of the dredging over twelve years of operation was the complete destruction of Warren Meadows, now a 4000-acre wasteland; Lavelle Thompson remembers Warren Meadows being lush grass where the Thompson cattle were rested en route from the South Fork ranch to McCall in the early 1930's [Thompson 1993]

[The Chinese presence in Warren is discussed in Reddy 1993: The Chinese Pioneer in Idaho: An Overview; also see article "A Sojourn Among the Chinese Miners" by Greg Burton in the July 24, 1994, issue of the Lewiston (Idaho) Tribune, which features the work of Payette National Forest Archaeologist Larry Kingsbury to preserve the Chinese heritage of Warren]

Warren supported a combined store and post office, a hotel, and two hard liquor bars and card rooms. There were the usual town characters who had been there a long time. Boston Brown and Clint Jones apparently had no visible means of support but seemed to be able to afford enough hard liquor to keep them happy and contented. They could frequently be seen walking up or down the street, arm in arm, in a happy mood. The day we reached Warren I walked up the Canyon to the home of a neighbor who had served as watchman at the Ranger Station until we arrived. He had the keys to the station buildings. Clint Jones came along before I left and said he wanted to get acquainted with the new ranger. I could see he was pretty well crooked up with hard liquor. He pulled a bottle from his rear pocket and invited me to sample his whisky, stating that he operated a moonshine still on the hillside behind the station and made good whisky. I told him I was not a drinking man. This seemed to satisfy him and he didn't insist. I was unable to find the still on the hillside and concluded Clint had been spoofing me about it. Clint was not a quarrelsome man and was always friendly. He was a fair fire camp cook when we could keep him sober. There was a dance in Warren one night, and someone had relieved Clint of all his clothes. He came marching up the street stark naked and singing as though he was happy as a lark.

A Mr. Strickland lived across the street from the Ranger Station in a shack-type cabin. The premises were always kept clean and orderly in contrast with most other yards in the neighborhood. He was quite old but was tall and erect and wore a beard. He was a dignified appearing man and was always neat and clean. The towns people said he was the local Justice of the Peace. He was friendly but reserved and tended strictly to his own business. I never knew of him ever having to exercise the duties of his office during the four summers we were in Warren.

Two very old Chinese men were still living in Warren, apparently leftovers from the placer mining days. One was known as China Can [Ah Kan]. No one seemed to know how old he was, but he could easily have been a hundred years of age, judging from his appearance. He was almost completely dried up and was barely able to shuffle along with the aid of a cane. He was very reserved and was never seen talking to anyone. Some folks said he was cranky, but who wouldn't be at that age. Old timers told us he operated a large pack string of mules to transport food supplies and equipment to Warren during the placer mining days before there were access roads. Some of Can's friends told me he was still hoarding more than a hundred aparejos, or leather pack saddles, at his cabin. I managed to get a look at these saddles one day, but was unable to draw any conversation out of Can. He could have told a very interesting story. I would liked to have acquired one of the saddles as a relic of the past.

[Ah Kan was over a hundred years old at the time. He died on March 8, 1934, at age 108. See Reddy 1993: He Can Always Have The Moon: The Story of Ah Kan; also see Kingsbury 1994: Ah Toy: A Successful 19th Century Chinese Entrepreneur]

The other Chinaman was known as China Sam [Ah Sam]. He appeared to be much younger than Can [Ah Kan] and was always friendly. He worked in the store and Post Office and folks said he was very old [census records indicate that Ah Sam would have been age 69 when Gene Briggs met him]. Whenever a drunk attempted to provoke either of the old Chinamen, folks came to their defense in a hurry. They were evidently considered to be assets in the town and relics of the past.

Otis Morris was the owner and manager of the store and the [former] Postmaster [1926-31, U.S. Postal Service Archives]. He kept a good variety of food supplies, clothing, and hardware. He also owned the town water system. He was a fine man, very accommodating and well respected by the towns people. He was an old timer in Warren and people went to him for advice and counsel.

[Otis Morris was born about 1889, came to Warren as a small child, spent all his life there, died about 1960. Otis Morris served a second time as Warren postmaster (1944-55) at which time the post office was in his store-gas station on the south side of Main Street, which place is now the Jack Pickell residence. During his second period as postmaster, Sally Preston, at around age 6 to 8, remembers one of her daily events was to walk the short distance from the Brad Carrey residence to Otis Morris' store to sit on the counter and pretend to help him sort the mail (Pickell 1995, Sally Preston 1995)]

Jim Payne and Fred Badley each operated a bar and card room in one room log cabins in different locations along the street. Payne was known to run an orderly place, but Badley's place was frequently the scene of drunken brawls. His reputation was none too good.

Bill Newman was the [Warren Postmaster, 1931-38] and deputy sheriff for that section of Idaho County. Whenever a law officer was needed and sent for, Bill would usually say, "This is the way they want it here," and would do nothing in the way of interceding. He may have been right. One bad result of Bill's attitude was that when there was trouble, people came to the Ranger Station for help, which the Ranger was not in a position to render except when Forest resources were being threatened or damaged, or in extreme emergencies.

Another historic character was Polly Bemis, a very old Chinese woman, who old timers said had been won in a poker game by Charley Bemis during the heyday of Warren. Charley had passed on many years before [1922] but Polly was still living in her little cabin on Salmon River at the mouth of Polly Creek. She lived alone and it was said that Bemis had left her well provided for. Friends and neighbors visited her quite frequently and provided her every need. She spoke English and was a wonderful source of historical information. I had the privilege of visiting her a few times, and although she was very old, she was very alert, intelligent, and a wonderful woman. Polly passed away a few years after we left Warren and newspapers of wide circulation paid high tribute to her as a pioneer of the early mining days and as a fine woman.

[Polly Bemis actually died, at age 70, during Briggs' tenure at Warren, on November 6, 1933. Much has been written about Polly Bemis, some of it inaccurate. The most accurate historical account of her life is in Reddy 1994: The Color of Deep Water, the Story of Polly Bemis, which includes an extensive bibliography]

The Brad Carrey's lived across the street from the Ranger Station and they were fine people. They became our closest friends in Warren. Their two daughters, Mary and Margaret, were nearly the same age as our daughter, Georgia. They spent much time together in the summer and attended the Intermountain Institute at Weiser, Idaho, during the school term. The Carrey girls were allowed almost full latitude in the use of the Carrey automobile, and it always worried us considerably when they and Georgia drove over the road between Warren and [the] South Fork of Salmon River, over eight miles of steep, winding and narrow road between Warren Summit and the canyon bottom [to the Carrey ranch at the mouth of Pony Creek]. But the Carrey girls were skilled drivers over such roads and somehow avoided accidents.

[Brad Carrey was Sally Preston's great uncle. In addition to his mining interests in and around Warren, he had the mail contract from McCall to Warren to Big Creek. All the Carrey family members were involved in delivering the mail, especially his daughter Mary with whom Sally rode frequently as a young girl, and frequently got car sick with Mary's stop-and-go driving on the switchback mountain roads. Other drivers were Brad's wife Margaret, Mary's husband Raye Mende, and Brad's son-in-law Willard Gribble (daughter Margaret's husband and nephew of Ruby McDowell). For a complete history of mail service in the area see "Wilderness Post Offices" by Preston:1996]

Wallace and Ruby McDowell owned and operated the hotel and had a good business furnishing meals and lodgings to the employees of the gold dredging companies operating on Warren meadows below the town. Two more dredges were moved in soon after we reached Warren, and the town came to life again after many years as a ghost town.

[In addition to the Warren Hotel, the McDowell family was engaged in mining and ranching. The McDowell's were close friends of the Brad Carrey family and Sally Preston knew them well. The McDowell's sons still have residences in Warren and keep their mining claims active. Grand daughter Charlotte McDowell Coombs owns the old hotel, which is in need of much repair (Sally Preston 1995, Pickell 1995)].

Warren was located in a narrow timbered canyon in the upper reaches of Warren Creek. The buildings occupied both sides of the canyon and the McCall-Warren road served as main street. There were only four modern and substantially built homes in the town. These were the Brad Carrey, Otis Morris, the Ranger Station and Warren Mining Company dwellings. There were possibly twenty other shake-roofed log cabins, unused for many years until the dredges were moved in and there was need for more housing. Most of the old cabins were made livable and occupied by dredge company employees.

[The Brad Carrey house, of which nothing now remains, was on the north side of Main Street, about half way between the Hotel and the Ranger Station. Sally Preston remembers the Carrey house from having lived there in the summers in the mid-1940's to the early 1950's. The house was two story, built of logs and chinked with mortar. It had a porch across the front, which faced south. The kitchen was on the ground level at the rear of the house and had running water. Adjacent to the kitchen was a small room with a toilet and a sink, but no bath tub. Bathing was done in large galvanized tubs. Upstairs were several bedrooms, each equipped with wash bowl, water pitcher, "thunder mug", or chamber pot, for toilet needs during the night. Brad Carrey met his death by accident at age 58 on October 18, 1952, when the trucked vehicle he was driving overturned in a dredge pond and he drowned

underneath. His body was brought to his house; Sally was 12 years old then and the only family member there. She remembers Jack Badley (son of Fred Badley) putting coins on Brad's eyelids to have them closed before the other family members arrived (Sally Preston 1995)].

[Another of the old buildings still standing in Warren is the Dance Hall at the west end of Main Street opposite the Hotel. The Dance Hall was owned by Otis Morris and was a center of activity up to World War II. Margie Park Bowen (youngest sister of Sally's father Don Park) and Charlie Bowen have told of the fun they had dancing there in 1940-41 when Charlie was hard-rock miner at the Iola Mine (1940) and the Rescue Mine (1941), working for Wallace McDowell (Bowen 1994)].

A power plant on the South Fork of Salmon River [at the mouth of Elk Creek] provided electric power for the town people and dredge operations [from 1931 until dredge operations terminated in 1942]. The culinary water supply was provided through a system of pipe lines from an open hillside ditch leading from Slaughter Creek a half mile or so above the town. I still shudder when I think about what an analysis of the water would have shown in bacteria count. To add to the already bad situation, men seeking work on the dredges moved their families in and set up camps on Slaughter Creek, many of these camps were located above the intake of the ditch supplying the town water. Otis Morris owned the town water system and the unsanitary conditions and water pollution was occurring on National Forest land, so we pooled our efforts to persuade people to move their camps below the ditch intake and refrain from practices which were contaminating the town water supply. We found a woman washing diapers in the creek above the ditch intake and some goats picketed along the banks of the ditch. It was a difficult situation to control. Some people just didn't seem to be interested in helping to keep the water supply clean. How the town people avoided a typhoid epidemic or other serious illness was a mystery.

Warren experienced an unemployment problem shortly after the dredges were moved in. Many individuals and families moved into the area to seek employment with the dredging companies, but there were many more applicants than available jobs. Family camps were set up on Warren meadows below the town. I entered the store and Post Office one afternoon a few days after we reached Warren. When I left the store, I was confronted by three men, one of them explained that they and their families were camped on Warren meadows and they were unable to get employment. Their food supplies were running low and they must have food from some source. They wanted to know what action I would take as District Ranger if I found them coming off the hill with deer meat. They had put me on the spot, and my only answer was to ask them what they expected me to do as District Ranger if I found them coming off the

hill with deer meat. They looked me over a few seconds and then said, "We guess that answers our question," and thanked me. I made no efforts to search camps or other buildings for illegally possessed game and people were very cautious about keeping game meat out of my sight during my routine travel and work. We had no troubles from this source.

As I became better acquainted in the community, someone would occasionally volunteer the information that he was eating bacon and not deer meat. On one or two occasions when I was absent from the station, one of the neighboring women offered [my wife] Hiley some fresh deer steaks if she would promise not to breathe a word of it to her ranger husband. Hiley told them she was very sorry, but she never could keep a secret from her husband. She told me her refusal to accept the deer steaks didn't seem to offend the woman who offered them. They apparently respected the responsibility and position of the District Ranger and his family in this regard. My predecessor [Charlie Gray] had built up some ill will and troubles for himself by searching private buildings for illegal game meat, which he failed to find. I was determined to avoid this mistake if possible, but to enforce the law in cases when the violator carelessly displayed the evidence where I could see it during my routine travel and work. This policy seemed to gain their respect for my position and they were always cautious about keeping the evidence out of my sight.

HIDEOUT COUNTRY

That part of Idaho County situated south of the Salmon River was often referred to as the Salmon River Strip. Grangeville, some 180 miles to the north and across Salmon River was the county seat. The Salmon River Strip was very sparsely populated. There were a few ranchers along the South Fork and main Salmon rivers and in the higher areas, but these were few and far between. In addition to the few ranchers, a few miners were still holding down claims in the Burgdorf, Warren, and Big Creek areas. Some of the small bars [alluvial river benches] at the mouth of canyons leading into South Fork and main Salmon were occupied by lone individuals whose only apparent means of support was panning small quantities of gold from the stream beds. Some of them would show up and offer to help on major fires in their area. Some of these men never left their cabin areas more often than twice each year to procure food supplies and clothing, and their meager supplies were usually transported by man pack.

No one in the area seemed to know the background of many of these men, who were spending their lives hidden away in some lonely spot. The District Ranger, when traveling in their locality was usually invited and always made welcome to share the simple rations of food with them, and any available horse feed. I was told that an easy way to offend these men was to fail to stop at their cabins and at least pass the time of

day and tell them about current events in the outside world. I made it a practice to leave a late newspaper or magazine with them, but I always refrained from prying into their backgrounds or trying to determine why they preferred to live such lonely lives.

On a few occasions, Department of Justice and Federal Bureau of Investigation agents came to Warren Ranger Station, usually at night, to inquire about certain individuals who were wanted men. We had the names of several transients in the area on our payroll records after employment on fires. Some of these names were found to be aliases from photographs shown by the agents. A half dozen or so wanted men were apprehended and taken out of the area during the four summers we spent at Warren. The area became known as "Hideout Country."

THE COMMUNICATION SYSTEM

A sizeable telephone switchboard arrangement was maintained at the Warren Ranger Station where many telephone lines from lookout points, guard stations, and Ranger Stations on the Warren and Big Creek districts converged. It was a very busy switchboard during the fire season, especially during periods of extreme fire danger and during fire emergency. It was [my wife] Hiley's responsibility to receive and relay fire weather reports, fire reports, and other messages coming in over the many lines. During fire emergencies it required her constant attention day and night. About her only relief periods were when the key guard or myself were at the station for a few hours occasionally. I will never know how she endured the strain over the long periods, but she did and without complaint.

The switchboard was equipped with a "high powered" telephone instrument, especially designed to function on grounded or one-wire lines during all kinds of weather conditions.

[The Forest Service open-wire telephone system was a constant maintenance problem due to winter snows and trees falling on the line; this system was abandoned in favor of a radio communication system by about 1950. The abandonment of the old telephone lines left a number of privately-owned dwellings, which had tied into the Forest Service system, without a means of communication until a backcountry radio network was established some years later. In 1995 a subsurface public telephone tie line was established from McCall to Warren]

It was a lonely vigil for the lookouts stationed on the high points over the District. About their only relief from the loneliness came after nightfall in calling the Ranger Station and having Hiley connect all the lines so they could visit with her and with each other and learn the events of the day. Many of the lookout men were equipped with musical instru-

ments, usually a violin, guitar, or banjo, and they would put on a concert. What they lacked in musical talent, they made up in volume and enthusiasm. When they tired of the concert or ran out of wind, they would remain on the line while Hiley gave them recipes for pies, cakes, and other food mixtures. Then the following night, each of them would explain his success or failure in preparing the food. Quite a few failures were reported but they kept trying. They usually could think up a new song for Hiley, who never failed to take time to work the switchboard and chat with them.

Many of these young men were college students earning and saving funds to tide them over the ensuing school term. After the fire season was over and before leaving for school, they would come to the Ranger Station and pay their respects to Hiley, and express their appreciation. These were high caliber youngsters, many of them returned year after year. They had intestinal fortitude in finding fires and doing the best they could to put them out in rough, heavily timbered areas.

LOOKOUT QUARTERS

Buildings were in place on War Eagle and Pilot Peak lookout points to provide shelter and living quarters for the occupant and his equipment. Within two years after we took over the Warren District, lookout buildings were erected on Bear Pete, Steamboat, Carey Dome, and Cottontail Lookout points. The structures placed on Carey Dome and Cottontail Points were 72-foot steel towers with a cupola on top to house the fire finder and serve as a shelter against the weather. Living quarters were provided near the base of the towers. Standard lookout houses were placed on Bear Pete and Steamboat points. The house on Steamboat was placed on 12-foot stilts. These buildings were constructed in accordance with an approved building plan. They were built on high points previously selected to provide the widest possible view of the surrounding landscape. They had to be substantially built and well anchored with guy cables or heavy wires to withstand the high velocity winds on the high points. They had to be well wired and bonded with heavy copper wire to provide protection from lightning, because lightning seems to prefer high, rocky points to administer heavy blasts.

The [lookout] houses were hip-roofed, and glass was used in the upper half of the four walls to provide unobstructed view of the surrounding country. They were equipped with a small, wood burning cook stove, two steel cots hinged to the wall, a cupboard for storage of food supplies and utensils, and a small table hinged to the wall. They were also equipped with a fire finder mounted on a stand in the center of the room. The fire finder was a device designed for use by the lookout to find the location of discovered smokes before calling the fire dispatcher. It consisted of a 360 degree vernier approximately 20 inches in diameter and was graduated in degrees. A

small shaft or pin was located in the center of the circle. A half-inch scale map was mounted under the fire finder. This showed the location and names of canyons, ridges, and high points which were located within a ten-mile radius from the center point on the map. A four-inch circle graduated in degrees was printed on the map. Zero degrees was oriented with the zero degrees on the 20-inch vernier, and then the map was securely pasted to the 20-inch circle. The vernier was then oriented to the four cardinal directions and with the other lookout points, the location of which were known in relation to other points from previous triangulation surveys. Zero degrees pointed to magnetic north. The vernier was then securely set in the fixed position. An instrument known as an alidade was used for sighting on smokes and determining the location in degrees from the lookout point. This instrument was 20 inches long, one inch wide and one-eighth inch thick, with six-inch vertical and slotted ends. A thread of fine hair was tightly stretched and fastened in the center of one of the slots for more accurate sighting and degree reading. When a smoke was sighted, the lookout would telephone the degree reading to the fire dispatcher [at the Forest Supervisor's Office in McCall].

The dispatcher's office was equipped with a large wall map showing all the natural features, with four-inch verniers graduated in degrees, and their center points directly over the point for all the lookout points on the Forest. A string was attached to the center of the circle for each lookout point with a pin on the movable end of the string. When a fire location reading came in it was simply a matter of pinning the string over the degree reading given by the lookout to determine the direction of the fire from the reporting point. A single reading would give only the direction and not the distance from the reporting point. Other lookouts could usually see the same smoke and would call in their readings. Where the strings on the map intersected as determined from two or more readings, pin-pointed the location of the smoke without question. It was a reliable method for locating fires while they were small, and saved many hours of searching in rough, timbered areas and enabled smokechasers to get to fires while they were small in many cases and put them out before they became raging infernos.

Lookout men vied with each other in efforts to call in the first reports on smokes. All the lookouts considered it quite a let-down for them when a lookout within another lookout zone or area called in the first report on a smoke discovered in their areas. This did not occur often as the lookouts were usually alert and on their toes. Records were kept of the number of first reports for each lookout and these were used in preparing efficiency reports for each man at the end of the fire season.

It was necessary for new and inexperienced lookout men to learn to distinguish the difference between smoke and dust and most of them soon did. Areas of old burns where ashes from deep duff remained on the ground and where large dry trees were blown over during high winds, sending up puffs of dark dust, were a source of worry and indecision for inexperienced lookout men. During some days of high velocity winds when many falling trees were sending up frequent puffs of black dust, it was difficult to hold inexperienced men on the lookout until the smoke or dust could be checked by more experienced men. Sometimes when these new men believed they were seeing smoke and not dust, and where there was some question, they were allowed to leave their points and see for themselves.

Food supplies were delivered to the lookout men approximately every two weeks by pack animals and a packer was employed for that purpose. The lookout inspection requirement called for at least two inspections by the District Ranger during the period of occupancy of the lookout each year. The purpose of the inspections was to determine how well the occupant knew his job and his area, and to check on the condition of his equipment and quarters. More frequent inspections were made when there were questions concerning the qualifications of the man to effectively handle the job, to insure against any slip-ups in discovering and getting to fires while they were small.

It was the general practice of the District Ranger to see to it that a late newspaper, magazine, some fresh vegetables and meat were in his packs when making trips to the lookouts. I managed to procure some hair clippers and have them along when I visited the lookouts. They were always glad to be relieved of their long hair, even though it was far from a professional job. They usually ordered a short-cut job, all over.

The water supply for the lookouts was usually obtained from a spring or small stream sometimes located as much as a mile or more from the point. The water was man-packed up a very steep trail early in the morning. Snow banks sometimes held near the lookout point until late in the season and were the source of water supply for some points.

Some emergency points were occupied only during critically dangerous fire weather and fuel conditions. These points had telephone communication but no constructed living quarters. Tents were set up to shelter food supplies and the occupant. In some areas bear would raid the camp, scatter the contents and then carry off the food supplies. This resulted in some angry and hungry lookouts before a new supply of food could be delivered to the camp. One provoked lookout exhibited some bruised knuckles which he said were caused from punching a thieving bear in the nose.

PACK STRINGS

When Forest Service employees, miners, and other people talk about pack strings, they are referring to pack animals used to transport supplies and equipment into remote areas accessible only by trails. Horses, mules, or burros are used as pack animals, but mules are most commonly used because they are strong, tough, and sure-footed under heavy loads on steep, narrow, and ledgy trails. Experienced packers say mules are the most intelligent of the pack animals. They do not excite easily in dangerous situations and are more dependable than horses.

The number of animals used in each pack string is usually nine mules and a bell mare, and of course, the saddle horse used by the packer in charge of the string. The bell mare is usually a sizeable animal and only light gray or white mares are used to head the string. She is generally cranky and impatient with the mules, but apparently they consider her to be a sort of mother to them and are never far away from her when she is hobbled and belled during the night, or during rest days when the mules are unpacked and turned loose to graze. Sometimes during the night when the bell mare is at rest and there is no sound from the bell, pandemonium breaks loose and there is loud braying and running until the bell mare moves and sounds the bell. The pandemonium subsides as suddenly as it began, a sure sign that the mules have found their ma.

Handling a pack string in rough country can be classed as a profession. Packers must be familiar with the characteristics and endurance capacity of each animal. They must keep the animals well shod and know how to prevent sores from developing under the heavy packs. They know how to balance the weight on either side of the pack to prevent turning on either side. It involves long hours of strenuous work and know-how to cargo and securely tie the materials on the pack saddle. The packer must know many rope hitches and be a genius in devising other hitches when necessary to secure the pack.

After witnessing the successful transportation of the materials for lookout houses and the 72-foot steel towers many miles by pack animals, I have wondered if there is anything within reasonable length and weight limits an experienced packer would refuse to tackle. Some parts for the steel towers fourteen feet long and four feet wide were successfully packed from fifteen to thirty miles over rough trails to the lookout site. It was necessary to use two poles, one on each side of the pack saddle on two mules on which the longer and heavier pieces of materials were securely lashed. I saw large range stoves, davenport, and other items of bulky household furniture which had been transported by pack animals over many miles of rough trails to isolated homes in the back-country.

The most difficult packing job I have ever witnessed was transporting two 350-foot sections of one and a half inch steel cable used in constructing a suspension bridge across [the] Salmon River [at Mackay Bar] near the mouth of the South Fork, for use by pack animals and foot travel. It required several men to make two coils of the cable around a 50-gallon oil drum and clamp the coils. The coils were spaced to allow the uncoiled cable to reach between mules. There were 22 coils in the cable and 22 mules were required to carry it. Each of the 22 coils were spread and placed astride the pack saddle and securely lashed down with rope. The cable was packed from Warren to the bridge site on Salmon River, a distance of approximately twenty miles over a steep, winding trail. It required two trips with the 22-mule pack string to deliver the two sections of cable. No one except experienced packers would consider tackling a job like this.

[This unusual task was accomplished by Fred Badley and Roy Stover; see photo in Carrey 1968:47]

Professional packers prefer to work alone. The only times they will allow any other person to work around their mules is when they need help to load and lash down extra heavy or bulky cargoes which they cannot handle alone. They claim mules don't like strangers working around them and may use their hind feet with unerring aim. The stranger always takes their word as the truth.

The Idaho National Forest owned approximately 80 mules and 30 saddle horses and bell mares. After the packing jobs had been completed in the fall and the trails were closed by snow, the animals were banded together and placed on a feedlot in charge of a caretaker, usually one of the regular packers. Some years when hay and grain prices were high, the animals were taken to South Fork or main Salmon River Canyon where lush grass was available on the steep slopes and there was little or no snowfall. The grass was supplemented by a ration of oats once each day, which kept the animals in good flesh condition and fairly close around the supplementary feeding area. There was some danger in wintering the animals on the steep grassy slopes of the canyons. Occasionally a freezing rain or sleet would fall on the slopes making them very slick and no animal could hold his footing. They would sometimes roll as much as half a mile to the foot of the slope. Deer and elk which had lost their footing on the slick slopes were found dead at the foot of the slope. Pack animals were usually corraled and held off the slopes during a storm period, but sometimes through some slip-up, a few were caught on steep slopes and were lost.

The animals were being wintered on South Fork and the caretaker called the Forest [Supervisor's] Office in McCall and reported that ticks were about to eat the animals alive. He had used creolene or sheep dip, a strong repellent in strong solution on the animals but it had not rid them of ticks. I contacted George Anderson, who had handled pack strings for many years for the Forest Service and explained the problem of ticks to him. He advised sending a few pounds of dry sulphur to the caretaker with instructions to mix a small amount of the sulphur with the oat rations for the animals and to gradually increase the amount of sulphur to the point where the animals were beginning to reject it. The dry sulphur was sent to the caretaker with the instructions. A couple of weeks later I called the caretaker and inquired about the ticks. He reported he had mixed the sulphur with the oat rations for the animals and the ticks had all disappeared.

From two hundred to three hundred pounds was about the average weight a pack animal was expected to carry over rough trails day after day. Young, husky mules were able to holdup under heavier packs over long periods of time much better than horses. Saddle sores were much easier to prevent on mules than horses. Experienced packers used the Decker type pack saddle. The so-called saw buck type saddle with canvas panniers, or bags, commonly used by stockmen, were never used by experienced packers in the back country.

Each fall after the packing season was over and before the packers turned over their strings to the caretaker, the animals in each string were culled by deciding which ones, because of age or injuries, could no longer be expected to endure the rigors of the trail under heavy loads. The best of the culled mules were then designated for use by the rangers and guards as kitchen mules. These were the older and more gentle mules which could serve very well under lighter pack loads and longer rest periods.

I fell heir to one of the culled mules named Big Sam. He had served in one of the regular pack strings for many years and was ready for semi-retirement. This was to be my first experience in handling mules. Big Sam was a very gentle and intelligent old mule and knew his duties as a pack animal. During my pack trips over the District I found that Sam could always be depended upon to plod along close behind the saddle horse, he never needed a lead rope. He never lagged behind to graze along the trail as most pack animals will do when not led. When we would reach our camping place Sam was always close at hand. He would watch where I placed the saddle rigging from the horse and then sidle up to the place ready for his pack to be unloaded. When we broke camp and the pack was ready for loading, Sam was always near by. It was never necessary to lead him to his pack. He was an excellent pack mule and never caused any inconvenience or bother. I always carried a supply of oats in the packs and managed to give Sam an extra

ration quite often. I never subjected him to heavy pack loads. An extra mule was rigged up and taken along in order to avoid a heavy load for Sam.

During my first pack trip to the lower South Fork Canyon, I witnessed a demonstration of Sam's ability to think his way out of a bad situation, which I had gotten him into. A short distance below the lower South Fork suspension bridge a trail crew had started to blast a trail through a perpendicular granite ledge some 30 feet above the white water of the South Fork. About half way around the ledge the construction work had been suspended. This left a dead end on the trail. The dead end could not be seen from the entry point and no sign had been posted to warn travelers about it, so I started over the trail. When we reached the dead end, I could see we were in trouble. The trail was narrow and there was not enough space for an animal to turn around because of the perpendicular ledge on the upper side and the white waters of South Fork below. I looked the situation over and wondered what next. Here was a good possibility to loose a good saddle horse, a good mule and their rigging, camp equipment, and food supplies. I cautiously dismounted from the saddle horse and this was a tight squeeze because of the narrowness of the trail. While I was dismounting, Sam had decided his next move. He balanced his weight on his hind legs, lifted his front legs and pivoted in a half circle and headed in the opposite direction. I could hardly believe what I had seen. In completing the turn, at least half his weight was suspended in the air and over the roaring water below. For an ordinary animal this would have been an impossible feat, but Sam had somehow managed to maintain his balance during the turn. After he completed the turn, Sam stood quietly by and appeared to be unconcerned.

There appeared to be only one way to move the saddle horse back over the trail. After Sam had made the turn, the horse became very nervous and required some quieting down. Sam was standing close by to lend moral support. The horse was large and I knew he would be unable to turn as Sam had because there was simply not enough room on the trail. I knew it would be dangerous to back him over the trail to the flat as he could easily loose his footing and plunge into the water, so I carefully removed the saddle, even this was a tight squeeze. I wanted to at least avoid loosing the saddle. I started to slowly back the horse along the trail. Sam held his position a few feet ahead. It was a slow and tedious task, but we finally reached the flat where the trail widened. I then returned for the saddle. Before leaving the entry to the dead end trail, I improvised a penciled sign warning travelers about the dead end and attached it to a tree. The old trail led over a ridge above the ledge. We soon found this and proceeded on our way. Sam had saved the day for us and had proved himself to be an intelligent and valuable mule. He probably had proved his value many times before.

[Ranger Briggs moves his story to a street scene in Warren:]

A one-room log cabin with the roof extending over a sizeable front porch was located near the yard fence surrounding the [Warren] Ranger Station buildings. The building was unused for many years until the families of dredge company employees moved to the community. Old man Beckley owned approximately 15 burros which were turned loose in the town when not in use. They were in use only rarely when some prospector hired them for trips into the backcountry. The burros used the porch of the old school building as a shade-up place during the heat of the day and as shelter during storms. They produced a good crop of offspring each year, and even though they were a nuisance in the town, they provided a lot of amusement for the town kids. Three or four kids were frequently seen astride a burro parading up and down the street, or fondling a young burro. The burros were no doubt descendants from left overs from the early mining days.

Seasonal employees and pack strings loaded with supplies were moved into the back country about June 1 each year to start clearing trails and repairing telephone lines in preparation for the fire season ahead. Three pack strings and approximately twenty men including the District Ranger left McCall for Big Creek Ranger District headquarters regardless of the weather or trail conditions. It was approximately a five-day trip via Warren and South Fork, and over 9,000 foot Elk Summit between South Fork and Big Creek. Dan Levan was the District Ranger in charge of the Big Creek District, including the Chamberlain Basin area. In May of 1933, it was necessary for Ranger LeVan to undergo an appendectomy at a hospital in Boise, so he was unable to accompany the seasonal employees from McCall to Big Creek. Supervisor Scribner decided the men making the trip should be headed by a regular Forest officer and detailed me for the job. I was to join the men at Warren, where they were to stop overnight.

[The Big Creek crew met by Ranger Briggs included John Cook (son of early Warren ranger Warren Cook), Art Francis, Bill Bean, Wilmer Shaver, Dick Cowman, Walter Hinkley, John Reeder, and Tom Coski (Carrey 1968:29); the absent ranger, Dan LeVan (1895-1965), was ranger at Big Creek from 1925 to 1950 (Hockaday 1968:169)].

The next overnight stop was the Smoke House on Elk Creek, a sizeable one-room log cabin located near the snow line some three miles below the summit. [The Smoke House was built around 1900 as a mail carrier's stopover; nothing currently remains of the Smoke House except a marker noting the site]. There were about six miles of snow cover on the trail over Elk Summit, ranging from two feet at the snow line to eight feet or more on the summit. The objective was to leave the Smoke House about 4:00 a.m. while the snow was still crusted

sufficiently to hold the weight of the animals and try to reach the snow line on the other side of the summit before the sun softened the snow. We had covered approximately five miles of the snow trail when the snow began to soften and our troubles began. We had moved over the deepest snow on the summit, but it was still four to five feet deep. This lessened as we progressed along the trail toward the lower elevations. When the animals began to break through, it was necessary for the men and animals to take turns breaking trail through the deep, heavy snow. As the lead men and animals became exhausted in breaking trail, they dropped back to the rear and were replaced by fresher men and animals. It was a slow and strenuous task and the value of mules as pack animals was demonstrated. Horses, when wallowing in efforts to extricate themselves from the deep snow, would become excited and nervous and soon give up from exhaustion. Mules did not become excited and nervous, and seemed to know how to conserve their strength. We finally reached the snow line and arrived at Big Creek station late in the evening, a tired, wet, and hungry group of men and animals.

The dog salmon had started their spawning run in Big Creek so the next morning some of the men asked me if I would like to spear a salmon, I expressed a desire to do so. This was when spearing salmon was a common practice and was not illegal. We found some spears and gaff hooks mounted on long poles and headed for Big Creek a short distance away. The water was clear and we could see big salmon resting in deep holes. Occasionally one would dart over a riffle in shallow water. I was instructed by those with experience just how to go about the spearing process. I had caught a cold during the trip and wanted to avoid getting wet in the icy water. The men would prod big salmon out of the deep holes and I was to spear them in the shallow water. I failed to realize what I was letting myself in for and how powerful the big salmon can become after they are speared, I managed to get the spear well embedded in a salmon, then things happened fast. Before I had him safely retrieved and on the stream bank I was well soaked in the icy water, but it was fun and the fresh salmon were very good eating.

I remained at Big Creek Ranger Station until the packers and other employees had agreed on which animals, rigging, and other equipment they were to use and had started for their assigned work areas. I then left for the return trip to the Warren Ranger Station.

In the process of distributing the mules and horses to the work crews, one mule was to be left for my use for packing my sleeping bag, duffel, and food supplies on the return trip. I had used my personally-owned saddle horse during the trip. Up to that time I was inexperienced and unwise in the ways of professional packers and experienced seasonal employees. I trusted them implicitly when they selected the mule for my use. I had been busy with last minute details among the men

before they left the station with their outfits and had paid little or no attention to the mule I was to use, or to my saddle horse. I was informed by one of the men that my mule was packed and ready and was tied to the hitch rack. I should have looked the mule over while she was being packed, but I had failed to do this and it was a mistake as I learned later. I saddled my horse and then approached the mule. She was a large, young female. I noticed that she tried to shy away from me when I was near her and she tried to break away, but I cautiously untied the lead rope and mounted the horse.

The day was well advanced but I reached a camping place near the snow line before darkness set in. I tied the mule securely to a tree and started to remove the pack. I then discovered that someone had palmed off a rejected mule on me. She was mean and did not hesitate to strike as quickly as lightning with either foot when I tried to approach her. I looked her over carefully and decided it would be necessary for me to use great caution around her to avoid injury to myself. I had handled a few wild horses and had some ideas how to go about handling this mule. The saddle horse was large and strong and fortunately, he had a gentle disposition. I untied the mule from the tree and snubbed her closely and securely to the saddle horn. By working from the saddle on the horse, I managed to remove the pack. I then tied her securely to a tree where she remained during the night. The same method was used to repack her early the next morning, and I avoided serious injury.

Immediately after I arrived at the Warren Ranger Station, I reported the mule as surplus to my needs. She was soon taken from my care and placed in a regular pack string where she belonged. She was used under heavy loads day after day, which calmed her down a lot before the end of the season.

I learned that mules can be much more treacherous and mean than horses. They can also be gentle and trustworthy after many years of use as had our mule Sam. Many good dogs, experienced in heeling horses and cattle have been killed or badly injured from lightning-fast kicks on the head from mules.

FIRE CONTROL PROBLEMS

The year 1931 had been a critically bad fire season because of the prolonged fire weather and dry fuel conditions [see Introduction]. Efforts to control the fires with large numbers of men over vast acreages had revealed many deficiencies in the three phases of fire control. There was urgent need for more effective planning and programs for prevention of man-caused fires. There was need for more effective presuppression placement of men and equipment for quicker discovery and for action in getting men on fires while they were small and easily extinguished. There was need for better transportation facilities to insure faster deployment of men and equipment on going fires.

It was revealed from the fire control expenditure records that the Idaho National Forest over a five year period, including 1931, had spent approximately \$350 thousand per year for fire suppression, \$17 thousand presuppression, including lookout and guard salaries, equipment and transportation, and the small sum of \$250 per year for fire prevention.

After my first year on the Warren District in sizing up the fire control situation, it was my contention that if we were to control fires effectively and within reasonable cost limits in the rough timbered areas, it would be necessary to greatly intensify our fire prevention planning and programs. There was need for many more fire warning signs, and much greater dissemination of information on fire danger during critical fire danger periods, and better fire law enforcement. There was need for weeding out a few individuals from fire suppression crews who were inclined to start fires, or keep them going during periods of unemployment.

There was need for better lookout and guard coverage within the known blind areas which could not be seen from the established lookout points. There were three of these blind areas within the Warren District. They were Bear Creek, Porphyry Creek, and Carey Creek drainages, where it was impossible for lookouts to see smokes while they were small. It required many hours to get men to these areas after the fires were discovered. The Carey Creek drainage burned out in 1934 and Porphyry Creek in 1935. Both were expensive fires and could have been discovered and extinguished while they were small had the man placement been adequate. The Bear Creek drainage burned out a year or two later, after I had left the [Warren] District.

There was need for better care of supplies and equipment used on project fires. During the four years I was assigned to the Warren District, a continuing job was gathering up fire tools bearing the USFS brand which had been left along the fire lines. Many Government tools and other equipment were found on private property. Piles of food supplies were left unattended and some natives of the areas who didn't mind helping themselves to the abandoned food were able to lay in several years supply of canned goods and other unperishable items. Sometimes wet storms ended fires abruptly and several days would elapse before packers could get to all the camps to remove the equipment and food supplies. The deficiency was in not leaving an attendant at the camps to guard against loss through theft.

There were three men in different locations on the District who owned small pack strings and were the first to show up on project fires and offer their services as packers. We were getting far too many fires and were unable to determine the cause of many of them. There had been no lightning for weeks and the fires had started in places almost never visited by anyone except the District Ranger or guard, then only on very rare occasions. Unaccountable fires started in rough, heavily timbered places and in areas which were not within view of the lookouts. The quick response of some of these owners of pack strings after fires had started was a basis for suspicion that at least some of them just didn't start from the natural elements. The extended periods of employment on project fires may have been the incentive for starting fires in the bad areas of heavy fuels where they would spread rapidly over large areas before they could be controlled. The problem of incendiary fires was known to have existed during periods of unemployment. It was well worth considering in the case of some fires on the Warren District, and some prevention strategy was in order. It was not the policy of the Forest Service to refuse employment to local people, but when there were reasonable grounds for suspicion that an employee was committing acts to create emergency employment for himself, causing heavy losses in timber, and the expenditure of large sums of public money, refusal of employment was necessary.

Apprehension of arsonists in the act of setting fires in rough and heavily timbered areas is impossible within reasonable time and cost limits, so the next most effective procedure is to remove the incentive when it is known or suspected. I made a special effort to personally contact the owners of pack strings, and a few other individuals whose records showed their only source of income was from long periods of employment on project fires. They were told that the Forest Service was well supplied with pack strings, and that fire suppression work would be handled by organized crews of CCC [Civilian Conservation Corps] enrollees; that neither private pack strings nor their owners, or other local men would be employed. They were not employed even though they continued to show up and offer their services when fires started.

When fire weather and fuel conditions became critical and dangerous, the areas involved were placed under martial law. This, coupled with our refusal to hire individuals suspected of starting fires to create jobs noticeably reduced the number of unaccountable fires on the Warren District.

CIVILIAN CONSERVATION CORPS

The Civilian Conservation Corps [CCC] program was initiated during the summer of 1933. The Idaho National Forest was allotted five companies of 200 enrollees each. The Warren District was allotted two companies, or two camps fully staffed with Forest Service and Army overhead men. The Army overhead consisted of a captain, a lieutenant, and a doctor for each company of enrollees. The Forest Service or work agency overhead consisted of a project superintendent, a crew foreman for each 24 enrollees, and the District Ranger. Blacksmiths and equipment repair men were employed for each camp.

The Army overhead was responsible for subsistence, health, safety, and equipment in the camps. The Forest Service, or work agency, was responsible for the safety, training, work accomplishment and equipment when the enrollees were away from the camp and on work projects.

Two camps were established side by side at the mouth of French Creek on the main Salmon River. The work project was construction of a road along Salmon River from a point about mid-way between Riggins, Idaho, and the camps at French Creek. The work involved was dangerous, difficult, and expensive for experienced workmen, and a much more difficult and dangerous one for inexperienced youngsters from the big cities in the east, who had never used an ax or shovel or operated heavy road building equipment.

Here was a training job of great magnitude. Youngsters had to be carefully selected and trained as truck drivers. The only access road to the camps was over Fall Creek summit and several miles of steep, narrow, and winding switch-back truck trail leading into French Creek Canyon. It was a dangerous road for skilled and experienced truck drivers. The road construction required the use of air compressors and jack hammers for drilling holes in solid granite ledges, and the use of many tons of high explosives per month for blasting purposes. Perpendicular ledges of solid granite had to be stripped of loose rock before work started below in order to protect the workers blasting the road way. Strippers were suspended on ropes from ten to a hundred feet above the road location. Men had to be trained to operate huge tractor-bulldozers to move blasted rock off the roadway. A slight error in operating the big tractors would have plunged the big machine and operator over the brink into Salmon River.

Our first impression after sizing up the youngsters who had to be trained to handle the trucks, huge tractors and other equipment was that it would be an impossible task within reasonable safety and time limits. But these were the orders handed down from the higher authorities who, it would appear, had little conception of the dangers involved.

We were told by Army officers who had accompanied the enrollees from the east that most of the youngsters had come from the slum districts in the big cities and many were repeaters in appearances in the juvenile courts. As we continued to work with the youths, we found many of them had come from broken homes, or no homes at all, and had been "kicked around" without much if any encouragement or kind treatment from anyone. Most of them gradually responded to encouragement, decent treatment, and patience, but there were a few incorrigibles who failed to respond. Because of their continued efforts and activities to agitate and even to incite groups of other enrollees, it became necessary, after concerted efforts to change their attitude, to issue them dishonorable discharges and remove them from the camps.

They were a noisy group of youngsters. They had developed the habit of shouting at the top of their voices when talking with each other. This was very annoying to anyone not accustomed to it. In the mountain and timbered areas, and especially on dangerous work projects, a loud shout or yell usually signaled an accident or other trouble. One day when the noise seemed almost unbearable, I asked one of the Army officers why the boys found it necessary to make so much noise. He inquired if I had ever lived in New York or other large city where the deafening noise from the elevated railways and from other sources made it necessary to yell loudly to be heard above the noise. I had not lived in New York, and his reply answered my question.

The CCC program called for a six-month enrollment period. Re-enrollment was optional with the youths, but only a small percentage of them reenrolled at the end of the period. They apparently were unable to rid themselves of the urge to return to the big cities. This complicated our job of training, greatly enhanced the possibilities for accidents in the type of work the youths were expected to do, and retarded the work program accomplishment. The primary purposes of the CCC program, as we understood them, were to get them out of the big cities and to afford training opportunities away from the undesirable environment to which they were accustomed. The short period of enrollment and new starts with raw recruits at the beginning of each enrollment period was a hardship on the work agency overhead who were held responsible for strict compliance with safety rules and procedures and training progress. It would have been far more advantageous to the youths and the work agency had the enrollment period been at least a year, and better yet, two years.

Each accident or injury of any consequence required a hearing before a board of review and almost necessitated a congressional investigation in cases of fatal accidents. The overhead men were really on the spot.

Some Army officers in command of the CCC camps were poorly qualified to handle youths. They maintained the attitude that they were handling groups of hard headed, tough soldiers under strict army discipline. They couldn't seem to realize that these youths needed encouragement, consideration, and patience, along with reasonable discipline. Enrollees would come to the Forest Service men to pour out their troubles, including abuse by the captain or other army officers. Some of these cases were found to have been poorly and almost brutally handled.

Enrollees in some CCC camps were provided with plentiful and well-balanced meals, while in others they were very much under fed. I have seen groups of these youngsters sent out on the work project after one cup of black coffee and two hot cakes, without butter or syrup. The lunch and supper rations were not much better. It was nearly a starvation diet. I wondered why the youths in some camps could be well nourished with good food while others were nearly starved. We were told that each camp had the same food ration allowance. There was a [problem] somewhere. The camp commanders handled the money allotted for subsistence supplies. Camp inspections were made by the district commander, or his lieutenant, but advance notice of the inspection date seemed to reach the camp commander. The barracks and mess halls were always spic and span on the day of the inspection and the enrollees were well fed that day.

After two or three years from the beginning of the CCC program, the poorly qualified army officers had been pretty well weeded out and replaced by better men.

At the time the CCC camps were established at French Creek, we were instructed to plan use of the enrollees for fire suppression work. I questioned the use of enrollees on this type of work unless adequate overhead could be provided because of the dangers involved in using inexperienced youths from the big cities to suppress fires in the rough, heavily timbered areas without training in the use of tools.

The first major fire occurred on the Warren District after the CCC camps were established. Two hundred enrollees with a foreman in charge of each [group of] twenty four youths were sent to the fire. Then my real troubles began. The youths were inexperienced in the use of an ax, shovel, pulaski tool, and cross-cut saw. They wore leather-soled shoes which became very slick on the steep, grassy slopes, and it was impossible for them to hold their footing. After a few hours on the fire line, there were many injuries from contacts with the razor-sharp tools, some of them were deep gashes.

The Forest Service provided the food to fire crews and there was always a plentiful supply of various kinds for well balanced meals. After the youths had subsisted on near starvation rations in the CCC camps, and found that in the fire camps there were no limits to the number of times they could refill their plates with food, dozens of them overloaded themselves, and of course, stomach upsets resulted. At the end of the first day on the fire line, more than half of the crew were incapacitated from tool gashes and belly aches, and it was necessary to send them back to the base camp. The futility of efforts to suppress fires with this type of help was clearly obvious. I issued orders against replacing the sick men with other enrollees. I requested replacements of local experienced men. This caused a great furor among the high ranking army officers, and one or two forest officers, who had apparently failed to recognize the futility of trying to suppress fires in rough, heavily timbered areas with inexperienced youths. They had not been confronted with the real problems on the ground, and were not directly responsible for the safety of the youths or progress in suppressing the fires. It was indicated that I would be subjected to an investigation and a hearing because of my refusal to use enrollees in fire suppression. The furor subsided after a preliminary investigation on the ground. The fire was stopped by experienced men after it had covered some two thousand acres of heavy timber.

In organizing the enrollees into groups for assigned jobs on the fire line during the first day on the fire, six husky youths were detailed to carry water to the fire fighters along the line. A trail was blazed to a spring on the mountainside above the fire front. The carriers were furnished five-gallon canvas manpack water bags with shoulder straps. They were accompanied on one or two trips to the spring by a foreman and instructed to use the spring as the source of water supply. It was a long climb from the fire line to the spring, but when loaded with water, the travel was down-grade. Carey Creek was located in an inaccessible box canyon below the fire front, and water falls could be clearly heard from the fire line. The water carriers could hear the water and requested permission from several of the foremen to be allowed to fill their water bags from the creek to avoid climbing the hill to the spring. The foremen refused permission to go into the canyon and explained that it was a box canyon and inaccessible and that they would have a hard time finding their way through the ledges. They were also told that it would be impossible to make their way out of the canyon with five gallons of water on their backs. The waterfalls sounded much nearer than they [actually] were and the carriers were unconvinced that the creek was not the easiest and best source of water.

Along in the afternoon, the men on the fire line began to ask for water. No water was available. The foremen managed to keep the men working until the end of the day. They felt quite certain the water carriers had become tired and had returned to the fire camp. I had made several trips along the fire line during the day and the carriers had asked about permission to go into the canyon for water. Each time I had warned them to stay out of the canyon and explained why.

The crews returned to the fire camp about sundown and the men were counted. The six water carriers were missing. I returned to the camp after darkness had set in and was told about the missing youths. The fire had made a fast run in the canyon bottom during the afternoon. There was excitement and concern about the missing youths and search parties were being organized to start the search during the night. I immediately ruled against sending men into the rough canyon and explained that it would be foolhardy and very dangerous for searchers to enter the canyon in the darkness, this would almost surely result in the loss of additional men through serious or fatal injuries. The excitement subsided when I agreed to head a search party into the canyon at daylight the next morning.

At daylight I started the search with six selected men. The ashes were still pretty hot among the ledges as we made our way into the canyon. In a steep draw leading into the main canyon, between ledges, we found the charred remains of two water bags, after finding these, we expected to find the remains of some of the youths. After a thorough search of the area surrounding the steep draw, we proceeded to the bottom of the canyon to a main trail. We found footprints of several men in the dust leading down the canyon. Large spruce trees located in swampy places in the canyon bottom had not burned. We felt more relaxed and knew there was a good possibility the youths had made their way into the canyon and were safe.

We followed the footprints on the trail several miles to Salmon River. The tracks led to a cable way across the river, and no tracks led away from it, so we concluded the youths had crossed the river and would eventually find their way back to the base camps at French Creek. The cable way cage was on the opposite side of the river and we were unable to follow the tracks.

Soon after we returned to the fire camp, a messenger arrived and reported the water carriers had showed up at a ranch across the river from the base camps at French Creek, and had been boated across the river and were safe at the camps.

After several other episodes of lost youths, serious injuries, and some fatal ones during efforts to use enrollees on major fires on other ranger districts, the top brass of the

Army and the Forest Officers concerned decided to hold a hearing in McCall to learn the facts about the problems involved in using inexperienced enrollees on project fires in rough, timbered areas.

They were finally convinced that enrollees and foremen alike should know how to avoid pitfalls and dangers while working on the fire front. The youths were to be provided with at least two changes of wool socks, and properly fitted with hob-nailed or composition-soled foot gear. A trained first aid man was to patrol the fire line among the men while the work was in progress with adequate first aid supplies and equipment. An Army officer with at least the rank of lieutenant was to be assigned to each fire camp to lend a hand to the District Ranger or fire boss in determining the needs of the enrollees and otherwise looking out for their welfare. The number of enrollees under each foreman was not to exceed seven.

This reorganization, including the weeding out of poorly qualified and disinterested army officers and some project foremen, marked the beginning and continued development of orderly and effective training and work accomplishment organizations. A good percentage of the enrollees continued to re-enroll until they had completed their training as equipment operators, blasting experts, blacksmiths, and mechanics, and were qualified for employment as skilled men with private contractors. This was the hoped for objective in initiating the CCC [also see Dzurainin 1994, "Civilian Conservation Corps, 1933 to 1941, on the Payette National Forest"].

WINTER TRANSPORTATION AND DEEP SNOW

During the first winter the CCC camps were established on Salmon River, and until the road was completed between Riggins and the French Creek camps, it was necessary to supply the camps over snow roads from McCall through Burgdorf, and over Secesh and Fall Creek summits. The supplies included food for approximately 430 men, gasoline and oil for a dozen or more huge tractors, many trucks, and air compressors, and ten to fifteen thousand pounds of high explosives for blasting purposes per month. This was no small undertaking in the way of transportation over snow roads, with snow depths ranging up to fifteen feet on Secesh Summit, which was the divide between the Payette and Salmon River drainages.

The hauling job was accomplished by the use of two heavy logging sleds and a lighter enclosed bob sled, all hitched in tandem to a Model 60 Caterpillar track-type tractor equipped with snow treads. The logging sleds were each loaded with approximately five tons of weight. The enclosed bob sled was equipped with cook stove, three single beds, cooking utensils, and food supplies, which were used by the tractor operators during relief periods. The tractor was equipped with a

heated cab and extra strong headlights. The outfit was kept in continuous operation day and night except for stops to load and unload and to service the tractor.

Snowfall appeared to be almost constant on Secesh Summit, and continued to pile up, but the continuous travel with the heavy outfit kept the snow well packed. During the return trips when the sleds were not loaded, the operators would widen the snow trail. This provided a wide, well-packed road bed. Sometimes when a blizzard was in progress on Secesh Summit at night, reducing visibility to zero, it was necessary for one of the relief operators to lead the way on foot with a strong flash light immediately ahead of the tractor.

There were four experienced operators serving in shifts of two to four hours, depending on weather conditions. The cook always had a pot of hot coffee on hand, and meals were served frequently in the rear sled. People talk about precision production. This was it. The outfit was kept moving without mishap or complaints. The Model 60 Caterpillar Tractor, or two-lunger as it was referred to, performed most faithfully without breakdown throughout the hauling job. The loads were transferred to trucks at the snow line between Fall Creek summit and the CCC camps.

I made two or three trips with the outfit, including one trip at night, to watch the men and equipment perform. I marveled at the high degree of efficiency in which the hauling job was accomplished. It appeared to be a tough job in the beginning.

SNOW SHOES FOR HORSES AND MULES

During my detail to the Idaho National Forest in 1931 and after my assignment to the Warren District, I occasionally heard men talk about the use of snow shoes on horses and mules. It seemed very silly to me as I had never before heard of such a thing as animal snow shoes. I was quite sure some folks were trying to "pull my leg," but the subject continued to pop up. I was reluctant to reveal my ignorance by questioning the statements about the snow shoes.

One day while I was discussing matters with the Supervisor in his office at McCall, I mentioned hearing about using snow shoes on horses and mules, I expressed my doubts that any such thing existed. He smiled and said, "Come out to the barn and I will show them to you." Sure enough, there they were. They appeared to have been moulded from wrought iron and were approximately 12 inches wide and 16 to 18 inches long. The front ends were rounded and slightly turned up. They were grided presumably to reduce the weight. They were attached to the horse's hoof by clamps over the front of the hoof and behind the corks [calks] on the horse shoe. I still wondered how effective they would be in aiding an animal to travel over deep snow.

[The use of snow shoes for horses and mules may have been introduced to the area by Carl Brown when he began carrying the mail in the backcountry in 1909 (Jordan 1961:31). Carl Brown subsequently became owner of Brown's Tie and Lumber Company which was the principal business activity in McCall for many years. A set of the described snow shoes are on display at the Valley County Museum at the old townsite of Roseberry].

The supervisor explained that the shoes were originally designed for use on horses in logging operations in the spruce swamps in the State of Maine, where horses needed a wider bearing surface on their feet to prevent miring in the soft soils. Someone had conceived the idea that they may help horses or mules to travel over deep snow. They had proved helpful and were used quite extensively in the deep snow in mountainous areas in central Idaho.

I learned later that the snow shoes were used regularly in the stage and mail route between McCall and Warren during the winter months. Two husky teams of horses were used on each bob sled, and were equipped with snow shoes. Overnight stops were made at Halfway House, between Warren and Burgdorf, and near Secesh Summit where snow depths of 15 to 18 feet were not uncommon. The barn where the horses were sheltered at night was completely covered with snow. The entrance way leading down through the snow into the barn was the only evidence that such a building existed in the area. The snow shoes were not removed from the horses until they had been led to the watering place and then into the barn. During my first trip to Warren on the mail stage during the winter, the driver demonstrated for me the insistence of the horses that the snow shoes be attached before they could be led from the barn into the snow. The driver started to lead one of the horses out of the barn without the snow shoes. When the horse reached the entrance to the barn, he refused to be led into the snow. The driver then attached the shoes and the horse walked out of the barn into the snow without hesitation, another demonstration that one should never misjudge the intelligence, or question the judgment of a horse or mule.

Mail was delivered to the people in the back country during the winter months by using a light toboggan and a single horse or mule equipped with snow shoes. Experienced mail carriers claimed they could deliver mail anywhere in the back country by horse or mule regardless of snow depths, and they were doing it. The snow was plenty deep on some of the high passes.

AIR TRANSPORTATION IN FIRE CONTROL

The use of airplanes for transportation of men, equipment and supplies to and from the few landing fields in the back country during the many major fires in 1931 marked the beginning of air transportation in fire control in the Intermountain Region. Analysis of accounting records showing the costs for

truck, pack animal, and air transportation showed little difference in cost. There were many advantages in air transportation, however, over the much slower deliveries by truck and pack strings. Men, equipment, and supplies could be placed on going fires in remote areas in much less time and in better condition. The old practice of walking men loaded with sleeping bags and fire tools for one to three days over rough country to get them on going fires was very soon to be outmoded by air transportation. After walking over steep trails for many miles under heavy loads, men were in no condition to do effective work on the fire line until they were given an opportunity to rest. Some of them were incapacitated during the period of the fire because of blistered feet from excessive walking.

The few developed landing fields in the backcountry beyond the end of the truck roads had been used to good advantage, but many of them such as Big Creek, Soldier Bar, and Chamberlain, were located in canyons or basin areas from where it was necessary to walk men many miles upgrade to going fires. It was necessary to transport supplies and equipment from these landing fields by pack strings. There was urgent need to develop additional landing fields on broad ridges, plateaus, and high meadows.

During my first winter [1932-33] in the Forest headquarters office at McCall, I discussed the possibilities for developing landing fields with the supervisor and other Rangers. I suggested that we go over the Forest map for our respective Districts and from our knowledge of the country, spot the locations where landing fields might be developed in the higher areas to provide the best distribution in relation to other fields and truck roads and within reasonable cost limits. They agreed it was a good idea, but thought the matter of construction funds would be the delaying factor.

We spotted some 30 locations pretty well distributed over all the Districts with allowances for areas already opened up by roads or other landing fields. The following summer an engineer, Henry Shank, was detailed from the Regional headquarters at Ogden, Utah, to examine the areas spotted and proposed for landing fields, and to prepare cost estimates and recommendations [Henry Shank returned to the Idaho National Forest as Supervisor from 1936 to 1940]. A few of the proposed locations were eliminated from consideration because of excessive development costs or because the area could be served from some other landing field or road. From this beginning, a landing field development program was started. The landing fields most urgently needed that could be developed at the most reasonable costs were started first. Within a few years, landing fields were developed on Hida Ridge, Elk Meadows, Mackay Bar, and Cold Meadows. Much convincing information, detailed costs, and pleas were necessary to get the high authorities to loosen their grip on the money purse and allot funds in small dribbles for landing field development.

[The proposed development of airstrips in isolated areas for improved fire control logistics was a good idea; however, some of the proposed airstrips were overtaken by other technologies before being completed or used. Of those noted above, the Hida Ridge strip, north of Chamberlain, was cleared to a 2200-foot length by 1941, but subsequently abandoned and is now covered with small trees. Elk Meadows, a 2040-foot strip west of Burgdorf, was completed in the 1930's but was listed for emergency use only by 1968 and is now abandoned due to adequate roads in the area. Mackay Bar remains an active airstrip on private land at the confluence of the South Fork and main Salmon Rivers. At Cold Meadows, southeast of Chamberlain, an 800-foot strip was constructed in 1933, lengthened to 3400 feet in 1955-57 and remains active. Work was started but not completed on airstrips at Ramey Meadows, Runaway Ridge, Moose Meadows, Phantom Meadows, and Hungry Creek (Hockaday 1968:108-09)].

It was difficult to convince them that air transportation was less expensive in the long run because of the savings in fire suppression costs than the much slower pack strings and trucks. The rangers agreed that air transportation should go beyond landing fields. They believed they could foresee many advantages and great savings in fire suppression costs by dropping food supplies and equipment by parachutes to fire crews on going fires in remote areas. They found that the advantages in air drops had to be convincingly demonstrated to the higher authorities before this type of transportation would be authorized and made a part of the fire control plans. After much discussion there appeared to be only one way to prove the advantages of air drops and that one way was for the rangers to take on the job.

The Idaho National Forest had two or three airplanes and pilots under contract to transport men and supplies to and from landing fields. The rangers managed to acquire a dozen or so parachutes which were suitable for dropping cargoes of food supplies and equipment from the air. One of the planes under contract was a Travelair; a seven passenger ship with short wing spread. It was very powerful and maneuverable, and also rough. Removing all of the seats except one for the pilot provided space for several cargoes of food supplies, sleeping bags, or fire tools. There was also space for folding the chutes in the rear section of the fuselage. When placing the folded chutes, the top was tied to a ring with a light cord or string so the chutes would unfold properly when the attached cargo was dropped from the plane. The door of the plane was removed to provide an opening through which cargo was dropped when the pilot yelled, "let-er go." It was a narrow doorway, more narrow at the bottom, making it necessary to lift the cargo before pushing it out the door.

The pilot of the plane used in our first dropping experiments was Chick Walker. He was skilled and experienced in handling planes in mountainous areas. He would maneuver the plane over the fire before selecting the dropping place, and these places were usually in rough areas. In the meantime, the dropper was to attach the shroud line of the chute to the cargo. After a trip or two over the dropping place, the pilot would yell "get ready," and then, "let-er go." He would then bank the plane sharply and point the nose of the plane upward at the same time. After the dropper had lifted and pushed the cargo out of the door, he found himself braced with a hand on each side of the door frame, looking down into space. When the top end of the chute left the door, it was traveling like a bullet and there was always a loud crack similar to a sharp clap of thunder. The pilot would continue to maneuver the plane over the dropping place until all the cargo, had been dropped. He explained that it was necessary to bank the plane sharply and nose it up in order to prevent the chute from becoming entangled in the tail piece of the plane. In any event, it was rough on the dropper.

During the dropping operation, our only thought concerning safety was our hopes that the pilot could keep the plane under control. We gave no thought to what might happen if a chute became tangled with one of our feet or legs and flipped us out of the plane into space, or if we blacked out while braced against the door looking into space below. In later years, strict rules were set up requiring a safety belt securely attached to the body and to a safety ring on the opposite side of the fuselage, and also a folded chute strapped to our back, with orders to keep one hand on the rip cord ring. I presume our failure to take precautions for our own safety was just one of those things foolish people will do sometimes.

The rangers had agreed to take turns in the dropping experiments, but during the first trip some of them developed nausea and became very ill. They really appeared bad after their return to the landing field. In fact, the pilot returned to the field a few times still loaded with cargo because the dropper had become too ill to do the dropping. It finally developed that Fred Williams and I were the only rangers who could make the dropping trips without air sickness, so we bore the brunt of the dropping job to prove it could be done at reasonable cost. The only effect I experienced was a severe headache for several hours after each trip. The doctors said the headache was caused from nervousness and high tension.

[Fred Williams was one of the early rangers on the old Idaho National Forest, beginning his career in 1920. At the time of the aerial experiments he was ranger on the old Lake Fork District, now the McCall Ranger District, a post he held until his death in 1954 (Hockaday 1968:169)]

Our dropping experiments marked the beginning of more extensive use of airplanes in fire control. Men were trained as parachutists and in the techniques of fire suppression. They were young, husky individuals and were organized in squads and were called smokejumpers. After intensive training in the techniques of parachuting, safety and fire suppression, they were landed on fires within minutes after the fires were discovered and while they were small and easily extinguished. Many of these jumps were made on fires in remote locations where it would have required hours and in some cases days for foot men to reach them. No doubt the fast suppression action saved many thousands of acres of timber and watershed, and hundreds of wild animals from destruction by fire.

Men were trained as cargo droppers and soon hot, well balanced meals were successfully dropped to fire crews in disposable containers.

Airplanes were used extensively for reconnaissance over blind areas after lightning storms, and many smokes were discovered while they were small and easily handled. Air transportation was finally accepted as indispensable in fire control.

Only one incident marred the otherwise successful dropping operation and experiment, and this threatened to wreck the whole promotional program. A fire camp had been established near the Black Mare lookout house [southeast of McCall] on the Lake Fork District. Food supplies and sleeping bags were being dropped to the fire camp. Ranger Fred Williams was the cargo dropper. After the first dropping trip, the fire boss called headquarters from the lookout by telephone and complained that the cargos were not landing near enough to the camp. Fred received the complaint before starting the second trip and decided to land the cargoes nearer the camp which was very close to the new lookout house. A quarter of beef was pushed out of the plane at a time when Fred thought it would land close enough to camp to satisfy the camp boss. The beef landed squarely on the roof of the lookout house and almost went through the floor below. Fortunately no one was injured, but it necessitated an expensive repair job. The air drop promoters had a real tussle to extricate themselves from the resulting entanglements with the higher authorities who investigated the mishap.

SOUTH FORK TRAIL

Constructing a trail through the lower South Fork Canyon was a very expensive project. Still in use was the old method of using sledge hammers and hand drills to drill holes in the solid rock, in which sticks of dynamite were exploded to blast a half tunnel through the granite ledges for the trail bed. Sledge hammers with long handles weighing more than six

pounds were referred to as doublejacks because they were used by a team of two men, one holding the rock drill and the other wielding the sledge. The hammer wielder had to be sure of his aim to avoid smashing wrists or fingers of the man holding the drill.

Sledges weighing less than six pounds, with short handles were called single-jacks. They were used by one man holding the rock drill with one hand while wielding the single-jack with the other. The granite rock was really hard and drilling was the kind of work which built arm muscles.

Construction of the lower South Fork Trail provided winter employment for fire control men who desired yearlong employment. A section of the trail had been completed each year for several years. There were still some four miles to be completed, most of it through sheer ledges of solid granite. There was urgent need to complete the trail.

George Mosher, a tall, raw-boned individual from the deep south was an expert blaster and was foreman of the trail crew of ten to fifteen men. The climate in South Fork Canyon is comparatively mild during the winter months because of the low elevation. There is seldom any snowfall in the canyon bottom. Climatic conditions are very favorable for winter work. The trail camp was supplied by pack string from the South Fork Ranger Station, where the winter supply of food, explosives and equipment had been stockpiled in the warehouse before the roads were closed by snow.

[In the 1920's George Mosher had a squatter's claim on lower McCalla Creek in Chamberlain Basin but it was never patented. He was married to Argie Willey, oldest of Sim Willey's eight children. In the late 1920's and later he was a packer and guide working in the South Fork area (Helmets 1988:1921). He was known as "Curley" to Sally Preston when he was a dredge-master at Warren in the 1940's].

I managed to find time to spend with the trail crew during the winter months when there was deep snow and low temperatures in the higher elevations and enjoyed it. Several species of wild game moved into the canyon when they were forced out of the higher areas by deep snow. Mountain [bighorn] sheep, elk, deer, and occasionally a few [mountain] goats could be seen from the trail camp most any hour of the day. They were never molested by the trail crew and were unafraid.

Steelhead trout started their annual spawning run in main Salmon River and South Fork in March. The big trout were easy to take with hook and line near the trail camp, and there was never any competition from other fishermen because of the inaccessibility during the winter months, or any time of the year for that matter.

The trail was completed through the granite ledges during three winter work periods while I was assigned to the Warren District. The trail was not considered completed to the prescribed standards until an average sized man could walk in the center of the trail with out-stretched arms and clear the ledge or earth bank on the upper side. The trail was then sufficiently wide to freely admit a loaded pack animal.

A prank by some members of the trail crew one day almost cost me a plunge into the cold waters of South Fork. It occurred before all the rattle snakes had hibernated for the winter. The trail crew had left the camp a half hour or so ahead of me to start work on the trail. I was walking briskly down the trail when I suddenly saw a rattle snake in the trail bed coiled and ready to strike. I suddenly put on the brakes and jumped back. I was carrying a club, the usual snake weapon, and immediately went to work on the snake. I noticed the snake did not move or show any signs of life after the first blow, but I completed the job and then tossed him in the river. All the while two or three members of the trail crew were watching the performance. They had already killed the snake and coiled him.

RATTLESNAKE COUNTRY

South Fork and Main Salmon River Canyons were excellent habitats for rattle snakes. They were found in the largest numbers in places rarely visited by people. It is known that rattle snakes will eventually leave an area when people move in. The primary reason of course is that people immediately start and continue an eradication program. The high temperatures and ledge formations in the canyons appear to be ideal for the production of big rattlers and many of them. They are quite docile during the early part of the summer months, but during August and September, they become more active. They are mean and usually coiled and ready to strike when approached by man or animal.

The lower South Fork Canyon was especially dangerous because of the dense population of rattlers, and the noise of the white waters of the South Fork made it very difficult to hear their warning rattle. The rattling sound of the dry vegetation while walking through it added to the difficulty in hearing the snakes, so it was necessary to closely scan the area ahead of each step. The snakes were hard to see because their color blended closely with that of the surrounding soil formations and vegetation. While climbing over ledges, it was necessary to take a good look, or prod around with a club before placing the hands or feet on other rocks. Sometimes this was hard to do when securing a hand hold on a rock above. Men experienced in snake areas always wore high boots and heavy gloves for protection. They carried a club five to six feet long and sufficiently light and tough to prod in brush and in rock crevices, and for wielding on snakes.

Horses and mules have a deadly fear of rattlesnakes and are able to sense the presence of rattlers quicker than man. Horses and mules will unhesitatingly jump off trails in efforts to avoid being struck by a rattle snake. This is sometimes dangerous for the rider.

Glenn Thompson, a key guard, and I surveyed and staked the uncompleted section of the South Fork trail. The job involved a lot of climbing over and through ledges. It was in September when the rattlers were putting on their most dangerous behavior. Glenn was a native of the area and fortunately for me, was experienced in avoiding contacts with rattlers as far as this was possible while accomplishing the surveying and staking job. We had many narrow escapes from rattler strikes and from falls from ledges after loosening our hand holds on rocks after discovering the presence of a rattler.

[Glenn Thompson (1909-1977) came to the South Fork in 1928 with his father Lewis Thompson, brother Lavelle and sister Doris. Glenn and Lavelle both became USFS career foresters. They both manned the South Fork Guard Station in alternate years 1934-38. Glenn was ranger at Chamberlain 1939-42, and was later Supervisor of the Salmon National Forest. He and completed his USFS career as Southeastern Area Director of State and Private Forestry. Gene Briggs encouraged Lavelle's USFS career by offering him employment as fire guard at the Warren Ranger Station beginning in May of 1934. Lavelle became Ranger on the Boise National Forest, Fire Control Officer on the Payette National Forest, Forest Supervisor of the Apache National Forest, and completed his career as Assistant Regional Forester for Watershed Management of the Southwest Region (Thompson 1995)].

Shortly after the survey job was completed, I accompanied the trail crew from South Fork Ranger Station to the camp site where the trail construction work was to start. It was really dangerous riding the trail, especially for the lead rider. In many places the bank on the upper side of the trail was about shoulder high and seemed to be a favored place for the snakes to coil up and sun themselves. We all carried clubs and killed dozens of snakes that day. Fortunately no one was struck by a rattler.. A little black dog accompanied us on the trail and was usually a hundred feet or so in the lead. It was interesting to watch the little dog's maneuverings to avoid rattle snake strikes. It was miraculous how he escaped them all.

Rattle snakes usually manage to escape being burned in fast running fires by crawling into rock crevices or moving over the ground surface ahead of the fire front. They are a menace to fire fighters when they congregate in large numbers outside the fire line, and they are usually on the prod. Snake bite serum to counteract the snake venom is always one

of the important items carried in first aid kits by field men while in rattlesnake areas and in fire camps in such areas. It was miraculous that there were only a few occurrences of snake poisoning, but they were very sick men. All recovered from the poisoning.

MOONSHINERS AND FEDERAL AGENTS

Forest Supervisor Scribner called me early one morning on the telephone from McCall. He was leaving McCall for Warren by automobile and requested me to leave Warren at the same time and meet him on the road. I assumed he had an important message for me which should not be communicated by telephone.

[This was the era of the open-wire crank telephone system in which all parties on a trunk line were able to hear the ring of the station being called. It was common practice for many lonely subscribers to listen in on the conversation to see what was going on. Thus, a confidential conversation was not possible].

When I met the Supervisor he informed me that two revenue agents would arrive in Warren late that evening enroute to Lower South Fork to investigate two reported moonshine operations. Two saddle horses were being transported from McCall to South Fork Ranger Station for use by the agents to ride the twenty miles to Lower South Fork.

[At this time Prohibition was still in effect and the making of whiskey was a federal offense until repealed in late 1933]

It was August and the peak of the fire season and a very bad time to stir up moonshine operators, if there were any in the locality at that time, which I doubted very much. I had maintained friendly relations with the few people living in Lower South Fork Canyon and had depended on them to extinguish lightning fires originating in their locality. They had previously gone to such fires on several occasions and put them out while they were small and easily handled. Had these people been uncooperative because of a dislike for the Forest Service for some reason or other, some of the fires would surely have developed into large proportions before Forest Service men could have reached them.

I had no knowledge of any moonshine operations in the locality, and none of the people had caused any trouble for the Forest Service. They were the type of people who were quick to develop a vindictive and uncooperative attitude when provoked. I certainly didn't want them provoked by an invasion of their premises by revenue agents. This would almost surely have developed the belief on their part that a representative of the Forest Service had "turned them in," which of course was not true.

I explained the dangerous potentials to the Supervisor and informed him of my doubts that any moonshine stills were in operation in the locality. I did my best to persuade him to dissuade the revenue agents from carrying out their plans, at least until after the dangerous fire season. He said it was too late to try to change their plans. I expressed my opinion that it was very poor judgment and would cause troubles for us, and I would refuse to accept responsibility for any damages resulting from the invasion of revenue agents.

The Supervisor said McGinniss and Fields were the two revenue agents who would conduct the investigation. I was heartsick because I remembered my unpleasant experiences with McGinniss on the Caribou Forest a few years previously. I informed the Supervisor I would not accompany the two agents to lower South Fork, but since he was the umpire and had made his decision, I would accompany them to the South Fork Ranger Station and show them the trail over which they were to travel. I also wanted to inform them of a few facts concerning the explosive fire situation in the canyon.

The two agents arrived at Warren after darkness had set in. The truck and two saddle horses arrived soon after. I explained the dangers involved to McGinniss and Fields and expressed my hope that the people in lower South Fork Canyon would not be given the impression that a representative of the Forest Service had turned them in as moonshine still operators, which they had definitely not.

Before the two agents mounted the saddle horses and started over the South Fork Trail I noticed they were both heavy cigarette smokers. I warned them about dropping lighted cigarettes or matches in the dry and explosive vegetation along the trail and suggested that when they felt the urge to smoke they stop at a stream or other place bare of vegetation, have their smokes, and then make sure their cigarettes and matches were dead out before leaving. After they mounted the saddle horses, McGinniss dropped a lighted cigarette in the dry grass. I could see the red glow in the darkness. He dismounted and put the cigarette out. I lectured them again and warned that they just could not drop lighted cigarettes or matches in the dry vegetation along the trail without starting fires which would be difficult to control.

During the afternoon of the second day after the departure of the two agents for lower South Fork, the Smith Knob and Pilot Peak lookouts reported a smoke in the lower South Fork Canyon; one of the worst places on the Warren District for a fire to start. The Smith Knob lookout immediately started for the fire. Half a dozen or so other guards were started, but it required at least three hours for any regular fire

control men to reach the fire. In the meantime, smoke was boiling up and I alerted the fire dispatcher at McCall to the possible need for large numbers of men and supplies. It was almost sure to become a project fire very rapidly because of the long, steep slopes and dry vegetation above.

The Badley Ranch on the Lower South Fork was one of the places to be investigated by the agents. Old man Benson and his two sons had the Badley Ranch leased. They had a fire tool cache and emergency food rations at the Ranch. I called the Bensons at the Badley Ranch on the telephone. The men folks had left for the fire and McGinniss and Fields had left an hour or so before the smoke was discovered along the trail above the ranch. I then called the Thompson Ranch about midway between the Badley Ranch and South Fork Ranger Station, and requested Lew Thompson to watch for the agents to show up along the trail and then have them call the Warren Ranger Station on the telephone, as I wanted to discuss some matters with them.

[The Badley Ranch, owned by Fred Badley, was near the mouth of the South Fork and included the former properties of Fred Burgdorf, Andy Nelson, Gus Carlson, and George Otterson; although Fred was a saloon keeper in Warren at the time of Briggs' memoirs, Fred returned to his ranch and died there in 1953. The Thompson Ranch, owned by Lew Thompson noted above, was known as the Hettinger Ranch and is about six miles down-river from the South Fork Guard Station. All of these South Fork ranches are now owned by the Mackay Bar Corporation as supporting properties for their river rafting and hunting guide activities. These properties are now collectively called the "South Fork Ranch" by the Mackay Bar Corporation].
river rafting activities]

In the meantime, lookouts reported the smoke had died down some, and that a cloud had passed over the fire area and apparently had dropped some moisture. McGinniss called the Warren Ranger Station and I informed him a fire had started in the canyon along the trail a mile or so above the Badley Ranch, that the fire had apparently started about the time he and Fields passed over the trail in that area, and that I suspected the fire had started from a dropped lighted cigarette or match, as there had been no lightning in the area. I requested him to stop at the Warren Ranger Station to discuss the matter with me.

Lookouts reported the smoke still dying down. Some three hours later, the Smith Knob lookout, the first regular fire control man to reach the fire, reported from the Badley Ranch that the fire had made a fast start up the mountain, but after four or five acres were burned, a cloud had dropped two or three inches of hail on the burning areas. This was apparently about the only area in the canyon where moisture had fallen. The moisture had cooled the fire down until a fire

line could be cleared around it and the fire was safely under control. The Benson's had gone to the fire as soon as the smoke showed up and had a fire line part way around the fire when the Smith Knob lookout arrived.

Providence had really been good to us that day, but I still had a score to settle with McGinniss and Fields, and a case for the Supervisor to consider.

The agents stopped at the Warren Ranger Station as I had requested. They were informed that the very thing I had feared really had happened. McGinniss recalled that at the breakfast table that morning at the Benson home he had mentioned to them that if a fire started along the trail, he and Fields would surely be blamed for it because Briggs had lectured them at length about caution with cigarettes and matches while they were in the canyon. I wondered how stupid a person can become in situations of this kind, and expressed my thoughts to McGinniss.

His stupidity in mentioning at the breakfast table that he and Fields would certainly be blamed for any fire starting along the trail behind them could certainly develop an idea as to how Benson's could even the score with the revenuers for raiding their premises in search of a still. Knowing McGinniss as I did, I suspected that the raid was none too orderly.

McGinniss claimed they were careful with matches and cigarettes, and one of the Bensons probably followed them along the trail and started the fire. The Benson's claimed they could show me the remains of a burned cigarette where the fire started. Efforts to determine the true facts would have been futile.

The agents failed to find a moonshine still in operation, as I had predicted. They claimed they found parts of an old still at the Badley Ranch, which they destroyed. Old man Benson made beer and offered me a sample of it on two or three occasions. The materials were kept in a wood barrel in a dugout in the hillside. He would lead me into the place, remove a cloth cover and move the flies and gnats to one side, and then dip me a tin cup of beer. After a few gulps, I told him it was very good.

I wrote up the case of the revenuers in detail for the supervisor and recommended that a copy of the report be forwarded to the Internal Revenue Service with the suggestion that their agents be kept out of critically dangerous fire areas, at least until the representatives of the Forest Service on the ground had been given an opportunity to determine and recommend the most propitious time for moonshine still investigations and raids. I heard nothing more about the case. In

any event, poor judgment and lack of full consideration of all the potentials on the part of the umpire and the agents involved nearly cost us a major forest fire, which was prevented only by a freak of nature.

SNOWBOUND ELK HUNTERS

A few adventurous hunters each year would take automobiles and other motor transportation vehicles to the ends of poor roads in remote areas. They apparently gave little or no thought to how they could move the vehicles out of the areas in the event of heavy snowfall on the high summits behind them. Ironically, the few hunters who had used the poorest judgment in allowing themselves to become snowbound and found themselves in the most difficult predicaments, were the most persistent and unreasonable in their demands that they be rescued by the Forest Service or other public agency at public expense.

It was the policy of the Forest Service to rush men and equipment to the scene of an emergency where they were needed. Occasionally, however, a case developed when the costs would have been very high to move Forest Service equipment and men over long distances and poor roads, and when privately owned equipment was close at hand and available for hire at reasonable rates. Unless this would have resulted in expensive delays for the people involved, they were encouraged to use the private equipment.

A typical case of unreasonable demands for Forest Service equipment and men to rescue a small group of snowbound hunters developed when the group traveled by automobile to the end of an old mining road and established their camp in the Smith Creek drainage, beyond nine thousand foot Elk Summit. Elk Summit was known to always be closed by deep snow in September and never later than October 1.

A telephone call was received at the Warren Ranger Station from one of the hunters at one of the Big Creek field stations, demanding that the Forest Service rush snow removal equipment to Elk Summit. I suggested that the hunter remain on the telephone for an hour or until I could determine what might be done, then I would call him back.

Any available Forest Service tractor-bulldozer equipment was located at McCall and French Creek, a distance of 60 miles or more from Elk Summit. Transportation of heavy equipment by truck was impossible because of bad road conditions following a heavy storm. It would have required several days to "walk" the heavy equipment on its own power to Elk Summit.

A privately owned tractor-bulldozer was located at the Smoke House some three miles from Elk Summit and was available for hire. I contacted the owner in Warren and was informed that he would be willing to leave immediately and open the road over Elk Summit for the snowbound hunters. He said his charges would not exceed forty dollars.

I returned to the Ranger Station and called the hunter. He was told about the availability of the privately owned tractor-bulldozer near Elk Summit, that the owner could be on the job within a few hours after notification that he was wanted, and that the cost for opening the road would not exceed forty dollars. I explained that it would require several days to move Forest Service equipment to Elk Summit and would be very expensive in public funds for the two or three hour job of opening the road. I suggested he authorize me to tell the owner of the equipment to proceed to do the job. It was then I learned how unreasonable some people can become and their attitude of selfishness in their demands for expenditure of public funds to rescue them from predicaments resulting from their own poor judgment.

After I had explained the equipment situation to the hunter, and suggested he authorize the owner of the nearby equipment to open the road, his retort was that his party did not intend to put out any money for hire of privately owned equipment and the Forest Service was to do the job, and he knew how to get them moving. He gave his name, which I have forgotten, and said he was an influential lawyer from Twin Falls. He threatened to call his congressman in Washington D. C. and the President of the United States if necessary to get the Forest Service moving on the job. He said his six thousand dollar automobile had to be brought over snow-blocked Elk Summit.

I further explained that it would cost the Government upward of two thousand dollars to move the equipment to do approximately three hours of snow removal work on the summit as compared to forty dollars for hire of the private equipment already located near the job. This did not change his attitude; he still insisted the Forest Service do the job.

At this point I had built up considerable steam pressure and finally blew up. I pointed out to him that any person who could afford to own and operate a six thousand dollar automobile could surely with the help of the other party members dig up forty dollars for snow removal. I told him it was his privilege to appeal to his congressman and the President of the United States if he desired, that he had a very poor case in view of the facts, and that I intended to write up the facts in case they were needed for reply to his congressman. I told him I intended to strongly recommend against the use of Government equipment in his case, and why.

The following day while I was absent from the station, Hiley received a telephone call from the same hunter requesting her to put through a call to his congressman in Washington D. C., which she did. The following day I received a telephone call from the Forest Supervisor to inquire about the complaint of the hunter that his party was snowbound and the District Ranger had refused to provide Forest Service equipment to open the road. The inquiry had come from the congressman, through the Secretary of Agriculture, the Chief of the Forest Service, Washington, D.C., the Regional Forester at Ogden, Utah, the Forest Supervisor at McCall, and then to the hard-hearted and lowly District Ranger at Warren.

I gave the Supervisor the facts in the case and informed him that a detailed report was already in the mails for his information and for the records. I heard nothing more through the high channels or from the hunters. A few days later a heavy truck loaded with the high priced automobile and the hunters passed through Warren. The hunters did not take time to come to the station to pay their respects to the District Ranger. The case was apparently closed.

This case indicated that the hunter who claimed influence with his congressman and was so persistent in his efforts to force the Forest Service to rescue his outfit regardless of the cost and availability of privately owned equipment, was well aware of the policy and trend of the "New Deal" administration, that when people become involved in predicaments through stupidity or poor judgment, Uncle Sam would rush to their rescue regardless of the cost or other circumstances.

THE END OF THE WARREN ASSIGNMENT

During the winter months the District Rangers and other staff officers on the National Forests live in an atmosphere of expectancy of transfers to other positions. My transfer to another position was expected because I had spent four years on the Warren district, and I remembered the commitment of C.N. Woods that a change in position would be in order for me at the end of four years...

GENE BRIGGS AFTER WARREN

Gene Briggs and family left McCall and the Idaho National Forest on February 1, 1936, being replaced by F.E. "Gene" Powers as Ranger on the Warren District. Gene Briggs was assigned a new ranger district on the Wasatch National Forest in Utah. It was there that he got back into range management, which was the activity most rewarding to him. He had another ranger district on the Nevada National Forest, then became Supervisor of the old Minidoka Forest which was consolidated with the Sawtooth National Forest during his tenure. Gene Briggs' last assignment was Assistant Chief for Range Management at the Intermountain Regional Office in Ogden. He retired on April 30, 1953, with over 31 years of service.

In his retirement years he doted on his two grandchildren, John and Patty Beaver, children of his daughter Georgia. He wrote his autobiography in 1963. Gene Briggs died on December 18, 1971, at the age of 77.

Although his land management interest and expertise was in range management, he is also remembered on the Payette (Idaho) National Forest as being an early innovator in the application of aircraft in all aspects of fire control in the 1930's. In recent years, the Warren Ranger District that Gene Briggs knew, has been incorporated into the McCall Ranger District.

As for the community of Warren, it became a ghost town once again in 1942 when gold dredging was terminated as a result of World War II restrictions on non-essential activities. From that time Warren has essentially remained a ghost town. Only a few of the original buildings remain, which are identified in USFS Pamphlet "Warren Historic Walking Tour." The isolation of Warren continues to appeal to some people; long time resident and former Postmaster Jack Pickell indicated that only twelve people lived overwinter in Warren during the winter of 1994-95. In the summer a few more people are in residence and many tourists visit Warren to try to imagine what life was like when Gene Briggs was Ranger there.

REFERENCES CITED

- Bowen, Charles and Marjorie (sister to Don Park)
 1994 Continuing interview with Peter Preston, 1993-95, in McCall, Idaho.
- Briggs, A. Eugene
 1963 Memoirs of a U.S. Forest Ranger, privately published, copy at Idaho State Historical Library, Boise, Idaho.
- Burton, Greg
 1994 "A Sojourn Among Chinese Miners," Lewiston Morning Tribune, July 24, 1994, Lewiston, Idaho.
- Carrey, John H.
 1968 Mocassin Tracks of the Sheepeaters, Idaho County Free Press, Grangeville, Idaho.
- Dzuranin, Dan
 1994 Civilian Conservation Corps, 1933 to 1944, on the Payette National Forest, Heritage Series Historical Monograph, U.S.D.A. Forest Service, Payette National Forest, Supervisor's Office, McCall, Idaho.
- Elsensohn, Mary Alfreda
 1951 Pioneer Days in Idaho County, Caxton Printers, Caldwell, Idaho.
- Helmets, Cheryl
 1988 Warren Times, Hennington Publishing Company, Wolfe City, Texas.
- Hockaday, James M.
 1968 History of the Payette National Forest, U.S.D.A. Forest Service, McCall, Idaho.
- Jordan, Grace E.
 1961 The King's Pines of Idaho: A Story of the Brown's of McCall, Binford's and Mort, Portland, Oregon.
- Kingsbury, Lawrence A.
 1993 Midvale Telephone Exchange Inc. Buried Telephone Cable: Archaeological Investigations at the Historic Warren Townsite, East Main Street Commercial District, Heritage Series Historical Monograph, U.S.D.A. Forest Service, Payette National Forest, Supervisor's Office, McCall, Idaho.
 1994 Ah Toy: A Successful 19th Century Chinese Entrepreneur, Heritage Series Historical Monograph, U.S.D.A. Forest Service, Payette National Forest, Supervisor's Office, McCall, Idaho.
- Pickell, Jack (former Warren Postmaster, current resident)
 1995 Interview with Peter Preston, June 1995.
- Preston, Peter
 1995 Chamberlain Basin's Historic Three Blaze Trail, Heritage Series Historical Monograph, U.S.D.A. Forest Service, Payette National Forest, Supervisor's Office, McCall, Idaho.
 1996 (in progress) Wilderness Post Offices: A History of Postal Service in the Salmon River Mountains of Central Idaho, Heritage Series Historical Monograph, U.S.D.A. Forest Service, Payette National Forest, Supervisor's Office, McCall, Idaho.

- Preston, Sally (daughter of Don Park)
1995 Continuing interviews with Peter Preston, 1993-95.
- Reddy, Sheila D.
1993 Warrens, the Mountain Dream: A History of Early Mining and Ethnic Diversity in the Idaho Territory, Heritage Series Historical Monograph, U.S.D.A. Forest Service, Payette National Forest, Supervisor's Office, McCall, Idaho.
1993 The Chinese Pioneer in Idaho: An Overview, Heritage Series Historical Monograph, U.S.D.A. Forest Service, Payette National Forest, Supervisor's Office, McCall, Idaho.
1993 He Can Always Have the Moon: The Story of Ah Kan, Heritage Series Historical Monograph, U.S.D.A. Forest Service, Payette National Forest, Supervisor's Office, McCall, Idaho.
1994 The Color of Deep Water: The Story of Polly Bemis, Heritage Series Historical Monograph, U.S.D.A. Forest Service, Payette National Forest, Supervisor's Office, McCall, Idaho.
- Thompson, E. Lavelle (retired U.S. Forest Service Officer)
1995 Continuing interviews with Peter Preston, 1993-95.
U.S.D.A. Forest Service, Payette National Forest, McCall, Idaho.
1994 Warren Historic Walking Tour (Pamphlet).