

A HISTORY OF THE
SALMON NATIONAL FOREST



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FOREST

Preface

Mrs. Don (Elizabeth) Smith was issued a contract in 1969 to prepare this History of the Salmon Forest - to record those early events and happenings that have led to, and been so instrumental in, the development of this large variable complex area of public land.

To provide the proper cornerstone for the development of the Salmon Forest it was necessary for her to research and record the previous 100 years of man's activity in the area leading to the establishment of the Forest. The influence of the events prior to the origin and development of the National Forest still remain in evidence throughout the forest today - Indian trails, artifacts, petroglyphs, homesteads, settlements, mines and roads.

The piecing together of this history has been a difficult task, early records are not complete and memories wane with time. In her statewide search and interviews with many "old timers", Mrs. Smith has done a remarkable job of tracing this history.

Mrs. Smith has had a strong interest in history of the Salmon country for many years before she undertook this project. She was a resident of the Salmon area for twenty years while her husband was pastor of the Salmon Methodist Church. Part of their residence was on a ranch on Withington Creek. As an enthusiastic outdoor recreationist she has traveled over much of the Forest and is personally acquainted with many of the present and past Forest personnel. The Smiths now reside in Boise, Idaho, and are active members of the Idaho Historical Society.

This history merely "opens the door" to many of the happenings of the past. As we inventory, study and develop the Forest we continually encounter evidence of the past worthy of recording and preserving. Additional contacts with the "old timers" will also add more to the story.

We are grateful to Mrs. Smith and all those who participated in this history and development of the Salmon National Forest.

J. L. EMERSON
Forest Supervisor

DEDICATION

This history of the Salmon National Forest is respectfully dedicated to retired forest supervisor, Mr. F. E. (Gene) Powers. Histories of some forests have been written by retired supervisors and in a very real sense, though he did not do the actual research and writing, Mr. Powers has "written" much of the history of the Salmon. Retired from the Forest Service in 1970, he spent the last twenty-six years of his professional career on the Salmon, first as assistant supervisor and for the last eleven years as supervisor. This period of time, over a third of the total time since the Salmon River Forest Reserve was first created in 1906, is something of a record for time spent with one forest by a professional forester. Certainly no one knows the Salmon better and no one has been more intimately concerned with its problems, or more fully dedicated to its proper management, than has Mr. Powers.

In a life career spent with the Forest Service Mr. Powers has been involved in almost all aspects of the development of a modern forest and in the twenty-six years spent on the Salmon he has had the interest as well as the opportunity to become acquainted with this forest to a degree that few people can ever attain in relation to any forest. Comparisons are difficult but it can be safely said that the Salmon is one of the most rugged forests in the south forty-eight states; circumstances that call for the leadership of a man of rugged and independent character with the integrity and devotion to his work that make it possible for him to serve under rugged conditions. These are qualities of the man who had the best interests of the Salmon National Forest as his primary concern for twenty-six years.

Seldom has there been in one person the combination of abilities that Mr. Powers brought to his work. From his earliest training and childhood experience he has developed the ability to appreciate and be at home in the most primitive of outdoor conditions. As a woodsman and horseman he has those talents one associates with the early day foresters who had to live much like the frontiersmen of their time. But combined with his knowledge of the out of doors has been a fine ability to understand and work with people; a basic diplomacy and the willingness to consider the various sides of a problem; talents that made him a first class administrator of a modern forest with its increasingly complex administrative problems.

The life span of F. E. Powers very nearly covers the life span of the U. S. Forest Service; his devotion to the principles of sound conservation for which the Forest Service was created marks him as a career forester of the calibre to which our public lands can be properly entrusted. His twenty-six years of experience on the Salmon Forest and his unlimited cooperation and help in the preparation of this history makes it most appropriate that it be dedicated to him in particular and to all fine career foresters in general.

DON IAN SMITH

PART 1

EARLY DAYS, PRE-NATIONAL FOREST

A. GEOLOGY OF THE SALMON RIVER AREA

The area of the Salmon National Forest is mountainous, varying in elevation from 2,480 feet at the mouth of Horse Creek in the Salmon River canyon to 11,350 feet at Big Peak near Leadore. Mountains along the Salmon River in this area are largely made up of sedimentary rocks of the Belt Series of the Pre-Cambrian era, laid down more than half a billion years ago in shallow seas. Instances of the Belt Series rock are: the Yellowjacket Formation and Hoodoo Quartzite near the Middle Fork of the Salmon River, and the Lemhi and Swauger Quartzites in the Lemhi Range. There are also remnants of marine rocks (Paleozoic) deposited from one half billion years ago to 180 million years ago in seas that were shallow compared with the depth of the oceans of today. These were probably troughs extending northward to 45° and westward to 115° from larger basins in Utah and adjacent states. 1/

The Idaho batholith rises in the western part of the Salmon National Forest. Measuring roughly 240 by 70 miles, this huge body of granite is one of the largest of its kind in the world. This batholithic intrusion is dated as occurring over 100 million years ago. 2/ The Salmon River canyon cuts deeply into the batholith, exposing the inside of this granite mass. There is no sharp dividing line between the batholith and the rocks that enclose it. The surrounding rocks were "soaked" with molten granite for several miles, showing gradations and local differences among the rocks along the contact. These variations are evident through much of the Salmon River canyon from North Fork west to Riggins. 3/

In 1935 geologists on the National Geographic trip down the Salmon River from Salmon to Lewiston made observations in the Idaho batholith as the party traveled through it for 90 miles. They reported that gold is the most important metal in and near the Idaho batholith. Gold veins are numerous near the top of the granite mass, but not in the interior. Gold veins along the river are few. In some places streams of molten rock or "dikes" pushed up from below into fissures in the hardened granite. 4/

1/Clyde P. Ross, Geology along U.S. Highway 93 in Idaho, U. S. Geological Survey Pamphlet 130 (Moscow: Idaho Bureau of Mines and Geology, 1963), P. 63.

2/Clyde P. Ross and M. Donald Forrester, Outline of the Geology of Idaho, Bulletin No. 15 (Moscow: Idaho Bureau of Mines and Geology, 1958), p. 33.

3/Ross, p. 77.

4/Philip J. Shenon and John C. Reed, "Down Idaho's River of No Return," National Geographic (July, 1936), 94-136.

The Challis volcanics once covered much or all of the area of the Salmon National Forest, both the mountains and the valleys. This eruption began over 30 million years ago, spread widely, and in some places reached a thickness of more than a mile, 1/ filling valleys, burying streams, and covering all but the highest summits in Blaine, Butte, Custer and parts of Lemhi and Valley counties. 2/ These disturbances in the earth's crust occurred intermittently. In the volcanic rocks are some sediments, products of streams and lakes deposited in remaining lowlands. These include some lignitic coal near Salmon. 3/

Later changes in drainage have altered the topography. Clyde P. Ross suggests that though the Salmon River now runs north and then west through the mountains to the Snake on the western boundary of Idaho, it has not always done so. Changes resulting in its present route probably occurred less than one million years ago and perhaps much less than this. The modern Salmon River travels a very round about course and Ross suggests that possibly at one time some of the valleys around Salmon drained southeast to join the upper Snake River instead of entering the Snake near its mouth as it now does. 4/

The northwest-draining streams are all tributaries of the Salmon; the southeast-draining streams are considered tributary to the Snake, joining it underground after disappearing into lava sinks on the Snake River Plain. Ruppel concludes that the Salmon River could not have existed in its present form until after the reversal. 5/

Evidence suggesting reversal of the Lemhi River is that placer deposits of gold in streams tributary to the Lemhi River near salmon have been found to extend into the Lemhi and up the Lemhi rather than extending down the Lemhi from the tributary as would normally be expected. Howard Sims reported this to be true on Kirtley Creek. He followed the gold down the creek and when he got to the Lemhi he started down the river and found there was no gold. He couldn't explain this until he started up the river from the creek mouth and found matching gold in the old channel going up the river instead of down. 6/

1/Ross and Forrester, pp. 13-15

2/Ross and Forrester, p. 34.

3/Ross, p. 70

4/Ross, p. 71.

5/Edward T. Ruppel, "Late Cenozoic Drainage Reversal, East-Central Idaho, and its relation to possible Undiscovered Placer Deposits." Reprinted from Economic Geology, Vol. 62 (1967), 648-663.

6/Interview with Howard Sims, Salmon, Idaho, October 23, 1969.

The physical features of the Salmon National Forest are aptly described in the "Report for Forest Atlas" made by Supervisor George Bentz in 1909.

This Forest is composed of high and very rugged mountains, having no plains, plateaus, or deserts, and containing but few valleys. The mountains are divided into four distinct ranges. Two of them lie on the east side of the Salmon River and are separated by the Lemhi River (the Beaverhead Mountains in the Bitterroot Range of the Continental Divide, and the Lemhi Range.) These two ranges make up the highest and most rugged part of this Forest. They attain an elevation ranging from 9000 to 11000 feet (later surveys reach 11,350 feet), and have a general trend from the northeast to the southwest. The other two ranges are on the west side of the Salmon River and lie between it and the Middle Fork (Salmon River Mountains and the Big Horn Crags.) They are separated by Big Creek (now Panther Creek) which heads near the southern boundary of the Forest and flows north into the Salmon River. These two ranges are not as rugged as the ones on the east side of the Salmon River and have broader summits. The general trend of these two ranges is north and south and their average elevation is about 9000 feet. 1/

Within and along the boundaries of the Salmon National Forest lie two of the deepest canyons in the United States. The Salmon River canyon between North Fork and Riggins, and the canyon of the Middle Fork of the Salmon are exceeded in depth only by the Hells Canyon of the Snake. They are deeper than the Grand Canyon of the Colorado which is the fourth deepest in the United States.

Williams Lake is a water feature of exceptional interest. The largest lake for miles around, it is held behind a high dam of landslide debris. The lake is over a mile long, over a half-mile wide, and several hundred feet deep. The ancient landslide blocks the valley to a height of 480 to 660 feet. The lake has no outlet except underground, the water emerging as a big spring near the bottom of the slide. A gigantic amphitheater-like scar north of the slide debris marks the source of the slide material. 2/

The entire Salmon Forest is within the drainage of the Salmon River except about six square miles in the southern Lemhi Range south of Long Canyon. The streams in this small area sink, but would be con-

1/George Bentz, "Report for Forest Atlas," January 15, 1909, pp. 1-2.

2/Alfred L. Anderson, Geology and Mineral Resources of the Salmon Quadrangle, Lemhi County, Idaho, Idaho Bureau of Mines and Geology, Pamphlet No. 106 (Moscow: University of Idaho, January, 1956, p. 12.

sidered as tributary to Birch Creek and the Snake River. The Salmon River does not head in the Salmon National Forest but flows adjacent to and through it for over one hundred miles. Some of the main streams in the Salmon National Forest are Salmon River, Lemhi River, Middle Fork of the Salmon, Panther Creek, Horse Creek and North Fork of the Salmon. The two main valleys in this region are the Lemhi Valley and the Salmon River Valley. They are not within the Forest boundaries but their supply streams have their sources in the Forest. These two valleys include the greater part of the agricultural land and most of the population in this area.

B. INDIANS IN THE AREA

The Shoshone Indians can be considered the early, or prehistoric, residents of the upper Salmon River, above the Middle Fork having occupied the area for the past 8000 years or more. Shoshoni Indians are a part of the Great Basin cultures found south and east of the Salmon River. The area of the Mountain Shoshoni, or Sheepeaters, was bounded by the Payette River on the west, Salmon River on the north, and Bear River Valley and Bruneau River on the south. Much of the Great Basin dried up during a climatic change about 7,000 years ago and this changed the way of life of the peoples in the lower areas of the Great Basin. The ancestors of the Northern Shoshoni, known as the Bitterroot Culture, withdrew into the high mountain country of the Salmon River, and retained their big game hunting way of life. The Western Shoshoni and Northern Paiute developed a Desert Culture because of the changes in their environment. This was a marginal way of life dependent upon seed gathering and hunting of small mammals. 1/

The Mountain Shoshoni, or Sheepeaters, did not use horses until late, and never in great numbers though other Shoshoni acquired them early. Some authorities think the Shoshone were among the first Indians to have horses, probably trading for them with their relatives the Comanches around the year 1700. The horse gave the Shoshone mobility. Pottery and vegetable fiber utensils and clothing were replaced by bison (buffalo) hide, horn, bone and sinew. The mobility afforded by the horse also caused changes in their political tribal structure. The former loosely knit small groups of families were combined at times of organized bison hunts to give strength in the hunt and protection from their enemies. Archaeological research yields evidence that bison were hunted throughout the 8000 years of Indian occupancy of the Salmon River area, whenever they were available. From 3000 years ago into the nineteenth century, bison were available in large and increasing numbers.

The Shoshoni shared their Salmon River fishing grounds with their neighbors. The Flatheads, of the Salish language group, came from the Bitterroot Valley to the north, and the Nez Perce, of the Plateau Culture and Sahaptin language, came from the north and west. 2/ The Nez Perce and Flatheads often came to the Salmon River for fishing and trade with the Shoshoni. Popular meeting places were the fishing grounds at the junction of the Lemhi and Salmon, and the junction of the North Fork and Salmon River. Groups from these tribes sometimes united for the trip east of the Continental Divide to hunt buffalo. The combined

1/Earl H. Swanson, Jr., "Idaho Yesteryears," Idaho Yesterdays, Volume 9, No. 1 (Spring, 1965), 17-24.

2/ Sven S. Liljebblad, "Indian Peoples in Idaho" (Pocatello: Idaho State University Museum, unpublished manuscript, 1957), p. 20.

strength made a better hunt and gave more protection against the Blackfeet and other Plains groups who considered their territory invaded by Shoshoni, Nez Perce or Flathead from the west.

Through all this period of change the Mountain Shoshoni (Sheepaters) remained in their mountain fastness, hunting big game on foot. Their diet included a long list of roots, seeds and berries. They lived in some of the best fishing areas of Idaho and it was their habit to construct weirs and dams to catch the salmon. They were the most skilled hunters on foot of all Idaho Indians, using excellent bows of laminated horn of the bighorn mountain sheep, light snowshoes in winter, and dogs trained for the chase. 1/

The Sheepaters have been thought to be both isolated and destitute but there is evidence they carried on some trade with other Indians. Their highly perfected laminated sheep horn bows were a coveted trade item. Those Sheepaters who received horses in trade moved to the Lemhi Valley and joined the bison hunting Shoshoni. Unchallenged by other Indians, the Sheepater homeland included much of the area now found in the Payette, Salmon, Boise, Challis, Sawtooth and Beaverhead National Forests. 2/ The greatest density of Sheepater or Mountain Shoshoni was in the Salmon River Mountains and the Middle Fork area. People who have traveled in the Middle Fork area have seen evidence of Indians of the past, finding tipi rings, Indian writings and ceremonial rings. 3/

When Lewis and Clark came through in 1805, they found about 400 Shoshone living in the Lemhi Valley. About 100 were warriors, the rest women and children. Lewis described the Shoshoni as dwelling in security west of the Continental Divide, venturing eastward after buffalo, sometimes in company with the Flatheads, but retreating to the mountain fastness as soon as they had obtained meat, because of their fear of the Indians of the plains. Lewis described the Shoshoni as not only cheerful, but even gay; their character more interesting than that of any Indians he had seen, containing much of the dignity of misfortune. Lewis found the Shoshoni frank and communicative, and fair in their dealings. The Shoshoni shared their small possessions and scant food, but abstained from begging.

These Shoshoni in 1805 had around 700 horses, including about 40 colts and 20 mules. Some of the mules had Spanish brands, and Lewis observed stirrups, a bridle-bit and other articles of Spanish horse-gear. The Shoshoni stated they could reach the Spanish settlements in

1/Liljeblad, p. 96.

2/Liljeblad, pp. 99-100.

3/Earl H. Swanson, Jr., "Archaeological Survey of the Middle Fork of the Salmon River, Idaho."

ten days by way of the Yellowstone River, but complained the Spaniards refused to let them have fire-arms. This left them at the mercy of the Indians on the plains who had guns and used them to get Shoshoni horses. The Lemhi Shoshoni of 1805 fought on horseback, possessed a few hard guns but more commonly used the bow and arrow, shield, lance and pog-gamoggon, an instrument with a leather-covered wooden handle and a thong at one end tied to a two-pound round stone covered with leather. Shoshoni bows were of cedar or pine, with sinews glued on the outer side. Another type of bow was made of a single piece of elkhorn, but the most prized were bows made of laminated pieces of horn of the bighorn sheep. The armed and mounted Shoshoni was a formidable enemy even with his feeble weapons.

The journals of various trappers such as John Work, W.A. Ferris, Robert Newell, Captain Bonneville and others record that the Lemhi and Salmon River valleys were favorite camping spots for bands of Flatheads and Nez Perce in the 1830's and 1840's. Some of these bands spent winters in this country.

In 1877 Chief Joseph's Nez Perce band came through the Lemhi Valley on their famous retreat toward Canada. The people of Salmon and the Lemhi Valley had word of the Nez Perce flight, and knowing that the Nez Perce were familiar with the country around Salmon, anticipated that Joseph might come that way. A company of men was organized for defense, and stockades were built in Salmon and Junction. There were few guns in Salmon, and very little ammunition. A request was made to the Governor for arms and ammunition. About the time word was received that the Nez Perce had come over Lolo trail and were moving up the Bitterroot Valley, Nez Perce signal fires were seen on the hills around Salmon. The signals were repeated for several days. One signal spot was on the cemetery hill, another was a short distance up the Leesburg hill, and a third was near the present city dump. 1/

Joseph sent messengers to ask help from the Indians under Chief Tendoy, against the soldiers and whites. The Nez Perce and the Lemhis had been friends. Tendoy held a council and the decision was to give no help to the Nez Perce because of the friendship of the Lemhi Indians for the white people of Lemhi Valley.

Following the Battle of the Big Hole, August 9-10, 1877, the Nez Perce traveled south, but did not come to Salmon. Instead, they crossed the Divide farther south, passed near Junction, and camped in a canyon that has since been called Nez Perce Canyon. Orlo Johnson, former Leadore District Ranger, found in 1965 what is believed to be Chief Joseph's campsite, with indications of rifle pits and a breastworks fortification. The pits cover a three-acre area.

1/George Elmo Shoup, History of Lemhi County (Boise, Idaho: Idaho State Library, 1969), p. 21.

Chief Joseph and the Nez Perce continued south, over Gilmore summit. On Birch Creek they came upon freight wagons bound for Salmon. The Indians took over the outfits and some of them got drunk on whiskey found in the cargo. A skirmish followed and five men were killed. Two Chinamen had escaped through the brush along the creek and headed for Junction. The horse herder, Al Lyons, escaped toward Eagle Rock (Idaho Falls) and was later found by some riders. The freighters killed were Albert Green, loaded with merchandise for George L. Shoup and Company, Dan Coombs and James Hayden, loaded for Fred Phillips and Dave Wood of Leesburg and Salmon City, and a stranger. Another stranger was found dead about a mile away. 1/ Mrs. Nora Whitwell, now living in Salmon (1971) was a child of seven when the Nez Perce came into Lemhi Valley, and can remember the stockade built at that time.

Nez Perce Indians returned to the Salmon Forest in later years after Chief Joseph's retreat of 1877. In August, 1887, an item in the local paper noted that about 50 Nez Perce Indians had been in town, coming to sell horses. 2/ Their "annual visit" was the occasion for a celebration around 1898. Governor Shoup and M. M. McPherson entertained the Nez Perce and Tendoy's Lemhis in Feinstein's field, near where the St. Charles Catholic Church is now. Shoup and McPherson had a pit dug and roasted a beef for the Indians. The Indians conducted a sham battle between the Nez Perce and the Lemhis, on horseback. Fred Chase remembers this occasion, along with the fact that in the same field there was a camp organizing men to go to the Spanish-American War. 3/

The Bannock Indians under Chief Buffalo Horn were at war against the whites during the summer of 1878. This was another restless summer for the settlers of Salmon and the Lemhi Valley because there were some Bannock among Tendoy's Lemhi Indians. Tendoy's band remained loyal to the settlers and the warring Bannocks did not enter the Lemhi Valley. However, several Salmon area residents were besieged by Bannock warriors who surrounded their freight outfit north of Mackay, and Jesse McCaleb of Salmon was killed. Joe Skelton, Henry Skelton, Joe Currier, Joe Bush, Daniel D. Wade, and George Dinsmore were freighting toward Challis. A group of men came out from Challis to warn them that the Bannock Indians were in the vicinity. Among those who came out to warn and guard the freighters were Jesse McCaleb, Dave Wood, Billie Trelor, Joe Rainey and Ed Harrington. The Indians kept the party surrounded from August 10 to August 14. Jesse McCaleb was killed August 11. The rest of the party reached Challis August 17. 4/

1/Shoup, p. 23.

2/ The Idaho Recorder, Salmon, Idaho, August 27, 1887.

3/Interview with Fred Chase, Boise, Idaho, June 1, 1970

4/Daniel D. Wade, "Jesse McCaleb and Bannock Indians," Lemhi County Museum, Salmon, Idaho. First published in the Arco Advertiser.

J. W. Snook's freight outfit was also attacked about this time by Bannock Indians, at the Birch Creek springs. Snook and his teamster escaped, and later with help recovered the wagons and some cargo. 1/

Bannock War Chief Buffalo Horn had been killed earlier in the summer of 1878 and Captain Reuben F. Bernard had effectively defeated the Bannock as they pushed westward into Oregon. The battle on Lost River and the attack on Snook apparently were isolated incidents provoked by disgruntled Bannock fleeing from the troops as Army units hunted for stray Bannock bands across southern Idaho and into Montana and Wyoming.

The mountain wilderness of central Idaho where the Sheepeater Indians lived had not often been penetrated except for the Leesburg and Loon Creek miners, and a few borderland ranchers, until the time of the Bannock War in 1878. Fleeing Bannock are thought to have joined the Sheepeaters, and the Bannock may have been responsible for attacks against whites and Chinese which were blamed on the Sheepeaters.

Four white men were killed in Long Valley near Cascade in the summer of 1878, and Chinese were killed at Oro Grande on Loon Creek in February, 1879. Settlers near Warren were attacked in the summer of 1879. Much of the search for the Sheepeaters in 1879 was carried on in what is now the Idaho Primitive Area. The country was largely unexplored, unmapped, and extremely rough. A portion of the Middle Fork below Big Creek was labeled by the soldiers, "Impassable Canyon." The campaign touched the Salmon National Forest on Papoose Creek west of the Middle Fork, along the Middle Fork south of Big Creek, and at Meyers Cove.

Lt. H. Catley and a company of the 2nd Infantry started from Camp Howard, near Grangeville. Captain Reuben Bernard proceeded from Boise with a company of 1st Cavalry, and Lt. E. S. Farrow and Lt. W. C. Brown were sent from Umatilla Indian Agency in Oregon with scouts. All these commands were hunting the Indians, and no command was in communication with any of the others. They forced their way through the wild country slowly and cautiously, like hunters in search of game.

Bernard scouted the country northeast as far as Meyers Cove on Camas Creek, along the Middle Fork of the Salmon River, and the Loon Creek country. John S. Ramey of the Salmon area was a scout for Bernard. Another scout well known in the Salmon area was Uncle Dave Lewis ("Cougar Dave").

The Indians had wounded two of Catley's men along Big Creek, and later kept Catley's troops on a hill for 14 hours without water. The place came to be known as Vinegar Hill from the story that the troops drank vinegar from their supplies to quench their thirst.

1/"From Salmon City, The Indian Situation in the Salmon River Country," The New North-West, Deer Lodge, Montana, September 6, 1878. From E.H.J., Salmon City, I.T., August 24, 1878

About August 11, the various military units joined forces and descended Big Creek. Traveling was difficult and the military lost many horses on the precipitous trails. An Indian village was destroyed at Soldier Bar. In a surprise attack there by the Indians, on August 20, Private Harry Eagan was wounded in the thighs, died during an operation to amputate, and was buried on the spot. A monument was later erected to mark his grave and the site of the engagement. Soldier Bar is in the Big Creek drainage west of the Salmon Forest.

By this time the soldiers' rations were running low and many horses and mules were exhausted and had to be shot. Bernard and Catley and their men returned to their bases. Farrow and his scouts continued, sustained by food discovered in Indian food caches. On September 17, Farrow's men captured two squaws, a papoose and a small boy near what is now called Papoose Creek (Middle Fork drainage). An older Indian boy escaped. The squaw with the papoose helped arrange a parley and subsequent surrender of 51 Indians, mostly Sheepeaters, by October 1. Their arms consisted of eight guns: two Henry carbines; one Sharp's carbine; one Springfield carbine, calibre .45; one Springfield breech-loading rifle, calibre .50; two muzzle-loading rifles, and one double-barrelled shot gun. The prisoners were taken to Vancouver barracks, and the following year were sent to the Fort Hall, Idaho, Reservation. ^{1/} Other Sheepeaters eluded the Army, and a few families continued to live their ancient way of life in the mountain fastness for a few more years.

The Sheepeater Campaign was one of the last "Indian Wars" in the United States.

The Lemhi Indian Reservation consisted of approximately 160 square miles, or roughly the width of the Lemhi River Valley (ridge to ridge) from just below the present Tendoy post office south up the Lemhi River to a line near the Lemhi post office. The Reservation, established in 1875 for Tendoy's mixed band of about 700 Shoshoni, Sheepeater and Bannock, proved impractical. The Government tried to close the Reservation and move the Indians to Fort Hall.

In 1880, Tendoy of the Lemhis, Gibson Jack and Captain Jim of the Fort Hall Shoshoni, and Tyhee of the Bannock were sent to Washington. Tendoy's delegation included Grouse Pete, Jack Tendoy, and Tsidmit. On May 14, 1880, these Indians signed a treaty in Washington which provided among other things for the removal of the Lemhis to Fort Hall. However, "Tendoy's Indians" refused to move. The Indian Commissioner, therefore, recommended to Congress that the portion having to do with the Lemhis be deleted from the treaty. This caused them to forfeit any benefits which they might have received. Thirty-two Lemhis voluntarily moved to Fort

^{1/}"The Sheepeater Campaign, 1879," Originally Published in The Tenth Biennial Report, Idaho Historical Society, 1926, pp. 5-27.

Hall two years later, but the benefits specified in the treaty still were not forthcoming. 1/

George E. Shoup described what was probably the last hunting trip of the Lemhis as a band. In the fall of 1905, when Mr. Shoup was living at the home ranch on the Salmon River near the Shoup bridge a few miles south of Salmon, Tendoy and his people came through and stopped at the ranch. Many of the horses were pulling travois made of teepee poles. Lashed to the poles were bundles of baggage and, in some instances, a papoose. The squaws rode the travois horses. The whole band went into the mountains following an old trail into the Middle Fork country. Many days later they returned, with pack horses laden with meat and skins. Later, Mr. Shoup realized that he had probably witnessed the ending of Chief Tendoy's last organized hunt, and the last organized hunt of the Lemhi tribal Indians. 2/

On January 2, 1906, the Lemhi Indians signed the treaty for removal to Fort Hall, and in April of 1907, 474 Lemhi Indians moved to the Fort Hall Reservation. Tendoy, who became chief after Chief Snagg was killed in 1863, had been their chief for the entire Lemhi Reservation period, 1875-1907. He did not move to Fort Hall, but elected to stay by the Lemhi River. He died in May of 1907. Over 100 people from Salmon attended the funeral at the Indian burying ground on a bench near the present town of Tendoy. His body was placed in a sitting position in a wickiup set in place for the occasion. He was clad in official garb, with war-bonnet and beads, and his right hand held an eagle wing. A medicine man from Ross Fork spoke for the Indians. Rev. Bonner of Salmon also spoke, through an interpreter, to the Indians. Later a monument of native sandstone was erected, with the following inscription:

Chief Tendoy
Died May 10, 1907, aged 73 years
Erected by his White Friends

There are several families of Indians presently living in Salmon, most of them descendants of the Lemhis. For many years they lived together in one area at the south edge of town along Highway 93. The area was called the Indian Village. In the 1940's their homes consisted mainly of wooden platforms and frames with tent coverings. Their homes have been improved or new ones built, and some families live in other parts of

1/Virginia Cole Trenholm and Maurine Carley, The Shoshonis: Sentinels of the Rockies (Norman: University of Oklahoma Press, 1964), pp. 270-271.

2/George E. Shoup, "Incidents concerning Chief Tendoy and History of Lemhi Indian Tribe as told at Dedication of Sacajawea Marker," The Recorder-Herald, Salmon, Idaho, August 5, 1936.

Salmon. The tribal backgrounds have become mixed through intermarriage. Their handmade moccasins and gloves are highly sought after. There are presently 18 local Indian students in the Salmon public schools.

In 1971, a group of Lemhi tribal descendants at Fort Hall urged the Indian Claims Commission to award the Lemhi tribal descendants 4.5 million dollars for 5,002,000 acres of land they say was taken by the Federal Government in 1875. Lawyers for the tribal descendants and for the Justice Department have reported agreement on the proposed payment for Lemhi tribal lands which lay west of the Bitterroot Mountains in the Salmon River area, west of the Middle Fork of the Salmon River and south to the Sawtooth Mountains, Big Lost River, and Birch Creek. 1/

1/"\$4.5 Million for Land Asked by Lemhi Indians," The Idaho Statesman, Boise, Idaho, March 4, 1971, p. 1-A.

C. LEWIS AND CLARK EXPEDITION, 1805

The area of the Salmon National Forest played a critical part in the expedition of Lewis and Clark (1804-1806). On August 12, 1805, Meriwether Lewis and three companions reached the summit of the Continental Divide at Lemhi Pass and stepped into what is now the state of Idaho and the Salmon National Forest. They were the first white men known to enter Idaho. They could see high mountains, partially covered with snow, still to the west of them. The ridge on which they stood forms the dividing line between waters of the Atlantic and the Pacific oceans. Ahead would be the westward flowing waters they had traveled so far to discover. Three quarters of a mile down the mountain they found a handsome, bold creek of clear, cold water running westward. This was Horseshoe Bend Creek which runs into Agency Creek, a tributary of the Lemhi River.

As he crossed the summit, Lewis left U.S. territory. By the provisions in the Louisiana Purchase, the Continental Divide separated the possessions of the United States from the unclaimed territory to the west. On that day, August 12, 1805, Captain Meriwether Lewis, a representative of the United States government, entered into new country and thereby established, by right of exploration, the strongest claim that the United States had to the Pacific Northwest. That evening, camped on the western slope of the Continental Divide, Lewis wrote in his journal; he was recording the first history written in the state of Idaho.

In the Lemhi River valley for three weeks during the rest of August, 1805, the fate of the expedition hung in the balance, depending entirely upon the ability of Lewis and Clark to deal with the Indians, the mood of the Indians, and their willingness to part with horses which Lewis and Clark desperately needed if they were to continue the expedition.

Lewis had seen one Indian on the Montana side before crossing Lemhi Pass. Later Lewis and his companions found a broad Indian road which led them through the hills to the Lemhi Pass. On the Idaho side they followed the Indian road, camped by it, and the next day found Shoshoni Indians who took them to their chief, Cameahwait. The Chief invited them to the Shoshoni village on the banks of the Lemhi River about 4 miles south-east of present Baker, Idaho. The Indians were friendly and hospitable. They had little food; serviceberry and chokecherry cakes dried in the sun, some salmon and a little antelope meat. This was the first salmon Lewis had seen and gave evidence that they were on Pacific waters. The Shoshoni tribe had been attacked that spring by the Pahkees (Minnetarees) who defeated them, killing or taking prisoner 20 warriors. The Shoshoni had lost their entire camp except for one "leathern lodge", and were living in conical huts of willow brush. There were about 400 Shoshoni

in the village. 1/ They had about 700 horses 2/ and hunted mostly with bow and arrow, having only a very few old guns.

Lewis asked Cameahwait to send men with horses back over the divide with him to bring the rest of the party and the baggage. Cameahwait agreed reluctantly, since many of the Indians thought Lewis was in league with their enemies, the Pahkees. Finally most of the village headed for Montana to meet Captain Clark and bring the men and baggage over the divide.

When Clark's party arrived on August 16, Charbonneau's wife, Sacajawea, recognized Chief Cameahwait as her brother. She had been separated from the Shoshoni some years before when the tribe had come over to Montana on a hunting foray. The Minnetarees had attacked and taken Sacajawea as one of the prisoners, later traded her to the Mandans from whom Charbonneau had purchased her for his wife.

Cameahwait agreed to go get more horses from their village in Idaho and on August 19 the Indians set about moving the expedition over the Continental Divide to their home on the Lemhi River. They camped that night on a small stream about 5 miles northeast of Tendoy. On August 20 they reached the Indian village which had been moved upstream 2 or 3 miles since Lewis' visit. Here Clark conferred with the Indians regarding possible routes over the mountains.

A band of Indians who lived to the southwest and who happened to be in the camp described the country in that direction, comprising the Snake River plain, in terms scarcely less gruesome than those in which Cameahwait had represented the country to the west. He said that in order to reach this country the first 7 days of travel would be over steep rocky mountains where there were no game or roots for subsistence and which were occupied by a fierce warlike people. Clark asked Cameahwait by what route the "pierced-nose" Indians who lived west of the mountains crossed over to the Missouri. He was told that the "road" which was toward the north was a very bad one. That during the passage he had been told, the Indians suffered excessively from hunger being obliged to subsist for many days on berries alone there being no game in that part of the mountains which were broken and rocky and so thickly covered with timber that they could scarcely pass. In spite of this description Clark concluded that of all of the passages by land this one seemed the most practical and that if the Indians could make the passage

1/Bernard DeVoto (ed.), The Journals of Lewis and Clark (Boston: Houghton Mifflin Company, The Riverside Press Cambridge, 1953) p. 207.

2/Elliott Coues (ed.), History of the Expedition under the Command of Lewis and Clark (New York: Dover Publications, Inc., 1965), II, 558.

with their women and children no difficulties which they could encounter would be formidable to the expedition. (It has never been explained satisfactorily why the Shoshone Indians did not suggest that the expedition travel to the Nez Perce country by way of the southern Nez Perce trail, a route which would have shortened the journey considerably).

Before making a final recommendation that the expedition proceed by land, Clark decided to determine for himself whether or not it would be feasible to float down the Salmon - or Lewis River as he called it. Therefore he procured an Indian guide and with his party proceeded down the Lemhi River to a campsite near Baker, Idaho.

The next day the party crossed to the east side of the Lemhi, passed over the cliffs by present Salmon to the junction of Carmen Creek and the Salmon and camped on the east side of Salmon River at the foot of a bluff about one mile above the mouth of Tower Creek. On August 22 they struggled over the points of 4 mountains of which Clark remarked "the ascent of the grade was so steep that it was incredible to describe." They camped about three miles below North Fork at the lower point of an island.

The following day they proceeded along the steep side of the mountain for 5 miles at which point across the river and near the mouth of Moose Creek the whole current of the river beat against the right shore on which they were traveling and which was a cliff of solid rock making it inaccessible to horses. Clark then decided to leave the horses and the greater part of the men at this place to hunt and fish and he proceeded on by foot accompanied by his Indian guide and three men. The river was now one continual rapid and he concluded that the baggage would have to be transported along the steep hillsides where it would be impossible to employ horses for the relief of the men. Leaving the river they ascended Squaw Creek about 4 miles, crossed over a ridge and descended again to the river. They then ascended a high and steep point of a mountain about 3 miles upstream from Shoup. From here Tobe, the Indian guide, pointed out the difficulties the party would experience if it attempted to float down this rock filled river which in places flows between nearly perpendicular cliffs. Clark was now convinced that the expedition must cross the mountains by way of what later became known as the Lolo Trail, therefore, he turned back and crossed the flat along the north side of the Salmon, climbed through a saddle on the ridge between the river and Squaw Creek and camped the night of August 23 on the latter stream, probably near the mouth of Papoose Creek.

August 24 they proceeded down Squaw Creek at the mouth of which Clark "marked my name on a Pine tree." They continued back up the river and rejoined the remainder of the party. From here Clark sent back Colter on horseback to apprise Lewis of the situation. The remainder of the group then worked its way back to an Indian village which was located about 5 miles southeast of Salmon. Here on August 27 and 28 they hunted for game which was scarce. Their only food consisted of a few Salmon obtained by the Indians.

During Clark's expedition down the main Salmon below North Fork, Lewis remained in Montana negotiating with the Indians for horses. On August 26 they crossed Lemhi Pass and encamped at the upper Indian village where they were occupied for the next few days in determining their route and in procuring additional horses from the Indians.

August 28, Sgt. Gass appeared in camp to inquire if Capt. Lewis planned to join Clark's advance party at the lower Indian village. After being informed that Lewis and the main party planned to stay at the upper village another day to purchase additional horses, Gass returned to the lower camp. August 29, Clark and all but 2 of the men in his party joined Capt. Lewis and the main party at the upper Indian camp.

August 30 the explorers loaded the 29 horses that had been purchased from the Indians and proceeded down the Lemhi River and camped at a point about six miles southeast of Salmon near the mouth of Mulkey Creek which was within one mile of where Clark's men were waiting.

August 31 they resumed their journey traveling down the east side of Salmon River to Tower Creek, turned northeastward up this creek where Clark noted "remarkable rock resembling Pirimids on the left side." They camped 4 miles up Tower Creek at the foot of the mountain. The route the next day bypassed the steep bluffs along the Salmon. They climbed through a saddle and continued across several ridges and valleys to a campsite on the North Fork of the Salmon about six miles north of the village of North Fork near the mouth of Hull Creek.

While proceeding up the North Fork on September 2 accompanied by only 2 Indians now, the old guide called me his son, Clark said, "we proceeded on thro thickets in which we were obliged to cut a road over rocky hillsides where our horses were in perpeteal danger of slipping to their certain destruction and up and down steep hills where several horses fell. Some turned over and others slipped down steep hillsides one horse crippled and two gave out with the greatest dificuelty and risque. We made five miles and encamped."

The next day the mountains closed in on the river and they were forced to climb out and cross the mountains which here were so steep that several horses slipped and hurt themselves. September 4 after thawing the baggage the expedition ascended a "high snow mountain" which was probably Saddle Mountain, crossed over to the ridge between the east and west forks of Camp Creek and decended to the valley floor in the Bitterroots. Hence the Lewis and Clark expedition left the Salmon on September 4, 1805.

D. FUR TRAPPERS, TRADERS AND MISSIONARIES

Gold was discovered in the Salmon Forest 61 years after the visit of Lewis and Clark's party and before any permanent settlement in the area. However, it is surprising how many people used the area prior to the development of mining interest. These included British traders and trappers from the Northwest Company and Hudson's Bay Company, rival American trappers and their parties from the Rocky Mountain Fur Company and American Fur Company, independent trappers, and missionaries.

1819: Donald McKenzie led the Northwest Company's Snake Country Expedition. They trapped through Lemhi country during the winter of 1819-20.

In 1821 the Northwest Company and the Hudson's Bay Company united as the Hudson's Bay Company.

1822: Michel Bourdon and his Hudson's Bay Company party went through Lemhi country enroute from Spokane House to the Snake River. The route most often used by the British trappers was from Flathead House near Thompson Falls, Montana, past the site of Missoula and through Hell's Gate up to Deer Lodge Pass to Missouri waters, south past Big Hole River and Beaverhead crossing the divide into Idaho at Lemhi Pass. On this trip Bourdon discovered Round Valley, where Challis now is. Part of Round Valley was in the Salmon National Forest for a brief time.

1823: Finan McDonald, with Michel Bourdon and five engages conducted 45 freemen on the Hudson's Bay Company Snake Country Expedition from Flathead Post. Just after crossing Lemhi Pass into Lemhi Valley they were attacked by Blackfeet. McDonald lost Bourdon and five other men, and in the course of the battle set fire to the thicket in which the Blackfeet were hiding, killing at least 68 Indians. McDonald continued on south to the Snake. In the fall he returned from Henry's Fork, went down the Lemhi River and crossed Lemhi pass eastward, bringing 4,339 beaver from the "Snake Country." 1/

1824: Alexander Ross led the H.B.C. Snake Country Expedition, including 55 men, 25 women and 64 children, with 392 horses. The women were Indian wives of the trappers. They left Flathead Post in February, 1824, and came south from Missoula up the Bitterroot River and through the Big Hole. From the Big Hole

1/Dale L. Morgan, Jedediah Smith and the Opening of the West (Lincoln: University of Nebraska Press, 1953), pp. 122-125.

they traveled south and turned west over Lemhi Pass and went down the Lemhi River to the Salmon which they crossed and traveled south up the west side for about ninety miles. There were many buffalo along the way. One valley, possibly the Pahsimeroi Valley or Round Valley near Challis, had an estimated 10,000 buffalo in one herd. After trapping several rivers, they returned to the Salmon River and raised their cache of beaver pelts. They met a party of Americans, Jedediah S. Smith and six men, who continued with Ross's party down the Salmon, up the Lemhi, crossing Lemhi Pass into Montana October 27, 1824, enroute to Flathead Post which they reached late in November with 5,000 beaver besides other pelts. 1/

1825: On February 11, Peter Skene Ogden led the Hudson Bay Company Snake Country Expedition across Bannock Pass 2/ into Lemhi Valley where they spent seven weeks. They found buffalo by the hundreds, deer, elk, sheep and goat, and grass for their horses. With Ogden was Francois Payette, Charles McKay and William Kittson. The group included 61 men, 30 women and 35 children, with 268 horses, 61 guns and 352 traps. Nine days out of Flathead Post they were joined by the rival Americans, Jedediah Smith and six others, including James Clyman, William Sublette, and Thomas Eddie. The great number of buffalo in the Lemhi Valley indicated that they were penned in by deep snow in the passes to the south. This was discouraging to Ogden who wanted to get on to beaver country. On March 19, Jedediah Smith and the six Americans moved on toward Snake River. The next day Ogden sent six mounted men to explore the pass between the Lemhi and Birch Creek. The last 12 miles they drove about 600 buffalo ahead of them to break out a road through the snow. But the reconnaissance party then ran into a war party of Blood (Blackfeet) Indians. The men escaped back to camp and Ogden decided that if there were Blackfeet on Birch Creek, the Hudson's Bay men should go some other route, and on March 23 they started out over the same route Jedediah Smith's men had taken. There is indication that they crossed the Lemhi Range by a very steep and difficult trail,

1/Morgan, p. 130

Alexander Ross, Fur Hunters of the Far West, ed. Kenneth Spaulding (Norman: University of Oklahoma Press, 1956), chapters 10, 11, 12, 13.

2/Morgan, p. 399. Authorities differ on which pass Ogden's party took. Former Salmon Forest Supervisor Glenn A. Thompson is of the opinion Ogden entered Lemhi Valley via Bannock Pass. Morgan believed Ogden came in via Lemhi Pass and later used Bannock Pass.

choked with snow, to the Little Lost River. They reached the Snake on April 6. 1/

1827: Peter Skene Ogden left Fort Vancouver on September 1 with the Snake Country Expedition, traveling to the Snake River in southern Idaho by way of the Blue Mountains of Oregon. On this trip Thomas McKay and party went to Salmon River to trap and early snowfall prevented their return as scheduled. Ogden on the Snake River near Blackfoot River, sent Payette and two men in February, 1828, to find McKay. They returned March 1, reporting that McKay was camped on the forks of the Salmon River. "The forks" usually referred to the mouth of the Lemhi. Samuel Tulloch and six Americans encountered McKay's group in the Salmon River area in November, 1827. 2/

1831: Thomas (Broken Hand) Fitzpatrick, Kit Carson and party left Taos, New Mexico in the fall of 1831, traveling north, trapping as they went. They established winter quarters on the Salmon River near the site of Salmon City. Fitzpatrick headed the party on the Salmon River and when winter was over, ordered them to resume trapping enroute to the Snake River. 3/

The "forks of the Salmon" (mouth of the Lemhi) was a busy place during the winter of 1831-1832. Three different groups wintered there. Jim Bridger and M. G. Sublette led a group of Rocky Mountain Fur men, including Robert Newell, in a fall hunt from Bear River to the Salmon to winter with the Flathead and Nez Perce Indians. When they reached the forks of the Salmon,

1/Morgan, pp. 134-139

2/Archie Binns, Peter Skene Ogden: Fur Trader (Portland: Binfords & Mort, Publishers, 1967), pp. 203-215.

3/J. Cecil Alter, Jim Bridger (Normal: University of Oklahoma Press, 1962), pp. 113-119.

Byron Defenbach, Idaho: The Place and its People (3 vols. Chicago, New York: The American Historical Society, Inc., 1933), V. 1, p. 149.

Noel B. Gerson Kit Carson: Folk Hero and Man (Garden City, N. Y.: Doubleday and Company, Inc., 1964), pp. 36-37.

DeWitt C. Peters, Carson--Life and Adventures (Hartford: Dustin, Gilman & Co., 1873), p. 56.

Christopher (Kit) Carson, Kit Carson's Autobiography, ed. Milo M. Quaife (Chicago: The Lakeside Press, 1935), pp. 22-23.

Warren Angus Ferris' group of American Fur Company men were already there, having come over Lemhi Pass in October. 1/ In November Henry Fraeb arrived with Rocky Mountain Fur Company supplies. One of his party was Joe Meek.2/ John Work, successor to Peter Skene Ogden, came across Lemhi Pass into Idaho in December, 1831, with a party of 56 Hudson Bay men. Francois Payette was second in command. In addition there were a number of Indian and half-breed women and children: squaws and children of the Indian hunters and the white traders and trappers. Upon learning that a large party of Americans had encamped at the forks of the Lemhi and Salmon, Work's group camped farther up the Lemhi Valley. 3/ In December, Ferris' group separated from the Rocky Mountain Fur men and camped in Little Salmon River (Pahsimeroi) valley, near several lodges of Flatheads. The Ferris party killed over 100 buffalo there. In February, 1832, Ferris and party left their winter camp on Little Salmon (Pahsimeroi), going up the valley and across the pass into Day's Defile (Little Lost River) and on to the Snake. 4/

1832: In March, 1832, John Work sent four men with one canoe down the Salmon River, to trap to Fort Walla Walla. Their story is told in a later chapter on river travel. The rest of John Work's Hudson's Bay Company men trapped up the Salmon River, through the mountains to the Payette and Weiser Rivers, and back to Fort Walla Walla. W. A. Ferris and two companions returned to the Lemhi River in May, 1832, to persuade Flatheads and Nez Perce camped there to come and trade near Henry's Fork. Again in August, Ferris traveled down the Lemhi River to the Salmon, down the Salmon, and over to the Big Hole. 5/

Captain Benjamin L. E. Bonneville came to Idaho in 1832. He obtained a leave absence from the army and led a trapping expedition of over 100 men into the Rocky Mountains. They were not connected with the American Fur Company or Rocky Mountains. They were not connected with the American Fur Company or Rocky Mountain Fur Company, but comprised an independent group. There is strong indication that Bonneville was on reconnaissance work for the Federal Government. Among

1/Warren Angus Ferris, Life in the Rocky Mountains, ed. Paul C. Phillips (Denver: Old West Publishing Co., 1940) p. 120.

2/J. Cecil Alter, Jim Bridger (Norman: University of Oklahoma Press, 1962), p. 116.

3/John Work, The Journal of John Work, ed. William S. Lewis and Paul C. Phillips (Cleveland: Arthur H. Clark Co., 1923), pp. 114-117.

4/Ferris, pp. 128-130.

5/Ferris, pp. 145-162.

his party were David Adams, Joseph Reddeford Walker, J. M. Cerre, and the clerk Mr. Hodgkiss. Bonneville built a fort on Green River in Wyoming but trappers warned him of deep snow and severe winters in that area so he took their advice and traveled toward the Salmon River, having sent Mathieu and a party of about 20 men to the Snake with the horses that were too weak for the trip to the Salmon. He reached the upper waters of the Salmon (the Lemhi River) on September 19. Here he met friendly Nez Perce who shared their meager food with the party. Bonneville sent Cerre and a few men with the Nez Perce to hunt and trade with them for meat for the winter. Bonneville proceeded down the Lemhi and three to five miles below the forks, near Carmen, Idaho, he started to build winter quarters, September 26. Some authorities believe his camp was on the east side of Salmon River, near the mouth of Carmen Creek. The notes of W. A. Ferris, who visited Bonneville's camp around November 1, 1832, place the camp on the west side of the Salmon River. Samuel Parker traveled down the east side of the Salmon River three years later and mentions stopping at Bonneville's camp. Bonneville built a pen for the horses, and several log cabins. Bonneville and 20 men remained to protect the place and the rest of the party was divided into three brigades and sent off in different directions to hunt. Flathead and Nez Perce Indians camped in the vicinity. W. A. Ferris of the American Fur Company came west from Horse Prairie country and visited Bonneville's camp around November 1, 1832. A group of Rocky Mountain Fur Company men also spent several days in Bonneville's camp, then left to winter on the Pahsimeroi. 1/

The large numbers of people and horses around Bonneville's winter camp soon used up the available horse forage and the game for both Indians and white men. Bonneville sent 50 men, under Joseph R. Walker, south to trap and winter on the Snake River. Ferris accompanied Walker's group, on an Indian trail, possibly along the Salmon to the Pahsimeroi, up this river and down Day's Creek (Little Lost River) and on to Snake River. The Indians left the forks of the Salmon for better pasture. Bonneville cached his valuables, and on November 19 or 20, followed the Indians with 13 of his party. Here historians disagree on which direction he took. Edgeley W. Todd, one editor of Washington Irving's account of Bonneville's travels, sends Bonneville north from Carmen to the North Fork to spend Christmas there before leaving for the Snake. 2/

1/ Ferris, pp. 184-187

2/Washington Irving, The Adventures of Captain Bonneville, U.S.A. In the Rocky Mountains and the Far West, ed. Edgeley W. Todd (Norman: University of Oklahoma Press, 1961), p. 111.

Chittenden, Rees and Brosnan describe his route as up the Lemhi, spending Christmas probably in Swan Basin on Timber Creek, then continuing up over a pass into Little Lost River and on to the Snake. 1/ Glenn Thompson, former Salmon Supervisor, thinks it probable that Bonneville followed the Indian trail from Salmon to the Pahsimeroi, camping with the Nez Perce chief at an Indian campground in the vicinity of McKim Creek. 2/

1833: After finding Mathieu and the horses on the Snake, Bonneville returned in March 1833, to his caches on the Salmon. He brought a party of 16 men, including Robert Newell who had been working with Joe Meek and William Craig, but who had transferred to Bonneville's party. From his caches Bonneville furnished the free traders for a trapping trip to the Malad (now Big Wood) River. Before leaving the Salmon he sent Cerre with a few men to purchase horses from the nearby Indians and left his clerk Hodgkiss with trading goods. After a poor hunt on the Malad, and competition from Milton Sublette and Jean B. Gervais who had with them 20 hunters of the Rocky Mountain Fur Company, Bonneville returned to the Salmon at the appointed time, June 15, and then set out for the Green River Rendezvous. 3/

1835 Reverend Samuel Parker, a Presbyterian missionary came west to establish missions in the Nez Perce country. Leaving Pierre's Hole on August 29, he traveled with a group of Nez Perce Indians. The Nez Perce and Parker came through Lemhi valley, camped near Bonneville's abandoned fort, left the Salmon River to follow the old trail up Tower Creek and across the ridges and valleys, dropping into the North Fork about four miles north of its junction with the Salmon. A mile farther up the North Fork they took a southern Nez Perce Trail up Hughes Creek. This is the junction which "Old Toby" missed when he took Lewis and Clark on up the North Fork over Lost Trail Pass, to travel west on the Northern Nez Perce Trail one hundred miles farther north. The southern trail follows the east-west ridge between the

1/Cornelius J. Brosnan, History of the State of Idaho (New York: Charles Scribner's Sons, 1935), p. 76.

Hiram M. Chittenden, The History of the American Fur Trade of the Far West (2 vols. New York: The Press of the Pioneers, Inc., 1935), pp. 401-403.

John E. Rees, Idaho, Chronology, Nomenclature, Bibliography (Chicago: W. B. Conkey Company, 1918), p. 57.

2/Interview with Glenn Thompson, Caldwell, Idaho, March 10, 1971

3/Washington Irving, The Fur Traders of the Columbia River and the Rocky Mountains, as described by Washington Irving, ed. F.L.O. (New York and London: G.P. Putnam's Sons, The Knickerbocker Press, 1903), pp. 131-132.

Salmon and the Bitterroot drainages. Pine trees along the trail were peeled by Indians for food. The Indians did not kill the trees, but scaled off a part of the inner bark to eat, particularly in the spring when food was scarce. Accurate dating in the Forest Service Laboratory showed the trees had been peeled in 1833—excellent evidence that this trail was used by Indians at that time. The trail can be traced past the headwaters of McConn Creek (a branch of Indian Creek), Marlin Springs, past Blue Nose Mountain and through Horse Creek Pass. Samuel Parker was 56 years old and in poor health when he made this trip, yet he kept up with the Indians and wrote regularly in his journal. He was the first white man to describe this area, and relatively few have traveled it since. The Indian trails remained untraveled by the trappers because trappers followed the water courses where the beaver were, while the Indians followed the ridges where traveling was easier. This southern Nez Perce trail was a logical one for the Nez Perce to take to join the Flathead and Shoshoni for buffalo hunts across the Divide to the east. A peak on the boundary line between the Salmon and Bitterroot National Forests was officially designated in 1965 as Parker Mountain. Reverend Parker reached the Snake River October 1, 1835. It took Lewis and Clark 39 days from Tower Creek to this spot on the Snake River, following the Northern Nez Perce Trail. Samuel Parker and the Nez Perce Indians made it in 16 days by taking a southern Nez Perce trail. 1/

1837: About September 1, Joe Meek, "Cotton" Mansfield and Caleb Wilkins left Fort Hall for Flathead country where Wilkins had a wife. From Godin's Fork (Big Lost) they crossed over to the Salmon River (a favorite route was up Little Lost River and across into Lemhi Valley, probably the route used by Ogden in 1824), struck the Nez Perce trail which led from the Salmon River over to the Beaverhead country. 2/ A probable route for this trail is up Hughes Creek from the North Fork, and down Montana's Hughes Creek to the Bitterroot. This trail was used in later years (1890's) by the Nez Perce.

1838: John Larison and seven other trappers including Joe Meek, left Pierre's Hole for the Salmon River. They stayed with the Nez Perce village at the forks of the Salmon. Joe Meek married a

1/ Ernst Peterson and H. E. Anderson, "Rev. Samuel Parker and the Southern Nez Perce Trail," Montana the Magazine of Western History, XVI, No. 4 (October, 1966), 12-27.

2/ Frances Fuller Victor, The River of the West (Hartford, Conn., and Toledo, Ohio: R. W. Bliss & Co., 1870), pp. 94-95.

daughter of chief Kowesote (Irving's Kowsoter). Joe Meek called her Virginia. They remained together many years, and had seven children. He later took her to Oregon. Robert Newell's wife was a sister of Virginia Meek. 1/

1839: In August, Kit Carson and five others joined a party of men who trapped on the Salmon River. 2/

By 1840 most of the trapping was over and soon the great migration of settlers to Oregon began. Father Pierre Jean DeSmet founded St. Mary's Mission in Bitterroot Valley in 1840. In 1850 he moved the mission and leased the site to Major John Owen who had been a sutler at Cantonment Loring, near Fort Hall, Idaho. During the next few years many of the Fort Owen men traveled through the Salmon area.

Emanuel Martin, also known as "Old Manwell the Spaniard," made a trip to the Salmon River for Major Owen in 1852. 3/

In October, 1854, Major Owen organized an expedition to the Salmon River, to trade with the Indians. Frederick H. Burr was in charge of the expedition. Emanuel Martin was guide and interpreter. Another of Owen's men on this trip was Charles Jackson. They left Fort Owen October 31, and were gone three weeks. They traveled up Nez Perce Fork, over the mountains and down to the Salmon. About ten miles up the Lemhi they found seven lodges. One of the lodges belonged to John Grant, son of Captain Richard Grant. The Fort Owen men traded with the Indians, then moved down to the Salmon River November 14. Learning that these Indians would not be arriving until Christmas, they started for Fort Owen, going up a creek (probably Dahlenega), over the mountain and down a creek to the Big Hole, thence to Ross's Hole, reaching Fort Owen November 22. 4/

Several men spent the winter of 1854-1855 on the Salmon River. Among them were Neil McArthur, Robert Dempsey, Louis Maillet,

1/Victor, p. 256.

2/Quaife, p. 59.

3/George F. Weisel (ed.). Men and Trade on the Northwest Frontier as Shown by the Fort Owen Ledger (Missoula: Montana State University, 1955), p. 38.

4/John Owen, The Letters and Journals of Major John Owen, ed. Seymour Dunbar, with notes by Paul C. Phillips. (2 vols.; New York: Edward Eberstadt, 1927), Vol. 1, pp. 93-95.

Thomas Irvine and Richard Grant. 1/ Some of these men had taken up trading on the emigrant road in southern Idaho and were probably wintering their cattle on the Lemhi.

Mormon Mission: Fort Lemhi 1855-1858

In 1855 Brigham Young, president of the Church of Jesus Christ of Latter Day Saints, sent 27 men to conduct missionary work among the buffalo-hunting Indians. The men were to select a place among the Shoshoni, Bannock or Flathead, found a settlement, teach the Indians civilized ways, convert them to Mormonism and promote peace among the tribes. 2/

The men left Farmington, Utah, May 15, 1855, with provisions for a year, including cattle. Thomas S. Smith was in charge. At Fort Hall they met Neil McArthur who described to the Mormons the valley where he and several companions had spent the winter. The mormons reached the place around June 12, and noted "McArthur's old corral." 3/ They settled here near the present town of Tendoy, on land which today (1973) is part of the Steve Mahaffey ranch. This area was one where the Shoshoni, Bannock and Nez Perce often met in early summer to fish. The Indians were friendly and allowed the men to use the land and to cut timber for houses and corrals, with the understanding that they were not to kill game or fish in excess of their needs. 4/

Though it was late in the season, the men planted a crop and brought water in a ditch from a nearby creek. They started construction of a fort. Fort Lemhi was named for Limhi, a character in the Book of

1/Weisel, p. 166.

2/Bringham D. Madsen, The Bannock of Idaho (Caldwell, Idaho: The Caxton Printers, ltd., 1958), pp. 86-87.

3/John D. Nash, "Salmon River Mission of 1855: a Reappraisal," Idaho Yesterdays, Idaho Historical Society, Vol. 11, No. 1 (Spring, 1967), 22-31.

4/Kate B. Carter, The Salmon River Mission (Utah Printing Company, 1963), p. 7.

Mormon. It was not a military post, but a fortification erected to protect the Mormon people who settle there. A stockade was built by digging trenches around a sixteen rod square. Twelve-foot logs were placed upright in the three-foot trenches, making palisades about nine feet high. Log houses were built inside the fort. Lumber for doors windows and floors was sawed by hand.

Next to the stockade the men built a mud fort the same dimensions as the stockade. The walls were built by making forms approximately four feet wide at the bottom, tapering to two feet at the top and about seven feet high. Mud and straw were tramped into the forms. The mud fort was used as an enclosure for cattle.

Their crops in 1855 and 1856 were eaten down by grasshoppers, and trips were made to Utah for more supplies and seed. Additional missionaries and their families came to Fort Lemhi. Some of the mormons learned to speak some Shoshoni, and preached to the Indians, but had little success in teaching new ways of living to the Indians.

Brigham Young visited Fort Lemhi in May, 1857.

A crop was harvested in 1857, including vegetables and 2500 bushels of wheat.

In February 1858, Indians drove off 250 cattle and 20 horses belonging to the Mormons of Fort Lemhi. In the resulting skirmish, two Mormons were killed and five wounded. Brigham Young sent permission to abandon their mission and on April 1, 1858, all who remained at Fort Lemhi left for Salt Lake. 1/

Other Migrants and Travelers

Around 1861-1862, many people from the south and east tried to get to the new gold fields in Pierce, Elk City and Florence by way of the Salmon River. They were deluded by a map available in Salt Lake City showing a wagon road north into Idaho, up Birch Creek and down

1/ Madsen, pp. 100-101

the Lemhi River, then following the Salmon River downstream, across the North Fork and west along the north-side of the river to Florence. Such a wagon "trace" did exist as far as the abandoned Mormon Fort Lemhi, near present Tendoy, but beyond that, travel became difficult and wagon travel impossible. This problem of travel contributed to the gold discoveries in Montana. Of the gold seekers attempting to reach the Florence diggings, nearly one thousand were caught in the Lemhi Valley in the summer of 1862. 1/ Some went back to the Snake River and around by Walla Walla. Others abandoned their wagons, make pack saddles, and crossed the Continental Divide at Lemhi Pass into present Montana to go by way of Deer Lodge and west to Florence. Some of them found gold enroute, at Grasshopper Gulch, near Bannack, resulting in stampedes to Bannack, Alder Gulch and Virginia City, Montana.

George E. Shoup tells of one party that brought three wagons from Utah, and attempted to continue north of Carmen via the old mountain trail across the heads of the creeks. They had great difficulty with the wagons, using ropes to let them down from some of the ridges. They finally changed their plans, part of the group headed back to Utah with the lightest wagon, the others making pack saddles from the remaining wagons to continue on west. Later a wagon hammer was found near their camp, giving the name to Wagonhammer Creek. 2/ (Wagonhammer was a wrench used to remove wheels from wagons).

John McGarvey was one who came to the Lemhi Valley about this time and stayed to build a fish trap and cabin. He was located near the mouth of the Lemhi River when the Leesburg discovery party came through in 1866.

During the 61 years after Lewis and Clark visited the area of the Salmon National Forest, well over one thousand people of record visited the region, in addition to the Indian residents and the miners who passed through in 1862. Most of these visitors were just traveling through trapping, or camping through the bad winter months. Some of

1/Barzilla W. Clark, Bonneville County in the Making)Idaho Falls, Idaho: Published by Author, 1941), p. 4

2/George Elmo Shoup, History of Lemhi County (Boise. Idaho: Idaho State Library, 1969, p. 4

the Mormon Missionaries were here for nearly three years before abandoning Fort Lemhi. In 1866, the land was much as it had been when Lewis and Clark came in 1805. Discovery of gold in 1866 brought great changes. Large numbers of people came, and many stayed to start businesses and ranches which have continued to the present.

E. MINING

Gold Discovery, Mines and Mine Settlements

In the summer of 1866 a party of five men outfitted in Montana with horses, pack animals and provisions, came through the Big Hole, over the Divide, down the North Fork and up the Salmon River, prospecting as they traveled. About July 1, they reached the site of present day Salmon, crossed the river and continued south to and up Williams Creek, over the ridge and down Phelan Creek. July 16 they made their strike on Napias Creek. Napias is an Indian word meaning gold. Members of the discovery party were: Frank B. Sharkey, Elijah Mulkey, Joseph Rapp, Ward Girton and William Smith. A stampede followed to this new placer gold field. The place was named Leesburg after General Robert E. Lee. Most of the prospectors were from the South, having come west to escape the devastation of the Civil War. There were enough northerners to establish a rival camp nearby named Grantsville. Other towns which sprang up in the basin were Summit City and Smithville, but the largest was Leesburg. 1867 and 1868 were the years of the highest population and greatest production in the Leesburg basin. Population of the basin has been estimated at 3000 to 7000 people. There was no official census until 1870, and by that time many prospectors had moved on to new fields such as Loon Creek and Yellowjacket. The official census of 1870 found only 180 people left in the Leesburg area. Approximately one-fourth of these were Chinese.

A total production of gold from Leesburg basin has been estimated at five million dollars upwards to sixteen million or more. 1/ There was no railroad in the west at that time. Supplies were brought in to Leesburg by pack string from Fort Benton, Montana, the head of navigation on the Missouri, a distance of about 375 miles; or from Walla Walla via the southern Nez Perce Trail. The town of Salmon started as a farming service center for Leesburg.

Other mining discoveries in the area soon followed Leesburg. In 1869 gold was found at Oro Grande on Loon Creek. Claim locators on Loon Creek were mainly from Lemhi County and Boise Basin. The Idaho Statesman in September, 1869, carried a report of the rush to Loon Creek: "The new Salmon river diggings are creating a great excitement in Boise Country. From several parties down from Idaho City, we learn that a real stampede is setting in, that horses sell readily, and almost everybody is going. One packer started last Saturday with a seventy mule load of merchandise."

1/0. E. Kirkpatrick, History of the Leesburg Pioneers (Salt Lake City: Pyramid Press, 1934), p. 24. (\$16,000,000. estimate).

Joseph B. Umpleby, Geology and Ore Deposits of Lemhi County, Idaho (Washington, D. C.: Government Printing Office, 1913). (\$8,000,000. estimate).

Prospectors for gold fanned out over the mountains and many placer camps became the sites of later discoveries of gold quartz, which led to mills and "hard-rock" mining, and the discovery of other valuable ores.

Yellowjacket and Silver Creek placers were found in 1869; their quartz mines were developed later. In 1895 two lode properties were being mined in the Yellowjacket district: The Columbia Consolidated Gold Mining Company and the Yellow Jacket Mining Company. Each of the two companies started mills early in 1895. The Yellow Jacket Company's mill was 20-stamp. 1/ At one time there was a 60-stamp mill at Yellow Jacket. The cables and materials for the mill were packed in from Challis by Hank Smith. It took 26 mules to carry the cable. In 1923 the mine was reactivated. A large hotel was built then, with all materials brought in with horse and team. 2/

John Ramey acquired the Silver Creek placers and in later years his son Lee was manager of the Rabbit Foot Mine on Silver Creek. At one time there were over 30 buildings at this camp. 3/

The quartz mines of Gibbonsville were discovered in 1877 by George D. Anderson, who built an arrastra there. The settlement was called Andersonville at first, but Mrs. George Anderson's father had been a Civil War prisoner in Andersonville prison, so because of her unpleasant memories the name was changed to honor General Gibbon who fought Chief Joseph's Nez Perce in nearby Big Hole, Montana, August 9, 1877. It is not known that General Gibbon ever saw the site of Gibbonsville. Mines there were "Twin Brother," "Hughes and Hunt," "Keystone," and "Huron." In 1895 the American Development and Mining Company (A. D. & M.) built a 30-stamp mill with accessory cyanide and Chlorination plants. 4/ At one time an estimated 500 men were working under ground in the Gibbonsville area. Most of these miners came from Butte. There was a four-teacher school, and in 1896 Gibbonsville claimed the largest population of any settlement in Lemhi County, though a typhoid epidemic swept through about 1895. The A. D. & M. went into receivership in 1898 after a serious accident in which five men were killed. Many of the people left at this time but some stayed to placer mine and Gibbonsville has never become a ghost town. During the depression in

1/George H. Eldridge, "A Geological Reconnaissance Across Idaho," Department of the Interior--U. S. Geological Survey, Extract From The Sixteenth Annual Report of the Director, 1894-95, Part II (Washington: Government Printing Office, 1895), p. 49.

2/Interview with William and Adele Wilson of Hall, Montana, June 12, 1969.

3/Interview with Fred and Thelma Ramey, Salmon, Idaho, April 30, 1969.

4/Lena Dellen Heidt, "Gay Times in Gibbonsville," Old West (Spring, 1968), 26-28.

the 1930's the number of residents increased again as people returned to placering for a livelihood. An elementary school was maintained until 1965. Gibbonsville school children are now taken by bus to Salmon. Today the Gibbonsville area is becoming popular for summer home sites.

Near Shoup, gold quartz discoveries were made in 1882 when Pat O'Hara discovered the Grunter mine; the Kentuck was found by Sam James. Some later mines in the area were the Big Lead, Humming Bird, Lost Miner, True Fissure, Spring Lode, Clipper Bullion and Monolith. There was no road down the river and supplies were brought in by packstring or floated down the river from Salmon on barges or scows. Stamp mills, and heavy machinery were floated down. The boats could not return upstream, so the boats were taken apart and the material used in construction in Shoup and at the mines. The mills used water power. The Grunter had an overshot wooden wheel. The water was out of Boulder Creek and flumed around the rock bluffs. The flume rested on iron pins in the bluff, put in with hand drilling.

Shoup was mostly hard-rock mining, and placering only on small bars along the river, and there was very little mining below Shoup except on Pine Creek. Shoup had an elementary school, a store, and several saloons. There were fruit trees by the late 1890's. William Wallace Slavin and William E. Taylor came to Shoup in 1886. Taylor had been a mechanic in the California gold fields. He ran the 10-stamp mill for the Kentuck mine; later he ran mills in Gibbonsville and Ulysses. He also built most of the coffins used in the Shoup cemetery, not because he was a carpenter but because there was no one else to do it. 1/

Slavin packed for the Shoup mines in partnership with Charles Spinney. There was no stage coach or wagon road; the gold brick had to be taken out by pack string. It was a two-day trip from Shoup to Salmon; the first night's camp from the Grunter was usually on the North Fork. From there they went up Trail Creek, across the ridges to Tower Creek, down along the river to Carmen, then through the hills to Salmon. When Slavin and Spinney terminated their partnership, Slavin kept a ranch on Carmen Creek, which is still in the Slavin family; and Spinney took the pack string. Later Dodge was a partner packing with Spinney. 2/

In 1895 development began on Indian Creek with the sale of the Kitty Burton and Ulysses claims. A lively community developed around one of the biggest quartz-mining enterprises in Lemhi County. About 1901, a rough road up Indian Creek was built by the county and by subscription, to

1/ Interview with William (Billy) Taylor, Jr., Salmon, Idaho, October 23, 1969.

2/ Interview with Ted and Leitha Slavin, Salmon, Idaho, February 20, 1969. Interview with Otis and Virginia Slavin, Boise, Idaho, March 22, 1970.

carry equipment from the river to the mines. The 30-stamp mill burned around 1904. It was rebuilt as a 15-stamp mill. A tram was used to get the ore down to the mill from the mine. It was close to a mile long, with 22 buckets. The cable traveled continuously. The loaded buckets coming down kept it running. 1/

Other Mining: Copper, Lead, Cobalt, etc.

Silver and lead veins were discovered in 1879 at Nicholia in the "Texas District," and smelters were soon operating. When the Utah and Northern narrow gauge railroad reached Camas Station in 1879, it became the largest shipping point on the line because of shipments from Viola Mine employed 200 men mining, smelting, freighting and preparing fuel for the smelter. The daily output was 100 tons of ore. 2/ The Viola was one of the larger lead producers in the United States at that time. In the 1890's the enterprise was abandoned when the ore was cut off by a fault. Other mines at Nicholia were Shear Brothers, Kaufman, and Lemhi Lead. Discoveries were made in the area of Gilmore but development there came later.

The town of Gilmore was named for Jack Gilmer of the Gilmer and Salisbury Stage Company. The change in spelling from Gilmer to Gilmore apparently happened in the post office department in Washington when the Post Office was established in Gilmore in 1903.

Ralph Nichol acquired lead and silver prospects at Gilmore about 1883 when he was manager of the Viola mine at Nicholia. He called the mine The Latest Out. Other claims came under the ownership of the Gilmore Mining Company, which later became the Deleware Idaho Company. Ore was shipped as early as 1903 by wagon, over 70 miles to Dubois. The large ore shipments encouraged the building of the Gilmore and Pittsburg railroad by the Northern Pacific from Armstead, Montana, to Gilmore and to Salmon in 1910. The town of Gilmore once had seven saloons, three stores, two hotels, two dance halls, two trucking companies, a two-room school, and a bank. Around the time of the first World War there was a two-bed, two-room hospital in Gilmore.3/The town is now a ghost town.

The 1907 report of Idaho Mine Inspector Robert N. Bell gives the following information:

Gilmore mine: the most important mineral producer in this county this year, shipped 1500 tons of lead and silver ore. J.E. Walker, Supt.

1/Billy Taylor

2/The Idaho Recorder, Salmon, Idaho, May 5, 1888.

3/Carl E. Hayden, "Gilmore Was Real Town Many Long Years Ago," The Salt Lake Tribune, January 26, 1947, p. 5.

Elizabeth M. Reed, "The Gilmore Story," Lemhi County Museum, Salmon, Idaho. Interview with Fay Brunk, Salmon, Idaho, April 30, 1969.

Oriole mine in the same vicinity employs 10 men.

Lemhi Union: recently equipped with a 60 horsepower hoist. Two cars shipped this summer with big values in gold and silver.

Bruce-Stone: near Lemhi Union. A copper property, with magnetic oxide of iron, together with gold and silver values.

Viola and Shear group: idle at present.

Lemhi Lead: 8 miles south east of Viola, 10 men developing lead carbonate ore associated with iron oxide.

Weimer Copper: 4 miles southeast of Lemhi Lead, in Lemhi and Fremont counties, employs 30 to 40 men until recent copper slump slowed them down.

Leadville mine: three miles northeast of the Junction post office., fine ore showing at present; 5 men employed.

Copper Queen mine on Agency Creek now being actively developed by a Duluth, Minnesota company. Has a small concentrating mill and has shipped several cars of rich concentrates this season, S.S. Mitchell, supt.

Virginia Mining Company: a large group of claims on Sandy Creek; have several hundred feet of tunnel showing some gold bearing quartz and a mixture of iron, lead and copper sulphide minerals.

Climax mine: north of Sandy Creek, now employs 15 men; has a 10 stamp mill. F. C. Miller, manager; Richard Gies of Great Falls is owner. Wages: miners, \$3.50 per day, laborers, \$3.00 per day, eight-hour shift.

U.P. Mine: near a small glacier lake at the head of Moore Creek, only seven miles from, and in sight of, Salmon City. Recently purchased by Hon. Frank R. Gooding. R. W. McBride, Manager.... Mill being increased to 15-stamp...

Kitty Burton Co.: operating the Kitty Burton and Ulysses mines on Indian Creek, has been producing steadily for several years. Its 30 stamp mill burned in 1905, now operating a 15 stamp mill, J. Urn, manager. Crew: 35-45 men, 8 hour shift, excepting engineers, who work 12 hours. Water power is used during spring flood, with steam power and cord wood fuel the rest of the year. Wood is \$4.50 a cord; stull timbers at the mine cost 4c per running foot and lagging 15c each. Lumber: \$18. per thousand, and freight from the railway, \$40. per ton.

Mineral Hill District: The old Kentuck and Grunter practically idle the past year. Clipper Bullion mine across the river operated a 5 stamp mill. Owner, E. S. Suydam. Big Lead Gold Mining Company's group of mines at Pine Creek sold to a Denver company and is operating with a force of 14 men, and a 10 stamp mill.

Gibbonsville. The old A.D.&M Mines were sold to eastern capitalists who are working a small crew.

Rabbit's Foot: Stamp mill run by steam power, sampling 30 tons a day. Manager, S. P. Burr; 30 men employed.

Singiser mine: employing 40 men. 50 ton daily capacity milling plant, consisting of 6 Hendy quadruple discharge stamps in separate mortars, and 2 Bryan mills for fine grinding.

Yellow Jacket District: Black Eagle group and the Red Jacket group have 10 to 20 men employed in developmental work.

Blackbird District: Contain copper sulphide ore, associated values in cobalt and nickel as well as important gold and silver values. Several mines have been developed and large group of claims patented, but the properties have been practically idle for several years waiting better transportation facilities. The nickel and cobalt have attracted heavy metallurgical interest and the Rose brothers' group of claims is now being developed with a force of 10 men.

Leesburg District: Now operating are the old Garretson mine on Arnett creek, under Newton Hibbs, and Gold Ridge mine, recently equipped with a 10 stamp mill and cyanide plant.

Moose Creek: dredge operating under Mullen on the old McNutt diggings.

Pollard Coal mine: near Salmon, recently purchased by H. G. King, produces lignite, selling locally at \$6. per ton.

Queen of the Hills: seven miles northwest of Salmon, lost their compressor plant during the year. Work has been resumed and mine now employs four men.

The mines in this county are now employing fully 300 men, mostly in developmental work. 1/

Copper mines developed later than gold mines. There were few shipments from Lemhi County before 1911 of ore mined primarily for copper, though copper was present in some gold and lead-silver ores shipped earlier. From 1911 to 1922 the three highest copper producers in Lemhi county were Harmony mine on Withington Creek, Copper Queen on Agency Creek, and Pope Shenon on Sal Mountain. Other copper producers were Patton, Tormey, Ruby, Royal Gold, Gold Point, Castle Rock, Blue Bird, Ranger. 2/ At the Harmony mine little development work was done before 1916. It flourished in the 1920's and in 1923 it boasted the largest building in Lemhi County, 175 feet long, 56 feet wide, and 40 feet high, built to house the great concentrator.

1/The Lemhi Herald, Salmon, Idaho, February 21, 1907 and November 28, 1907.

2/Clyde P. Ross, The Copper Deposits Near Salmon, Idaho, U. S. Geological Survey Bulletin No. 774 (Washington, D. C.: U. S. Government Printing Office, 1925), p. 31

The Copper Queen dates from 1883. In 1899 it was owned by T.E.G. Lynch of Digby, Nova Scotia, Canada, and included five claims, two patented. The mine was first operated in 1905 and has been under lease by several different groups since then. The mine has been flooded since 1949 and the mill has fallen into ruins. It produced copper, silver and gold. 1/

In the early 1890's Lige Stroud and James Fenning located gold claims in the Pope-Shenon area and later Thomas Pope, Red McDonald, Thomas Andrews and Richard Clark located two copper claims. A two-third interest was acquired later by Philip Shenon. 2/ By the year 1956 the Pope Shenon had produced over 2,600,000 pounds of copper. 3/

At Blackbird, gold claims were located about 1888, however production for cobalt didn't get going until the period from 1902-1908. James G. Sims and J. P. Clough had later claims for copper. There was interest in the area during World War I because of the cobalt and nickel prospects there.

The Calera Mining Company, a division of Howe Sound Company, acquired interest in the Blackbird property in 1943 and conducted surface and underground exploration. By 1949 sufficient ore had been blocked out by their exploration program to justify a mining operation. A mill was constructed and mining operations were started in that year. Mining continued until 1959 when the Government ceased purchase of cobalt at a supported price. Calera could not then compete with foreign competition. They sold their interest in the properties to Machinery Center, Inc. of Salt Lake City, Utah, which operated the property on a limited scale for copper only until the fall of 1967. When they discontinued operations the Idaho Mining Company a subsidiary of Hanna Mining Company acquired Machinery Center's interest in the property; since then they have been conducting an exploration program and are contemplating resuming mining of the remaining ore bodies.

The town of Cobalt on Panther Creek, established in conjunction with the cobalt operations in the Blackbird mine, grew to over 1000 people, with a four-room school during the 1950's. The mine at one time supplied one-fourth of the nation's cobalt needs and employed over 400 men. It was

1/William N. Sharp and Wayne S. Cavender, *Geology and Thorium-Bearing Deposits of the Lemhi Pass Area, Lemhi County, Idaho, and Beaverhead County, Montana*, U. S. Geological Survey Bulletin No. 1126 (Washington, D. C.: U.S. Government Printing Office, 1962), p. 51

2/Clyde P. Ross, *The Copper Deposits Near Salmon, Idaho*, pp. 34-35.

3/Alfred L. Anderson, *Geology and Mineral Resources of the Salmon Quadrangle, Lemhi County, Idaho*, p. 79.

the only cobalt-producing mine in the United States and the largest copper-producing mine in Idaho. 1/ The Howe Sound Company and the Forest Service worked cooperatively to insure that there would be no pollution of water from the settling ponds or from the townsite. In spite of the efforts made, some residues or wastes from the milling process did create a serious pollution problem. In one instance the pollution was aggravated when a truckload of acid from the mill tipped over below the mine, spilling into Blackbird Creek and flowing into Panther Creek. This acid solution virtually eliminated the anadromous and native fishing in Panther Creek below the mouth of Blackbird Creek.

Tungsten mines, including the Ima mine, near Patterson, gave Lemhi County the distinction during World War II of being one of the leading producers of tungsten in the United States.

Lemhi County has deposits of cobalt ore, monazite, thorite and other comparatively rare metals of present commercial value. An unusual mining claim is that of A. B. Cutler on Mackinaw Creek. It is a huge trunk of a petrified Sequoia tree buried in volcanic debris. The Salmon National Forest contains quantities of petrified trees, but this one is of unusual size, the stump measuring 62 feet in circumference and standing about 12 feet high. The wood has been replaced by opal and agate of commercial value. Mr. Cutler has given it the name "Jureano Wood." It is estimated to be 25 million years old.

In 1970, Seaforth Mining Company announced plans to mine flourspar on patented claims at Meyers Cove, near Camas Creek. Ore from the underground mine would be reduced at the site and shipped to Mackay via Challis.

Prospectors have covered a large portion of the Salmon Forest thoroughly, and there are few creeks that have not had a mineral operation of some kind. Charles R. Hubbard, in 1955, mapped 54 different mineral resources of the state of Idaho, and 23 of these are found in the vicinity of the Salmon National Forest. 2/

The depression of the 1930's increased the production of gold. It was one commodity whose price remained stable. People turned to panning streams and rivers to earn enough for food. In 1933, Pelton's grocery store in Salmon installed a new set of gold scales as a convenience to the prospectors and miners who brought in gold to trade for supplies.

See appendix for description of various mining methods used in the Salmon area.

1/Information from Salmon National Forest Map, 1956.

2/Ross and Forrester, Figure 2.

F. CHINESE

Chinese followed the gold rush to the Leesburg country. The Chinese were able and dependable miners. They sometimes worked for white miners, but more often worked over the ground when the white men were through. They were hard workers, lived frugally, and sometimes gleaned a good harvest of gold from the worked-over claims. The "hurry" of the white miners usually left plenty of gold for the careful chinamen. The placer ground along Bohannon Creek was worked by Chinese as far back as the early seventies. 1/ Some Chinese became business men in Leesburg and in Salmon, running restaurants, laundries, raising produce, and selling Oriental merchandise. Others were hired as domestic help. The official census of 1870 showed 42 Chinese in Leesburg and 70 in Salmon. At that time the population of Idaho was listed as 14,999, and of that number, 4,247 were Chinese. 2/

Salmon had its own Chinatown. It occupied the area on both sides of Main street near the Salmon River bridge. Later Chinatown was confined to the North side of Main Street, near the river. The Chinese kept mostly to themselves, but were usually quiet, orderly and friendly. Wah Sing, one of the established merchants, owned his own pack string, operated by Chinese under one known as "Florence." Another Chinese, known as "Boise Sam," operated a wagon freight outfit. He was a good horse handler and an expert roper. 3/ Other Chinese names in Salmon included Fong Kee, Yan Kee, Wing Lee, Ah Yen, and Sing Lee. 4/

Bu Kee and Mary Kee were two well remembered Chinese in Leesburg. 5/

The name "small boy" was often used for a Chinaman, undoubtedly because of the small stature of the Chinese.

The Chinese cabins in Salmon were built low to the ground, and on occasion, boys used to climb up and put cans over their chimneys. There was some racial discrimination. Some help-wanted ads mentioned "no Chinese wanted;" but others hired Chinese readily. 6/

1/Alfred L. Anderson, Geology and Mineral Resources of the Baker Quadrangle, Lemhi County, Idaho, Idaho Bureau of Mines and Geology, Pamphlet No. 112 (Moscow: University of Idaho, January, 1957), p. 65.

2/Sister M. Alfreda Elsensohn, Idaho Chinese Lore (Caldwell, Idaho: Caxton Printers, Ltd., 1970), p. 15.

3/Shoup, p. 10.

4/Allen Merritt, "Salmon Main Street Changes with Time," "The Recorder Herald, Diamond Jubilee Edition, 1961, Section Three, P. 4.

5/Fred Ramey.

6/Interview with Marjorie Sims, Salmon, Idaho, October 23, 1969.

A local item in the newspaper in 1887 reported, "Boys made two raids on Chinatown last week. 1/

The Chinese did not always get along among themselves. They belonged to various tongs or associations which sometimes feuded with each other.

It was important to a Chinese person to be buried in China. If he was unable to return to China before he died, usually his bones were sent back by others. Various Chinamen were selected periodically to check the different areas in the United States where Chinese had lived and to retrieve the bones of all those who had died during that time. In 1887 the Idaho Recorder reported that the skeletons of two Chinamen were shipped on Thursday's coach, accompanied by four "Celestials," enroute for China. It had cost the Chinese companies to whom these two belonged, in the neighborhood of \$1500. to gather their bones and have them shipped. 2/

In February of 1888 the Recorder reported on the local Chinese New Year celebration. Firecrackers and bombs were fired off every few minutes, keeping up a continuous noise for about 48 hours. It was fun for the "small boy" and delighted the Indians. 3/

There were still Chinese living in Salmon as late as the 1940's.

1/The Idaho Recorder, August 13, 1887.

2/The Idaho Recorder, September 3, 1887.

3/The Idaho Recorder, February 2, 1888.

G. CHARCOAL KILNS

The Charcoal Kilns in the southern part of Lemhi County were part of the Salmon National Forest from 1938 to 1848, and though they are now in the Targhee Forest, their history is part of the history of the Salmon National Forest area.

The charcoal kilns were used from about 1880 to 1889 to produce charcoal for the smelters of the lead mines at Nicholia. C. H. McDonald, Salmon Forest Ranger on the Medicine Lodge District from 1941-1944, located the foundations of at least 42 kilns and from old timers in the area determined their period of use and average capacity, and calculated that about one and one-half billion feet of timber had been cut and used. At the time McDonald was district ranger there were four brick kilns left, which he tried to preserve by fencing and keeping the farmers from hauling off the bricks for building in the valley. Charcoal six to eight feet deep remained in two of the kilns. Almost the entire stand of old growth timber had been cut for charcoal. McDonald was surprised to find such a good stand of timber in its place, sixty years later. 1/

Val Gibbs, a recent Targhee Forest Ranger for that district reported that 16 charcoal kilns were installed on the west side of the valley, and there were also 40 open pit type kilns scattered in the canyons and creeks of Italian, Irish, Scott, Eidleman and Willow on the east side of Birch Creek, and Bell, Mammoth, Coal Kiln, Davis and Meadow on the west side. Most of the work was done by Chinese, Italians and Irish people.

The kilns, constructed of bricks made locally, were shaped like beehives, about twenty feet in diameter and about twenty feet high. They were loaded through a door at ground level, and also through an opening in the top. A kiln would hold 40 to 50 cords of wood. The fire was allowed air for a short time only, so that the wood would not be entirely burned. The complete process often took seven days, with some time needed for cooling. Douglas fir timber was preferred, though mountain mahogany was sometimes used.

The brick kilns were built under the direction of the Viola and Nicholia mining companies. Hundreds of woodsmen were employed in cutting and hauling wood for the kilns. An estimated 3,000 people lived in the area and were engaged in making charcoal. Nearly 2,000 mules, oxen and horses were used in handling the timber and hauling the charcoal, ore and supplies.

Charcoal production ceased when the smelters shut down. 2/

1/Letter from C. H. McDonald, Stevensville, Montana, September 14, 1970.

2/"Historic Kilns Draw Interest," The Recorder-Herald, November 7, 1968.

H. SETTLEMENT AND DEVELOPMENT

Salmon Area, Junction Area, and Other Settlements

Following the miners came farmers, stockmen and businessmen. The town of Salmon began in 1866 at the foot of Leesburg hill, west of the Salmon River, where prospectors crossed the river enroute to the new gold fields. A ferry was started and later a toll pack-bridge was built by Chris Darnutzer and Charles Chamberlain. After this the town spread to both sides of the river: a collection of tents, log cabins and 'dobe buildings, some with dirt roofs. Mr. Van Dreft had a ranch where the business section of Salmon now is. George L. Shoup, later governor and then senator for Idaho, started a store in 1866. The first school, started in 1867 with Fannie Price as teacher, had nine pupils enrolled.

Some of the early business establishments in Salmon were: 1/

George L. Shoup	Store
Michael Spahn	Brewery
B. F. Price	Restaurant
Peter Amonson & M.M. McPherson	Shoemakers
Wilson Ellis	Butcher Shop
Robert Dunlap	Goldsmith and Watchmaker
Lew and John Snook	Livery Stable
Fred Phillips & David McNutt	Store, Pack String
John Wheeler	Freighter
Chester Willis	Saloon
Haines Andrews	Hotel, later owned by Elijah Mulkey, then by E. S. Edwards
Wm. Orcot	Saloon
George Wentz & Jacob Feinsteur	Stable

In 1868, George Barber and R. H. Johns built a wagon bridge across the Salmon River, and sold it to Jesse McCaleb who ran it as a toll bridge. John Ramey, grandfather of Fred and John Ramey of Salmon, was sent in to collect taxes in 1867. He became the first elected sheriff of Lemhi County in 1869. In the first county election, held June 14, 1869, the following election districts were named: Salmon City; North Fork; Sierra (on Moose Creek); and Smithville, Arnett and Leesburg in Napias Creek basin. Lemhi County has been created in January of 1869, from the southeastern part of Idaho County..

John Ramey took the first census of Lemhi County in 1870. By that time the majority of miners in the Leesburg basin had moved on to newer

1/Shoup, pp. 10-11

fields and the total for Lemhi County was 988 people, distributed as follows: 1/

<u>Area</u>	<u>Total</u>	<u>Males</u>	<u>Females</u>	<u>Comments</u>
Leesburg	180	172	8	42 were Chinese, 1 Spaniard from Peru 1 Negro
Salmon City and Vicinity	187	163	24	70 Chinese
Salmon River Mining Dist.	76	67	9	1 Chinese
Fort Lemhi	37	25	12	
Loon Creek	479	452	27	7 Chinese, 4 Mexican
Stanley Basin Dist.	<u>29</u>	<u>29</u>	<u>0</u>	
Totals	988	908	80	(120 Chinese)

Later census figures give the following population to Lemhi County:

1880: 2,230	1930: 4,643
1890: 1,915	1940: 6,521
1900: 3,346	1950: 6,278
1910: 4,786	1960: 5,816
1920: 5,164	1970: 5,566

Junction was named from its location at the junction of two routes where the road from Montana across Bannock Pass met the Birch Creek road to Salmon, and the town of Junction served the wagon freighters and stage coaches as well as being a center for ranches and early mines in the vicinity. A. M. Stephenson and family came to Junction in 1867. Some other early settlers in the Junction area were the George, Jacob, John and Joseph Yearian families, John and Elijah Stroud, Edwin R. Hawley, Gray and Andrew Purcell, Susan Clark, James and Neil McDevitt, William Peterson, Joseph B. Pattee, J. P. Clough, Z. B. Yearian, George W. Cottom and Michael Maier. Most of these were stockmen, as there was little farming in the upper Lemhi. Z. B. Yearian had a dairy herd of Holsteins.

The importance of Junction declined somewhat after the Utah-Northern railroad was built into Montana in 1879-80, and a wagon road was established between Salmon and Red Rock, Montana, going up Agency Creek over Lemhi Pass. When the Gilmore and Pittsburg Railroad was built in 1910, it missed Junction by two miles, the new town of Leadore was established, and old Junction diminished and disappeared.

Communities other than mining towns grew up primarily as agricultural, supply, and school centers, such as the present day Salmon, Leadore, Lemhi, Tendoy, Baker, Carmen, North Fork and Ellis. Such centers of

1/1870 Census, Idaho Historical Society, Boise, Idaho.

earlier days include Forney, Sunfield, Yearianville. There have been at least 55 post offices in Lemhi County through the years. 1/ By 1908 there were 25 school districts in the county. 2/

Some of the early settlers in rural areas include: 3/

Major Wimpy	Wimpy Creek
Bohannon	Bohannon Creek
Ben Carman	Sawmill on Carman Creek (now Carmen Creek)
B. F. Sharkey	(one of Leesburg discovery party) Pattee Creek
Elijah Mulkey	(of Leesburg discovery party) Mulkey Creek
Anthony Hornback	near Carmen bridge
Harry Lewis	Geertson Creek, later 4th of July Creek
Lars Geertson	Geertson Creek
James L. Kirtley	Kirtley Creek
John Rouse	Kirtley Creek
Wm. Baker	Baker
L. P. Withington	Withington Creek
John and Sandy Barrack	Barracks Lane
George Thomas	North Fork
James Neicwander	North Fork
John Holbrook	near Salmon

Others near Salmon include:
Tom McGarvey, Michael Boyle, Lee, John Morgan,
Joshua Brown, James Beattie

As late as 1936 Leesburg was reported to have about 40 inhabitants, and a small boarding house that could accomodate five or six people for \$1.50 per day and up. At that time Gibbonsville had one rooming house for about ten people and around 100 population. At Forney in 1936 one ranch took in lodgers and served meals. It could accomodate ten persons. Forney was an outfitting point for pack trips into the Big Horn Crags. 4/

Agriculture

The first grazing use by stock in the Salmon National Forest vicinity was by the horses of the Indians. At times it was heavy and concentrated in the places where they camped. At other times it was negligible. Cameahwait's Shoshoni were reputed to have over 700 horses in 1805; Nez Perce and Flathead also came through on horseback.

There was intermittent grazing by the trappers' horses after 1805. They often followed Indian trails and at times they had to move their camps

1/Interview with David G. Ainsworth, Salmon, Idaho, February 25, 1970.

2/Elizabeth Reed, "First School Established Here in Log Cabin," The Recorder-Herald, Salmon, Idaho, Diamond Anniversary Issue, 1961, p.4.

3/Shoup, pp. 9-15.

4/F. W. Godden, December 7, 1936, letter to Mrs. Verna Colton, Mackay, Idaho.

or seek other routes because of over grazing by Indian horses or those of previous trappers. Captain Bonneville had to move his camp from Carmen in November, 1832, not only because game grew scarce, but because the great numbers of Indian horses and his own had eaten down the forage.

With gold discovery in 1866 came continuous range use. The thousands of people in the Leesburg basin during those first two years required horses for transportation. Herdsmen kept the large horse herds on nearby ranges. Some milk cows were brought in and foraged nearby. As the town of Salmon grew, the nearby ranges supplied food for the horses and milk cows and then for range cattle.

Many of the early cattle in the Lemhi and Salmon River valleys came from Montana where herds were built up from the practice of trading with the wagon trains traveling the Oregon Trail. Men from Montana such as John Grant, John Jacobs, Caleb E. Ervine, possibly Fred Burr, Neil McArthur and others made trips south each summer to the Oregon Trail to trade horses to the emigrants for their tired, broken down cattle, oxen and horses, which they drove to lush pastures in the Bitterroot and Deer Lodge valleys for conditioning. ^{1/} This nearby source made cattle easily available to the people of the Salmon River area. Other cattle came from Utah, Southwestern Idaho, and Oregon. Some had come originally from California and Texas and were old Spanish Longhorns. Shorthorn cattle eventually predominated, with some Angus, and the longhorn strain diminished. Later, Herefords were introduced. The valleys of the Lemhi and Salmon rivers proved to be very favorable for stock growing.

The cattle would be driven to the mining camps as needed for slaughter. Small drives were made in the summer, and toward fall the drives would be larger to provide for the winter needs. Smoked or "jerked" meat was in common use. A cattle drive through the town of Salmon and across the river could always be counted on for a little excitement as the cattle often strayed through yards and gardens or clotheslines full of newly hung washing. Most of the rural settlers were stockmen. Lars Geertson brought in cattle from Utah. It was reported that in the late 1870's his cattle ranged from Salmon to Nicholia. He also had extensive gardens and furnished Salmon with vegetables, fruits and butter. John Snook has one of the earliest brands in Idaho that has been in continuous use. The Barrack brothers had large herds ranging from Kirtley to Wimpy Creeks. E. P. Rippey near Baker imported shorthorn cattle and some fast horses. During the depression of the 1870's, George L. Shoup accepted cattle in trade and soon had a large herd just from trade and natural increase. Shoup also brought in cattle from Utah. In 1876 he shipped 800 head of mature steers to Chicago, trailing them from his range on Lost River to the Union Pacific Railroad at Green River, Wyoming. The top price was 4¢ a pound, down to 2½¢. ^{2/}

^{1/}Weisel, pp. 39-41.

^{2/}Shoup, p. 18.

In 1880 another shipment was made, this time from Camas Station on the Utah-Northern railroad, by cattlemen Shoup, Morse, Morrow, Spahn, Brooks and others from upper Lemhi. The combined herd numbered about 1100 four to eight year old steers. 1/ In 1882 several thousand cattle were delivered to contract buyers.

All these years the cattle ranged widely the year round with little fencing and no stored feed. The only hay produced was a little for the milk cows and saddle horses. The late 1880's brought a change. Increasing numbers of cattle, from importation and natural increase, had caught up with the existing supply of forage. Ranges were becoming depleted. Then came a severe winter when the temperature was reported as low as 60^o below zero. Hungry stock froze to death. A dry spring and a season of poor grass followed, then another fierce winter. Stockmen in the Lemhi and Salmon River valleys, like those throughout the Rocky Mountain west, had no way to save their cattle. Losses were overwhelming. By 1890 the cattlemen realized they could no longer range their cattle the year around without the use of stored feed. The ranchers began to acquire more land, build fences and grow hay for winter feeding, using the high mountain forage for summer grazing.

Everyone was dependent on horses and pack animals in the early days, whether miner, stockman, or businessman. There were innumerable pack strings, freighting outfits, stock horses and saddle horses. Many fine horses were imported such as a carload of well-bred mares brought in from Missouri by Lars Geertson in 1875, along with the stallion Robert Lee. An 1890 report of the Lemhi County assessor gives the following horse statistics: 4 thoroughbred stallions, 1000 grade horses, and 2390 head of range or cayuse horses. 2/

Like the cattle in the early days, the extra horses ranged at will, and the natural increase was great. Soon ranchers were exporting horses to central and southern states for work and saddle horses. Fred Chase tells about Snook, Carpenter, and others buying horses from the Indians, and catching and branding feral horses, then trailing as many as 1,000 head at a time to Red Rock, Montana for shipment on the train. 3/

Sheep raising came later than the cattle. After the great losses of cattle in the late 1880's, some cattlemen turned to raising sheep. With little control of grazing the depletion of the range grew more rapid, and there was the usual contention between cattlemen and sheepmen.

1/Shoup, p. 31

2/Clark's Review, 1890. Lemhi County Museum, Salmon, Idaho.

3/Interview with Fred Chase, Boise, Idaho, June 1, 1970.

Supervisor George Bentz, in his report for the Forest Atlas in January, 1909, reports that the only agricultural product which was exported from the area at that time was the mature beef steer, the spring lamb or mutton, and the matured range horse, all of which provided their own transportation over the mountain roads and trails to the railroads. 1/

Butter brought a good price in the mining camps and was carried in by pack string. It was often packed in ten and twenty pound tins and sealed in brine. Salmon dairies for a time supplied Leesburg, Loon Creek and the Custer County mines.

There were extensive gardens near Salmon, which supplied the town of Salmon, and some produce was packed in to Leesburg and other mining camps.

Grain was raised for local milling and for livestock feed. John and Sandy Barrack operated a flour mill seven miles east of Salmon, built in 1872. In 1886 a grist mill was built on the east edge of Salmon, and operated by various people until about 1954. On Hayden Creek Oltmer and Bolts operated a flour mill from 1910 until 1933.

Some primitive and ingenious methods were used to harvest grain in places where machinery was inaccessible. Fred Chase tells of grain harvest on Warm Spring Creek sometime before 1900. At that time Pat Brennen owned a ranch on Warm Spring Creek, Dave Edson one on Poison Creek, and the Chase Family on McKim Creek. Brennen and Edson both had large numbers of horses. They could get a binder up to the Brennen ranch on the old road, but could not get a horse-drawn thresher up to the ranch. Edson and Chase hauled their grain down to the Brennen ranch, where there were two round corrals. They filled a corral with horses; had a man in the middle on a post with a whip, who started the horses around in the corral. Men on the outside pitched grain in onto the horses till it was up to their shoulders. In about two hours the tramping of horses threshed the grain, which was then cleaned by a fanning mill run by water power. Next morning they would start in again with another bunch of horses. The horses were pretty gentle after such a work out. It took about two weeks to thresh all the grain. 2/

Some settlers brought in berries and fruit trees. Jerry Fahey, who ran a pack train to Gibbonsville after 1877, brought in crabapple and older type apple and plum trees, gooseberry and currant bushes, by pack string. 3/ Some of these were planted near Gibbonsville, others at North Fork by George Thomas, and some on 4th of July Creek by Mr. Davis. In 1888, M. A. Chandler planted 200 fruit trees on

1/George Bentz, "Report for Forest Atlas," January 15, 1909.

2/Fred Chase.

3/Interview with Joe Gautier, Salmon, Idaho, February 21, 1969.

Withington Creek. By 1907 the Idaho Recorder reported over 8,000 apple trees from Carmen Creek down the Salmon and up the North Fork. 1/

Forest Supervisor Bentz reported in 1909, "In the northern part of the Forest there is quite a large amount of fruit, melons, and the more tender varieties of vegetables raised. This is along the North Fork, the Salmon River and its small tributaries.... In this part of the Forest the demand has not kept pace with the supply, and for the past four or five years there has been a plethora of farm products in that section of the country." 2/ He further reports that a wagon road from Gibbonsville to the Bighole Basin in Montana was built in 1907 by the Forest Service and the county. This opened up a market for the farm products of northern Lemhi County.

One small industry in the Salmon National Forest which flourished for a short time during prohibition was the making of whiskey in illicit stills. However, the exact output, market and income from this industry is difficult to obtain. It is known that there were several stills which produced high quality whiskey.

1/"Fruit Industry of Lemhi!" Idaho Recorder, Salmon, Idaho, January 24, 1907, p. 1

2/George Bentz, "Report for Forest Atlas," January 15, 1909, p. 8.

I. EARLY TRANSPORTATION

Indian Trails. The Salmon River canyon was inaccessible and river travel considered impossible in the early days, yet there were hundreds of travelers through the Salmon National Forest areas. Even before white men came, Indians hunted in the mountains, and there were trails used by various tribes for travel to good fishing areas, for trading, and to the buffalo country. Indian trails were not as well defined as our interstate highways, and the Indians traveled by many routes, yet some trails became well worn and almost legendary. One such trail was the one found by Meriwether Lewis in August, 1805, when he was searching for Indians and discovered a "broad Indian Road" leading across Lemhi Pass. This was a travois trail worn down by years of use by Shoshoni and also by some Nez Perce and Flathead in traveling east to hunt buffalo. In recent years when the Salmon National Forest wanted to mark the route of Lewis and Clark an attempt was made to find this travois trail. The search was unsuccessful until a study of aerial photographs revealed a marked difference in vegetation along a route where, in some parts, there had never been a known road. This discovery led to the realization the searching had been in the wrong areas, for the revealed route lay along the ridges, or directly down a streambed or gully, without contouring the hillsides, even if the way led precipitously up or down a steep ridge or gully. The horses with a travois could not travel along a hillside without tipping over load; they had to go directly up or down.^{1/} Samuel Parker repeatedly mentioned this aspect of the Indian Trails as he traveled them with the Nez Perce in 1835. He did not like going directly up or down instead of contouring.^{2/}

The Indian trail northward from Salmon to North Fork became the early pack trail, leading above the Salmon River cliffs to Carmen, up Tower Creek and across the hills past 4th of July Creek, Wagonhammer Creek, Big Silverlead and down Trail Gulch to the North Fork, thus avoiding a part of the Salmon River canyon too precipitous for travel. It also avoided a river crossing.

The Flathead Indians from the Bitterroot Valley came over to the Salmon to fish, usually traveling up the West Fork of the Bitterroot River. From there they came down to the Salmon River by way of Squaw Creek or Indian Creek, or down Hughes Creek to the North Fork. This last is probably the trail missed by the Lewis and Clark guide, old Toby, when he led the party on up the North Fork with no trail at all, and finally confessed he had missed the creek he had intended to follow. These same trails were used by the Nez Perce who came from the west. In 1835 when Samuel Parker was guided westward by the Nez Perce, the probable route was up Hughes Creek and on west on one of the southern trails of the Nez Perce. Many miles of the present divide trail between

^{1/}A. R. Bevan, Engineer, formerly with the Salmon National Forest

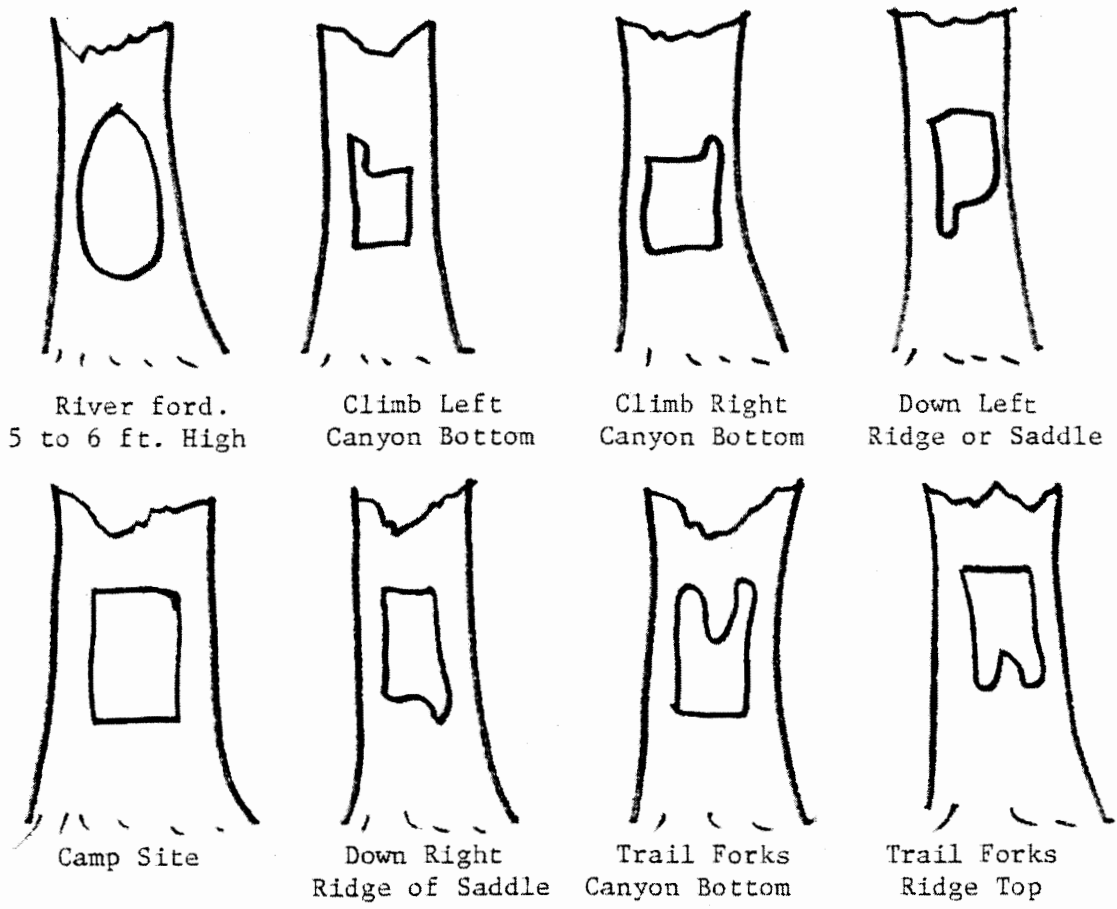
^{2/}Glenn Thompson

the drainages of the Salmon River and the West Fork of the Bitterroot River are probably part of the original Indian trail. After gold discovery, one of these southern Nez Perce trails became a freight artery for pack trains between Lewiston, Idaho and Virginia City, Montana.

A well known early Indian trail led from Salmon up the east side of the Salmon River to the Pahsimeroi. This trail was about a mile back from the river and up to about 2000 feet higher than the river.

Indians had a system of blazes by which they used to find trails in difficult places. Following are some Indian tree trail blazes common in central Idaho, as observed by Glenn Thompson, former supervisor of the Salmon National Forest.

INDIAN TRAIL TREE BLAZES COMMON IN CENTRAL IDAHO



These blazes were made by cutting or pounding the outer perimeter of the design. The inside bark and cambium later dried and fell of its own accord. There are a few where the dead bark persisted to leave an indentation the shape of the blaze.

Rock cairns were used where trees were not available. The top rock served to direct the traveler.

Prospectors and packers often used early Indian trails in their travels. Trails became life-lines between supply centers and the mining camps. From Salmon these trails fanned out to various camps. One led up from the west bank of the Salmon, over the Leesburg hill and down into Leesburg basin. Another went up the west side of the Salmon and up Lake Creek, south along the ridge, down into Prairie Basin, to Silver Creek, Meyers Cove, and Loon Creek. Yellowjacket was supplied by this route, or from Challis by way of Morgan Creek, or from Salmon by way of Leesburg. Other trails led over Lemhi Pass to the Virginia City country, which was also reached from Gibbonsville by a trail up Dahlenega Creek. An early day trail to Leesburg from Montana forded the Salmon River or crossed on Shoto's ferry below North Fork and led up the mountain, along Napoleon ridge and on to Napias Creek.

Wherever there was a mine, there soon was a trail, and often later a road. A mine on Bohannon Creek was in a place too precipitous to reach with pack animals. The gold ore was "high-graded" and wrapped in green cowhide, tied tightly and rolled down to the canyon bottom. From there it was loaded on a pack string.

During the period of greatest population and production in Leesburg all supplies came by packstring usually from Fort Benton, Montana, or from Walla Walla and Lewiston, branching off the trail to Virginia City, Montana.

Some early day packers in the Salmon Forest area were: Ira Tingley, Wm. Bryan, Dan Hire, Mart Newcomb, Ezra Orn, Jesus Erquetes, Beagle Brothers, Jim Wood, Eli Minert and George Hyde, Cap Williams and sons Ike, Henry and Tom with Jeff Riggs. Fred Phillips and David McNutt packed supplies into Leesburg as early as the fall of 1866 and started a store there. They operated a unique free delivery: their burros could be loaded with an order and driven by the purchaser to his cabin where he would unpack the burrows and turn them back toward home to return by themselves.

Joe Skelton, Jim Hayden, and Henry Leatherman packed supplies to Leesburg from the Bitterroot and Bannack. Later these three freighted with wagons and oxen. Skelton was severely injured by a steer he was trying to yoke up to his freight wagon. 1/

Packers W. W. Slavin and Charles Spinney supplied the Shoup mines and packed out gold. Another Shoup pack train was run by Campfield. Wallace St. Clair packed bullion from the Kentuck mine at Shoup to Red Rock, Montana. He usually took a route different from the preceding trip to confuse possible holdup men. 2/ Jerry Fahey packed into Gibbonsville and also ran a store there. He recalled one Christmas season when supplies were getting low. The women in town wanted flour

1/Shoup, History of Lemhi County, p. 13-14.

2/Interview with Herb St. Clair, Salmon, Idaho, May 1, 1969.

for Christmas baking and were happy to see the pack train from Walla Walla arriving. When the packs were unloaded, there was no flour--only whiskey. Fahey reported that the packer left town hurriedly to escape the wrath of the women. 1/ In July, 1878, Jerry Fahey's pack train to Gibbonsville was attacked by Indians on Sleeping Child Creek in Montana. The Indians took part of the cargo, which had been unloaded for the night, and drove off the pack mules. Fahey escaped. 2/

The Steen Brothers operated their own train after acquiring the Yellow Jacket mine and mill. Dick Johnson also serviced the Yellow Jacket mine by pack train. He ran 75 pack animals. Jim Wood at the mouth of Hat Creek was reported to have over 100 pack animals in his string.

Jack McGivney, father of Larry McGivney of Salmon, packed in to Thunder Mountain from Salmon. He had a place at the mouth of Loon Creek.

Hal Chase and Truman Andrews moved the steel boom to Moose Creek for the dredging operation there. The boom had been brought to Salmon from Red Rock by way of Junction because the Agency Creek road had too many bends to accomodate it. Fred and Dan Chase and Frank Andrews helped their fathers, acting as swampers to keep the horses moving. They used 36 horses, taking several days to get the boom from Salmon up the Leesburg hill. They went straight up the hill. From the top they took it along the ridge to Moose Creek. 3/

Wah Sing, Chinese merchant, owned his own packstring, operated by Chinese. Boise Sam, another Chinese operated a freight outfit. 4/ Some of the packers later turned to freighting with wagons pulled by oxen, mules or horses.

Wagon Roads. The completion of the first trans-continental railroad in 1869 made it possible to bring freight by wagon from the railhead at Corinne, Utah, which supplied Salmon and western Montana. There were no constructed roads, and travel was slow and difficult. By 1879 the Utah-Northern reached Camas Station, near present Dubois, shortening the wagon freight route to Salmon. By 1887 a wagon route was established from Salmon to Red Rock, Montana by way of Agency Creek and Lemhi Pass. The stage went through daily in 12 hours. Leaving either Salmon or Red Rock at 6 a.m. the passengers would cover the 71 miles by 6 p.m. E. Nashold was mail contractor and owned the stage line. The dinner

1/Interview with Fay Brunk, Salmon, Idaho, April 30, 1969.

2/"The Murder Party," New North-West, Deer Lodge, Montana, August 2, 1879, quoting from Missoulian extras of July 18 and 19, 1878. It was thought these same Indians had earlier killed 2 men near Phillipsburg.

3/Fred Chase

4/Shoup, p. 10.

or midway station was at Coldsprings, owned and conducted by Mr. and Mrs. W. W. Sunderlin. 1/

George Eldridge reported in 1894 that the Salmon River above Salmon City had recently been opened by a portion of the State Wagon Road. 2/

Some of the early freighters were: Charles and George Cockrell, Si Lindsay, John Snook, John Wheeler, Fraim Withington. E. Nasholds and "Red" McDonald operated a stage line from Salmon to Camas Station on the Helena-Salt Lake wagon road, later on the Utah-Northern railroad. Dan Chase drove stage to Red Rock using a six horse team. Ferril Terry drove stage to Red Rock with his father and later drove stage to Leesburg. By 1895 a wagon road was completed from Salmon to Forney, through Leesburg, reaching within 12 miles of Yellowjacket mining camp.

Fred Ramey recalls it used to be a three day trip from Salmon to the Rabbit Foot mine on Silver Creek, in a Concord coach with four horses. Mont Caldwell owned the stage line, which carried mail, passengers and freight. The route was the old Leesburg road straight up the hill west of Salmon, with lunch at the Mountain House well up the Salmon side, while the horses rested. The first night was spent at the Leesburg hotel whose proprietor was Mrs. Mahoney, mother of Marion Mahoney of the Forest Service. The second day dinner stop was at Leacock's ranch at the mouth of Napias Creek, with the second night at Forney, which was the end of the stage route. From there the trip was finished by buckboard. 3/

In the early days there was a "winter road" over Lost Trail from Gibbonsville. The country was too rough for a summer road, but in the winter when the snow was deep and covered the holes and boulders, horses could pull sleighs over this winter road. This was in use in the 1890's. 4/ Winter roads were also used for early day logging.

The wagon road up Indian Creek to Ulysses from the Salmon River was built by the county and by subscription about 1901.

During the rush to Thunder Mountain in 1901, the following appeared in the Recorder-Herald:

F. W. Vogler, general manager of the Redrock, Salmon City and Gibbonsville stage line, was in town Monday and states that his line is making all arrangements for the handling of the great crowd of people which, it is expected, will rush to the wonderful

1/Lemhi Herald, Salmon, Idaho, July 2, 1908, p. 1.

2/Eldridge, p. 10

3/Fred Ramey.

4/Joe Gautier.

quartz discoveries recently made in the Thunder Mountain district in Idaho, about 100 miles from Salmon City. He can easily handle 25 - 50 passengers each day, having ten four-horse Concord coaches and four six-horse Concords to do it with. He will be able to land passengers within 50 miles of Thunder Mountain at Yellow Jacket, from which point the journey must be made by pack outfits. 1/

The old road to the Big Hole from Gibbonsville, over Dahlenega, took a good team to haul half a ton over. The Rose brothers used to take fruit over it. They would have to take two teams to get to the top. Passengers traveled in Concord coaches with four-horse teams. The road over the hill was very steep; going down hill the drivers tied trees to the backs of the coaches and held the horses back as much as possible. 2/ In 1907 the Forest Service and the county cooperated in building a better wagon road up Dahlenega from Gibbonsville to the Big Hole Basin. After the wagon road was built, Tom Barber freighted from Gibbonsville to the Big Hole with a jerk line. 3/ The early stage from Salmon to Gibbonsville was a wagon. In winter they changed from wagon to sleighs at Eagle Station, now known as the Duncan place, and also called Red Butte. 4/

Ross Tobias described the freighters' outfits that serviced the mines on Yankee Fork and Loon Creek: the freighters usually used four, six or eight horses according to the load. Sometimes more teams were used, but going to the mines the curves made it hard to use more. They usually pulled two wagons and a camp wagon. In steep places they would take off one wagon, pull the other to the top, then go back for the one they left. They were kept busy hauling coke in and ore out. 5/

An unusual method of ore hauling was the "iron monster" used by the Dubois Salmon Transportation Company. This company was organized by the backers of lead mines in the Gilmore area to haul ore over 70 miles to the railroad at Dubois. They used a traction wagon: a steam engine with cleated metal wheels which ran on land, capable of pulling four cars, each loaded with 15 tons of ore. The great tractor ran day and night and took four days to reach the railroad. The trip was mostly down hill through sage-brush land. The off-duty crew slept in a sheep wagon at the end of the train. This method of moving the ore from Gilmore was used sometime after 1906. 6/

1/Recorder Herald, Salmon, Idaho, December, 1901.

2/Joe Gautier.

3/Herb St. Clair

4/Interview with Bessie Cannon & Frances Donlan, Salmon, Idaho, April 30, 1969

5/Interview with Ross Tobias, Salmon, Idaho, May 27, 1970.

6/"Spurt in Gilmore Recalls No-Rail Iron Monster," The Salt Lake Tribune, January 14, 1952, p. 13.

The building of the Gilmore and Pittsburg railroad to Gilmore and Salmon from Armstead, Montana, in 1910, and development of auto transport and better roads brought a gradual end to large scale freighting by wagon. A survey of stage lines in the area in 1917 listed the following:

Salmon-Forney Stage Line:

- 2 wagons
- 4 spring wagons
- 1 stage-coach

Fare: Salmon - Leesburg, \$2.50; Salmon - Leacock, \$3.50
Salmon - Blackbird, \$4.00; Salmon - Forney, \$5.00.

Challis - Gibbonsville Stage Company:

- 2 wagons
- 6 spring wagons
- 1 stage-coach
- 3 autos

Fare: Salmon - North Fork, \$2.50
Salmon - Gibbonsville, \$3.50
Salmon - Ulysses, \$4.00
Salmon - Indianola, \$3.50
Salmon - Challis, \$6.00
Salmon - Ellis, \$4.00 1/

In 1917 there were 73 automobiles in Lemhi County, including the following 15 different companies in order of their quantity: Ford, Dodge, Overland, Chalmers, Maxwell, Dart, Buick, Studebaker, Cadillac, Premier, Velie, Chevrolet, Hupmobile, Oakland, Apperson. 1/

The automobile had not yet "taken over" however, for the same survey reported 7 motorcycles, 1048 draft horses, 2599 saddle horses, 1174 pack horses, and 1073 wagons.

Railroads. During the years of the expansion of the railroads into the west, there was railroad talk and activity in almost every part of the west, as different railroad companies surveyed routes, and settlers contemplated the probabilities of some railroad reaching their particular spot.

The completion of the Union Pacific Railroad in 1869 changed the direction of the supply lines into the Salmon River area. Before this date, supplies were brought in by pack string from Walla Walla, Washington and Fort Benton, Montana. After the driving of the Union Pacific golden spike marking the completion of the Union Pacific railroad at Promontory Point, Utah, in May 1869, freighters could reach the Salmon River area with wagons, loaded with supplies from the railhead at Corinne, Utah.

1/Dana Parkinson, Forest Supervisor, "Reconnaissance Report for the Military Information Division," 1917.

Isaac Stevens had conducted railway surveys across northern Idaho in 1855. The Northern Pacific, hoping for a shorter route, decided further surveys should be made and chief engineer A. Milnor Roberts assigned Col. W. W. DeLacy the task of surveying a route down the Salmon River to Lewiston, in 1872. The Salmon River route attracted attention for several reasons: a) it would be on water grade while passing through the rugged mountainous area west of the Continental Divide, b) this route would avoid the problem of winter snow slides in mountainous country because the snow fall at the river level was known to be slight, c) this route was assumed to be shorter than the one through northern Idaho.

Col. DeLacy supervised the building of four boats at Salmon, and with a total party of 25, started the survey down the river on June 15. They ran the survey on the south side of the Salmon River, crossing to the north side seven miles above the mouth of the South Fork, and reached Lewiston on November 16, 1872, five months after starting from Salmon. They were able to survey a continuous line of levels from Salmon City to within two miles of Snake River, a distance of 248 miles, the average grade of the river being only 12.22 feet per mile. At South Fork Col. DeLacy and Col. Long made the trip in to Warrens for supplies and mail and Col. DeLacy reported that it would be a slow route because of the continual curves, and a rough route due to the rugged canyon of the Salmon River.

The other end of the Salmon River route also presented difficulties in getting over the Continental Divide. The Big Hole Pass was one of the contemplated routes. Another serious objection to the Salmon River route was that for a distance of approximately 300 miles the line could not be reached at intermediate points with wagons or steamboats so as to provide supplies and materials for the building contractors. The rugged canyon also indicated a lack of markets and population centers to be served by the line.^{1/}

In 1908 there was talk of an electric railway from Idaho Falls to Salmon and a subscription fund was started in Salmon.^{2/}

The railroad which finally reached Salmon was the Gilmore and Pittsburg, built from Armstead, Montana, on the Oregon Short Line, westward through Bannock Pass to Leadore, with a run south to Gilmore and north to Salmon. A group of Pittsburg, Pennsylvania business men, under the direction of the Northern Pacific Railway, incorporated the railroad in Idaho and Montana in 1907. The president of the group, W. F. McCutcheon, was also president of the Gilmore Mining Company of Gilmore. The announced purpose of the road was to service the Gilmore mines and the

^{1/}Idaho Signal, July through November, 1872.

^{2/}The Lemhi Herald, November 19, 1908 and December 3, 1908.

town of Salmon, but plans had been formulated for a water grade route on from Salmon to the Pacific, following down the Salmon, Snake and Columbia rivers. Surveying was done in 1907 and 1908. Track laying began in 1909. One of the early duties of the Salmon Forest Rangers in the upper Lemhi was marking timber for railroad ties, and instructing choppers how to pile brush. On May 18, 1910, there was a celebration in Salmon upon the arrival of the first passenger train. Regular passenger service was soon started, leaving Salmon at 6:30 a.m., arriving at Armstead at 12:15 p.m., traveling the 100 miles in less than six hours. The return trip left Armstead at 2:30 p.m., scheduled to reach Salmon at 7:30 p.m. The train handled passengers, mail and freight. Ore shipped from Gilmore sometimes amounted to three cars a day.

Surveys were made down the river. In March, 1908, engineers T. H. Bacon and Charles McClung had made a reconnaissance tour down the Salmon River. Captain Harry Guleke and Dave Sandilands piloted them by boat to Lewiston. During 1910, surveying down the river continued. Men reported they had to hang from the cliffs by cables to make the survey and they expected the railroad would have to do the same. At one time there were enough materials in Salmon to build the bridge across the river and continue on, but orders came to stop all further work.^{1/}

Later the Northern Pacific took over the line. Business had dwindled and a cutback was made in equipment. Though mine shipments had declined, business remained fairly stable through the 1920's, with cattle and sheep shipments accounting for half of the annual business. The depression signaled the end of the railroad. W. H. Bichler was able to keep it operating with existing equipment and track through the 1930's. The tri-weekly mixed train which had operated in the 1920's was replaced by a rail passenger car. The freight train operated only once a week except in summer and fall when more runs were needed for shipping livestock. In 1939 the line was inspected and declared unsafe for operation. By then the remaining equipment consisted of two locomotives, a gas electric passenger car, a rotary snow plow and 31 freight cars, all in poor condition. In May of 1939, railroad service stopped. In the fall of 1940, the locomotives were started up and worked their way to Armstead, picking up the track behind them. ^{2/}

Former Salmon Forest Supervisor S. C. Scribner (1918-1926) related a story about the surveyors going down the river in 1910. A family living on Owl Creek, which was then far below the end of the road, inquired what the surveyors were doing. Upon learning they were surveying for a railroad, the wife instructed her husband to start cutting poles that

^{1/}Correspondence from E. R. Lambert and Harold Borovec, Chehalis, Washington, February, 1970. Mr. Lambert was a locomotive mechanic at Leadore from 1910-1914, and 1922-1939.

^{2/}W. R. McGee, quoted in Recorder-Herald, August 29, 1968.

afternoon to make a fence between the house and the railroad. She was not going to have her children run over by a train. No whistles have yet been heard down the Salmon River. 1/

Salmon River Travel. - The Salmon River, for which the town and the National Forest are named, runs along or through the Salmon National Forest for over one hundred miles. Unlike many of the rivers of the eastern United States and Canada, the Salmon was never used extensively as a highway because it is swift, turbulent, and dangerous.

Lewis and Clark in 1805 hoped to travel down the Salmon in canoes and Clark explored it for nearly 40 miles below Salmon, finally deciding the Indians were correct in their description of the impassable river.

The first known attempt to boat the Salmon River comes from the diary of John Work, who led a Hudson Bay fur brigade into Idaho in 1831-32. They camped near what is now Salmon, Idaho, on March 25, 1832. The next day Work sent four men down the Salmon River with one small skin canoe, to hunt the river to Fort Walla Walla. They were listed as L. Boisdnt, A Dumaris, M. Plante, and J. Laurin. He expected they would have a good hunt because this part of the river was not known to have ever been hunted by whites. Work and the rest of his party continued up the Salmon River, trapping through the mountains to the Payette and Weiser rivers, and reaching Fort Walla Walla on July 19, 1832. Here he found that M. Plante and A. Dumaris had drowned on the trip. The canoe was too small to carry the men and their baggage also, so the men had taken turns, with two walking while two rode the river. The survivors did not see the accident, but only found the floating paddles, and were left without any food or supplies. They had been descending the river over 30 days when the accident occurred. Contrary to expectations, they found no beaver. Nez Perce Indians assisted the survivors. 2/

Early miners used the Salmon River to float mining equipment and supplies down from Salmon to wherever they were mining along the river. John McKay and Ben Ludwig were two of these early river travelers. They worked separately but are reported to have been on the river, possibly as early as 1867. They built their boats at Salmon, and each floated down to his claims. There the craft would be torn apart and the materials used at the claim. When the supplies were gone the miners would walk back up to Salmon, build another boat and float down with more supplies. Local belief is that John McKay may have been the first man to descend the river by boat from Salmon to Lewiston, perhaps in 1872. This date and the name J. N. McKay are found on a rock near Cove Creek, below Shoup.

1/Charles D. Simpson and E. R. Jackman, Blazing Forest Trails (Caldwell, Idaho: Caxton Printers, Ltd., 1967), p. 324.

2/Work, pp. 139-140, and 174-175.

When hard rock mining development started near Shoup, around 1882, there were no roads into that area. All miners, their machinery and supplies came in by trail and pack string, or floated down the river. Supplies came from Red Rock, near present Dillon, Montana, by freight wagon to Salmon. The rest of the way was by pack train from Carmen, or floated on the river.

Josiah Chase, grandfather of early Forest Ranger Fred Chase, built one of the first scows that went from Salmon to Shoup. The scow was built just above the present Salmon River bridge in Salmon, to carry a stamp mill for the Kentuck mine at Shoup. Tom McGarvey and Jim Compton manned some of the early scows bound for the Kentuck mine. Passengers often went with the supply scows. In November, 1884, Henry Clay Merritt, superintendent of the Kentuck, and Jack Gilmer were passengers on one of these supply boats and Merritt was drowned below Indianola. He was buried beside the river near Spring Creek.

The Salmon newspaper Idaho Recorder sometimes listed departures for Shoup. There is no indication that these boats were anything other than float-boats, and apparently the newspaper gave them the nickname "steamers."

September 3, 1887. The steamer "Juliana" left the Main Street wharf on Tuesday for Shoup and Thomasville. Quite a number of passengers were on the upper deck.

September 10, 1887. Steamer "Idaho" left on Wednesday for Shoup. Mr. Ritter and family (3) of Kansas City boarded here, en route for Pine Creek to reside there. Capt. Eli Suydam, Pilot Sanderland, other passengers: Jas. Fudge, Henry Breenan, Jack Hennesey, J. H. Duray, J. E. Booth, Miss Elma Edwards. Total 11.

October 22, 1887. Steamer "Porfet" named for Mrs. Porfet, left for Pine Creek with 11 passengers and crew of 2. Suydam and Sanderland have contracted for all the river freight for points below Salmon.

March 24, 1888. Mr. E. S. Suydam and Geo. Sunderlans are up from Shoup.... The Steamer "Clytie" will sail the middle of next week, being the first of the season of '88.

April 14, 1888. Captain E. S. Suydam of the steamer "Clytie" came back from the City of Shoup on Wednesday, via the trail.

May 12, 1888. Steamer "Louise" left Tuesday for Shoup and Mintzerville, heavily loaded with merchandise, Suydam and Sanderland in charge.^{1/}

Billy Taylor of Salmon reports that his mother, Anna Graves, was the first woman boat passenger between Salmon and Shoup, probably in 1886 or 1887.

^{1/}Idaho Recorder, Salmon, Idaho, 1887 and 1888, dates listed above.

Since boats could not be taken back up the river, the town of Shoup had many buildings that were partly constructed from salvaged river scows.

Captain Harry Guleke was a famous Salmon River boatman in the early days, freighting materials and supplies to the mines. Mrs. Elizabeth M. Reed of Salmon recalls the day in October, 1896, when a large crowd gathered at the bridge in Salmon to see Guleke take off on his first long trip, through to Riggins, over 150 miles downstream. With him was David Sandiland.^{1/} Cap Guleke, as he was called, ran the river for 40 years.

The type of boat which was developed through trial and error was a long rectangle with ends slanting up and outward, and was managed by two sweeps (long blades with poles attached) one in front and one in the rear, to guide the boat. These sweeps were usually arranged so one man, standing in the center of the boat, could reach both sweep poles. On larger boats, and going through rapids, the sweeps were manned by two men, and the swift water could wrench a sweep out of a man's hands, or knock him overboard. The size of boat varied according to the need. One in 1901 was reported to be 35 feet long, 6 feet wide and 4 feet deep. One of Guleke's last boats was 28 feet long, 8 feet wide, with sideboards five and a half feet high. Cargo and supplies were placed in the bottom, covered with planking to make a deck from which to navigate the boat.

Early trips by Guleke include one in 1901 with R. G. Bailey, who had mining claims on Bailey Creek about 100 miles below Salmon. Bailey walked from the claim to Salmon, where he and Guleke built a boat, loaded it with three tons of supplies and left Salmon in early April, when there was still much ice in the river. After several narrow escapes they reached the Bailey claims where they dismantled the boat and made two smaller ones. Guleke took one of them and went on to Riggins where he caught the stage back to Salmon. Bailey stayed at his claim and later used the second small boat to make his way to Lewiston.^{2/}

The Idaho Recorder for January 2, 1903, tells of a trip from Salmon to Lewiston late in 1902. Capt Guleke piloted two men from Omaha: R.F. Dwyer, a mining engineer and his younger brother J. V. Dwyer, on a successful hunting trip for big-horn sheep. The Dwyer brothers outfitted for the trip at the store of the Kitty Burton Mine up Indian Creek, loaded their supplies in 30 by 10 foot flatboat and headed for Big Creek (Panther Creek) where they hunted for several days, having arranged with Guleke to join them there before the winter ice formed. After a severe Thanksgiving day storm, they started downstream November 29 without waiting for Guleke. They were stopped at Poverty Flat by slush ice blocking the river for a quarter of a mile. Night came before they finished

^{1/}Interview with Elizabeth M. Reed, February 25, 1970.

^{2/}R.G. Bailey, "Pioneer Tells of First Boat Trip Down Main Salmon River," The Recorder Herald, January 17, 1952, reprinted from The Spokesman-Review October 4, 1951.

clearing a channel, and in the morning the channel was completely choked again. There Guleke found them three days later. Following his directions, they built a smaller boat from the large one, 12 feet long and four feet wide, portaged it over the ice, leaving a large part of the supplies in the larger, ice-bound boat:

Once started down the river in the smaller craft... there was never the least doubt about reaching the mouth of the river, although on several occasions there seemed to be considerable doubt of our making the trip alive... After leaving Whitebird, the river, although wild in its flow, gave evidence along its banks that man had come here and made this his home. There were a number of little homes with vineclad porches and orchards back of the house... We reached the mouth of the Salmon river December 17, and two days were occupied in reaching Lewiston.1/

The river has taken its toll of lives and there have been many narrow escapes. Already mentioned was the drowning of John Work's two trappers in 1832, and Henry Clay Merritt in 1884. At Cove Creek, below Panther Creek is the grave of Johnny Burr. Billy Taylor reports that Johnny Burr and Billy's father, Wm. E. Taylor, were passengers on a scow bound for Shoup. Burr was a good swimmer, and was enjoying swimming on and off all the way down. When they reached Shoup he dived off the boat to help get the line secure for docking. He never came up, and they found his body at Cove Creek.

In the early 1900's there was a lot of railroad speculation and surveying down the Salmon River. Much of it was done in secret to keep rival railroads from becoming curious. A near tragedy occurred when Guleke and J. B. Pope were going down the river in 1906. Their boat swamped and Pope lost a large number of valuable engineering instruments. In his relating this occurrence, people learned that he was a railroad engineer, a fact before kept secret.2/

In August, 1907, George Sandilands was assisting Captain Guleke, shipping a load of freight for the Mike Coan claims below Pine Creek. The rapids caused Sandiland's sweep to knock him into the rapids and he was drowned.3/

In May, 1947, a man and his two sons attempted to visit Hack Saw Tom who lived across the river above Shoup. High water caught the cage swinging along across the cable and in the following struggle, the two brothers, John and Guy Davis, were drowned.

Some river victims are never found. Some wash ashore weeks, months or years later. Since roads and cars have been improved, many people have been victims of cars accidentally going into the river. In 1970 two Salmon National Forest summer employees, Gary Yule and John Jones, were drowned June 25 when their Forest Service pickup went into the river one mile above Indianola during high water. These two were among at least eight who lost their lives in the upper Salmon and Middle Fork in 1970. Of these eight, two are still missing and at least two others are missing from river accidents in 1969 and 1967.

1/The Idaho Recorder, January 2, 1903.

2/The Lemhi Herald, April 18, 1907.

3/The Lemhi Herald, August 8, 1907.

Percy Anderson and Harry Guleke ran the river many times together, and in later years Elmer Keith worked with Guleke on the river. In 1931 Clyde E. Smith and son Don L. Smith came to the Salmon River working placers along the stream. Soon they were running boats on the river.

In October 1935, the National Geographic Society sponsored a boat trip down the Salmon River from Salmon to Lewiston. The boat, designed by Captain Guleke, was 32 feet long and had 28 foot sweeps with six foot blades. Monroe Hancock was the boat pilot and John Cunningham as second boatman and Dave Chard as cook. This trip was the subject of an article which appeared in the National Geographic for July, 1936, written by two of the passengers: Philip J. Shenon and John C. Reed. Others on the trip included Dr. Maynard Owen Williams, photographer and writer Dean A. W. Fahrenwald, director of Idaho Bureau of Mines and Geology; D. Worth Clark, Idaho Congressional Representative, and Howard R. Flint, Regional Forest Inspector of the U. S. Forest Service. At the Middle Fork Clyde and Don Smith and Tom Ayers took some of the party up the Middle Fork about three miles on an overnight trip. They pulled a small boat up, and floated down. Later during the trip Mr. Flint became ill and a plane was sent for. The plane piloted by Dick Johnson, met the boat party at Mackay Bar and flew Mr. Flint to a Missoula hospital, where he died. The rest of the party finished the boat trip to Riggins and Lewiston.

A more recent Salmon River trip sponsored by the National Geographic Society was made in 1969 by the John and Frank Craighead party.^{1/}

Clyde and Don Smith were the first people to keep a boat running on a schedule on the Salmon River, and the first to haul one back by truck. The trip took ten days, with a day spent getting supplies and two days trucking back to North Fork. After World War II the Smiths began running the river with paying passengers. Their first commercial passenger trip on the river was in 1946. Prior to that the Smiths hauled freight. Clyde Smith was active on the river until 1947. Their early scow-type wooden boats were equipped with butane for refrigerator and stove, and there were bunks for six persons. During a survey trip with the Corps of Engineers in 1945 the Smiths operated two big houseboats, moving the boats about four miles each day.

It was not long until motor boats were plying the Salmon. One craft tried on the river was a boat propelled by an airplane engine with an airplane propeller mounted on the back of the boat and two rudders behind in the slip stream. It was not successful. Don L. Smith used outboard motor boats for several years, both down and up the river.

^{1/}John Craighead and Frank Craighead, Jr.,
"White-water Adventure on Wild Rivers of Idaho," National Geographic,
Vol. 137, No. 2, (February, 1970) 212-239.

Charles Dahle of Salmon tried a jet boat on the Salmon River in 1957. His first one would not come up all the rapids. The first satisfactory one was built in 1959 in Portland for Dahle, who designed the pump to go with it. It was a welded aluminum boat with a Cadillac marine motor. This same boat is still in use (1973). The jet boat is propelled by the thrust from a jet of water. The water, drawn through a vent in the bottom of the boat, is shot through a jet nozzle by a pump operated by a relatively high powered motor.

In May, 1961, five men made a successful trip up the Salmon River in two hydrosleds. The craft were specially constructed to run the river. They had square prows and sterns, but the keels had a wide convex "v" with the open end at the bow, tapering toward the stern, allowing the boats to sled over even the roughest waters. Both boats were powered by Mercury outboards: the 14-foot boat had a 50-h.p. motor and the 16-foot boat a 70-h.p. The party started at Rogersburg, Washington, on the Snake River and traveled to the mouth of the Middle Fork of the Salmon in three days. The group included Dale and Alva Victor of Wallowa, Oregon; Elwyn Powers of Lostine, Oregon; Lovell Groves, photographer from Longview, Washington and Bill O'Malley, Mercury dealer from Portland. Elwyn Powers is a brother of F. E. Powers who was at that time Supervisor of the Salmon National Forest. They made the return trip from the Middle Fork to Riggins in five hours. 1/

Within a short time after the introduction of the jet boat, it became very popular and today many people use jet boats to go both down and up the Salmon River. Rubber rafts are a favorite for a more quiet, one way trip. Kayaks and wooden McKenzie River boats are sometimes used on parts of the Salmon and the Middle Fork. There are many outfitters that offer river trips commercially. Others float in private parties.

When the use of motors in the Idaho Primitive Area was prohibited it affected travel on the Middle Fork in that no boat motors of any type are permitted on the Middle Fork, limiting travel to float trips only.

In 1968 the Middle Fork of the Salmon River was designated as one of the eight initial units of the National Wild and Scenic Rivers System. Recreational travel on both the main Salmon River and on the Middle Fork has increased phenomenally in the past 20 years. In 1949 there were about 25 people who floated the Middle Fork. In 1969: 1624, and in 1970: 3028. Further boating statistics will be found in the chapter on recreation.

An unusual cargo on the Middle Fork in June, 1970 was a ten-passenger Volkswagen bus floated down from Dagger Falls to the Flying B ranch. Bob Smith of North Fork, veteran river runner, and his crew loaded the bus onto a 34-foot rubber pontoon and floated it down over 60 miles in

1/F. E. Powers

about 12 hours. His crew included Don Waetzig, Mike Isley, Chuck Baird, Sandy Sims and Ray Torrey, all of Salmon. The bus is used at the Flying B to transport guests from the airstrip to the lodge. 1/

1/"Ten Passenger Bus Takes Middle Fork Float Trip," The Recorder-Herald (Salmon, Idaho), June 18, 1970, p. 1.

PART 2

SALMON NATIONAL FOREST, ORIGIN AND DEVELOPMENT

A. CREATION OF THE SALMON NATIONAL FOREST

The Salmon River Forest Reserve was established by Proclamation of President Theodore Roosevelt on November 5, 1906. This Reserve was bounded on the west by the total length of the Middle Fork of the Salmon River, with Marsh Creek and Valley Creek on the southwest. The Salmon River formed the southern boundary, from Valley Creek east to Thompson Creek. From Thompson Creek north to the North Fork of the Salmon River the line followed approximately the present boundaries of the Challis and the Salmon National Forests as they more or less parallel the Salmon River, then followed west down the Salmon River to the Middle Fork.

Later Presidential Proclamations and Executive Orders added lands or eliminated lands from this original Salmon River Forest Reserve. The name Forest Reserves was changed on March 4, 1907, to National Forests.

President Theodore Roosevelt's Executive Order No. 841, effective July 1, 1908, added to the Salmon National Forest the area north of the Salmon River from and including the drainage of Boulder Creek, which enters the Salmon River from the north at Shoup, west to and including the drainage of Horse Creek. This area had been part of the Bitterroot Forest Reserve established in 1897 by Proclamation of President Cleveland. Also added to the Salmon National Forest by Executive Order No. 841 was that portion of the Lemhi National Forest directly east of the addition from the Bitter Root Reserve: north of the Salmon River, east of the Boulder Creek drainage to the Continental Divide, south to the Lemhi Indian Reservation near the drainage of Agency Creek. Also transferred from the Lemhi National Forest was the Lemhi Mountain range south to Bell Mountain, exclusive of the Pahsimeroi drainage.

This same Executive Order separated from the Salmon National Forest those lands south of lower Camas Creek to Yellow Jacket Creek, and that part south of Yellow Jacket drainage, south of the Panther Creek drainage, and south of Hat Creek drainage, creating the Challis National Forest.

The Idaho Enabling Act, July 3, 1890; reserved for the State of Idaho title and claim to sections 16 and 36 in each township as grant-in-aid to common schools. These school sections sprinkled throughout the National Forests presented a potential management problem. However, in the Salmon National Forest, as in other National Forest areas that had not yet been surveyed, the title or claim of the State did not attach (the State did not take title to these lands) because of the lack of an accepted survey, and an adjustment was made whereby the State accepted, or would accept, other lands "equivalent in acreage and value lying along and within the boundaries of said National Forests, in such position that, when eliminated therefrom, all of said selected lands will lie outside the new exterior boundaries of the National Forests...1/

1/A Proclamation No. 1235 by the President of the United States of America, dated March 3, 1913. p. 1.

A memorandum of agreement was entered into on October 4, 1911, between the Secretary of the Department of Agriculture and the Governor of the State of Idaho. The lands involved in these transactions have become known as "lieu lands" because the State accepted them in lieu of their designated lands with the National Forest boundaries.

Proclamation No. 1240, dated May 19, 1913, by President Woodrow Wilson made further boundary changes, transferring lands north of Camas Creek and west of Meyers Cove, plus the Silver Creek drainage, from the Challis National Forest to the Salmon National Forest, primarily T18N, R17E. A portion of Little Hat Creek drainage was transferred from the Salmon National Forest to the Challis National Forest, lying in the S.E. portion of T17N, R19E. That part of the Salmon National Forest south of Lemhi Union Gulch, T12N, R27E, in the Lemhi Range, was transferred to the Lemhi National Forest. Most of the Beaverhead Forest lying west of the Continental Divide, from Chamberlain Creek (Lemhi drainage) northwest to the head of Peterson Creek, became part of the Salmon National Forest. Along the borders of the Salmon Forest many small areas were eliminated, to be restored to settlement and entry.

More transfers of land took place in 1926 when President Calvin Coolidge issued Proclamation No. 1769 on March 24. Transferred to the Salmon National Forest from the Idaho National Forest (now the Payette) was the area west of the Middle Fork, south of the Big Creek drainage, to but not including Norton Creek drainage, including all of the drainage of Brush Creek and west to Shellrock Peak. One very small part of the drainage of Cub Creek in this area was transferred to the Salmon from the Payette National Forest, being in section 5, T17N, R14E.

By Proclamation No. 1922 of President Herbert Hoover, September 25, 1930, the drainage of the North Fork of Morgan Creek (Pahsimeroi drainage) was transferred from the Salmon National Forest to the Lemhi National Forest.

October 8, 1938, Executive Order No. 7986 abolished the Lemhi National Forest. The following lands of the Lemhi National Forest were transferred to the Salmon National Forest:

T10-11N, R27E
T12N, R27E, that part south of Lemhi-Union Gulch
T9-11N, R28E.
T7-10N, R29E.
T12-13N, R29E
T7-13N, R30E
T9-13N, R31E
T8-14N, R32E

These lands were the Medicine Lodge District of the Salmon National Forest. They were transferred in 1948 to the Targhee National Forest.

Executive Order No. 8355, dated February 25, 1940, by Franklin E. Roosevelt,

transferred the following lands to the Salmon National Forest from the Idaho (now the Payette) National Forest: lands lying east or north and east of a line beginning at the forest boundary on Salmon River at mouth of Cottonwood Creek and extending up Cottonwood Creek to the mouth of Basin Creek; thence up the ridge between Basin Creek and Peak Creek to Cottonwood Lookout; thence following the divide between Papoose Creek and Cottonwood Creek drainage to Farrow Mountain; thence south and east along the divide on the west side of Papoose Creek drainage to the forest boundary on the Middle Fork of Salmon River. These areas west of the Middle Fork which came to the Salmon National Forest in 1926 and 1940 from the Idaho Forest were originally a part of the Bitter Root Forest Reserve in 1902.

The present (1973) total area within the boundaries of the Salmon National Forest is 1,790,999 acres. This includes approximately 23,140 acres which are not National Forest, being private or state land. The main body of the Salmon National Forest is in Lemhi County, with a small portion (65,578 acres) in Valley County, and a smaller portion in Idaho County. The Challis National Forest and Targhee National Forest extend into Lemhi County.

Because the public was not conservation minded in the early 1900's, President Roosevelt widely publicized the work of the Forest Service, enlisting the cooperation of local and state groups throughout the country. In 1907 he called for a national conservation conference at the White House, which focused the attention of the nation upon the problem of conservation, giving prestige to the Forest Service.

There was some hostility in the West to the United States Forest Service because it affected westerners directly and seemed to be infringing former freedoms. An article in the Lemhi Herald for December 6, 1906, set forth the principles and aims of the Forest Service.

.....The government declares that the administration of Forest reserves is not for the benefit of the government but of the people..... This forest force has two chief duties; To protect the reserves from fire and to assist people in their use.

Persons having valid claims under the public land laws or legal title to land within forest reserves are free to occupy and enjoy their holdings,... but must not cut timber or make use of forest reserve land without a permit, except within the limits and for actual development of their claims. Any other use will constitute trespass. The forest service will grant preference in the use of privileges to actual residents in or near forest reserves....

Prospectors for mineral may have free use of the reserve, provided they limit their use of timber to the actual needs of prospecting. And no claim of any kind can be held valid because of its containing valuable timber....Any mining concern, employing men on wages, must

pay for the timber. No rancher can freely take timber off a reserve, unless it be shown that he has not suitable timber growing on his ranch. But when the prospector or rancher exceeds these limits he must first procure a permit and pay for the timber used. All brush must be piled and burned...

The free-use material...will be refused to saw-mill men...or commercial enterprises....No free-use material is allowed to be sold.

Timber is for sale and applications to purchase are invited. Anyone may purchase except trespassers upon the public domain. All timber must be paid for before it is cut....No living trees can be cut until marked by the forest officer. Violation of these rules constitutes trespass.

Wild grass upon forest reserves may be cut for hay under permits issued by the supervisor. A reasonable charge per acre may be made....

The secretary of agriculture has authority to permit, regulate or prohibit grazing in forest reserves. In new reserves, where the livestock industry is the big thing, full grazing privileges will be given at first, to all who pay the required fees, and if reduction in numbers is afterward found necessary, stockmen will be given ample opportunity to adjust....The leading objects of grazing regulations are to protect and conserve all reserve lands adapted for grazing, to work permanent good to the livestock industry through proper care of the grazing lands....all persons must secure permits before grazing any stock in a forest reserve, except the few head in actual use by prospectors, campers and travelers, and not to exceed six head of milch or work animals owned by a bona fide settler; these latter require no permit.....

Applicants for grazing permits will be given preference in the following order:

- Small near-by owners,
- All other regular occupants of the reserve range.
- Owners of transient stock.

Applications of new settlers will be considered except when the range is already fully occupied by small owner....

Anyone grazing stock without a permit is a trespasser, and no trespasser can procure a permit....

A reasonable fee will be charged for grazing all classes of livestock. The minimum price will be 20¢ to 35¢ per head for cattle and horses for the summer grazing, and 35¢ to 50¢ for the entire year. Sheep will pay 5¢ to 8¢ per head for summer....

The Herald has gathered the foregoing from the "Use Book" issued by Forester Pinchot, fully defining the regulations and instructions for the use of forest reserves. Lemhi is already in such reserve, and another season will bring 2 or 3 supervisors and about 20 rangers to take charge of the country. It is appropriate that the people should be informed upon the practical side of the subject. 1/

Opposition arose among the local people, as reported three weeks later:

TO OPPOSE THE FOREST RESERVES OF LEMHI.

Citizens Prepare the Way For a Monster Petition and Memorial to the President. Citizens Unanimous in their Disapproval.

....The feeling of remonstrance is very general....an informal meeting of a few citizens laid plans for covering the county with copies of a petition....We the undersigned citizens and residents of Lemhi county, state of Idaho, hereby protest against the action of President Roosevelt in creating the new forest reserves in Lemhi county. We regard the step thus taken as ill-advised, unjust and directly contrary to the best interest of the state and its people. 2/

The petition included the following points:

- a) This is not a timber country: there are no valuable tracts of timber which require protection.
- b) The indigenous trees will never be of commercial value. Any timber in the reserves will be needed for local wants.
- c) The country is so precipitous that the sources of the streams can never be denuded of timber. The forest belts are generally on high rocky, precipitous land that is practically inaccessible.
- d) The stock ranches here are all small and the ranchers unable to afford the expense of permit grazing.
- e) The restrictions of the reserves will hinder prospectors and miners.
- f) The fees imposed for maintenance of the reserve is purely local, while the benefits, if any, are for the country at large.

1/"Rules and Regulations Over Forest Reserves," The Lemhi Herald, December 6, 1906, p. 1.

2/"To oppose the Forest Reserves of Lemhi," The Lemhi Herald, December 27, 1906, p. 1.

g) Wood for fuel is already expensive and hard to get, without this additional cost.

h) This thing has been done without the knowledge or consent of the people directly affected.

The petition concluded by asking an agent of the forestry bureau to come to investigate and to consult with the local men.

In March, 1907, Major Frank A. Fenn, Supervisor of the Forest Reserves in Idaho, came to Salmon, met with stockmen and other interested people, to explain the relation of the Forest Reserves to the people. Over 100 people attended. Mr. Fenn explained that the current haphazard method of using the range would mean destruction of the livestock industry within the next ten years. All admitted that the ranges were overstocked, yet nobody but the government would be able to take hold of the matter in the cause of the public welfare. The time had come when somebody would have to equalize the range-rights, or somebody would suffer. Fenn stated that the government planned to improve and protect grazing ranges within the forest reserves and maintain public grazing range to the highest state of productivity.

Fenn set forth the objects of the forest timber policy:

- a) to protect the remaining forests from ruthless slaughter,
- b) to reduce loss from forest fires,
- c) to guard the heads of streams and conservation of the water flow.

Fenn explained that the dominant industry is always considered first (cattle, sheep, lumber, etc.) and in this way the old time range war should be a thing of the past. In the first year there would be no restriction on herds that had habitually ranged on the forest. No new stock would be allowed. After the first year the range would be examined and adjustments in grazing permits made according to the condition of the range. In reducing numbers of livestock on a district, the men would be asked to decide among themselves. If they could not agree, the supervisor would settle it on a pro rata basis.

Major Fenn told of his meeting at Junction (near Leadore) and that the men of the upper Lemhi organized, with the following elected to the advisory boards to adjudicate differences: Herbert H. Hays, chairman, Thomas Yearian, secretary, Gray L. Purcell, George W. Cottom and Michael Maier.

Major Fenn answered questions and at the close of the meeting it was plain to see that most of the group had a more hopeful view of the forest reserves and felt the ranchers would eventually realize much benefit from this service. 1/

1/"Talks on Forest Reserve Rules," The Lemhi Herald, March 7, 1907, p.1

Frank Fenn was well chosen to represent the Forest Service to the people of Idaho because he had been an Idahoan for many years, was a member of the first legislature, and the people knew him and respected him.

On February 28, 1907, it was announced that George G. Bentz had been named Superintendent of the Salmon Forest Reserve, and on March 7 of the same year he opened his office in Salmon.

Earlier in 1907 the following poem was published:

ODE TO FOREST RESERVES
(From the Poet Lariat -- January 10, 1907)

If all the trees in all the woods were men,
and each and every blade of grass a pen;
If every leaf on every branch that quivers
Were turned to foolscap; Salmon and Lemhi Rivers
Were changed to ink, and all the local tribes
Had nothing else to do but act as scribes;
And for a thousand ages, day and night,
These hoodoo's souls should write, and write, and write,
Till all the pens and paper were used up
And the great inkstand were an empty cup;
They could not terminate their dissertation,
Or half-express their mighty indignation
At what they term a curse on all creation --

This bureaucratic forest reservation --
Applied to plains where forest never moan,
Where only sage and bunchgrass hold their own;
While coyotes follow where the cattle went,
And gray wolves chorus in a mad lament,
And deadly hemlock cleans up ten per cent.
Still would the scribblers cluster round the brink
Calling for more pens, more paper, and more ink.

B. PERSONNEL

Personnel records for the earliest years are incomplete. In June, 1907, The Lemhi Herald carried a report on the Forest Service and listed the following employees:

Supervisor: George Bentz
Assistant Supervisor: William Swan
Guards and Rangers, and their areas:
Ora Cockrell - Salmon City
Montie Buster - Sunfield
H. B. Weber - Lemhi Agency
F. W. Carl - Gibbonsville
Earl Gilbreath - Big Creek (Panther Creek) and Shoup
R. W. Young - Shoup
E. M. Christensen and Ashton - Prairie Basin (Forney)
H. D. Gerrish and Ross Tobias - Challis (The Salmon Forest Reserve at this time included much of the present Challis National Forest)
Wm. Shanafelt - Salmon River
George Nichols - Predator hunter in the Junction area
Jas. M. Ryan was being recommended for appointment as a ranger

Mr. Swan reported a need for two good timbermen at Salmon, a ranger for Loon Creek, one for Stanley Basin and one for Greyhound, and the Salmon office needed a clerk and a map maker. The Herald reported that these forest officers are endeavoring to get their stations established, cabins built and equipped, and the mountain trails opened from one district to another. Mr. Swan pointed out that after the force gets strung out it will be next to impossible for stock-rustlers to go through without being spotted and stopped. Strayed stock will be reported and recovered, and a close check will be kept on forest and range fires. 1/

The Salmon National Forest is part of the Intermountain Region with headquarters in Ogden, Utah.

Early Salmon Forest employees Fred Carl, Ross Tobias, and Fred Chase each tell about taking the Civil Service Commission test for ranger. In addition to the written test there was a field test, administered in a field on the bar near what is now Broadway and Third, about where Ikey's Beauty Shoppe now stands. Each applicant was required to make a plat of a piece of ground, pace off a certain distance, saddle a horse, use a diamond hitch in packing a mule, and pass a test of target shooting and use of a gun. In 1907 the salary for a Forest Guard was

1/"Local Forest Service," The Lemhi Herald, Salmon, Idaho, June 27, 1907, p. 1.

\$720. per year, soon raised to \$900., and in 1909 the annual salary for Assistant Ranger was \$1100. 1/

Fred Chase reports the following location of personnel in 1909:

Indianola - R. W. Young
Hughes Creek - Ora Cockrell
Salmon - Wm. Swan and Fred Chase
Lemhi - George Ashton
Forney - Morris Christensen
Junction - Harry Long

Ross Tobias started work for the Salmon Forest Reserve in April, 1907, at the age of 21, as a Forest Guard, and was later promoted to Assistant Ranger. His certificate bears the personal signature of Secretary of Agriculture James Wilson. Tobias worked on the Lemhi and Junction Districts in 1909, and in 1910 went to Cabin Creek Station at Forney. Earl Gilbreath was at Forney that year, and Gus Schroeder was at California Bar (Leesburg). The name A. L. Dryer appears in the Tobias diary in 1913 at California Bar. 2/

Otis Slavin remembers that in 1914, the Leesburg Ranger was Ray Dryer, with Clarence McCracken as assistant. Otis Slavin and Paul Stratton worked on trail crew under McCracken. 3/

A 1915 map of the ranger districts of the Salmon National Forest shows 12 Districts:

1. Indianola - R. E. Allan
2. Hughes Creek - Ora Cockrell
3. Fourth of July Creek - C. J. Kriley
4. From Sal Mt. up the east side of the Salmon River to the Pahsimeroi - F. C. Haman
5. Leesburg (California Bar) - R. L. Dryer
6. Forney (Cabin Creek) - J. Gautier
7. From Carmen to Hat Creek, west of the Salmon River - Wm. Swan
8. Shoup (Garden Creek) - M. E. Mahoney
9. Lemhi, surrounding the Indian Reservation - G. R. Ashton
10. Leadore area, west of Leadore - Fred Chase
11. Junction, Grizzly Hill area which had been the Idaho part of the Beaverhead National Forest - C. Nelson
12. Gilmore - H. B. Weber

1/Interviews: Fred Carl, Salmon, Idaho, May 1, 1969; Ross Tobias, Salmon, Idaho, May 27, 1970; Fred Chase, Boise, Idaho, June 1, 1970.

2/Ross Tobias, Forest Service Day Book, April 1907 - September, 1913

3/Interview with Otis Slavin, Boise, Idaho, July 18, 1969.

United States

Department of Agriculture,

Washington, D. C. April 12, 1907.

Mr. ROSS S. SOBIESKI ----- of the State
of IDAHO ----- is hereby appointed
FORESTER.

In the Forest Service,

in the United States Department of Agriculture, at a salary at the
rate of SEVEN HUNDRED AND TWENTY (\$720.00) ----- Dollars
per annum --- on the miscellaneous roll paid from the fund appropriated for
"General Expenses, Forest Service:" or from any other lump fund appropri-
ated for the Forest Service to which the salary is properly chargeable.
For a temporary period.

The above-named appointee is hereby required to take the
Oath of Office immediately and file the same, together with a
statement of loyal and correct conduct and personal record, with
the Appointment Clerk in the Department of Agriculture,
and report for duty in writing, to the Forester, Chief of the Forest
Service, and be subject to the rules and orders of the Secretary
of Agriculture. This appointment shall take effect on
April 12, 1907.

James M. Wood
Secretary of Agriculture

Later the Leadore and Junction districts were combined under Fred Chase, and the Gilmore district was later added.

A more complete roster of forest personnel is listed in the Appendix.

Salmon National Forest, Total Permanent Full-Time Employees:

1957: 20	1964: 64
1958: 23	1965: 52
1959: 32	1966: 50
1960: 42	1967: 54
1961: 45	1968: 52
1962: 55	1969: 50
1963: 65	1970: 55
	1972: 62

Accidents Fatal to Forest Employees

Herbert G. McPheters, assistant supervisor, was killed in May 1926. He and a foreman were returning by truck to a Forest road crew near Morgan Creek when mechanical failure caused the truck to run off the Salmon River road about 25 miles up river from Salmon. McPheters was killed and the foreman survived.

A CCC enrollee from Camp F-401, Ebenezer Bar, was killed in the spring of 1939 when struck by a rock dislodged by the spring thaw.

Clarence Schultz, forestry foreman at CCC Camp F-401, Ebenezer Bar, was killed by lightning on July 11, 1939. Returning by trail from a forest fire which they had extinguished in German Gulch, tributary of Pine Creek, Mr. Schultz and two CCC enrollees, George Lawrence and Jay Morris, were struck by lightning. Morris and Lawrence recovered.

In 1941 a summer employee died during fire training camp on Papoose Creek, tributary of Squaw Creek. He was not well, became confused and wandered from the group. An all-night search was conducted. His body was found the next morning.

Frank Gibson, member of a trail crew working in the Middle Fork area in the 1950's, drowned while attempting to ford the Middle Fork on a horse.

In 1956, Otto Crooked Arm, member of an Indian fire-fighting crew, was killed on a fire on the head of Trapper Creek, tributary of Papoose creek west of the Middle Fork. He was struck by a rolling log.

Two firefighters lost their lives during the Corn Creek fire in 1961. One died of a heart attack, and the other was killed in a highway accident enroute home to McCammon after the fire. Though he was not

on the Salmon Forest at the time of the accident, he was still on the Forest payroll.

In 1964 a TBM plane crashed while spraying for spruce budworm. The pilot was killed.

Gary Yule and John Jones were killed June 25, 1970, when their Forest Service vehicle went into the Salmon River near Indianola during high water. Two other employees riding in the truck survived the accident.

C. ADMINISTRATION OF THE SALMON NATIONAL FOREST

As the responsibilities of Forest Service officers increased, so did their regulations and instructions. One of the earliest "Use Books," published in 1907, had only forty pages, setting forth the purpose of the National Forests and the terms of their use by the public. A Use Book of 1918 was 168 pages. The 1928 manual was two and a half inches thick and today the Forest Service regulations fill many volumes.

In 1944 Inspector J. N. Kinney called attention to the uniqueness of the Salmon Forest among the Forests of Region Four because of the isolation of the Salmon; seven of the eight ranger districts comprise an isolated unit detached from surrounding economic, topographic and political areas. 1/ Kinney considered the Salmon Forest as an ideal unit for a social, economic or political study, which would show its economic and social relationship to the dependent community.

In 1947 General Inspection of Nord and Moncrief reported:

The Salmon National Forest is a big, important unit in good condition, well staffed, and well run. Its two million acres of rugged mountains form a major part of the Salmon River watershed and contain a fish and game resource of national importance. Its forage supports a sizeable agriculture economy with some 13,000 cattle and 36,000 sheep under permit. Sustained yield of merchantable timber is considerably more than adequate for the fuel, wood, lumber, and pole needs of the local population. It has been and still is a big producer of mineral wealth.

The Salmon and its people have a character of their own. They are independent, self-sufficient, and at the same time progressive. Since the days of Lewis and Clark they have been pioneering....

Most unsolved Salmon problems are interesting because they tie in so closely to this traditional character. They are primarily problems of taming and using, and yet preserving, the pristine wilderness.

The Salmon is a back-country forest, but is managed and used by an alert and forward-looking staff and public. Its greatest products will always be water for distant farms and communities, together with wildlife and other recreation values which are not measured in dollars. Therefore, the fact that the cash receipts are considerably lower than expenditures cannot be used as a measure of its importance. 2/

1/J. N. Kinney, "Inspection Report," May 13, 1944, p. 1.

2/Nord - Moncrief, "General Inspection Report," August 5, 1947.

1. Administrative Sites and Improvements

Ross Tobias, who started as a Forest employee in April, 1907, recalls that the earliest Forest headquarters in Salmon was an upstairs office on the north side of Main Street, in the Brown block near Center Street, later known as the Cavaness Building. Forest Service headquarters were later moved across Main Street to an upstairs office in the present McPherson building. New headquarters were built during the 1930's at Union and McPherson. In October, 1965, the Salmon National Forest moved into a new building north of Salmon, on the east side of U. S. Highway 93, retaining their Union Street property for Ranger District Headquarters, warehouse and storage.

Ranger or Guard Stations before 1908 were likely to consist of a tent platform and frame with a wall tent stretched over them. Ross Tobias remembers that during his first six months in the Forest Service (1907) he never had a meal in a house unless he stopped in at a mine like the Lost Packer for a dinner. He had no cabin; just camped out all the time. One of his early jobs was to survey the boundaries of the Salmon River Forest Reserve. He and Ora Cockrell went to Loon Creek, out past Custer and clear to Marsh Valley.

As soon as possible after the establishment of the Salmon River Forest Reserve, cabins were built for the personnel in the field. However, no more than \$500. was allowed to be spent on any one building. By 1919 a limit of \$650. was allowed to build a ranger's home on his ranger district.

Many of the earliest ranger cabins or guard stations are not in existence today, and some have been replaced by newer structures. Some of the old-timers have reminisced about a few of the earlier buildings.

On May 25, 1907, Ross Tobias rode to Opal Creek to locate a possible site for a Ranger Station.

In November, 1907, Ross Tobias assisted Ranger Dave Laing and Guard Gerrish in surveying for the Ranger Station on Loon Creek.

Ora Cockrell built the first station at Hughes Creek in 1909.

Fred Chase remembers a Station up Pattee Creek in 1909.

At one time there were two ranger districts near Junction. One was in Region 1, administering that part of the Beaverhead National Forest west of the Continental Divide and in Idaho; the other was a ranger district in the old Lemhi National Forest. In 1913

most of the Beaverhead Forest west of the Divide was transferred to the Salmon, adding a new district. Later this district became part of the Leadore District.

In the spring of 1910 Fred Chase and Gus Schroeder built a ranger station at the forks of Jesse Creek, and fenced about 40 acres. The snow was deep and they used a sleigh and team. The Jesse Creek site is presently used as a storage area and horse pasture.

The Gilmore Ranger Station was a little below Gilmore, near the Gray Purcell ranch. Harry Coleman lived at a "fire station" on Eightmile Creek near the old Bohannon ranch. The Forest had 40 acres there and kept fire tools and equipment at the station.

Ross Tobias and Ranger Long rode from Tendoy (Lemhi) Station in August, 1909, to Alder Creek, found U. S. Survey corners and surveyed for a ranger station.

Before the ranger station was established at Yellowjacket, about 1924, the ranger's headquarters for that district were at the Mormon Ranch on the Middle Fork. Money was allotted to build a district headquarters for the Middle Fork district at the mouth of Camas Creek, but in 1924 Inspector C. N. Woods noted that place was very dry, with little forage; timber was not handy; there was no chance to buy hay for delivery there; and it was in an out-of-the-way corner of the district. C. N. Woods authorized Supervisor Scribner to construct headquarters on Yellowjacket Creek, since it was more central, with wagon road and telephone.

The Forney Ranger Station was changed from Cabin Creek to Copper Creek in 1920. Al Wheeler and Earl Kingsbury built the new station across the road from Dummy Creek (now Cobalt). Al Wheeler was the first ranger to occupy it.

When the Medicine Lodge District was part of the Salmon Forest, from 1938 to 1948, the summer home of the ranger was Warm Springs Ranger Station, 34 miles from Dubois. Also on that district were the old Kaufman station and Coal Kiln ranger station.

In 1941 the name of the Tendoy ranger district was changed to Lemhi.

At various times the ranger district boundaries were changed for administrative purposes. In 1915 there were twelve ranger districts. These were combined in various ways to eight in 1916, seven in 1923, eight in 1938 with the addition of the Medicine Lodge District, seven again in the 1950's, five through the 1960's and at present the Salmon National Forest is administered by four ranger districts.

2. Communications

One of the first management objectives after the creation of the Salmon River Forest Reserve in 1906 was to establish a communication system.

- a) Mail was one of the first means of communication used. This proved inadequate during times of forest fire.
- b) Runners were used in times of fire or other emergency. Runners went by horseback if there were trails, but often went on foot if the country was too rough for a horse.
- c) Telephone. In some places telephone lines were built before there were rangers' cabins. There was already a telephone line from Salmon to Leesburg, completed in July 1906, owned by the Shoups. 1/ In August of 1907 Salmon was connected with the outside world when H. J. Bagley of Baker completed a line to Dubois and connected with the Bell long-distance system, and people of Lemhi County could talk to outside points. Salmon telephone headquarters were in Pyeatt's drugstore. The stations along the line included Salmon, Baker, Sunfield, Rees' Store (Lemhi), Junction, Gilmore, Weimer's Camp, Wood's stock ranch, Reno, Liddy's sulphur springs and Dubois. The Farmer's line from Yearianville to Bannister was an important side convenience. 2/

In October, 1907, it was reported that the Forest telephone line between Forney and Challis was nearing completion and later that fall F. C. Wells, forest construction engineer, and Earl Gilbreath of the Forest Service went to Shoup to inspect the route for a telephone line to Indianola. Fred Carl reported a line was planned up the North Fork, while Newton Hibbs and Willard Rood were assigned to build a line from Leesburg up Arnett Creek to Big (Panther) Creek. In November 1907 there was an estimated 325 miles of phone line in operation in Lemhi County and the contemplated Forest Service lines would bring this to 400 miles. 3/

Fred Carl recalls that one of his first duties as ranger on Hughes Creek was stringing telephone lines. 4/ Ross Tobias worked on the Indianola-Blue Nose phone line in 1912, along with Rangers R. E. Allan and R. L. Dryer. 5/ In 1916 the Salmon City and Western Telephone Company, which had operated a ground-

1/The Lemhi Herald, August 1, 1906

2/The Lemhi Herald, August 15, 1907.

3/"Notes on Forest Progress," The Lemhi Herald, November 28, 1907.

4/Interview with Fred Carl, Salmon, Idaho, April 30, 1969.

5/Ross Tobias, Forest Day Book Diary.

ed telephone line from Salmon to Leesburg and Yellowjacket, owned by the Shoup's turned their interest over to the Forest Service.

The following report on telephone lines of Lemhi County in 1917 was prepared for the military during World War I by Salmon Forest Supervisor Dana Parkinson.

Lemhi Telephone Company:

- One metallic copper circuit, Armstead, Montana to Salmon, Idaho
- One grounded copper circuit, Armstead, Montana to Salmon, Idaho.
- One metallic copper circuit, Leadore to Gilmore.
- One grounded copper circuit, Leadore to Gilmore.
- Various rural lines.

Forest Service wires:

- Metallic circuit, Salmon to Indianola Ranger Station.
- Grounded circuit, Indianola to Shoup and to Blue Nose Mountain.
- Grounded circuit, Northfork to Gibbonsville, with lateral along Hughes Creek and Ditch Creek.

The following Forest Service wires connect at a ranch house near Forney, with rural lines operated by Lemhi Telephone Company:

- One grounded circuit, Forney to Challis. At Challis the Mountain States Telephone and Telegraph Company has wires connecting with outside points.
- One grounded circuit, Forney to Meyers Cove.
- One grounded circuit, Forney to Yellow Jacket.
- One grounded circuit, Forney to mouth of Big Creek (Panther Creek), and later to Shoup.

The Forest Service built and maintains a telephone line to Cathedral Mountain to the Lookout there, for fire protection.

No telegraph lines. 1/

A Forest Service telephone line was built from Salmon to Taylor Mountain via Lake Mountain in 1918. It was largely a "tree line" built on existing trees. Otis Slavin, who began working for the Forest Service in 1914, recalls working on this line in 1918, until he entered the army, when he was replaced by J. L. O'Quinn from Cabin Creek. 2/

In 1924 the Forest Service owned no lines in the Lemhi River watershed. The two ranger stations in this area used the commercial line available. The Salmon Forest developed two separate telephone systems down the Salmon River, with one on the north side and one on the south side, and a fire dispatcher

1/Dana Parkinson, "Reconnaissance Report for the Military Information Division," 1917.

2/Otis Slavin

located at Cove Creek. By 1924 there were 305 miles of telephone line on the Forest. In 1928 new telephone line was built between Middle Fork Peak and Yellow Jacket Ranger Station. This connected the westernmost point, Two-Point Lookout between the Salmon and the Idaho (now Payette) with the main phone line to the east.

Early telephone lines used the "fixed tie:" the line was firmly attached to each insulator which in turn was fastened hard and fast to the tree or pole. A tree falling across the line would break it. A Forest Service employee developed the "split insulator" which allowed the line to go through without being fastened to it. Also, the insulator was fastened to the tree in such a way that if a tree fell across the line, the insulator would come off the tree before the line broke.

A portable phone was used by travelers along telephone lines. It was about the size of a three battery flashlight and used a buzzer instead of bells.

Telephone was the main form of communication in the days before radio.

- d) Heliograph was early used by lookouts in reporting fires. The heliograph used the sun's rays reflected on a mounted mirror to send messages by Morse code. Some of the drawbacks in the heliograph: stations sending and receiving had to be within visible distance; it could not be used on cloudy days; one could send messages from west to east only in the mornings, and from east to west only in the afternoons; it was difficult to find men for lookouts who knew Morse code. 1/
- e) Carrier pigeons. There was an attempt made on the Idaho Forest to use carrier pigeons. This was not successful. Many birds disappeared and the smokechasers were accused of eating the birds since rations quite often ran short. 1/
- f) Radio was a great boon to Forest Service communication but there were many problems to solve. The first radios used, around 1928 or 1929, required a pack string to haul one, with tools and equipment to set it up.

In 1934 the Salmon Forest had the following radio set-up:

At Salmon - 1 M set used as a central control for the Forest radio network. When fire season is on will be hooked up continuously and operator on hand to receive calls

1/F. E. Powers

from Salmon field stations.

Field Sectional Radio control stations having telephone into Salmon, and reporting by radio direct to Salmon:	Stations reporting direct to sectional radio control stations:
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Lake Mountain - SP setSal - PF set Sheephorn - SP set
Long Tom - M setButt's Creek - SP set Stoddard - PF set
Middle Fork Peak - SP set. . . . .	.Sugar Loaf - PF set (emergency point only)

Three additional PF sets were placed with road and trail crews. 1/

There were no portable two-way radios, so the Forest Service set up a shop and developed the SPF set. F. E. Powers recalls using one in 1937. It weighed 17 pounds but was very usable.

When World War II began, the Army did not have two-way radio, so they requisitioned the Forest Service radios until they could develop and produce their own. Improvements were developed rapidly, so each new issue of radio was vastly better than the last. Glenn Thompson recalls that during the war the Army always requisitioned the newest radios that the Forest Service had acquired.

1/"Memo for RO Files," June 21, 1934, p. 4.

3. Transportation

Trails were opened up as soon as possible after the establishment of the Forest. Some Indian trails or mining trails were improved and new trails were built as needed for fire protection. Through the years standards were developed for trails used for different purposes. By 1924 trails were usually referred to as primary trails, secondary trails, and way or fire-ways. Inspector C. N. Woods advised that "way trails" should be well blazed, with enough work done so a man could get through with a pack horse without difficulty. Ordinarily no dugout work was done on way trails; only cutting out of logs which horses could not readily step over, and standing timber removed to allow a horse through with an ordinary pack. Mr. Wood suggested that if no more than 35 horses used a route per year it could be classified as a way. More than 35 horses classified it as a trail, and maintenance should be done accordingly. A truck trail was a low standard road, nine feet wide and it usually followed along a ridge, going up and down with the ridge, with little effort to reduce the percent of grade. A six foot saw, an ax, and wedges were used in early trail work. Where possible, trail workers plowed with a horse and a two-way or reversible plow.

A 1924 report on trail work on the Salmon Forest includes the following:

- The Clear Creek trail and the Colson Creek trail were built in 1923.
- In 1923 a trail was built from the mouth of Camas Creek down the Middle Fork through the canyon to the Mormon ranch, the main object being to avoid the climb by the old trail over Aparejos Hill.
- The trail from Salmon City to Baldy Mountain could be improved by removal of rock; the steeper stretches run 25 to 35%.
- There are stretches on the China Springs - Taylor Mountain Trail that are 50% grade.
- A start had been made to cut out a trail between the Blackbird Lookout and the main Redrock - Cathedral Mountain - Divide trail. This section is a valuable protective trail.
- The old prospector's trail across Hoodoo and Lake Creeks and up Camp Creek is in places very steep, with 25 to 40% grade.
- The Middle Fork Peak guard has built a trail from his camp under the Middle Fork Peak saddle up to the saddle.
- There is a trail and a way, west from Middle Fork Peak to Mormon

ranch on the Middle Fork via Warm Springs Creek. Dropping off the mountain the grade is from 30 to 50%. As much as 80 pounds of telephone wire has been packed by horses up this trail.

- A trail has been proposed down the Middle Fork below the Mormon ranch as far as the mouth of Big Creek, on the east side of the river. At present the trail is on the west side from the Mormon ranch to Snowshoe Johnson's cabin, fording there to the east side.
- There is a ford at Snowshoe Johnson's cabin across the Middle Fork and a trail down the east side two miles to Wilson Creek, up Wilson Creek and over to the Hoodoo meadows on Hoodoo Creek. There are several bridges across Wilson Creek which will soon be too rotten to use. These bridges need not be replaced since the trail is used only in summer when the creek can be forded. (Vegetation since the Wilson Creek fire of 1929 has reclaimed the early trail and today travel down Wilson Creek is very difficult).
- There is a satisfactory trail between Leesburg and Haystack Mountain when the down timber is removed.
- The trail down Pine Creek is very poor, parts of it running from 25 to 40% grade and in places it is very brushy.
- The trail from Shoup down the Salmon River to Colson Creek is in good shape. Much rock work had been done on it since 1916.
- The trail and road from Horse Creek Hot Springs up Horse Creek to Blue Nose is good except for down timber.
- The trail from Blue Nose to Shoup via Horse Fly cabin is very good.
- The short cut trail from Indianola up Ulysses Mountain to the lookout is excessively steep, 30 to 40% in places.
- The trail up Ulysses Mountain to Grizzly Spring is acceptable.
- A satisfactory trail runs from Hughes Creek ranger station to the Stein Mountain Lookout. Some stretches are as steep as 35%.

The Timber Creek watershed has trails up most of the main forks. These trails should be maintained by blazing, and cutting out down timber. 1/

The trail grader was invented by John Raphael, later Supervisor of the Weiser Forest. It had an adjustable blade about 2½ feet by 12 inches, pulled by a horse from a singletree. This was a common tool in trail-

1/ C. N. Woods, "Salmon Inspection Report," August 20, 1924, pp. 9-21.

building. There is still a trail grader on the Salmon Forest (1970). 1/ Different types of trail graders in 1928 included the light weight Varner; medium weight Quillen and California; heavy weight D-1 and Beatty. 2/

High water made the Salmon River trail below Shoup impassable for three to six weeks each year. D. E. Romano in 1928 recommended a higher trail down the Salmon River, with a bridge across Owl Creek so the trail could be used throughout the year. 3/

The sheep bridge across Panther Creek at the mouth of Dry Gulch had washed out in the flood of 1926, making it necessary for Forest Officers to go to the mouth of Garden Creek, during high water, in order to reach Sage Brush Lookout and Clear Creek. A new trail bridge was built across Hayden Creek in 1929 just below Tobias Creek. A sheep bridge was built in 1930 on Hayden Creek, just above the mouth of East Hayden Creek.

Melvin and Marion Honey were the trail crew in the Yellowjacket area in 1930. Frank Neal did the blasting. 4/ The Williams Creek Way and the Deep Creek Ridge Way were inspected by Kinney in 1930. These were fire ways, for travel by fire guards to fires by day or night. Other "ways" were the East Owl Creek Way, from the Owl Creek Park to the Bear Trap ridge; and the Pattee Creek - Meadows Way.

In 1931 there were trails maintained by smokechasers on Colson Creek, Skunk Camp Lookout Trail, Skunk Camp to Salmon River, which descended over 4000 feet in about 3½ miles, and one being built up Horse Creek, where there was an old trapper's way that was slow and dangerous. There was a new trail on West Horse Creek with tread made by horse and trail plow.

The Shoup pack bridge, built in 1914 by Jack Bundy, was repaired in 1927 (south tower replaced) but by 1931 needed further repairs of new stirrups, stringers, and railing. 5/ By 1939 this bridge was unsafe and was so labeled.

By 1933 there was a pack bridge at the mouth of Big Creek on the Middle Fork; by 1934 a pack bridge at Brushy Creek. 6/

1/ F. E. Powers.

2/ C. N. Woods, "Salmon Inspection Report," August 29, 1928, p. 5.

3/ D. E. Romano, "District 1 Inspection," May 28, 1928, p. 4.

4/ J. N. Kinney, "Memorandum of Inspection," July 22, 1930, p. 5.

5/ J. N. Kinney, "Inspection Report," October 7, 1931, p. 1.

6/ Interview with Les Gutzman, Salmon, Idaho, October 23, 1969.

In 1939 the Clear Creek section of the Crag Ways was constructed by Arthur Ludwig, under Ranger A. R. McConkie, and a pack bridge was built across the Middle Fork at Crandall's ranch (Flying B).

Horses and Pack Animals. Trails were of great importance in the Forest for fire control, even after roads were built. Also importance in the area of fire control were the horses and pack animals which traveled the trails. When the Salmon Forest was established, each ranger was required to furnish his own saddle horse, and to pay the Forest Service annually for its feed. The Forest Service kept a few horses for use by inspecting officers and others. In 1916 there were eleven Government horses on the Salmon Forest.

Mrs. Jim Mahoney (Marian) remembers two Forest Service mules at Indianola in the late 1930's: old "Jimmy" and "Bobo." When the men were all away the women would have to put the mules and horses out to pasture and bring them in at night. Mrs. Clint Quesnel (Barbara) showed Sue Mahoney, who was just a child, how to hobble the bell-mare. Sue took care of the horses and mules without any trouble, which surprised the men. But the mules could jump fences and open gates. The corral fence was raised to about nine poles, but if "Jimmy" was left alone, he would still jump it. 1/

The Forest Service has often hired professional packers and their packstrings for specific jobs, such as hauling building materials for a lookout or a pack bridge, or materials to and from fires. Wallace St. Clair was one of the earliest packers for the Forest. Other packers have been Frank Lantz, Earl Poyner, Elmer Phillips, and Horace Marsing.

In 1952 a safety training film "Horse Sense" was made on the Salmon Forest. Most of the filming was done around the mouth of the Middle Fork and in the Crag. The film showed the care and use of horses and mules, emphasizing trail and camping use; hobbles, bells, feed, etc. It was filmed for Forest Service, sponsored by the Department of Agriculture. The film won a National Safety Council award for program content and technique, and was released for television showing. Within a short time the primary users of the film were dude ranchers.

Roads. "Winter roads" were sometimes used in places where travel was difficult and the building of regular roads was not feasible. A winter road mentioned earlier was one over Lost Trail Pass around 1900. Snow in the winter covered the boulders and smoothed the way, making it possible to travel with horses and sleighs. Winter roads were used by loggers in areas where it was difficult to build roads. A winter road was used in Pollard Creek by loggers in 1923. 2/ In 1928 Forest

1/ Interview with Jim and Marian Mahoney, October 22, 1969.

2/ C. B. Morse, "Inspection Report," August 8, 1923, p. 1.

Service Inspector U. S. Swartz recommended a winter road be built by Bolts and Oltmer between their mill and the timber up Hayden Creek, where slide rock and solid rock made ordinary road building impractical. 1/

Rich Knoblock describes the "winter road" procedure which was a common practice in the Salmon country in the early 1930's. They put one end of the logs on a sled; the logs and sled made the road in the heavy snow. Increased use and more snow and freezing improved the road. You could go around a fairly steep slope even where there was no road. Knoblock used this method on Kadletz Creek. 2/ Another name for the winter road was a snow road.

The first roads in the Salmon Forest were improved wagon roads. In 1928 Inspector C. N. Woods rode the Government Dodge truck from Prairie Basin to Yellowjacket Ranger Station and back, and then to Meyers Cove and back to find out if in case of fire, men and supplies could be transported by truck. He found it satisfactory, needing some maintenance on high centers. 3/ In 1930 Supervisor Kinney found the nine miles of road from Leacock's ranch (mouth of Napias Creek) to Leesburg barely passable to Ford cars because of high centers. Other cars with lower clearance could not make it. 4/

In 1931 work was begun on the Spring Creek motorway and the Williams Creek road. Roads in the Forest were still being graded with horse-drawn graders. Power enthusiasts recommended going entirely to mechanized equipment, while others favored continued use of teams of horses on the roads, partly so they would be ready for use on fires, to pull fire plows. 5/

Though there was a wagon road to Leesburg and Forney, the only auto route in 1932 was up the Salmon River and over Morgan Creek. The road over Williams Creek was not finished. Down Panther Creek below Napias Creek there was only a pack trail. 6/

In the 1930's many miles of road were built on the Salmon Forest. Men from the CCC camps built the road down the Salmon River below

1/ U. S. Swartz, Logging Engineer, "Inspection Report," 1928, p. 2.

2/ Interview with Rich Knoblock, Boise, Idaho, February, 1971.

3/ C. N. Woods, "Salmon Inspection Report," August 29, 1928, p. 6.

4/ J. N. Kinney, "Inspection," July 22, 1930, p. 1.

5/ J. N. Kinney, "Letter to Regional Forester," November 18, 1931, pp. 5-6.

6/ Interview with Lester and Mildred Gutzman, Salmon, Idaho, October 23, 1969.

Shoup to the Middle Fork, finished the road over Williams Creek summit, built the road up Panther Creek from the Salmon River, the Spring Creek road and others. By 1939 the Salmon National Forest had a total of 404 miles of existing truck trails, exceeded in mileage only by the Boise and Targhee National Forests in Region Four. Much of this was very low standard ridge road, such as the Spring Creek Motorway System. Williams Creek road was considered a medium service truck trail and probably the most important single road on the Forest. In 1939 a spike camp from the CCC Camp on Cove Creek was doing betterment work on the Panther Creek road, between Forney and the Salmon River, under superintendent Herb St. Clair and his foreman. 1/ Road projects in 1943 included Silver Creek, and a crew worked on the Nicholia road under Herb St. Clair.

Improved engineering methods, better equipment and vehicles have changed the work of road construction in recent years. Many roads have been reconstructed to meet present day needs for administration for public use, new standards of drainage and land use.

Forest Service Bridges. The Shoup Pack Bridge was built in 1914 by Jack Bundy. It was repaired in 1927 and 1931, condemned about 1939, and has since been destroyed. Horse Creek Pack Bridge was built in 1934. It was condemned and destroyed early in 1971. Stoddard Pack Bridge, at the mouth of the Middle Fork, was built by the CCC men in 1937.

Big Creek Pack Bridge was first built in 1933. It was rebuilt in 1957. Bernard Pack Bridge was built at Brush Creek in 1934, rebuilt in 1957.

There are pack bridges across Camas Creek at the mouth of Yellowjacket Creek, across Yellowjacket at Buck Creek, and across Panther Creek at Woodtick Creek.

The Salmon River auto bridges at Pine Creek and Cove Creek were built during the 1930's by the CCC men in the process of extending the Salmon River road below Shoup to the Middle Fork. Neal Poyner relates that they walked a "cat" across the river at Shoup in the winter of 1933, and took a compressor over by boat, to work on the bridge and the road below. The Pine Creek bridge was completed in the spring of 1934.

The three Salmon River auto bridges above Salmon, called the Shoup bridge, Rattlesnake bridge and Iron Creek bridge, were built originally by the county, since there were ranches on the other side, but the roads all entered National Forest Land.

1/ A. L. Anderson, "Inspection Report," September 28, 1939.

Landing Fields. There are three landing fields in the Salmon Forest. One is a private field on the Flying B ranch. The Forest Service Bernard Landing strip was built in 1932. Wayne O'Connor and Dutch Morrison worked on it, taking in a plow, scraper and fresno by pack string. The Forest Service emergency landing field at Hoodoo Meadows was begun by the CCC's in 1935, and completed in 1937. An airstrip was cleared but grading not completed south of Butts Point. The slips used in grading are still on the site.

Helipads. Since the advent of the use of helicopters on the Forest, helipads have been built in various places to facilitate the work of the helicopters. Many helipads are now marked so they can be seen from the air, and are shown on maps of the area. There are over 200 helipads on the Salmon Forest.

4. Civilian Conservation Corps

The Civilian Conservation Corps came into being during the depression of the 1930's when hundreds of thousands of people were without work. A New Deal plan of D. F. Roosevelt, it became a program of self-sustaining public work. Most of the camps worked on projects in national, state, or private forests. CCC boys planted trees, fought forest fires, built roads and trails, thinned overcrowded timber stands, fought diseases of the forest such as bark beetles, gypsy moth, and pine blister rust. They re-seeded thousands of acres of grazing lands within western National Forests, and built recreational facilities still in use in many forests. The CCC program lasted from 1933 until 1942. 2,500,000 young Americans took part in it. At its peak between 1935 and 1937 there were 1500 camps with a top enrollment of 500,000. 1/

The camp activities of the enrollees were supervised by military personnel, while the field activities were supervised by civilians hired and directed by the agency responsible for the work.

There were four CCC Camps in the Salmon Forest, with another CCC Camp on Haynes Creek under the Department of Grazing, a department dealing with non-forest public land. Those on the Salmon Forest were F-92 at Squaw Creek with Emmett Steeples, Superintendent; F-103 at Shoup; F-176 at the mouth of Panther Creek with Frank B. Bradley, Superintendent; and F-401 at Ebenezer Bar with Herbert St. Clair, Superintendent. About 200 men at a time were sent to each camp, plus their Army officers. They worked under direction of the district rangers on various projects in the Salmon Forest.

Remembered most by the public was their work in building roads and recreational facilities. The CCC work extended the road from Shoup down the rugged Salmon River canyon to the Middle Fork, finished the road over Williams Creek summit, built the road up Panther Creek from the Salmon River, the Spring Creek road, and Anderson Mountain road along the Continental Divide. Recreational facilities included building the original facilities at Twin Creek, Cougar Point, Long Tom, Deep Creek, and Wagonhammer Spring. In addition they built telephone lines, bridges, a landing field, maintained roads and trails, and fought fire when needed. In the period from June 1, 1933 to January 1, 1936, they spent 11,054 man days fighting fire.

The boys came from all over the United States. Some were from

1/Orville Freeman, Secretary of Agriculture and Michael Frome, The National Forests of America (New York: G. P. Putnam's Sons. In association with Country Beautiful Foundation, Inc., Waukesha, Wisconsin, 1968), pp. 88-90.

southern Idaho. Retired District Ranger Neale Poynor remembers that some of the boys from New York had never walked on ground except in a city park. Others with rural background could not write their names. The minimum age for the CCC program was 18 years, but there were older men also, who had wives and children left at home. The boys were not frightened or hostile, but were inexperienced, and in strange surroundings, and some did not know how to take care of themselves. Most of them were willing to learn, and anxious to do well. The CCC program gave them a chance to earn something on their own, and have a place to live. Many continued their schooling in night classes held in the camps. Neale and Laura Poynor recall attending an eighth grade graduation exercise held at one camp. 1/ The construction for the Salmon Forest was something the CCC men could be proud of and they acquired worthwhile skills and a love of the country in which they had worked. Some CCC men remained in the Salmon River area. Forest Service personnel and local citizens voiced approval of their work and of the CCC program.

One CCC project was construction of an emergency landing field on Hoodoo Meadows, to be used by planes on fire control work over the Primitive Area. In 1929 this meadow had been used as a base camp on the Wilson Creek fire. A 25 man CCC crew began work there in July 1935. The altitude is 9000 feet. Water froze every night. A PF radio set was used for communication. They were unable to finish the field that summer because work was interrupted by three different fire calls. One fire call was to the Big Horn Crags on Roaring Creek. There was no trail and the boys had to back pack their groceries and fire fighting tools. Leaving at 1 o'clock in the afternoon, they reached the fire at 2 a.m. the next morning. On one fire, one CCC boy was left at the Hoodoo Meadows camp to guard the supplies. When a Forestry foreman arrived at camp in the middle of the night he found the boy sitting in the midst of the food supplies with a meat cleaver in one hand and a double bitted ax at his side, for defense purposes. 2/ The Hoodoo Meadows Landing Field was completed during the summer of 1937.

The Salmon Forest still had three CCC camps in 1937. There was only one camp operating during the summer of 1939, F-401, and two the following winter.

1/ Interview with Neale and Laura Poynor, Boise, Idaho, November 18, 1969.

2/ "Hoodoo Meadows Landing Field," CCC Information Report, February 18, 1936.

PART 3

NATURAL RESOURCES AND FUNCTIONS

A. WATERSHED MANAGEMENT

The Salmon National Forest is composed of high and very rugged mountains, having no plains, plateaus, or deserts. The valleys lie along the Salmon and Lemhi Rivers, and while they are not within the boundaries of the Forest, they are dependent for their water upon streams that have their origin within the Forest, and their agriculture depends upon the grazing lands within the Forest. 1/ The major watersheds, all of which empty into the Salmon River, are: Lemhi River, North Fork and Middle Fork of the Salmon River, Panther Creek and Horse Creek. The headwaters of the Lemhi, North Fork, Panther Creek and Horse Creek are within the National Forest boundaries. The streams of the Salmon Forest are rapid and flow through narrow canyons and valleys.

The forest cover on the high mountains and ridges and the north slopes of the lower hills is rather dense, while on most of the southern slopes along the lower hills it is very sparse. In places the lower hills are barren. The cover is dense along the sources of all streams on the Forest, where it conserves the moisture and regulates the flow. Water stored in the high mountains in the form of snow and rain is released gradually through springs and streams for agriculture, domestic, and municipal use.

The first Forest-wide condition survey was made in 1938 and 1939. This was an extensive survey made by the Rangers using National guidelines. It was based on soil erosion primarily, by employing three erosion condition classes. The primary benefit of this effort on the Salmon was educational. Both Forest Officers and users began to appraise problem conditions more from the soil and water than in the past, judging from work plans and resource records. 2/

Inspectors Nord and Moncrief in 1947 reported the watershed cover in the Salmon Forest over the Salmon River, Medicine Lodge, and Birch Creek drainages to be with few exceptions in a very satisfactory condition. Rapid runoff and erosion was occurring in limited small areas damaged in times past by fire, over-grazing and from placer mining operations. Some erosion was still occurring in the Middle Fork Peak burn, and to some extent in the Ford and Tobias Creek tributaries of Hayden Creek on the common-use range, but control areas had been initiated. Impairment of watershed through burned area losses had been held to a favorable minimum. Vegetation had not become fully established on certain of the placer workings in upper North Fork. Very little geologic erosion in the national forest was observed. The main Salmon River, during spring runoff in heavy storm periods, became discolored and did carry some silt. This silt came largely from placer mining within the Challis and Salmon Forests and from outside watershed lands impaired from overuse and fire

1/George Bentz, "Report for Forest Atlas," January 15, 1909, pp. 1-2.

2/Glenn Thompson

damage and geologic erosion. The Dump Creek wash was cited as a striking illustration of the quantities of material that can be transported by a small stream when balances are upset. 1/ This balance was upset when a small mining diversion reservoir failed, about 1897, sending waters of both Moose Creek and Dump Creek down the Dump Creek channel.

Dump Creek is one of the most serious cases of accelerated erosion that can be found on national forest lands in the west. Even with complete diversion of the water from its head, debris will continue to erode from the canyon for many years. Serious downstream damages have been felt. Roads, ranches and other improvements have suffered from flooding as the heavy material progressively works its way downstream.

The municipality of Salmon obtains its water supply from Jesse and Pollard Creeks. In 1947 the municipal watershed on the national forest comprised 10,800 acres and was closed to use except for certain Forest Service purposes. The administration of this area was covered by agreement between Salmon City Corporation and the Secretary of Agriculture under date of June 8, 1939.

Much of the soil in the Salmon Forest does not erode easily. It is heavy--infiltration of water is high--particularly where surface mantle of litter and normal vegetation is not disturbed. Where surface litter has been scalped by fire and overuse, exposing the soil, trampling of grazing animals on steep slopes has created instability and started some creepage of soil. In some areas restoration of perennial vegetation has been very slow. In 1947 this was noticeable in the Middle Fork of the Salmon where early abuse from overuse of forage was evident. The hydrological condition is generally good over most of the Salmon Forest. There are some minor exceptions on the higher elevations.

The entire Salmon National Forest is an important watershed. Most of the summer water produced on the Lemhi River is used locally. Sizeable amounts of water along the main Salmon River, North Fork of the Salmon River, and Panther Creek also are used locally. Recreation throughout the area is enhanced by water. The Salmon drainage is one of the most important spawning areas for anadromous fish.

1/Nord - Moncrief, pp. 12 - 16.

B. TIMBER MANAGEMENT

Timber management began in this area with the creation of the Salmon National Forest at a time when the area was virtually in its primitive condition as a virgin forest. This is a contrast to the situation in many eastern states where large stands of forest had already been cut before forest management began. The first Salmon Forest Supervisor, George Bentz, predicted that by conservative cutting, not to exceed the annual growth, the Salmon National Forest could become a great asset to the State. 1/ He reported the timber in the area to consist largely of Douglas fir, lodgepole pine and yellow pine (Ponderosa), with small amounts of spruce, whitebark pine, "quaking asp," cottonwood and juniper occurring at different localities throughout the Forest. At that time there was an estimated two billion feet of timber of commercial and domestic value, with a very small part accessible to markets, which were strictly local. No outside markets were available. In these early days the timber cut was for such purposes as house logs, mine timbers, fence and corral posts and poles, and railroad ties.

Benjamin Carman built one of the earliest sawmills, on Carmen Creek, soon after the town of Salmon was started. Charles Reynolds had an early sawmill in Wagonhammer Creek, later run by William Hoffman. Timber needed for placer mining operations was usually cut at the spot. The old mining towns of Yellow Jacket, Shoup, Ulysses, Singiser, each had sawmills to cut timber as needed. Timber was cut by hand with crosscut saws and pulled to the sawmill with horses. One early commercial use of timber was for ties for the Gilmore and Pittsburg Railroad, finished in 1910. These ties were cut in the Leadore area, some in Stroud, Lee, Zeph, and Nez Perce Creek drainages. Some of the ties were hand hewn, others were sawed.

One of the early duties of the Forest Rangers after the establishment of the Salmon Forest was the systematic marking of timber for sawmill operators. Fred Carl, ranger at Hughes Creek, 1907-1910, recalls marking timber for Bradshaw at Bull of the Woods, Hoffman on Wagonhammer, and Wright on Silverlead. These operators logged with a team and all hand labor. There were also many free use permits. Settlers would get their own logs and then hire a sawmill to saw them for \$5.00 per thousand. 2/

Early Silviculture on the Salmon Forest included cone picking. Both Joe Gautier and Ross Tobias tell about gathering fir and pine cones for seed to be used in reforestation. Joe Gautier related that soon after 1910, his crew gathered fir cones up Silverlead, near North Fork, and pine cones up Ditch Creek. They packed the cones by pack string to the ranger station, where they were thrashed in a square box four feet by four feet, resembling an ice cream freezer. They got many of the cones

1/George Bentz, "Report for Forest Atlas, January 15, 1909, p. 16.

2/Fred Carl.

out of squirrel caches; in one cache they found over 50 bushel. 1/ Ross Tobias did his cone picking up the Lemhi in the fall of 1909, when he was at the Tendoy Ranger Station near the mouth of Hayden Creek. He and F. T. McLean made a drying rack for the seed. In October he made a churn to thresh out Douglas fir seeds and later entries in his diary mention time spent threshing out Douglas fir cones. 2/

Fred Chase remembers scaling timber for Billy Mulkey and Pete McKinney at their sawmill up Mulkey Creek, around 1910. Guy Mulkey and his father were running two four-horse teams, hauling cottonwood cordwood to Salmon every day for 4 or 5 months, for sale. Vic Durand solved a transportation problem up Mulkey Creek by sawing big round blocks at the edge of the timber, and starting them rolling down the mountain toward the Salmon Hot Springs. Chase reports the blocks would roll around that basin for about three-fourths of a mile and then drop into the canyon right below where the hot springs are. 3/

In 1916, C. N. Woods estimated seven billion feet of timber in the Salmon National Forest. 4/

C. B. Morse, Assistant District Forester, after an inspection trip in 1923, reported the following:

Inspected was the area of the cordwood cuttings in Pollard Canyon. The town of Salmon depends largely on wood for fuel, and part of the fuel comes from Pollard Canyon, which drains into Jesse Creek. This creek furnishes the domestic and irrigation water supply for Salmon and therefore the watershed must be protected.

There is no wagon road up Pollard Canyon, but a snow road has been used in the winter, with ranchers and commercial wood haulers leaving Salmon in the morning with a team, cutting a load of wood and returning the same evening. A strip system of clear cutting has developed, brush disposal is impossible in the deep snow and few purchasers return in the spring or summer to burn the brush.Hauling the wood out the same date it is cut makes it difficult for the ranger to scale it.

The old purchasers should be notified that changes must be made: we must protect the watershed; clear cutting in strips is discontinued; an improvement cutting will be made on the selection system and thinning of small trees for increased growth; only marked trees can be cut; brush will be burned when cut after snow

1/Joe Gautier.

2/Ross Tobias, Forest Day Book Diary.

3/Fred Chase.

4/C. N. Woods, "Inspection Report," 1916, p. 18.

comes and the cooperative work fund will be used when cutting is done before the snow comes; sales will be made by estimate. 1/

Most timbered areas near Salmon have had mills at one time or another. Some of the areas and operators were: Ditch Creek - Bradshaw, later F. C. Miller, later Murray Crook; Mill Creek near Lemhi - Doty; Deer Creek Canyon - Friedorf; Long Canyon, Rainey; Timber Creek - Ferris, Swan Basin - Luke Blecha; Silver Moon - Pyeatt; Panther Creek - John Oyler; Sage Creek - Joe Moore. One lumber company built a flume in Jesse Creek in the early 1920's and floated down about five million board feet of logs. The remains of the flume can still be seen. Around 1928, Bolts and Oltmer attempted to float logs down Hayden Creek, but the logs were too large.

The first fair-sized mill was opened about 1925 on Ditch Creek by Murray Crook. He continued operation through World War II, his annual cut around two million board feet.

Progressive burning was being used on some of the Salmon Forest timber sales by 1929; burning the brush progressively during the winter as the trees were cut.

In 1935 the estimated timber stand of the Salmon National Forest was calculated at approximately eight billion board feet, of which almost four billion was considered merchantable. There was not a great demand for the timber at that time because of the vast stands still remaining in northern Idaho and the Pacific states that was more accessible to markets than that on the Salmon Forest. At that time the Salmon had an estimated annual growth of forty million board feet. There were several small sawmills on the Salmon Forest which supplied lumber and timbers for local needs. Farmers and other residents could obtain fuel wood, posts, poles, or house logs at moderate cost. No Forest products were being shipped out of the area.

In 1939 there were 14 active sawmills, all quite small, with nearly all of the lumber used locally. Chain saws and "cats" began to appear. The volume of timber cut in the Salmon country was stepped up during World War II to meet war-time needs, with new mills and new management of some of the earlier mills. This was the beginning of a market beyond the local needs. Henry Benson bought the Crook mill, moved it to Salmon; Henderson moved a mill into Silver Creek. This mill was later purchased by B. E. Robinson who now has a mill just north of Salmon. Intermountain Lumber purchased the Benson mill, and Idaho Forest Products set up a mill and factory near Robinson's mill. Livingston and Lynch purchased a timber sale and set up a mill on the North Fork.

Almost all of the products and lumber are now sold outside of the local area. Horses and mules have left the woods, replaced by tractors

1/C. B. Morse, "Inspection Report," 1923.

and heel boom loaders. The timber industry has changed from the family-owned mill with part time labor to a steady industry employing year around loggers and mill hands, with large highway truckers moving the products to market. 1/ The first helicopter sale was sold in April of 1973 in Spring Creek.

Previous to 1952 the Salmon National Forest was divided into four working circles. The allowable cut for each varied from 250,000 board feet to three million board feet. A survey of the timber resources for the entire forest was initiated in 1953 with the entire forest considered as a single working circle. This gave enough basic information to indicate an increase in the allowable cut. The annual allowable cut was raised in 1956 to 20 million board feet. Past actual cut for the fiscal years 1955 through 1972 are as follows, for the Salmon Working Circle:

1955:	9.7 million board feet	1964:	31.2 million board feet
1956:	13.0	1965:	23.8
1957:	11.9	1966:	30.6
1958:	18.1	1967:	33.1
1959:	22.8	1968:	36.0
1960:	23.5	1969:	27.0
1961:	23.1	1970:	25.6
1962:	16.5	1971:	31.7
1963:	22.5	1972:	34.3

The present cut consists mostly of ponderosa pine and Douglas fir. Lodgepole pine is used for studs and mine timbers. Engelmann spruce and alpine fir are sold in conjunction with other species.

Present timber management is concerned not only with assurance of production in the future as well as lumber for today; it is concerned also with the esthetics.

Between 1928 and 1932, sixty percent of the lodgepole pine on the Salmon Forest was destroyed by the mountain pine bark beetle. In these four years it took all the mature timber. The epidemic seemed to have run its course by 1932. No means were used to fight it. Large stands of timber stood dead from this epidemic. Forney and Lemhi districts were hard hit. Five districts were seriously affected. In 1930 new attacks were seen in Agency and Pattee Creeks. Assistant Supervisor Romano reported that the mountain pine beetles seemed to be working up the Lemhi River, killing most of the mature lodgepole pine. In 1931 the infestation was noted along the Long Tom - Skunk Camp telephone line. The effects of this epidemic were seen in later years.

1/Lester Gutzman, "Lumbering Industry Claims Interesting Progress Here, The Recorder Herald, Diamond Anniversary Issue, 1961, p. 7.

Inspection reports in 1943 and 1947 noted that as these dead trees rotted and fell, they:

- a. fouled telephone lines
- b. clogged all trails through lodgepole stands
- c. made it impossible to move cattle to their grazing allotments
- d. constituted a most serious fire hazard.

Many of the accessible beetle-killed trees were cut for fuel. They were also in demand for ranch timber. The epidemic occurred during the depression and most people cut their own fuel, not having money for coal or oil.

Ponderosa pine was defoliated by an epidemic of pine butterfly from 1928 to 1930. This was a white butterfly with a two inch wingspread. Nothing was done to fight this infestation.

In 1947 the Nord - Moncrief Inspection Report mentioned that at that time the pine stands were quite free from insects. The east side fir pole stands were also clean, with little evidence of beetles or mistletoe. Former Douglas fir beetle attacks had been very severe over some areas. A current partial defoliation of young fir throughout the east half of the forest looked very serious for the future of watershed cover. Entomologists identified the trouble as a combined attack of a needle miner and a leaf disease. The epidemic had been spreading rapidly for three or four years and was expected to prove fatal if it persisted. A large volume of dead material was being salvaged under free use, and one sizeable dead timber sale had been made. 1/

Spruce budworm reached epidemic proportions in Douglas fir on the east fork of Indian Creek in 1959. DDT was sprayed from planes for three summers. The first year 250,000 acres were sprayed, the second year, 700,000 acres. In 1964 the spraying was done with helicopters, to keep the spray from the streams so as not to affect the fish. The spray in 1964 was effective, but did not cover the entire infestation area of the Salmon Forest. In September of 1965 there was a killing freeze. The temperature and moisture conditions had been like spring up until September 17; everything was lush and green with no fall coloration of leaves. The temperature dropped to 18 and 20 degrees all over the area, killing most terminal branches of Douglas fir. These same branches had the young budworms in them. The next spring (1966) there was also a severe freeze. These two heavy frosts, along with the spraying that had been done, brought the budworm under control. 2/

1/A. G. Nord and Lester Moncrief, "General Integrating Inspection Report," 1947, p. 5.

2/F. E. Powers

The Forest Service worked in cooperation with the Fish and Game Department to set up safeguards to minimize the effect of DDT on streamlife. The Forest kept records of fish runs to see if there was any adverse effect from the DDT. When a near record run of steelhead appeared in 1968 it was seen as an indication that the 1964 use of DDT on the Salmon Forest did not materially affect the run. 1/ By 1968 the use of DDT had been eliminated for all practical purposes from the Forest Service insect control measures.

Further research led to the use of zectran, with a LIDAR device to control the distribution of the spray. Bear Valley Creek and McDevitt Creek were used as test sites for this development in 1966. The Salmon National Forest, the U. S. Fish and Wildlife Service, and the Denver Wildlife Research Center cooperated in this project. The LIDAR device was developed at Stanford Research Center. 2/

In 1970 dwarf mistletoe was one of the worst enemies on the Salmon Forest. It is a small parasitic plant that lives on Douglas fir, lodgepole pine, and ponderosa pine. These will not cross infect, being a different strain of mistletoe in each case, so a different specific is needed to fight each one. Two study plots were set up on the Salmon Forest, to spray trunks of infested trees. These plots are on the Stormy Peak road in the Diamond Creek area. This was one of three or four mistletoe test areas in the Intermountain Region. 3/

1/"Powers Recalls Spraying, Notes Large Run of Fish," The Recorder Herald, Salmon, Idaho, October 31, 1968, p. 1.

2/"LIDAR Tested on Salmon Forest," The Recorder Herald, July 28, 1966.

3/Bruce Brown, Forester, 1970.

C. RANGE MANAGEMENT

When the Salmon National Forest was created, there were already cattle, horses, and some sheep grazing within the boundaries. These were allowed to continue unchanged until personnel had time to study the condition of the ranges and make recommendations which would assure future grazing and protect the watersheds.

In 1909 Supervisor Bentz reported that all stockmen owned ranches in connection with their herds: no absentee owners of transient herds. There were very few sheep in the Forest, and they had not been grazed there long enough to have any perceptible effect on the forage. They were held on the high ranges not then used by the cattle. Cattle here were nearly all sold to buyers from the Bighole Basin in Montana who drove them out in the fall, fed them in the Bighole all winter for the Butte and Seattle markets. There were no large horse outfits, but nearly all ranchers raised a few extra horses for transportation and freight. The surplus was sold to buyers who shipped them to various parts of the country. 1/

In 1909 only four stockmen grazed sheep on the Salmon Forest, while 128 had permits for cattle and horses.

In 1907 through the Forest Service and Bureau of Animal Husbandry, stockmen holding grazing permits in the National Forests were offered vaccine for the control of blackleg, tuberculosis and other animal diseases. 2/

At the time the Forest was established, some stockmen grazed their cattle for several months of each year on public land, and it had been customary to turn unneeded horses loose to fend for themselves year around. The horses became a range problem. There were few fences, the horses drifted long distances and were often several years on the range, with growing numbers of young unbranded horses. In May of 1908, ranchers and Forest officers spent several days rounding up a herd of 50 or 60 feral horses near the head of Little Hat Creek. Foresters taking part were Supervisor Bentz, Deputy Ranger Laing, William Swan, Fred Carl, Ross Tobias and Ora Cockrell. 3/

The following list of stockmen with sheep on the Salmon Forest in 1911 was found in the Forest Diary of Ross Tobias.

Sheep on Salmon National Forest 1911

Elmer D. Rees -	6,000	C. H. Benson -	1,000
Tendoy Livestock Assoc. -	5,000	Pattee Bros.	800

1/George Bentz, "Report for Forest Atlas," January 15, 1909, p. 12

2/"Improving the Ranges," The Lemhi Herald, September 12, 1907.

3/Ross Tobias, Forest Day Book Diary, May 10-18, 1908

Mr. L. F. Ramsey -	3,000	F. S. Knight -	750
Mrs. Emma Yearian -	2,000	Olive Knight -	750
Capron & Son -	2,000	W. J. Knight -	750
T. J. Stroud -	2,000	A. E. Knight -	750
Mr. Thomas Yearian	1,500	D. B. Thrasher -	193
Amas Shoup	1,500		

TOTAL

27,993

The early cattlemen marketed mainly three or four year old steers. They were not the gentle well-bred cattle we know today but often wild and difficult to manage. In October, 1912, Peter McKinney brought in 2400 head of Texas cattle in three trainloads to Armstead, where they were fed and rested, then driven to Salmon to the ranches of the Lemhi Irrigation and Orchard Company, Shenon Land Company and the Salmon Ranch Company. These mature cows all had long horns. They had to be dehorned with meat saws. In those days a three or four year old steer brought \$28 to \$30.

There were several cattlemen in the Forney - Middle Fork area in the early days, but the country was never suited to large numbers of cattle, mainly because of the difficulty of getting them in, and out to market. The trails were too rough and rocky and wore the cattle down too much with traveling. Some early cattlemen in the area were Earl Kingsbury, I. R. Wilson, Frank Allison, Max Oyler, the O'Connors, Mike Hogan, Tom McKinney, Albert Curry. I. R. Wilson, in 1919, bought land in the Middle Fork country, including the Walter Wade ranch at Three Forks, the Mormon ranch and the Reberg ranch on the Middle Fork. He and his son Bill moved 350 head of cattle from the Pahsimeroi to the Middle Fork. The last 14 miles, from Meyers Cove to the Middle Fork, was such a rough trail that it took them three days to make the 14 miles. 1/

In some areas close to the ranches the range became depleted for lack of control of the cattle, but C. N. Woods reported in 1916 that no part of the Salmon Forest that he inspected had been permanently damaged by overgrazing. Much range had never had large numbers of stock on it. He considered some of the easily accessible range adjacent to the main settle valleys and close to the railroad as still understocked. At that time Supervisor Pearson estimated that the Salmon Forest could carry 15,000 grazing cattle and horses, and 125,000 sheep. Inspector Woods believed this to be a conservative estimate. 2/

The concept of grazing as a fire control measure changed over the years. In 1916 C. N. Woods warned of the fire danger on several districts of the Salmon because they had not been grazed enough, suggesting that when the accessible forage was fully utilized it would be a big step

1/William Wilson.

2/C. N. Woods, "Inspection Report," 1916, p. 1-3.

in saving the timber from possible destruction by fire, since the quick and wide spread of many past fires had been due to the presence of inflammable forage plants. 1/ In 1927 Inspector Stewart expressed a similar view, urging that the Forest Service be lenient with grazing fees and qualifications in the back country in order to assure more grazing to assist in keeping down the fire hazard. 2/ In more recent years the view of grazing to reduce fire hazard has been reversed on the theory that a 70% ground cover is necessary to protect the soil. If overgrazed, cheat grass and other more flammable grass comes in. 3/

Numbers of permitted stock were increased, reaching a peak in 1918 of 17,317 cattle and horses, and 129,830 sheep and goats. The ranges of the Salmon Forest suffered from these high numbers of stock permitted during the first World War.

In 1922 a Portland buyer contracted in the Salmon country for steers at 6¢ a pound on the hoof. Cows went for 4½¢.

In 1924 Inspector Woods considered the biggest grazing problem on the Salmon Forest was trespass stock, particularly horses. Woods devoted a whole section of his report to this problem. Several years before, 35 head of trespass horses were rounded up in Swan Basin. In 1924 a roundup found 200 head of trespass stock, and 150 of these were horses. In the Leadore Ranger district alone there were 400 to 1000 trespass horses in 1924. Since most of the ranges were filled to carrying capacity with permitted cattle and horses, this trespass presented a serious problem of overgrazing. The custom had been that owners would remove trespass horses from the Forest and turn them loose on open range (public domain below the Forest boundary), from which they readily drifted back onto the Forest again. The Ranger on the Leadore District estimated in 1924 that there might be up to 100 owners of trespass horses, owning from one to thirty head, and that most of the horses were branded. 4/

In 1924 there was some grazing by permitted cattle along the Middle Fork, from Camas Creek to the mouth of Big Creek, but this area was mainly held for wintering of deer.

Indian-owned horses grazed part of the Jesse Creek range in 1927. It was not the custom of rangers to interfere with the Indians in the use of the range.

Large numbers of horses were found grazing on the Forest the year around by inspecting officer James O. Stewart in 1927. He recommended

1/C.N. Woods, pp. 19-20

2/J.O. Stewart, "Salmon Inspection Report," July 8, 1927, p. 13.

3/F.E. Powers

4/C.N. Woods, pp. 40-43.

that all horse use should be made seasonal, the same as cattle, with no year round permits. Stewart felt that many ranchers had more horses than they wanted but did not see any way to get out of the horse business because there was little or no sale for the horses. Another problem with trespass horses and cattle was due to the fact that in many areas the National Forest lands were in the high country, with a border of public domain below the Forest boundary and above the ranches. After 1934 this part of the public domain was controlled by the Taylor Grazing Act, and later by the Bureau of Land Management, but in the earlier years this public domain lay open with no fence between it and the National Forest. Even with boundaries posted, it was difficult for a rancher to graze his stock on the public land below the Forest without them straying onto the Forest. Stewart recommended fencing parts of the National Forest boundary where this problem was most severe.

Trespass continued to be a problem. Allotments could not be controlled or adjusted fairly as long as unpermitted stock was using part of the forage and contributing to depletion of the range. Some fencing was begun, horses rounded up, cattle and horse associations formed and gradually the ranchers began to realize the necessity of controls for their own protection.

Extensive grazing studies were made in various parts of the Forest. In 1930, grazing studies in lower Haynes Creek basin included:

- a) Enclosure to determine the change of vegetation and vitality if no grazing was permitted.
- b) Two take-down enclosures, one to be taken down at vegetative readiness and the other at seed maturity.
- c) One open plot to determine the spread of sagebrush.
- d) A quadrat.
- e) A plant development plot. 1/

By 1939 two grazing problems had developed along the Middle Fork of the Salmon River: 1) there were too many deer for the amount of winter grazing available, and 2) there was not enough forage for pack stock and saddle horses used by campers, hunters and others traveling through. 2/

The CCC program carried out reseeding projects on Colson Creek and Panther Creek. Areas were plow-furrow terraced ten to twelve feet apart, and the terrace and overthrow seeded to crested wheat.

1/D. E. Romano, "Memorandum," July 19, 1930, p. 2

2/A. L. Anderson, "Inspection Report," May 13, 1944, p. 13.

The manpower shortage during the second world war affected the stockmen as well as the Forest Service; it was difficult for the stockmen to get good management for their stock on the range.

By 1943 there was a definite trend from sheep to cattle on the Salmon Forest, particularly on the Lemhi and Birch Creek watersheds. There was still a problem from stock turned out in the valley on private and Grazing Service land, which naturally and inevitably drifted up the canyon bottoms onto the National Forest. Inspector Kinney recommended more cooperation with the Grazing Service locally and at regional and national levels, to work out some of the problems, possibly through land exchanges. If this was not possible, Kinney recommended the building of fences to obtain practical boundaries and sufficient control of the livestock to get necessary resource management of the Salmon Forest ranges.

By 1943, the Salmon, Lemhi and Medicine Lodge ranger districts were able to remove large numbers of trespass horses without resorting to trespass procedures. 1/ In the 1940's, trespass horses remained a problem in various areas of the Salmon Forest, including all the Medicine Lodge district, Hat Creek and Parks Creek, Iron and Badger Creeks, Forney area, Lower Panther Creek, and Meyers Cove - Middle Fork. In 1946 remarkable progress was made in reducing trespass, which had been the most outstanding range trouble. Horse trespass was drastically cut. With no bad reactions from anyone, the campaign against trespass resulted in known disposal of well over 500 horses and similar large numbers were removed to private lands by their owners. A closing order was obtained on lower Panther Creek which authorized disposing of about fifty horses. These horses had degenerated into small pony types, extremely wary and difficult to catch.

Serious damage was done in the Clear Creek - Big Deer Creek range by heavy grazing by sheep during the years 1918 - 1922. The range had not recovered by 1947. In 1947, approximate numbers of permitted livestock on the Forest were 13,000 cattle and 36,000 sheep. Total animal months of permitted livestock had dropped off 25 percent since 1938. Standard management plans had been prepared and were well accepted by the stockmen. General relations with stockmen were observed to be cordial excepting for one individual, a determined trespasser. The Bennett range on the Middle Fork continued to be a problem allotment because the total range was urgently needed for game. 2/

Recent range management methods include a system of rest-rotation whereby ranges are divided and the plots are rotated so that each plot gets a complete rest every three or four years and then is not always

1/J. N. Kinney, "Inspection Report," May 13, 1944, p. 13.

2/Nord - Moncrief, pp. 5 - 8.

grazed at the same time of year. On the Salmon Forest seventeen allotments are practicing rest-rotation grazing. The stockmen who have tried it are enthusiastic about the results and are promoting it.

D. WILDLIFE MANAGEMENT

When Lewis and Clark came through the Salmon National Forest area in August and September of 1805, they reported seeing antelope, deer, elk, big horn sheep, hares, ruffed grouse, prairie fowl, goose, and salmon. The local Indians used the fur and hides of beaver, buffalo, wolf, coyote, fox, wolverine, martin, mountain sheep, deer, antelope, otter and weasel.

Peter Skene Ogden found buffalo (bison) by the hundreds in the upper Lemhi Valley in 1825. 1/ In 1831, John Work reported seeing a large herd of elk in the mountains near their camp on the Lemhi River, and a week later many buffalo on the upper Lemhi, probably in Timber and Eighteenmile creeks. 2/ Warren A. Ferris killed a grey wolf, probably on the North Fork, in August, 1832, and reported that it was fat and made a tolerable supper. 3/ Later that same year Captain Bonneville recorded eating venison, elk, and "mountain mutton" (big horn sheep). 4/

The bison west of the Continental Divide were called mountain buffalo. They were generally smaller, more active, more timid, with lighter, silkier robes than the bison of the plains. There are few reports of them after the 1840's and 1850's. It is believed that severe winters or disease, or both, caused their decline. There are sites in the Salmon National Forest area believed to have been used by the Indians to kill bison before the Indians had horses with which to chase their game. The Indians maneuvered the bison herd to stampede over a cliff (called a "buffalo-jump") and other Indians stationed below finished the kill. Bison skulls and bones found below the rocky bluffs on Pratt Creek suggest these bluffs may have been an ancient "buffalo-jump." One such site near Challis was confirmed by archaeologists in September, 1970, as having been used by Indians between 1500 A.D. and 1750 A.D. 5/ Several people have found buffalo skulls in the Salmon area. Retired Salmon Supervisor, F. E. Powers found buffalo skulls on Fourth of July Creek, Fenster Creek, Bear Creek off Hawley Creek, and Hawley Creek.

At the time of the early settlement of the Salmon Forest area, mountain sheep were very numerous and inhabited the lower rough country, as well as the high mountains. They were stricken with scabies and there was a big "die-off" around 1890, completely wiping out the mountain sheep in some areas. F. E. Powers reports riding up Rocky Canyon near

1/Morgan, pp. 134-139.

2/Work, pp. 114-119.

3/Warren Angus Ferris, Life in the Rocky Mountains, ed. Herbert S. Auerbach and J. Cecil Alter (Salt Lake City: Rocky Mountain Book Shop, 1940) p. 130.

4/Brosnan, pp. 74-78.

5/Bob Johnson, "Father, Son Excavate Site of Ancient Bison Massacre," The Idaho Statesman, September 9, 1970, p. 14.

Leadore about 1945 and counting 19 mountain sheep skulls in a short distance. These skulls were all mature, big rams, completely weathered. There are no known sheep now on the Forest on that side of the valley any place south of the North Fork drainage. 1/

Whitetail deer were common when the area was first settled. Called brush deer, they were considered a pest by the settler. They rapidly declined in numbers and became a rarity.

When the Forest was established, wildlife included mule deer, mountain sheep, mountain goats, sage hen, blue mountain grouse, salmon, trout, salmon trout (steelhead), whitefish, bears, wolves, cougar, lynx, bobcat, and foxes. In 1909 bear could be killed at any time during the year, while the open season for deer, mountain sheep, and mountain goat was limited to September 1, through December 31. Elk, moose, and antelope were not mentioned as game animals. 2/

Wolves occupied the Salmon Forest area in early days. George Nichols, employed to hunt predators in the Junction area, killed 108 wolves in a period of 10 or 12 years. These were timber wolves, weighing from 90 to 120 pounds. 3/ Nichols' yearly report in 1908 included 23 wolves, 165 coyotes and a large number of lynx and bob-cat. 4/ Ralph Burr was a later hunter of predators in the upper Lemhi. William Wilson reports only a few wolves in the Forney and Middle Fork country from 1909 to 1920. Ross Tobias caught one in a trap at Ram's Fork in December, 1910. Wolverines have been reported seen in 1969 and 1972 in Carmen and Freeman Creeks.

The grizzly bear seems conspicuously absent from the Salmon Forest. George Nichols was once called to kill a grizzly east of the Continental Divide, on Bloody Dick Creek in Montana; Les Gutzman saw one west of the Middle Fork, and there have been grizzlies killed west of the Middle Fork in earlier years. None of the old timers could recall any grizzlies in the Salmon National Forest area, at least not since 1900. Ross Tobias as a boy accompanied Gilbert Yearian and Bert McNab on a bear hunt near Junction after a cow had been killed. They trailed, and finally killed the bear, which Ross remembers as a big grizzly. This was around 1900 or earlier. 5/

Bison and wolf have disappeared from the area. Fisher were introduced into the Chamberlain basin west of the Salmon Forest about 1955. It is believed they, too, are all gone now.

1/F. E. Powers

2/James W. Ryan, "Report for Forest Atlas," February 11, 1910.

3/Interview with Earl Nichols, Salmon, Idaho, October 22, 1969.

4/The Lemhi Herald, April 16, 1908.

5/Ross Tobias, May 1, 1969.

Conservation minded sportsmen joined Forest officers in promoting formation of game refuges at a time when game numbers were low. No hunting was permitted in the refuges. After the numbers of game animals increased, even to the point of seriously depleting their habitat and in extreme cases causing erosion of the land and starvation of animals, sportsmen and conservationists were reluctant to have their states allow more game to be killed. In addition, there had been a sustained effort in most areas, supported by sportsmen and stockmen alike, to kill off coyotes, cougars and wolves as predators of game and livestock. Gradually more and more people came to the realization that the numbers of wild game must be kept to a limit that could be supported in any given area, and today in many places studies of the available forage determines the carrying capacity of the area and game hunting limits are set accordingly.

The Big Creek Game Preserve (on Panther Creek) was established in 1917. It was abolished in the 1940's. There was also a game preserve on Hawley Creek which was abolished in the 1940's.

One long standing wildlife problem on the Salmon Forest is the congestion of deer on the winter range of the Middle Fork. There have been varied theories and opinions advanced concerning the causes and solution to this problem. Glenn Thompson, retired Salmon Supervisor, first saw the Middle Fork in 1924 and recalls that the winter range was then largely a cover of bitterbrush and mountain mahogany. During the next 25 years, nearly all of the winter forage was killed by three successive periods of overuse. 1/ Being in a roadless area has made it a difficult area to manage.

The Middle Fork Game Preserve established in 1925, included the entire watersheds of Yellowjacket Creek, Silver Creek, Camas Creek from Meyer's Cove to the Middle Fork, and the entire watersheds of all creeks emptying into the Middle Fork from Norton Creek to the mouth of Roaring Creek. The country is rough, varying from 3,404 feet elevation at the mouth of Waterfall Creek to 10,070 feet at Mt. McGuire. The winter range consists of a narrow belt extending back about three miles from each side of the river. It is about 25 miles long, very rocky, and rough in most places. The main concentration areas were around the mouth of Camas Creek and the Crandall Ranch. 3/ (now the Flying B).

One theory advanced concerning the Middle Fork deer winter range was that hunting pressure from surrounding areas pushed the deer down into the winter range area earlier than normal. Studies were made in 1933 by Forest Rangers Arthur Buckingham and Lester Gutzman, concerning

1/Letter from Glenn Thompson, Caldwell, Idaho, February 9, 1971.

2/Lester T. Gutzman, Forest Ranger and Glen Richardson, State Conservation Officer, Lemhi County, "Game Management Plan - Middlefork Game Unit," March 10, 1944, p. 1.

deer wintering and effect of hunting on the drift of the deer. Buckingham observed that in the Loon Creek and Middle Fork areas, the hunting season and intensity of the hunting remained approximately the same for a period of years, but the drift of deer to winter range occurred at a different time almost every year, correlating closely with the weather conditions at the time. Buckingham reported that hunting did scatter the deer locally but did not materially affect the main drift to winter range in the areas he observed. 1/

Another theory was that as the numbers built up in a game preserve, the deer would naturally move to other areas as food ran short. The Middle Fork deer herd was already established by the time the Game Preserve was started, and rapidly built up to a total of 4,000 or more. They did not move to other areas. During the heavy snow winter of 1931-32 they crowded the low winter range along the river and about 1500 starved to death. Heavy damage was done to the range.

In 1933 State Game Commissioner A. H. Eckert was of the opinion that the Middle Fork Game Preserve was in the wrong place, giving protection where it was not needed and Orange A. Olsen, Inspector of Grazing, recommended that it be abolished as it was serving no good purpose, and was overstocked. He felt opening it to hunting would not be disastrous because the area was inaccessible and could be reached only by pack outfits and airplanes. 2/ The Game Preserve was opened to hunting in 1934. Hunters did not respond, refusing to travel to such a remote area for one deer. In 1939 Inspector Anderson stated that the congestion of deer on the winter range of the Middle Fork was the biggest wildlife problem on the Salmon Forest. He recommended that the State Game Commission encourage more hunting on the Middle Fork. 3/

In 1940 two deer were allowed in the Middle Fork area, with a longer season. There was a heavier take but not enough. The winter of 1942-43 again had heavy snow and a late spring. The loss was approximately one-half of the herd and the carrying capacity of the range was further reduced. In 1944 the carrying capacity of the range was only 40% of the 1928 figure. 4/

A Game Management Plan was worked out in 1944 by the Forest Service and the State Game Commission for the Middle Fork Game Unit. Richardson formulated the plan with the purpose of providing the greatest number of game animals that could safely be carried through the most severe winter conditions, based on what had happened in the past, without damage to the range, and to provide a means of maintaining an orderly balance between the different species of big game, game and domestic stock,

1/Orange A. Olsen, Inspector of Grazing, "Memo," January 9, 1933, pp. 1-5.

2/Olsen, pp. 1-5.

3/A. L. Anderson, "Inspection Report," September 28, 1939, p. 8.

4/Gutzman and Richardson, p. 1.

and forage. In addition to deer, the plan included elk, mountain sheep and mountain goats.

The Middle Fork deer and forage problem continued. The Nord-Moncrief Inspection of 1947 mentioned the over-population causing serious destruction of watershed cover and reduced carrying capacity. They suggested that the hunting of cougars aggravated the situation. More cougars could help control the over-population. Hunting removed only about 100 deer in 1946—not enough for a herd of 2400. 1/

Ranger Henry Ketchie prepared another Game Management Plan for the Middle Fork Game Unit in 1950. Elk had increased in the area and there was range enough that mountain sheep and goat numbers could be increased. Domestic stock numbers had been cut.

At the present time (1973) the elk herd on the Middle Fork is expanding and the deer herd is decreasing somewhat. The range has not recovered from the earlier abuses of overuse. 2/

For many years there was a bounty on cougars. It was removed in 1959, but the number of cougars killed annually since 1959 has been larger than for most years when there was a bounty paid for cougars. 3/ In 1971 the cougar was taken off the predator list and is now considered a game animal. The Game Department reported about 60 cougars killed around Salmon in the winter of 1969-70, with the aid of snow machines.

In the wildlife report of 1944, Inspector Kinney listed three main wildlife problems on the Salmon Forest. First was the Middle Fork deer herd discussed above. Second was the elk herd in the North Fork. In 1943 Ranger Wheeler counted 60 winter-killed elk. He estimated about 150 native elk population and about 150 additional Montana drift. There was not sufficient winter feed on the Idaho side to care for the 100 percent increase due to Montana drift. The result was a heavy loss of elk from deep snow and starvation. Ranger Wheeler suggested that an open hunting season on the Idaho side would help to relieve the congestion due to the elk drift from Montana. The third wildlife problem on the Salmon in 1944 was that with the increase in forage production and reduction in livestock use, there was developing a heavy increase of game on the Forest, in both elk and deer. Kinney recommended this situation be carefully watched to prevent over-population and range depletion. 4/

1/Nord-Moncrief, pp. 8-9.

2/Interview with Martel Morasche, Idaho Fish and Game Department, Boise, Idaho, March 9, 1971.

3/Letter from W. M. Shaw, Game Biologist, Idaho Fish and Game Department, Boise, Idaho, March 11, 1971.

4/J. N. Kinney, "Inspection Report," May 13, 1944, pp. 16-17.

The Nord - Moncrief inspection in 1947 gave a resume of the wildlife situation on the Salmon Forest. At that time they reported the average visitor to the Salmon Forest looked at it first as a great fishing country and second as a vacation land with mountain sheep, mountain goat, bear, antelope, elk and deer. Fishing was famous, but was going downhill through depletion of the smaller streams, and needed fish planting to keep up with the outside fishermen. The mountain goat and sheep hunting ranked among the best in the country, but numbers were small and needed careful management to insure future growth. Bear were abundant, antelope increasingly common, especially on the Medicine Lodge District. Three elk herds were building up: Hawley Creek, Upper Panther Creek, and along the Continental Divide in the Hughes Creek District. Most acute problem was the deer overpopulation in the Middle Fork. Other deer problems existed but were not as acute. Packers and guides were rapidly increasing, creating a shortage of horse feed in the back country along concentrated travel routes and at the best camp sites. With the encouragement of the Supervisor the packers organized into an association which was a forward step toward solution of the complex problems involved. 1/

Wildlife Plantings.

Elk were planted on the Birch Creek drainage of Panther Creek in 1937, trucked from Mammoth and Gardiner in Yellowstone National Park. Les Aldous, Grant Ziemer and John Rose, with Mike Wilkins, Conservation Officer, brought in 62 elk.

Pheasants in the Salmon Forest area are a remnant of early plantings here.

Gambel Quail were introduced in several places in Idaho, including Salmon, around 1916. Twelve dozen were brought by train to Mackay and on to Salmon by wagon or car, and kept by Dr. Carnes, dentist, until released. The other Gambel Quail plantings in Idaho did not survive, but Gambel quail are still found near Salmon from Tower Creek to the Creeks near Baker, but not in great numbers.

Chukar partridge were brought in in the late 1940's and early 1950's.

An attempt was made in 1970 to introduce valley quail from Owyhee County.

Turkeys were brought into the area around Bernard Creek in the early days. Bill Wilson took them in in crates by pack string. They did not survive the first winter. Recent plantings of Merriam turkeys have been made on Wagonhammer Creek in 1971 and 1973.

1/Nord - Moncrief, pp. 8 - 12.

There have been many trout plantings over the years. Most early plantings were made using pack mules carrying the trout in five-gallon milk cans. Later plantings have been made by truck and airplane. For many years the Fish and Game Department took rainbow trout eggs from Williams Lake, up to 8 million per year, to a hatchery at Hagerman.

Les Gutzman past district ranger at Copper Creek and Salmon reported on trout plantings in the Bighorn Crags during the period 1938 to 1945. Gutzman, together with Carl Gaver, planted 24 of the lakes. They deposited rainbow trout in the Wilson Lakes, Yellowstone cutthroat in the No-Name Lakes and Golden trout in Big Clear Lake, Crater Lake, Pot Hole and Goose Neck Lakes.

During the summer of 1957 Gutzman made a check of fishing in the lakes he had previously stocked. He found that trout catches were neither bountiful or of record length. The fish were quite uniform in size, the majority being 8 to 10 inches in length, several had big heads, and thin bodies, characteristic of underfed fish. 1/

Wildlife Studies

There have been many wildlife studies carried out in the Salmon National Forest through the cooperation of the Forest Service, the Idaho Fish and Game Department, and the Idaho Cooperative Wildlife Research Unit of the University of Idaho. Some of these studies are:

Mountain Goat: Steward Brandborg, Carmen Creek, 1950's.
Lon Kuck, Pahsimeroi, in progress, 1971.

Mountain Sheep: Dwight Smith, 1950's.
Jim Morgan, Middle Fork, 1971.

Cougar: Maurice G. Hornocker, with Wilbur Miles, carried out studies for five years in the Payette and Salmon National Forests, in the area of the Big Creek drainage and the Middle Fork of the Salmon River. This study was reported in the National Geographic Magazine, Vol. 136, No. 5, November, 1969, pp. 638 - 655.

Cutthroat trout of the Middle Fork: Jerry Mallet, 1959-61.

Elk: Moyer Creek, 1967 - 1972. Effects of timber cutting on elk calving areas.

Anadromous fish study: Mouth of Hayden Creek, Quinton Doty and Terry Holubetz, 1966 -

In 1969 the big game harvest on the Salmon Forest included 4,756 deer and 975 elk.

1/Newspaper article in The Post Register, September 1957 by Keith Barrette.

E. RECREATION AND LAND USE

Recreational use of the national forests was one of the latest of the forest resources to be recognized and utilized. Stockmen, lumbermen and miners were recognized as users of forest resources and provisions were made for them much earlier. Gradually the vast opportunities for recreation in the forest became apparent to the public and the foresters alike, and the Forest Service began to develop recreational facilities. Recreational planning had to be coordinated carefully with plans for timber cutting, grazing and wildlife, to insure the balanced development of all resources and to prevent conflicts between recreation and other uses, and even between different kinds of recreation. 1/

In 1910, Supervisor James Ryan estimated that 500 people used the Salmon Forest for recreation, with about one-third coming from eastern states, and the remainder coming from areas adjacent to the Forest. Mr. Ryan felt that when the railroad was completed later in 1910, it would greatly increase the number of people coming to the Salmon Forest for recreation. 2/

The records for 1931 estimate 2500 visitors to the North Fork, 400 visitors to Hughes Creek, 1,000 hunters going through Shoup, and about 150 people visited the Idaho Primitive Area via the Salmon Forest. 3/ In 1931 Supervisor Kinney, in estimating the use of the Salmon River trail below Shoup, included 250 horse days use by hunters. 4/ In 1932, Kinney noted the heavy use by recreationists of the Williams Creek area, and a need for a road there. 5/

During the depression of the 1930's, the CCC camps in the Salmon National Forest accomplished several much needed construction projects, including some recreational facilities. They built camping facilities, picnic tables and shelters at Twin Creeks and Cougar Point. They also developed camping facilities at Deep Creek (Panther Creek drainage), Yellowjacket Lake, and Long Tom. In 1937 Inspector W. B. Rice commented on the attractiveness of the facilities at Twin Creeks and Williams Creek (Cougar Point), but felt they may have been overdeveloped, since there would not be need for that many campsites. Rice commended the Salmon Forest for their excellent work in the field of recreation. 6/

1/Bernard Frank, Our National Forests (Norman: University of Oklahoma Press, 1955), p. 75.

2/James Ryan, "Report for Forest Atlas," February 11, 1910.

3/Dana Parkinson, "Inspection Report," 1931.

4/J. N. Kinney, Memo," October 7, 1931, p. 2.

5/J. N. Kinney, "Memo" September 28, 1932, p. 1.

6/W. B. Rice, "Inspection Report," September 8, 1937, p. 3.

In 1939 Supervisor Godden recommended the building of simple campsites for hunters and fishermen, for fire protection and sanitation, possibly at the mouth of Dry Gulch, and other sites along the Middle Fork and Camas Creek. 1/ Inspector Anderson in 1939 reported that the Salmon Forest did not have intensive recreational use, but he did recommend development of campgrounds along the Middle Fork in the Primitive Area because of increased use there. 2/

One of the land use problems on the Salmon Forest reported in 1943 was the taking up of minerals claims as a subterfuge for other uses. This resulted in practically no requests for summer home special use permits on the Salmon National Forest and a great variety of low standard buildings along the Panther Creek and Salmon River roads. 3/

Recreation Use of the Salmon National Forest 1941 - 1943:

<u>Number of Visitor Days</u>	<u>1941</u>	<u>1942</u>	<u>1943</u>
Campgrounds	1,371	530	500
Picnic Areas	3,320	1,900	1,040
Primitive Area	1,020	400	250
Other National Forest Areas	7,795	3,300	1,800
Highways, Roads and Water	<u>5,100</u>	<u>3,400</u>	<u>1,850</u>
Yearly Totals:	18,606	9,530	5,440

Difference in yearly figures is a significant result of war conditions. The 1944 report stated that due to its isolation, the Salmon National Forest could not be properly classified as a heavy recreation forest. 4/

The Appendix lists statistical charts showing the development of recreational sites on the Salmon Forest and recent visitor statistics.

There were an estimated 10,000 to 14,000 visitors to the Salmon Forest by 1947. Attractions were fishing, hunting, picnicking and camping, sight seeing, back country trips and winter sports. Cougar Point campground was receiving more use by local families and groups but at Twin Creeks it was considered that the upper one-fourth, or eight units, would be surplus of all future public needs. 5/ This camp was rebuilt in 1967, enlarged to 53 family units, and is one of the most popular recreation spots on the Forest, possibly because of its proximity to U. S. Highway 93.

1/F. W. Godden, "Inspection," July 31, 1939, p. 3

2/A. L. Anderson, "Inspection Report," September 28, 1939, p. 6

3/J. N. Kinney, "Inspection Report," May 13, 1944, p. 9.

4/J. N. Kinney, "Inspection Report," May 13, 1944, p. 9.

5/Nord-Moncrief, pp. 16-22.

In 1946, 585 visitors entered the Idaho Primitive Area via the Yellowjacket District; of this number 295 were classified as hunters 275 as fishermen and 15 unclassified. Approximately half came in by airplane. About 20 pack outfits were operating in and out of the Middle Fork in the Yellowjacket District. As many as 38 head of horses were used in one string. Range feed for horses was a very serious problem in this narrow river bottom. Transportation by service landing at Bernard Creek Guard Station and the Bennett Ranch landing field. The existence of private holdings with landing fields greatly complicated primitive area administration. The possibility of additional resort development was a threat to the intent of the wilderness area program. This Middle Fork area presented many problems not found in any other of the primitive area of Region Four. Patented homesteads and mining claims, numerous mineral entries subject to patenting, together with a wide range of mineral discoveries which were subject to location, well established use of airplanes on private and national forest lands, the limitation of horse feed accessible from desirable camp sites, and the problem of expanding resort developments on private holdings combined to complicate wilderness area administration. While the Idaho Primitive Area has not been officially established as a wilderness area, it is to be managed in harmony with wilderness area policy. 1/

By 1937 a winter sports area was being developed near Lost Trail Pass. This site is partly on Region 4 and part on Region 1, and receives heavy use from both sides.

Construction of recreation facilities on the Salmon Forest increased in the 1950's, with four new campgrounds. Sixteen new camping and picnicking facilities were added in the 1960's besides four Primitive Area minimum facility boating sites on the Middle Fork.

A visitor Information Center was established in 1966 on Lost Trail Pass as a joint project of the Salmon, Beaverhead and Bitterroot National Forests. The purpose of this Visitor Information Center is to aid the visitor in understanding the geology, biology, ecology, history or archaeology of the area, and the ways productive forests are managed to sustain and renew themselves.

The Primitive or Wilderness Areas in our national forests were not always wilderness, but have become such only since the advent of the automobile and the motor road. Before the days of roads, when people traveled on horseback and with packstrings, these "wilderness" areas were often full of travelers and had many residents.

The Middle Fork has long been a popular recreation area of the Salmon National Forest but the numbers of people visiting it were limited by its inaccessibility until later years. In the days of mining at Yellowjacket, Loon Creek, and Thunder Mountain, the Middle Fork was

1/Nord - Moncrief, pp. 16-19.

crossed by main thoroughfares of travel, and several homesteaders settled there in the early 1900's to raise food for the nearby miners. The lower part of the canyon, below the mouth of Big Creek, was labelled "Impassable Canyon" by those who came in to find the Sheep-eater Indians during the Sheepeater War.

It is not known who first traveled the length of the Middle Fork, but as early as 1925, motion pictures were taken of a scow trip down the Middle Fork. 1/ Lester Gutzman recalls an early float trip on the Middle Fork around 1940, made by a party from Rogue River, Oregon, using a type of plywood boat called the Rogue River boat. They made two trips, with several boats each time. As they became available, rubber boats were put into use after World War II. Don L. Smith claims to be the first to use rubber boats on the Middle Fork of the Salmon River. It is estimated that by 1949 as many as 25 people were floating the river annually.

Recreational use of the Middle Fork and main Salmon rivers increased phenomenally during the 1960's. Fishermen and hunters, and adventurers were running the river in float boats or power boats. The Cobalt District patrolled the Middle Fork by float boat, aiding travelers and bringing out garbage. The Salmon and Bitterroot National Forests jointly initiated a river patrol, operated by jet boats, along the main Salmon River adjacent to the Primitive Area from Corn Creek to Mackay Bar. On the Salmon River in 1968 there were 84 float boat trips with 441 people, 159 sightseeing trips by power boats with 860 people, plus 24 kayaks and one canoe. Hunters with guides checking through the area included 133 elk hunters and 40 mountain sheep hunters. There were 1380 visitors at the guard station at Lantz Bar.

As a result of the National Wild and Scenic River Systems Act of October 2, 1968, the Middle Fork of the Salmon River became one of the nation's first Wild Rivers. The popularity of Middle Fork float trips has created a problem of crowding and the possibility of having to schedule or limit trips in the future. One of the largest parties on the river in 1970 was one group of 77 people in 15 boats. The last night of their trip they camped at Otter Bar and another 40 people there made a total of 117 on the one sand bar. Over 200 people came off the Middle Fork during one two-hour period in August. 2/

1/Glenn Thompson.

2/"Mark Looms for Boating on Salmon," The Idaho Statesman, August 10, 1970, p. 16.

F. FIRE CONTROL

The Big Fire of 1910 burned from the Canadian border south to the Salmon River and from Spokane, Washington, east past Missoula, Montana. It was not a single fire, but the joining of many fires and it reached the Salmon National Forest. Joe Gautier started working for the Forest in June, 1909, as a guard, and was sent down the Salmon River to fight the fire. When Gautier and two others reached the fire it had burned several sections. Three men were already there and Ranger Swan came to boss the fire crew. They had few tools, and were expected to find their own food. They worked all summer. The fire burned from Owl Creek up the Salmon River to the Sheepwater Creeks and to the north. Mr. Gautier remembered counting 17 fires from Blue Nose in one day. The fires finally grew together into one fire. The men could not put out the fire, but did keep it from jumping Owl Creek. They were aided by two settlers on Owl Creek, Reed Joseph and Elmer Groff. Charlie Haman, George Anderson and Frank Ayers were among the firefighters. 1/

Fred Chase recalls the 1910 fire as the worst he experienced in his years on the Salmon Forest. He was working on Hughes Creek, where the fire burned through some of the big yellow pine country. He was there all summer. He remembers that the sky was always smokey and the sun looked like the moon. He found many small animals with their feet burned off. 2/ Firefighting was hampered by insufficient means of communication, access trails, and men to guard the forests. Over three million acres were burned in the 1910 fire, and 85 lives lost. 3/ None of the known dead were on the Salmon Forest.

Lightning was the main cause of the many fires. Other causes included careless campers, sparks from train engines, loggers clearing private lands, fires of settlers and miners. It was a dry summer. On August 20 a hurricane-like wind swept through, and little fires grew big, big ones spread and merged, defying supervisors, rangers, guards, temporary employees and United States troops. The fire disrupted the economy of three states, upset the ecological balance of an area two-thirds the size of New Jersey, and crystallized public opinion in support of the Weeks Law, passed in 1911. This law provided for cooperation of the Federal Government and the States in protection and restoration of watersheds and forest resources.

In earlier days people did little to fight fire because there was little they could do. Fred Chase remembers when Baldy Mountain (then called Salmon City Mountain) was covered with dead timber, and

1/Interview with Joe Gautier, Salmon, Idaho, April 29, 1969.

2/Interview with Fred Chase, Boise, Idaho, June 1, 1970.

3/George T. Morgan, "The Fight Against Fire," Idaho Yesterdays, Vol. 6, No. 4, (Winter, 1962), 21-30.

lightning would hit there every summer, starting fires. People in town watched the fires, especially at night, enjoying the spectacle. Fire was accepted and no one went to fight it.

Fire control has always been of prime importance to the Forest Service and today on the Salmon Forest the prevention and control of fires requires more manpower and energy than any other activity. 1/ The mountainous regions of Idaho and western Montana are particularly vulnerable because of weather patterns and high incidence of fire-setting lightning strikes. The Salmon is among several National Forests referred to as "fire forests" for this reason.

Through the years, methods have improved, and new tools have been devised. Lookout points were established and men were stationed in them during the dry season to watch for fires. More trails, roads, and telephone lines were built, and some of the new tools developed include the Pulaski, chain saw, bulldozer, two-way radio, and fire retardant bombers.

In 1910 Fred Carl and Charles Truscott went to all the lookout points in the Salmon Forest to do visibility mapping: they mapped what they could see from each lookout point. 2/ Visibility mapping was repeated in the 1930's by Henry Shank of the Regional Office. Stimulated by the bad fires of 1931, the Chief of the Forest Service in 1935 established a policy on the "fire forests" of the Region (including the Salmon), to get 80 percent coverage of the fire area by the lookouts. 3/

Lee Bradley was one of the first to man a lookout on the Salmon Forest. The year was 1911. His point was Baldy Mountain, at the site of the present radio repeater station. When he went there the telephone line had not been completed and he had to ride to Salmon to report his first fires. His son Steve Bradley manned the Stormy Peak Lookout in the fall of 1957, and was on Ulysses Lookout in 1958.

In 1916, Salmon City Peak (Baldy Mountain) and Blue Nose, were considered the main lookout points of the Salmon Forest, Inspector Woods stating that from them nearly all the country where there is much fire danger can be seen. Fire guards were kept on them through each fire season, and Cathedral Mountain was to be visited now and then, as some of the Middle Fork country could be seen from there that was not visible from the other two peaks. Telephone lines were built or planned to these three points. 4/ The fire guards camped at the

1/"Long Term Objectives," Salmon National Forest, April 18, 1971, p. 1.

2/Fred Carl.

3/F. E. Powers

4/C. N. Woods, "Inspection Report 0," 1916, pp. 22-24.

lookout spots in tents. At some lookouts the guard would climb a handy tree for his lookout perch. At some points, metal towers were built for the guard to climb for his watch.

Fire fighting equipment recommended for each district in 1916 consisted of shovels, axes, cross-cut saws, water bags and buckets, canteens, mattocks or grub hoes, files and whetstones, and Government cooking and eating utensils for 10 to 12 men. 1/

Report of Lookouts on Salmon Forest in 1924:

Two Point: (west of the Middle Fork) two men.

Baldy Mountain: 9 foot by 9 foot lookout building. Not manned this season, since most of the country visible is also covered by other lookouts.

Lake Mountain: No improvements, but telephone line to Salmon. The lookout camps just under the top of the mountain.

Taylor Mountain: Has a 9 foot by 9 foot house; is a primary lookout.

Blackbird Mountain: Has a 14 foot by 14 foot house; a primary lookout.

Red Rock Mountain: The lookout camps a mile from the top of the mountain.

McEleny Mountain: The lookout-patrolman-smokechaser camps a half-mile under the mountain. No improvements.

Middle Fork Peak: Has a lookout-smokechaser camped under the Middle Fork Peak saddle.

Ulysses Mountain: No improvements. Lookout climbs trees to see the country.

Grizzly Springs: One man.

Allan Mountain: At Axe Park is visited daily during the fire season.

Granite Mountain: No horses are kept here; the only case where a smokechaser does not use horses, due to terrain and water and pasture conditions. This man has to get over the country on foot.

Stein Mountain: A primary lookout; has a building, and a man and wife are stationed here.

1/C. N. Woods, p. 21.

Sagebrush Springs: Two men here this year; one is an emergency man.

Haystack Mountain: No improvements, except a small horse pasture under the mountain. The lookout climbs trees to get the best view of the country. Need a tower built here.

Long Tom Mountain: A primary lookout, with a 10 foot by 10 foot building. Two men are stationed here.

Skunk Camp: One lookout is stationed here, with no telephone.

Blue Nose: Two men stationed here; a lookout and a smokechaser.

Horsefly Gulch: One lookout.

The Salmon Forest had no overall visibility map in 1924, which made it difficult to decide which lookouts should be considered primary lookouts, and have shelters and other improvements made. All the lookout houses on the Salmon were unpainted. 1/

In 1927 a four-day fire training camp was held at California Bar Ranger Station. Thirty-nine men attended. Instruction included use of the D-4 firefinder, map reading, telephone line and instrument maintenance, care of camp fires, care of equipment, making up fire-packs, methods of fire fighting, how to determine areas of fires, "mopping up." A Syracuse two-way plow was tried out in a dry meadow with fair success. 2/

The Wilson Creek fire of 1929 is remembered by several Forest Service personnel. A lightning caused fire which burned nearly 13,000 acres, it was the largest fire recorded on the Salmon Forest until the Corn Creek fire of 1961. The lookout on Middle Fork Peak had the only telephone. Lester Gutzman was ranger at Yellowjacket, and Glenn Bradley at Copper Creek. Fire fighters were trucked in and had to walk the last 18 miles to the fire. Earl Nichols, recently retired (1969), started his work for the Salmon Forest as a runner on the Wilson Creek fire. There were no radios. He recalls that he ran for the first two weeks. He did not use a horse because of rough terrain and lack of trails. A runner could go where a horse could not. Approximately 200 men were on the fire with about 25 men to a camp. Nichols would be sent with instructions for a crew. Several times when he got to a camp with a message, the camp would be burned and the crew had moved on. Nichols worked on the fire for sixty days. Henry Curry and Earl Poynor packed supplies and food for the firefighters. 3/

1/C. N. Woods, "Inspection Report 0," 1924, pp. 4-8.

2/J. O. Stewart, "Inspection Report," 1927.

3/Earl Nichols.

Wayne O'Connor was working with a road crew on the Yellowjacket road in 1929 when they were sent to the Wilson Creek fire. Wayne fought the fire for nine weeks. Once his fire crew had to make a fast run to keep from being caught by the fire.

O'Connor and Ranger Lester Gutzman both remember a near tragedy on the Wilson Creek fire. Supervisor Kinney, Herb Coles and Wendell Wilson were caught as the fire crowned up the hill around them. They clung to the side of a large bare rock as the fire swept up the other side. The fire then shifted to their side, so they moved to the other side of the rock. Water in their canteens was helpful. The heat swelled their eyes shut. After the fire swept through, Kinney, Coles and Wilson were missed by Gutzman, who knew they were in the vicinity. When the ashes and debris had cooled sufficiently, a search was made by Gutzman, Johnny O'Connor and Wayne O'Connor. Fearing the missing men to be dead, they were surprised to find tracks in the ashes. To quote Lester Gutzman: "Man, were we glad to see those tracks!" They followed the tracks and found the men who were badly blistered and had their clothes burned badly. They had to be led back to camp. 1/

The fire broke loose several times. Wayne O'Connor described it in heavy timber: the flames were like a big corkscrew into the sky, and the sound was a roar like a big waterfall. Deer, bear and smaller animals fled before it.

The Wilson Creek fire was a large fire, in steep country. It burned all the trees on the steep slopes. Since then snow slides have at times filled the canyon, perhaps 200 feet deep. The slides carried dead trees down, damming the stream and changing the stream bed to where it washed the soil and bank away. The hills have now grown a vegetative cover, but not enough trees to control these big slides. The stream is now practically impassable.

Several lookouts were built in the 1930's. Murdoch McNicoll built seven: Napoleon, Long Tom, Butts Point, Stoddard, Oreana, West Horse and Skunk Camp. McNicoll cut the materials to size during the winters and built the Lookouts in the summers. Earl Poynor packed the lumber to the various points. For a lookout building 14 by 14 feet, it was advantageous to pack pre-cut material in rather long sections. Some remarkable packing was done by Earl Poynor in packing loads of this type. He packed all the material for a lookout building, including lumber, windows and a stove on ten mules. The mules had to maneuver carefully between trees to carry the long lumber without bumping. The first lookout McNicoll built was Napoleon. There were seven switchbacks to the top. One mule, carrying the stove, bucked on the trail and rolled from the top down all seven switchbacks. The stove had

1/ Interview with Wayne O'Connor, Salmon, Idaho, October 23, 1969.

Interview with Lester Gutzman, Salmon, Idaho, October 23, 1969.

to be replaced. Merle Hoffman was the lookout on Napoleon that summer, and he worked with McNicoll in building the lookout. 1/

There was a serious drought in Idaho in 1934. At the same time many thousands of people from the dust bowl moved to the Northwest, including many to Idaho, swelling the relief rolls. Lemhi County was among several counties declared in insurrection by Governor C. Ben Ross during the depression because of the number of arson-caused fires in the forests. These fires were set deliberately by unemployed people hoping to gain employment as firefighters. 2/

Airplanes were first used about 1931 for dropping materials (tools and food) to firefighters.

Radio was used in fire protection on the Salmon Forest by 1934. Radio in the National Forests at this time was to some degree a novelty. Forest Service telephone lines were still considered as the primary means of communication, with the radio as supplemental.

Twenty-six lookouts were occupied during the fire season of 1939, with eight additional points available for emergency. Four trail crews were in radio communication with the Supervisor's Office. 3/

During the manpower shortage of World War II, women manned two of the lookouts on the Salmon Forest. They were placed where smokechaser support was reasonably close by. Mrs. Cloe Bradley was at Granite Mountain and Miss Horn was at Anderson Mountain. 4/ Because of the manpower shortage, the Forest Service enlisted the help of city and county highway crews in emergencies, and the cooperation of local business men. The Salmon Forest office figured they could gather 75 to 100 men for fire fighting regardless of where the fire was located, with a lot more ranchers and businessmen lined up who would be available for short times close in. The Forest Service worked hard on publicity for fire prevention.

In spite of the cooperation of the local communities, bad fires sometimes made it necessary to gather men and boys off the streets. There was no local radio in Salmon at that time, and a familiar sight was a forest car driving through the streets with the sound of a bullhorn calling for anyone who would fight fire to report to Forest Service headquarters immediately. Ranger Neale Poyner noted that because of the manpower shortage, his fire fighting group in 1943 was composed mainly of 17 and 18 year olds, and those who had passed the prime of

1/Interview with Mrs. M. M. (Claire) McNicoll, Salmon, Idaho, February 19, 1969.

2/Leonard Arrington, "The New Deal in Idaho," paper presented to Pacific Northwest History Conference, Boise, Idaho, April 10, 1969.

3/A. L. Anderson, "Inspection Report," September 28, 1939.

4/F. W. Godden, "Inspection Report," August 28, 1943.

life. Another Ranger commented, "They're either too young or too old."

In 1944 several lookouts were manned by 16 and 17 year old boys. They had to be replaced about August 25 so they could return to school.

In addition to the manpower shortage, fire control problems were increased by the Japanese incendiary balloon attack. The purpose of the balloons was to start fires, especially in the heavily forested northwest, to cause destruction, distract U. S. manpower from the war effort, and undermine the morale of the people. The long-range balloons were made of several layers of rice paper, were usually gray, white or greenish blue, and about 33 feet in diameter. They were unmanned, but contained incendiary devices, and some were very explosive. They floated across the Pacific Ocean on a natural air stream at about 45,000 feet elevation.

To counteract the Japanese balloon effort, the Army, the Army Air Force, Bureau of Land Management, National Park Service and the U. S. Forest Service each sent a representative to work out plans to resist this attack and to keep any news of Japanese balloon landings from reaching the newspapers or other news media. In this way they hoped to keep the Japanese from learning the exact time the balloons arrived, their locality, and their effect. This information would have enabled the Japanese to evaluate the results, and possibly to correct their methods. F. E. Powers of the Salmon Forest represented the Forest Service on this task force. They had 270 ground troops, 32 scout aviators, and an agreement with Gowen field for planes if needed, plus 30 or 40 paratroopers.

Our counter-effort against this balloon attack was one of the best kept secrets of World War II. Citizens and newsmen cooperated in keeping reports of balloon sightings from reaching the news. During the spring of 1945, over 1,100 balloons landed in western North America, most of them in Oregon and Idaho. Eight people were killed. 288 balloons came into the Boise area. Few started fires, partly because they arrived too early in the spring, before the dry season.

The wartime manpower shortage hastened the widespread use of smokejumpers in fire control. As a result of successful experimental jumps made near Winthrop, Washington in 1939 the Northern and Northwestern Regions each organized a small squad of smokejumpers for the 1940 fire season. The program grew, but by 1942, wartime manpower and equipment shortages reached a critical stage for the smokejumper program. The equipment shortage led to experimentation and development of better chutes. The manpower shortage was eased by volunteer conscientious objectors from C.P.S. Camps. By 1945 bases were maintained at Missoula, Montana; McCall, Idaho; Twisp, Washington and Cave Junction, Oregon. Jumps were made to fires on the Salmon Forest from both McCall and Missoula, depending on the location of the fire

and the number of jumpers available.

Observers for the United States Army visited the parachute training camp at Missoula in 1940 and later employed Forest Service techniques and ideas in organizing the first army paratroop training. In 1945 the 555th Battalion of Negro paratroops was trained in timber jumping and firefighting to combat the Japanese balloon fires. Since the balloon menace did not materialize, the 300 paratroopers were used as auxiliary suppression crews on large fires in Regions 1, 4, 5 and 6. 1/ The 1945 fire season was a severe fire year. During that season, paratroopers were dropped on two Salmon Forest fires: Pasture Mountain on the Lemhi, and the Horse Heaven fire.

Ford tri-motors and Curtis Travelairs were favorite planes for carrying smokejumpers and Forest Service cargo. The Ford tri-motor's high lift airfoil enabled it to fly at low speeds among high mountain peaks, and its stout landing gear allowed it to land on wilderness airstrips too rough for more modern planes. The Johnson Flying Service of Missoula is a name synonymous with the development of smokejumping in the northern intermountain area. Bob Johnson's contract with the Forest Service dates back to 1926. 2/ The last two old Ford tri-motor planes of the Johnson Flying Service were retired in May, 1969, and sold to Museums. The Curtis Travelairs were also retired and replaced by the Twin Otter and Beechcraft E-18's.

A helicopter was used on the Salmon Forest in 1950 on the Butts Creek fire and in 1951 on the Blackbird fire. Helicopters were used on the Hat Creek fire in 1959. Since that time two helicopters have been placed annually under contract on the Salmon Forest. On large fires additional helicopters have been used. Twelve helicopters were used at the peak of the Corn Creek fire in 1961.

1961 was the first season air tankers were under contract on the Salmon Forest. Bentonite was the first type of retardant used. The last few years phoscheck has been the retardant. The most tankers working on a fire at one time was 15 during the Corn Creek fire.

Major changes have been made over the years in methods of suppressing fires. Pick and shovel work by ground crews is still the basic method of controlling fires. Fires are now being partially controlled and/or slowed up by retardant delivered by air tankers, helicopters or through ground tankers. Water pumps and ground water pumper units also help in checking a fire and putting it out. The newest method of water

1/"History of Smokejumping," U. S. Department of Agriculture, Forest Service, Northern Region, Missoula, Montana.

2/Randle M. Hurst, The Smokejumpers (Caldwell, Idaho: Caxton Printers, Ltd., 1966), pp. 27-34.

delivery on a fire is through use of the helicopter and a water-carrying sling bucket. These buckets can be filled from rivers or lakes while in flight.

Methods of delivery service to fires has been expanded. Until development of air transport, on inaccessible fires the pack string was the main transportation source. During the 1930's, cargo planes started parachuting supplies to fires. In use now is the cargo-carrying helicopter which can deliver items on the fire line or into the fire camp. The smokejumper program has facilitated getting people onto a fire quickly. This has been especially valuable in controlling small fires before they become large fires. At times the use of smokejumpers is limited by weather conditions. With the use of helicopters, personnel can now be moved rapidly onto a fire line from a road-based helicopter spot. The last several years the Salmon Forest has based a six-man helitack crew with a helicopter for rapid transit to a fire. 1/

1/Joe Ladle.

PART 4
MISCELLANEOUS

A. HERMITS IN THE SALMON NATIONAL FOREST

A sociological phenomenon of unusual interest is the resident population of "hermits" in the Salmon National Forest. There is no way to accurately catalog the hermits that have lived on the Salmon Forest but some estimates suggest that there have been times when the population of socially remote people in the Salmon National Forest was as high as 150. With a very few exceptions these have been and are all single males who for various reasons have chosen to live in isolation of varying degree. A few examples are given of this type of forest resident.

Tom Tobin had placer claims in Bear Valley up Hayden Creek. He was there before 1894, and for many years afterward. His horse herd grew to 50 or more. It is believed he came to the area as an Indian scout.

Snowshoe Johnson was a miner. He built an arrastra mill high on Wilson Creek. He also had a cabin on the Middle Fork, above Wilson Creek.

Frank Love lived in a cave on the east side of the Middle Fork below the mouth of Camas Creek. He lived there at least two years. Later he lived in a cabin on the Middle Fork across from Sheep Creek. Several different people have, at one time or another, occupied caves along the Middle Fork.

One Middle Fork "hermit" was Earl K. Parrott, a native of Iowa who came to the Middle Fork from Florida around 1900 with two horses, a cow, and prospecting equipment. He built a cabin at the mouth of Nugget Creek, put in a garden, and devoted his time to prospecting. He made a boat, and fashioned his own clothes, usually from deer hide. His living expenses were covered by about \$35.00 per year, the money coming from his panning gold. His garden and wild game provided his food. His home was on a ledge, and he used ladders and ropes to get down to the Middle Fork. His place was always very clean and neat. Around 1941 he became ill and a packer brought him out. At that time he reported he had not seen a human being for two years. He lived briefly at the Emmet Reese ranch on Pine Creek and later was cared for in Salmon until his death in 1945.

Tom Christenson (Hacksaw Tom) and Gus Peebles were well known to Salmon residents because of their location. Hacksaw Tom lived in a cabin above Shoup, across the Salmon River from the road, reached by a cage on a cable across the river. Gus Peebles lived at the mouth of the Middle Fork, across the river from the road.

"Cougar Dave" and "Uncle Dave" were nicknames for Dave Lewis on the Middle Fork. His home was on Rush Creek, tributary of Big Creek, on the Idaho (now Payette) Forest, but he was well known in the Salmon Forest also. He had been a scout for Captain Bernard during the Sheepeater War in 1879, and was famous as a cougar hunter.

A common story in the late 1930's and early 1940's was that of families who had gone into the back country, perhaps as a way of surviving the depression. Some of the parents taught their children at home, others were situated where their children could attend a one-room rural school. When the children reached high school age they often boarded with other families in the town of Salmon. In 1947, thirteen-year-old Roy Safford visited Salmon, 55 miles from his two-acre home on Beaver Creek, tributary of Panther Creek, where he lived with his parents and two brothers and a sister. He had not been to town for eight years, and was so young at that time he could not remember it. Of his new experiences, the electric clippers in the barber shop seemed the most amazing to him. 1/

One category of "hermit" in the Salmon National Forest was composed of disillusioned war veterans, and examples of this type could probably be found after every war, beginning with the war between the states. An outstanding example of this type was Major Downey who lived for a time around 1954 and 1955 on the East Fork of Owl Creek. He was a veteran of World War II and had experienced a long imprisonment on Corregidor.

The phenomenon of the socially remote hermit or isolated family is becoming much less common, and very few are on the Salmon Forest at present, possibly because of cultural changes in America and because with vastly increased recreational use of the Salmon Forest, there are few really remote areas, and present Forest policy discourages the use of unpatented mining claims or "squatters rights" for living purposes.

1/The Recorder-Herald, August 21, 1947, p. 1.

APPENDIX

B. GRAVES IN THE SALMON NATIONAL FOREST

Brief notice is made here of some of the graves which are scattered throughout the Salmon National Forest. Most of them pre-date the time when improved transportation made it practical to transport the dead to a common burying place.

The Indianola Ranger Station has several graves in the horse pasture. Retired Ranger Neale Poynor reports that two were unmarked. The others are Charlie Spades, James McConn, Rodney Parks and William M. Vergis.

There are fenced graves by the Salmon River near Spring Creek. One is Henry Clay Merritt, who drowned in the Salmon River in 1884. Another is Joe Lockhorn. 1/

Johnny Burr is buried by the Salmon River near the mouth of Cove Creek. He drowned in the Salmon River, probably before 1900. 1/

In the summer of 1907, the local newspaper reported the death of a shepherd and his dog, struck by lightning on the ridge between Forney and Yellowjacket, under Red Rock Peak. The herder, named M. Taggart, was employed by the Wood Livestock Company, but no one knew his first name or the whereabouts of his family. Maurice Christensen, Ranger, found him. He was buried there and a marker was placed there by the Forest Service. A nearby gulch is named Shepherd Gulch. 2/

There are graves at the Mormon Ranch on the Middle Fork. One is Mrs. Lee Wyatt (Mamie). Another is Ben Beagle. 3/

Scotty Stewart is buried up Pine Creek, near his mine, the Big Lead. 4/

On Beaver Creek is the grave of James Vier, an old miner. 3/

Near Little Spring Creek, across the Salmon River from the road, is a cemetery on a hill by a cabin. Bill Hall is buried there, as are his parents. Neale and Laura Poynor remember attending the funeral of Bill Hall. Everyone attending the funeral crossed the river by the cage and cable. 5/

1/Billy Taylor.

2/The Lemhi Herald, August 8, 1907, p. 3.
Lester Gutzman.

3/Wayne O'Connor.

4/Herb St. Clair.

5/Neale and Laura Poynor.

Moyer, for whom Moyer Creek is named, was killed along the Thunder Mountain trail, and is buried on a ridge near Moyer Creek. 1/

Near Middle Fork Peak is the grave of a Mr. Armstrong, who died of mountain fever during the Thunder Mountain boom. 2/

Graves at the mouth of Musgrove Creek include Charles O. Scott, a hunter shot by a hunting companion, and Neal Stewart, a miner who fell to his death. 3/

In the Moose Creek area there is a grave near the old racetrack.

Up the Lemhi Valley there is a grave at the mouth of Grave Gulch near Mill Creek near Lemhi. In 1938, Mrs. Yearian gave the following information about it to Clinton Quesnel who was Lemhi District Ranger. While the Lemhi Indians were on the Lemhi Reservation, some Cree Indians came from Canada to visit them. There was a single buck, and a family of a man, wife and child. Yearians hired them to get out fencing material. They camped near Mill Creek (near the 1938 site of Hill's mill), to get out timber. While there the child died and was buried there. This was about 1902. Quesnel rebuilt the crib fence around the grave in 1938. 4/

1/Lester Gutzman.

2/Wayne O'Connor.

3/Mrs. Otis (Virginia) Slavin.
Wayne O'Connor.

4/Clinton C. Quesnel, letter to Forest Supervisor, "Graves Record," October 21, 1938.

A. PLACE NAMES

The following list of names of places in Lemhi County or the Salmon National Forest is not all inclusive. Left out are obvious derivations such as Boulder Creek, Deep Creek, Goat Lake. The list was compiled mostly from a Geographic Gazetteer of Lemhi County and includes those places which have been named for known people or interesting circumstances.

Adams Creek, flows northeast from Gunsight peak, disappears in sinks west of Leadore. After George Adams, early rancher.

Agency Creek, from west slope of Continental Divide, tributary of Lemhi River. After Agency of old Lemhi Indian reservation.

Aggipah mountain, in Bighorn Crags. Indian name of Salmon river, meaning "salmon."

Allan mountain, northwest of Gibbonsville, after John F. Allan, early mining operator.

Allison Creek, from west slope of Lemhi range, westward to Salmon River. After John F. Allison, pioneer packer and horseman.

Anderson Creek, tributary of Dahlonga Creek at Gibbonsville. After George D. Anderson, pioneer mining man. Also Anderson mountain.

Arnett Creek, tributary of Napias Creek near Leesburg. After surname of early day placer miner.

Baker Creek, and Baker post office, nine miles southeast of Salmon. After William R. Baker, early settler here.

Baldy Creek, from east slope of Lemhi range eastward to Lemhi River, one mile north of Tendoy. After George A. Martin, early settler, whose friends nicknamed him "Baldy."

Bates Gulch, from east slope of Lemhi range, joins Alder Creek. After William Bates, pioneer.

Beagle Creek, tributary of Yellowjacket Creek. After Beagle brothers, Al and Bill, early settlers.

Bell Mountain, on southern boundary of Lemhi County. After Robert N. Bell, mining engineer of Boise.

Birdseye Creek, tributary of Silver Creek. After James W. Birdseye, early day county surveyor.

Bob Moore Creek, from east slope of Salmon River mountains, to Salmon River, near Carmen. After Robert Moore, pioneer settler.

Bohannon Creek, from west slope of Continental Divide, tributary of Lemhi River. After Isaiah Bohannon, pioneer settler.

Bray Creek, from Hi peak northeastward to Hayden Creek. After Mark Bray, pioneer settler.

Briney Creek, tributary of Salmon River from the east, 15 miles south of Salmon. After W. A. Briney, early settler.

Bruce Canyon, out of Spring mountain, eastward to Little Birch Creek, south of Lemhi Union gulch. After A. T. Bruce, pioneer mining prospector.

Burns Gulch, from the east, tributary of Salmon River below Wagonhammer Creek. Mr. Burns fell from the cliff into Salmon River and was drowned.

Camp Creek, at Leesburg. After Chris Camp.

Carmen Creek and post office. After Benjamin Carman who had a sawmill on this creek.

Chamberlain Creek, from west slope of Continental Divide, tributary of Eighteenmile Creek, Lemhi drainage. After George Chamberlain, one of the original locators of the Copper Queen mine.

China Gulch, enters Salmon River opposite Shoup. Was once placer mined by Chinamen.

China Springs, on side of Lake mountain, draining into Deep Creek. Three Chinamen in early days were killed here for their gold dust.

Chips Creek, from Baldy mountain, tributary of Pollard canyon west of Salmon. After Chips Evans, old timer of this district.

Colson Creek, from the north, tributary of Salmon River, below Owl Creek. After surname of an early day packer.

Cooper Creek, tributary of Hayden Creek. After J. Newt. Cooper, pioneer stockman.

Corn Creek, tributary of Salmon River from the north, below Middle Fork. After early settlers there.

Cramer Creek, tributary of Salmon River from the north, about four miles west of Middle Fork. After Jack Cramer, pioneer mining prospector.

Cronk's Canyon, a box canyon of Salmon River about three miles long, extending northward from a point about one mile north of mouth of Pahsimeroi River. After James Cronk, early day cattleman.

Cruikshank Creek, tributary of Canyon Creek from west slope of Continental Divide, east of Leadore. After Alexander Cruikshank, a scout for General Howard during the Nez Perce flight. He settled here in 1878.

Daly Creek, tributary of Moose Creek. After surname of early placer miner.

Dahlongega Creek, from west slope of Continental Divide, tributary of North Fork at Gibbonsville. After Dahlongega, Georgia.

Davis Canyon, from northeast, tributary of Freeman Creek. After J. W. Davis, early settler.

D. C. Gulch and D. C. Bar, southeast of Lemhi. After initials of David and Criderman, pioneer stockmen.

Degan Mountain, four miles south of Lake mountain. After Joseph Degan, early settler.

Donnelly Gulch, from the north, tributary of Salmon River one mile west of North Fork. After James Donnelly, pioneer settler.

Dummy Creek, from the east, tributary of Salmon River above Twelvemile Creek. After two mutes, men who were partners on a ranch there.

Ebenezer Creek, tributary of Salmon River from the north, below Owl Creek. After Ebenezer Shell, early resident there.

Everson Creek, from Lemhi range, tributary of Lee creek. After John Everson, pioneer ranchman.

Ezra Creek, from the west, tributary of Salmon River, between Ringle and Shep Creek. After Ezra Orn, pioneer packer and freighter.

Falls Creek, tributary of Patterson Creek, Pahsimeroi drainage. After Lorenzo Falls, stockman.

Fenster Creek, tributary of Salmon River opposite Carmen Creek. After Jacob Feinstein, early settler.

Ford Creek, tributary of Bear Valley Creek. After Albert H. Ford, early day mining prospector.

Forge Creek, tributary of Camas creek about eight miles from Middle Fork. An old forge was left here by early day miners.

Forney, early post office and stage station on Panther Creek at mouth of Fourth of July Creek. After Henry Forney, early settler, related to present Forney families in Boise.

Frank Hall Creek, tributary of Cruikshank Creek. After a pioneer ranchman, of that creek.

Freeman Peak, east of Carmen, near Continental Divide. After James Freeman, pioneer.

Geertson Creek, tributary of Lemhi river from the west. After Lars C. Geertson, pioneer settler.

Gibbonsville, on Dahlonga Creek. After Col. John Gibbon, commander of U. S. troops at Battle of Big Hole in 1877.

Gilmore, 17 miles south of Leadore. After John T. Gilmer of Gilmer & Salisbury Stage Line.

Gorley Creek, from Baldy mountain, west of Salmon, eastward to Salmon River. After James Gorley, early day freighter and packer.

Hammerean Creek, from the west, tributary of North Fork. After a placer miner named Hammerean who worked this creek in the 1870's.

Hawley Creek, from western slope of Continental Divide, tributary of Eighteenmile Creek, above Leadore. After E. R. Hawley, early stockman in that area.

Hayden Creek, from Long mountain at Hi peak of Lemhi range, north-eastward to Lemhi River near Lemhi. After James Hayden, early day freighter, who, with others was murdered by Indians on Birch Creek in 1877.

Haynes Creek, from Lemhi range east to Lemhi River opposite Kenney Creek. After Norman I. Andrews, early settler on this creek, whose nickname was "Haynes" Andrews.

Hughes Creek, tributary of North Fork of Salmon River. After Barney Hughes, pioneer placer miner on this creek, and one of the original discoverers of Alder Gulch, Montana.

Hull Creek, from the west, tributary of North Fork. After Joseph Hull, early day settler.

Jack Smith Gulch, tributary of Mill Creek, from the west, southeast of Lemhi. After pioneer cattleman.

Jake's Canyon, four miles north of Leadore. After Jacob Yearian, pioneer ranchman.

Jesse Creek, tributary of Salmon River at Salmon. After Jesse McCaleb, pioneer settler on this creek, who was later killed by Indians on Big Lost River. Mt. McCaleb in the Lost River range was named for him.

Jureano Creek, tributary of Panther Creek, below Napias Creek. After Jules Reneau, old time placer miner in this gulch.

Kadletz Creek, from southwest, tributary of Lemhi River near Baker.
After Joe Kadletz, early settler near mouth of Kadletz Creek.

From southwest, tributary of Bear Valley Creek. After William Kadletz, once government blacksmith at Lemhi Agency.

Kenny Creek, from west slope of Continental Divide, below Tendoy.
After Dr. George A. Kenney, pioneer physician who had a ranch at the mouth of this creek.

Kirtley Creek, from west slope of Continental Divide, tributary of Lemhi River near Salmon. After James L. Kirtley, pioneer rancher.

Lee Creek, from east slope of Lemhi range, tributary of Lemhi River northwest of Leadore. After Charles Lee, pioneer settler.

Leesburg, once a mining town on Napias Creek. After Robert E. Lee, General of confederate armies in the Civil War.

Lemhi River, Pass, post office and mountain range. After Limhi, a character in the Book of Mormon.

Lost Trail Pass, between Idaho and Montana, from headwaters of North Fork of the Salmon to headwaters of the Bitterroot River in Montana. Here Lewis and Clark realized they had lost their intended trail.

Mount McGuire, east of Middle Fork, in the Bighorn Crags. After Don Maguire, mining engineer and geologist.

McKay Creek, tributary of Salmon River from the north, near Shoup.
After J. N. McKay, prospector on Salmon River in 1870's.

McKim Creek, from Lemhi range westward to Salmon River, above Poison Creek. After David McKim, pioneer ranchman.

McDevitt Ranch, from east slope of Lemhi range, tributary of Lemhi River above Tendoy. After Neal McDevitt, early settler.

Meyers-Cove, on Camas Creek. After B. F. Meyer, ex-congressman of Pennsylvania, who operated mines on Arrastra Creek.

Mogg Mountain, in Lemhi range, overlooking Hayden Creek to the north and Morse Creek to the southwest. After Fred Mogg, pioneer.

Mollie Gulch, six miles northwest of Leadore. After Miss Mollie Yearian, pioneer, who later married James H. Clarke.

Morgan Creek, from west slope of Lemhi range, to Patterson Creek near May. After John Morgan, pioneer horsegrower of this area.

Mormon Ranch, on Middle Fork, north of Camas Creek. After Mormons who located there during Thunder Mountain boom days.

Morse Creek, flows southwestward from Mogg Mountain in Lemhi range, to Patterson Creek. After early day stockman of that name.

Moyer Creek, from Taylor Mountain to Panther Creek. After George Moyer who was killed there.

Mulkey Creek, from Lemhi range, tributary of Lemhi River, six miles above Salmon. After Elijah Mulkey, one of the Leesburg discovery party, who settled on Mulkey Creek.

Musgrove Creek, from Bighorn Crags southeastward to Panther Creek. After Major Musgrove, early day mining character.

Napoleon Gulch, from Napoleon Hill, tributary of Salmon River near North Fork. After Napoleon LaVarre, early settler.

Napias Creek, from west slope of Salmon River mountains, southwestward to Panther Creek. After Indian name for "money" because gold was found there.

Panther Creek, a large creek from the south, draining to the Salmon river eight miles below Shoup. That part below Musgrove Creek was called Big Creek in the early days.

Pattee Creek, from west slope of Continental Divide, tributary of Lemhi River below Tendoy. After Joseph L. Pattee, early rancher.

Patterson Creek, from Lemhi range southwestward and westward to Pahsimeroi river. Name misspelled from Ross Pattison, who ranched here in early days, and discovered the tungsten mines on that creek.

Payne Creek, tributary of Bear Valley Creek near Hayden Creek. After an early day mining prospector of that name.

Perreau Creek, from Baldy mountain eastward to Salmon River south of Salmon. After John Perreau, pioneer settler.

Peterson Creek, from west slope of Continental Divide, tributary of Lemhi River above Lemhi. After William Peterson, early settler.

Phelan Creek, tributary of Napias Creek below Leesburg. After Larry Phelan who ran a horseherd and dairy cows there during Leesburg boom.

Pierce Creek, tributary of North Fork north of Gibbonsville. After a pioneer miner.

Pollard Canyon, tributary of Jesse Creek west of Salmon. After Frank M. Pollard, pioneer rancher.

Pratt Creek, tributary of Lemhi River above Baker. After Jerome Pratt, early settler on this stream.

Pruvan Creek, tributary of a fork of Sheep Creek (North Fork drainage). After John Pruvan, G.A.R. veteran who had a cabin on this creek.

Puddin Mountain, in Bighorn Crags, five miles east of Middle Fork. After "Puddin River" Wilson, early day saloon keeper at Yellowjacket mining camp.

Ramsey Mountain, northeast of Lemhi. After an early day storekeeper at Lemhi.

Rapps Creek, tributary of Arnett Creek near Leesburg. After Joseph Rapp, one of the Leesburg discovery party.

Rees Creek from west slope of Continental Divide, tributary of Lemhi River above Lemhi. After Robert G. Rees, pioneer settler.

Ringle Creek, from west, tributary of Salmon River above Iron Creek. After William Ringle, early settler on this creek.

Salzer Creek, tributary of Hughes Creek. After early day placer miner on this creek.

Schwartz Creek, from east slope of Lemhi range, tributary of Lemhi River southeast of Lemhi. After H. Schwartz, early rancher.

Sharkey Creek a) tributary of Agency Creek in Lemhi Valley
b) tributary of Napias Creek at Leesburg
both named for F. B. Sharkey of the Leesburg discovery party.

Shell Creek, from south, tributary of Salmon River three miles east of Middle Fork. After Ebenezer Snell or Shell, old time settler.

Shoup, mining town on north bank of Salmon River below North Fork. After Col. George L. Shoup, pioneer settler, and first state governor of Idaho.

Smithey Creek, tributary of Dahlonga Creek near Gibbonsville. After Dennis Smith, early prospector.

Smout Creek, from northeast, tributary of Freeman Creek. After W. T. Smout who once settled there.

Stein Mountain, seven miles northeast of North Fork. After Henry Stein, early prospector.

Stroud Creek, from Lemhi range, branch of Lee Creek, tributary of Lemhi River below Leadore.

Swan Peak, in Salmon River mountains, five miles west of Lake mountain. After William Swan.

Taylor Mountain, in Salmon River mountains, overlooking Big Hat Creek, east, and Panther Creek, west. After Bob Taylor, early day horsegrower on Big Hat Creek.

Tendoy, post office in Lemhi Valley. After Chief Tendoy of the Lemhi Indians, who is buried near there.

Thompson Gulch, three miles northeast of Leadore. After Elmer E. Thompson, early settler.

Tobias Creek, tributary of Hayden Creek. After Solon S. Tobias, pioneer ranchman.

Tormay Creek, tributary of Perreau Creek near Salmon. After John Tormey, locator of Tormey mine.

Treloar Gulch, tributary of Panther Creek near Cobalt. After an early resident and postmaster of Forney.

Turner Gulch, tributary of Jesse Creek. After Captain N. L. Turner, civil war veteran who mined in this gulch.

Votler Creek, tributary of North Fork below Gibbonsville. After Gus Votler, early resident.

Waddington Creek, from the east, tributary of Salmon River opposite Rattlesnake Creek. After Watts Waddington who owned a ranch there.

Wade Creek, tributary of Hayden Creek. After Daniel and Henry Wade, early ranchmen.

Wagonhammer Creek, from west slope of Continental Divide, tributary of Salmon River two miles above North Fork. After discovery of wagon remnants presumably left by prospectors in 1862 who tried to drive wagons by this route to the Florence gold fields.

Wallace Creek a) tributary of Owl Creek. After Wallace St. Clair who mined this stream.
b) tributary of Salmon River from the west, near Carmen. After William Wallace, early settler.

White Creek, tributary of Agency Creek. After Harry White, early settler.

Williams Creek, Williams Lake, south of Salmon. After Henry Williams, pioneer ranchman.

Wilson Creek, tributary of Middle Fork, from the east. (Also Wilson Mountain). After "Puddin River" Wilson, early saloon keeper at Yellowjacket mining camp.

Wimpy Creek, from west slope of Continental Divide, tributary of Lemhi River near Baker. After William Wimpey, early settler.

Wire Gulch, tributary of Panther Creek, three miles from Salmon River, After James Vier, pioneer prospector, who is buried there.

Withington Creek, from southeast, tributary of Lemhi River near Baker. After Lester P. Withington, pioneer settler.

Wright Creek, tributary of Bear Valley Creek. After Dr. F. S. Wright, one time official physician at Lemhi Agency.

Yearian Creek, from west slope of Continental Divide, tributary of Lemhi River above Lemhi. After George Yearian, pioneer settler.

Yellowjacket Creek, from Bighorn Crags to Camas Creek, four miles east of Middle Fork. When the first propsectors were finding gold here, their pack horses stirred up a nest of yellowjackets.

A very interesting story is related concerning the origin of the name of Horse Creek. This story illustrates the interesting oral tradition concerning many place names in the Salmon Forest. In gold rush days, prior to about 1890, the Horse Creek drainage was known as Big Sheep Creek. A man named Reynolds who had a little store at Shoup, and a trapper named Allen, went to Big Sheep Creek to trap. They packed their supplies and traps to the big meadow at the main forks of the creek, built a cabin and prepared to spend the winter trapping, primarily for martin. They turned their horses, quite a herd, out on the south slopes of Big Sheep Creek. Along in early spring they got the "cabin fever" and decided to go out to civilization. On their way to the Bitterroot Valley, on snowshoes, they stopped for lunch by a campfire and Reynolds went to sleep. Allen saw his chance to own all the furs, and as was quite common in the West, terminated the partnership by shooting Reynolds while he slept. Allen took the pelts and other valuables but was caught and hanged before he got out of the country. This left the horses on Big Sheep Creek without any owners. They wintered on the open hillsides for several winters before they were caught by local people or were winterkilled.

Because of the horses the local people began to call the creek Horse Creek and later named all the forks of the creek some name associated with a horse. One exception was Reynolds Creek, a large branch of Horse Creek, on which Reynolds and Allen built the cabin in the winter of 1891. 1/

1/Howard Sims.

B. EARLY MINING METHODS

The early prospector started with a pick, shovel and a gold pan. He partially filled the pan with earth, added water and shook the pan with a circular motion that separated the heavier gold from the dirt. As he poured off the water and dirt, the gold remained in the bottom of the pan. A prospector would pan his way along a likely stream and if he found good "pay dirt" he then resorted to methods which would speed up the volume of production.

a) Rocker: This is shaped like a baby's cradle, with the foot board removed and the bottom made of a piece of sheet iron full of holes. Dirt is thrown on this sheet and water poured in and the whole thing rocked to wash the dirt through the holes, where the gold would be caught on cleats fastened to the bottom of the rocker.

b) Sluice box or Long Tom: A long trough, ten or twelve feet long and about a foot square at the ends. Sometimes sluice boxes were placed end to end in strings. Earth is dumped into the troughs and a current of water from a ditch is run into them. The heavy gold particles sink to the bottom where they are collected behind wooden cleats or riffles.

c) Giant or hydraulic mining: Instead of moving the earth to the sluice box with pick and shovel, water is directed through high pressure nozzles onto a hillside of gold-bearing earth, washing the earth into the sluice boxes, where the riffles trap the gold as the earth and gravel wash through.

d) Dredge: a power driven chain of buckets on a barge revolve to bring up placer material from the stream bed. On the barge the gold is separated from the other material and the waste returned to the stream. A variation is a steam shovel on a barge to scoop up the dirt and gravel. One of the earliest dredges in the Salmon National Forest was on Moose Creek. Other dredges were operated on Kirtley Creek, Bohannon Creek, Napias Creek, and the Nork Fork drainage in the Gibbonsville area.

When there was not enough water in a creek for dredging, sometimes water was diverted into it near its head from a nearby creek. Three examples of this in the Salmon Forest vicinity are: diversion of a fork of Carmen Creek to Kirtley Creek, Wimpy Creek to Bohannon Creek and Moose Creek to Dump Creek. Besides the tailings left from the dredging, there was another adverse effect from the diversion of Moose Creek to Dump Creek when a small dam washed out about 1897 and the diversion became permanent, sending all of Moose Creek down Dump Creek for the past 70 years. While the bed of Dump Creek appears to be granitic formations of the Idaho batholith, the upper part of the Dump Creek gully appears

to be unstable tuffs and ash similar to Challis Volcanics formation and the resulting erosion has built an alluvial fan in the Salmon River at the mouth of Dump Creek. This has forced the Salmon River several hundred feet north, which has created a body of dead water upstream. The ice forming at dead water in cold weather spreads upstream many miles and causes danger of flooding ranches and the highway. 1/ Effects of this erosion continue to be felt downstream, and are discussed further in the section on watershed management.

Following discovery of placers, gold was often found in rocks and ledges buried deep under the surface, and was removed by quartz mining or "hard rock" mining. Treatment of the ore required great investment and heavy machinery. Various hard-rock mining methods were used in Lemhi County.

e) Arrastra: This primitive mill was used all over the Salmon National Forest, at Pine Creek, Shoup, Gibbonsville, Indian Creek, Arrastra Creek and others. Four cross-arms attached to a central spindle have weights which are dragged around the bottom of a cylindrical tub. Later the ore is washed and panned. Arrastras sometimes used water power, or horsepower to drag the weights around. They saved more gold with the arrastra than with any other method because there was no discharge through them as they were run. It was a slow process, and was used only if the ore was rich.

f) Stamp Mill: The stamp is an ore-crushing hammer. The early day stamps were only 800 pounds, but later were as heavy as 1250 pounds for each stamp. There were five stamps in a battery. The ore was in a heavy cast iron or steel mortar. Each stamp had a cam which raised the stamp and let it drop, working the ore fine enough to wash through a screen. The gold was then separated from the dirt, usually amalgamated by a mercury process and converted into bricks. 2/

g) Ball Mill: This was used later than the stamp mill. Iron balls were put into a large cylinder with the ore and the cylinder rolled until the balls had ground the ore. There was a ball mill used at Shoup, another on Carmen Creek. 2/

1/ A. R. Bevan, Reconnaissance Report, Dump Creek Erosion Problem, Salmon National Forest, 1964, United States Department of Agriculture, Forest Service, Region Four.

2/Billy Taylor.

C. PERSONNEL STATISTICS

The following charts give the personnel of the Salmon National Forest as listed in the records from the Ogden office of Intermountain Region 4. Names starred (*) appear in the Salmon National Forest historical file but not in the Ogden file. For the years 1918 and 1919, Dana Parkinson appears in the Salmon file as Supervisor, while the Ogden file lists S. C. Scribner as Supervisor. The Salmon file lists S. S. Steward as Deputy Supervisor in 1918, and S. C. Scribner as Deputy Supervisor in 1919.

Local office listings may be by actual dates while those from the Ogden office are possibly by fiscal years.

SUPERVISOR AND STAFF OFFICERS

<u>Year</u>	<u>Supervisor</u>	<u>Deputy Supv.</u>	<u>Forest Asst.</u>	<u>Forest Clerk</u>	<u>Forest Rgr.</u>	<u>Exec. Assistant Tech. Asst.</u>
*1907	G. G. Bentz					
*1908	G. G. Bentz	J. M. Ryan	F. T. McLean			
*1909	G. G. Bentz	J. M. Ryan	*F. T. McLean			
1910	J. M. Ryan	J. Pearson	*C. P. Wilber			
			I. W. Cook			
1911	J. M. Ryan	J. A. Pearson	I. W. Cook			
			*L. Crowell			
			*S. B. Locke			
			*W. N. Sparhawk			
			*W. W. Twaddel, Jr.			
1912	R. F. Mathias	J. A. Pearson	H. Work			
1913	J. A. Pearson	S. S. Stewart	H. Work			
1914	J. A. Pearson	S. S. Stewart				
1915	J. A. Pearson	S. S. Stewart				
1916	J. A. Pearson	S. S. Stewart				
1917	D. Parkinson	S. S. Stewart				
1918	S. C. Scribner	E. Renner		*H. H. Power		
1919	S. C. Scribner	E. Renner		*H. H. Power		
1920	S. C. Scribner	E. Renner		*J. A. O'Connell		
1921	S. C. Scribner	E. Renner		*J. A. O'Connell		
1922	S. C. Scribner	E. Renner		*M. L. Cahalan		
		<u>Assistant</u>		A. R. Hines	F. X. Schumacher	
		<u>Supervisor</u>		G. Stevens		
1923	S. C. Scribner	F. H. Eyre				
1924	S. C. Scribner	F. H. Eyre		W. O. Putnam	R. E. Allen	
1925	S. C. Scribner	H. G. McPheters		D. Howe	R. E. Allen	
1926	J. N. Kinney	J. L. Rutledge				W. B. Crites
						H. B. Knipe
						C. M. Archbold

SUPERVISOR AND STAFF OFFICERS, (Continued 2)

<u>Year</u>	<u>Supervisor</u>	<u>Asst. Supv.</u>	<u>Exec. Asst.</u>	<u>Admin. Asst.</u>	<u>Clerks</u>	<u>Fire Control</u>
1927	J. N. Kinney	D. E. Romano	H. B. Knipe			
1928	J. N. Kinney	D. E. Romano	H. B. Knipe			
1929	J. N. Kinney	D. E. Romano			H. C. Payne	
1930	J. N. Kinney	D. E. Romano			H. C. Payne	
1931	J. N. Kinney	D. E. Romano			H. C. Payne	
					C. T. Angell	
1932	J. N. Kinney	D. E. Romano			H. C. Payne	
1933	J. N. Kinney	D. E. Romano			M. C. Shipley	
1934	J. N. Kinney	D. E. Romano			H. B. Knipe	
					M. C. Shipley	
1935	J. N. Kinney	D. E. Romano	J. T. O'Neill		E. H. Foss	
1936	F. W. Godden	D. E. Romano	J. T. O'Neill	I. Robertson	E. H. Foss	
1937	F. W. Godden	D. E. Romano	J. T. O'Neill	I. Robertson	E. H. Foss	
					W. E. Bowen	
1938	F. W. Godden	T. V. Pearson		J. T. O'Neill	E. H. Foss	I. Robertson
					W. E. Bowen	
1939	F. W. Godden	T. V. Pearson		J. T. O'Neill	E. H. Foss	I. Robertson
					W. E. Bowen	
1940	F. W. Godden			J. W. Mattsson	E. H. Foss	I. Robertson
					W. E. Bowen	
1941	F. W. Godden	A. Buckingham		J. W. Mattsson	E. H. Foss	I. Robertson
					W. E. Bowen	
1942	A. Buckingham (Acting)			E. H. Foss	D. J. Butler	I. Robertson
					M. C. Shipley	
1943	A. Buckingham (Acting)			E. H. Foss	C. Jorgensen	I. Robertson
1944	C. Dougherty	F. E. Powers		E. H. Foss	F. Erickson	I. Robertson
					M. R. Butler	I. Robertson
					J. M. Spencer	
1945	C. Dougherty	F. E. Powers		W. Peterson	M. R. Butler	I. Robertson

SUPERVISOR AND STAFF OFFICERS (Continued 4)

<u>Year</u>	<u>Supervisor</u>	<u>Recreation</u>	<u>Range</u>	<u>Timber</u>	<u>Engineer</u>	<u>Admin. Officer</u>	<u>Dispatcher</u>
1963	F. E. Powers	E. A. Fournier	R. N. Hickman	J. W. Ladle	A. R. Bevan	W. E. Hales	J. G. Denny
1964	F. E. Powers	E. A. Fournier	R. N. Hickman	J. W. Ladle	A. R. Bevan	W. E. Hales	J. G. Denny
1965	F. E. Powers	E. A. Fournier	R. N. Hickman	J. W. Ladle	A. R. Bevan	W. E. Hales	J. G. Denny
1966	F. E. Powers	J. W. Ladle	R. N. Hickman	W. B. Sendt	A. R. Bevan	L. Slagowski	J. G. Denny
1967	F. E. Powers	J. W. Ladle	R. N. Hickman	C. T. Solberg	A. R. Bevan	L. Slagowski	J. G. Denny
1968	F. E. Powers	J. W. Ladle	R. N. Hickman	C. T. Solberg	A. R. Bevan	L. Slagowski	J. G. Denny
1969	F. E. Powers	J. W. Ladle	R. N. Hickman	C. T. Solberg	A. R. Bevan	L. Slagowski	J. G. Denny
1970	J. L. Emerson	J. W. Ladle	J. L. Hougaard	C. T. Solberg	W. Valentine	L. Slagowski	J. G. Denny
1971	J. L. Emerson	G. C. Smithey	J. L. Hougaard	C. T. Solberg	W. Valentine	L. Slagowski	J. G. Denny
1972	J. L. Emerson	G. C. Smithey	B. J. Graves	D. S. Goodrich	W. Valentine	L. Slagowski	G. Daniels
1973	J. L. Emerson	J. R. Moorhead	B. J. Graves	D. S. Goodrich	W. Valentine	L. Slagowski	G. Daniels

DISTRICT RANGERS

Year	Indianola	Hughes Cr.	Salmon	Lemhi or Tendoy	Forney or Cabin Cr. or Copper Cr.	Junction or Leadore	Shoup	Leesburg
1916	*R.E.Allen	*O.Cockrell	*W.Swan	*G.R.Ashton	*E.R.Gilbreath		*M.E.Mahoney	*R.L.Dryer
1917	*R.E.Allen	*O.Cockrell	*C.J.Kriley	*G.R.Ashton		*F.H.Chase	*M.E.Mahoney	*R.L.Dryer
1918	*R.E.Allen			*G.R.Ashton	*Mahoney		*J.L.Oquin	*C.L.McCracken
1919	*C.F.Clark	*R.E.Allen	*C.J.Kriley	*G.R.Ashton	*Vecart	*V.Olant		
			*M.Hogan (Iron Cr.)					
1920	C.F.Clark	E.J.Caperon	R.E.Allan	C.D.Huestis	A.H.Wheeler	D.M.Casterlin		
1921	C.F.Clark	T.A.Jerrell	R.E.Allan	C.D.Huestis	A.H.Wheeler	*T.M.Aldous		
						D.Casterlin		
						*G.R.Smith		
						(Meadow Butte)		
							Middle Fork or Meyers Cove or Yellowjacket	
1922	C.F.Clark	T.A.Jerrell	R.E.Allan	C.D.Huestis	A.H.Wheeler	D.Casterlin		
1923	C.F.Clark	A.H.Wheeler	D.E.Romano	C.D.Huestis	O.W.Slavin	T.A.Jerrell	R.E.Green	
1924	C.F.Clark	A.H.Wheeler	D.E.Romano	C.D.Huestis	O.W.Slavin	T.A.Jerrell	R.E.Green	
1925	C.F.Clark	A.H.Wheeler	D.E.Romano	O.W.Slavin	R.E.Green	T.A.Jerrell	N.E.Poynor	
1926	N.E.Poynor	A.H.Wheeler	I.Robertson	O.W.Slavin	R.E.Green	T.A.Jerrell		
1927	N.E.Poynor	A.H.Wheeler	I.Robertson	O.W.Slavin	R.E.Green	J.L.Phillips	R.M.White	
1928	N.E.Poynor	A.H.Wheeler	I.Robertson	F.Godden	R.E.Green	J.L.Phillips	R.M.White	
1929	N.E.Poynor	A.H.Wheeler	I.Robertson	F.Godden	G.Bradley	J.L.Phillips	L.T.Gutzman	
1930	N.E.Poynor	A.H.Wheeler	I.Robertson	F.Godden	G.Bradley	J.L.Phillips	L.T.Gutzman	
1931	N.E.Poynor	A.H.Wheeler	I.Robertson	F.Godden	G.Bradley	J.L.Phillips	L.T.Gutzman	
1932	N.E.Poynor	A.H.Wheeler	I.Robertson		G.Bradley	J.L.Phillips	L.T.Gutzman	
1933	N.E.Poynor	A.H.Wheeler	I.Robertson	M.J.Markham	G.Bradley	J.L.Phillips	L.T.Gutzman	

DISTRICT RANGERS (Continued 2)

<u>Year</u>	<u>Indianola</u>	<u>Hughes Cr.</u>	<u>Salmon</u>	<u>Lemhi</u>	<u>Copper Cr.</u>	<u>Leadore</u>	<u>Yellowjacket</u>	<u>Medicine Lodge</u>
1934	N. E. Poynor	A. H. Wheeler	I. Robertson	M. J. Markham	G. Bradley	J. L. Phillips	L. T. Gutzman	
1935	N. E. Poynor	A. H. Wheeler	I. Robertson	M. J. Markham	G. Bradley	J. L. Phillips	L. T. Gutzman	H. H. VanWinkle
1936	N. E. Poynor	A. H. Wheeler	O. W. Slavin	M. J. Markham	G. Bradley	J. L. Phillips	L. T. Gutzman	
1937	N. E. Poynor	A. H. Wheeler	O. W. Slavin	M. J. Markham	G. Bradley	J. L. Phillips	L. T. Gutzman	
1938	N. E. Poynor	A. H. Wheeler	O. W. Slavin	C. C. Quesnel	A. R. McConkie	J. L. Phillips		
1939	N. E. Poynor	A. H. Wheeler	O. W. Slavin	C. C. Quesnel	A. R. McConkie	J. L. Phillips		
1940	N. E. Poynor	A. H. Wheeler	O. W. Slavin		A. R. McConkie	J. L. Phillips	L. T. Gutzman	L. H. Garner
1941	N. E. Poynor	A. H. Wheeler	O. W. Slavin	C. C. Quesnel	A. R. McConkie	J. L. Phillips	L. T. Gutzman	C. H. McDonald
1942	N. E. Poynor	A. H. Wheeler	O. W. Slavin	C. C. Quesnel	A. R. McConkie	J. L. Phillips	L. T. Gutzman	C. H. McDonald
1943	N. E. Poynor	A. H. Wheeler	O. W. Slavin	C. C. Quesnel	A. R. McConkie	J. L. Phillips	L. T. Gutzman	C. H. McDonald
1944	C. C. Quesnel	A. H. Wheeler	N. E. Poynor		L. T. Gutzman	J. L. Phillips		C. H. McDonald
1945	C. C. Quesnel	A. H. Wheeler	N. E. Poynor		L. T. Gutzman	J. L. Phillips	K. Call (Acting)	
1946	U. Zuberbuhler	A. H. Wheeler	N. E. Poynor	W. H. Lucas	L. T. Gutzman	J. L. Phillips	K. Call "	E. W. Gutzman,
1947	U. Zuberbuhler	A. H. Wheeler	N. E. Poynor	W. H. Lucas	L. T. Gutzman	J. L. Phillips	H. L. Ketchie	(Acting) E. W. Gutzman
1948	U. Zuberbuhler	P. Grossenback	N. E. Poynor	W. H. Lucas	L. T. Gutzman	E. L. Noble	H. L. Ketchie	(Acting) E. C. Maw
1949	U. Zuberbuhler	W. J. Lucas	N. E. Poynor	H. C. Armstrong	L. T. Gutzman	E. L. Noble	H. L. Ketchie	E. C. Maw
	M. T. Hyatt	S. L. Cuskelly						
1950	M. Hyatt	W. J. Lucas	N. E. Poynor	N. C. Armstrong	L. T. Gutzman	E. L. Noble	H. L. Ketchie	
			E. R. Naanes					
1951	M. Hyatt	E. R. Naanes	N. E. Poynor	H. C. Armstrong	L. T. Gutzman	J. W. Ladle	H. L. Ketchie	
1952	M. Hyatt	E. R. Naanes	N. E. Poynor	R. B. Allison	L. T. Gutzman	J. W. Ladle	W. Mueller	
1953	M. Hyatt	E. R. Naanes	N. E. Poynor	R. B. Allison	L. T. Gutzman	J. W. Ladle	W. Mueller	
			D. F. Marsolek					
1954	M. Hyatt	E. R. Naanes	N. E. Poynor		L. T. Gutzman	J. W. Ladle	W. Mueller	
			D. F. Marsolek					
1955	M. Hyatt				L. T. Gutzman			
1956		*M. Johannesen	N. E. Poynor	E. Smith	L. T. Gutzman			
1957		NO RECORDS						

DISTRICT RANGERS (Continued 3)

<u>Year</u>	<u>Cobalt</u>	<u>Indianola</u>	<u>Leadore</u>	<u>North Fork</u>	<u>Salmon</u>
1958	L. T. Gutzman	W. Mueller	N. E. Poynor	D. E. Marsolek	J. McFrederick
1959	NO RECORDS				
1960	L. T. Gutzman G. L. Farr	W. Mueller O. E. Engelby		R. E. Leicht	M. McFrederick
1961	G. L. Farr L. E. Beardall	W. Mueller W. J. Little	A. O. Johnson	R. E. Leicht	O. E. Engelby B. G. Brown
1962	G. L. Farr L. E. Beardall	W. Mueller W. J. Little	A. O. Johnson C. T. Arnold	R. E. Leicht L. W. Jensen	O. E. Engelby B. G. Brown
1963	G. L. Farr L. E. Beardall	W. Mueller B. G. Brown	A. O. Johnson	R. E. Leicht	O. E. Engelby
1964	G. L. Farr A. J. Schultz	W. Mueller B. G. Brown	A. O. Johnson C. T. Arnold	R. E. Leicht A. W. Wirth	O. E. Engelby T. W. Smith
1965	G. L. Farr A. J. Schultz	A. W. Wirth B. G. Brown	A. O. Johnson C. T. Arnold	R. E. Averill W. C. Wakefield	O. E. Engelby T. W. Smith
1966	R. A. Finn	A. W. Wirth	A. O. Johnson C. T. Arnold	R. E. Averill W. C. Wakefield	W. W. Daniels T. W. Smith
1967	R. A. Finn D. T. Pence	A. W. Wirth R. K. Svenson	A. O. Johnson C. T. Arnold	R. E. Averill W. C. Wakefield	W. W. Daniels G. E. Peterson L. E. Beardall
1968	R. A. Finn D. T. Pence	A. W. Wirth R. K. Svenson	A. O. Johnson C. T. Arnold	R. E. Averill P. E. Hightree	W. W. Daniels G. E. Peterson L. E. Beardall

DISTRICT RANGERS (Continued 4)

<u>Year</u>	<u>Cobalt</u>	<u>Indianaola</u>	<u>Leadore</u>	<u>North Fork</u>	<u>Salmon</u>
1969	R.A.Finn F.C.Pence A.A.Varillone	A.W.Wirth R.K.Svenson	C.P.Guillette S.W.Bills	R.E.Averill W.K.Jensen M.C.Rude	W.D.Daniels P.E.Hightree L.E.Beardall
1970	R.A.Finn F.C.Pence G.Jensen	A.W.Wirth R.K.Svenson	C.P.Guillette S.W.Bills	R.E.Averill W.K.Jensen M.C.Rude	W.W.Daniels J.V.Hustead L.E.Beardall
1971	R.A.Finn F.C.Pence G.Jensen	A.W.Wirth R.K.Svenson	C.P.Guillette S.W.Bills	R.E.Averill W.K.Jensen M.C.Rude	W.W.Daniels J.V.Hustead J.Hammond
1972	R.A.Finn G.S.Jensen E.W.Benedict	A.W.Wirth R.K.Svenson	C.P.Guillette R.C.Hamilton	R.E.Averill W.K.Jensen M.C.Rude	D.H.Hooper J.V.Hustead J.R.Hammond
1973	R.A.Finn G.S.Jensen E.W.Benedict	Combined w/North Fork 7/1/72		F.S.Elder W.W.Rockwell N.L.Huntsman	D.H.Hooper J.R.Hammond D.D.Bassford

D. EARLY DAY ROADS - SALMON N.F.

<u>Wagon Roads</u>	<u>Year Constructed</u>
Lemhi Pass - Tendoy - Salmon	1887
Salmon - Leesburg - Forney - Yellowjacket	1895
Big Hole Pass - Gibbonsville - North Fork	1907
Ellis - Salmon - North Fork	1901
Indian Creek - Ulysses	1901

Motorized Vehicle Roads

Lower Salmon River Area

North Fork - Shoup	Before	1919
Shoup - Mouth Kitchen Creek	CCC	1934
Kitchen Creek - Corn Creek		1958
Horse Cr. Pass - St. Clair Mine	Before	1930
Long Tom Ridge & Oreana Spur	CCC	1936
Blue Nose - Beartrap - Sheepeater	CCC	1938
Spring Creek Motorway		1932
Squaw Cr. - Papoose Creek	CCC	1938
Indian Creek - Ulysses Mine	Before	1930
Sage Creek	Before	1930
Pine Creek	CCC	1937

North Fork Area

North Fork - Lost Trail Pass	Before	1930
Hull Creek	Before	1930
So. Fork - W. Fork	CCC	1935
Hughes Cr. - Allen Creek	Before	1930
Ditch Creek	Before	1930
Lost Trail Pass - Anderson Mountain	CCC	1936
Gibbonsville - Big Hole Pass		1907
Lick Creek	Before	1930
Sheep Creek - Stein Gulch	Before	1930
Wagonhammer Creek	Before	1930
4th July & Little 4th of July Creeks	Before	1930
4th July - Skewag Lake	CCC	1936
Carmen Creek	Before	1930
Freeman Cr. - Orogrande Mine	Before	1930

Panther Creek - Yellowjacket Area

Panther Creek Road: Morgan Cr. Pass - Napias Cr.		1925
Mo. Napias Creek - Leesburg		1925
Mo. Napias Creek - Salmon River	CCC	1934

Napias Creek		
Phelan Creek - Big Jureano	Before	1930
Jureano L.O.	CCC	1937
Arnett Creek	Before	1930
Mocassin Cr. - Williams Cr. Summit	CCC	1932
Musgrove Cr. - French Gulch	Before	1930
Porphery Creek - Yellowjacket Station	CCC	1935
Porphery Cr. Rd. - Hoodoo Meadows	CCC	1937
Porphery Cr. Rd. - Dutch Peak	CCC	1938
4th July Creek - Yellowjacket Mine		1928
Silver Creek - Meyers Cove	Before	1930
Silver Creek - Rabbitfoot Mine	Before	1930

Upper Salmon Area

Ellis - Salmon - North Fork	Before	1930
Salmon - Leesburg	Before	1930
Carmen - Hd. Dump Creek	Before	1930
Leesburg - Hd. Dump Creek	Before	1930
Pollard Canyon	Before	1930
Spring Creek - Forney Mine	Before	1930
Williams Creek Rd.	CCC	1932
Williams Cr. Summit - Napoleon Hill	CCC	1937
Williams Cr. Summit - Iron Lake	CCC	1938
Iron Creek - Peel Tree Creek	Before	1930
Lower Twelvemile	Before	1930
Spring Creek - Mulkey Cr. Loop	Before	1930

Lemhi Area

Salmon - Tendoy - Lemhi Pass	Before	1930
Tendoy - Gilmore Summit	Before	1930
Withington Cr. - Harmony Mine	Before	1930
Hayden Creek - Ford Creek	Before	1930
Mill Creek	Before	1930
Everson Creek - Everson Lake	Before	1930
Big Eightmile - Patterson	Before	1930
M. Fk. Timber Creek - Reservoir	Before	1930
Big Timber Creek	Before	1930
Nezperce Creek	Before	1930
Deer Creek	Before	1930
Meadow Lake Creek - Meadow Lake	Before	1930
Hawley Creek - Big Bear Creek	Before	1930
Railroad Canyon - Divide	Before	1930
Cruikshank Cr. - Frank Hall Cr.	Before	1930
Divide - Jakes Canyon	Before	1930

E. BRIDGE INVENTORY

<u>Trail or Road</u>	<u>Bridge</u>	<u>Stream Crossed</u>	<u>Location</u>	<u>Year Built</u>
<u>Woodtick Trail</u>	<u>Woodtick</u>	<u>Panther Creek</u>	<u>Sec. 24, T20N, R18E</u>	<u>1955</u>
<u>Hayden Cr. Road</u>	<u>Bear Valley Cr.</u>	<u>Bear Valley Cr.</u>	<u>Sec. 27, T17N, R23E</u>	<u>1960</u>
<u>Bear Valley Road</u>	<u>Bear Valley</u>	<u>Bear Valley Cr.</u>	<u>Sec. 28, T17N, R23E</u>	<u>1949</u>
<u>Peel Tree Road</u>		<u>Iron Creek</u>	<u>Sec. 8, T18N, R21E</u>	<u>1936</u>
<u>Williams Cr. #721</u>	<u>Williams Cr. #1</u>	<u>Salmon River</u>	<u>End of Williams Cr. Road</u>	<u>1952</u>
<u>Williams Cr. #721</u>	<u>Williams Cr. #2</u>	<u>Napias Creek</u>	<u>Junctn Wms. Cr. Rd & Leesburg Rd</u>	<u>1953</u>
<u>Salmon River Road</u>	<u>Indian Cr.</u>	<u>Indian Cr.</u>	<u>Sec. 13, T24N, R19E</u>	<u>1963</u>
<u>Salmon River #161x</u>	<u>Boulder Cr.</u>	<u>Boulder Cr.</u>	<u>Shoup</u>	<u>1965 or 1966</u>
<u>Salmon River #161x</u>	<u>Pine Creek</u>	<u>Salmon River</u>	<u>1½ miles below Shoup</u>	<u>1954</u>
<u>Salmon River 60030-10.8</u>	<u>Squaw Creek</u>	<u>Squaw Creek</u>	<u>--</u>	<u>1963</u>
<u>Salmon River #161x</u>	<u>Pine Creek (small)</u>	<u>Pine Creek</u>	<u>mouth of Pine Creek</u>	<u>1954</u>
<u>Salmon River</u>	<u>Spring Creek</u>	<u>Spring Creek</u>	<u>--</u>	<u>1963</u>
<u>Salmon River</u>	<u>Panther Creek</u>	<u>Panther Creek</u>	<u>Sec. 18, T23N, R18E</u>	<u>1949</u>
<u>Salmon River</u>	<u>Cove Creek</u>	<u>Salmon River</u>	<u>Sec. 18, T23N, R18E</u>	<u>1959</u>
<u>Salmon River</u>	<u>Owl Creek</u>	<u>Owl Creek</u>	<u>Sec. 15, T23N, R17E</u>	<u>1959</u>
<u>East Indian Creek Road</u>	<u>East Indian Cr.</u>	<u>Indian Cr.</u>	<u>Sec. 33, T25N, R20E</u>	<u>1970</u>
<u>Indian Creek</u>	<u>Indian Cr.</u>	<u>Indian Cr.</u>	<u>upper end Indianola Admn. Site</u>	<u>1954</u>
<u>Indian Creek</u>	<u>Indian Cr. #2</u>	<u>Indian Cr.</u>	<u>2nd bridge above Indianola</u>	<u>1954</u>
<u>Indian Creek</u>	<u>Indian Cr. #3</u>	<u>Indian Cr.</u>	<u>3rd bridge above Indianola</u>	<u>1955</u>
<u>Indian Creek</u>	<u>Indian Cr. #4</u>	<u>Indian Cr.</u>	<u>4th bridge above Indianola</u>	<u>-</u>
<u>Indian Creek</u>	<u>Indian Cr. #5</u>	<u>Indian Cr.</u>	<u>5th bridge above Indianola</u>	<u>-</u>
<u>Indian Creek</u>	<u>Indian Cr. #6</u>	<u>Indian Cr.</u>	<u>6th bridge above Indianola</u>	<u>-</u>
<u>Iron Creek</u>	<u>Iron Creek</u>	<u>Salmon River</u>	<u>Sec. 15, T18N, R21E</u>	<u>1959</u>
<u>Iron Creek</u>	<u>Iron Creek</u>	<u>Iron Creek</u>	<u>0.6 mi. from mouth of creek</u>	<u>1959</u>
<u>Morgan Cr.-Panther Cr.</u>	<u>Panther Cr.</u>	<u>Panther Cr.</u>	<u>--</u>	<u>1953</u>
<u>Morgan Cr.-Panther Cr.</u>	<u>Panther Cr.</u>	<u>Panther Cr.</u>	<u>--</u>	<u>1953</u>
<u>Morgan Cr.-Panther Cr.</u>	<u>Panther Cr.</u>	<u>Panther Cr.</u>	<u>--</u>	<u>1953</u>
<u>Morgan Cr.-Panther Cr.</u>	<u>Porphyry Cr.</u>	<u>Porphyry Creek</u>	<u>mouth of Porphyry Cr.</u>	<u>1953</u>
<u>Morgan Cr.-Panther Cr.</u>	<u>Musgrove Cr.</u>	<u>Musgrove Creek</u>	<u>mouth of Musgrove Cr.</u>	<u>1953</u>
<u>Morgan Cr.-Panther Cr.</u>	<u>Blackbird Cr.</u>	<u>Blackbird Creek</u>	<u>mouth of Blackbird Cr.</u>	<u>1953</u>
<u>Morgan Cr.-Panther Cr.</u>	<u>-</u>	<u>Panther Cr.</u>	<u>Sec. 22, T21N, R19E</u>	<u>1962</u>

<u>Trail or Road</u>	<u>Bridge</u>	<u>Stream Crossed</u>	<u>Location</u>	<u>Year Built</u>
Morgan Cr.-Panther Cr.	-	Deep Creek	Sec. 22, T21N, R19E	1962
Morgan Cr.-Panther Cr.	Leacocks	Napias Creek	mouth of Napias	1956
Morgan Cr.-Panther Cr.	Beaver Pipe Line	Beaver Pipe Line	Sec. 34, T23N, R18E	1956
Morgan Cr.-Panther Cr.	Beaver Creek	Beaver Creek	Mouth of Beaver Creek	1953
Carmen -4th of July Cr.	Carmen #1	Carmen Creek	Sec. 35, T23N, R22E	1961
Carmen-4th of July Cr.	Carmen #2	Carmen Creek	Sec. 6, T23N, R23E	1963
4th of July - Silver Lead	Blacktail	4th of July Creek	Sec. 10, T24N, R22E	1960
Hughes Creek	Hughes Creek	N. Fork of Salmon River	Sec. 21, T25N, R21E	1958
Hughes Creek	Lower Ditch Creek	Ditch Creek	Sec. 8, T25N, R21E	1959
Hughes Creek	West Fork	W.Fork of Hughes Cr.	5.2 mi. from hwy 93	1956
Granite Mountain	Votler	N.Fork of Salmon River	Sec. 35, T26N, R21E	1959
Hull Creek	N. Fk. (Hull Creek)	North Fork of Salmon R.	mouth of Hull Creek	1953
Copper Creek Road	Copper Creek	Panther Creek	Copper Cr. Ranger Station	1955
Moyer Creek	Moyer	Panther Creek	mouth of Moyer Creek	1960
Middle Fork Peak	Yellowjacket #1	Yellowjacket Creek	Sec. 4, T19N, R17E	1956
Middle Fork Peak	Yellowjacket #2	Yellowjacket Creek	Sec. 24, T19N, R16E	1959
Middle Fork Peak	Yellowjacket #3	Yellowjacket Creek	Sec. 24, T19N, R16E	1963
Middle Fork Peak	Hoodoo Creek	Hoodoo Creek	Sec. 22, T19N, R16E	1959
Lemhi Admin. Site	Lemhi Admin Site	Hayden Creek	Sec. 29, T18N, R24E	1960
N. Fork Admin Site	N. Fk. Admin Site	North Fork of Salmon R.	Sec. 15, T25N, R21E	1963
Hawley Cr.-Cruikshank	Hawley Creek	Hawley Creek	---	1963
Cobalt Admin. Site	Cobalt Admin. Site	Panther Creek	Sec. 18, T20N, R19E.	1962
Spur of Morgan-Panther	Old CCC Camp	Panther Creek	McDonald Flat Camp Ground	1953
Yellowjacket Admin. Site	Yellowjacket Admin.	Yellowjacket Creek	Sec. 4, T19N, R17E	1962
Camas-Middle Fork Trail	Yellowjacket Tr. Bridge	Yellowjacket Cr.	mouth of Yellowjacket Cr.	1950
Camas-Middle Fork Trail	Camas Trail Bridge	Camas Creek	mouth of Camas Creek	1953
Camas-Middle Fork Trail	Bernard Pack Bridge	Middle Fk of Salmon R.	Sec. 27, T19N, R14E	1957
Camas-Middle Fork Trail	Jack Creek	Jack Creek	Sec. 2, T19N, R14E	1961
Camas-Middle Fork Trail	Wilson Creek	Wilson Creek	mouth of Wilson Creek	1957
Camas-Middle Fork Trail	Waterfall Creek	Waterfall Creek	Sec. 10, T20N, R14E	1957
Camas-Middle Fork Trail	Big Creek	Middle Fork of Salmon R.	Sec. 10, T20N, R14E	1957
Lower Yellowjacket Trail	Buckhorn	Yellowjacket Creek	Sec. 33, T19N, R16E	1962
Short Creek Lookout Trail	Horse Creek	Horse Creek	mouth of Horse Creek	1951
Stoddard-Farrow Mtn. Trail	Stoddard Pack Bridge	Salmon River	mouth of Middle Fork of Salmon	1937
Cottonwood Butte Trail	Horse Cr. Pack Bridge	Salmon River	1/4 mi. below mouth of Horse Cr.	1934

F. GRAZING STATISTICS

Salmon National Forest - 1907 - 1972

Forest and Year	Permitted Numbers		No. Actually Grazed		No. Permits	
	C&H	S&G	C&H	S&G	C&H	S&G
<u>Salmon</u>						
1907	6,465					
1908	5,129	6,000				
1909	4,622	23,840	6,739	9,044	128	4
1910	3,799	30,850	10,877	15,920	97	9
1911	4,976	24,193	4,976	24,193	100	12
1912	5,935	42,311	5,935	42,311	101	14
1913	6,538	33,150	6,538	33,150	121	21
1914	8,284	59,483	8,284	59,483	116	18
1915	10,404	74,065	10,404	74,065	142	37
1916	12,714	120,763	12,714	120,763	154	54
1917	16,582	109,543	16,582	109,543	176	69
1918	17,317	129,830	17,317	129,830	172	90
1919	15,294	91,352	15,294	91,352	170	84
1920	13,858	67,480	13,858	67,480	148	71
1921	15,468	62,921	13,464	54,354	173	61
1922	14,549	64,679	14,549	58,954	153	44
1923	13,094	57,690	13,094	57,690	164	44
1924	15,767	58,329	16,274	56,030	152	41
1925	13,011	56,818	13,054	56,231	142	50
1926	13,277	51,428	12,802	46,318	165	43
1927	11,861	55,168	11,241	51,202	141	46
1928	10,744	58,083	10,804	49,537	150	45
1929	9,836	54,371	10,264	49,984	127	62
1930	9,270	48,204	9,254	46,738	130	61
1931	9,889	49,420	9,829	44,325	124	54
1932	10,474	48,590	10,474	44,410	135	52
1933	11,348	46,687	11,343	43,697	133	47
1934	11,563	47,058	11,546	45,622	139	43
1935	11,150	42,219	11,150	38,804	135	43
1936	10,454	40,370	10,422	39,767	121	46
1937	10,698	42,250	10,932	38,983	122	45
1938*	11,958	58,680	11,829	57,410	156	57
1939	11,632	59,056	11,456	60,404	148	49
1940	11,481	50,058	12,277	47,858	161	49
1941	12,308	49,698	13,077	50,005	141	44
1942	12,152	47,578	12,951	48,672	154	45
1943	12,392	43,747	13,685	42,224	143	47

*Part of Lemhi transferred to Salmon.

Forest and Year	Permitted Numbers		No. Actually Grazed		Number Permits	
	C&H	S&G	C&H	S&G	C&H	S&G
1944	13,097	39,126	13,639	31,981)	
1945	12,746	36,899	13,051	34,871)	
1946	12,606	34,092	12,168	33,801)	
1947	12,608	25,743	12,752	27,297)	
1948	12,156	26,718	12,214	26,779)	
1949	9,800	13,018	10,407	13,346)	
1950	9,755	13,318	9,699	13,857	)	No
1951	9,915	13,318	10,081	13,153	)	figures
1952	10,258	13,118	10,405	13,194	)	available
1953	10,278	10,268	10,108	10,370)	
1954	10,640	9,218	10,733	10,758)	
1955	10,522	8,718	10,608	8,094)	
1956	10,746	8,218	10,802	7,815)	
1957	10,442	8,218	10,708	7,789)	
1958	10,124	9,018	10,220	7,841)	
1959	10,759	9,018	10,994	8,281)	
1960	10,034	7,469	10,113	8,218	123	7
1961	13,652	8,468	9,923	7,000	123	7
1962	10,673	6,530	10,200	6,389	122	7
1963	10,694	6,530	10,079	6,880	122	7
1964	10,631	6,530	10,128	7,445	117	7
1965	10,781	6,530	10,557	7,350	117	7
1966	10,782	5,780	10,570	7,756	117	7
1967	10,673	7,220	10,601	6,546	109	10
1968	10,493	7,220	10,588	7,111	109	10
1969	9,957	7,220	10,383	6,000	109	10
1970	9,660	7,220	9,901	5,991	98	8
1971	8,872	6,005	9,800	5,305	98	6
1972	8,798	6,005	10,899	6,537	82	5

Year	Permitted Animal-Months		Actual Use Animal Months	
	C&H	S&G	C&H	S&G
1924	-	-	80,427	260,807
1925	-	-	62,890	239,961
1926	-	-	63,109	149,145
1927	-	-	55,635	194,457
1928	-	-	55,661	164,293
1929	-	-	49,486	134,714
1930	49,656	187,870	48,227	143,418
1931	52,868	200,970	51,803	148,697
1932	54,218	189,185	56,570	162,341
1933	58,976	188,653	58,738	152,706
1934	62,135	190,582	69,970	173,286
1935	58,983	181,831	61,539	146,288
1936	55,535	172,600	57,979	150,839
1937	57,753	179,970	59,765	148,686
1938*	62,329	233,579	61,402	192,327
1939	59,279	224,209	60,934	184,651
1940	61,644	192,626	60,958	152,300
1941	63,427	189,266	61,294	155,274
1942	61,040	172,280	58,259	135,684
1943	62,198	161,119	61,768	125,320
1944	66,319	128,826	65,195	89,992
1945	62,136	118,201	62,264	99,170
1946	59,478	104,552	53,837	86,317
1947	57,082	76,478	53,334	60,250
1948	55,839	82,195	51,736	64,047
1949	43,319	35,760	40,166	28,369
1950	41,261	38,077	37,994	33,190
1951	42,382	38,077	39,406	33,118
1952	43,525	37,977	40,243	30,076
1953	42,957	26,242	37,318	22,252
1954	44,463	21,297	41,395	19,812
1955	43,986	22,119	41,319	19,790
1956	42,940	22,089	40,253	18,285
1957	42,043	21,399	38,580	18,139
1958	39,481	23,739	35,603	11,788
1959	39,700	22,302	43,439	21,339
1960	42,173	19,389	41,580	21,339
1961	39,650	16,969	39,963	16,944
1962	41,412	18,073	39,891	13,679
1963	48,604	17,950	41,880	14,403
1964	47,894	20,187	40,472	13,500
1965	47,020	20,020	40,698	12,501
1966	47,781	17,417	39,067	11,531
1967	42,060	17,817	38,331	10,013
1968	39,324	14,986	37,129	11,520
1969	38,850	16,502	36,835	12,780
1970	37,343	14,522	34,816	13,134
1971	37,869	14,522	34,877	12,147
1972	37,991	15,076	35,063	10,424

*Added Medicine Lodge District - Old Lemhi

G. RECREATION AREA AND USE STATISTICS

DEVELOPED RECREATION SITES - SALMON NATIONAL FOREST

<u>Campground, Family Type</u>	<u>Date of Constr.</u>	<u>Reconstr. Date</u>	<u>Family Unit 5 per Unit</u>
Big Eightmile	1961		4
Cache Bar	1965		10
Corn Creek	1964		27
Cougar Point (originally built by CCC)			
Crags	1961		24
Deadwater Spring	1959		7
Deep Creek (originally built by CCC)	1938	1964	3
Ebenezer Bar	1957		14
Hayden Creek	1958		3
Horse Creek Hot Spring	1965		16
Iron Lake	1959	1965	8
Long Tom (CCC construction)	1937		5
Lost Spring	1963		12
Meadow Lake	1961		8
Middle Fork	1965		10
Middle Fork Peak	1961		5
Twin Creeks (originally built by CCC)	1935	1967	47
Wallace Lake	1963		12
Williams Lake	1962		3
Yellowjacket Lake		1960	7
<u>Picnic Sites</u>			<u>People Capacity</u>
Lost Trail Pass	1964		50
Wagonhammer Spring	1968		20
Twin Creek	1935		50
<u>Boat Ramp Sites</u>			
Corn Creek			15
Middle Fork			15
Deadwater			15
Williams Lake			60
<u>Observation Sites</u>			
Lewis and Clark Trail - Deep Creek	1967		25 No Camping
Trapper Gulch	1969		15 No Camping

DEVELOPED RECREATION SITES - SALMON N.F. (continued)

Backcountry Camp Sites

<u>Minimum Facility Sites</u> <u>Primitive Area</u>	<u>Date of</u> <u>Construction</u>	<u>People Capacity</u>
Airplane Lake	1967	10
Big Clear Lake	1966	10
Birdbill Lake	1966	10
Heart Lake	1967	10
Terrace Lake	1965	10
Welcome Lake	1965	10

Recreation Use, Salmon N.F.

<u>Year</u>	<u>Visitor Days 24 Hr. Base</u>	<u>Visitor days 12 Hr. Base</u>
1954	37,055	
1955	40,055	
1956	44,300	
1957*	204,230	
1958	215,340	
1959	178,100	
1960	172,200	
1961	187,200	
1962	213,700	
1963	255,500	
1964	306,000	
1965		527,200
1966		566,600
1967		667,400
1968		803,300
1969		828,100
1970		623,700
1971		752,100
1972		810,700

Started better reporting procedures.

Visitor Information Services

<u>Year</u>	<u>Season</u>	<u>Visits</u>
1966	6/16 - 9/15	11,130
1967	6/15 - 9/12	11,470
1968	6/15 - 9/12	12,276
1969	6/14 - 9/7	10,670
1970	6/16 - 9/7	12,742
1971	6/15 - 9/8	22,894
1972	6/11 - 9/5	30,154

BOATING STATISTICS - SALMON N.F.

MIDDLE FORK of the Salmon River

<u>Year</u>	<u>Float Boats</u>	<u>People</u>
1965	310	1,260
1966	310	1,260
1967	329	1,299
1968	398	1,396
1969	466	1,624
1970	741	3,028
1971	793	3,250
1972	1,135	3,972

MAIN SALMON RIVER

<u>Year</u>	<u>People in Power Boats</u>
1972	2,200

H. LARGE PROJECT FIRES - Salmon National Forest 1919 - 1972

<u>Name or approximate location</u>	<u>Year</u>	<u>Acres</u>	<u>Cause</u>	<u>Summary</u>
Long Tom	1919	8,960	Lightning)
Hughes Cr.-Twin Cr.	1919	1,425	Miscellaneous)
Moose Creek	1919	4,700	Lightning)
Bridge Cr.-Trail Cr.	1919	850	Brush burning	) 7 fires -
Turner Gulch	1919	1,286	Unknown	) 18,474 acres
Moyer Creek	1919	653	Unknown)
Meadow Lake	1919	600	Unknown)
E. Fork Owl Creek	1920	600	Lightning)
Owl Creek	1920	400	Lightning)
Wilson Creek	1929	12,900	Lightning)
Cave Creek	1929	5,425	Lightning	) 5 fires -
Soda Creek	1929	1,295	Lightning	) 22,510 acres
Big Bear Creek	1929	2,240	Lightning	) (all on Middle
Sheep Creek	1929	650	Miscellaneous	) Fork drainage)
NezPerce Creek	1931	1,710	Lightning)
Lake Fork	1934	2,700	Lightning)
Bear Creek point	1940	2,462	Lightning)
Lake Creek	1945	4,300	Lightning)
Sal Mountain	1947	1,000	Lightning)
Garden Cr. ridge	1947	576	Lightning)
Hancock Rapids	1948	470	Lightning)
Hat Creek	1959	1,500	Lightning)
Corn Creek	1961	17,960	Man caused)
Brushy Gulch	1961	2,030	Lightning	) 3 fires -
Sage Creek ridge	1961	1,545	Lightning	) 21,535 acres
Kadletz Creek	1963	160	Man caused)
Trail Creek	1967	335	Man caused)
Shell Creek	1969	960	Lightning)
Owl Creek	1971	340	Man caused)
Cramer Creek	1971	225	Man caused)
Goat Creek	1972	1,760	Lightning)

I. LEGISLATION

Changes in Management Through Legislation

a. The Idaho Primitive Area was set aside administratively by R. Y. Stuart, Chief of the Forest Service, on April 7, 1931. It was designated for recreation, to be maintained in an undeveloped condition, closed to the construction of public roads or special use permits for the construction of permanent improvements. The Idaho Primitive Area includes approximately 1,225,000 acres in part of the Payette, Boise, Challis and Salmon National Forests, composed mainly of Middle Fork drainage plus drainages of streams entering the Salmon River from the south below the Middle Fork, to Mackay Bar.

b. The Surface Right Determination Act of 1955 (Multiple Use of Surface of Public Lands - Materials Disposal Act of July 23, 1955) provided that, except as needed for development of the mine, the vegetative surface resources of public lands were left to be managed by the federal agency under whose jurisdiction the mine was located.

The increased use of the land for recreation, and changing concepts of land use indicate the need for updating the mining laws which have not changed materially since 1872 when resources were considered inexhaustible and mineral wealth was considered of first importance.

c. The Multiple Use - Sustained Yield Act of 1960 enacted into law the basic purposes which had guided the Forest Service from the time of its establishment; namely, that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes. "Multiple use" in the Act means: The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output. "Sustained yield of the several products and services" means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the

national forests without impairment of the productivity of the land.

In 1897 Congress passed the Organic Act, outlining a broad policy for management of the resources and opening them for managed use. This act embodied Gifford Pinchot's conservation principal of "use with sustained yield." Strengthened and broadened by later amendments and by the Multiple Use - Sustained Yield Act of 1960, the Organic Act is still the basic authority for managing the National Forests. 1/

d. The Wilderness Act of September 3, 1964, is an act to establish a National Wilderness Preservation System, to secure for the people the benefits of an enduring wilderness. Federally owned areas, designated as "wilderness areas" shall be administered in such manner as will leave them unimpaired for future enjoyment as wilderness, shall be protected and preserved in their wilderness character. A wilderness area shall continue to be managed by the department and agency which managed it before its inclusion in the National Wilderness Preservation System. Wilderness area is defined as an area where man is a visitor and does not remain, an area without permanent improvements or habitation, and at least 5,000 acres in extent. The act prescribed that all primitive areas were to be reviewed within ten years as to suitability for wilderness classification and the findings of the Chief of the Forest Service given to the Congress with the recommendation of the President concerning its designation as "wilderness" or other reclassification. Congress must act on these presidential recommendations. Prior to submitting recommendation to the President, public notice shall be given and public hearings held.

Except as otherwise provided, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use. There shall be no commercial enterprise, no permanent road except for administrative purposes, no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within such area. Use of aircraft or motorboats, where already established, may be continued subject to restrictions desired by the secretary of agriculture. Measures may be taken to control fires, insects and disease.

Nothing in this Act shall prevent prospecting if carried on in a manner compatible with the preservation of wilderness environment. The Geological Survey and the Bureau of Mines shall determine mineral values present, and such surveys shall be made available to the public. Existing mining laws shall pertain until 1983, but the U.S. shall

1/U.S. Department of Agriculture, Forest Service, PA-771.

retain surface rights. After 1983, minerals in designated lands are withdrawn from all forms of appropriation. 1/

When the Wilderness Act was passed in 1964, there were already fourteen Wilderness Areas established in various National Forests. On the Salmon Forest there are no Wilderness Areas yet designated, but the Idaho Primitive Area is being considered as to suitability for wilderness classification.

e. Land and Water Conservation Fund Act of 1965 authorized the charging of fees on Federal recreation areas. Golden Eagle Passports, for sale for \$7.00 annually, admitted the purchaser, family or carload to all Federal recreation areas at which entrance or admission fees were charged, supervised by the National Park Service, Bureau of Land Management, Bureau of Reclamation, Forest Service, U.S. Army Corps of Engineers, Bureau of Sport Fisheries and Wildlife, and Tennessee Valley Authority. Moneys received are used to provide further outdoor recreational areas and facilities, to meet growing recreational demands. Fees are charged only at areas which have recreational facilities or services provided at Federal expense.

On the Salmon National Forest campgrounds at the Crags, Lost Springs, Ebenezer Bar, Wallace Lake, Iron Lake, Twin Creeks, Meadow Lake, Cougar Point, Deadwater Springs, Corn Creek Bar, Cache Creek Bar and Yellowjacket Lake were administered under the Golden Eagle Permit System.

This law expired in the spring of 1970. The Forest Service issued its own use permits at \$7.00 per unit for a season, usable in any National Forest. Congress approved an extension of the Golden Eagle program in 1970. In 1971 the Golden Eagle Passports were again available with an increased fee to \$10.00.

f. National Wild and Scenic Rivers Act of October 2, 1968, designated portions of eight rivers as the first components of the National Wild and Scenic Rivers System: 1. Feather (California), 2. Rogue (Oregon), 3. Clearwater River, Middle Fork (Idaho), 4. Salmon, Middle Fork (Idaho), 5. Rio Grande (New Mexico), 6. St. Croix (Minnesota and Wisconsin), 7. Wolf (Wisconsin), 8. Eleven Point (Missouri). The main Salmon River is among others being considered for future inclusion.

The Middle Fork of the Salmon River and adjacent lands are classified as a "Wild River" area, except for the Dagger Falls road-head area, which is classified as a "Scenic River" area. This short scenic River section extends from Dagger Creek to about one-half mile

1/Public Law 88-577, 88th Congress, S.4, September 3, 1964.

below Dagger Falls and is thus classified because it is accessible by road, while the remainder of the Middle Fork conforms to the definition for Wild River: free of impoundment and generally inaccessible except by trail, with watersheds or shorelines essentially primitive.

Approximately 32,000 acres are within the boundary of the Middle Fork of Salmon River Wild River area. The Middle Fork flows through the Boise, Challis, Payette and Salmon National Forests. The Middle Fork begins with the confluence of Marsh and Bear Valley Creeks, 20 miles northwest of Stanley, and flows 104 miles to the main Salmon River. Its lower 80 miles flow through the Idaho Primitive Area. That lower portion is subject to the provisions of both the Wild and Scenic River Act and the law and regulations governing primitive areas. In case of conflict, the more restrictive provisions apply.

The Middle Fork is to be administered by the Forest Service in a manner that protects and enhances the values which caused it to be included in the National Wild and Scenic Rivers System. To accomplish this, the river will be managed to:

- Maintain the natural free flowing conditions of the river.
- Protect water quality.
- Protect scenic, recreational, geologic, fish and wildlife, historic, archaeologic, and other similar values.
- Maintain the essential primitive conditions of the shorelines.
- Provide recreation opportunities in harmony with the wild and scenic nature of the river. 1/

A portion of the main Salmon River from North Fork to its confluence with the Snake River is presently being considered for inclusion in the National Wild and Scenic Rivers System.

In June, 1970, the Public Land Law Review released a report on its five year study of several thousand laws dealing with public lands. This is the first such comprehensive review in over a century.

Recommendations included:

- the maintenance or enhancement of the environment on and adjacent to public lands through statutory guidelines and restrictions insuring pollution control measures.
- payments by the Federal Government to the states where public

1/"River Plan for the Middle Fork Salmon Wild and Scenic River," Intermountain Region - Forest Service, U.S. Department of Agriculture, pp. 2-3.

lands are located, in lieu of taxes.

- repeal of the Homestead Act and Desert Land Act, with such agricultural lands to be sold to the highest bidder.
- grazing should be continued with policies flexible enough to attain maximum efficiency in the use of the forage and to support regional economic growth. Grazing fees should adhere to a fair market value.
- some classes of public land should be excluded from future mineral development.
- existing Federal systems for exploration, development and production of mineral resources on public lands should be modified.
- patent fees should be increased and royalties paid to the United States on all minerals produced and marketed from public lands. 1/

1/Senator Len Jordan, "Land Study Announced by Jordan," The Recorder Herald, June 25, 1970.

J. BIBLIOGRAPHY

HISTORY OF THE SALMON NATIONAL FOREST AND
THE GENERAL AREA IN WHICH IT IS LOCATED

Bibliography

Acknowledgement is given to the following for their assistance:

Idaho Fish and Game Department, Boise, Idaho
Idaho Historical Society, Boise, Idaho
Lemhi County Museum, Salmon, Idaho
Lemhi County Recorder's Office, Salmon, Idaho
The Recorder-Herald Office, Salmon, Idaho
U. S. Forest Service personnel in Region One and Region Four.

Footnoted items not found in the Bibliography are mainly Forest Service reports and memoranda from the history files and other files in the Salmon National Forest Office, Salmon, Idaho.

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Unpublished Sources

Arrington, Leonard. "The New Deal in Idaho." Paper presented April 10, 1969 at the Twenty-Second Annual Pacific Northwest History Conference in Boise, Idaho.

Clark's Review, 1890. Lemhi County Museum, Salmon, Idaho.

Liljeblad, Sven S. "Indian Peoples in Idaho." Unpublished Manuscript, Idaho State University Museum, 1957.

Reed, Elizabeth M. "The Gilmore Story." Lemhi County Museum, Salmon, Idaho.

Swanson, Earl H., Jr. "Archaeological Survey of the Middle Fork of the Salmon River, Idaho." Salmon National Forest history files.

Wade, Daniel D. "Jesse McCaleb and Bannock Indians." Lemhi County Museum, Salmon, Idaho.

Interviews

Ainsworth, David G., Salmon, Idaho. February 25, 1970
Brown, Helen, Lemhi, Idaho. May 29, 1970
Brunk, Fay. Salmon, Idaho. February 21, 1969
Cannon, Bessie. Salmon, Idaho. April 30, 1969.
Carl, Fred. Salmon, Idaho. April 30, 1969.
Chase, Fred. Boise, Idaho. June 1, 1970.
Donlan, Frances. Salmon, Idaho. April 30, 1969.
Gautier, Joseph. Salmon, Idaho. February 21, 1969 and April 29, 1969.
Gutzman, Lester and Mildred. Salmon, Idaho. October 23, 1969.
Knoblock, Rich. Boise, Idaho. February 17, 1971.
Mahoney, Jim and Marian. Salmon, Idaho. October 22, 1969.
McNicoll, Claire. Salmon, Idaho. February 19, 1969.
Nichols, Earl. Salmon, Idaho. October 22, 1969.
O'Connor, Wayne and Velma. Salmon, Idaho. October 23, 1969.
Powers, F. E. Salmon, Idaho. February 20, 1969 and February 25, 1970.
Poynor, Neale and Laura. Boise, Idaho. November 18, 1969.
Ramey, Fred and Thelma. Salmon, Idaho. April 30, 1969.
Reed, Elizabeth M. Salmon, Idaho. February 19, 1969 and February 25, 1970.
Sims, Howard and Marjorie. Salmon, Idaho. October 23, 1969.
Slavin, Otis and Virginia. Boise, Idaho. July 18, 1969.
Slavin, Ted and Leitha. Salmon, Idaho. February 20, 1969.
St. Clair, Herb. Salmon, Idaho. April 30, 1969.
Swanson, Earl H. Jr., in Boise, Idaho. April 10, 1969.
Taylor, William (Billy). Salmon, Idaho. October 23, 1969.
Thompson, Glenn. Caldwell, Idaho. March 10, 1971.
Tobias, Ross. Salmon, Idaho. May 1, 1969 and May 27, 1970.
Wheeler, Leola. Boise, Idaho. September 15, 1969.
Wilson, William and Adele. Hall, Montana. June 12, 1969.

Correspondence

Borovec, Harold, Chehalis, Washington, February 10, 1970

Lambert, E. R., Retired locomotive mechnic. Chehalis, Washington,
March 7, 1970

McDonald, C. H., Stevensville, Montana. September 14, 1970.

Shaw, W. M., Game Biologist, Idaho Fish and Game Department.,
Boise, Idaho, March 11, 1971.

Newspapers

- Bailey, R. G. "Pioneer Tells of First Boat Trip Down Salmon River," The Recorder Herald (Salmon, Idaho), January 15, 1952.
- "\$4.5 Million for Land Asked by Lemhi Indians," The Idaho Statesman (Boise), March 4, 1971, p. 1-A.
- "From Salmon City, The Indian Situation in the Salmon River Country," The New North-West (Deer Lodge, Montana), September 6, 1878.
- "Fruit Industry of Lemhi!" The Idaho Recorder (Salmon), January 24, 1907.
- Gutzman, Lester. "Lumbering Claims Interesting Progress Here," The Recorder-Herald (Salmon, Idaho), Diamond Anniversary Issue, 1961, Section One, p. 7.
- Hayden, Carl E. "Gilmore Was Real Town Many Long Years Ago," The Salt Lake Tribune, January 26, 1947, p. 5
- "Historic Kilns Draw Interest," The Recorder-Herald (Salmon, Idaho), November 7, 1968.
- "Improving the Range," The Lemhi Herald (Salmon, Idaho), September 12, 1907.
- Johnson, Bob. "Father, Son Excavate Site of Ancient Bison Massacre," The Idaho Statesman (Boise), September 9, 1970, p. 14.
- Jordan, Senator Len. "Land Study Announced by Jordan," The Recorder-Herald (Salmon, Idaho), June 25, 1970.
- Knopf, Jerry. "Forest Service Official Raps Bugs, Not Monsters, As Prime Timber Killers," The Idaho Statesman (Boise), March 13, 1970, p. 12B.
- "LIDAR Tested on Salmon Forest," The Recorder-Herald (Salmon, Idaho), July 28, 1966.
- Lorimer, Bob. "Resource Meeting Told Idaho Growth Hinges on Planning," The Idaho Statesman (Boise), November 19, 1970, p. 3D.
- "Mark Looms for Boating on Salmon," The Idaho Statesman (Boise), August 10, 1970, p. 16.
- Merritt, Allen. "Salmon Main Street Changes With Time," The Recorder-Herald (Salmon, Idaho), Diamond Jubilee Issue, 1961, Third Section, p. 1.

- "The Murder Party," The New North-West (Deer Lodge, Montana)
August 2, 1878.
- "Notes on Forest Progress," The Lemhi Herald (Salmon, Idaho),
November 28, 1907.
- "Powers Recalls Spraying, Notes Large Run of Fish," The Recorder-
Herald (Salmon, Idaho), October 31, 1968.
- Reed, Elizabeth. "First School Established Here in Log Cabin,"
The Recorder-Herald (Salmon, Idaho), Diamond Anniversary
Issue, 1961, Section One, p. 4.
- Shoup, George E. "Incidents concerning Chief Tendoy and History of
Lemhi Tribe as told at Dedication of Sacajawea Marker," The
Recorder-Herald (Salmon, Idaho), August 5, 1936.
- "Spurt in Gilmore Recalls No-Rail Iron Monster," The Salt Lake
Tribune, January 14, 1952, p. 13.
- Summer Patrols Organized for Salmon, Middle Fork," The Idaho
Statesman (Boise), March 16, 1971, p. 7.
- "Ten Passenger Bus Takes Middle Fork Float Trip," The Recorder-
Herald (Salmon, Idaho), June 18, 1970, p. 1.

Back files of the following newspapers:

- The Idaho Recorder, Salmon, Idaho.
- The Idaho Signal, Lewiston, Idaho.
- The Idaho Statesman, Boise, Idaho.
- The Lemhi Herald, Salmon, Idaho.
- The Missoulian, Missoula, Montana.
- The New North-West, Deer Lodge, Montana.
- The Recorder-Herald, Salmon, Idaho.
- The Salt Lake Tribune, Salt Lake City, Utah.
- The Post Register, Idaho Falls, Idaho.

Magazines and Periodicals

- Beal, Merrill D. "The Story of the Utah Northern Railroad,"
Idaho Yesterdays, Vol I, No. 2 (Summer, 1957), 3-10.
- Craighead, John, and Craighead, Frank, Jr. "White-water Adventure on
Wild Rivers of Idaho," National Geographic, Vol. 137, No. 2
(February, 1970), 212-239.
- Eldridge, George H. "A Geological Reconnaissance Across Idaho,"
Department of the Interior - U. S. Geological Survey, Extract
from The Sixteenth Annual Report of The Director, 1894-1895, Part II
(Washington: Government Printing Office, 1895).
- Heidt, Lena Dellen. "Gay Times in Gibbonsville," Old West
(Spring, 1968), 26-28.
- Morgan, George T. "The Fight Against Fire," Idaho Yesterdays,
Vol. 6, No. 4 (Winter, 1962), 21-30.
- Nash, John D. "Salmon River Mission of 1855; a Reappraisal,"
Idaho Yesterdays, Vol 11, No. 1 (Spring, 1967), 22-31.
- Peebles, John J. "Rugged Waters: Trails and Campsites of Lewis and
Clark in the Salmon River Country," Idaho Yesterdays, Vol 8,
No. 2 (Summer, 1964), 2-17.
- Peterson, Ernst, and Anderson, H. E. "Rev. Samuel Parker and the
Southern Nez Perce Trail," Montana the Magazine of Western
History, XVI, No. 4 (October, 1966), 12-27.
- Ruppel, Edward T. "Late Cenozoic Drainage Reversal, East Central
Idaho, and its Relation to Possible Undiscovered Placer Deposits,"
Reprinted from Economic Geology, Vol. 62 (1967), 648-663.
- The Sheepeater Campaign, 1879," Originally Published in The Tenth
Biennial Report, Idaho Historical Society, (1926), 5-27.
- Shenon, Philip J., and Reed, John C. "Down Idaho's River of No
Return," National Geographic (July 1936), 94-136.
- Swanson, Earl H., Jr. "Idaho Yesteryears," Idaho Yesterdays,
Vol. 9, No. 1 (Spring, 1965), 17-24.

Books and Pamphlets

- Alter, J. Cecil. Jim Bridger. Norman: University of Oklahoma Press, 1962.
- Anderson, Alfred L. Geology and Mineral Resources of the Baker Quadrangle, Lemhi County, Idaho. Idaho Bureau of Mines and Geology, Pamphlet No. 112. Moscow: University of Idaho, January 1957.
- Anderson, Alfred L. Geology and Mineral Resources of the Salmon Quadrangle, Lemhi County, Idaho. Idaho Bureau of Mines and Geology, Pamphlet No. 106. Moscow: University of Idaho, January 1956.
- Binns, Archie. Peter Skene Ogden; Fur Trader. Portland: Binfords & Mort, Publishers, 1967.
- Brosnan, Cornelius J. History of the State of Idaho. New York: Charles Scribner's Sons, 1935.
- Carson, Christopher. Kit Carson's Own Story of His Life.
— Ed. Blanch C. Grant. Taos, New Mexico, 1926.
- Carson, Christopher (Kit). Kit Carson's Autobiography. Ed. Milo M. Quaife. Chicago: The Lakeside Press, 1935.
- Carter, Kate B. The Salmon River Mission. Utah Printing Company, 1963.
- Chittenden, Hiram M. The History of the American Fur Trade of the Far West. 2 vols. New York: The Press of the Pioneers, Inc., 1935.
- Clark, Barzilla W. Bonneville County in the Making. Idaho Falls, Idaho: Published by Author, 1941.
- Coues, Elliott (ed.). History of the Expedition under the command of Lewis and Clark. 3 vols. New York: Dover Publications, Inc., 1965.
- Defenbach, Byron. Idaho: The Place and Its People. 3 vols. Chicago, New York: The American Historical Society, Inc., 1933.
- DeVoto, Bernard (ed.). The Journals of Lewis and Clark. Boston: Houghton Mifflin Company, Sentry Edition, The Riverside Press Cambridge, 1953.
- Elsensohn, Sister M. Alfreda. Idaho Chinese Lore. Caldwell, Idaho: The Caxton Printers, Ltd., 1970.
- Ferris, Warren Angus. Life in the Rocky Mountains. Ed. Herbert S. Auerbach and J. Cecil Alter. Salt Lake City: Rocky Mountain Book Shop, 1940.

- Ferris, Warren Angus. "A Diary of the Wanderings on the Sources of the Rivers Missouri, Columbia, and Colorado from February, 1830, to November, 1835," Life in the Rocky Mountains. Ed. Paul C. Phillips. Denver: Old West Publishing Company, 1940.
- Frank, Bernard. Our National Forests. Norman: University of Oklahoma Press, 1955.
- Freeman, Orville, Secretary of Agriculture, and Frome, Michael. The National Forests of America. New York: G. P. Putnam's Sons, In Association with Country Beautiful Foundation, Inc., Waukesha, Wisconsin, 1968.
- Gerson, Noel B. Kit Carson: Folk Hero and Man. Garden City, N. Y.: Doubleday & Company, 1964.
- Hurst, Randle M. The Smokejumpers. Caldwell, Idaho: Caxton Printers, Ltd., 1966.
- Irving, Washington. The Fur Traders of the Columbia River and the Rocky Mountains, as described by Washington Irving. Ed. F.L.O. New York and London: G. P. Putnam's Sons, The Knickerbocker Press, 1903.
- Irving, Washington. The Adventures of Captain Bonneville, U.S.A., In The Rocky Mountains and the Far West. Ed. Edgeley W. Todd. Norman: University of Oklahoma Press, 1961.
- Kirkpatrick, O.E. History of the Leesburg Pioneers. Salt Lake City, Pyramid Press, 1934.
- Madsen, Bringham D. The Bannock of Idaho. Caldwell, Idaho: Caxton Printers, Ltd., 1958.
- Morgan, Dale L. Jedediah Smith and the Opening of the West. Lincoln: University of Nebraska Press, 1953.
- Morison, Samuel Eliot, and Commager, Henry Steele. The Growth of the American Republic. 2 vols., 5th ed. rev. and enl. New York: Oxford University Press, 1962.
- Owen, John. The letters and Journals of Major John Owen. Ed. Seymour Dunbar, with notes by Paul C. Phillips. 2 vols. New York: Edward Eberstadt, 1927.
- Peters, Dewitt C. Carson--Life and Adventures. Hartford: Dustin, Gilman & Co., 1873.
- Phillips, Paul C. The Fur Trade. 2 vols. Norman: University of Oklahoma Press, 1961.

- Rees, John E. Idaho, Chronology, Nomenclature, Bibliography.
Chicago: W. B. Conkey Company, 1918.
- Ross, Alexander. Fur Hunters of the Far West. Ed. Kenneth Spaulding.
Norman: University of Oklahoma Press, 1956.
- Ross, Clyde P. Geology along U. S. Highway 93 in Idaho. U. S.
Geological Survey Pamphlet 130. Moscow: Idaho Bureau of
Mines and Geology, 1963.
- Ross, Clyde P. The Copper Deposits Near Salmon, Idaho. U. S.
Geological Survey Bulletin No. 774. Washington, D. C.:
U. S. Government Printing Office, 1925.
- Ross, Clyde P., and Forrester, J. Donald. Outline of the Geology
of Idaho. Bulletin No. 15. Moscow: Idaho Bureau of Mines
and Geology, 1958.
- Sharp, William N., and Cavender, Wayne S. Geology and Thorium-
bearing Deposits of the Lemhi Pass Area, Lemhi County,
Idaho, and Beaverhead County, Montana. U. S. Geological
Survey Bulletin No. 1126. Washington, D. C.: U.S. Government
Printing Office, 1962.
- Shoup, George Elmo. History of Lemhi County. Boise: Idaho State
Library, 1969. Published originally in the Salmon Recorder-
Herald, May 8 - October 23, 1940.
- Simpson, Charles D., and Jackman, E. R. Blazing Forest Trails.
Caldwell, Idaho: Caxton Printers, Ltd., 1967.
- Trenholm, Virginia Cole and Carley, Maurine. The Shoshonis:
Sentinels of the Rockies. Norman: University of Oklahoma
Press, 1964.
- Umpleby, Joseph B. Geology and Ore Deposits of Lemhi County, Idaho.
Washington, D. C.: Government Printing Office, 1913.
- Victor, Frances Fuller. The River of the West. Hartford and
Toledo: R. W. Bliss & Co., 1870. Reprinted by Long's
College Book Co., Columbus, 1950.
- Weisel, George F. (ed.). Men and Trade on the Northwest Frontier
as shown by the Fort Owen Ledger. Missoula: Montana
State University, 1955.
- Work, John. The Journal of John Work. Ed. William S. Lewis and
Paul C. Phillips. Cleveland: Arthur H. Clark Co., 1923.

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ERRATA

- Page 7, Footnote 1/Shoup, p. 21 should read:
1/George Elmo Shoup, History of Lemhi County Boise, Idaho: Idaho State Library, 1969), p. 21.
- Page 9, Line 26 should read: "Lt. H. Catley and a company of the 2nd Infantry started from Camp Howard, near Grangeville. Captain Reuben Bernard proceeded from Boise with..."
- Page 9, Line 35 "Uncle Dave Louis" should read "Uncle Dave Lewis."
- Page 27, Line 15: "George L. Shoup" should read "George E. Shoup."
- Page 36, Line 20: "circumstance" should read "circumference."
- Page 38, Footnote 3/ should read: The Idaho Recorder, February 2, 1888.
- Page 55, Line 15: "Dandilands" should read "Sandilands."
- Page 56, Line 39: "Cover Creek" should read "Cove Creek."
- Page 64, After line 33, insert: "T10-11N, R27E."
- Page 64, Line 37, T12 and 12N, R29E" should read: "T12-13N, R29E."
- Page 65, Line 26: "is" should read "was."
- Page 73, Line 14: "May 1962" should read "May, 1926."
- Page 83, Line 13: place parentheses around sentence beginning:
(Vegetation since the Wilson Creek fire of 1929...)"
- Page 84, Line 16: "Melvin and Marion Mahoney" should read "Melvin and Marion Honey."
- Page 120, Line 38: "We" should read "He."
- Page 170, Add: The Post Register, Idaho Falls, Idaho. (footnoted on page 111.)
- Page 172, After Clark, Barzilla W..... (following line 25) insert:
Coues, Elliott (ed.). History of the Expedition Under the Command of Lewis and Clark. 3 vols. New York: Dover Publications, Inc., 1965.
(Used in footnote, page 14.)