NORTH AND SOUTH BASS TRAILS HISTORICAL RESEARCH STUDY

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Figure 1. W.W. Bass at the Canyon rim near Bass Camp ca. 1910
(National Park Service Collection, Grand Canyon 3635)



Figure 2. **Left to Right: Ada Diefendorf Bass, Mabel Melba Bass holding Edith's son Bert Lauzon, Edith Bass Lauzon, pregnant with Loren (Tiny) Lauzon. Ca. 1920. Bill Bass Collection** (National Park Service Collection, Grand Canyon 3635)

ABSTRACT

The Bass Trails Research Study is an examination of the human history of the South and North Bass Trails, located approximately twenty-five miles west of Grand Canyon Village within Grand Canyon National Park.

The South Bass Trail was first traced by Anasazi and Havasupai Indians and later improved by William Wallace Bass between 1884 and 1898. The trail served the Indians as ingress to the inner Canyon where they made seasonal and permanent homes and exploited natural resources. Bass established a tourist facility at Bass Camp, a few miles west of Havasupai Point, and improved the trail first as far as the esplanade and later to the Colorado River to facilitate his earliest mining and tourism businesses.

The North Bass Trail reflects a later extension of Bass's mining and tourist activities, and was improved between 1898 and 1901. As early as 1896 it served as the only transcanyon route within Grand Canyon, a distinction it lost in 1907 with the connection of the North and South Bright Angel Trails. The North Bass was never used as extensively as the South Bass due to access difficulties.

Both trails were largely abandoned and fell into disrepair soon after Bass left the Canyon in 1926. The trails and other Bass constructions along the routes were purchased in 1926 by the Santa Fe Land Improvement Company. They became a part of Grand Canyon National Park in 1956 when the Fred Harvey Company donated its interests in the property to the United States Government. Both trails are today considered wilderness hiking trails.

SCOPE OF PROJECT

Grand Canyon National Park was created by act of Congress on February 26, 1919. In the seventy years since its creation the park has attracted millions of visitors from around the globe, most of whom have come to gaze at the awesome presence of the largest chasm on Earth. The astonishing depth, breadth, and beauty of the Canyon -- absorbed from various points along the rim -- has been the major attraction in modern times, but there was an earlier time when the principal attraction was the inner Canyon. The earliest tourists worked harder just to get to the rim, and once there stayed longer and ventured into its depths. Here they obtained a closer look at six of the Earth's seven life zones with a corresponding diversity of plant and animal life; 300-million-year-old fossils lodged in Cambrian rock; and clearly delineated and colorful rock strata representing two billion years of geologic time. They also found stacked-stone pueblo ruins, pictographs, and petroglyphs, fading and eroding beneath cliff side overhangs, suggesting human history thousands of years old. They travelled on the trails of small tourist operators and stayed at their base and trail camps, the sites of which today are marked by rusting bits of metal and rotting timbers.

The scope of this study is to examine the human history of the North and South Bass Trails, two of the dozen or so major trails that were created and improved by these early Grand Canyon entrepreneurs. It is written within the larger context of an overall study of inner Grand Canyon trails, portions of which have

been completed through prior cooperative agreements between the National Park Service and Northern Arizona University's Center for Colorado Plateau Studies. It is hoped that this study will add to the accumulation of data on the activities of the earliest Canyon inhabitants, and especially to the history of the first Anglo pioneers that contributed to the creation of Grand Canyon National Park.

It was once common for histories of the American West to begin with the first Anglo visitors to heretofore "virgin" regions and trace occupation forward through periods of increasing populations and technological exploitation. A more inclusive approach today is to extend occupation further into the past to help reveal changing patterns of land use. This approach is used in this study of the Bass Trails because these routes, as with most trails within Grand Canyon, represent a pattern of extensive aboriginal use, followed by later pioneer improvements and maintenance. The history of the Bass trails fits this pattern precisely.

EARLY NATIVE AMERICAN OCCUPATION

Although a detailed historical chronology cannot be made of the early periods of Native American occupation at Grand Canyon, anthropologists and archeologists have managed to construct a timeline of several cultural affiliations that begins as early as nine thousand years ago. From approximately 7000 to 200 B.C., nomadic hunter-gatherers inhabited the American Southwest, exploiting native plants and animals for food, clothing, and shelter. They moved about as the seasons and climatic conditions dictated. The first evidence of their presence at Grand Canyon dates to cerca 2000 B.C. with the discovery of split-twig figurines in a number of Grand Canyon rock shelters. Other archaic materials have been found along the North Rim and the Coconino Plateau south of the Canyon to substantiate occupancy or occasional use during this early period.[1]

With the revolutionary concept of corn cultivation introduced to the American Southwest cerca 200 B.C., the nomadic peoples in and about the Canyon began to modify their survival strategies to include agriculture. This transition between 200 B.C. and A.D. 450 marked the onset of the Anasazi culture, and is termed the Basketmaker I and II period. Because the early Anasazi lived in rock shelters and did not make pottery, evidence of their presence at Grand Canyon is scant. Nevertheless, traces have been found that place the early Basketmaker Anasazi on the North Rim and the Coconino Plateau as early as A.D. 1.[2]

During the Basketmaker III period, A.D. 450-700, the Anasazi upgraded their housing from rock shelter dwellings to pithouses and began to manufacture pottery. A very small population of these peoples inhabited the inner Canyon during this period, mostly in the eastern portions. After A.D. 700, the Anasazi began to replace their wood and thatch pithouses with above ground, stacked-stone dwellings and outbuildings, marking the onset of the Pueblo I period. Agriculture expanded as the Pueblo period progressed, to include more of the arable inner Canyon flat lands and the addition of beans and squash to the staple crops. During the Pueblo II and early Pueblo III periods, A.D. 1000-1200, population levels in and around the Grand Canyon reached a peak. Of more than two thousand early archeological sites found within the Canyon today, almost all are dated to A.D. 1050-1150. After A.D. 1175 these people began to leave the Canyon, many moving to the Hopi and Zuni Villages to the east. Reasons for the abandonment are still a matter of conjecture. Overpopulation, competition from other cultures, depletion of arable soils, and changes in weather patterns including a decrease in precipitation have all been proposed as causes for the rather sudden emigrations. During and immediately following a drought in the years A.D. 1190-1200 the Anasazi left the Canyon entirely, leaving little more than pottery sherds and pueblo ruins to mark their occupation.[3]

Studies of early Native American occupation in the western end of Grand Canyon National Park, which includes the Bass Trails area, have turned up numerous Anasazi occupation sites. On the

South Rim near the head of the South Bass Trail there is evidence of occupation as early as A.D. 600. This evidence points to a well settled network of Anasazi communities extending from the head of the South Bass Trail, along the trail to the Colorado River, and up the North Bass Trail to and including the Powell and Kaibab plateaus atop the North Rim.

At the head of the South Bass Trail, a stacked-stone ruin overlooks the Darwin Plateau fifteen hundred vertical feet below. George Wharton James, an author who interacted extensively with the Havasupai Indians for nearly thirty years, noted that the structure predated the Havasupais and that it was used by them as a watchtower while others of their tribe worked the mescal pits on the plateau below. A 1928 Park Service expedition noted several ruins upon the rim within a one mile radius of the trailhead, and speculated that researchers with more time might discover many more. Numerous stacked-stone ruins, pottery sherds, and bits of chert are still found along the rim near the trailhead today. This evidence points to small Anasazi communities living at and near the trailhead, perhaps cultivating the reasonably flat terrain surrounding Pasture Wash immediately to the south.[4]

The Anasazi accessed the inner Canyon along today's South Bass Trail, approaching either from today's trailhead or from Fossil Mountain Wash to the east. Along the upper portion of the trail, near the top of the Coconino Sandstone where Fossil Mountain Wash intersects, a series of ruins are found to the east amid the broken cliffs. These are well preserved, and noted by nearly every writer of the trail area from James to authors of

modern guidebooks. They appear to be grain storage bins, constructed purposefully close to the waterpockets in the adjacent wash. Since it is impossible to cultivate this broken area, it is probable that the Anasazi stored crops here that were grown on the rim above. More ruins and numerous mescal roasting pits are located upon the Hermit Shale esplanade of the Darwin Plateau two to three miles below the trailhead. The Havasupais were using these ancient pits, storage houses, and dwellings on a periodic basis as late as 1900. Additional stacked-stone ruins and bare foundations can be seen along Bass Canyon and at the base of the South Bass Trail at the Colorado River.[5]

There is also ample evidence of Anasazi occupation along the North Bass Trail from the river to the plateaus of the North Rim. The foundations of several small rooms exist immediately across the river and above today's Lower Bass rafter campsite. At least ten ruin sites and evidence of irrigation farming are found along perennial Shinumo and intermittent White creeks leading up to the Powell and Kaibab plateaus. Powell Plateau alone, isolated and much smaller than Kaibab Plateau, contains the ruins of 650 - 700 rooms with a density of seventy-one rooms per square mile. As many as several hundred people may have occupied this plateau at one time. Most of the ruins and artifacts found along the North and South Bass trails are attributed to the Kayenta Anasazi culture and are dated to the A.D. 1050-1150 period.[6]

The significance of these Anasazi sites lies in the understanding that the Bass Trails area was populated and exploited for centuries before the first Spaniards and later

Anglos appeared at Grand Canyon. These original residents used the area to the limits of their technology. They engaged in dry farming, irrigated where it was possible, collected usable plants for food and medicines, hunted available game, and used local materials for their dwellings. This occupation, which reached its peak between A.D. 1050-1150 and quickly dissipated thereafter, represents the most extensive population and resource exploitation in the history of these trails.

Coincident with Anasazi occupation of Grand Canyon and as early as A.D. 600, the South Rim of the Grand Canyon, its western tributary canyons, and the plateaus extending to the south along a line roughly paralleling today's Interstate 40 were occupied by the Pai Indians. The Pai were offshoots of Yuman peoples farther to the Southwest in the area of the lower Colorado River. The Pai as a whole shared a common Yuman language and many facets of their culture. The Spanish called these people the Cosninas, which was as close as they could come to the Hopi term Kohonin (Cohonina)[7].

Ceramic comparisons indicate that the Pai traded with the Kayenta Anasazi to the east. They reached a cultural climax and population peak between A.D. 900-1100. By the latter date there were probably several cultural subdivisions, one of which moved into Havasu Canyon fifteen to twenty miles west of the Bass Trails and began the practice of intensive agriculture along perennial Havasupai [Cataract] Creek. A non-Pai people, the Cerbat, moved into the western plateaus cerca A.D. 1150 and joined the Pai in Havasu Canyon. By A.D. 1200 the western plateau region was largely abandoned as a permanent home. Havasu Canyon likely

received some of these plateau peoples and reached its population peak during the thirteenth century. By A.D. 1300-1400, however, all but a small group had abandoned Havasu Canyon. Those that remained are considered the ancestors of the modern day Havasupai Indians.[8]

The Havasupais were farmers, gatherers, and hunters. Wherever irrigation farming was praticable they raised corn, beans, squash, melons, sunflowers, and tobacco. They seasonally roamed the southern plateaus and tributary canyons of the Colorado River gathering honey, salt, mescal, cactus fruit, yucca, mesquite beans, juniper berries, pinyon nuts, and other edible seeds and leaves. Among the abundant animal life in the region the Havasupais hunted deer, antelope, mountain sheep, wildcat, mountain lion, rabbit, raccoon, squirrel, turkey, quail, and dove. These local food resources in the vicinity of Grand Canyon supported a fairly stable Havasupai population of perhaps several hundred prior to Anglo contact.[9]

The traditional hunting and gathering grounds of the Havasupais included the ravines, canyons, esplanade, and riverbanks encompassing the South Bass Trail. Physical evidence of early Havasupai occupation is scant due to low environmental impact living, and is obscured by the fact that they shared many of the survival traits of the earlier Anasazi. The Havasupais lived in wickiup and other wood and thatch dwellings which, if they existed at all along the trail, had long since disappeared by the time Anglos arrived. They were also known to live in stacked-stone shelters, but whether these were of their own construction

or those abandoned by the Anasazi is unknown. Both the Havasupais and the Anasazi practiced irrigation farming, raised similar crops, and stored these crops in stacked-stone storage bins, so evidence of these practices near the trail may be attributed to either culture.[10]

Since the Havasupais were an extant culture when the first white pioneers arrived at Grand Canyon, we do not have to rely on interpretations of physical evidence to confirm the tribe's traditional use of the South Bass Trail. George Wharton James wrote of his interaction and conversations with the Havasupais between 1890 and 1910 and attested to their intimate familiarity with the Bass Trail Corridor and its adjacent canyons. He visited the village of Supai numerous times and travelled in their company several times thereafter. He noted that the storage bins found along the South Bass Trail were of the same construction as those found in Havasu Canyon, and that the "LeConte [Darwin] Plateau and the region beyond was once the wandering ground and pasturage of certain Supai families, and they made their home in the interior of the canyon...."[11] James described the mescal pits, cliff dwellings, and storage cribs of the inner Canyon and esplanade plateau, and noted that the Havasupais still used them. He further related that Mount Huethawali, which rises from the Darwin Plateau, was named by the Havasupais and means in their language, "White Mountain."[12]

The history of William Wallace Bass is closely intertwined with the Havasupais, both within Havasu Canyon and along his own network of trails. Among the several stories that describe Bass's

introduction to the Canyon is one in which he was led to the rim overlooking the original Indian trail by Hotauta, son of the Havasupai chief, Navajo. Hotauta led Bass down a faint path to the esplanade of the Darwin Plateau, and then down Trail [Bass] Canyon to the Colorado River. He remarked that they "... knew the country: it was their tribal territory, where they hunted and collected mescal...."[13] Later, Bass was accompanied on a prospecting trip by Jekopanageh (or Chickapanagie), a Havasupai who brought sacks along to bring salt back to Supai and led the party to salt deposits at the bottom of a canyon just west of Bass Camp.[14]

There are many more accounts of Bass's interaction with the Havasupais to confirm the tribe's traditional use of the South Bass Trail and surrounding canyons. One particular story, perhaps apocryphal, serves to illustrate the Havasupais' superior knowledge of these canyons. In a version related by George Wharton James, Bass had long searched for a spring known to exist on the Darwin Plateau, but had not been able to locate it. One day his Havasupai friend, Captain Burro, said to Bass, "Billy, you give me a sack of flour and a half of beef, and I show you my spring, and you can always use it for yourself and horses."[15] Bass agreed and Burro led him directly to Mystic Spring on the northwest side of Mount Huethawali, within a stone's throw of where Bass had searched to no avail. True story or not, it serves to illustrate the Havasupais' intimate knowledge of the esplanade of the Darwin plateau beneath Bass Camp. James and Bass recognized the tribe's familiarity not only with the ancient trail

to the river, which Bass would later improve, but also the many side canyons and what they offered in the way of plant and animal foods, salt, water, and shelter. If they did not establish permanent homes along the trail, they certainly exploited the area during seasonal visits.

Although this study will reveal much more information about the history of the Bass Trails since 1883 than it does of former Indian occupation, it is worthwhile to keep the period of human occupation in perspective. The Havasupais considered this part of the Canyon their home for at least seven hundred years, and the Anasazi perhaps seven hundred years before that. These native peoples understood what was required to live in such a hard place for such a long time, and helped William Wallace Bass learn the same lessons. Another reason to recognize Anasazi and Havasupai occupation is that early pioneer tourists, who would be the primary force behind the establishment of Grand Canyon National Park, came to the great chasm as much to peek at Anasazi ruins and the surviving Havasupai Indians as to marvel at the natural wonders. The Grand Canyon continues to attract visitors with its physical landscape, but ancient and existing Indian civilizations provided the earliest human interest.

PIONEER EXPLORATION AND SETTLEMENT

Spanish entradas of the sixteenth century left little imprint on the lives of Native American peoples at Grand Canyon. The Havasupais simply borrowed appealing Spanish implements, usually through trade with the Hopi Indians, without altering their traditional culture. A far more powerful and invasive cultural

movement began in the early nineteenth century, however, as Anglo-Americans began to move into the American Southwest. Successive waves of trappers, explorers, miners, ranchers, and settlers -- one wave followed by another still more invasive -- washed over the Grand Canyon country in the ensuing eighty years. Conflicts between these cultures flared, burned briefly, and ended inevitably in the white man's favor. Only a few years before William Wallace Bass arrived at the Canyon the Havasupais gave up their centuries-old territorial domination and important facets of their culture to accept survival on the reservation.

The first Anglos to enter Grand Canyon country were the ephemeral trappers, eager to exploit the fur bearing animals of the Southwest and then move on, and more stolid pioneers seeking settlement sites who, nevertheless, saw little to keep them in the Canyon vicinity. Among the notable explorers were Joseph Christmas Ives, who may have been the first Anglo-American to visit Grand Canyon at Diamond Creek in 1857-58, and John Wesley Powell, who explored the entire length of Grand Canyon in 1869 and 1871-72 and can be credited with attracting the first Canyon tourists by the 1880s. Notable guides to settlement included the French-American Antoine Leroux, who gave his name to Leroux Springs [Flagstaff], and Jacob Hamblin, who led the way for Mormon settlement in Arizona in the 1860s. Trappers, explorers, and settlers into the late 1860s did not stay at the Canyon, but their experiences and topographical knowledge eventually led others to the Southwest.[1]

The specific catalysts for settlement at Grand Canyon came in 1848 with the end of the Mexican-American War and the discovery of gold in California. The federal government immediately set out to locate one or more routes to the Pacific in order to encourage settlement, move troops and munitions to the territory recently acquired from Mexico, and protect the thousands bound for California. One of the proposed routes was along the thirty-fifth parallel from Santa Fe, New Mexico to the Colorado River and on to the Pacific Coast. With the surveys of Sitgreaves (1851), Whipple (1853-54), and Beale (1857-59), a route was identified and crude wagon road defined from Santa Fe to California, passing just north of present day Flagstaff and Williams. With few locational variations, the old wagon road would later evolve into the National Old Trails Highway and in the 1920s into U.S. Route 66. This was the principal route that would lead permanent settlers to the Grand Canyon.[2]

Settlers of the 1860s and 1870s included a few from among the thousands that left the East for the California goldfields, only to find that the best claims were staked and the placer gold depleted. A backwash of disappointed miners flowed eastward from California to Nevada, Idaho, Utah, and Arizona. Some continued to prospect, others had had enough of gold fever and determined to settle as ranchers, hired hands, and town builders. The year 1876 was a good one for town founding along the old Beale wagon route, some seventy miles south of Grand Canyon. Two groups of Boston colonists arrived at the foot of the San Francisco Mountains in that year, settling briefly what would become Flagstaff, Arizona.

Mormon colonists from Utah founded four small communities (Joseph City survives) along the Little Colorado River sixty miles east of Flagstaff, and another Mormon party settled Millville [Pine Springs] thirty-five miles to the west. Williams was also founded in 1876. These were small struggling communities awaiting something to spur their economic growth.[3]

The awaited economic catalyst came in 1880-83 with the construction of the Atlantic & Pacific Railroad across the thirty-fifth parallel. As the railroad inched westward to connect the Atchison, Topeka & Santa Fe terminus at Albuquerque to the Southern Pacific spur on the west bank of the Colorado River, it brought a host of economic opportunities to the region immediately south of the Canyon. Between 1880 and 1885, Yavapai County -- which included the territorial capital of Prescott as well as the fledgling communities of Winslow, Flagstaff, Williams, and Ash Fork -- doubled in assessed property evaluations to $3,785,000, while population rose to nearly 30,000. Mohave County immediately to the west -- which had been mined for gold, silver, lead, copper, and iron since the 1860s -- experienced comparable growth as track was laid westward to Needles. Assessed evaluations increased to $1,755,000 and the towns of Cerbat, Hackberry, and Mineral Park were thriving by 1884. Tentative cattle and sheep operations were the primary industries in these two counties prior to the railroad's completion. After 1883, lumber, mining, and tourism secured the economic stability of the region.[4]

WILLIAM WALLACE BASS

Mineral prospectors who had combed Grand Canyon and its tributaries since the mid-nineteenth century occasionally found precious ores, but seldom were able to make money at mining. It was difficult to extract the ore, and even more difficult to transport it from the inner Canyon to smelter and markets. The railroad's completion along the thirty-fifth parallel in 1883 alleviated the problem of transportation, if not other difficulties, and soon attracted a new generation of prospectors to the South Rim. A handful of these prospectors staked claims in the 1880s and 1890s and worked their mines, among them John Hance, Seth Tanner, Pete Berry, Louis Boucher, and Ralph Cameron. Most of them quickly realized that the railroad was not a ticket to mining wealth but was the means to a new form of income: tourism. Some of these men established pioneer tourist operations to supplement their meager mining income. One of the most successful of these miner-tourist entrepreneurs was William Wallace Bass.

Bass's history, like so many told of pioneers in the American West, began on the East Coast. His grandfather, Obadiah Bass, immigrated from Great Britain to Warwick, Massachusetts, in 1780. Bass's father, Charles, was one of Obadiah's eight children and named his son for Maj. Gen. Lewis Wallace. William was born in Shelbyville, Indiana, but sources conflict on the exact year of birth. The most consistent birthdates given are either October 2, 1848 or October 2, 1849. The family moved to New Jersey, soon after which Charles left for the California goldfields where he

died of yellow fever in a mining camp along the Sacramento River in 1851. Charles' effects, worth all of fifty dollars, were shipped to his widow, who later remarried Moses Farrow.[1]

By age 17 Bass had learned the carpenter trade and telegraphy, but decided to go to work for the railroad in New York. He served first as a conductor on the Erie Railroad for eight years and then as a dispatcher on the New York Elevated. In 1880 Bass's health broke down and he entered Roosevelt Hospital where doctor's gave him only a few months to live. Bass later related that he had suffered from some form of nervous exhaustion. He soon moved west, hoping that a better climate would improve his health. In the fall of 1881 Bass lived first in Southwestern New Mexico and then in Southern Arizona. He moved on to Chihuahua, Mexico, where the dry climate improved his health, but left again for Arizona about the time that the Mexican Central Railroad reached Chihuahua. His health continued to improve in Arizona. In July, 1883 he arrived at Williams, just a year after the Atlantic & Pacific Railway reached the town. He liked the bustle of the frontier town and decided to stay.[2] In later years, Bass recollected that Williams of the early 1880s was a

> typical frontier town, with a few wooden buildings and a long row of tents strung out parallel with the railroad. I counted over thirty saloons, and liquor could also be procured in every store.... not a Salvation Army Camp, by any means.... It was the division and supply points for the construction of the A.&.P.R.R.[3]

Bass was a thirty-four-year-old drifter when he came to Williams, a diminutive man of 5'6", 145 pounds. He had recovered his health, however, and was ready to go to work. As was typical in frontier towns, Bass had to take employment wherever he could

find it. Soon after his arrival he went to work for the railroad coupling cars and "giving high signs." He worked for two months on the railroad construction between Williams and Needles until he had a grubstake to try something else. He found a partner named Charlie, also a railroad man from back East, and moved seven to eight miles north of Williams to establish a ranch on Cataract Creek. There he found a water hole with a cave nearby and staked a claim. Bass continued to work many odd jobs in his first two years at Williams. As a trained carpenter, he built potato storage bins, houses, and other buildings. He played the fiddle at local dances, earning $85 in December 1883 alone. He secured the Atlantic & Pacific ice contract in the Spring of 1884 and served as clerk of the Williams Justice Court, deputy sheriff, and constable at the same time. While juggling this array of jobs he continued to save money to begin prospecting at Grand Canyon.[4]

Several stories relate how and why Bass first came to the South Rim of Grand Canyon. It is difficult to separate fact from fiction in these stories because Bass -- like another Canyon pioneer, John Hance -- was known for his ability to spin a yarn. Bass told one with variations that had him chasing a steer (or horse, or cows...) and suddenly breaking through the brush to confront the chasm. George Wharton James, a long time friend of Bass at the Canyon, related another story that may be closer to reality. In September, 1884, Bass and a man named McKinney started out to visit the Havasupai within Havasu Canyon. As they approached the rim, McKinney went on ahead and got lost. Bass returned to Williams for a search party, which was able to locate

McKinney in the care of the Havasupais. Bass likely glimpsed the Canyon on this first trip, but if he did not, James tells of a second visit to the Havasupais in March of 1885 when Bass met and befriended Tom, a second chief of the tribe. Yet another story places Bass on a trip with Hotauta, son of Havasupai Chief Navajo, in September 1884. The trip began at the head of Cataract Canyon, continued east and south out of sight of the rim, then turned up a wash [Pasture Wash] for a few miles until the party broke through the trees at the Canyon's edge. This is perhaps an accurate account of the first time Bass traveled to the site that would later be called Bass Camp. Exactly how Bass came to see the Canyon for the first time is conjectural, but that he did see it by 1884-85 is consistent with all accounts.[5]

There are also varying stories as to why Bass first visited Grand Canyon. Bass's wife, Ada, recalled in later years that he had done considerable exploring in the Canyon during 1884 and was formulating a plan in that year to build a tourist trail. Bass's son, William Guy Bass, told of a search for a cache of gold nuggets purportedly left in the Canyon by John D. Lee while hiding out with the Havasupais. This account had Bass meeting Lee's wife, Emma, at Ash Fork where she showed or gave him a map and some of Lee's nuggets. He then went to the Canyon to search for the remaining gold cache. James later related how Bass took further trips into the Canyon in 1886 and 1890 to search for Lee's gold, which lends support to the Emma Lee story. We can surmise that curiosity to visit the Havasupais and the Canyon, coupled with a desire to prospect for mineral wealth (in the form of ore

or nuggets) brought him to the rim soon after his arrival at Williams. Once there, he quickly realized the mining and tourism potential and went to work establishing a camp and improving roads and trails to accommodate these new enterprises.[6]

The years 1884 and 1885 were clearly busy ones for Bass. Besides holding multiple jobs at Williams, he located a base camp on the Canyon rim a few miles west of Havasupai Point, setup a few tents for his equipment, and began work on improving the existent Havasupai trail to the esplanade below. At the same time he constructed a wagon road from Williams to his camp, a distance of seventy miles, and began advertising tourist trips. In 1885 he enticed a representative of the Atchison, Topeka & Santa Fe Railroad to visit Bass Camp. Bass was interested in building a scenic hotel at the site and having the railroad advertise the tourist possibilities, but the railroad man considered the idea unfeasible since no one would travel to that out of the way place. Undaunted, Bass began advertising himself, and led his first tourist party to Mystic Spring before the close of 1885.[7]

Although tourism would become the single most influential factor in the creation of Grand Canyon National Park, the Santa Fe's reaction to Bass's proposal is indicative of the fledgling state of the industry at Grand Canyon in 1885. Among those who preceded Bass in this enterprise were J.H. Farlee, who built the Farlee Hotel in 1884 along the Colorado River at the mouth of Diamond Creek, just west of today's national park. Stagecoaches ran from Peach Springs to this first tourist enterprise within the Canyon. Another predecessor was Captain John Hance, who settled

east of Grandview Point in 1883 and was leading tourists from Flagstaff into the Canyon by the following year. Bass's operations from Williams in 1885 place him on the ground floor of Grand Canyon tourism along with Hance and Farlee. In the ensuing thirty-eight years he would build up his tourist business, promote Canyon visitation, and outlast all other private tourist operators to become the most enduring factor -- and one of the most influential local persons -- in the creation of Grand Canyon National Park.[8]

The Early Years, 1884-1894

Bass was slow to develop his interests at Grand Canyon for several reasons. One was a lack of capital, a chronic problem of early private operators. Another reason was that Bass operated as somewhat of a loner in the early years, occasionally hiring a few Havasupai Indians or drifting prospectors but most often building, prospecting, advertising, and guiding on his own. He spent the winter months in the first years alone within the Canyon, loading burros with several months supplies and leisurely prospecting and studying geology and astronomy. The solitude gave him time to develop unconventional explanations for the formation of the Grand Canyon and led him to write poetry, some of which he later published. Although he unofficially located several mining claims and built a small wooden punt in which to cross the Colorado River to further his prospecting on the north side, there is no indication that Bass earned much, if anything, from mining during these years. It is reasonable to assume, however, that Bass became acquainted with the geologic nooks and crannies in the

vicinity of his Mystic Spring Trail, along Bass Canyon, across the river, and into Shinumo, White, Hakatai, and Hotauta canyons during these years. The fact that he studied geology books while in the Canyon and built a boat to cross to the north side indicates that he prospected and learned the terrain, but it is likely that his dreams ran not to mineral wealth but to the natural splendors that would attract paying tourists.[9]

Since Bass earned nothing from his early prospecting forays it is reasonable to believe that he spent most of his time, especially the summer tourist months (typically May through October), building up his tourist business. The construction and maintenance of the long wagon road from Williams to Bass Camp and of Mystic Spring Trail occupied much of his time through the 1880s. What time remained was spent driving his few tourists to the rim and leading them on overnight trips down to the esplanade of the Darwin Plateau, or west from Bass Camp to the Havasupai village of Supai and the falls below the village. The Bass Camp Register from the opening of Bass's Williams Stage Line in 1885 until 1895 was destroyed in a fire on July 4, 1895, so it is unknown exactly how many tourists Bass led into the Canyon during these years. Later entries and the infant nature of his business, however, suggest that fewer than thirty tourists per year made the trip.[10]

One of the earliest and most time-consuming problems Bass had to overcome before he could do much with his operations was the aridity of the Canyon's South Rim. He needed dependable water for his tourists and stock and there was no perennial source from

Williams all the way to Mystic Spring within the Canyon. What water existed came from snowmelt and summer thunderstorms, so Bass had to construct cisterns and check dams at strategic points along his road and trail to catch the runoff. He improved the water holes at "The Caves," the halfway point along the Williams Stage Road. At Bass Camp he created several cisterns, and a small dam along the wash west of the camp. The principal camp cistern was a limestone cavern, enlarged through blasting and protected with a wooden frame and screen door. A mile below the Mystic Spring Trailhead he improved two old Indian cisterns by lining them with cement and installing covers. He constructed dams along Havasu Creek and blasted cisterns out of solid rock to catch thousands of barrels of water along the route to Supai. Shortages at strategic points were chronic and often forced Bass to transport water from one location to another. Bass largely solved his water problems, but it was a time-consuming task for a man with few helpers.[11]

George Wharton James wrote that Bass, with

> ...drill and hammer, brain and muscle... assisted by powder and dynamite, and, later, by cement, has blasted out and made water tight vast rock cisterns, which store the rain-water, storm flows, and melted snow... all through the heated months....[12]

In 1924, Bass would itemize his dams and cisterns to include 7-Mile Dam, Red Dam, Bass Dam, two dams near Havasupai Point, one cistern on the rim, and two cisterns south of Bass Camp, all valued at $2,000. These were only those water constructions worth noting, and only those within the bounds of Grand Canyon National Park.[13] Superintendent J.R. Eakin in that year would admit that

> They cost greatly in excess of that [$2,000], and are, at present in this dry weather, the only source of water for

> wild life in that area. The cisterns are the only source of drinking water in that area. They are extremely valuable to the Park Service.[14]

Although some of Bass's water containments were built after his earliest years at the Canyon, most had to be constructed before he could attract tourists to his roads and trails. The 1924 extent of his water system is therefore indicative of the work expended in these early years.

There is further evidence that Bass favored tourism over prospecting in the 1880s and 1890s. His first formal claim was for a "Pass to the Grand Canyon," filed with Coconino County on August 26, 1891. This was Bass's claim not only to the Mystic Spring Trail to the esplanade, but also to the route through Trail Canyon to the Colorado River. In Bass's words he intended to "...construct, complete, and operate the same as a Toll Road or Trail as provided by law.... Said Road or Trail shall be known as the Mystic Spring Trail."[15] In a diary entry of November 23, 1891, Bass indicated that he "...filed on the Bass trails and toll road from Williams to Grand Canyon by virtue of the laws in such cases. Chapter 3rd, revised laws, recorded in Book 1, page 16. This prior to the creation of the forest preserve."[16] The Revised Statutes of the United States and the Arizona laws of 1887 provided that a person could build such a road over public lands not already reserved for public uses and could charge tolls. The law applied as well to pack and foot trails "built in mountainous or precipitous places." Bass would not file his first mining claim until 1898, but he was concerned as early as 1891 with establishing his right to operate a toll road from Williams to the

Colorado River. This could only have been intended to secure controlled access for his tourist wagons and pack trains and to charge others that did not use his services.[17]

In 1888, Bass met George Wharton James in Flagstaff and the two developed a lifelong friendship. James was perhaps the greatest promoter of Grand Canyon tourism in the early years, publishing books in 1900 and 1910 aimed directly at the prospective tourist and lecturing far and wide on the Canyon's scenic splendors. He was a regular visitor to Bass Camp, rode all the Bass tourist trails, and created a writing studio in a cliff overhang northwest of Bass Camp where he wrote his first Canyon book, In and Around the Grand Canyon. He was certainly the best one man advertising agency Bass ever had, consistently favoring Bass's tourism operations over others even after the Fred Harvey Company established elegant accommodations at Grand Canyon Village.[18]

Although James wrote In and Around the Grand Canyon in 1897-1899, years when Bass was making extensive improvements to his trails, his description within the book of the approach to Bass Camp and Mystic Spring Trail is probably an accurate depiction of road and trail conditions in the late 1880s and early 1890s. From his accounts and those of Ada Bass it is possible to reconstruct what a tourist trip from Williams to Mystic Spring would have been like prior to 1894.

Bass would pick up his tourists at the train station in Williams and begin the seventy-mile wagon ride to Bass Camp. The first wagon used on the Williams Stage Line was originally brought

west by Major General Nelson Miles for the Indian wars. It was pulled by four horses and could accommodate six passengers. Tourists would usually spend the night at "the Caves," near the seventh and last crossing of Cataract Creek.[19] This spot was no more than the name implies:

> A tent over a wood floor was used for sleeping and warmed by a sheet iron stove, when firewood was available. The kitchen and dining room combined was reached by going down a ladder into the cave. An old cook stove had been installed and the stove pipe emerged through a natural opening in the roof of the cave. A rough table of pine boards and dry goods boxes for seats and also for cupboards were the main furnishings of this underground kitchen.[20]

James added that Cataract Caves (as he called the spot) had a "commodious tent" built over them. After 1894 when Bass completed the more level wagon road from Ash Fork, passengers would reach the Caves earlier in the day, eat lunch there, and continue on to reach Bass Camp by late afternoon. Along the way passengers were expected to help with road and wagon repairs as part of their fare.[21] After a jolting two-day trip from Williams, or an equally jolting if briefer trip from Ash Fork, the tourist was grateful to catch first sight of the destination:

> When we strike the borders of the cedar and juniper forest on the northern end of our trip.... A vast grassy field is entered, then the enclosed pasture [Pasture Wash area], and after travelling three miles further.... the stage stops by the side and at the very brink of the Great Abyss.[22]

James called the very brink of the abyss Surprise Outlook. Bass was known to advertise the spot as Camper's Paradise. It was, however, the several acre site that Bass developed as a tourist camp that later came to be known as Bass Camp. The last mile or two of the road to the site still penetrates a thick stand of pinyon pine and juniper before emerging suddenly at the rim. The

impression on the tourist of the time was probably as much of a surprise, and a welcome one, as James' suggested.

The geologic view that greeted Bass's tourists was, of course, the same as that today. At Bass Camp the rim faces east-northeast to the Darwin Plateau and the inner Canyon beyond, with a background of the Powell and Kaibab plateaus across the Colorado River. To the imaginative viewer, the immediate foreground resembles a hand, minus a few fingers. James called the broad esplanade of red sandstone fifteen hundred feet below Le Conte Plateau, from which emanated the three fingers of Mystic Spring Plateau [Spencer Terrace], Observation Plateau [Huxley Terrace], and the Grand Scenic Divide. The stage would usually arrive in the late afternoon. The sun setting behind the viewer cast the scene in pastel colors, presenting a stunning first vision to the disembarking visitors. A common phenomena of the Canyon is the changing shapes and colors of formations from minute to minute; nowhere is the effect more pronounced than at Bass Camp.[23]

The camp itself would never compete with the accommodations of the El Tovar and Grandview hotels farther to the east, but by 1894 had been improved from the original small cabin and storage tents to

> ...a large circus tent partitioned off into six bedrooms with a dining hall through the center. The kitchen was a small cabin adjacent to one entrance of the tent through which food was carried to the dining hall. It was within a stone's throw of the Rim, and among the scrubby junipers and pinyon trees surrounding the tent were six wooden-floored tent houses.[24]

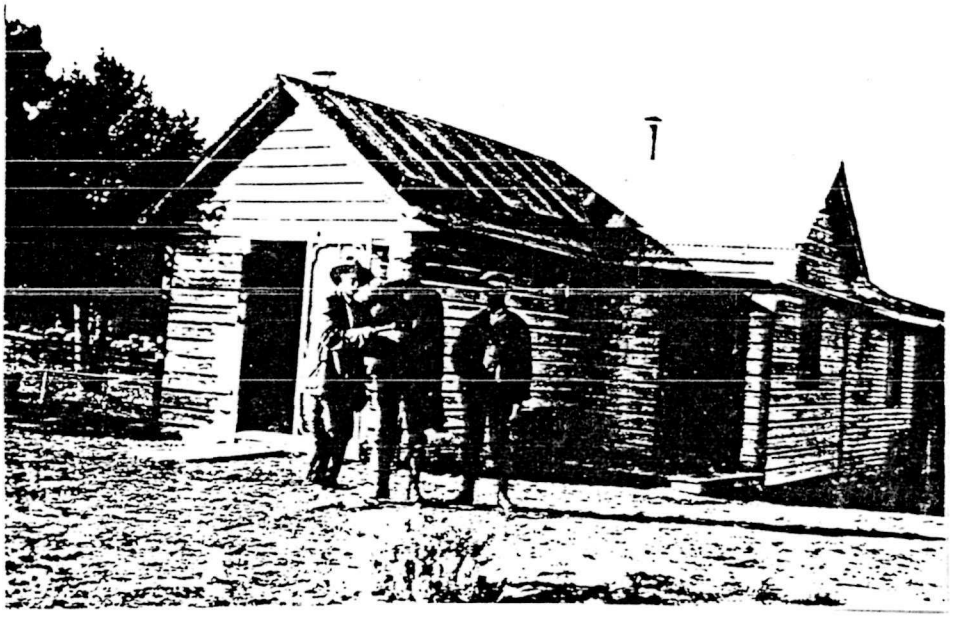


Figure 3. Bass Camp main house. W.W. Bass on the left. 1920.

(Nation Archives)

Figure 4. Bass Camp cabins next to main house. 1920.



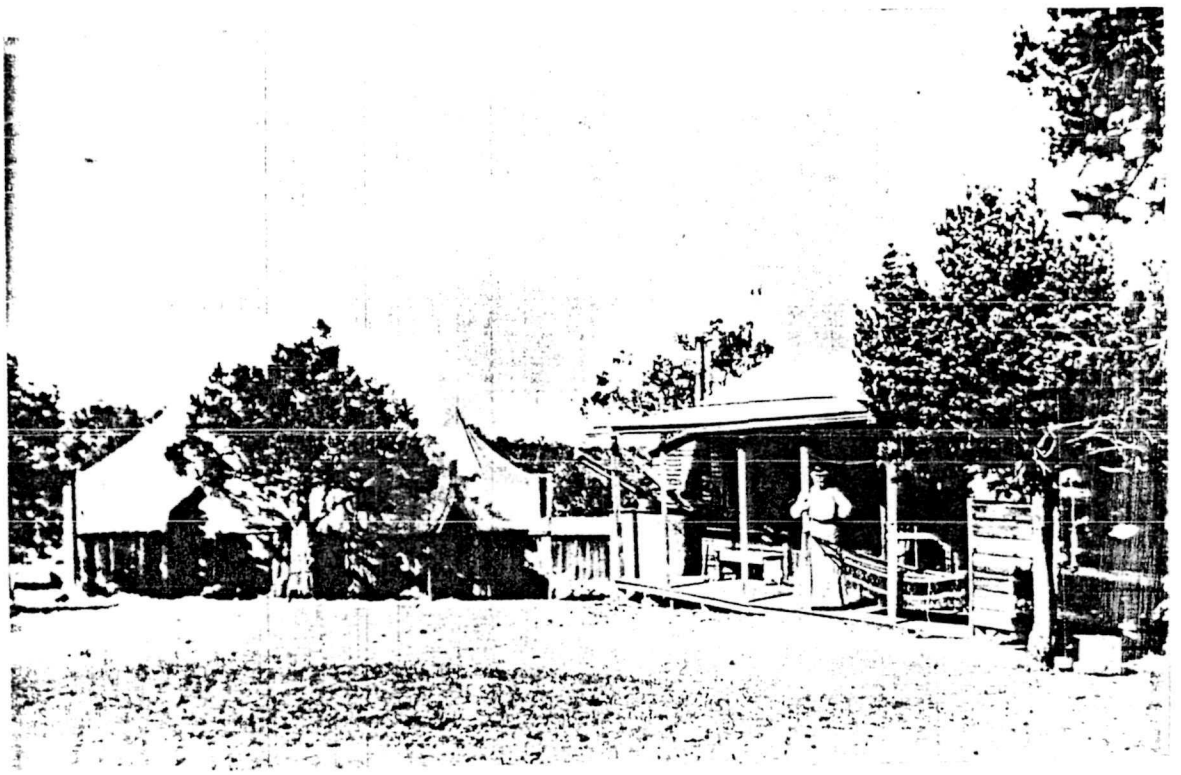


Figure 5. Bass Camp main house and circus tent. Ca. 1900. (National Park Service Collection, Grand Canyon)

Figure 6. W.W. Bass conducting a tourist party along the rim (National Park Service Collection, Grand Canyon 5440)





Figure 7. **Frederic Maude (left) and W.W. Bass. Ca. 1920**
(National Park Service Collection, Grand Canyon 3617)

There was also a 4' x 4' darkroom immediately beneath the rim about fifty feet east of camp, built of limestone slabs and a wooden door. Bass himself was an amateur photographer, but the room was also used by many professional photographers visiting the camp, including Frederick Maude (who illustrated James' first book), A.F. Messinger, Henry G. Peabody, and Oliver Lippincott. These men photographed the Canyon extensively, contributing to the early promotion of Grand Canyon tourism.[25]

If the stage arrived at Bass Camp by late afternoon, visitors might have time to stroll west to a small promontory known as Sunset Point or east along the rim toward Havasupai Point before dinner. They might also inspect the Indian ruin at the rim's edge or sit on the bench beneath the two pinyon pines that grew (and still grow) beside the trailhead to admire the view. After a night's rest they could take the "fair wagon road" of thirteen miles from camp to Topocoba Hilltop, then switch to mules for another thirteen miles to Supai and the falls of Havasu Canyon.[26] Another option was to step off the rim at Bass Camp to follow Mystic Spring Trail several miles to the esplanade. James described the trip down to Mystic Spring prior to 1899:

> The trail begins not more than a yard from where we stand. One step and we are upon it. It glides down eastward for nearly a mile on the face of this talus [Kaibab formation] without a sag in it then it zig zags for a short distance until a natural stream bed is reached. This is the more solid portion of the cross bedded ss. [Coconino formation] Near this point, a little below the trail, on the left, are two natural tanks or reservoirs, which catch the water... and stores it for future use. When these tanks were found by Mr. Bass they were completely filled with debris.... Now that they are well cleaned out, well cemented, and carefully covered, they will hold several hundred bbls. of water...
>
> Leaving the tanks and crossing this slight rocky ravine, the trail follows along the brink of a precipice [where the

> Coconino is cliffed] until the so called "cliff dwelling" is reached....
>
> A little distance from the cliff corn house the trail reaches a sort of break down the face of the cross bedded ss., where it descends in a zig zag course, back and forth, until the LeConte Plateau is reached.[27]

Near the "cliff corn house," Bass constructed a barbed wire fence to check his free ranging stock from descending farther into the Canyon. Within a hundred yards of the fence, the trail dropped precipitously in the zig-zag fashion James described, but left the old Indian trail that descended to the drainage bottom in favor of a northerly route along the slope: a less broken, smoother, and more gradual descent to the esplanade. James went on to describe the broken surface of the esplanade, smooth in appearance from the top but covered with trees and shrubs, boulders, and drainages on closer inspection. On this particular trip the hearty among the group scrambled to the peak of Mt. Huethawali then rode around the mountain, past Seal Head Rock, to Mystic Spring before continuing their trip to the Colorado River.[28]

Prior to the late 1890s when Bass improved his trail to the river most tourists would be content with a rest or overnight stop at Mystic Spring before returning to Bass Camp. The original trail to Mystic Spring is today obscured, but there is little doubt that it continued north-northeast once the esplanade was reached, turned westward beyond the drainage passed on today's trail, and continued west and then north beneath the south and west slopes of Mt. Huethawali to the northern head of Garnet Canyon. The spring and associated camp sites are found just below the level of Spencer Terrace at this side canyon head, and are marked today by a few stacked stones at the spring and bits of

debris in the area of the camp. Seal Head Rock was best viewed from the trail just below terrace level. The camp, like all of Bass's inner canyon camps, was not much more than a level spot convenient to the water source. The spring produced an amount of water barely sufficient for a few tourists and stock, and after 1900 became notably drier following an earthquake.[29]

Early Grand Canyon tourists were prepared for outdoor rigors, but the long wagon ride to Bass Camp and several mile burro ride to Mystic Spring -- along with the vistas obtained from Surprise Outlook, Sunset Point, Havasupai Point, and the esplanade terraces -- were sufficient ruggedness and ample grandeur for all but a few visitors. If visitors wanted more, Mystic Spring could be used as a base camp and several days spent venturing in any direction along the esplanade on foot or horseback. Although Bass was prepared to lead parties down Bass Canyon, across the river, and up to the North Rim by 1896, these trails were not improved at this early date and apparently few chose to descend all the way to the river.

Expansion, 1894-1901

By 1894 Bass's tourist operation was gaining momentum. In that year he completed a thirty-five-mile wagon road from Ash Fork to intercept the Williams Stage Road approximately half way to the Canyon. This was immediately advertised as an all year route to the Canyon, "smooth, and nearly level, passing over a grassy, undulating region for the most part covered with pinyon and cedar trees."[30] Tourists had the option of making the complete sixty-four-mile trip in ten hours, or stopping overnight along the

way. The round trip fare was fifteen dollars, with meals and beds an extra seventy-five cents each. Tourists could still make the trip from Williams on the old stage line, and a package deal was available that included transportation, food, sleeping accommodations, guide, and saddle animals for twenty-five dollars. Soon after 1894, Bass was advertising forty miles of roads along the rim with extended side trips east toward Havasupai Point or west toward the Havasupai village. A trail to Havasupai Point was completed by 1895.[31]

Also during this period Bass extended his promotional efforts to lure tourists to Bass Camp. By 1897 he formed an informal partnership with George Wharton James. James spent considerable time in Los Angeles, where he met the photographer, Frederic H. Maude. Maude joined the informal partnership in 1896 or 1897, travelled to the Canyon with James, and helped illustrate James' first Canyon book. In and Around the Grand Canyon was published in 1900, and in conjunction with the building of the Grand Canyon Railroad Line the following year, helped to attract a great number of visitors. James also wrote newspaper articles about the Canyon, prepared lantern slide presentations which both he and Bass presented, lectured widely on his favorite subject, and helped lead tourist parties from Bass Camp. These efforts attracted many famous people to Bass Camp over the following twenty years, including Henry G. Peabody (famed photographer) in the company of Maude, Thomas Moran, H.A. Pilsbury, F.S. Dellenbaugh, Joseph McClintock, Levi Noble, Mrs. George Eastman, Zane Grey, Emory Kolb, and John Van Dyke. Famous people could be

counted on to influence others to visit Bass's camp. Bass also put out a booklet that advertised the Ash Fork wagon road and trips to Havasu Canyon. These promotional efforts kept Bass's business operating at near capacity, although they did not seem to have elicited a dramatic increase in the number of tourists from previous years.[32]

Bass was among the earliest promoters of a railroad spur from Williams to the Grand Canyon, completion of which would greatly increase the number of tourists and coincidentally help with the shipment of mineral ore. On October 4, 1894, he called and chaired a meeting of Williams citizens for the purpose of organizing a survey for a railroad line to the South Rim. At this meeting Bass was appointed to act as superintendent of construction, and a motion was carried to pay men and teams four dollars per day for construction work. Bass surveyed a line for the proposed railroad, which would of course terminate at Bass Camp. Competing interests in Flagstaff and Ash Fork also lobbied about this time for a spur departing their towns. When rich copper deposits were discovered at Anita in 1897 (forty-five miles north of Williams and fifteen miles from the Canyon), potential mineral wealth decided the issue of originating towns. Lombard, Goode & Company began construction in 1898-99 and completed a spur from Williams through Anita to within eleven miles of the Canyon by 1900 before financial problems halted construction. The company was bought out by the Atchison, Topeka & Santa Fe in 1901 for $150,000 and the line was continued to the area of Grand Canyon Village by September of that year. Bass's efforts from the

earliest organizational meeting through the building of the line to Anita clearly reveals that he was a major factor in the construction of a railroad to Grand Canyon.[33]

Coincident with his emphasis on tourist promotion and the building of a railroad spur between 1894 and 1901, Bass increased his mining activities near the base of the South Bass Trail. His first recorded claims were the Montazuma and Astec (sic) mining locations, adjoining sites within and near the mouth of Copper Canyon. These were recorded in March, 1898.[34] He described the find:

> The ore is almost pure and when broken it glistens like silver. By following up the side of the cliff, I succeeded in tracing the vein to the top and here I found it was still better. Every seam in the rock was filled and the ledge almost solid ore. I traced it for about 1/2 mile or more to where a side gorge commences.... every crack and seam the mineral had seemingly melted and run out in great chunks....[35]

Copper deposits are found throughout the Canyon, from the rim to the river. At river level, copper-bearing ores including chalcocite, bornite, and chalcopyrite are found within the Vishnu Schist. Bass had discovered a rich fissure vein and over the next decade would file many contiguous claims at this site, however, he apparently considered the Montazuma and Astec claims sufficient to keep him busy during the expansion period. He did, however, take the time to file one more claim before the turn of the century. On December 31, 1900, he recorded the location of the Yankee Girl, "about six miles in a southerly direction from the Colorado River at the head of Bass Trail." This was the location of Bass Camp, and the notice was filed exclusively in the names of Ada and Edith Bass (see Appendix A for Bass mining claims).[36]

To facilitate increasing tourist and mining operations and the increased trail usage these activities engendered, Bass developed during this period what would prove to be the furthest extent of his main trail system, known today as the North and South Bass trails. This artery began with the Mystic Spring Trail as far as the esplanade, completed as early as 1884, and was followed by improvements to the Bass Canyon route to the Colorado River by 1898. Some of the improvements within Bass Canyon were made as early as 1886 by one account, but probably not until 1901 was the trail sufficiently improved for tourist travel along the entire route. Still, with the operation of an open boat, cableless ferry across the river as early as 1896, and with some improvements to the north side route, Bass could boast in that year of the only transcanyon trail within Grand Canyon. Also during these years Bass established crude camps along the route at Bed Rock Tanks about a mile short of the river within Bass Canyon, at River Camp along the trail just above the river, and Shinumo Camp on Shinumo Creek north of and one mile upstream from the Colorado River.[37]

It is difficult to establish exact dates for trail improvements made by Bass because he seldom had long periods to work before moving on to other tasks. He thus went at it when he had the time and as current needs demanded. Although the construction of Bass's trails was generally good, they could not be compared to those engineered later by Pete Berry and the Fred Harvey interests farther to the east (the Grandview and Hermit Trails). These better trails were built within the context of

specific plans that promised greater financial reward, justifying the great amounts of money and energy invested. They were also constructed within narrow time frames over more difficult terrain resulting in more concise historical reports of their creation and better preserved sections observable today. Bass had little capital for trail construction and maintenance, no promise of immediate payoffs, and relatively easy terrain to negotiate, so he consistently followed paths laid down by animals and Indians along natural contours. Trail construction required clearing landslide rubble from these routes and some amount of grading, but there was little shoring required and little performed. Maintenance was a continuous activity, accomplished as much by everyday use as it was by deliberate improvement. It was laborious work, however, and costly in proportion to Bass's available capital and limited work force.

To help with the expansion of the trail system and operations in general Bass began to hire a few permanent and seasonal workers. In 1897 he hired R.M. "Dad" Bleak, a Mormon who enjoyed talking to Bass about John D. Lee and the Mountain Meadow Massacre. Bleak worked with Bass for many years driving the stage, working trail construction, helping with tourist parties, prospecting, and mining. Another permanent worker was John Waltenberg who came to work for Bass about 1900. Waltenberg performed all the odd jobs listed for Bleak and was a reliable helper for Ada Bass. Although Ada's diary records that Waltenberg quit Bass in a fit of anger in 1912, there is a record of him working with Levi Noble along the Bass Trails in 1917. After that



Figure 8. South Bass Trail (Arizona Historical Society)



Figure 9.

South Bass Trail.
(National Archives)



Figure 10.

John Waltenberg

(NPS Collection
Grand Canyon
3636)



Figure 11.

R.M. "Dad" Bleak
at Bass Copper
Claims.

(NPS Collection
Grand Canyon
3637)

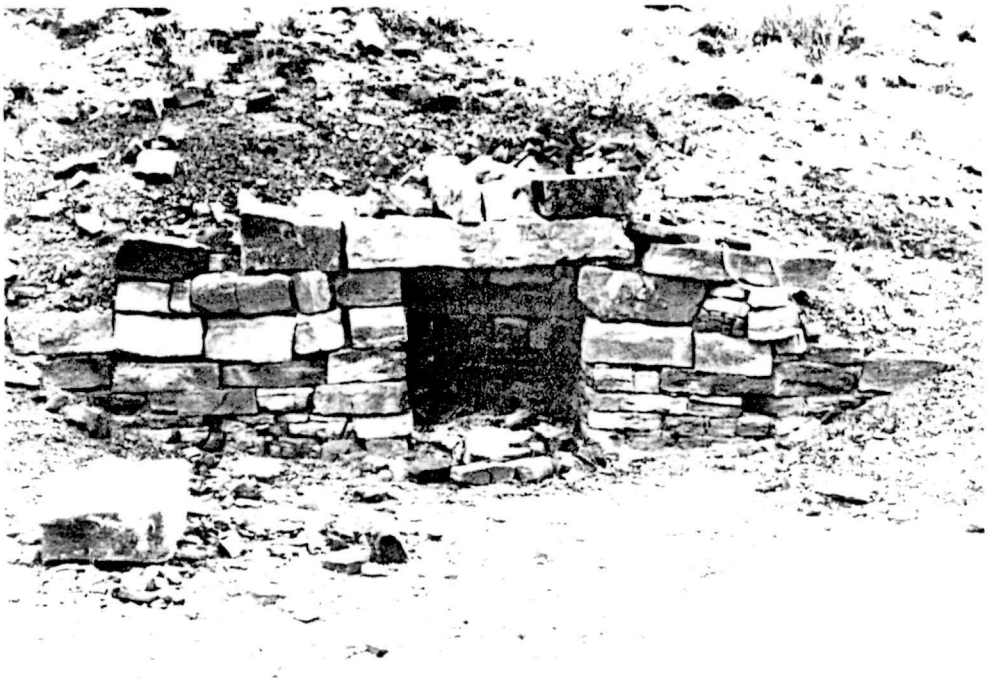


Figure 12.

Fireplace at River Camp, 1990 (Author's photo)

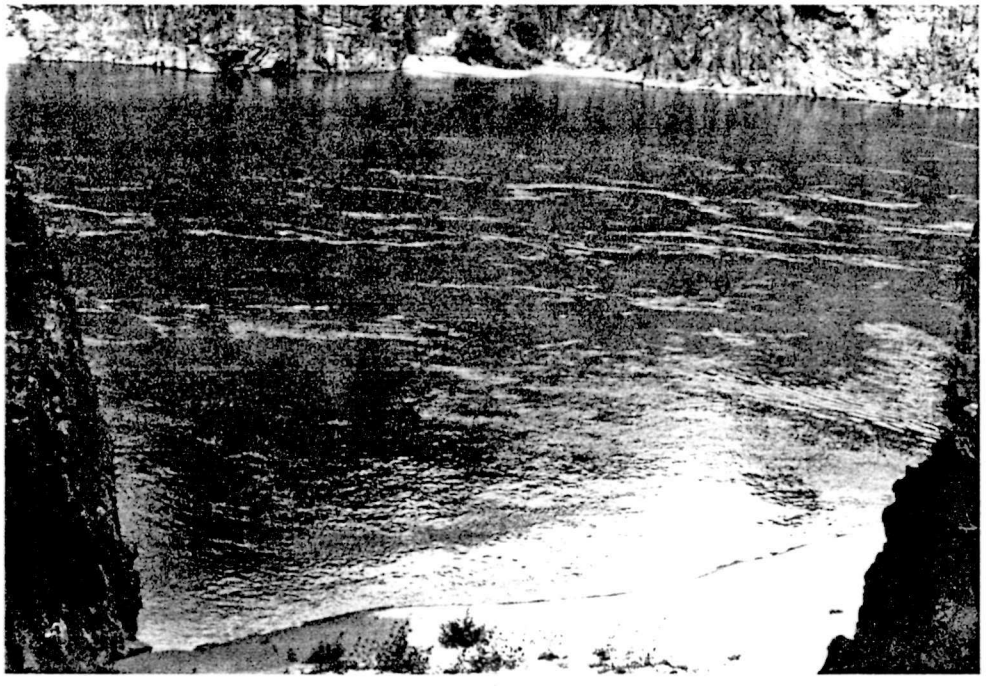


Figure 13.

Foreground: South Ferry Cove
Background: North Ferry Cove
(Author's photo)

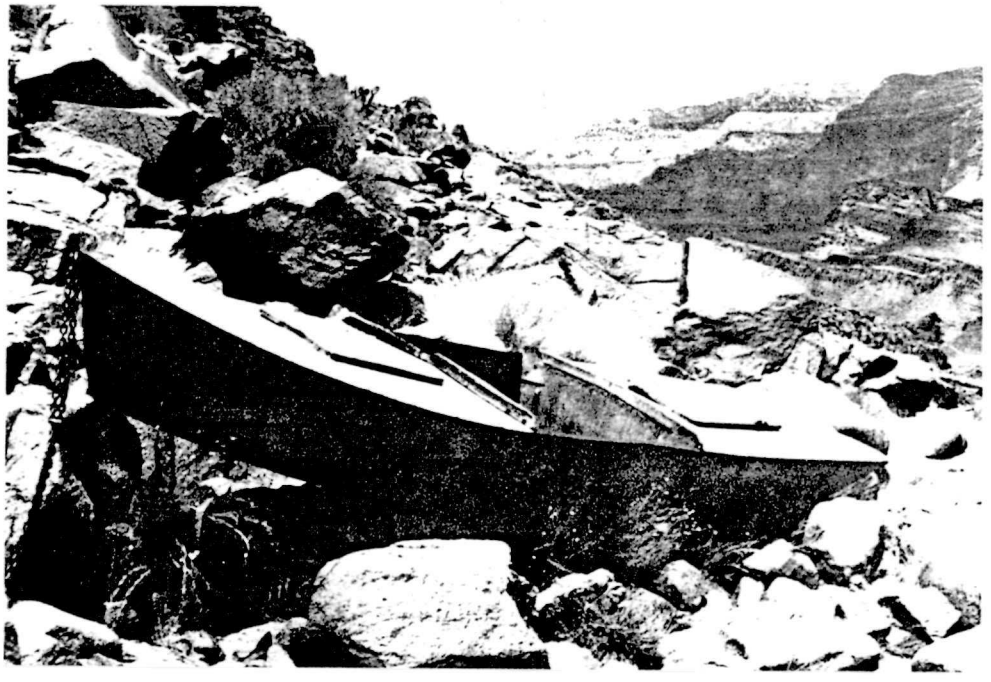


Figure 14.

The Ross Wheeler at the base of South Bass Trail
(Author's photo)



Figure 15. Tourist party beneath the overhang at Rock Camp.
(NPS Collection, Grand Canyon 3618)

Figure 16. Ferry boat below Bass Rapid. Burros are on the north side of the river, near Lower Bass campsite.
(NPS Collection, Grand Canyon 3615)



date he moved to Southern California where he worked in Noble's orange groves until his death. Bert Lauzon, who later married Bass's daughter Edith, was another regular worker. In addition to these permanent workers, semi-regular visitors such as George Wharton James, James' brother Duncan, and Frederic Maude helped considerably with road and trail maintenance.[38]

Bass himself did not consider his trail completed beyond the esplanade to the river before 1898, even though the route was well-established and visitors had been down it before that time. He waited until that year to make his first mining claim and on the location notice for the Montazuma Mine referred to the location as "... about 3 miles below the terminus of Mystic Spring Trail..." which is to say, three miles below the esplanade.[39] It is likely that Bass was measuring from Mystic Spring straight down Copper Canyon to the claim (if he meant down Bass Canyon the distance would be wrong), but in any event he was indicating that his trail ended on the Darwin Plateau. In 1898 Bass hired three men to help him improve the route from the esplanade down Bass Canyon to the Colorado River. These improvements can be traced through historical accounts and observations of the trail today.[40]

Since tourists had been meandering across the esplanade for some years, and there were some "40 miles of trail riding" on the plateau, it is difficult to identify exactly where the the earlier Mystic Spring Trail connected with the extension to the river.[41] It is fairly certain that there was a direct route across the esplanade -- similar to the route followed today -- heading generally to the north, and to the east of Mt. Huethawali.

Improvements in 1898 likely began near Benchmark 4 at 5376' (which is not identified on today's quadrangle), where the modern trail drops into the Supai Sandstone along the west wall of Bass Canyon, then doubles back toward the head of this canyon. There is no other probable route along the Supai after this benchmark, and since the modern trail passes Benchmark 5 at 4857' with a nearby downslope stacked-stone retaining wall, this trail was likely Bass's. With occasional slight switchbacks, the trail continues a slow descent to the head of the box canyon, passing a sandstone shelf with half a dozen dessicated 1" x 12" boards -- perhaps dating to Bass -- stacked neatly inside. A little farther down, the trail drops steeply and finds a break in the Redwall Formation to the creek bed below. In constructing this last section before the creek bed, Bass mentioned snow on the trail and that two of his burros and one horse fell down the slope. It was without doubt the most difficult portion of the trail to improve and likely consumed most of his time during the 1898 constructions.[42]

Bass picked his way through the heavy brush and boulders at the head of Bass Canyon and crossed to the east side where the trail makes its way above the creek bed and out of the brush along the talus slope. It rises to as much as 150 feet above the creek along this slope then gently descends, occasionally switchbacking through slight side drainages, to cross to the west side of the creek bed just beyond Benchmark 8 at 3345' and just one hundred yards short of the junction with the Tonto Trail. This portion of the trail is in good condition today. That it was also Bass's route is confirmed by the benchmarks alongside the trail and a

contemporary description that "... the trail is excellent, and we ride in comfort."[43] Riding further down in the steep, boulder strewn drainage would not have been comfortable.

Bass may have made improvements at this time to the Tonto Trail from Bass Canyon over to Copper Canyon to facilitate packing ore out to the South Rim. In a later inventory of trails built by Bass, one stretch of ten miles is listed as connecting Bass Canyon to Garnet Canyon. This could include the Tonto Trail, which today passes through Copper canyon and near Bass's mine, or it may refer to an extension of the Bass Trail continuing west and downriver from the south ferry site. Today there is a path that takes this route near the river, but it peters out before reaching Copper Canyon and it is not clear whether it was built by Bass.[44]

Below the junction of the Tonto Trail, the route passes the Wheeler Fold as Bass Canyon begins to narrow and run through the red and black Hakatai Shale. The trail crosses to the east side of the creek where it runs for much of the way until it crosses at a series of bedrock waterpockets. The stretch from the Tonto Trail Junction to these waterpockets is no more than a half mile and the trail today would be difficult to follow in many places without the cairns that mark the way. The route, however, is impossible to lose as it stays with the creek bed. Bass probably did not bother with trail improvements along the creek bed, but simply crossed where convenient.

Just below where the trail crosses the bedrock tanks Bass created Rock Camp:

> ... a precipice of fifteen or twenty feet, and the overhanging rock.... Here Mr. Bass has stores of food, a portable forge, anvil, and other aids to his trail building and mining operations. Above the camp, and reached by a rough ladder built of mesquite, is a tiny spring... nestling in a basin of solid rock.[45]

This was, as James' described it, simply a camp site with some shelter and nearby water. Today there is no indication of a spring (and little indication of the camp), but the larger of the seven or eight tanks in the stream bed are replenished with several hundred gallons of water whenever rains cause the creek to run. The site is about a mile above the river and provided a reasonably comfortable place to camp when floodwaters prevented crossing the river on the ferry.[46]

The trail that rises steeply from the creek bottom on the east side of the bedrock tanks eventually joins the Tonto Trail on its path to Copper Canyon, and was built by Bass in 1898 or perhaps earlier. This connecting trail was probably used by Bass as a shorter route between Rock Camp and his mines in Copper Canyon, or as a direct route from Copper Canyon to the water available at the tanks. It is steep and today the footing near the bottom is poor, but it would save enough distance between the south ferry site and Copper Canyon to merit its use.[47]

From Bed Rock Camp the trail twists downstream in and out of the drainage, then follows the western slope above the creek before crossing a final time to the east and swinging around to within sight of the river. The trail is fairly easy to follow in this section, although modern hikers often as not follow the drainage as far as the last crossing. If the last crossing is missed, the hiker will follow the creek bed only to be cliffed out

at the mouth. James related a story of how he and several companions missed the correct route and were stymied at the eighty-foot-high cliff, which forced them to hike all the way back to the esplanade without water.[48]

After leaving the creek bed of Bass Canyon, Bass continued his trail to the north along the top of the precambrian schist, following the river downstream for about a mile. Several hundred yards short of the trail terminus Bass widened the path and built a stone fireplace that still exists to serve as an overnight stop before crossing the river. He called this site River Camp. The fireplace is built of flat stones fitted into the upslope. It is roughly ten feet long, three feet high, and was covered by a tent in Bass's time. Rusted cans litter the immediate area today. Tourists could sleep thirty yards away toward the river where today a stacked-stone foundation on a flat shelf still marks the spot. This area is also littered with rusted cans.[49]

A few hundred yards beyond River Camp the trail confronts a drainage cutting through the schist to the river, then veers down this drainage to Bass's ferry site at a small, enclosed, sandy cove. Though short, this spur is the best example of trail construction along the whole route from Bass Camp. It switchbacks steeply along the south side of the drainage, and is continuously reinforced by downslope retaining walls of stacked-stone. Near the bottom it disappears amid the rubble of drainage and river floods. From this cove Bass would ferry tourists across to the north side in a small wooden boat, constructed at the river from lumber carried by burros from Bass camp. The wooden boat was a

"punt" with 1/8" cracks caulked with clothesline, a "rude boat made of rougher lumber."[50] It was approximately four feet by twelve feet and shallow, with room for perhaps two people plus some gear. Bass also used a canvas boat to ferry the river and both crafts were in use at the turn of the century. In 1963, during a period of very low water (1250 CFS), scant remains of Bass's boats were found in this cove: cracked and splintered oar blades and a rusty oarlock.[51]

Ferrying a party across the Colorado River would usually require several trips, while the stock was encouraged to swim across. The boat was launched from the south side and drifted downriver in the calm water below Bass Rapid to the sandbar upstream of what is today called Lower Bass Campsite. From here the boat was hauled out of the river and carried upstream to a ravine, where another well-constructed trail twists down through the schist to a cove seventy-five degrees east-northeast of the south cove. On the return trip, the object was to hit the south cove only slightly downstream before the current carried the craft farther down toward Shinumo Rapid. This was probably a fairly easy task to accomplish during periods of low water, and a rather difficult task in the faster current of higher water. Prior to 1906 when Bass constructed a cable system, there was no way to cross the river safely during floods.[52]

Development of the North Bass Trail

George Wharton James noted that "Sometime before 1900, Mr. Bass completed a trail on the north side of the river...."[53] He was referring to what is today called the North Bass Trail -- in James' time and well into the 1930s known as the Shinumo Trail -- which continued the route from the ferry site and later cable site to Swamp Point on the North Rim. Major improvements were made to the north trail between 1898 and 1901, and few improvements made thereafter. Bass considered the north trail a logical extension of his transcanyon route, and since its existence beyond Shinumo Camp became less important to his operations as business on the South Rim increased, the entire history of this trail will be considered at this time.

Like all of Bass's trails, the major extent of the north trail was not of his original construction. Anasazi and later Southern Paiute Indians visited the Colorado River from the North Rim on a seasonal basis for centuries, resulting no doubt in a well-worn path. Improvements to the upper portions of this route were made by a prospector named White sometime during the 1860s or 1870s to access a mine within the shale above Shinumo Creek. This may have been the James White of Colorado Controversies fame who purportedly rafted the Grand Canyon of the Colorado in 1867, two years before John Wesley Powell. Little is known of the mine or the trail he supposedly built, but White Creek and nearby Whites Butte bear his name. It is probable that the Havasupais, who often hunted with Bass atop the North Rim, showed him this route sometime during the 1880s.[54]

Bass had several reasons for continuing his trail system on the north side of the Colorado River. One of the earliest was to extend his prospecting operations and to establish a means for funneling ores from the many side canyons on the north side to an improved trail and thence to the north shore of the river. It would be six to eight years before Bass had the means to transport the ores across the river with his cable system, however, it is reasonable to assume that prospecting and mining helped motivate his improvements. Tourism must also have been a major reason for the completion of the north trail, since his boast of a transcanyon trail as early as 1896 would not have been made to encourage competing prospectors. Before 1900, James took a tourist trip with Bass to the North Rim, perhaps along the recently improved trail or just before it was completed, and advertised the availability of guided hunting trips to the North Rim in his first Canyon book.[55]

Bass's original trail headed generally north from the riverbank at today's Lower Bass campsite where the ferry from the south would land. From this beach it is easy to bypass the difficult schist and gain the flat and above. The trail probably headed on a course perpendicular to the river, across the relatively flat bench above and toward the mountain slope a quarter mile distant. This flat area was identified by Robert Brewster Stanton during his railroad survey in 1889 as a possible location for a switch station. The first few hundred yards of original trail is impossible to identify today because the river runners who use this site as a favorite campsite have crisscrossed

the area with informal paths. Feral burros which have roamed this area since the 1920s have contributed to the confusion of informal paths. There are cairns found scattered everywhere along this bench, however, they probably cannot be attributed to Bass. Long time river guides indicate that the cairns were not there in the early 1970s. Still, there is a good path today that runs in the logical direction from the beach that may have been Bass's trail.[56]

In 1906 Bass established his north cable terminus immediately upriver of the north ferry site and atop the schist about sixty feet above the river. The system was improved in 1908. The cable site ruins today consist of a flat landing area constructed of stacked stones, cable strands cemented into the schist, a wooden tripod, and various bits of wood and metal debris. From this site, a dim path -- reverting to desert pavement but occasionally marked with cairns -- heads east and northeast and intersects the previously mentioned path from Lower Bass Campsite as the slope begins to steepen. This was Bass's trail from the cable site, in use after 1906. It can be followed easily all the way to the ridge top and over to Shinumo Creek. This trail is seldom used today because river runners have worn a far easier trail at a lower elevation from Lower Bass campsite over to Shinumo Creek. There are no indications of trail improvements across the fairly flat bench, but Bass had to pick away at several sections traversing the rocky mountain slope on the way to the ridge. It is certain that this was Bass's trail because Benchmark 12 at 2923' is passed at the crest of the ridge.[57]

From the ridge, the trail drops steeply to Shinumo Creek. There is evidence of stacked-stone, downslope shoring before reaching the creek, but generally the trail follows the natural contour of the slope with necessary switchbacks all the way down to the creek. It then follows the Shinumo upstream on the southeast side for a few hundred yards, passing Benchmark 13 at 2483', before reaching the site of Shinumo Camp.

Bass established this camp prior to 1899 as an overnight stop for his north side operations. It was at first a "rude camp," but was greatly improved by the Bass family in January of 1900 and again in 1901 when severe winter weather at the South Rim compelled them to spend several months here.[58] During these stays, Bass, John Waltenberg, and others put up several tents and a fireplace, and a pen for some Belgian hares that joined some hens and a rooster Waltenberg had brought down previously. As an overnight camp for a tourist or hunting party Shinumo Camp was ideal; as a family home for several winter months it was a problem. Ada Bass noted in her diary that the creek froze over that winter and she had to send Waltenberg several miles to the south side of the river to replenish their flour supply from stores at Copper Canyon.[59] James described the camp in the first years of the Twentieth century as

> ... part tent, part wood, part rock, part indoors, part outdoors. The fireplace is of stone and out of doors, and the table is a great slab of red sandstone resting on two heavy rock supports.... There are two good beds. Across the stream a little way down is the Shinumo garden.... excellent melons, cantaloupes, radishes, onions, corn, squash, beans, and with a fair-sized peach and other trees.... discovered by following the ruins of ancient irrigation ditches down to the spot. In the wall beyond are several small cliff dwellings and storage bins....[60]

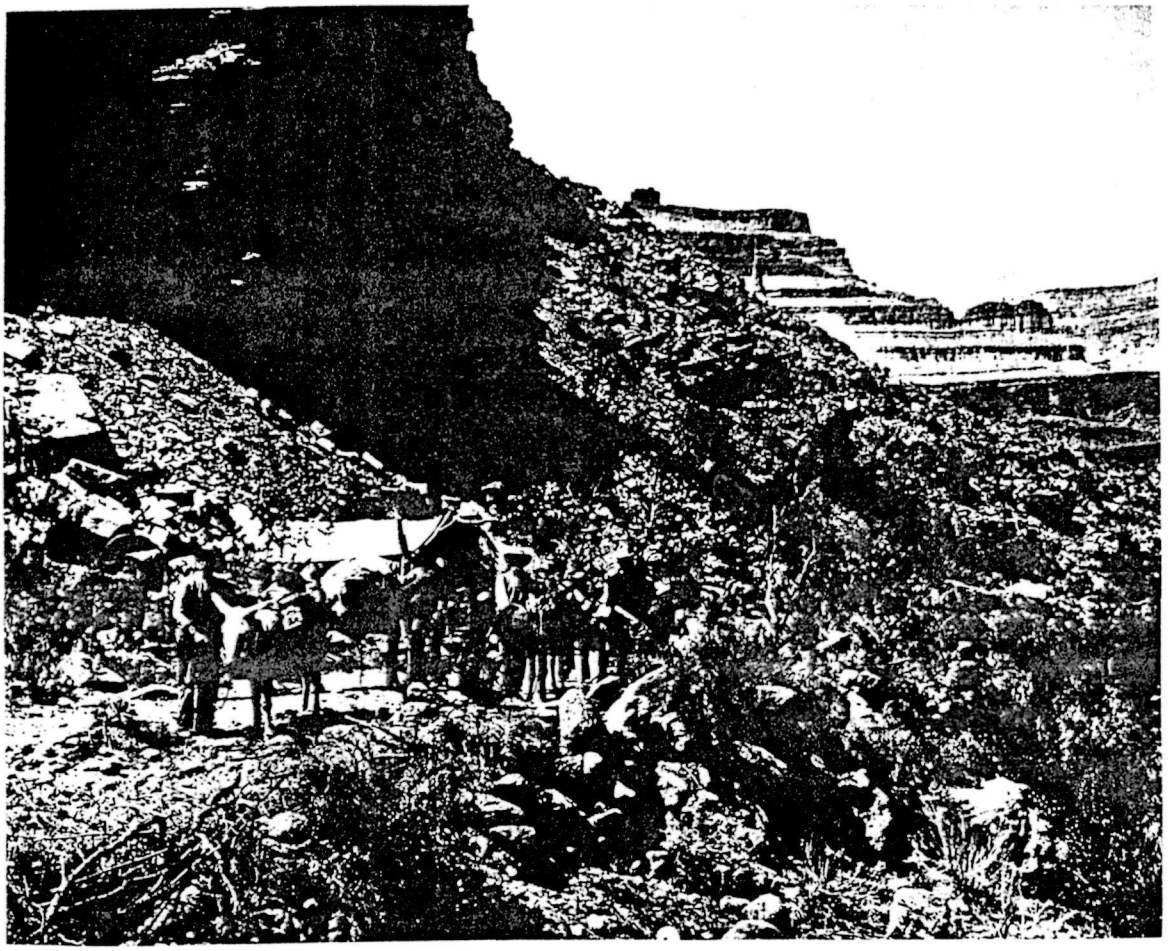


Figure 17 (Above).

Tourist party at Shinumo Camp. ca. 1900.

(Bill Bass Collection, NPS 6216)



Figure 18.

Artifacts near the site of Shinumo Camp - 1990.

(Author's photo)

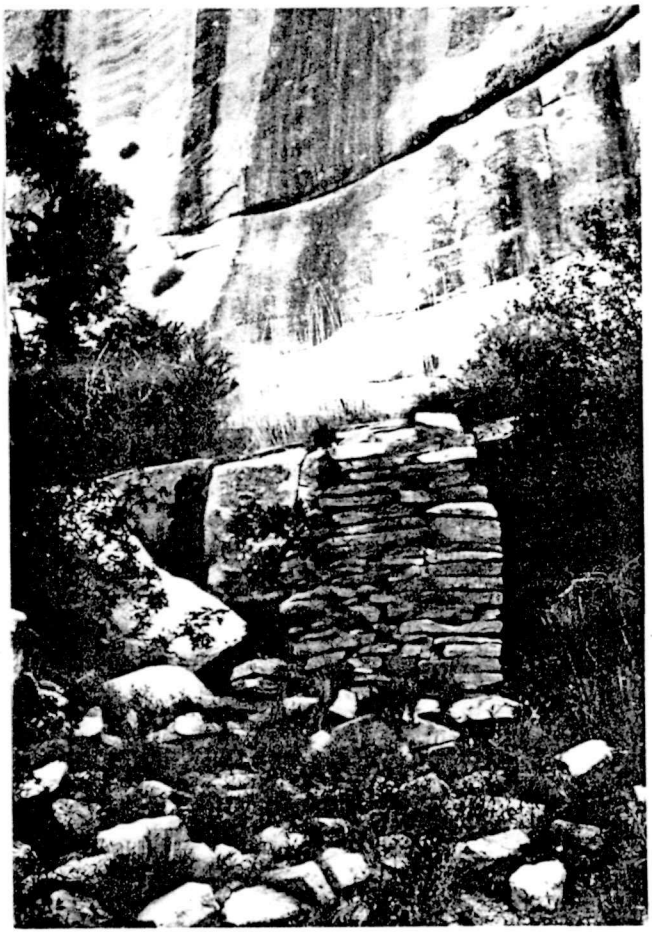






Figure 19 (Top left). "Totem" next to the springs near Muav Saddle.

Figure 20 (Top right). Firepit at Shinumo Camp - 1990.

Figure 21. Debris collected in the grotto near Shinumo Camp - 1990.

(Author's Photos)

The garden was located on a flat bench of about an acre, less than a quarter mile downstream of the camp on the opposite side of the creek. The plot had long ago been cleared of brush and rocks and irrigated by Indians. Bass and his wife improved the irrigation system with a water retention tank adjacent to the crops and planted a wide variety of vegetables for tourist and family needs. In 1974, seed packets sent to Bass by the Department of Agriculture were found in a small cave in the cliffs above Shinumo Camp. These indicated that Bass and "Dad" Bleak also raised seven varieties of lettuce, cabbage, mustard, parsley, candytuft, collard, balsom, and cucumbers.[61]

Shinumo Camp did not improve with age. In 1917, Joseph McAleenan and a small party of cougar hunters made the transcanyon trip with Bass and others as guides. McAleenan, whose account is laced with sarcasm and who was none too fond of Bass's services, nevertheless provided some insight on the camp during the late summer months and coincidentally on the rigors of Canyon travel near river level:

> ...we reached the temporary camp on the banks of the Shinumo. All around our camp the soft, fine dust and sand lay a foot deep, and the tramping, restless pack horses raised it in soft yellow clouds. Cactus and mesquite were the only green things....
>
> ...we sat down in the sand to eat. No one was hungry, as the heat was intense, registering one hundred and twenty degrees at eight-thirty in the evening.... We all retired early, sleeping on the outside of our blankets without covering of any kind.
>
> Bill Shay killed a large diamond-back rattler below the corral where we kept our horses last night.... These venomous gentlemen move about quite freely on moonlight nights, in fact, the canyon is a stamping ground for the poison people....[62]

McAleenan mentioned no amenities at the camp, no fresh fruits nor

vegetables, and implies there was not so much as a table on which to eat. It is likely that by 1917, approaching seventy years of age, Bass limited operations within the Canyon and did not keep up the camp. We can also guess that his wife, Ada, a strong-willed and decidedly independent woman, no longer agreed to stay there for weeks on end to tend the garden and orchard.

Today, camp debris and crumbling stone structures are found in and about the campsite for a quarter mile in all directions. A wide variety of camp equipage and debris, including metal implements, bottles, pick heads, plates, and pans are laid out neatly within a shallow grotto along the trail. Downstream within fifty yards of the grotto is a stacked-stone wall and circular room, perhaps the small corral mentioned by McAleenan. Within another hundred yards is a stacked stone fireplace with rusted cans littered about, directly across the trail from Benchmark 13 at 2483'. Another twenty yards downstream is a rock inscription with the year 1912 chiseled deeply. Ancient storage bins are also widely scattered in this general area.

The trail continues up Shinumo Creek for about a mile until the canyon opens up slightly to low benches on both sides of the creek. This section is certainly Bass's route because there is no other, but it is difficult to attribute the current trail to Bass since it has been used extensively by backpackers and river runners in recent times and has probably been scoured several times by floods of the past sixty-five years. The current trail remains on the east side of the creek wherever practicable, but

there is always a fainter path on the opposite side as well. There are no indications of trail improvements within this section.

Just upstream of the open benches and immediately before the creek veers sharply to the east, the trail leaves the creek from the west bank and ascends the talus slope in a northerly direction. The beginning of this section is found twenty to thirty yards above the northwest creek bank as the creek veers to the east. It is marked by a campsite with several stacked-stone benches. The faint trace of a trail can be followed today because the way is marked with numerous cairns that were likely placed by someone trying to preserve the location of the original trail. The trail climbs the talus slope and swings to the east, passing the benchmark at 3150' above a steep unnamed side drainage before returning to a northerly route and gaining the relatively gentle slope beneath Powell Plateau. Once atop this slope, the trail winds through sparse vegetation and in and out of side ravines for about three miles before dropping down to the broad bottom of White Creek, just downstream of the benchmark at 3480'.

Mrs. James B. Gayler of Ridgewood, New Jersey, took one of the earliest tourist trips up the North Bass Trail with James Bass, "Dad" Bleak, and Dr. Carl Barck of St. Louis in the autumn of 1901. Her diary helps to trace the North Bass Trail from the Shinumo to Point Sublime, and is used from this point in the narrative to help identify the trail route.[63] Of the section passing along the loose talus around the 3150' benchmark and continuing to White Creek she wrote:

> We go up a long trail over a ridge, with loose soil, quite barren. The ascent is not very steep but the hillside across which the trail passes slopes down to canyons and precipices which suggest unfathomable depths. At one place the trail, for about fifty feet, is over ashes or some exceedingly loose material that allows the animals to slide very quickly down towards the deep precipice on the right and the sight is most trying to my nerves....
>
> From this we pass into a canyon or series of canyons where one can plainly see that in the remote past a torrent has poured down, tearing away the soil and tossing huge boulders about. Many naked rocky ledges show, and my burro is occasionally required to carry me up stone steps.[64]

The trail section described by Mrs. Gayler, from the Shinumo to White Creek, is in poor condition today, and is almost untraceable once the gentler slope beneath the plateau is reached. The trail along the steep talus slope near the benchmark would need frequent repairs since slides along the naked shale would constantly tend to obliterate it. Once across the talus and atop the gentler slope, the regularly spaced blackbush obscures the trail as well as the route. The trail can be picked up only when heading the numerous side drainages described by Mrs. Gayler. This was Bass's trail, but it is so infrequently used today that it is reverting to desert pavement. Most modern hikers follow Shinumo Creek to the mouth of White Creek, thence up White Creek to the point where Bass's trail intersects. Bass did not choose the creek route because at places it is impassable for stock.[65]

The trail continued across the broad section of White Creek to the fairly level northwest bench at a point just downstream of the benchmark at 3480'. It followed the creek along this bench for about one and a half miles before crossing to the southwest side and switchbacking first away from the creek bed then back

toward it to bypass a boulder-strewn section of the creek ahead. Atop this switchbacked section is Benchmark 17 at 4006'. This trail section to the benchmark is easy enough to follow along the low bench, but often as not is choked with brush and it is easier to follow the drainage. The crossing to the southwest side is noted by looking ahead to the boulder-strewn section of the creek where the inner gorge narrows, and is marked by cairns that are not easily found. The southwest slope above White Creek at this point is broad and there are a number of Anasazi sites with foundations and scattered pottery. The trail makes its way up this slope and is fairly easy to follow as it switchbacks up toward Benchmark 17.

From Benchmark 17 the trail drops back into the creek bed. Here the inner gorge of White Creek narrows somewhat and the benchlands above the creek are brush covered and difficult to negotiate. Traces of trail can be found on either bench:

> Presently we enter a narrow canyon through which flows a clear, cool stream. Walls of red rock on both sides with much gray stone. Many large sycamores, cottonwoods and alders, grass and flowers, with maidenhair ferns on the rocks. We stop for lunch under a big cottonwood tree. About four thousand five hundred feet elevation [closer to 4350']. We leave this lovely spot and go up the canyon which makes a sharp turn to the left. This is Muav Canyon.[66]

This section of the route is today as Mrs. Gayler described it ninety years ago. The canyon is narrow, the stream is intermittent, and the sycamore, cottonwood and alder still thrive. She might have added that the creek bed becomes steeper and more boulder choked. As the route makes its way into this section of the Redwall formation, it is even more difficult to

pick up traces of what may have been the Bass trail and it is easy to believe that Bass used the creek bed more often than not.

A little further on White Creek becomes impassable, and before this point is reached the trail leaves the creek for a steep talus slope to the west. It switchbacks continuously up this slope, gaining more than six hundred feet elevation in less than half a mile, before passing along a ledge of the Redwall and finding a drainage to escape to the gentler slope above. At this drainage the trail passes the benchmark at 5006' and nearby is one of the few signs of trail improvements: a rotting log along the downslope supported by a rusted, leaning iron spike. There is no doubt however that Bass improved the trail ascending the slope to accommodate stock and would have to clear it of debris on almost every trip. This half-mile section is the steepest along the entire North Trail:

> Then begins a tremendous climb which I accomplish by clinging to the coat tails of the guide with one hand and sometimes with both hands, he holding tight to the burro's tail ahead of him. Belshazzar [her burro] accepts this - to me - novel situation with accustomed cheerfulness and does his best to haul us up the mountain, stopping occasionally to recover his breath. Finishing this part of the ascent, we come to a fertile plateau with trees in great number and variety.[67]

The "fertile plateau" is actually a series of four slopes punctuated by three ravines. The ravines are not deep but the sides are very steep and difficult to walk much less ride. The trail is flanked by encroaching manzanita and other brush, to the extent that a decade of neglect would obliterate much of the route. Just before descending back to White Creek at Benchmark 20 at 5175' the trail passes close to the inner gorge where one can

look over the side to the creek two hundred feet below and understand why Bass chose to ascend the Redwall:

> On this plateau we still see the canyon with its perpendicular gray stone walls. It falls below our trail and we ride along the brink of it and down in the bottom see the black entrance to a cave. Then we come to the dry bed of a stream [White Creek] which we follow until we come to water....We camp here; elevation six thousand one hundred feet.[68]

The benchmark at 5175' is immediately found on the west side of the creek where the trail again meets the creek bed. Mrs. Gayler found it dry, but it flows intermittently at this point. From here to Benchmark 21 at 5697', a distance of a little over a mile, there are several ravines entering the creek bed from the east and west. White Creek is indebted to the streams within these unnamed ravines for what water it carries farther downstream. Mrs. Gayler's estimation of 6100' would place their campsite above the point where the current trail leaves White Creek, so it is more likely that they were camped below the uppermost eastern ravine slightly below 6000' elevation. In any event, she indicated that the party followed the dry creek bed from the benchmark at 5175' and this is probable since the surrounding terrain is steeply sloped. There is no indication of a trail on either side.

The route up the creek bed continues past Benchmark 21 at 5697', which is found on the west side of the creek just two feet above the bed and is today marked with a cairn. The trail leaves the creek to the west, then returns and crosses at roughly 6080' elevation. It switchbacks up a steep slope to a ridge between two drainages which is smothered in hollyoak, manzanita, pinyon pine,

juniper, and agave. The trail today scrambles steeply up a loose talus slope almost due north from this ridge and gains the Coconino formation west of the springs at the Coconino base. This is not the original route. The 1962 Powell Plateau topographical map indicates that the trail swings more to the east beyond the ridge and gains the Coconino sandstone to the east of the springs. It then follows the base of the Coconino to the west, passes the springs, meets up with today's trail, and continues another few hundred yards to Muav Saddle. This is the historic trail, but only traces of it are found today. Mrs. Gayler notes on this section of the trail:

> We start again [from camp] and ascend a steep, loose trail in the manner of yesterday. The trail is very pleasant here [once the Coconino is reached], springs of excellent water coming out from under the cross-bedded sandstone and trees of considerable size shadowing the way.[69]

This is the stretch of trail along the Coconino base, which is fairly level and would be pleasant relative to the talus slope just negotiated. Mrs. Gayler's party then passed the springs, which they would not have done had they followed today's trail. Along this portion of the trail, thirty yards east of the springs, is a large stacked-stone structure that resembles a cairn. It is referred to as a six foot totem in guide books. This and the overgrown foundations surrounding it are the ruins of a small house built by a prospector who spent the winter here around 1930. He built the house with slabs torn from an Indian ruin further to the east.[70]

Once at Muav Saddle, the trail is easy to follow as it switchbacks up eight hundred feet in less than a mile to Swamp

Point. This is almost certainly the route Bass took since it is the first opportunity to circumvent the Coconino cliffs to the plateau above. This final trail segment to Swamp Point was rebuilt by the Park Service in 1925.

Swamp Point is the logical end of the North Bass Trail today, but tourists and hunters in Bass's time would continue onto the Kaibab Plateau at least as far as Point Sublime, roughly nine miles in and out of tributary canyons along the rim along a trail constructed by Bass. Mrs. Gayler's trip ended at that point. Her description of the route to Point Sublime sounds little easier than the ascent up the North Bass Trail, but indicates a trail the entire distance. Bass was flexible as to using his own trail or one created by the cattle and wildlife abundant on the plateau. Bass led a hunting party up the North Bass Trail a few years later and these men were satisfied to camp at Muav Saddle and take Bass's westerly trail up to Powell Plateau for further hunting. Bass constructed a trail from the saddle up to the plateau and out to Dutton Point. The northern plateaus, and especially Powell Plateau, were favored for deer and elk hunting prior to 1906 when the North Rim in this area became a game preserve. After 1906 hunting interest continued for predators, especially mountain lion.[71]

When parties arrived at the rim, Bass would light fires from Dutton Point on the Powell Plateau or at Point Sublime to indicate a safe arrival. The number of fires would indicate the number of days before the anticipated return and signal those back at Bass Camp to bring stock down to the river to meet the returning

party. A like number of fires from Bass Camp would indicate that the message had been received. Parties typically made a hurried trip on the way back, sometimes camping en route at Shinumo Camp or some informal spot along the way, sometimes making it across the river to camp overnight at Rock Camp. The following day would usually see them make Bass Camp if there were no problems along the way.[72]

Although Bass could boast the only transcanyon trail from 1896 until 1907, how far his boast echoed is open to question. In the Spring of 1902, Francis Emille Matthes was assigned to begin the topographical mapping of the Grand Canyon. He spent the late spring and early summer months mapping the South Rim and then began to look around for a way to get at the North Rim. Matthes had arrived at the Canyon on the recently completed Grand Canyon spur and longingly eyed Bright Angel Canyon directly across the chasm as a way up. As promising as it looked, locals told him that it was impassable to stock and possibly impassable to men on foot. Although he undoubtedly asked around for the best route to the north side, he was initially unaware of Bass's Trail. When he finally heard of it, the impression he obtained was that it was a burro trail (Matthes planned to use horses and mules), still unfinished at the lower end, and little more than a seldom used, faint track up the north side. He was also unaware that Bass used a ferry boat to cross the river, and believed the crossing to be dangerous. Nevertheless he felt he had no choice but to take the South and North Bass Trails.[73]

The party set out in August, 1902, and required six days to make their way to the North Rim. Bass let the party use his ferry

boat, but Matthes complained that he had to swim across to the north side to get it. They tricked the stock into the water and led them across with the boat, then spent an exhausting day and a half gaining the North Rim. Once on top Matthes chose to get supplies from Kanab because "Bass crossing could not be negotiated by one man, nor even by two" and his entire party consisted of only four.[74] At the completion of the mapping, he chose to break trail down Bright Angel Canyon rather than return by the Bass Trails. It appears that during the entire expedition Matthes did not use Bass as a guide nor any services from Bass Camp. He may have found the experience a little more enjoyable if he had.[75]

The following year another team of the U.S. Geological Survey was along the Bass trails doing some mapping in the vicinity of Shinumo Camp. One day in early April, Ada Bass opened her door at Bass Camp to find one of the team shivering, and naked but for an old quilt. As he thawed out inside he explained that they were low on provisions on the north side of the river so he had swam across the river with his clothes over his head and lost them in the current. He scrambled naked to Rock Camp where he found the quilt and one of Bass's burros and made it the rest of the way to the South Rim. Ada and her husband may have had further humorous moments with these USGS men as they continued to travel the Bass Trails in 1904 and 1905, preparing the 1906 Shinumo Quadrangle Map. These men used Bass Camp and the various camps along the main trail, with or without Bass's services.[76]

The North Bass Trail very likely never excelled the condition reported by Matthes in 1902. The trail continued to be used as

access to the North Rim by a few adventurous tourists and hunters, and by Bass as an artery to prospect within the side canyons on the north side of the river, but usage -- the principal maintenance mechanism for all Bass's trails -- would steadily decrease after the first decade of the 20th century. After Bass left, the trail fell into disrepair, although it would remain listed in National Park Service records as the northern leg of Bass's transcanyon trail.

In 1910 Mr. W.L. Walker, mining inspector of the General Land Office; Mr. Wheeler, an expert miner; and T.C. Hoyt, Assistant District Forester of Kaibab National Forest reported on a trip to Shinumo Camp from Swamp Point. The purpose of the trip was to investigate Bass's mining claims in Hakatai Canyon. They reported no problems with the trail, but noted that it took three full days to reach Shinumo Camp. McAleenan's account of his 1917 trip noted little of trail conditions, but mentioned that the cable cage across the river was "... a flimsy-looking structure built of odd bits of planking and held together with a few nails and a quantity of bailing wire." This statement, in combination with his description of Shinumo Camp, is further evidence of a deteriorating trail system by the 1910s.[77]

The next evidence of activity in the area of the trail was in late 1924 or 1925, when the National Park Service constructed a trail or crude wagon road from the check station at North Rim to Swamp Point, a distance of twenty miles. Two miles of Bass's trail from Swamp Point to Powell Saddle were also reconstructed at this time at a cost of $2,179.57. A snowshoe cabin was built in

1925 at Muav Saddle halfway between Swamp Point and the Powell Plateau, perhaps in conjunction with this trail work, and may be the cabin that stands here today (See Appendix C, "Muav Saddle Cabin"). The trail or wagon road was obliterated from lack of use by 1930 and was partially reconstructed in that year at a cost of $1,313.28, with plans to complete the remaining thirteen miles at an estimated cost of $3,000. This twenty-mile stretch was called the Powell Saddle Trail and was listed later by the Park Service as a bridle path.[78] The Park Service had a dual purpose for the improvements:

> This trail [Powell Saddle Trail] serves an area through the forest otherwise unprotected from fires, and too it opens up a section of the park which has heretofore been very seldom visited.[79]

There is no indication that any of this work was done to facilitate use of the North Bass Trail, nor that at that time any maintenance had been effected or was planned for the larger trail.

The larger trail's condition only a few years after Bass left the Canyon indicates that it was little more than a path in the first place and that it could quickly be lost. In 1925 a Park Service team attempted to take the trail to stock trout in Shinumo Creek. These men had such a difficult time negotiating the trail, encountering brush obstructions and injury to pack animals, that they gave it up and planted their 50,000 Black-Spotted Trout eggs in the trickle of the intermittent White Creek. They did not thrive in the dry creek bed.[80] In August of 1930 Chief Ranger Brooks and Rangers Art Brown and Ed Laws successfully made it to the Shinumo and planted another 50,000 eggs in the perennial stream, however, the trip is revealing for the mention of the

trailbuilding required and the difficulty of access:

> These eggs were brought in from the Yellowstone. They travelled to Cedar City, Utah, by railroad, thence by automobile some 200 miles to Powell Saddle.... The trip down into the canyon was over a trail which had been previously cut out and prepared for this purpose [author's italics] - eight miles by pack animal, one mile on the ranger's backs.[81]

In these years when more than 50,000 annual visitors were being deposited by rail at the South Rim of the Canyon and enjoying the well-engineered Bright Angel and South Kaibab Trails to the river, visitors to the North Rim would have to endure a more considerable effort. In the early 1920s visitors could request a stage from Maryvale, Utah, a station on the spur line of the Denver & Rio Grande Railroad, to get to the park boundary 215 miles distant. This stage ran twice weekly at most. Or they might leave from a Los Angeles & Salt Lake Railroad station at Lund, Utah, 200 miles distant. As the ranger account above indicates, by 1930 the trip might be made by automobile from the railroad station at Cedar City. With any of these approaches to the Park there would be another twenty miles over bridle trail to reach Swamp Point. The rangers had to cut a special trail (likely following Bass's trace) just to reach Shinumo Creek in 1930. It is little wonder that as facilities improved dramatically at the South Rim, tourists would choose the easier adventure. The North Bass Trail, never easily accessible, early on lost its appeal to a softening breed of tourist.[82]

There is no mention of the North Bass Trail in Grand Canyon National Park historical files from the early 1930s until the mid-1950s, and every indication that the trail was virtually, if

not in fact, abandoned. In 1956 District Ranger Clyde A. Maxey completed a field trip of the North Bass with U.S. Geological Surveyors to check the benchmarks that were placed every half mile along the trail in 1906. His description of the trail confirms its virtual abandonment.

Maxey noted that the section from Swamp Point to Powell [Muav] Saddle, rebuilt in 1925, was in fairly good condition but washing out due to lack of maintenance. He reported that the two springs near the saddle provided sufficient water for domestic use at the saddle cabin. The trail from the springs

> ...is so overgrown with brush that it is difficult to follow except with the aid of a topographic map. In 1906 bench marks were placed every half mile along the trail and we were able to find all but two of these...[83]

Maxey described the worst places along the trail as the descent through the Redwall and the loose talus just above Shinumo Creek. the two spots singled out as hair-raising by Mrs. Gayler in 1901. Although he was optimistic that these sections could be brought back into shape, he intermingled his appreciation of possibilities with the trail's actual condition:

> These natural trails or Indian trails grew over and slide off it is true, but they are located in such spots that 40 years of no maintenance and lack of use does not completely eliminate their usefulness. The slides of only one winter on the North Kaibab Trail are far worse than anything encountered on the Bass.... The section of the trail below the redwall was difficult to follow since the many burro trails are often more prominent than the one we were trying to locate.... The worst spot as far as hazard is the shale just above the granite [immediately above Shinumo Creek]. This section was at an angle of repose and the trail only about six inches wide.... a pick and shovel would soon make it passable for stock.... As an escape route from the river it would require a topographic map with the trail clearly marked and someone who could read it.[84]

Despite the trail's apparent abandonment, the Park Service continued to list it as a portion of the "Bass Trail, South Rim to North Rim, 25.5 miles" in 1964. This was, perhaps, to add bulk to the park's report of sixty-two routes and 346.3 miles of trails within park boundaries at that time. There is no indication that the Park Service ever seriously considered rebuilding the North Bass Trail at any time. This is understandable considering the Park Service's need to build and maintain trails more easily accessible to tourists and with some promise of being used consistently.[85]

By the 1970s the Canyon's inner trails were again in use by a new generation of adventurous tourists carrying backpacks. Usage of the Canyon's trails had increased to the point that the Park Service solicited bids for concessionaires to operate commercial hiking trips. In the Grand Canyon National Park's file entitled North Rim Hiking the North Bass Trail is mentioned only once, an indication that the trail was still not high on the list of potential commercial usage. Private trips increased, however, and it is this new generation of hiking enthusiasts that are to be thanked for the usable condition of the trail today. One also has to consider that these hikers have created the current route, and although that route generally follows the benchmarks laid along the historic trail in 1906, it deviates in several sections according to the ability of people on foot rather than on horseback.[86]

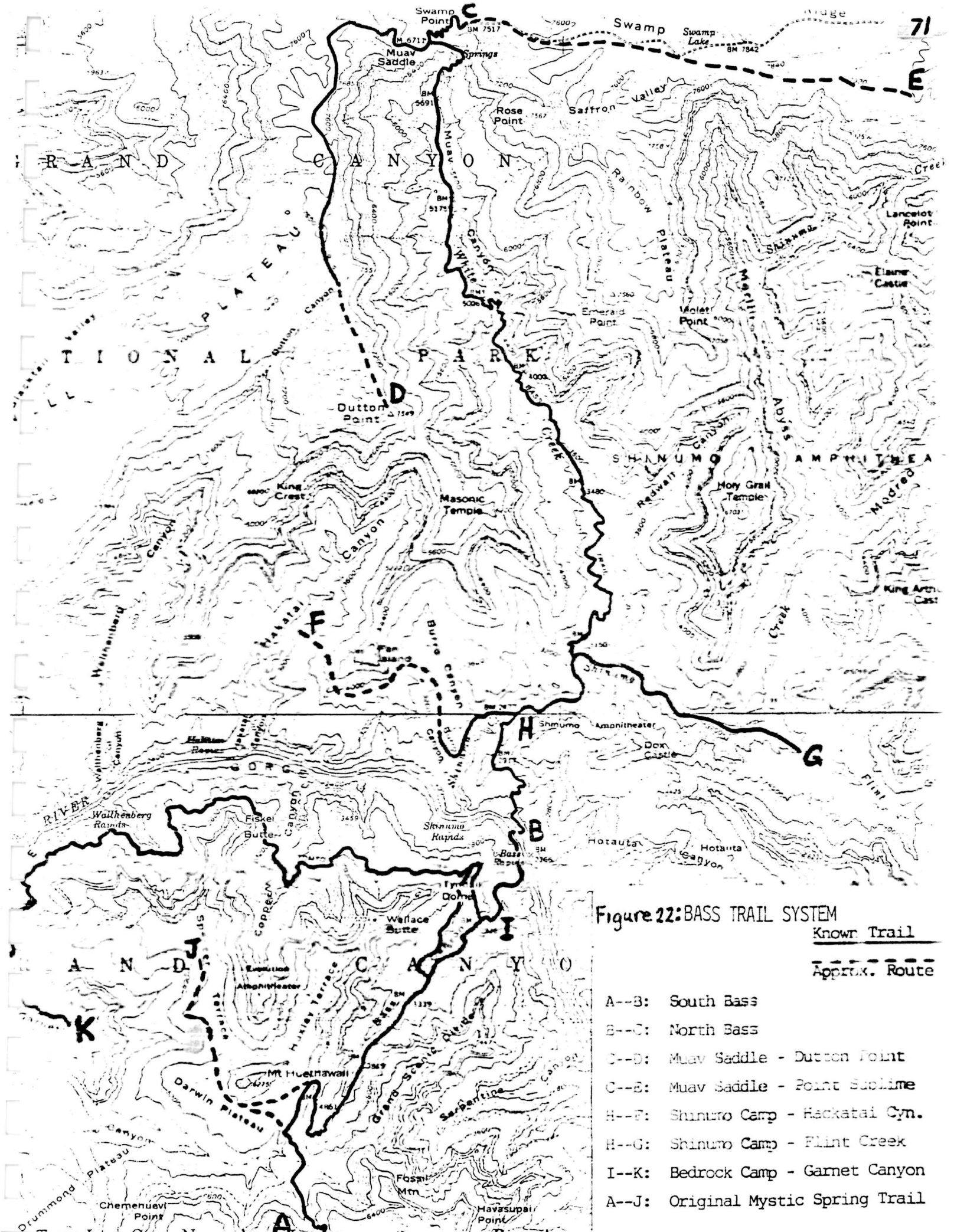


Figure 22: BASS TRAIL SYSTEM

Known Trail

Approx. Route

A--B: South Bass

B--C: North Bass

C--D: Muav Saddle - Dutton Point

C--E: Muav Saddle - Point Sublime

H--F: Shinumo Camp - Hackatai Cyn.

H--G: Shinumo Camp - Flint Creek

I--K: Bedrock Camp - Garnet Canyon

A--J: Original Mystic Spring Trail

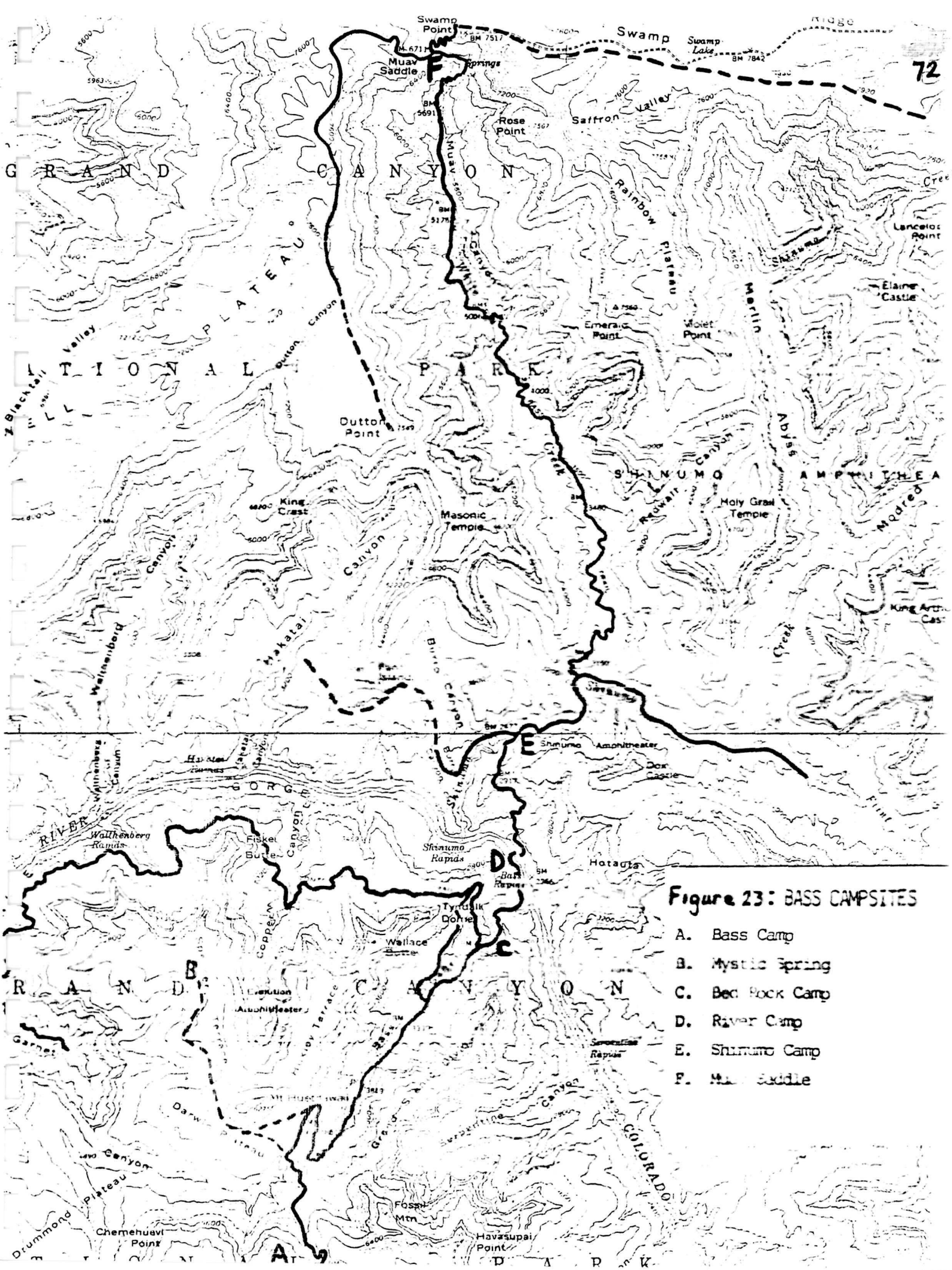


Figure 23: BASS CAMPSITES

A. Bass Camp
B. Mystic Spring
C. Beer Rock Camp
D. River Camp
E. Shinumo Camp
F. Muav Saddle

After the Railroad, 1901-1926

By 1901 Bass had improved his main artery trail to its furthest extent, successfully promoted his tourist business, and begun to expand his mining operations. Part of his success had been due to hard work, good luck, good health, fortunate partnerships with a few good men, friendly relations with his Havasupai neighbors, and a vision that had enabled him to first promote the railroad and then immediately react to its construction away from Bass Camp. Some of his success to 1901 and much of it after that date, however, must be attributed to his wife Ada and to his children.

Ada Lenore Diefendorf was born in Charlottesville, New York, on August 29, 1867. She studied music from a young age, learning to play the piano and violin. She passed her teacher's examination in 1883 and later studied at the New England Conservatory of Music. While at the conservatory she was invited by her aunt in Prescott to move to Arizona to teach music, an invitation she accepted in the early 1890s. In Prescott, Ada taught music and the violin and stayed in the Congress Hotel which her aunt owned. In 1894 she took a trip to the Canyon in the company of her aunt; J.C. Martin, editor of the Prescott Journal Miner; and several others, under the guidance of William Wallace Bass. This was a seven day trip during which the party took in both the trail to Mystic Spring and the Topacoba trail down to Supai. Five months later, on January 6, 1895, she married Bass and within a week was on her way to her new home at Bass Camp.[87]

Although Ada undoubtedly helped Bass with business expansion between 1895 and 1901, she spent most of this period adjusting to life in a remote section of Grand Canyon. From February 1895 until May 1896, Ada helped Bass around Bass Camp and made at least ten trips to and from Williams and Ash Fork helping to operate the tourist business. In May 1896 she returned to the East to have their first child, Edith Jane, born in August 1896. For the next few years Ada renewed her teacher's certificate, took a teaching job, and gave every indication of staying in the East. Bass took several trips to visit her during this period, however, and as the operations at the Canyon expanded, apparently convinced her to return in September 1899. This was just in time to live through a hot, dusty late summer on the Coconino Plateau followed by a bitterly cold January at Shinumo Camp. In July 1900 she made it from Bass Camp to Williams in time to deliver her second child, William Guy, and when sufficiently recovered headed straight back East with the children where she stayed for another fifteen months. In late 1901 Edith returned to the Canyon, apparently deciding to build a life with Bass.[88]

For the next twenty-two years, Ada became progressively more involved and increasingly more valuable in the Bass business operations. Her life was at first typical of a frontier housewife. She sewed, baked, made and mended clothing, cleaned, did the wash, and worked at a hundred other tasks at Bass Camp. Soon she was using her "free time" at unconventional women's jobs like breaking teams of horses, leading tourists into the Canyon when no one else was available, and contending with empty cisterns

and footloose livestock. In her role as proprietress of the Bass Camp "hotel" she cleaned, cooked, and otherwise looked after the tourists. While thus engaged she managed to improve the previously drab accommodations with upgraded furniture, a piano, a small library of books, and other niceties. While busily engaged at these activities she managed to find time to give birth to a second daughter, Hazel Canyonita, in 1903, and a third daughter, Mabel Melba, in 1906.[89]

In 1904 Bass and Ada improved Bass Camp. The circus tent that had served for more than ten years was torn down and an addition added to the cabin:

> With the addition, the main house included three bedrooms, a large living room, and a dining room, kitchen, pantry, and storage room. Porches ran along the west and east sides of the building. The living room had a small couch next to the stove and provided another sleeping place.... Guests stayed in tents along the rim, although when a large party was expected, some of the bedrooms in the main house were used as well.[90]

The house was of frame construction and was insulated with tarpaper. The camp by this time also included corrals and outbuildings and several cisterns. These improvements of 1904 were perhaps the last of the major renovations at Bass Camp. The railroad, which had arrived at Grand Canyon in 1901, required that Bass change the nature of his operations and shift his tourism focus closer to the growing Grand Canyon Village.

From the moment the first train pulled into Grand Canyon Village until 1907, Bass maintained excellent relations with the Santa Fe because both parties wanted to attract more Canyon visitation. Bass was given free passes to travel the Santa Fe line anywhere it went. He was allowed to ride the train and

solicit passengers to depart at Anita or Bass Siding for a stay at Bass Camp. The railroad advertised his accommodations in their pamphlets advertising the Canyon spur. It even offered to build a spur line from Milepost 59 to Bass Camp if Bass would do the grading and pay $340 toward labor and materials. When Bass considered building a new hotel at Havasupai Point in 1902 the railroad offered to ship the materials at no cost. Three carloads of materials were in fact shipped, although the hotel was not built. During the years 1901-1907 it seemed the railroad could not do enough to encourage and expand the Bass business.[91]

The relationship between the railroad and the small operators began to deteriorate soon after the El Tovar was built and other Santa Fe - Fred Harvey facilities, accommodations, and tours were established. Nevertheless, these operators -- including Bass, Ralph Cameron, and Pete Berry -- continued to compete fiercely for their share in the tourist trade at and near the village. Soon after 1908, Bass was the only competitor remaining at the village who offered a full range of tourist services. That he could continue to do so was in large part due to Ada managing the business and his children reaching an age where they could help.[92]

When Ada returned to the Canyon in 1906 following the birth of Mabel Melba, a new two-story home was awaiting her at Bass Siding. Bass Siding was actually a homestead established by Bass near Milepost 59 along the Grand Canyon spur, just outside today's National Park boundary and six miles from the Canyon rim. Through agreement with the railroad it was a flag stop where Bass could unload passengers. The home, called the White House by the Bass

family, could accommodate twenty guests. The grounds included warehouses, storage sheds, corrals, and cisterns. The Bass family moved into the White House in the summer of 1906 and it became their principal home as well as the center of Bass operations. Ada now had two homes to manage: Bass Camp and the White House. Although Bass was shifting tourists operations to buggy rides along the South Rim at Grand Canyon Village, some tourists, particularly old-timers, preferred to stay at Bass Camp and enjoy the western trails. Ada was now responsible for keeping inventory and ordering supplies for the two locations as well as the several camps and mines below the rim. She also had to hire additional employees and manage their activities to keep up with the expanding business.[93]

Fortunately for Ada, Edith Jane was ten years old by 1906 and was doing the work of a fulltime employee. She took over some of Ada's household duties, cared for the livestock, hunted up horses and burros, and accompanied her father and tourists into the Canyon. She would answer the signal fires from the North Rim and would bring stock down to the river to meet returning parties. Six-year-old William was also of an age to help at the White House, and as the years passed began driving pack trains loaded with ore from Copper Canyon to the rim. He also served as wrangler for stage and saddle stock and helped in other ways. Thanks to the tireless efforts of Ada and the eldest children, the Bass business thrived during the first two decades of the new century.[94]

Although the focus of the Bass tourist business steadily shifted to day trips by buggy and later automobile along the South Rim near Grand Canyon Village, operations in and about Bass Camp continued with no significant upward or downward trend through the remaining years of Bass's presence. During the expansion years of 1895-1901, as many as fifty-eight or as few as eighteen tourists signed the guest register at Bass Camp, with an annual average of thirty-seven. These were parties that signed up with Bass for accommodations and/or guide services into the canyon, and did not include the many who chose to take the trails without Bass's services or those that simply did not sign the register. From 1902 through 1921 there were as many as fifty-nine and as few as eight who signed the camp register, with an annual average of thirty-five. In the last year of trail operations, 1923, twenty-four people signed the camp register. These figures indicate the additional assistance provided by Bass's family and a few hired hands, who helped at both ends of the operation and kept the business thriving.[95]

Mining Activities, 1898-1917

With the increasing help of his family, Bass was able to continue to build and maintain trails, and increase his prospecting and mining after 1898. In fact, Bass filed a flurry of claims between 1903 and 1908, not all of which were intended for the extraction of ore. Many of these claims were filed to protect his tourist and campsite interests at Bass Camp, Bed Rock Camp, the ferry and cable crossings, Shinumo Camp, and springs along the route from the South Rim all the way up to Muav Saddle.

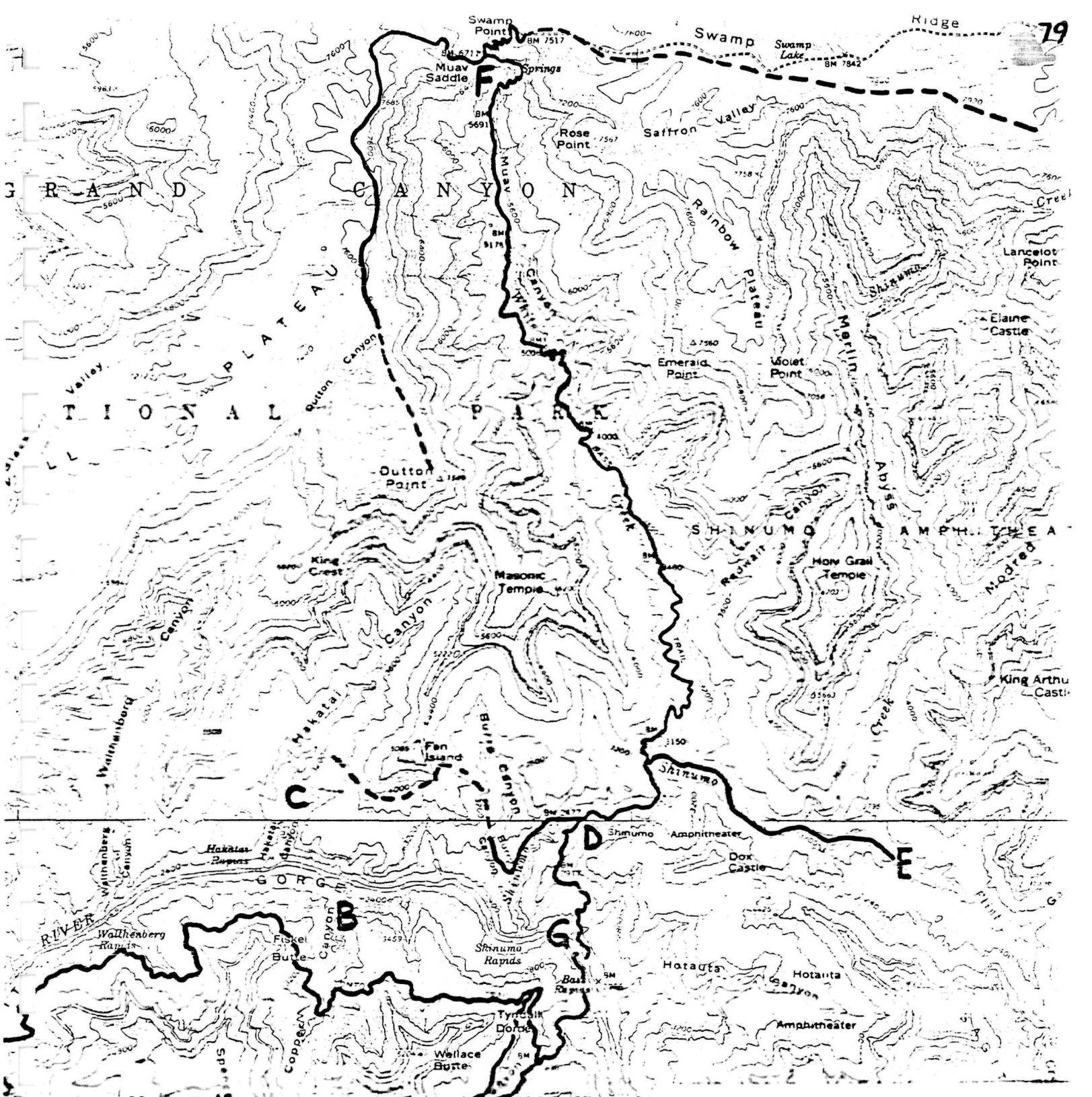


Figure 24: MAJOR BASS CLAIMS

A. Bass Camp- "Yankee Girl" 1900
B. Copper Cyn- Many claims 1898-1907
C. Hackatai Cyn-Asbestos mines ca.19
D. Shinumo Camp- Water right 1906
E. Flint Creek- "Mother Lode" 1908
F. Muav Saddle- "Cold Spring" 1905
G. Cable/Ferry site- "Delmonde" 1906

He also took the precaution of claiming 2,000 river-inches (miner's measure) of Colorado River water at the ferry site and another 3,000 inches at the mouth of Copper Canyon.[96] This practice of making mining and water claims for non-mining purposes was well known and little appreciated by the Forest Service, although it was difficult to do anything about it unless a field inspection proved that no mining activity was taking place. In 1908, J.H. Clark, Acting Supervisor of the Kaibab National Forest wrote to F.C.W. Pooler, Forest Service Supervisor, to complain of this practice:

> One thing is certain.... Very few if any of the mining claims located along the Canyon were made for their probable mineral value. There seems to always be some other motive in locating these claims, such as the acquiring of water rights which would be hard to obtain in the regular way.[97]

Along with the claims filed to protect his trail and tourism interests, Bass did extend his bona fide mining locations. Between 1904 and 1908 he filed claims in Copper Canyon, contiguous to the earlier Montazuma and Astec locations, and on the north side of the river within Burro Canyon, Hakatai Canyon, Flint Creek, and at Muav Saddle. He also went so far as to incorporate the Hockatai Mining and Milling Company in 1907 to raise capital for mining operations (See Appendix A for Bass Mining claims within Grand Canyon National Park).[98]

There is every reason to suspect that Bass's filing frenzy in these years was a deliberate attempt to protect his interests before Grand Canyon changed federal management status. On January 11, 1908, Grand Canyon National Monument was proclaimed, which had the effect of making all of the Bass claims inholdings. After

that date, new mining locations were no longer recognized, but valid claims filed before that date were protected as long as annual assessment work was done. Always alert to what was brewing in government matters concerning Grand Canyon, Bass probably knew by late 1904 that a management change was in the offing and began to secure his holdings. Between November 1904 and January 1908 he filed on seventeen mining locations, mill sites, and water rights. The last two were filed on January 3 and 4, 1908. These last claims were quickly questioned by the Forest Service as they were recorded after the January 11 cutoff date. When it was determined that they had been filed before that date, the Forest Service tried to investigate assessment work completed. In October 1910, rangers made a special trip down the North Bass Trail to investigate these and other claims made just prior to the 1908 deadline. These men could not find Bass at Shinumo Creek, were unable to find the locations themselves, and exited the way they came a few days later. There were no further field efforts to investigate Bass's claims after this failed attempt.[99]

There is insufficient evidence to determine exactly how much mining Bass did along his trails, but that he engaged in mining and shipped some ore is certain. In 1906 he installed a two-strand cable system just upstream of his ferry ports, and upgraded it in 1908 to a four-strand system with a large cable car. The cable systems not only allowed him to cross tourists, stock, and equipage safely during periods of high water, but also made it possible to ship ore profitably from the north side of the river.

Bass's asbestos mines in Hakatai Canyon produced high grade ore, with fibers from one to four inches in length. In 1917, perhaps just before selling his Hakatai Canyon interests, Bass hauled several tons of this ore out by burro train and the railway, and sold it to eastern buyers at $1,500 per ton. Five tons of asbestos ore were shipped to China and another ton shipped to France where it was used in strengthening and fireproofing silk and in making the world's first fireproof theater curtains. Bass apparently let his ore accumulate, perhaps for years, and made occasional large shipments. If these were the only shipments made from his asbestos mines, he may have grossed as much as $10,000 overall from asbestos sales.[100]

Bass also had numerous claims in Copper Canyon on the south side of the river and likely worked these extensively after the initial discovery and claims were made in 1898. During the following decade he filed on the Toltec, Hockatai 1, 2, 3, and 4, and the Foraker, all contiguous claims to the original Montazuma and Astec locations. Some of these locations were filed by Bass alone; others in partnership with William Crowley, R.M. "Dad" Bleak, John Waltenberg, Charles F. Molly, and Ada Bass. Before 1908, Bass drove a tunnel more than one hundred feet long and a shaft more than fifty feet deep to follow the rich vein and extract the ore. Ore from these claims found its way to the 1931 Northern Arizona State Fair in Prescott, where it was displayed with sixteen other Grand Canyon minerals. Around 1908 Bass packed out and shipped twenty-five tons of this copper ore. Some silver was also mined from these claims. One carload of copper ore.

assayed at 70% silver, was shipped to a smelter (probably at El Paso) and another carload was taken to Williams but never shipped. The value of these shipments is unknown.[101]

Although Bass's main artery trail from Bass Camp to the North Rim and the extensions to Dutton Point on the Powell Plateau and Point Sublime on the Kaibab Plateau were completed by 1901, mining activities of this later period resulted in a series of tributary trails emanating from the main trail. Mining locations give some indication of when these tributary trails were improved or constructed. The trail connecting the South Bass to the Copper Canyon claims would have been completed soon after 1898 to facilitate the transportation of ore. A trail was also constructed from Shinumo Camp to the asbestos mines in Hakatai Canyon prior to 1908. This trail went down Shinumo Creek, turned into Burro Canyon, and probably followed the terrain to the South of Fan Island into Hakatai Canyon. One further tributary trail continued up Shinumo Creek past the White Creek confluence to the mouth of Flint Creek, then went up Flint Creek a half mile to the Mother Load mining claim. None of these tributary trails, other than the Tonto Trail, are found on today's topographical or Forest Service maps, however, they were recognized by the Park Service in 1924 as trails constructed by Bass and of possible value to Grand Canyon National Park.[102]

Bass Sells his Interests at Grand Canyon

As previously mentioned, the Bass business as a whole flourished between 1901 and 1923. As the trends in tourism shifted from rugged multi-day trail trips to brief rides along the

rim, Bass adjusted by offering these short excursions. In 1912 he leased 2.5 acres from the Forest Service and built the Tin House within a mile of the railroad depot at the village to get even closer to the center of activity than the White House allowed. By 1914, Bass had four surreys and two wagons engaged in this side of the business, and soon added a Studebaker which could also make the trip over rough road to Bass Camp. In 1915 the business had its best year with $21,000 in gross receipts. Tourist operations along the Bass Trails remained fairly consistent during these years, while mining activities and revenues increased. Prosperity, however, was clearly due to the expanding tourist operations centering at Grand Canyon Village.[103]

Although Bass and his family were doing well on paper, competition from the Santa Fe - Fred Harvey combination was effectively squeezing out the small operator. The Santa Fe had done business with Fred Harvey before building the Grand Canyon spur, but it was several years before these companies established facilities at the Canyon. After Fred Harvey moved into the picture cooperation with Bass began to fade. As late as 1908 Fred Harvey advertised Bass Camp as a rest and overnight stop on the Harvey trips to Havasu Canyon. There was no mention of Bass Camp in the brochures of 1910 or thereafter. The railroad removed Bass Siding as a flagstop along the Grand Canyon spur in 1909. It also became clear that the National Forest Service, responsible for Grand Canyon National Monument and concerned with efficient operations, favored the activities of the Santa Fe and Fred Harvey who were investing huge sums to develop the South Rim tourist

business. Bass remained a competitor despite the odds, but perhaps understood as early as 1915 that he would soon be out of the Grand Canyon picture. With business good in that year, he and Ada bought some land in Wickenburg and began to develop interests there.[104]

On February 26, 1919, Grand Canyon National Monument became Grand Canyon National Park, and on August 11 of that year the three-year-old National Park Service became the new management. The Park Service's goals for Grand Canyon as with all the national parks were the protection and conservation of natural resources and the encouragement of nondestructive tourist use. Although the Park Service promoted and facilitated tourist visitation to the Canyon, its goals required policies and procedures that afforded some control over visitation and land use. This could most effectively be accomplished through contracts with major concessionaires and the elimination of private holdings within the park. Bass was doomed on both accounts.

Numerous correspondence during the years 1920-1926 indicate that Park Service Director Stephen T. Mather immediately encouraged a policy of buying out small operator mining claims and homesteads while giving liberal concessions to the Santa Fe and Fred Harvey interests. This policy was implemented by the first park superintendents. In the first annual report of Acting Superintendent W.H. Peters in 1920, Bass was not listed as a concessionaire nor as a tourist operator, but rather as one of those with mining claims:

> Another small group of claims are held by W.W. Bass. These claims are alleged to contain commercial copper and asbestos

> and are located in the Canyon in the vicinity of Shinumo Creek. The mineral value of these existing valid claims has not been investigated by the service or, to my knowledge, by any representative of the department.[105]

There are no mentions in the Annual Reports of 1920 through 1925 of the Bass tourist operation at Grand Canyon Village nor along the Bass trails. The slights appear to have been deliberate, since the Park Service was clearly interested in operations to the west of the village on both rims. Bass's wagon road from the Rowe Well and Bass Siding areas to Pasture Wash and on to Cataract Canyon was described as an inner road fallen into disrepair by 1921, but was not identified as Bass's road. In 1925 the Bureau of Public Roads completed surveys and estimates for improvements to the road to Cataract Canyon and the spur to Bass Camp; again, with no reference to Bass or his rights to these roads. Bass's road from Ash Fork was described as impassible in 1920 without acknowledgment that it was ever associated with Bass (the Grand Canyon spur had made this road obsolete much earlier, even for Bass's use). The annual report of 1925 indicated that a ranger station and barn were built at Pasture Wash and a telephone line completed to the station in that year, again neglecting to mention that Bass had holdings in the general area. Accounts of the considerable activity taking place on the North Rim near the North Bass Trailhead in the mid-1920s failed to refer to Bass or the larger trail. The Park Service was clearly interested in developing the western end of the park, but was careful to avoid mention of Bass's relationship and purported rights to roads and trails in the area.[106]

The Park Service also appears to have developed preferential procedures for the Santa Fe and Fred Harvey corporations while

making things difficult for private operators. An indication of these procedures are found with the handling of another small operator, Martin Buggeln, and his plans to establish a hotel and tourist operations east of Grand Canyon Village on patented land within the park in 1925. While careful to defend Buggeln's rights to his property, Acting Director Arno Cammerer outlined strict limitations on his rights within the park:

> ...in the event that Mr. Buggeln did go into the hotel business and desired to run his own cars between the railroad station and his hotel property... he would not be permitted to transport [tourists] over any other road in the park than the direct road between the station and his hotel.... if his hotel guests [wanted] to make other automobile trips in the park, the service would have to instruct the present operators [Fred Harvey] to furnish it.... It should be made plain to him... that under no circumstances would he be permitted to solicit business for his hotel within the limits of the park.[107]

During these same years the Park Service would bend over backwards to promote the interests of the Santa Fe and Fred Harvey companies. Superintendent M.R. Tillotson later summarized the relationship between the Park Service and these companies, making it clear how small operations could not effectively compete. In a letter to R.B. Ball, Chief Engineer for the Santa Fe, Tillotson reviewed the policy in effect since the earliest years:

> The twenty year contract between Fred Harvey and the National Park Service provides that the government gives to Fred Harvey by that contract... the use of such pieces and parcels of land in the park as may be agreed upon from time to time for... purposes necessary or desirable in the proposed exercise of the general privileges granted.... We therefore have ample authority to grant to the concessionaire - Fred Harvey - the use of any land that may be agreed upon... without referring the matter to the Department or without red tape of any kind....[108]

Tillotson noted that the Santa Fe -- in this case requesting an easement for building construction -- was not a concessionaire,

that the Park Service could not grant its requests for additional easements for the Grand Canyon spur and village operations, and that the application for easements was a cumbersome process, however,

> ...it is the simplest matter in the world to assign a parcel of land to Fred Harvey.... If authority is granted Fred Harvey... it is immaterial to us who constructs these buildings and so long as we use a reasonable amount of discretion in deciding just what is and what is not "solely for railroad purposes" it is obviously much simpler to handle these cases insofar as possible under the Fred Harvey contract.... I will, in accordance with the explanations as above given, and if agreeable to you, be as liberal as possible in deciding what construction here is for Fred Harvey and what is solely for the Santa Fe, so as to avoid the necessity of all the fuss incident to securing easement from the Secretary of the Interior.[109]

Although it is clear that the Park Service favored the Santa Fe and Fred Harvey, this is not to say that they gave them a free hand with Grand Canyon tourist development. Plats, blueprints, reports, and estimates were required for new constructions. All work was done at the corporations' expense and the superintendents were careful to monitor these operations and hold the companies to their obligations. By granting twenty-year leases and limiting usage under the terms of these leases, the Park Service had exactly what it wanted: large, private capital investments in tourist facilities by companies that owned none of the land and could be effectively controlled. These procedures were reasonable and of great benefit to the National Park, however, they made it difficult for small operators such as Bass to compete.

Bass was aware of the Park Service policy, which was after all merely an acceleration of the policy begun by the Forest Service. He was further apprised of policy trends by his friend

and the Park Service's arch enemy, Ralph Cameron. Cameron had been waging a battle with the Forest Service and later Park Service since the late 1890s over his control of the Bright Angel toll trail, and was interested in keeping other small operators apprised of developments to help further his own ends. The battle with Cameron and a second battle with William Randolph Hearst (who had purchased Pete Berry's homestead and Grandview Hotel interests) closer to the Grand Canyon Village area in the early 1920s helps to explain why the Park Service took a more moderate approach to acquiring Bass's holdings.[110]

In 1919 Bass was concerned about how the new management at Grand Canyon would effect his trail operations (the Park Service itself had cause for concern, since it had not yet received appropriations to manage the park). Bass corresponded with Frank "Boss" Pinckley, Park Service custodian at Casa Grande Ruin, expressing his confusion at what new policies might be effected. He indicated his readiness for a full tourist season at Bass Camp and his intention to run his "stage line to Bass Camp, a camp establishment there, [and to use] the Bass trail and ferry and trails to the north rim...."[111] Pinckley knew that he was outside his authority to guarantee anything to Bass, but assured him that:

> ...our Service has no intention of shutting out an old timer like yourself so long as you render actual service for reasonable compensation and create no friction to hinder the smooth working of the Grand Canyon National Park Machinery.[112]

Bass, indeed an old timer at seventy years of age, was nevertheless prepared to continue his trail operations. He informed Acting Director Horace Albright that he intended to effect maintenance to the north trail near Muav Saddle and that he

had recently repaired portions of the wagon road to the Topacoba Trail. Neither Albright nor Stephen Mather could assure Bass of what new policies might be placed in effect. Despite his confusion, Bass proceeded to service his tourists during the 1919 season while submitting new paperwork for grazing permits and other operations required by the change in management jurisdiction. He gave every indication of having a thriving business during 1919, yet felt persecuted (by whom is unclear) and seemed discouraged at the lack of park advertising for his camp operations.[113]

Bass appears to have abandoned tourist operations at Grand Canyon Village in 1920. He wrote to Superintendent W.H. Peters to inform him that he had no intention of renewing his lease to the 2-1/2 acres near the village (which included the Tin House) and that he would remove the structures if the Park Service had no need for them. Superintendent Peters informed Acting Director Cammerer that he had cancelled the lease and suggested to Bass that he remove the buildings as they were "unsightly," to which Cammerer concurred.[114]

In April 1920, the Park Service began to investigate Bass's claims in the west end of the park. These investigations were initiated as a result of a letter written by Bass to the superintendent describing his contract to sell asbestos to a Japanese firm, his intention to renew his mining operations, and his desire to conduct further tourist trips down the trails in what Bass referred to as "his country." Superintendent Peters considered that it might be dangerous precedent to allow Bass a

monopoly on the claimed trails, "as practically every trail in the Canyon is claimed by some old timer as his personal property."[115] The Park Service obtained a legal opinion that Bass was simply a trespasser on federal lands, but Cammerer softened this position with his own opinion that Bass had rights to access his mining claims. Cammerer, however, was quick to ask Superintendent Peters whether Bass was "conducting bona fide mining operations?"[116]

Despite these investigations, the Park Service issued Bass permits to operate Bass Camp on ten acres as a tourist hotel and to conduct his tourist operations along the trails for the 1920 season. These permits did not imply Bass's control of the trail system, but rather reflected the ongoing argument by stating that

> This permit, in no way, shall entitle the permittee to exclusive use of any roads, trails, or stream crossing or serve to restrict any road, trail or stream crossing to the full use and enjoyment of the public or other park concessionaires or the National Park Service.[117]

The permits further established the rates Bass could charge for his services. Accommodations at Bass Camp were set on the American plan: board and lodging at five dollars per day, nine dollars double occupancy. Pack trips were limited to ten saddle horses, and an extra guide was required if the party was of more than five people. Rates were set at ten dollars for one person, eighteen dollars for two, and six dollars per person thereafter from Bass Camp to the north bank of the Colorado River. Trips that included guide services, meals, and all equipment were set at fifteen dollars per day one person, twenty-five dollars for two persons, thirty dollars for three persons, and five dollars for each additional person. In other words, the Park Service was treating

Bass as simply another concessionaire, with rigid controls over his operation.[118]

Superintendent Peters inspected Bass's holdings in July 1920 and gave what might be considered in light of current arguments an objective appraisal of the camp, trails, and cable systems at this point in Bass's occupancy:

> The camp proper consists of a bungalow with dining room, a kitchen and sleeping quarters that would accommodate a party of seven or eight people, a small cottage for the help, three tent cottages for guests, a barn and corrall [sic], three splendid water cisterns and one dam or tank for stock all in a fair state of repair.
>
> The trail in the canyon on the south side of the river in point of grades and distances is about equal to the Bright Angel trail it is, however, badly in need of repair [yet] at the present time it is not unsafe.... In addition to the main trail... there are several very interesting side trails, one to Mystic Springs, one to Copper canyon, and one to Garnet canyon.
>
> [The cable] crossing consists of four well stretched and well anchored galvanized steel cables upon which run a cage capable of transporting six or seven persons or one horse at each trip. The motive power is furnished by a friction-drum winch operated from the top of the cage. It is my opinion that this cage is perfectly safe... when they are accompanied by an experienced guide.... The trail from the cable crossing to the North rim is rather over grown with brush and needs extensive repairs.[119]

There is no indication that Bass performed much maintenance on his trail and inholdings after 1920. Getting up in years, he could have done little of the work himself. Concerned with retirement, he probably did not want to pay anyone much to do it, either. The overall condition reported by Peters is an indication that the constant maintenance required was not being accomplished.

The argument for control of the Bass holdings was renewed in early 1921. Bass requested permission to operate an automobile stage in conjunction with 1921 operations, but the Park Service was concerned that this would lead to competition with the Fred

Harvey Corporation which also ran auto stages out toward Bass Camp. Bass shifted his position in March, noting to Superintendent D.L. Reaburn that lack of water on the rim and a renewed interest in mining precluded his operating the tourist business. A suspicious Park Service responded that Bass required a permit for whatever operation he contemplated, and to submit application for same with the appropriate fees. Bass had apparently been studying up on his claims and rights and consulting a local attorney. In a letter to Reaburn, Bass indicated his position that Bass Camp and trails were eliminated from the National Park by the organic act of 1919 and that the status of the trail was the same as that of the Bright Angel. He explained his willingness to accept the previous year's permit as simply an attempt to avoid friction.[120]

The Park Service immediately investigated Bass's claims to the road and trails, and determined to its own satisfaction that they were not legitimate. Bass's claim to the toll road, filed in 1891, had in fact expired since he had not submitted for an extension to the county and in any event could not legally have extended to as late as 1921. His claim to Bass Camp as a millsite was questionable, but since Peter's report of the year before had not indicated milling operations, the claim was likely invalid. Still, if Bass could prove that the site was associated with valid mining locations within the Canyon, the claim to Bass Camp could be valid. Bass had been paying the appropriate county taxes and had been doing at least some assessment work, so the Park Service was in doubt as to its position. With these doubts -- and since

Bass had indicated to Peters that he was hard up for money, could not work to improve his holdings, and only wanted to take out a few friends in 1921 -- Peters recommended that the matter be dropped for the time being and that Bass be given verbal permission to take guests down the trails from time to time.[121] Cammerer agreed, adding that:

> ...as the county has made no claim of ownership in this trail I do not believe that it would be well to bring up this question but simply let Mr. Bass go along as in the past. Mr. Bass will probably not live a great many years and if the County asserts no right in his trail during his life time they will never assert such right.[122]

This is the way matters rested for the next several years. The Park Service perhaps felt that the claims would disappear upon Bass's death and that the county was not a threat to make claims on the wagon road and trails within the park. In any event, early struggles with appropriations and the running feud with Cameron suggested that a temporary truce was wise. Bass and his family spent more time in Wickenburg during these years, but continued to take parties out to the camp and perhaps down the trails.[123]

The condition of the properties in 1922 was reported by Superintendent W. W. Crosby following a trip out to Bass Camp in September in the company of Bass, General Foreman M. R. Tillotson, and Chief Ranger Smith. This trip was in the nature of a reconnaissance to determine the value of the road and camp to the Park Service. Crosby reported that the road from Rowe Well was merely a track across the landscape and the Pasture Wash spur to Bass Camp overgrown and fainter still. The camp buildings were in serviceable condition, if dilapidated, and a good deal of general maintenance would be required before opening it up to the public.

Crosby was positive concerning potential usage of the camp, trails, and surrounding area and indicated that Bass had no definite plans for future use. The favorable tone of his letter to the director in October may have renewed the Park Service's interest in securing the property.[124]

By late 1923 Bass approached the Park Service concerning the purchase of his claims at Grand Canyon. He also began to use Senator Henry Ashurst as an intermediary. Acting Director Cammerer told Ashurst of the Park Service's position as determined in 1321, adding that:

> It is undoubtedly true that Mr. Bass did much in bringing the Grand Canyon to the attention of the world and that he made many sacrifices in bygone days. The Service has been reluctant because of the above and in view of Mr. Bass's age to question his claims, and in the past has given him a permit to maintain his camp as a tourist operation.... In recent years the superintendents have been authorized to give him verbal permission whenever he wanted to take anyone out to his camp.[125]

Bass began to pressure the Park Service to buy out his claims during 1924, bringing Arizona State Representative Carl Hayden into the issue and prompting National Park Service Director Stephen Mather to take a more active interest. Fred Harvey also became involved, loaning Bass $1,500 to proceed with improvements to his Wickenburg properties. There was some talk of federal appropriations for the purchase of the claims, but Park Superintendent J. B. Eakin felt that this was unwise since the park was still engaged in the purchase of the Bright Angel Trail. Eakin also held to the position that none of Bass's claims were patented and that he had no right to claim compensation.[126]

Superintendent Eakin began the year of 1924 with the firm opinion that Bass's claims were invalid. He was also somewhat indifferent to pursuing acquisition of the holdings. By the summer of 1924, however, his position changed considerably. Bass increased his pressure on the Park Service by intimating that he would sell his interests to others if the park did not buy them, and that he had several interested parties. At least one of the offers appears to have been legitimate. In response to a letter from Representative Hayden, Eakin, with Bass's assistance, prepared an evaluation of the holdings within park boundaries. To his surprise he discovered that the price Bass was requesting, $25,000, was probably half of the replacement value for structures, trails, and roads built by Bass. Eakin identified fifty-eight miles of trails, twenty-eight of which were of immediate value to the park; thirty-seven miles of roads, all of which were in current use by the Park Service and tourists; seven dams, three cisterns, the buildings at Bass Camp and the cable system at the river as being worthy of purchase (See Appendix B for a summary of these holdings and values).[127] In his zeal to convince Hayden that a bill in Congress to pay for the holdings was justified, Eakin changed his tune on the validity of the claims:

> You will note that Mr. Bass' mining claims and mill sites are not listed as they are not patented. It is my opinion, however, that if the General Land Office were to investigate the validity of these claims that some of them at any rate would be held to be valid claims. As Bass Camp is filed as a mill site, if any of these claims in the Canyon were declared valid, it would automatically make Bass Camp Mill Site valid....
>
> As stated before, Mr. Bass will give a quit claim to all these structures and all his mining and mill site claims in Grand Canyon National Park for the sum of $25,000.[128]

Bass continued to apply pressure on the Park Service by sending a letter to Representative Hayden in September 1924, outlining the proposition he had made to Superintendent Eakin. This was a particularly bitter letter, with claims that the Park Service had driven him out of the Canyon, stored thirty tons of dynamite in his barn (referring to the Tin House property), closed off his trail with a gate, wanted water from his cisterns, and all in all

> ... this whole business from beginning to end has been a dismal failure... after being driven out of home and business that consumed nearly forty years of my life to build up, don't you think I naturally would want relief if it could be had?.... my property [has been] made into kindling wood "in one case at least" [referring to the Tin House]. I do not feel greatly encouraged with the outlook.[129]

Hayden in turn increased pressure on Eakin, who by this time was corresponding with R. Hunter Clarkson of the Fred Harvey Corporation to try to acquire the money for purchasing the Bass holdings. Bass was willing to sell a one year option on the property for $5,000, minus the $1,500 he already owed Fred Harvey, and Clarkson thought that the money might be had. Bass visited with Eakin in September while attending his daughter Edith's funeral and further excited him with talk of the rising price for copper, the great interest in copper mines, and an option offer he had received from the Daly interests.[130] Eakin went so far as to argue with Mather over the advisability of buying the properties, stating in a letter to Mather that the mining claims were probably valid, and

> I am firmly convinced, that if something is not done to clear up this situation immediately, it is going to be a source of much embarrassment for us in the future.

> I begin to suspect that Congressman Hayden has lost interest in this matter, and in that event, someone must dig up $25,000.00 if we are to secure the Bass holdings.[131]

The embarrassment Eakin referred to was a survey under way for planned road improvements to Cataract Canyon that could be money wasted if Bass's holdings proved legitimate. Eakin followed this letter up with an encoded telegram to Mather, reporting that Ralph Cameron was trying to get possession of the Bass properties and that there was enough mineral ore to secure a patent. If an option were not soon secured the park would likely lose the property. This rumor of Cameron purchasing the property may have been a plot on Bass's part to continue the pressure on the Park Service. Eakin convinced Mather that the property should be acquired quickly, however, the Park Service did not have the money to do so. This left the Fred Harvey or Santa Fe corporations as the only means by which to secure a purchase or option at an early date.[132]

In the latter part of 1924 or the early part of 1925, the Santa Fe Land Improvement Company took out an option on the Bass properties for $5,000, $1,500 being deducted to clear the previous loan made to Bass. Neither the Fred Harvey Corporation nor the Santa Fe Land Improvement Company were particularly interested in the properties, but the Santa Fe purchased the option to help the Park Service secure the properties from other private hands. There is also an indication that the option was taken in an effort to persuade the Park Service to allow certain Santa Fe easements within the park.[133] Director Mather was not about to tie Santa Fe easements in with the purchase of the Bass properties, however, and further seemed concerned that justice be done to Bass:

> While the Bass properties may not be worth $25,000 to the Atchison Company or Fred Harvey, Superintendent Eakin has placed a valuation of them of that amount, which he considered a very fair one, both to Bass and to the Government. Personally, I would not approve of getting the properties for less value, even if Mr. Bass would consent to their sale under the immediate need for ready funds....[134]

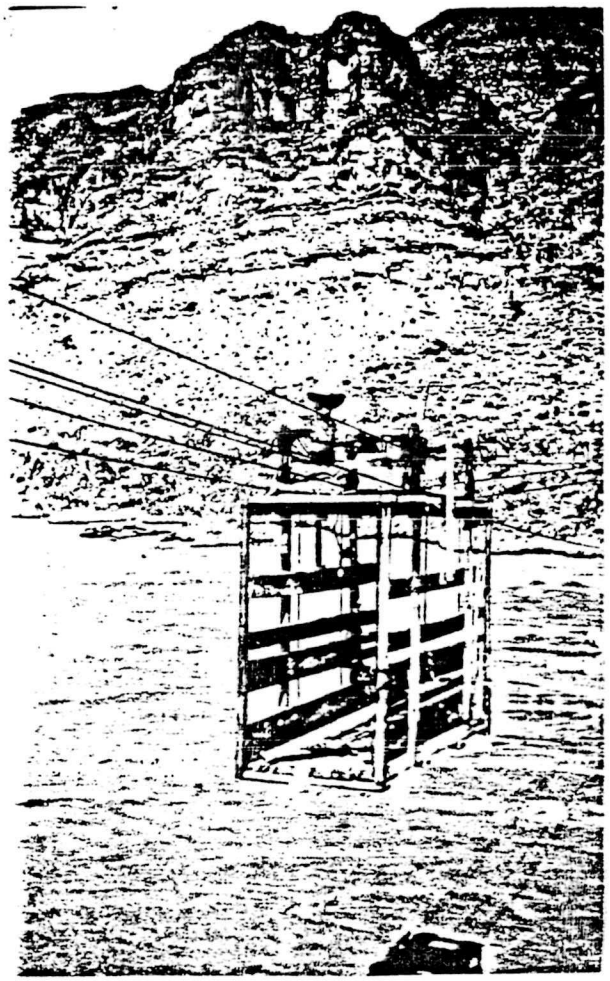
By November of 1925 the Santa Fe arranged a deal to exercise the option on the Bass properties. This eased Mather's and Eakin's concerns for rights of way in the western section of the park where the aforementioned surveys had recommended a high standard road from the village west via Bass Camp to Mannikaja Point overlooking Havasu Canyon. Purchase details were agreed to on December 2. Clarkson made the condition that the $20,000 balance of the $25,000 purchase price was to be paid with equal $10,000 checks made out to Ada Bass and W.W. Bass. Bass agreed to this condition, and seemed happy with the overall agreement. A quitclaim deed to the Santa Fe Land Improvement Company was executed on February 6, 1926, for all mining claims, mill sites, water rights, roads, trails, and structures held by Bass. The deed was dated December 11, 1925, signed by Ada and William on February 6, 1926, before a notary, and recorded February 11, 1926.[135]

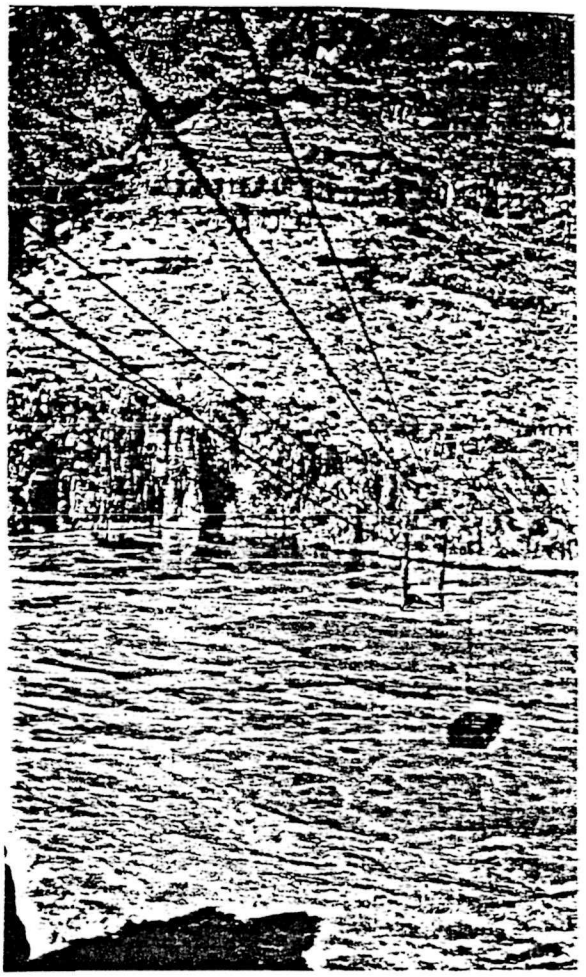
William Wallace Bass and family retired to Wickenburg, Arizona, for good in 1926, ending more than forty years of Bass operations at Grand Canyon. Bass looked forward to developing his Wickenburg properties, and was active from 1926 until his death in doing so. He prospected and worked some local mines including the Monte Cristo, irrigated gardens to sell produce, and operated a gas station and campground with three cabins. When he died of a

cerebral hemorrhage on March 7, 1933, he was cremated and the ashes spread by airplane on Bass Tomb, a rock formation along Shinumo Creek. Ada Bass remained in Wickenburg near her children and grandchildren. She died in 1951 and was buried in the Pioneer's Cemetery at Grand Canyon Village. Edith Bass died in 1924 following complications from appendix surgery and was also buried at the Pioneer's Cemetery. William Guy Bass worked for the Fred Harvey Company as a driver and guide from 1917 to 1926, then moved to Wickenburg to be near his aging parents. He operated the La Siesta Motel for many years, became a noted desert photographer, and gave slide shows on the Southwest including the Grand Canyon. He died in February 1981, and was buried at Wickenburg.[136]

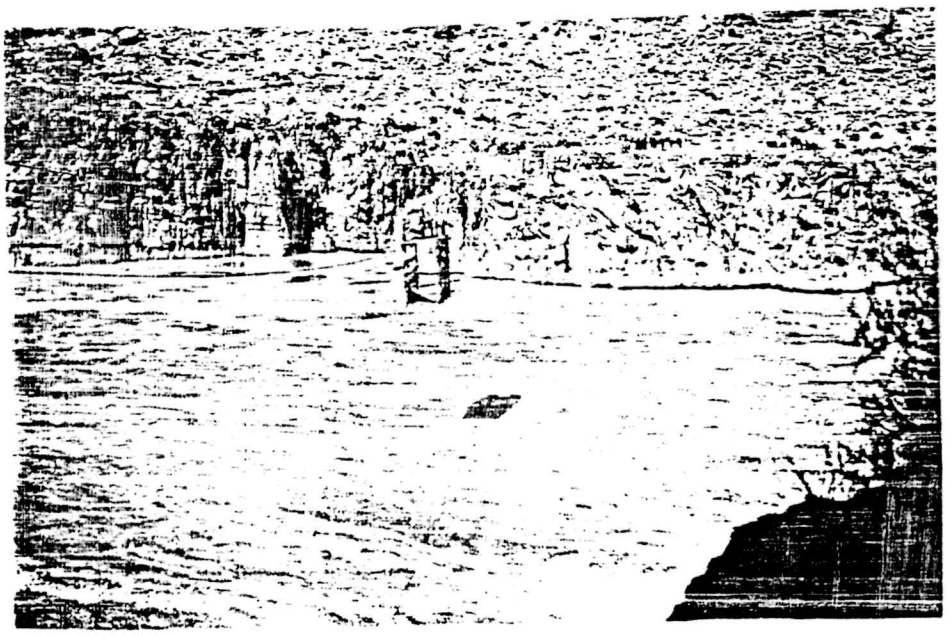
It is interesting to note that the Santa Fe Land Improvement Company wrote to Superintendent Eakin in February 1926 to inquire whether assessment work need be done to maintain title to the Bass holdings. Eakin responded that if the company did such work it would be misconstrued by others wanting to work claims that the Park Service favored the company, and that the money would be wasted in any event. Five years later the company inquired about the Park Service paying $12,500 to cover half of the 1926 purchase price, to which Acting Director Cammerer replied that they had failed to do assessment work, therefore the claim automatically fell into the hands of the Government and became a part of Grand Canyon National Park! This opinion, however, was put aside by a similar question in 1931 concerning other lands within the national park system.[137]

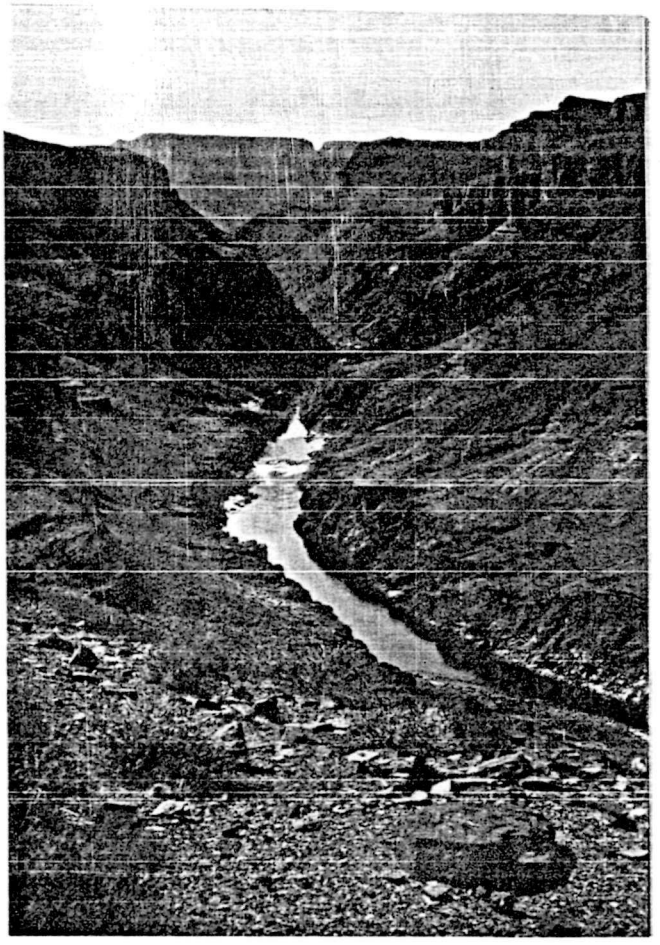
Ownership of the Bass holdings remained with the Santa Fe Land Improvement Company until December 10, 1954. On that day they were transferred by quitclaim deed to the Atchison, Topeka, & Santa Fe Railway Company. The railway transferred the properties to the Fred Harvey Corporation by quitclaim on July 25, 1955, apparently in connection with other property transfers from the railway to the Harvey company. On July 15, 1955 Daggett Harvey informed the Park Service that he was interested in donating the Bass properties to the government. This initiated a flurry of activity to determine the status of the holdings, since some Park Service personnel believed they were already a part of the park, and in any event official records in the land office and county offices were incomplete. It was determined by December 1955, that Fred Harvey had paid the taxes on the property and the Assessor's office listed these claims along with other properties, thus it was reasonable to assume that they owned the property or at least had whatever rights the government did not have. The National Park attorney determined that since the interest being released to the government was a limited one, and the claims being transferred were unpatented, an informal abstract and quitclaim deed were sufficient to transfer title to the government. An informal abstract of mining claims with twenty-nine certified photostatic copies of these claims was prepared. A quitclaim deed was executed, transferring the Bass holdings from the Fred Harvey Corporation to The United States of America on June 29, 1956.[138]





Figures 25 - 27. Bass cable system across the Colorado River, improved to four strands in 1908. These photographs were taken by Superintendent W.H. Peters in 1920. (National Archives)





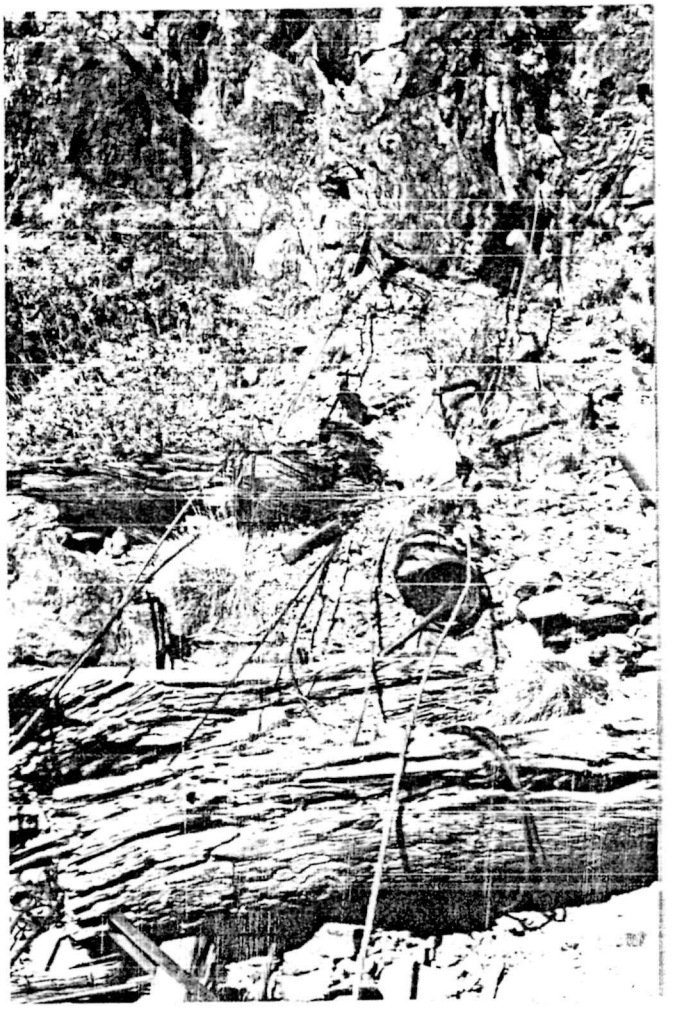
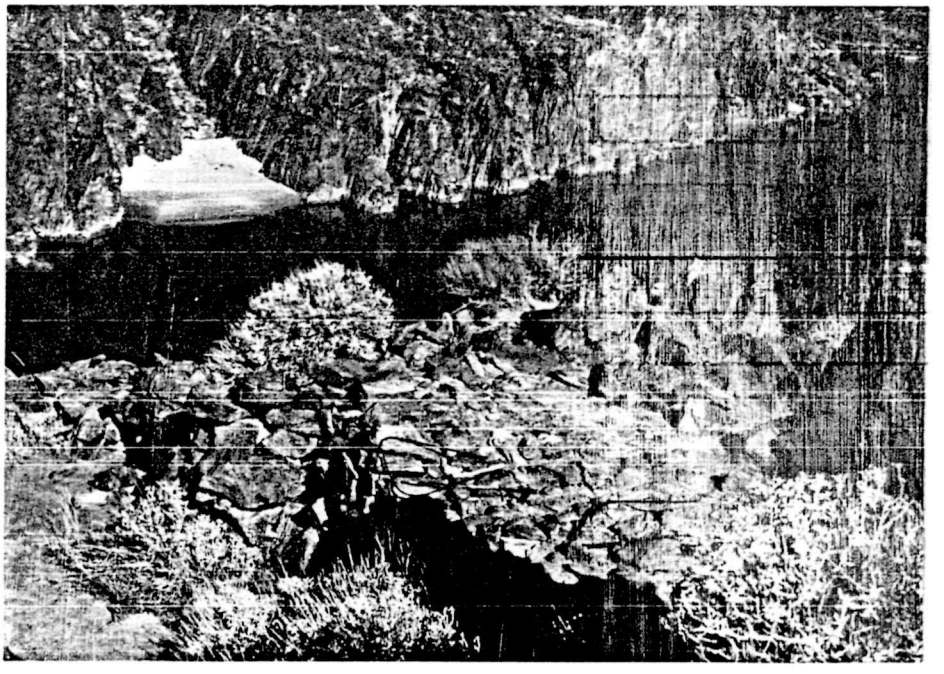


Figure 28 (Top left). Colorado River facing upriver. The Bass ferry and cable system operated below Bass Rapid.

Figure 29 (Top right). Debris at the south cable site. Cables are driven into the vishnu schist.

Figure 30. Landing platform at the north cable site. The south ferry site in in the left background. (Author's photos)



NORTH AND SOUTH BASS TRAILS SINCE 1926

The negotiations of 1923-1926 leading to the purchase of the Bass holdings indicates that neither the Santa Fe Land Improvement Company, the Atchison, Topeka & Santa Fe Railway, nor the Fred Harvey Corporation were particularly interested in acquiring the properties. There is every reason to believe that the purchase was made primarily as a favor to the Park Service (perhaps in an effort to obtain other concessions), and secondarily as insurance against possible competition in the event Bass chose to sell to other interests. In any event, the Santa Fe interests did not purchase the property with plans to integrate the area into their tourist operations. That this was the case, and that development of the holdings for tourist purposes was far from their minds, is indicated by the extent of Fred Harvey operations and plans during the period 1925-1935.

In 1925, the Fred Harvey operations included tourist facilities at Grand Canyon Village, Hermits Rest, Hermit trail and camp, Santa Maria Spring, Desert View, Phantom Ranch, and Pipe Spring. These were areas easily accessible from the railroad depot at Grand Canyon Village. The operations here included day trips along the South Rim and well-made trails to inner Canyon camp spots. Between 1925 and 1930, Fred Harvey spent $1,140,000 on construction alone to improve and expand these facilities. For the 1930-1935 period the company planned to spend another $3,500,000 on improvements and new facilities at Indian Gardens, Desert View, Phantom Ranch, and the village area. Although $300,000 of this budget was planned for expanding access and

facilities within Havasu Canyon, not one cent was planned for improvements or maintenance to Bass Camp and the Bass trails.[1]

Fred Harvey ownership of the Bass properties, along with their expenditures and planned expenditures for this period, helps to explain several facets of tourist development in the early years of Grand Canyon National Park. First, it explains why the Park Service favored a large concessionaire over the interests of small operators from the outset. With so much private money allocated for tourist services by Fred Harvey, the Park Service had that much less to seek in its own budget to provide these services. It was difficult to obtain adequate funds for park operations during the early years. In the first year of operations, 1919, congressional appropriations of any amount for Grand Canyon were cutoff temporarily through political maneuvering. Appropriations for 1922 reached $100,000 but were cut to $75,000 the following year. While superintendents struggled for these amounts of money, Fred Harvey spent $670,000 in one year to build a power plant and tourist facilities. It is easy to see why the Park Service would welcome a concessionaire willing to invest more than twice the amount of government appropriations to help it achieve one of its major goals. Also, since Harvey expenditures and plans were subject to review and approval by the Department of the Interior, effective controls could be placed on development. This neatly fitted the Park Service's dual purposes of resource protection and visitor access.[2]

Expenditures also indicate that Fred Harvey was naturally interested in development that would turn a profit. Ninety

percent of planned expenditures were targeted for expansion at the village or for services that centered there to accommodate the more than 100,000 annual tourists visiting the park by 1923. The company apparently did not see profit potential in the more remote Bass Camp and trails, therefore, development simply did not occur. With the Park Service struggling to hire sufficient rangers to patrol the park, Fred Harvey concerned with development at Grand Canyon Village, and the Bass holdings technically owned by the Santa Fe into the 1950s, it is easy to understand why Bass Camp and the trails were ignored after Bass left the area in 1926.[3]

When Superintendent Eakin visited Bass Camp and trails in 1924, he noted that the camp was already somewhat dilapidated and the trails were in need of repair. In 1928 a ranger visit to the South Bass Trail described how the deterioration had progressed in just a few years. The road to Pasture Wash Ranger Station was in "very poor condition," the "trackways" becoming waterways with each storm. The trail south of the river

> ... in general is in poor shape. There are places where slides have blocked the trail sufficiently as to deter one from attempting to take a horse down it. In other short sections there are "drop-offs" on the trail three feet deep caused by storms.[4]

Only the proliferating burros, progeny of Bass's pack stock, kept the trail in fairly good shape. The rangers noted that the cable crossing appeared to be unsafe. The cable car of oak reinforced with steel was cracked and rusted. The steel pulleys and tow cable were also rusted, although the four galvanized cables were in excellent condition. Back at Bass Camp the cisterns were full of water, but also full of bloating pack rats and chipmunks making

the water unfit for drinking purposes. The main house was beginning to fall into ruins:

> Although the Bass Camp house is protected by heavily galvanized sheet roofing, it is deteriorating rather rapidly. Windows are missing, doors are open, and chipmunks and pack rats use the space between the walls and ceilings as a rendevous [sic].[5]

Aside from the observations made of Bass Camp and the trails, this report is interesting for the effects of wild burros on the terrain surrounding the Bass trails. Bass was the first to bring burros to this area, shipping in at least two railroad car loads before the turn of the century and releasing them in the Canyon to multiply and serve as his pack animals on both sides of the river. By the time of Bass's departure, these animals had become a nuisance within the park. They would eat anything and everything they could reach, practically denuding the landscape of grasses, mormon tea, sage, catsclaw, and cactus. They also created a bewildering array of paths that tended to obscur the route of Bass's historic trail in open areas such as the esplanade of the Darwin Plateau. By this 1928 report, 146 had been killed in the western end of the park, bringing "the total casualties among this former beast of burden up to 1097." Trips to the Bass area after 1926 often included observations on the effects of burros in the western end of the park.[6]

Park rangers and naturalists made several trips down the South Bass Trail during the early 1930s, noting little of the condition other than that the section beneath the Redwall was rough and that the wild burros appeared to maintain the trail fairly well. By 1937 the facilities at Bass Camp had deteriorated

to a condition that the Park Service was interested in clearing the area. The Santa Fe gave the park permission to tear down the buildings and remove the debris, requesting only that the galvanized roofing be saved for Santa Fe pickup. Superintendent Tillotson issued a work order on August 16, 1937, to raze the buildings, stack the sheet metal for the Santa Fe, and salvage whatever materials were worth the effort. What was not salvageable was shoved over the side of the rim. This debris -- bits of wood and metal from wagons and other odds and ends -- can be found today along the slope beneath Bass Camp.[7]

It is probable that Park Service personnel and private pack outfits made trips down the trails over the next twenty years, but the principal users were no doubt the feral burros. A report on trails and paths within the park, written after the 1930s, indicated that both the South and North Bass trails were not in use and that there was no immediate need for them. It mentioned that the route was passable for a man on foot, but unfit for saddle or pack animals. Speculating on its future value to the park, it was estimated that it would cost $50,000 to bring them back into shape. The only trail up until the time of this report that had cost more than this amount to construct or maintain was the Kaibab Trail, which had cost the Park Service $150,000 between 1924 and 1928 to build from scratch. This gives some indication of the repairs required of Bass's trails and helps explain why the Park Service did not go through with the repairs.[8]

With the change of ownership in the mid-1950s, a new interest arose over potential use of the Bass Camp site and south trail in

the context of expanded operations to the west. Inspection trips were made and plans were developed for area usage far into the 1980s, but the upshot would include no development for the Bass trails nor for the Bass Camp site.

District Ranger Clyde A. Maxey made an inspection trip in March 1955 along with Assistant Chief Ranger Schuft and Biologist Bendt. He reported the trail as in fairly good condition, passable for horses with a little maintenance work. The cable system's timbers were rotted, but

> The tramway is still intact across the river.... In an emergency I believe a person could use a bosn[sic]-chair on one of the four cables and make a safe passage, however, not knowing the condition of the anchoring on the other side I believe he would have a few interesting moments out in the middle.[9]

Maxey reported that Bass's camp sites were visible and that there were still some tools at the site of Rock Camp. He also noted that the ranger station at Pasture Wash was in good shape and that the Indians were using the nearby corral.

Harvey Butchart made the same trip on foot the following year, reporting that the trail was in better shape than he expected. He could follow it the entire way except for a short distance through the Hermit Shale, but suggested that a West Side map be carried. He also noted that the trail route on the map was wrong, showing the route as swinging far to the west then doubling back to Bed Rock Tanks (this would be the Tonto Trail going off to the west then returning to the tanks along the talus spur). Butchart was interested in the path that continued from the south ferry site toward Shinumo Rapid and farther west, wondering if it was a route to the Hakatai cable site. As noted earlier in this

work, it is unclear whether Bass made this path to his Copper Canyon locations.[10]

In May of 1957 and again in February of 1958, Supervisory Park Ranger Dan E. Davis made extensive notes on inspection trips to the South Bass Trail area. He reported that the access road was in very poor condition, especially after recent rainstorms. The trail through the Kaibab formation was good enough for stock, but the switchbacks down through the Coconino sandstone were filled with rocks and difficult walking. Below the Coconino the trail was difficult to follow, but burro paths led in the right direction (the only direction available) to the esplanade. He had to give directional instructions along the Darwin Plateau to the head of the Supai formation because of the many burro paths. The trail from the esplanade to the bottom of Bass Canyon was described as the most difficult:

> The upper Supai presents the biggest obsticle [sic] to the use of stock on the Bass because they are almost completely washed out and is steep and a jumble of boulders. After the trail swings back south it improves and there, an occasional large rock is all that would block stock and is relatively easy walking. After Bass Canyon is reached, brush would be the biggest problem with stock and in many places the trail is so overgrown that it is hard to find.[11]

The trail along the east slope of Bass Canyon was easily followed and the head of the spur from Bed Rock Tanks to the Tonto Trail to the west easily found and could be followed, however, "... [it] was so far gone that it was almost cross country going and involves a strenuous climb back to the plateau."[12] The rangers took the Tonto west to Copper Canyon and a spur down to the Hakatai cable site. Here, near the mouth of Copper Canyon, they found the 1907 location notice to one of Bass's claims and carried

it out with them, giving it to the "Naturalists." (This would be the notice for one of the three Hockataia locations made in that year.)13

The rangers made their way down a spur from the Tonto to the cable system that allowed access to the mouth of Hakatai Canyon across the river. This cable system was installed after Bass sold the asbestos mines in that canyon, about 1917, to facilitate transportation of ores directly over to the Tonto Trail (a far easier route than working the ore over to the Bass cable site several miles upstream). At this visit, some forty years later, the cable was

> ... hanging in the water [and] was not attached to the shore, as was reported, but was connected to the cable car. The car was out over the river, about 150 feet from the cable anchor on the shore and about 100 feet above the water. In an attempt to work the car toward the south shore, one of the two anchor cables was disconnected at the turnbuckle which dropped the south end of the cable about 4 feet but the car would not slide to the south, apparently the car is off the pulley or the pulley is too rusted to roll.... all the cables are held with the normal cable clamp.... The south anchor of the Hakatai cable is solid, and the cable is apparently in good condition so this cable should hold a man with no trouble (if the north anchor is solid).14

The rangers were apparently investigating the cable system as a hazard to rafting parties, and concluded it was not if the parties knew what they were doing in running Hakatai rapid. They were also, incidentally, testing the capabilities of radio handsets (KB9673), which worked quite well from most locations along the Bass Trail.15

Davis's trip in 1958 further described the South Bass Trail as rocky, but easy to follow to the Darwin Plateau where it fans out into a maze of burro trails. He noted that the head of the

Supai switchbacks was difficult to find but that the map was accurate and a direct route to the Supai could be found by following it. This trip was also a burro-seeking expedition, and fresh sign was evident along the trail from Bass Camp to the Darwin Plateau. Davis estimated from this and several recent trips that perhaps two hundred burros ranged within the Canyon from Hermit Creek west to Garnet Canyon. He noted that it would be difficult to shoot them out of the rugged country between Bass and Agate Canyons and that "none of the Indians making burro drives will ever go in there after them."[16]

Whatever interest these reports of the mid-1950s may have engendered, they did not lead to the establishment of facilities at Bass Camp nor the improvement of the Bass trails. During the late 1960s and early 1970s the Park Service considered making general improvements to the west along the South Rim as far as Havasu Canyon. These plans included possibilities of improving a jeep road away from the old telephone route, which was straight along the park boundary and somewhat dull, and possibly following the surveys of 1925 which would be in rough accordance with Bass's original wagon road. The general idea was to establish view points along the rim, including Boucher Canyon, Jicarilla Point, Havasupai Point, Bass Camp, Forster Canyon, and Manakacha Point, with spur roads leading from the main jeep road to these points. Bass Camp was also in the running for an overnight campsite, and was mentioned as a possible site for overnight accommodations and meal services. In late 1968 Fred Harvey was expected to begin advertising for 1969 trips to Manakacha Point (for "binocular

gazing into Supai Village"), with a lunch stop at Bass Camp. Comfort facilities (pit privies) were to be installed and the area cleaned up. The general park wilderness plan being considered in 1971 suggested that a primitive overnight camp be developed at Bass Camp. These ideas and proposals led to few, if any, improvements in the area of Bass Camp and no improvements to the trails.[17]

Today, Bass Camp and the Bass Trails are substantially in the condition of the last official reports found through this study. All of Bass's structures on the rim are gone, but the Pasture Wash Ranger Station built in 1925 about three and a half miles short of Bass Camp along the spur road still stands. Its walls and roof are intact, but it is falling into disrepair from lack of use. Today's guide books indicate that it is manned in the summer, but the station itself has not been used by the Park Service since 1977, is uninhabitable, and could not easily be restored. The floors are rotted and the interior otherwise is a wreck.[18]

At the site of Bass Camp, some of the debris shoved over the side in 1937 is found beneath the rim. Several foundations help identify what the entire camp may have looked like seventy years ago. Rusted tin cans litter the slope leading to the western wash. Bass's principal cistern immediately beneath the rim near the trailhead is intact, with the rusted ventilation pipe (choked with debris) still penetrating from the ledge above. The stacked-stone walls of Bass's photography "studio" beneath the rim are crumbling, but still mark the spot. The walls of the

Havasupai watchtower atop the rim still overlook the esplanade below as they have for centuries. Despite the plans of the previous quarter century, the only recent improvement to the camp has been the placement of two picnic tables.

The trailhead is now marked by a standard Park Service sign, and the trail itself steps off the rim beside the twin pinyons as it has since Bass arrived. The trail is in good shape for hikers, all the way to the Colorado River, with problem sections being those encountered by historic users. The switchbacks through the Coconino talus beyond the Indian storage bins often require a scramble. The esplanade still contains multiple faint paths, although the direct route to the Supai is better worn and marked by cairns. At the bottom of Bass Canyon, creek bed brush still encroaches on the trail, making passage irritating but not difficult. The trail through the Hakatai shale in and about Rock Camp is marked with cairns and likely in better shape than it was during Bass's time.

Near the river the first spur trail descends to Upper Bass campsite just above Bass Rapids and passes a metal boat, the Ross Wheeler, built by Bert Loper in 1914 and abandoned in 1915 by the Russell, Tadje, and Clement Expedition. This spur was not created nor was it used by Bass, although it is a favorite south side campsite for hikers and river runners today. The historic trail continues about half a mile to the spur above the ferry site, where it immediately branches upstream slightly to the south side cable terminus as well as continuing to the small cove where the ferry was launched. Backpackers who have hiked the South Bass

since the early 1970s remark that the trail today is in far better shape than it was in 1970, and attribute the fact to usage.[19]

The North Bass, as previously indicated, varies in places from its original route, with the principal variation being the bypass of the soft talus above Shinumo Creek in favor of a route along Shinumo to White Creek and thence up that creek. The last struggle up the talus beneath the Coconino Sandstone also varies as today's hikers opt for a more direct, northerly approach to the Coconino, reaching it west rather than east of the springs. Without a topographical map or knowledge of the original trail, these historic sections would undoubtedly be missed by today's hikers. The 1988 Provisional Edition of the King Arthur 7.5 minute quadrangle preserves the original trail above the Shinumo while adding the Shinumo-White Creek route, but ignores the historic route to the Coconino in favor of the new trail west of the springs.

As has been noted in this study, there are vestiges of the various camps Bass established along his trails. Few signs remain at Mystic Spring and Rock Camp, and although they cannot be seen from today's trail, they can be identified once found. River Camp is marked by the stacked-stone fireplace along the trail. Both cable sites are littered with debris and are easily recognized, but again are not common destination points for today's hikers. Shinumo Camp is identified by the benchmark and stone fireplace found along the trail on Shinumo Creek. The best construction, of course, is the snowshoe cabin located on Muav Saddle, still used by modern hikers. Constructed in 1925, it is



Figure 31.

Photography Studio at Bass Camp.

(Author's photo)

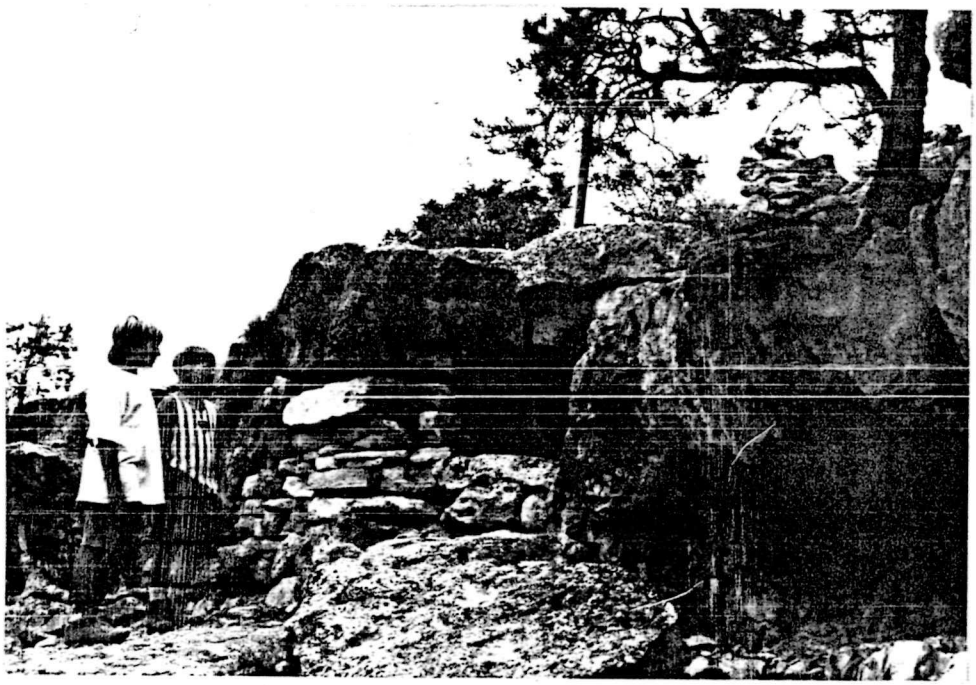


Figure 32.

Storage cistern at South Bass Trailhead.

(Author's photo)

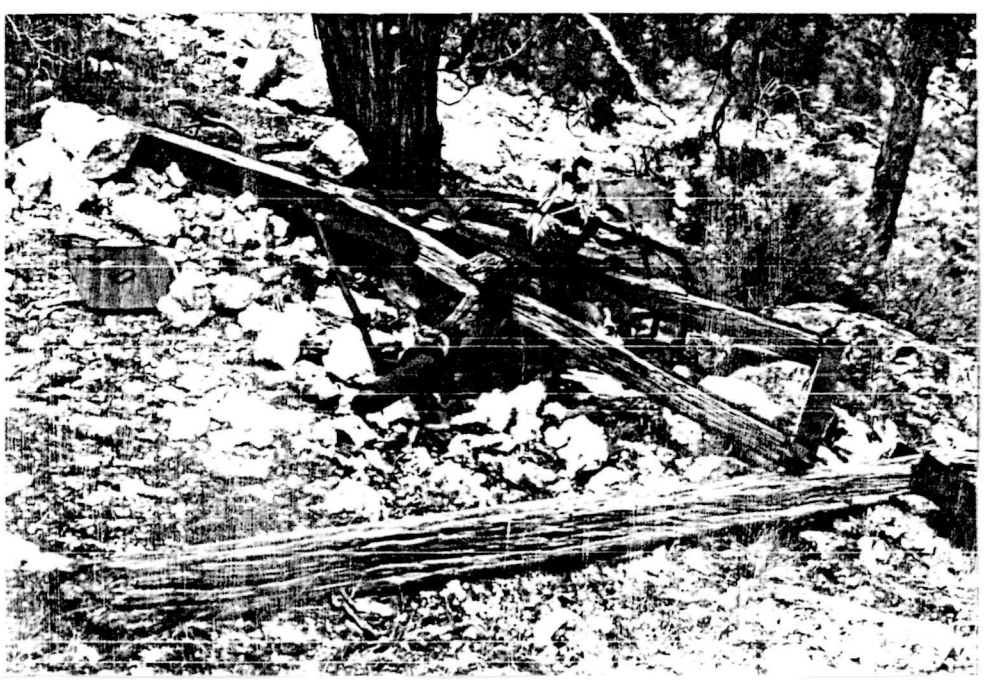


Figure 33.

Wagon debris beneath Bass Camp.

(Author's photo)



Figure 34.

Stacked stone Indian ruin at Bass Camp.

(Author's photo)



Figure 35.

Debris on west side of Bass Camp.

(Author's photo)

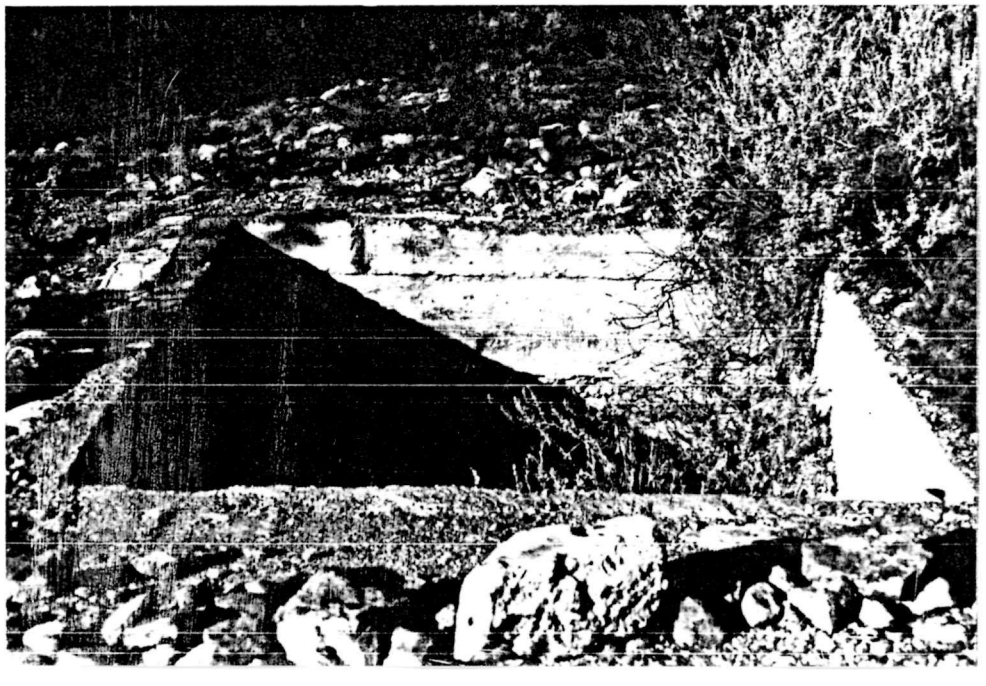
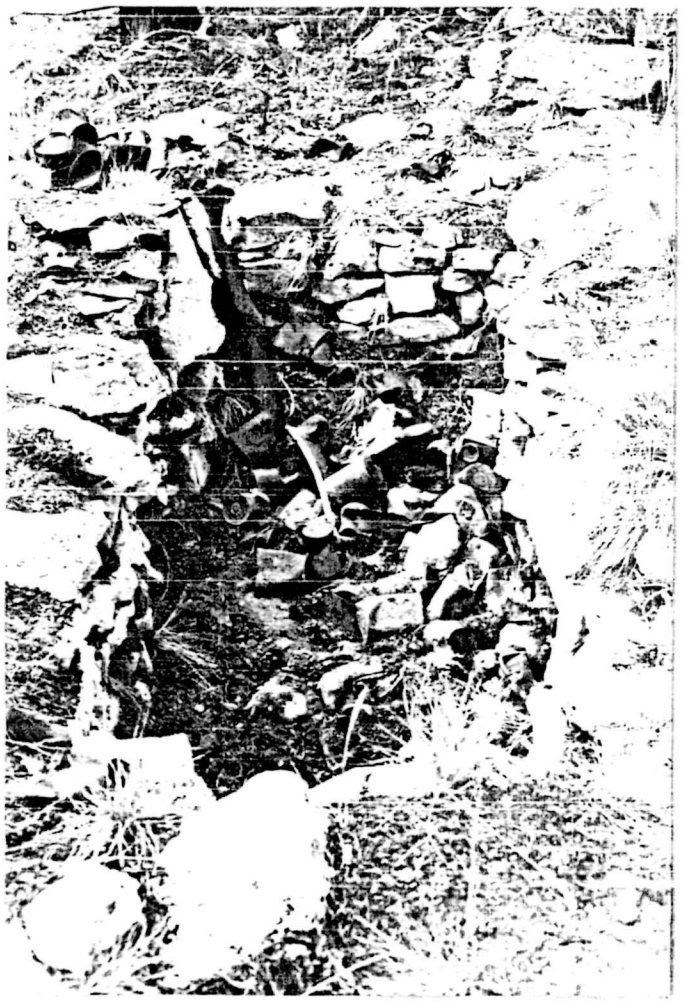


Figure 36.
Concrete cistern at Bass Camp.

(Author's photo)



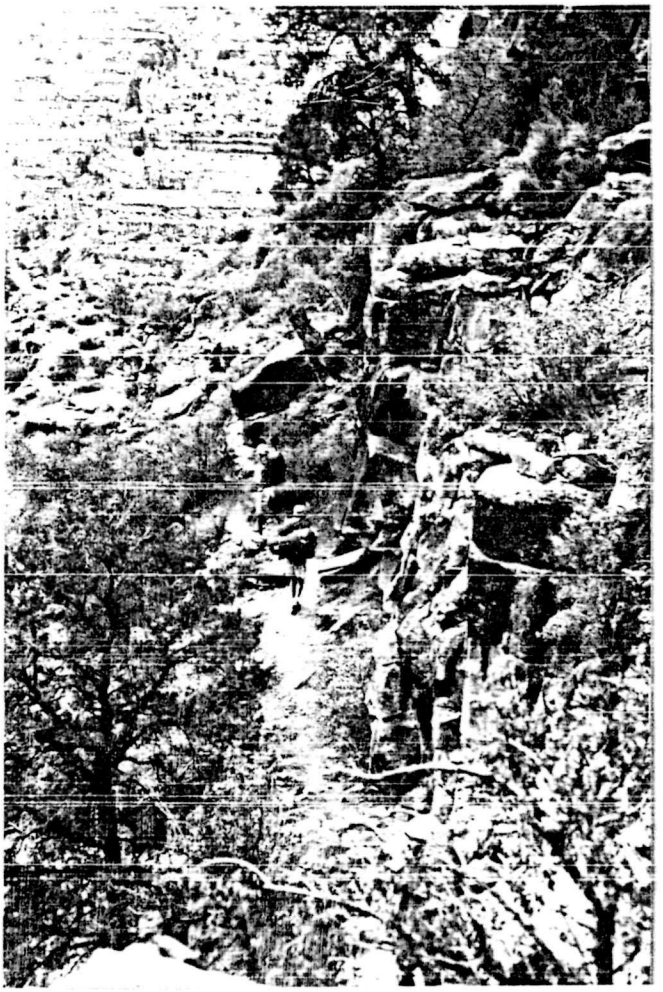




Figure 37 (Above left).

Outhouse "foundation" at Bass Camp
(Author's photo)

Figure 38 (Above right).

South Bass Trail beneath the Supai, about 100 yards below the benchmark at 5376'
(Author's photo)

Figure 39.

Stacked stone retaining wall along the South Bass Trail at the benchmark at 4851'
(Author's photo)

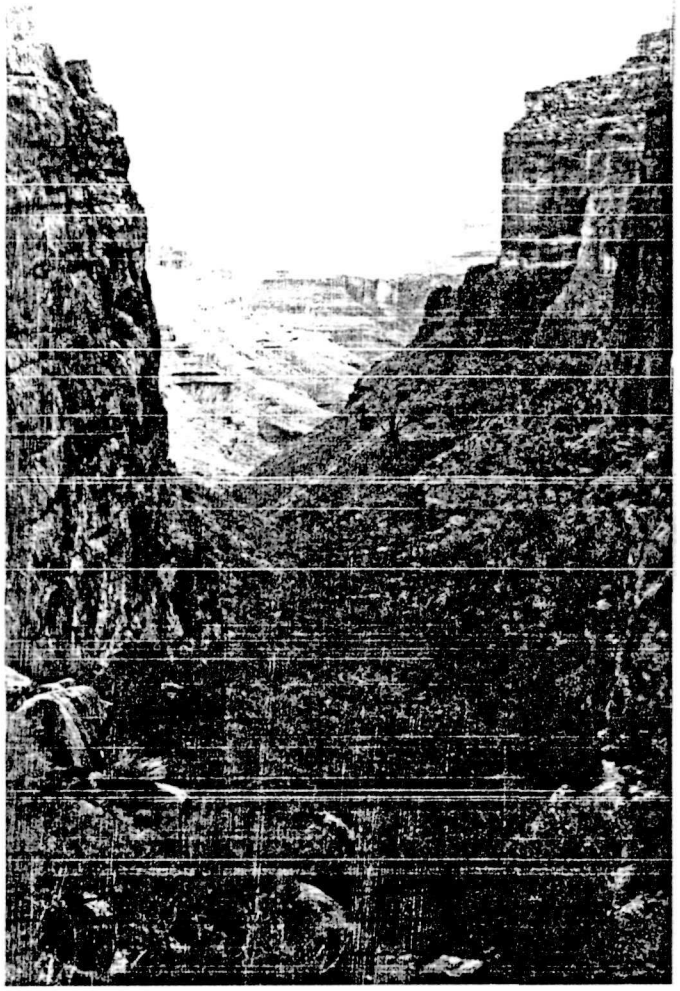






Figure 40 (Above left).

Looking down Bass Canyon from the break in the Redwall.
(Author's photo)

Figure 41 (Above right).

South Bass Trail above the creek bed in Bass Canyon
(Author's photo)

Figure 42.

Bed Rock Tanks above Rock Camp. Facing up Bass Canyon.
(Author's photo)

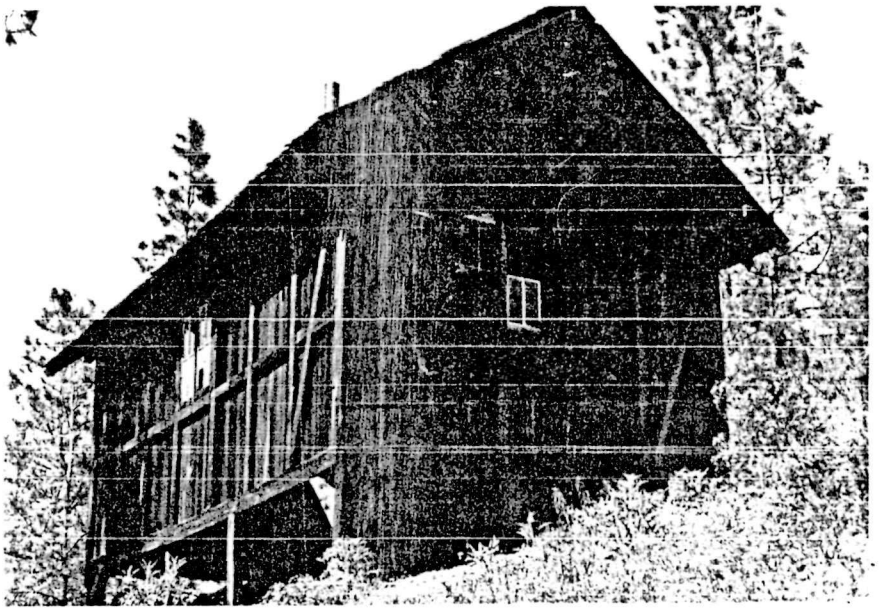


Figure 43.

Muav Saddle snowshoe cabin. Facing NNW.

(Author's photo)

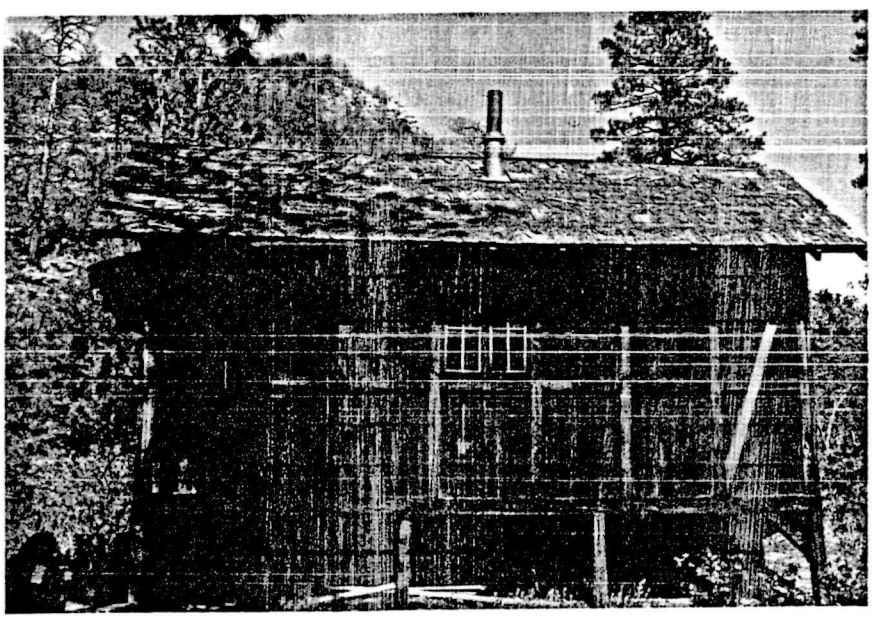


Figure 44.

Muav Saddle snowshoe cabin. Facing NNE.

(Author's photo)



Figure 45.
North Bass Trail near Swamp Point

(Author's photo)

outside the realm of Bass's history, but is Grand Canyon history nonetheless. It should be noted that this study did not prove that the existent cabin is that constructed in 1925, but it appears to date to that time and no evidence was found of a more recent construction. This cabin barely escaped the Swamp Point fire of 1989, which reached the saddle and scorched trees near the cabin but spared the structure.

CONCLUSIONS

Two thousand years of Native American occupation preceded Anglo-American settlement of Grand Canyon. During those long centuries, the Anasazi and later Native Americans managed to maintain fairly stable populations while exploiting natural resources to the limits of their technology. Today the trails and plateaus are littered with several thousand of their stacked-stone ruins and foundations, pottery sherds, and bits of chert to remind us of their passing, and of the tendency of humankind to use its collective knowledge toward maximum development of the environment.

It is interesting to speculate what we might find today if the miner-tourist entrepreneurs of the late nineteenth century and their successors had been allowed to exploit the Canyon to the limits of newer technologies. Scarcely a hundred years after their coming it is not hard for today's entrepreneur to imagine condominiums at Bass Camp, planned developments stretched along the fifty miles of trails, and private tramways to the boat docks along a lake deep within the Canyon. William Wallace Bass would

have done it in 1884 if he could; he had the imagination, but not the money, tools, nor consumer demand to make it happen.

Bass had, however, the desire to come to the Canyon's rim and make it his home, the business sense to know that others would want to see it, and the determination to carve miles of roads and trails to give them access. He was among the first to work for a Grand Canyon Railroad spur to increase visitation, and was the most vocal proponent of development in the western end of the park. He and the other handful of early pioneers succeeded in attracting and accommodating the earliest tourists, and when the they came in sufficient numbers, the Atchison, Topeka & Santa Fe stepped in to ensure maximum visitation and development. Bass, therefore, can be credited along with his several contemporaries for creating the motive force -- tourism in big numbers -- behind the creation of Grand Canyon National Park.

Fortunately, the railroad was soon followed by the National Park Service, the counterbalance to unregulated exploitation at Grand Canyon and other national parks. It was the early Park Service employees like Mather, Eakin, and Tillotson who joined battle -- sometimes doggedly with interests such as Cameron and Hearst, sometimes patiently with "old-timers" like Bass -- to arrest unrestricted development of the natural resource. This battle, and the similar battles fought throughout the American West, deserve more study because they mark the beginning of preservationist victories over unrestricted exploitation of America's open lands. Bitter in later years over what he perceived as a cozy arrangement between the Park Service and the

Fred Harvey Company, and equally bitter over the government policy of forcing out private interests, Bass was nonetheless a believer in governmental regulation of Grand Canyon development and was known to lobby for it. If he lived with what we know today of human influences on the environment, he might be expected to forget the condos and join forces with the Park Service.

William Wallace Bass left the Canyon sixty-five years ago, leaving the question of park development to others. This study has revealed that the others have done little with Bass's home and trails while commercial tourism has continued to center at Grand Canyon Village. It is not the purpose of this work to suggest that development should have proceeded otherwise. The profits of private concessionaires, the demands of modern visitors, and the need for adequate control over tourist use are reasons as valid today as they were in 1920 for maintaining operations in a central location. This work does suggest, however, that the Bass trails offer an interesting mix of history and prehistory for those who are willing to make the considerable effort to approach the Canyon at Bass Camp.

ENDNOTES

Early Native American Occupation

[1] David Grant Noble, Ancient Ruins of the Southwest (Flagstaff, AZ: Northland Publishing, 1981), 25, 62; Richard W. Effland Jr., A. Trinkle Jones, and Robert C. Euler, Archeology of Powell Plateau: Regional Interaction at Grand Canyon (Grand Canyon: Grand Canyon Natural History Association, 1981), 12f.

[2] Noble, Ancient Ruins, 25; Effland, Archeology, 8.

[3] Noble, Ancient Ruins, 25-29, 62ff; Effland, Archeology, 13. Effland states that there is no direct evidence of inner Canyon population until A.D. 700-800.

[4] George Wharton James, In and Around the Grand Canyon (Boston: Little, Brown, and Company, 1908), 123f; [field trip ranger] to the Superintendent, memorandum, 15 February 1928, History Files, Grand Canyon National Park library, hereafter referred to as "GCNP Library."

[5] James, In and Around, 150f; field observations, June 1990.

[6] Effland, Archeology, 3, 26, 31, 37; field observations, May 1990; Euler to Anderson, letter, 11 June 1990, author's possession.

[7] Bertha P. Dutton, American Indians of the Southwest (Albuquerque: University of New Mexico Press, 1983), 179; Stephen Hirst, Life in a Narrow Place: The Havasupai of the Grand Canyon (New York: David McKay Company, 1976), 40.

[8] Douglas Wright Schwartz, "Havasupai Prehistory: Thirteen Centuries of Cultural Development" (Ph.D. diss., Yale University, 1955), 285-293; Hirst, Life in a Narrow Place, 42-43.

[9] Dutton, American Indians, 181-183; J. Donald Hughes, In the House of Stone and Light: A Human History of the Grand Canyon (Grand Canyon: Grand Canyon Natural History Association, 1978), 9-14; Hirst, Life in a Narrow Place, 44; Jacilee Wray, "Havasupai Ethnohistory on the South Rim of Grand Canyon National Park: A Case Study for Cultural Resource Management in the National Park Service" (Masters Thesis, Northern Arizona University, 1990), 16-18, 20-21.

[10] Dutton, American Indians, 180ff; Wray, "Havasupai Ethnohistory," 20-21.

[11] James, In and Around, 150.

[12] Ibid., 150ff.

[13] Stephen Maurer, "Following the Footsteps of W.W. Bass," Wildwater Magazine, 1986.

[14] Assistant Superintendent Lon A. Garrison, "Notes Taken From W.W. Bass Material at Wickenburg, Arizona - January 30-31 and February 1, 1952," 1952, Trails Miscellaneous File, GCNP Library, 13. Garrison took these notes from manuscripts, records, photographs and other materials of W.W. Bass. The Bass materials were donated to the Arizona Historical Society, Tucson, in 1986, but were on loan to Stephen Maurer, Albuquerque, New Mexico, during 1990-1991 when this report was prepared and were unavailable to the author. The 1952 notes are hereafter referred to as the "Garrison Notes."

[15] James, In and Around, 151f; A similar version of this story was related by Ada Bass, Garrison Notes, 10.

Pioneer Exploration and Settlement

[1] Hughes, In the House, 27ff.

[2] W. Turrentine Jackson, Wagon Roads West: A Study of Federal Road Surveys and Construction in the Trans-Mississippi West, 1846-1869 (Lincoln, NE: University of Nebraska Press, 1964), 23f, 28, 244-47; Marshall Trimble, Roadside History of Arizona (Missoula: Mountain Press Publishing Company, 1986), 237, 277-279.

[3] Ibid., 227-234.

[4] Robert Clark Euler, "A Half Century of Economic Development in Northern Arizona, 1863-1912" (Masters Thesis, Arizona State College, 1947), 29f, 57f, 76f.

William Wallace Bass

[1] Garrison Notes, 20. Many sources give or imply 1847 through 1849 as years of Bass's birth. 1848 and 1849 are the most frequent years given. The author uses 1849 for this report as it is the date noted in the Garison Notes, 20, and the History of Arizona: Family and Personal History (New York: Lewis Historical Publishing Company, Inc., N.D.), Vol. 3, 131f, and repeated in several other sources. It should be noted, however, that reliable sources, including Stephen Maurer, give 1848 as the birth year. All sources agree that Bass was born in Shelbyville, Indiana on October 2nd; Garrison Notes, 1, 7.

[2] Garrison Notes, 1, 2, 7; James, In and Around, 174; William Wallace Bass, Rhymes and Jingles (Los Angeles: J.F. Rowney Press, 1915), 8; James R. Fuchs, A History of Williams, Arizona: 1876-1951 (Tucson: University of Arizona Press, 1953), 35ff. Williams had 260 registered voters in 1882, the year the railroad gangs arrived, but a total population of only 35 in 1884 after the gangs moved west. Bass arrived at Williams during a most turbulent time.

[3] Garrison Notes, 2, 13; Fuchs, History of Williams, 61f.

[4] Garrison Notes 3, 13, 19; William Wallace Bass, Adventures in the Canyons of the Colorado (Grand Canyon: by the author, 1920), 36; Garrison Notes, 3; Nell Murbarger, "Trail-Blazer of Grand Canyon," Desert Magazine (October 1958): 5-9; Garrison Notes, 13.

[5] Maurer, "Following in the Footsteps," 12; Garrison Notes, 1; James, In and Around, 176-190, passim.

[6] Garrison Notes, 10, 19; James, In and Around, 244-246; Stephen Maurer, Solitude & Sunshine (Boulder, CO: Pruett Publishing Company, 1983), 1.

[7] Garrison Notes, 10; Lisa D. Madsen, "The Grand Canyon Tourist Business of the W.W. Bass Family," (Masters Thesis, University of New Mexico, 1980), 15f, hereafter referred to as "Madsen, thesis"; Stephen Maurer to Douglas Brown, Cultural Resources Management Specialist, Grand Canyon National Park (GCNP), letter, 31 December 1990, a copy in the author's possession. Maurer says there is little evidence other than the accounts of W.W. Bass, Ada Bass, and George Wharton James to confirm Bass's activities between 1883 and 1888, and that their claims of early activity may be attributed to "primacy arguments" between Bass and John Hance. It is true that the author found little to confirm activity prior to 1891, but Bass, his wife, and James -- all used extensively in this study -- are assumed by the author to be generally reliable sources.

[8] Hughes, In the House, 44-49; Garrison Notes, 8-10, 16; Madsen, thesis, 15-17.

[9] Garrison Notes, 8, 14, 16.

[10] Garrison Notes, 11. Garrison states that this information was written on the inside cover of the post-1895 register; Madsen, thesis, 42.

[11] Anonymous manuscript to Dr. Bryant at GCNP, written between 1937-1941, 8, 10, Historical File, GCNP Library, hereafter referred to as "Bryant manuscript"; Maurer, Following in the Footsteps, 13; James, In and Around, 194; Murbarger, 6f.

[12] James, In and Around, 120.

[13] See Appendix B for notation.

[14] Park Superintendent J.R. Eakin to Arizona State Representative Carl Hayden, letter, 3 July 1924, Bass Claims File, GCNP Library.

[15] See Appendix A for notation.

[16] Garrison Notes, 10; Congress, House, 58th Cong., 2nd sess., H.R. 10411, Congressional Record, (18 January 1904). Arizona congressman Wilson introduced a bill granting a right of way for a "trailway" to W.W. Bass, one hundred feet wide and extending from Bass Camp to the North Rim. The right was for public use and contingent on Bass building a cable system across the river and maintaining the

trail. It allowed Bass five acres at each trail end for hotels, stock, etc., and to charge tolls fixed by the Department of the Interior. The right would be good for twelve years. The bill refers specifically to the map filed by Bass with Coconino County on 26 August 1891. It is not known if this bill passed. It is not referred to in later arguments on Bass's rights within the Canyon, perhaps because it would have expired by 1916. See also Flagstaff (Arizona) Coconino Sun, 20 June 1891. The Sun printed a note that Bass was building a road to Grand Canyon at this date. In conjunction with the "pass to Grand Canyon" several months later, it is quite possible Bass did not go to work on a stage line until 1891. Further, a review of all issues of the (Holbrook, Arizona) Apache County Critic, published June, 1886 through September, 1887, reveals that while stage connections from the A & P Railway main line to points north and south were consistently advertised (by the railway) -- including that of Farlee to Diamond Creek at Grand Canyon -- Bass's purported stage line was not.

[17] Arno B. Cammerer to Superintendent D.L. Reaburn, letter, 5 April 1921, History File, GCNP Library.

[18] Madsen thesis, 21; Bass, Adventures, 5ff.

[19] Garrison Notes, 9; Maurer, In the House, 52; Florence Arizona Enterprise, 21 November 1891. Bass had several names for his stage operation over the years, including the Williams Stage Line and the Grand Canyon Stage Line. The Arizona Enterprise article states that Bass leased the Peach Springs & Grand Canyon Stage Line which ran from Peach Springs to the Farlee Hotel at the mouth of Diamond Creek, but is not clear whether he ran this line or simply leased the equipment for his Williams to Bass Camp route. The railroad spur to the Canyon completed in 1901 made these stage lines obsolete.

[20] Lisa Madsen, "Women and The Grand Canyon," undated bound manuscript, GCNP Library, 3f. Madsen wrote this 24 page manuscript almost exclusively from the diary of Ada Diefendorf Bass.

[21] James, In and Around, 58f; Garrison Notes, 9f; Murbarger; "The Ash Fork Route", undated advertising brochure published by W.W. Bass's Grand Canyon Stage Line, Special Collections, University of Arizona, Tucson, hereafter referred to as the "Ash Fork Brochure".

[22] James, In and Around, 64.

[23] Ibid., 95.

[24] Garrison Notes, 7.

[25] James, In and Around, 335-338; Bryant manuscript, 8f.

[26] James, In and Around, 257f; Ash Fork Brochure, 17f. Bass advertised the trip to Supai as taking three to four days at a cost of fifteen to twenty dollars for board, camp equipment, and saddle animals. The Topocoba Trail is one of the two trails to Supai still allowed to be used by the Havasupais, but almost all hikers today use the more easily accessible Hualapai Trail.

[27] Ibid., 147ff.

[28] Maurer, "Following in the Footsteps," 13; James, In and Around, 155f.

[29] Interview with Donald Ziegler, Phoenix, Arizona, March 31, 1991. Ziegler has recent photograph slides of the Mystic Spring site and Bass's nearby campsite. Mystic Spring is not identified on recent topographic maps, and older maps do not accurately identify its location. Ziegler identifies it as further north along Spencer Terrace, just beneath terrace level, at the northernmost head of Garnet Canyon.

[30] Garrison Notes, 4f.

[31] Madsen, thesis, 17; Garrison Notes, 4f; Ash Fork brochure, 7-15, passim.

[32] Garrison Notes, 11f; Madsen, "Women", 6; Garrison Notes, 4f, 6, 11; Madsen, thesis, 42.

[33] Garrison Notes, 14; Madsen, thesis, 41ff; "The Second Cinch Always the Best", Williams (Arizona) News, 23 February 1901. The Williams News article was written between the time Lombard, Goode & Company stopped contruction and the Santa Fe continued the line to Grand Canyon. It is an impassioned plea for construction to recommence, but also an interesting indirect comment on Bass's importance to the railway and the region as a whole. It reads in part, "W.W. Bass, the apostle of the Grand Canyon, is more than any, responsible for bringing this capital [Henry P. Barbour and H.B. Haveland, capitalists holding options on the Grand Canyon Mining District] into this district." For a further account of the completion of the spur, see Flagstaff (Arizona) Coconino Sun, 26 May 1900, 1 August 1900, 20 July 1901, and 12 October 1901.

[34] See Appendix A for notation.

[35] Garrison Notes, 14.

[36] Edwin D. McKee, "Copper Deposits of Grand Canyon," Grand Canyon Nature Notes, 31 July 1930, GCNP Library.

[37] Murbarger, "Trail-Blazer", 6; James, In and Around, 85; Madsen, thesis, 39; Maurer, "Following in the Footsteps", 14f.

[38] Garrison Notes, 16, 11, 15; Madsen, "Women", 7f; Appendix A, Bass Mining claims.

[39] See Appendix A for notation.

[40] Maurer, "Following in the Footsteps", 13.

[41] George Wharton James, The Grand Canyon of Arizona (Boston: Little, Brown, and Company, 1910), 84.

[42] Maurer, "Following in the Footsteps," 14, quoting from William Wallace Bass's 1898 diary entry; field observations, May, 1990; James, In and Around, 155-156. Douglas Brown, Resource Management Department, Grand Canyon National Park, and Donald Ziegler, Phoenix, Arizona, note that another route exists from the esplanade through the Supai to Bass Canyon, with a shelter just beneath the esplanade that appears to have been used as a rest stop and viewpoint. Harvey Butchart in Grand Canyon Treks (Glendale, CA: La Siesta Press, 1990) also mentions this route and calls it a "climbers shortcut." It appears that Bass began a trail from Bass Overlook (as Ziegler has named the rest stop), but abandoned work on it to go the other way from Benchmark 4 and past Benchmark 5.

[43] James, In and Around, 156.

[44] Levi F. Noble and J. Frederick Hunter, A Reconnaissance of the Archaen Complex of the Granite Gorge, Grand Canyon, Arizona (Washington: Government Printing Office, 1916), 95. Noble strongly implies that Bass built this section of the Tonto Trail from Bass Canyon to Copper Canyon.

[45] Ibid., 158.

[46] Maurer to Brown, letter, 31 December 1990. Maurer states that there was never a spring at Rock Camp, and the terrain leads one to believe this. Although several travellers commented on "stagnant" water in the tanks, leading one to believe that the water was simply runoff, Joseph McAleenan in Grand Canyon Trails (New York: published by the author, 1924), 18, specifically mentions a spring at Rock Camp, which was perhaps further up the slope or somewhere nearby.

[47] Maurer to Brown, letter, 31 December 1990.

[48] Butchart, Grand Canyon Treks, 45; James, In and Around, 168ff.

[49] Maurer, "Following in the Footsteps," 14; field observations, June 1990; Stephen Maurer, "Grand Canyon's Bass Corridor", [ca. 1986], author's possession.

[50] James, In and Around, 198.

[51] Garrison Notes, 10; James, In and Around, 199 - photo of the craft; Colin Fletcher, The Man Who Walked Through Time (New York: Vintage Books, 1989), 117; Williams (Arizona) News, 14 September 1939. this article was a reprint of a 1905 article in which a hunting party mentions both boats in use.

[52] Maurer, "Following in the Footsteps," 15; field observations, May and June 1990; Maurer to Brown, letter, 31 December 1990. Maurer believes that once on the north side of the river Bass would row his boats from today's Lower Bass Campsite to a point upstream of the south cove, then cross with the current to the south side, and that this is fairly simple to do during periods of low water. In "Following in the Footsteps", he states that Bass would "haul the boat upstream, follow a

small gully (where he built another trail) to the river, launch below Bass Rapid..." to return to the south side. It is reasonable to believe that Bass and a few men could easily carry the small boats if necessary, perhaps during higher water, but would prefer to row upstream whenever possible.

53 James, Grand Canyon, 85.

54 Effland, Archeology, 22; Garrison Notes, 16; Will C. Barnes, Arizona Place Names (Tucson: University of Arizona Press, 1988), 482, 484; Maurer to Brown, Letter, 31 December 1990. Barnes contends that White Creek and Whites Butte were named for James White, which suggests that he was associated with the North Bass Trail area if not the developer of an upper trail. According to Maurer, Bass told Park Superintendent Tillotson that White Creek and Canyon were named for a prospector named White, but Maurer, who has done considerable research on James White, never found evidence that he had prospected within the Canyon.

55 James, In and Around, 200ff.

56 Larry A. Morris, Hiking the Grand Canyon and Havasupai (Tucson: Aztex Corporation, 1981), 114; Field observations, May 1990; River guide Tim Whitney and others, May 1990.

57 Madsen, thesis, 39; field observations, May 1990. The United States Geological Service placed benchmarks along the North Bass Trail in 1906 to facilitate mapping. These benchmarks help to identify portions of the historic trail. Today's river guides attribute the well-worn, lower trail leading from Lower Bass Campsite to Shinumo Creek to rafting parties. It is possible that Bass used this route as a shorter access to Burro and Hakatai Canyons, however, there are no historical references to this route.

58 James, In and Around, 200ff.

59 Madsen, "Women", 7ff; idem., thesis, 80.

60 James, Grand Canyon, 87f.

61 "Inventory of objects found...", 15 October 1974, Reho Richard Thorum, Park Naturalist, North Rim, GCNP Library.

62 McAleenan, Grand Canyon Trails, 20ff.

63 Madsen, thesis, 50; James, Grand Canyon, 87-95; Garrison Notes, 12. In the Garrison Notes, Dr. Barck wrote that this was the first cross canyon trip to Point Sublime. It was certainly one of the earliest cross canyon trips by a tourist party.

64 James, Grand Canyon, 88.

65 Williams (Arizona) News, 14 September 1939. The hunting party describes the section along BM3150, "We have just finished a hair-raising climb out of Shinumo Canyon. It would be hard to imagine a more dizzy one." This appraisal is further confirmed by McAleenan in Grand Canyon Trails, 24, who describes the section as "precipitous beyond words." Maurer, in his letter to Brown of 31 December 1990, notes that a Sierra Club trip leader in the 1980s fell off this section of the trail, broke some bones, and had to be helicoptered out. Maurer also notes that George Wharton James took at least one trip along the Shinumo/White Creek route, bypassing this dangerous trail section.

66 James, Grand Canyon, 89.

67 Ibid.

68 Ibid.

69 Ibid., 90.

70 Barbara H. McKee, "A Large Cliff Dwelling," Nature Notes, 7 October 1933.

71 Madsen, thesis, 40f - As early as 1887, cattle of the Kaibab Land and Cattle Company, formed by Brigham Young's son, John W., were ranging on the Kaibab Plateau; James, Grand Canyon, 91ff; See also Williams (Arizona) News, 14 September 1905 and McAleenan, Grand Canyon Trails, 30-69. McAleenan gives an extensive description of hunting along the North Rim in the company of Uncle Jim Owens, famed mountain lion hunter.

72 Garrison Notes, 16.

73 F.E. Matthes, "Breaking a Trail Through Bright Angel Canyon," Nature Notes, 21 November 1927.

74 Ibid.

75 Ibid.

76 Madsen, "Women", 12; idem., thesis, 51.

77 Letter from Hoyt, 2 November 1910, Historical File, GCNP Library; McAleenan, Grand Canyon Trails, 19f.

78 Superintendent's Annual Report of 1925, J.R. Eakin, GCNP library; Hughes, In the House, 87; Letter from the office of the superintendent, "Program of Trails and Paths," unsigned and undated but after 1931.

79 Ibid.

80 Ranger Robert R. Williamson, "Trout Propogation in Grand Canyon National Park", Nature Notes, May 1932.

[81] "Odds and Ends," Nature Notes, 30 August 1930.

[82] Superintendent's Annual Report of 1920, W.H. Peters, and Superintendent's Annual Report of 1921, D.L. Reaburn, GCNP Library.

[83] Maxey to the Chief Ranger, memorandum, 8 September 1956, Maintenance File, GCNP Library.

[84] Ibid.

[85] "Trail System for Grand Canyon National Park," 3 September 1964, Trails, Miscellaneous File, GCNP Library. Note that at least one outfitter, Grand Canyon Trail Guides, offered two to seven day guided trips along the North Bass during the 1970s.

[86] Superintendent Merle Stitt to Peace and Quiet Inc., 22 March 77, North Rim Hiking File, GCNP Library.

[87] Garrison Notes, 7ff; Madsen, "Women", 2ff - note that Madsen writes that Ada did not move to Prescott and meet Bass until 1894. Maurer also notes in his letter to Brown of 31 December 1990 that Ada's trip to Bass Camp was in August of 1894. In Stephen Maurer's Grand Canyon by Stage (Albuquerque: Cottonwood Press for Heritage Associates, 1982), 1ff, Maurer quotes the 1894 newpaper articles by Martin, confirming that the trip was taken in 1894. Ada's own statement, recorded in the Garrison Notes, 7, says she made the trip with Bass in 1892. This is clearly the wrong year for this particular trip -- perhaps a slip of the memory as Ada's statement was made in 1948. See also the Arizona Hall of Fame Nomination Form for Ada Lenore Bass, Arizona Collection, Hayden Library, Arizona State University, Tempe. The form reads that Ada came to Arizona in 1890.

[88] Madsen, "Women," 6ff.

[89] Ibid., 13, 15.

[90] Ibid., 14.

[91] Madsen, thesis, 46ff.

[92] Ibid., 46-49; Idem., "Women," 17.

[93] Idem., thesis, 53. Each of the homes Bass established at the Canyon -- that at Bass Camp and the later White House and Tin House -- were built to accommodate tourists as well as the Bass family, and tourists were charged room and board. Therefore, these structures can be considered both homes and hotels. Since it was one of Ada's prime responsibilities to house and feed the tourists, she no doubt considered herself an hotel-keeper!; See also Flagstaff (Arizona) Coconino Sun, 28 June 1902 and "Excerpts from Report Made Jan. 25, 1910 to Forest Supervisor F.C.W. Pooler, Forest Supervisor, on Roads and Trails in Grand Canyon Division," Misc. - Old Roads & Trails in the Park 1923-1944 File, GCNP library. The Sun indicated that the Santa Fe

established "A new station called Bass" at Bass Siding by early 1902. The excerpts of 1910 mention the road built from the siding to Bass Camp.

94 Madsen, "Women," 16; Murbarger, 7.

95 Madsen, thesis, 42,54. Madsen obtains these figures from the Bass Camp Hotel Register, located in the Bass Papers.

96 See appendix A for notation.

97 J.H. Clark to F.C.W. Pooler, letter, 18 April 1908, Historical File, GCNP Library.

98 Garrison Notes, 6.

99 Pooler to Clark, letter, 13 April 1908; Clark to Pooler, letter, 18 April 1908; Clark to M.J. McClean, letter, 18 April 1908; McClean to Clark, letter, 1 May 1908; Bass to Clark, 11 October 1910; all letters in Historical File, GCNP Library.

100 Murbarger, 7; Maurer, "Following in the Footsteps," 15; H.R. Lauzon, "Is There Gold in the Canyon?", Nature Notes, 10 January 1934; Garrison Notes, 9, 18.

101 Edwin D. McKee, "Copper Deposits of Grand Canyon," Nature Notes, 31 July 1930; Lauzon, "Is There Gold...?; H.H. Waesche, "Blue Ribbon Minerals,", Nature Notes, August 1931. All Nature Notes articles in GCNP Library. See also Maurer, "Following in the Footsteps," 15; Garrison Notes, 19; Appendix A for all mining locations filed by Bass and later sold to the Santa Fe.

102 J.R. Eakin to Representative Carl Hayden, 3 July 1924, letter, Bass Claims File, GCNP library.

103 Madsen, thesis, 65; idem., "Women," 20; Garrison Notes, 15.

104 Madsen, thesis, 64; Debra Sutphen, "Grandview and Hermit Trails Historical Research Study, Grand Canyon National Park, Arizona," 1 June 1990, Resource Management Department, Grand Canyon National Park, 24ff; Garrison Notes, 18.

105 Superintendent's Annual Report of 1920, W.H. Peters, GCNP Library.

106 Ibid., 8; Superintendent's Annual Report of 1925, 4, 6; Superintendent's Annual Report of 1921, 8. See also "Grand Canyon Outings," (March 1928 and November 1936), advertising brochures, Grand Canyon Outings File, Arizona Collection, Hayden Library, Arizona State University, Tempe. These brochures with maps were published by the Santa Fe Railroad. A map in the 1928 brochure shows Bass's Ash Fork Road; the same map in the 1936 brochure omits the road. This is an indication that the Ash Fork road may have been used into the 1930s.

[107] Cammerer to Park Superintendent Eakin, letter, 11 September 1925, GCNP library.

[108] Cammerer to Ball, undated letter, Fred Harvey Lands 1922-1951 File, GCNP Library.

[109] Ibid.

[110] Sutphen, "Grandview and Hermit," 23ff; Garrison Notes, 16.

[111] Frank Pinckley, custodian at Casa Grande Ruin, to Bass, letter, 21 March 1919, Privileges: W.W. Bass - Grand Canyon National Park File, Series RG 79/E6/CF 1907-39, National Archives, Washington DC, hereafter referred to as "National Archives." Bass may have communicated with Pinckley at this time because Park Service personnel had not yet arrived at Grand Canyon.

[112] Ibid.

[113] Bass to Albright, letter, 20 June 1919; Albright to Pinckley, letter, 26 April 1919; Mather to Bass, letter, 26 June 1919; Bass to Pinkley, letter, 19 May 1919. All letters in National Archives. See also Bass, Rhymes and Jingles, 23, 31f, for further indications of Bass's bitterness caused by his perceived persecution by the Park Service, Fred Harvey, and the Santa Fe.

[114] Bass to Peters, letter, 18 January 1920; Peters to Cammerer, letter, 10 March 1920; Cammerer to Peters, letter, 16 March 1920 -- All letters in National Archives. These letters do not refer to the Tin House holdings specifically, but mention Section 23 of the current map which was where Bass held this lease. One letter also mentions that TNT was stored here, perhaps explaining later complaints by Bass that the Park Service had blasted his holdings out of existence.

[115] Peters to The Director, letter, 7 April 1920, National Archives.

[116] Cammerer to Peters, letter, 21 April 1920, National Archives.

[117] Peters to The Director, letter, 10 July 1920, National Archives. Attached to this letter are transportation permits, dated for 1 July 1920 through 31 December 1920.

[118] Ibid.

[119] Peters to The Director, letter, 10 July 1920, National Archives.

[120] Reaburn to The Director, letter, 19 March 1921; Bass to Reaburn, letter, 10 March 1921; Reaburn to Bass, letter, 12 March 1921; Bass to Reaburn, letter, 15 March 1921 -- all letters in National Archives.

[121] Cammerer to Reaburn, letter, 5 April 1921; Reaburn to The Director, letter, 2 May 1921 -- both letters in National Archives.

[122] Cammerer to Reaburn, letter, 27 June 1921, National Archives. It was apparently clear to Cammerer that if Bass did not have a claim to the trails, Coconino County certainly did by existing Arizona statutes and by Section Four of the 1919 organic act.

[123] Cammerer to Senator Ashurst, letter, 8 January 1924, Bass File, GCNP Library.

[124] Crosby to The Director, letter, 10 October 1922, Bass File, GCNP Library.

[125] Cammerer to Senator Ashurst, letter, 8 January 1924, Bass Claims File, GCNP Library.

[126] Letters: Hayden to Eakin, 12 May 1924; Mather to McCarty, 15 May 1924; Eakin to Hayden, 17 May 1924; personal note, Eakin to Cammerer, 17 May 1924; Acting Director Demaray to Eakin, 27 May 1924 -- letters and personal note in GCNP Library; Mather to Fred Harvey, letter, 19 December 1923, National Archives; Congress, House, 68th Cong., 1st sess., H.R. 3682, Congressional Record, (March - June 1924). The congressional record indicates that Carl Hayden was active in promoting the bill that would appropriate funds for the purchase of the Bright Angel Trail. The bill would also provide some $700,000 for further Grand Canyon park improvements, including $5,000 to reconstruct the spur road to Bass Camp. The record does not indicate, however, that Hayden was lobbying for the purchase of the Bass holdings in early 1924.

[127] Eakin to Fred Harvey, letter, 3 July 1924; Eakin to Carl Hayden, letter, 3 July 1924 -- both letters in Bass Claims File, GCNP Library.

[128] Ibid.

[129] Bass to Hayden, letter, 12 September 1924, Bass Claims File, GCNP Library.

[130] Eakin to Hayden, letter, 19 September 1924; Eakin to Clarkson, letter, 26 September 1924 -- both letters in Bass Claims File, GCNP Library.

[131] Eakin to Mather, letter, 7 October 1924, Bass Claims File, GCNP Library.

[132] Eakin to Mather, telegram, 30 October 1924, Bass Claims File, GCNP Library; Garrison Notes, 16; Mather to Eakin, letter, 31 October 1924, Bass Claims file, GCNP Library. House Bill 3682 (noted above) allocated $308,000 for the reconstruction and some new construction of the road to the Havasupai, fifty miles in total. Failure to eliminate Bass's claims at the Canyon might indeed cause embarrassment, or at least a delay in starting the contemplated road work.

[133] Clarkson to Cammerer, letter, 3 October 1924, Bass Claims File, GCNP Library.

[134] Mather to Clarkson, letter, 29 July 1925, Bass Claims File, GCNP Library.

[135] Mather to Clarkson, letter, 25 November 1925; Eakin to Carl Hayden, letter, 18 December 1925; quitclaim deed -- all letters and deed in Bass Claims File, GCNP Library. See Flagstaff (Arizona) Coconino Sun, 26 February 1926, for a newspaper account of the sale and also a fair list of other inholdings at the park at this date.

[136] Garrison Notes, 18; Madsen, "Women", 23f; Murbarger, 9; Williams (Arizona) News, 26 February 1981.

[137] C.B. Wilson to Eakin, letter, 16 February 1926; Eakin to Wilson, letter, 17 February 1926; Cammerer to The Superintendent, letter, 12 June 1931; Acting Regional Director Harthon L. Bill to the Director, letter, 8 December 1955 -- all in Bass Claims File, GCNP Library.

[138] Memoranda: Regional Director Hugh Miller to Director, 15 July 1955; Miller to Director, 31 October 1955; Chief of Lands Jackson Price to Regional Director, 16 November 1955; Bill to the Superintendent, 7 December 1955; Acting Superintendent Charles E. Shevlin to Regional Director, 21 December 1955; Superintendent John S. McLaughlin to Regional Director, 30 July 1956 -- all above memoranda in Bass Claims File, GCNP library; Memoranda: Regional Chief of Lands John Kell to the Assistant Chief of Lands, 12 December 1957; National Parks Assistant Solicitor Richard Buddeke to the Director, 16 December 1957; Bill to the Director 16 August 1956 -- all above memoranda in File L1425, GCNP library. The informal abstract with photostatic copies of mining claims and the quitclaim deeds are attached to a memorandum from Shevlin to the Regional Director of 23 October 1956, File L1425, GCNP Library.

North and South Bass Trails Since 1926

[1] Fred Harvey to the Secretary of the Interior, letter, 4 March 1930, Santa Fe Buildings 1924-1935 File (C58), GCNP Library. These are Fred Harvey's development plans for 1930-35, hereafter referred to as "Fred Harvey Development Plans."

[2] Superintendent's Annual Reports of 1922 and 1923, GCNP Library; Santa Fe Railway to Fred Harvey, letter, 11 April 1927, Santa Fe Buildings & Campgrounds File (C58), GCNP library.

[3] Fred Harvey Development Plans; Superintendent's Annual Report of 1923, GCNP Library.

[4] Memorandum to the Superintendent, 15 February 1928, Bass Claims File, GCNP library.

[5] Ibid.

[6] Ibid.; H.C. Bryant to the History files, memorandum, 5 February, 1947, GCNP library; Garrison Notes, 16.

[7] E.D. McKee, "Geological and Wildlife Observations Between Bass Canyon and Hermit Canyon," Nature Notes, 30 November 1930; Santa Fe Railway to Tillotson, letter, 10 August 1937 and work order from Tillotson, 16 August 1937, Bass Claims File, GCNP Library; field observations, May 1990.

[8] Undated report from the office of the Superintendent, "Program of Trails and Paths," Trails Miscellaneous File, GCNP Library.

[9] Maxey to Chief Ranger, memorandum, 17 March 1955, Trails File, GCNP Library.

[10] Harvey Butchart to Chief Ranger A. Lynn Coffin, letter, 22 October 1956, Trails File, GCNP Library.

[11] Davis to Headquarters District Ranger, memorandum, 19 May 1957, Trails File, GCNP Library.

[12] Ibid.

[13] Ibid.

[14] Ibid.

[15] Ibid.

[16] Davis to Headquarters District Ranger, memorandum, 4 February 1958, Trails File, GCNP Library.

[17] Howard B. Stricklin to the Regional Director, memorandum, 12 December 1967; Ranger James J. Bailey to the Superintendent, memorandum, dated obscured but probably 19 December 1967; David deL. Condon to the Superintendent, memorandum, 14 October 1968 -- all memoranda in File 3415, GCNP Library.

[18] Jacilee Wray, "Pasture Wash Historic Structures Report: Grand Canyon National Park, Arizona", November 1989, Cultural Resources Management Division, Grand Canyon National Park. This document briefly describes the history and use of the Pasture Wash Ranger Station.

[19] Butchart, Grand Canyon Treks, 45; See also James, Grand Canyon, 257, for more information on Russell's river expeditions.

Bass Mine Locations, Millsites, and Water Rights
Included in the Sale to the Santa Fe Land Improvement Company [1]

Filed	Recorded	By	Location/Notes
08/24/1891	08/26/1891	Wm W. Bass	Mystic Spring Trail, from the rim 4.5 miles to the river. Location notice reads that this is a "pass to Grand Canon (sic)" and "it is my intention to construct, complete and operate the same as a toll road or trail."
02/12/1898	03/14/1898	W.W. Bass	Montazuma notice of mine location. Three miles below the terminus of Mystic Spring Trail and about 1/2 mile south of the river and just North of Mt. Observation (Mt. Huethawali; this is in Copper Canyon.)
02/12/1898	03/14/1898	W.W. Bass; R.M. Bleak	Astec notice of mine location. "Below the terminus of Mystic Spring Trail 'or what is now generally known as Bass Trail.'" Joins the Montazuma on the north end.
02/12/1898	03/11/1899	W.W. Bass; William Crowley	Montezuma notice of mine location. This is the same location as the Montazuma above, recorded again nearly a year later and replacing Bleak's name with Crowley's.
12/22/1900	12/31/1900	A.L. Bass; Edith Bass	Yankee Girl Notice of location. "About 6 miles in a southerly direction from the Colorado River at the head of Bass Trail." This is the site of Bass Camp, on the rim.
07/07/1903	07/09/1900	Wm W. Bass	Millsite location. "A millsite or storage dam on the wash running westward about 500' more or less from the head of Mystic Spring Trail." This is the wash west of the Bass Camp site. Bass called this wash "Surprise Outlook Wash Bass Camp."
11/14/1904	12/31/1904	Wm W. Bass; Charles F. Molly	Grub Stake notice of location. "1/2 south of the river along the Bass Trail." This is roughly the site of Rock Camp, which is closer to a mile south of the river.

11/12/1904	12/31/1904	Wm W. Bass; C.F. Molly; John Waltenberg	Toltec notice of location. Adjoins Montazuma mining claim on the west, in Copper Canyon.
11/12/1904	12/31/1904	Wm W. Bass; Charles F. Molly; J. Waltenberg	Toltec millsite & water right. On the Colorado River, about 3/4 mile north of the Toltec mining claim, "at or near the mouth of the water course upon which said mine is sit uated." Also claims 3,000 inches of Colorado River water. This is at the mouth of Copper Canyon.
11/14/1904	12/31/1904	Wm W. Bass; C.F. Molly	Grub Stake millsite & water rights. On the Colorado River about 3/4 mile northeast of the Grub Stake mining claim "near the Bass Trail." Bass claims 2,000 river inches of water. This is the site of the ferry and cable crossings.
11/14/1905	12/28/1905	Wm W. Bass; Charles F. Molly	Grub Stake millsite & water rights. This is an identical claim as that above with slightly different wording, filed exactly one year later.
11/15/1904	12/31/1904	Wm W. Bass; Charles f. Molly	Francis E. Willard Molly notice of location. "One and one half miles in a southerly direction from the Colorado River on the Bass Trail." This is referring to the approximate location where the Bass Trail crosses the Tonto Trail.
10/24/1905	12/28/1905	Wm W. Bass; John Waltenberg	Cold Spring notice of location. "About 10 1/2 mile north of the Colorado River in an easterly direction from Powell's Plateau at a point known as the saddle on the Bass Trail on the North side of the Colorado River." This would be Muav Saddle. Note that this is Bass's first location on the north side of the river.
10/24/1905	12/28/1905	Wm W. Bass; John Waltenberg	Cold Spring millsite & water right. located in Laxite (or Taxite?) Canyon, at the north end of Powell Plateau about one mile northwest of Cold Spring mining site and connected "by trail through the saddle which divides Powell's and Kaibab Plateaus." Ten inches of water is claimed from "Oak Spring". This may be today's Powell Spring.

01/04/1906	01/22/1906	Wm W. Bass; John Waltenberg	Iroquois No. 1, 2, & 3 notice of location. About one mile in a northerly direction from the Colorado River in "Bullion Canyon", south of Powell Plateau. All three claims adjoin. This is either today's Burro Canyon or Hakatai Canyon. Bass worked asbestos claims in Hakatai Canyon.
01/04/1906	01/22/1906	Wm W. Bass; John Waltenberg	Iroquois millsite & water right. Located on Shinumo Creek on the north side of the Colorado and "connected by trail with said Iroquois group... at the junction of said trail with Bass Trail." Claims 600 inches of Shinumo Creek. This is the site of Shinumo Camp. A trail did connect the camp to Hakatai Canyon through Burro Canyon.
04/02/1906	04/17/1906	W.W. Bass; A.L. Bass; John Waltenberg	Foraker notice of location. Adjoins the Montazuma claim, 3/4 mile south of the Colorado, and "...is a relocation of abandoned property." This is in Copper Canyon.
04/03/1906	04/17/1906	W.W. Bass	Foraker millsite & water right. "... situated in the first wash south of Havasupai Point, near the rim of the canyon, about 1/4 mile east of Fossil Mountain and 3/4 mile north of Bass Signal and bench mark, and connected by trail with said Foraker mining claim." Bass apparently dammed the wash and he claims the floodwater. He calls this Fossil Mountain Wash.
04/18/1906	05/01/1906	Wm W. Bass	Delmonde notice of location. 1/4 mile in a northerly direction from the "Bass Ferry across the Colorado .... on the Bass Trail, and extends from the east to the west side of the river." This would be today's Lower Bass rafting campsite, extending across the river.
07/29/1907	10/10/1907	W.W. Bass	Hockataia No. 1, 2, 3 notice of locations. 1/2 mile south of the Colorado "... in what is known as Copper Canyon an inner side canyon west of Bass Canyon & connected by trail and joins the Foraker claim on the west."

12/23/1907	03/24/1907	W.W. Bass; John Waltenberg	Iroquois No. 4 notice of location. Located in "Bullion Canyon" with the other Iroquois group.
12/24/1908	12/30/1908	W.W. Bass	Notice of location for a dam site for water storage and a reservoir. Also for right of way for canals and ditches on Cataract Creek near where the "Ash Fork & Grand Canyon wagon road crosses said creek... at a place called the 'Caves'." This was Bass's rest and overnight stop on the road to Bass Camp. He states his intention to build a twelve foot high dam and call the lake thus formed Chichomemie Reservoir.
01/03/1908	03/24/1908	W.W. Bass; John Waltenberg	Hockataia No. 4 notice of location. Adjoins the other Hockataia group in Copper Canyon.
01/04/1908	03/24/1908	W.W. Bass; R.T. Barton; John Waltenberg	Mother Lode notice of location. 1/2 mile in an easterly direction from Shinumo Creek on Flint Creek "... east of the Twentieth Century Mining Claim." Bass improved a trail to this claim. The Twentieth Century claim doesn't appear to have been his. R.T. Barton did not sign this location notice. This claim and the one above were disputed by the Forest Service because of the recording date.
06/12/1916	10/02/1916	W.W. Bass	The Company Well water location. Situated on Bright Angel Wash near the mouth of Redwall Wash.

[1] Acting Superintendent Charles E. Shevlin to Region Three Director, "Bass Mining Claims, Informal Abstract," 23 October 1956, History Files, Grand Canyon National Park Library, Grand Canyon Village, Arizona. This letter contains copies of the quitclaim deeds of 1955 and 1956 transferring title of the holdings to the U.S. Government. It also contains photostats of the mine locations, millsite, and water rights transferred by Bass. It does not include whatever holdings Bass may have had outside park boundaries.

Bass Holdings Within Grand Canyon National Park, 1924 [1]

Item Description	Distance	Value
ROADS		
- Sheep Tank to Bass Camp.	10 miles	4,000.
- Benchmark 6519 to Benchmark 6302 and up Pasture to Bass Camp.	9 miles	3,600.
- Bass Camp to Havasupai Point	4 miles	1,600.
- Pasture Wash to Hilltop	14 miles	5,600.
Total:	37 miles	$14,800.
TRAILS		
- Bass Camp to Muav Saddle (North & South trails)	18 miles	4,050.
- Muav Saddle to Dutton Point	5 miles	1,125.
- Muav Saddle to Point Sublime	9 miles	2,025.
- Shinumo Creek to Asbestos (Hakatai) Canyon	6 miles	1,350.
- Bass Canyon to Garnet Canyon (Tonto Trail?)	10 miles	2,250.
- Shinumo (North Bass) Trail to Flint Creek	4 miles	900.
- Hilltop to Junction Lee and Cataract Canyons	5 miles	1,125.
Total:	57 miles	$12,825. [2]
DAMS AND CISTERNS		
- 7-Mile Dame, Red Dam, Bass Dam, 2 dams near Havasupai Point.		1,400.
- One cistern on the rim, two cisterns south of Bass Camp.		600.
MISCELLANEOUS		
- Bass Camp, outbuildings, and equipment; corrals near 7-Mile Dam; cable crossing at Shinumo Creek.		1,900.
Total Valuation:		$31,525.

[1] Superintendent J.R. Eakin to U.S. Representative Carl Hayden, 3 July 1924, Bass Claims 1924-1956 (L3023), Grand Canyon National Park Library, Grand Canyon Village, Arizona. This is a letter containing Eakin's evaluation of the extent and value of Bass's holdings. He considers the values conservative. Note that mining claims, millsites and water rights are not included.

[2] Eakin placed a value on only 28 miles of Bass's trails, although acknowledging another thirty miles extant (which would make 58 miles, not 57). This reconciles the eventual purchase price of $25,000.

Muav Saddle Cabin

This is a description of the cabin which sits at Muav Saddle and is believed to have been built in 1925 as a snowshoe cabin. There was, in fact, a snowshoe cabin built here in that year, but it is uncertain if the current structure is the same structure. Photographs are attached. Photographs and observations made in May 1990.

General

The cabin sits about fifty yards off the main trail that connects Swamp Point with the Powell Plateau. It is reached by a footpath which starts down Saddle Canyon where the North Bass turns west to go along the Coconino formation. The cabin -- approximately 12' x 20' with the door on the shorter side -- is in fairly good condition, except as noted below. the cabin door faces 340 degrees, pretty much straight down Saddle Canyon. Swamp Point is sixty degrees from the cabin door.

Exterior

The walls are solid and of a good grade plywood that was once stained or oiled to its dark brown color. Exterior walls are supported by both horizontal and vertical 2"x4"s. There is one set of double windows on each of the longer sides, each double window having a wood support between two single, four pane windows (eight total panes per cabin side). Wooden steps lead up to the door, which is solid wood, hinged, and held semi-shut by a cord.

Interior

There are two rooms with a solid wood divider wall between them. The floors of both are solid. A door leads into the rear room which contains some bedsprings and a ceiling access to an attic. The front, larger room contains a table in the center and a stove behind it nearer the rear room wall. The stove is a cheap metal type and appears functional accept that the stovepipe is askew. It rests on an interesting foundation about twelve inches high of dirt and stone that is contained by a wooden form. This room also contains two sets of bedsprings and some shelving with assorted pots, pats, tin plates, and food items. Water is cached here in several containers. There is a hiker register on the table that confirms that hikers borrow from the cache and replenish it from the springs east along the Bass Trail.

Foundation

The cabin is not skirted. Viewing the foundation from the downslope, 20 foot long side, there are five 4"x4" posts in the ground with five or so 4"x4" joists connecting these to form a 20 foot center joist. This was not a great way to do it and one of these parts of the center joist is slumped, another is cracked. There is no imminent danger of collapse, however. 2"x6" floor joists cross the center joist. On the north, upslope side these meet the ground slope; on the south, downslope side these sit on 4"x4" posts in the ground about two feet off the ground, indicating the degree of slope.

Roof

There is a top center joist running the approximate 20 foot length of the building. Roof joists are 2"x4"s spaced two feet apart. The roofing material is 2"x 12"s, covered with flaked wood shingles. It appears to be water tight from visual inspection and no indications of water damage inside. There are undecorated dormers front and rear. The stove chimney pops out of the center of the roof.

This cabin is historically significant and could qualify for the state and national registers in a context of National Park history (not Bass Trail history specifically). It is in such a condition that it would be in excellent shape with some foundation and roof shingle work.

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North Bass Trail, Swamp Point to Colorado River, May 20-27, 1990. Michael F. Anderson and David. E. Anderson. Notes and photographs of historic constructions. Interviews with river guides.

South Bass Trail, Bass Camp to Colorado River and to Copper Canyon, June 9-14, 1990. Michael F. Anderson, Donald, Michael, Jason, and Daniel Mayerhoffer. Notes and photographs of historic constructions.

Interview with Donald Ziegler, Phoenix, Arizona, March 31, 1991. Mr. Ziegler has hiked the Bass trails numerous times and investigated sites associated with Bass. On one or more occasions he has been accompanied by Douglas Brown, Resource Management Department, Grand Canyon National Park.