NOTE TO USERS

IF YOU BUILD IT, THEY WILL COME: THE STORY OF THE CATALINA HIGHWAY

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STATEMENT BY AUTHOR

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ABSTRACT

The construction of the Catalina Highway began at the height of a worldwide economic depression, when a huge portion of the workforce was unemployed and capital funds were hard to come by. Federal prisoners provided most of the labor in the eighteen-year project, which began in 1933 and ended in 1951, spanning the eras of the Great Depression and World War II, periods of sustained national shortages of material and equipment. Convict labor was considered the only affordable means of constructing the road (United States Department of Commerce [USDC] 1951:13). This thesis examines the work and labor correlates represented in the material culture of the road features and the attendant prison camp that was constructed to house the workforce for the Catalina Highway project. The thesis also examines the working and living conditions of the inmates and how the inmates were perceived by the community. The thesis employs the recognized historical and archaeological methods of archival, ethnographic, and archaeological research to achieve its ends.

INTRODUCTION

The Road From Mexico to Canada

Roads are a part of our existence. Roads are a measure of who we are. Roads endure. Centuries after they were built, roads built by the Chinese, the Incas, and the Romans remain. Roads achieve fame simply for being what they are; the Appian Way, the Silk Road, the Autobahn, the Burma Road, and Route 66 all evoke a specific impression that helps to define a culture or a people. Roads inspire thought, poetry, and tales. Roads serve as metaphors for life and our passage through it. Roads mark the beginning and the end of journeys. But above all else, roads are functional. They provide a way from here to there.

To stand almost anywhere in the city of Tucson, Arizona, and to gaze to the north is to look upon the front range of the Santa Catalina Mountains, rising like a craggy wall from the desert floor. Most of the mountain ranges in southeast Arizona are aligned from north to south. The Santa Catalinas, however, are aligned from east to west, completely dominating the northern horizon of Tucson. The sun's rays are more direct on the south face of the range, the side facing Tucson. In the afternoons, the long, steep canyons are emphasized by the shadows cast from the west. To regard the granite canyons and forested peaks is to observe from the environs of a modern city most of the vegetative life zones that exist in the whole of the western United States. To make the drive up the Catalina Highway, from Tucson to Summerhaven, is, to paraphrase a display at the

Arizona-Sonora Desert Museum from the 1960s, like driving from Mexico to Canada in less than an hour.

Charles Bowden characterizes his view of the relationship between Tucson and the Santa Catalinas in this way. "Without the Santa Catalina Mountains, Tucson is just another city in a nation of urban islands. The range is the heart and soul of this community, but for decades the city has sold the mountain as it clawed its way toward the magical goals of growth and wealth. The stone skyline exists in every car sold, every house slammed against the desert floor, and every steak sizzled over a mesquite fire in a cowboy restaurant" (Bowden 1987:6).

This is the story of the Catalina Highway, a road that begins at the desert floor and travels to the top reaches of the Santa Catalina Mountains near Tucson, gaining about 6,500 feet in elevation. The road was constructed with a specific purpose in mind: to provide the inhabitants of the desert with a vehicle-friendly means to ascend the Catalina Mountains by the shortest route possible.

Federal convicts supplied the labor to construct the road. The project marked the first time in the United States that such an ambitious project had been implemented using a workforce composed almost entirely of convict labor. Without the low capital investment for labor, the road probably would never have been built. The 27.5 miles of road were blasted from the granite mountain at a cost of $38,000 per mile. This thesis examines the work and labor correlates represented in the material culture of the road features and the attendant prison camp that was constructed to house the workforce for the Catalina Highway project.

The road has been known by many names since it was conceived; Arizona Forest Highway No. 33, the Catalina Highway, the Catalina Forest Highway, the Mt. Lemmon Road, and the General Hitchcock Highway. For the purpose of simplicity, the road will be referred to as the Catalina Highway in this paper.

Construction of the highway and prison camp began at the height of the Great Depression and continued through World War II and beyond. This was a period of sustained national shortages of material and equipment, elements which are archaeologically recognizable in the remaining material culture associated with the highway and prison camp.

This thesis tells the story of the Catalina Highway, but to tell the story of the highway, one must tell the story of the prison camp, and to tell the story of the prison camp, one cannot help but tell the story of the prisoners who built it.

The thesis consists of seven sections: the Abstract; the Introduction; Project Overview; Previous Research; Methods; Findings; and Conclusion.

PROJECT OVERVIEW

The Catalina Highway and the prison camp are the subject of several previous archaeological investigations, each one focused on a specific project at a specific location. There has never been a comprehensive study that tied these piecemeal investigations together to form a single picture of the highway and the prison camp and what they meant to the people who built and used them, and what the consequences were for the mountain itself.

Almost the whole route of the Catalina Highway and the entire area of the prison camp are located on federal land that is administered by the Coronado National Forest. Each of the previous archaeological investigations were driven by the requirement to comply with Section 106 of the National Historic Preservation Act, which states that federally funded undertakings shall "take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register." (United States Code, 16 U.S.C. National Historic Preservation Act, Section 106).

Each of the archaeological investigations was conducted by archaeologists under contract with or directly working for the U.S. Forest Service. The investigations considered the impacts of various projects on the highway and prison camp, the features associated with them, and the areas immediately bordering them. Due to the scope of projects and report deadlines, these investigations did not look beyond the individual

projects that required an archaeological clearance. They did not see the highway and the prison camp as a whole entity, each requiring the other for its existence.

This thesis will examine the work and labor correlates archaeologically represented in the material culture of the road features and the attendant prison camp, which was constructed to house the workforce for the Catalina Highway project. The highway and prison camp construction spanned the periods of the Great Depression through the end of World War II. They were built during a period of sustained national shortages of material and equipment. The Catalina Highway and the prison camp were built "on the cheap," using convict labor, surplus equipment, and makeshift materials. These facts are recognizable in the remaining material culture associated with the projects. The archaeological features of the highway and prison camp indicate that a variety of improvised materials and methods were utilized. For example, at the prison camp site, steel fuel drums were welded end to end to construct makeshift culvert tubes (Figure 1).

Culverts along the highway were often constructed of formed concrete. Some of these culverts are still operational today (Figure 2). Locally procured stones were used on all of the masonry features, which display a wide range of craftsmanship. Many of the masonry features were completed in exacting detail, while others seem as if they were haphazardly constructed (Figure 3).

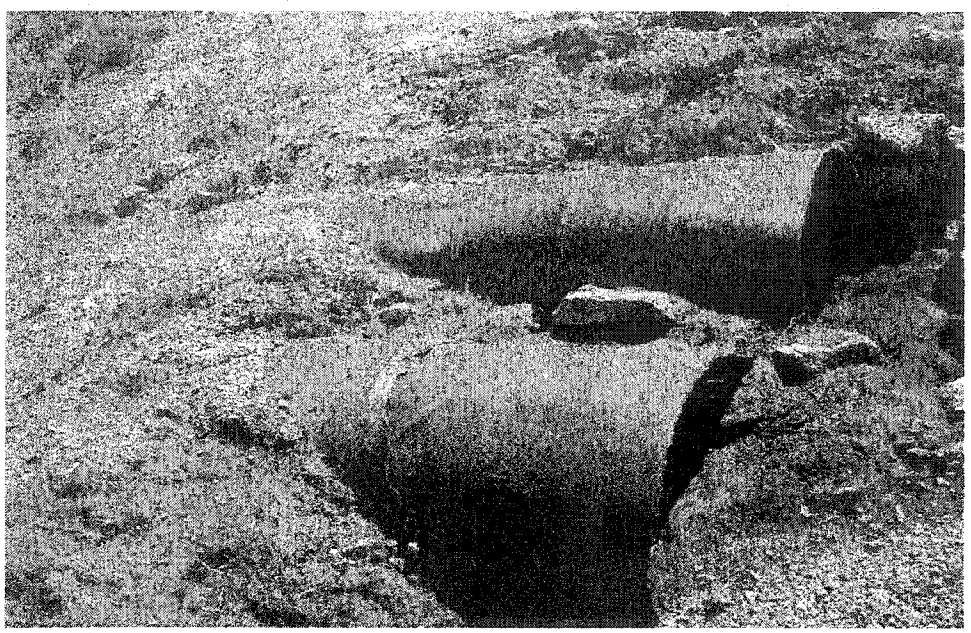

Figure 1. Steel-drum culvert.

Figure 2. Concrete conduit culvert with mortar masonry arch.

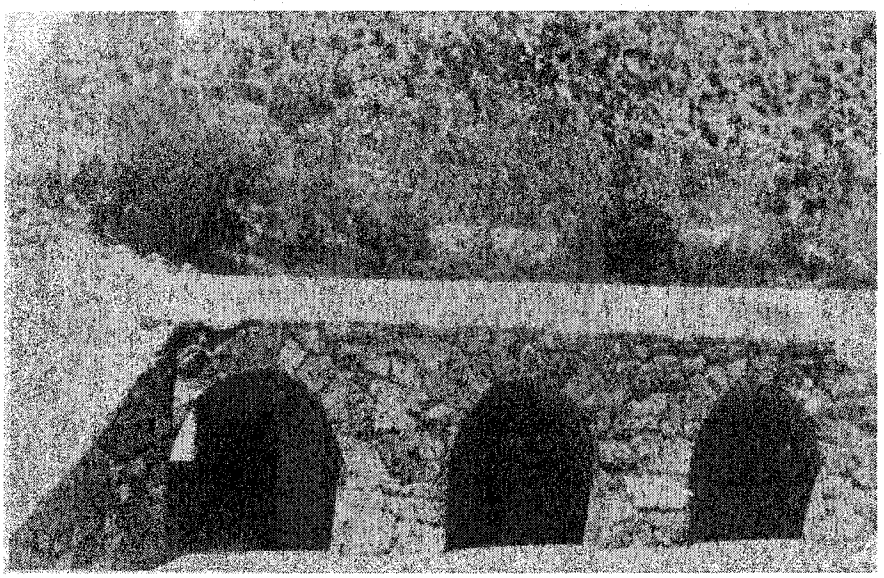

Figure 3. Triple arch culvert.

Research Questions

The thesis seeks to find answers to the questions that have occurred upon assessment of the archaeological features and material culture, and the examination of written and oral histories of the Catalina Highway project.

Research questions guiding the thesis include:

1) How are the social and economic conditions of the time reflected in the construction methods and material culture associated with the highway and the prison camp? How were labor and materials procured and utilized during times of scarcity and economic hard times?

2) What were working and living conditions like for the prisoners who constructed the road?

3) How was the road project, and the use of convicts to build it, perceived by the local community?

It is well documented through print, oral, and film sources that hardships and shortages were a part of daily life from the onset of the Great Depression through the end of World War II. This investigation demonstrates that these broad historical facts can be represented in the material culture of relatively small-scale, regional projects.

I was involved in an archaeological field survey of approximately 12 miles of the Catalina Highway, conducted during the winter of 1999-2000, prior to the current road-widening project. The results of that survey are contained in a separate report (see Makansi 2000).

While engaged in the archaeological survey, I became intrigued about the difficulty of constructing a road over such challenging terrain. I had a vague knowledge that the road was built during the Depression, but I was also under the misconception that the Civilian Conservation Corps (CCC) was involved and that the road was constructed at an earlier time and simply improved and paved by the CCC. I knew that there had been a prison camp above Molino Basin, but I thought it was a camp for juvenile offenders and kids from the Indian Reservations who had gotten into trouble. Once I learned, in conducting some background research for the report, that the entire workforce was comprised of convicts, the story of the road became even more intriguing. How were men compelled to work in all kinds of extreme weather, over broken and rough terrain,

engaged in extremely physical labor for year after year? Why did they not simply refuse to work?

While conducting archival research in preparation for the Gordon Hirabayashi Recreational Area dedication in 1999 and 2001, I became aware of the personal stories of some of the men who actually constructed the Catalina Highway. These were Japanese-American men who had refused to register for the draft during World War II to protest the massive internment of their fellow-citizens by the United States government. Dr. Gordon Hirabayashi and about 300 other prisoners of conscience stood up for their constitutional rights as Americans during World War II, an extremely difficult time in their lives and in the history of the United States. Dr. Hirabayashi has since become a symbol of integrity and courage in the Japanese-American community and is the subject of a celebrated U.S. Supreme Court case.

In preparing for the dedication, I was involved in organizing and conducting oral history interviews with seven Japanese-American resisters. The example that these men set in refusing to serve a government that had illegally incarcerated their families based solely on their race is a fascinating story worthy of further research. Again, I had no idea that the constitutional issues of a citizen's duty to their government, when the government is not fulfilling its duty to the citizen, were in play right here in Tucson. And of course, the issues of the road construction and resistance were interlocked: these same men who had refused to register for the draft were among the hundreds who helped to construct the Catalina Highway.

The two threads of interest converged: the physical difficulty of constructing a road up an inhospitable mountain and the story of some of the men who made it happen. I was personally involved with one of the surveys of the highway, I had done archival research on both the Catalina Federal Honor Camp and the Japanese-American resisters, and I had met and interviewed many of the resisters who were incarcerated at the camp and helped to construct the highway. Therefore, the idea for this thesis was conceived.

PREVIOUS RESEARCH

Numerous archaeological examinations have been conducted of the Catalina Federal Honor Camp and along portions of the Catalina Highway since the late 1970s. Both the Catalina Highway and the prison camp have been in continual use since they were created. Both have been significantly modified since their initial construction; among other things, the highway has been widened and the camp has been converted into a campground. Therefore each entity has been repeatedly modified, and with each modification, something of the original integrity was lost. We do not live in a static world, and the Catalina Highway and the Catalina Federal Honor Camp are dynamic entities, changing as the times require. With each modification came changes to some of the original features, with the result that, in time, most of the original features have been modified or removed entirely. Each change to the features since the mid-1970s has been the subject of archaeological evaluations and investigations. Most investigations were conducted to fulfill compliance requirements.

Archaeological Surveys of the Catalina Highway

Three archaeological surveys were conducted along the length of the Catalina Highway: one by a private contracting company (see Phillips et al 1984), and two by archaeologists from the Coronado National Forest (see Schrager 1989, and Makansi et al 2000). All of these surveys were linear in nature, and each was sponsored by the U. S.

Department of Transportation, Federal Highway Administration. In the two surveys conducted by Forest Service personnel, archaeologists followed standard pedestrian survey techniques. Where the terrain allowed, two or sometimes, three archaeologists walked the highway right of way, spaced approximately thirty feet apart. The Phillips survey examined the stretch of highway from near the milepost 26 at Whitetail Campground to the Coronado Forest boundary at milepost 2 at Soldier Canyon. The survey focused on a corridor 100 meters wide along each side of the highway alignment and did not record features intrinsic to the road. Much of the survey was apparently conducted from a vehicle, due to the fact that it took less than three field days to complete. The survey was further compromised because when the survey was conducted (1984), the upper portion of the highway was not considered to be of sufficient age to be considered for eligibility to the National Register of Historic Places. As outlined in the guidelines for National Register eligibility, a property must be at least 50 years old to be considered historical. The requisite time of 50 years had not elapsed between the time of the Phillips survey and the construction dates at the upper reaches of the highway. Therefore, the investigation only considered features at the lower ends of the highway for potential eligibility. Eight "actual or potential cultural resource loci" (Phillips et al 1984) were documented.

The Schrager survey was a pedestrian survey and covered approximately 18 miles of the highway alignment and right-of-way. Schrager recorded 36 features, primarily culverts, associated with the construction of the Catalina Highway.

The Makansi survey was a pedestrian survey and examined approximately 12 miles of the highway alignment and right-of-way.

Table 1 below, illustrates several examples of the features recorded during the Makansi survey.

Table 1. Example of Features Located during the U.S. Forest Service survey of the Catalina Highway, (after Makansi et al 2000:8).

Feature #	**Milepost**	**Description**
137	17.3	Original very large culvert, with exposed conduit. Poured concrete conduit; opening 29" x 38." Uphill: mortar masonry arch; no wing walls or cap. Downhill: mortar masonry arch; the bank has eroded away, exposing 7.5' of the poured concrete conduit. A concrete apron tapers down to the streambed.
138	17.6	Original culvert. Poured concrete conduit; opening 16" x 19". Uphill: mortar masonry arch; no wing walls or cap. Downhill: mortar masonry arch with natural rock cap; no wing walls.
139	17.7	Original culvert. Poured concrete conduit; opening 16" x 17.5". Uphill: mortar masonry arch with cap of large natural rocks. Downhill: mortar masonry arch, no wing walls or rock cap; opening is 14" x 17".
140	17.7	Original culvert. Poured concrete conduit; opening 31" x 37". Uphill: wide, circular mortar masonry arch. Downhill: large mortar masonry arch with a finely made rock and masonry spillway (chute). The spillway is approximately 22' with two large wing walls, 46" wide at the top and extending to 15' at the bottom.
141	17.8	Trail with small rock alignment. Unknown age.
142	17.8	Old steel signpost; sign not present. Unknown age.
143	18.7	Segment of Soldier's Trail, constructed prior to highway.
144	18	Original culvert. Poured concrete conduit; opening 31 ½" x 43". Uphill: mortar masonry arch. Downhill: mortar masonry arch.

The author participated in the Makansi survey, which recorded and re-recorded a total of 80 features, including 43 features that were associated with the original highway construction. Other features recorded included features that pre-dated the highway (6), features that post-dated the highway construction (4), features that were original to the highway construction but have undergone recent modifications (5), and features of unknown age (22). Many of the recorded features from the original construction, especially culverts, were destroyed in a series of road improvement projects. However, each of the U.S. Forest Service's archaeological investigations measured, photographed, and recorded in detail all of the existing historical features associated with the highway.

Archaeological Surveys of the Catalina Federal Honor Camp

As many as eight previous archaeological investigations have been conducted at the prison camp by Coronado National Forest archaeologists, beginning in the mid-1980s. Each of the surveys was a pedestrian survey, with a minimum of two archaeologists participating. Spacing varied, but generally allowed 30 feet between surveyors.

In the most comprehensive survey to date, completed by archaeologists from the National Park Service's Western Archeological and Conservation Center and the Coronado National Forest, features were recorded and given numerical designations. A more comprehensive map of the prison camp complex was completed in the late 1990s (Burton 1996). Many, but not all, features were measured and photographed. The

features and artifacts were described, and a field map was completed (Figure 4 and Table 2, pp.25-26).

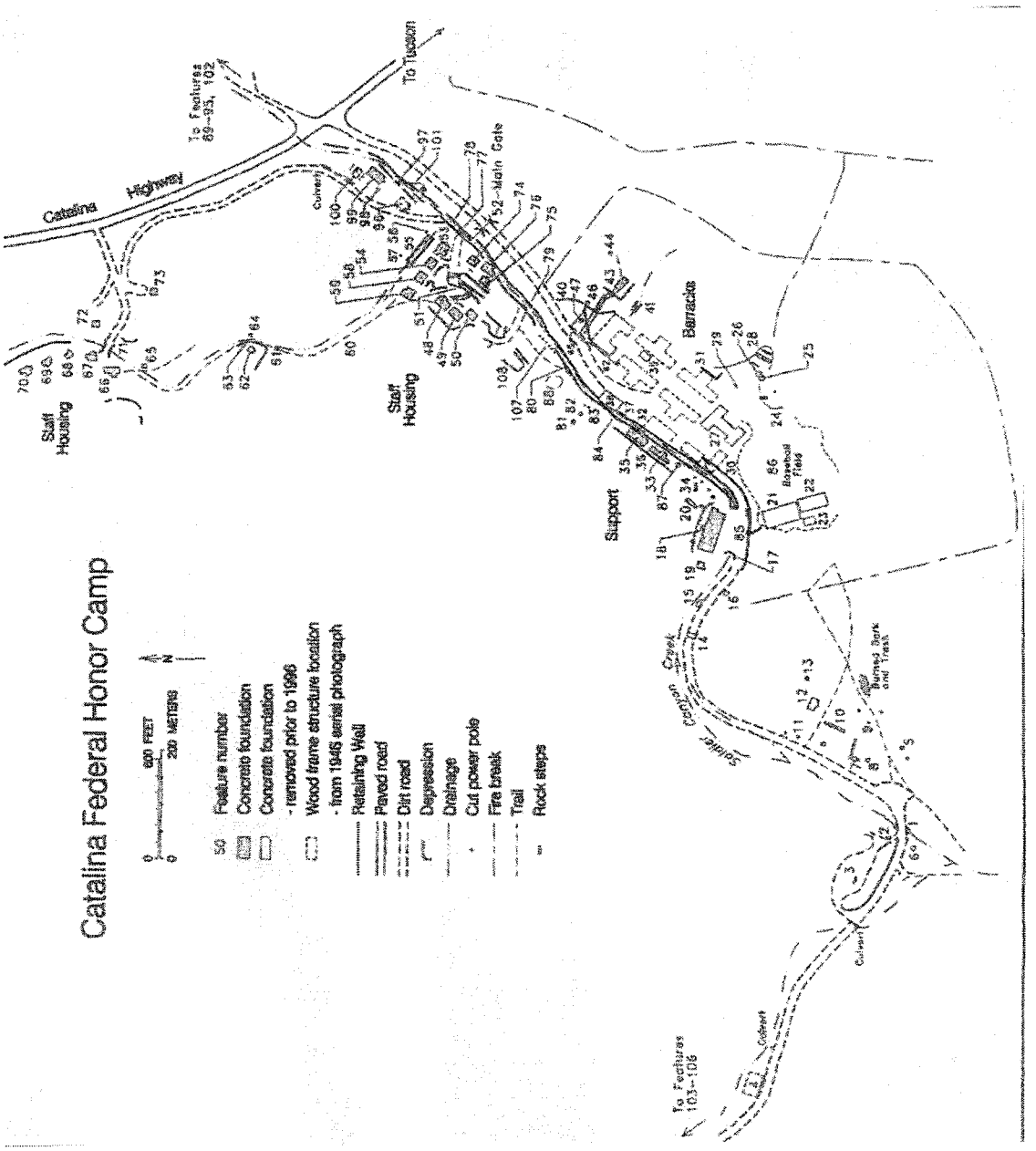

Figure 4. Map of archaeological features at the Catalina Federal Honor Camp (From Burton, et al 1999).

Table 2. Key to Archaeological Features at the Catalina Federal Honor Camp (From Burton et al 1999).

1. Rock and concrete bridge/ford.
2. Rock work and culvert.
3. Foundation remains and level area.
4. Foundation remains and level area.
5. Concrete slab.
6. Level area with an imbedded pipe.
7. L-shaped concrete trough.
8. Concrete slab.
9. Concrete and rock post foundation.
10. Concrete slab foundation.
11. Concrete box.
12. Concrete slab foundation of house.
13. Rubble.
14. Concrete valve box.
15. Floor tiles and large segment of concrete foundation.
16. Possible water tank location.
17. Rock bridge or culvert.
18. Large concrete slab.
19. Small cemented rock post (?) with iron pipe.
20. Concrete slab with pipes.
21. Concrete basketball court.
22. Volleyball or tennis court.
23. Small concrete slab.
24. Bleachers and dugout area, with inscriptions on concrete well cap "1957," "ETO," "IGM," "MANUEL FLOREZ," "ER."
25. Subterranean structures.
26. Subterranean structures.
27. Concrete slab foundation of mess hall and kitchen.
28. Shuffleboard courts.
29. Concrete work, possibly for miniature golf.
30. Rock and concrete retaining wall.
31. Stone and concrete foundations.
32. Retaining wall with inscription "1962."
33. Concrete slabs and rock retaining wall.
34. Water pipe support posts.
35. Concrete slab.
36. Concrete and rock retaining walls.
37. Bridge support with inscription: "8-3-51."
38. Concrete slab and concrete retaining wall.
39. Concrete slab.
40. Level area/slope cut.
41. Rock-lined drainage ditch.
42. Concrete and rock foundation.
43. Concrete slab, scratched in floor: "Kidds AUG. 17, 1971 MONDAY NITE."
44. Post or tower foundation, with inscription: "May 1950."
45. Rock and concrete patio area.
46. Terraces and steps.
47. Rock work and stone tree planter in patio area.
48. Concrete slab foundation of house.
49. Concrete slab foundation of house.
50. Concrete slab foundation of house.
51. Stairway with elaborate terraced retaining walls and non-native trees. Graffiti spray painted on wall "KEITH M. 1987."
52. Main gate, rock and concrete walls.
53. Concrete slab foundation of house.
54. Concrete slab foundation of house.
55. Rock and concrete retaining walls.
56. Rock and concrete power pole support.
57. Rock and concrete power pole support.
58. Concrete slab.
59. Concrete slab.
60. Foot path.
61. Eroded area along footpath showing buried pipes (two water, one sewer).
62. Flat area with concrete slab.
63. Prehistoric bedrock metates.
64. Prehistoric petroglyphs.
65. Weir box, inscription "FRED DIE."
66. Concrete slab foundation of house.
67. Concrete slab foundation of house.
68. Concrete slab foundation of house.
69. Concrete slab foundation of house.
70. Concrete slab foundation of house.
71. Stone bridge and retaining wall.
72. Leveled area with some concrete.
73. Concrete slab.
74. Concrete slab.
75. Concrete slab.
76. Concrete basement.
77. Bridge supports.
78. Bridge supports and retaining walls, with inscription: "T.N.R. 5/20/65."
79. Bridge supports.
80. Supports for possible foot bridge or aqueduct.
81. Concrete support for radio tower.
82. Post or tower foundation, with inscription: "May 1960."
83. Concrete supports.
84. Concrete base.
85. Manhole and collection box.
86. Baseball field location (borrow pit).
87. Concrete slab.
88. Leveled area and rock berm.
89. Rock and concrete water storage structure with wood roof.
90. Concrete box.
91. Rock and concrete walls with overflow pipe.
92. Valve and rock work and pipe, "MIL.WAUKEE VALVE CO. INC./1148-1158/125 S.W.P. 200 W.O.G."
93. Pipeline bridge.
94. Pipeline bridge.
95. Foot bridge supports and pipeline along cliff face.
96. Concrete slabs and level area.
97. Bridge supports.
98. Concrete block.
99. Concrete slab.
100. Concrete slab and rocks.
101. Culvert and rock walls.
102. Rock and concrete work at Bug Springs
103. Water tank remains.
104. Trash scatter in disturbed area.
105. Masonry dam on Sycamore Creek.
106. Pipeline(s).
107. Pipeline supports.
108. Leveled area on hillside.

In the summer of 2003, the Aspen Fire burned through much of the prison camp area and exposed some features that were previously obscured by brush and undergrowth. The fire revealed previously undocumented features that were overlooked in the previous surveys. In the wake of the Aspen Fire, a damage assessment of the area was completed by the author in July 2003 and submitted to the Arizona State Historic Preservation Officer (SHPO).

METHODS

The design of the research for this thesis incorporates methods from the fields of anthropology, archaeology, and history. The methods used for this paper will include archaeological survey, archival research, and ethnographic research in the form of the transcripts of oral history interviews with some of the inmates involved in the road construction project in the 1940s.

By itself, archaeological research cannot tell the whole story of the Catalina Federal Honor Camp or the Catalina Highway. Like most archaeology, the remnants of the past are ephemeral, whether it is a soft-drink bottle or a stone building. Given enough time and the right conditions, everything deteriorates back to the soil. In the specific case of the Catalina Highway, solidly constructed triple-arched culverts large enough for a full-grown human to stand inside have been demolished to make way for new culverts that reflect the new dimensions of the road. The buildings at the prison camp were torn down and removed three decades ago to create a campground. Any sign of a trash dump was filled-in and leveled at the same time.

Neither can the historical record tell the whole story. Only a fraction of the documents sought have been located. The rest have been lost to time or filed away under an obscure heading. The construction of the Catalina Highway has limited interest in the large scheme of things. It is a sideshow of events that threatened to overshadow the world through the 1930s and 1940s.

Ethnographic interviews can flesh-out and humanize the archaeological and historical records, but cannot begin to piece together the story by itself. People's memories fade and are replaced by other memories. The passage of time exacerbates this problem (Wood 1990). Most of the men interviewed about the prison camp and highway were interviewed almost sixty years after the fact. Many events have occurred in each of their lives of far greater importance to them than where the trash was deposited at the camp.

In other words, people do not remember only the things that an ethnographic interviewer is interested in; they remember things that were, and are, important to them. For example, a group of prisoners recalls that there was a poultry farm at the prison camp, and that one evening they raided the farm and killed, cooked, and ate some of the birds. Every man who participated in the event vividly recalls it, yet not a single one can recall where the farm was located in relation to the rest of the camp.

Seemingly simple changes in the details of a place can throw a person's whole sense-of-place off. An example of this is how one of the inmates of the camp always associated the layout of the camp with two large oak trees located at the entrance to the administration building. Now that those trees are dead and gone, the man is no longer certain of how the camp fit together.

In a way, the informants are our most fragile and temporary resource. Artifacts can be curated, features preserved, and documents archived. But people cannot. Of the men interviewed in 1999 and 2001, two have died and one is incapacitated by illness.

Because it takes more than one method to accomplish the goals of the thesis, an interdisciplinary approach is necessary in order to achieve a holistic analysis and to tell the story of the construction of the Catalina Highway.

Archaeological Research

The previous archaeological surveys mentioned above serve as a base for the archaeological portion of this thesis. The author participated in a survey of the highway and an assessment for potential damage from the Aspen Fire to features at the Prison camp. In addition, an on-going archaeological survey is being conducted of the Prison camp by volunteers from the Arizona Site Stewards program of the Arizona State Parks system. The survey is being coordinated by the Coronado National Forest Heritage Resources program. Unfortunately, the results of this survey were not available before this thesis was completed.

Few artifacts remain at the prison camp site that can be positively identified from the highway construction era. The prison camp underwent several transformations in its life, each one depositing their own layer to the archaeological record. In the middle 1950s, it was converted from an adult to a juvenile prison. In the mid-1960s, it was turned over to the state and continued to be used as a facility for juvenile offenders, and then to house Native American juvenile inmates. In the late 1960s and into the 1970s the prison camp housed fire crews employed by the Forest Service. The prison camp site was razed in the early 1970s by the Forest Service and has been cleaned up repeatedly since. Only semi-permanent features such as concrete building slabs and stone walls

remain. The area is a popular camping area, and modern trash is mixed with the few historical-period artifacts that remain. The two trash deposits that have been located contain a variety of modern trash mixed with trash of an undetermined age. In fact, the only diagnostic trash found in these dumps is bottles and cans with components that indicate they were manufactured in the early 1970s or later. Interviews with former inmates and archaeological survey have failed to reveal the location of a significant trash dump, midden, or other temporally diagnostic element at the prison camp site.

Archival Resources

Primary sources consulted include letters and documents from the Coronado National Forest, letters and documents from the Federal Bureau of Prisons, original photographs, original editions of the prison camp newspaper, and the final construction report of the Catalina Highway, written in 1951.

Secondary sources consulted include historical accounts of the United States and more specifically the Tucson area during the Depression and World War II, various books, memoirs of retired Coronado National Forest employees who witnessed the construction of the highway, and contemporary and modern newspaper articles primarily taken from the *Arizona Daily Star* and *The Tucson Citizen.*

W. Raymond Wood (1990) cautions against accepting written records without critically examining them, and to consider the validity of all documents by adhering to a series of principles, including: "Temporal proximity to the event is important, for the greater the time lapse between observation of an event and its documentation, the greater

the potential distortion in the record"; "What was the purpose of the document and what was its intended audience"; and "How competent was the witness?" (Wood 1990:89). Biases inherent in these types of sources have been considered and weighed. The documents from the Federal Bureau of Prisons are fairly straightforward and may be taken at face value; they mainly list the Prison camp's population and where the prisoners transferred in from.

The 1951 construction report is generally impartial, though at times it is self-serving, primarily when it emphasizes the low cost of the project. The report also emphasizes the hardships of building a mountain road with limited equipment and a constantly fluctuating workforce just enough to quell questions of why it took nearly 18 years to construct a 27-mile road.

As expected, the most overtly biased accounts have been the local newspapers. In the 1920s, the *Tucson Citizen* was a tremendous booster of the idea of constructing the road. Prior to the 1928 bond election, they ran estimates of the cost of the road that were greatly minimized. The *Arizona Daily Star*, on the other side of the issue, countered with exaggerated figures of what the road would cost. Once the decision was made to construct the road with federal funds instead of the dollars from local citizens, the accounts published in both newspapers were nearly indistinguishable from each other. In general, the *Citizen* tended to give the road project more "ink" than did the *Star*, which is hardly surprising, considering the road was officially named the General Hitchcock Highway after the publisher of the *Tucson Citizen*.

Interestingly, once highway construction commenced, very little local media attention was directed at the project. Perhaps the lack of media attention reflects the marginal status that convicts have traditionally held in society. The milestones were covered, such as in February 1939, when the Catalina Federal Honor Camp was opened for business, but it seems the Tucson media found little of interest in the ongoing story of the road. When an inmate was killed and several others injured in a rollover accident in 1934, the story consisted of just a couple of paragraphs and was buried inside the *Arizona Daily Star*. The paper did not even do a follow-up article when a second inmate succumbed to his injuries from the accident the following day. The *Tucson Citizen* covered the story more thoroughly, devoting two short articles to the story, but the articles were inserted well away from the front page. Throughout the 1930s, both papers regularly ran front-page stories involving fatal automobile accidents that occurred all over the United States, yet one that occurred near Tucson, involving prisoners, was virtually ignored.

Oral History

Orser and Fagan (1995) discuss the importance of oral history and how it can complement historical archaeology, stating that people's recollections "cannot be culled from articles, books, or newspaper accounts: they exist only in people's memories" (Orser and Fagan 1995:150). This thesis uses several different oral histories for the ethnographic research component. Oral interviews were conducted in 1981 with retired Coronado National Forest employees who worked in the Santa Catalina Mountains from

the early 1900s until the 1960s. In addition, oral interviews were conducted and transcribed in 1999, 2001, and 2002 with some of the inmates who worked on the Catalina Highway (Table 3).

Table 3. Oral Historical Interviews of Former Catalina Federal Honor Camp Inmates.

Informant	**Date of Interview**	**Interviewer**	**Comments**
Gordon Hirabayashi	November, 1999	Nicole Branton and Cherstin Lyon.	Conducted in Tucson, AZ.
Joe Norikane, Hideo Takeuchi, Noboru Taguma, Ken Yoshida, and Harry Yoshikawa	November, 1999	Cherstin Lyon and Peter Taylor	Conducted in Tucson, AZ. Hideo Takeuchi died in 2000. Joe Norikane died in 2004.
Kay and Ken Yoshida.	2001	Nicole Branton and Cherstin Lyon	Conducted in California.
Noboru Taguma, Susumu Yenokida, and Harry Yoshikawa	2002	Nicole Branton and Cherstin Lyon	Conducted in California.

The retired Forest Service employees were interviewed by Coronado National Forest naturalist Loree Boebinger in 1981, using an audio tape recorder. Two of the interviews were conducted at the interviewee's homes, and one was conducted while driving up the Catalina Highway with the informant. The primary purpose of the interviews was to gather personal recollections of what it was like to work in the Santa Catalina Mountains in the early 20th century. The topics of the highway and Prison camp were ancillary to the main topic, and only came up a couple of times.

The interviews of the resisters and Gordon Hirabayashi were conducted by Coronado National Forest archaeologists, University of Arizona Anthropology graduate students Nicole Branton and Peter Taylor, and by graduate student Cherstin Lyon from the University of Arizona's Department of History. All of the interviews were audio taped and some were video taped as well. Transcripts of the interviews are currently housed at Special Collections at the University of Arizona Library and are also on file at the Coronado National Forest Supervisor's Office.

The subjects of these later interviews were primarily Japanese-American men who were incarcerated during World War II for failing to register for the draft. One Native American inmate was also interviewed, but requested that any information he provided not be used in this paper. He is likewise not included in Table 3, above.

The resisters were generally willing and eager to tell their stories. They felt that their stories could benefit an understanding of the position they took as young men. That the interviewees were biased is unquestioned: many are still bitter about the treatment that they and their families had received at the hands of the federal government and within their community. This bias, however, did not reflect upon the narrow questions this thesis is concerned with, the construction of the road and the living conditions in the prison camp. On those topics they recalled their camaraderie with other prisoners who shared the same working and living conditions.

The anecdotes used that the prisoners provided, especially Dr. Hirabayashi, have no independent means of verification. The group interview of the five resisters, conducted in November 1999, by Lyon and Taylor, became somewhat of a free-for-all,

with, for example, one resister beginning a story only to have the others correcting his version of it. On these occasions, another resister often finished the anecdote. Obviously, collective memory was at play here, but the fact that all the men recalled the same stories, with slight variation, lead us to believe in the general accuracy of the recollections.

In the case of both the resisters and Dr. Hirabayashi, the recollections have been relayed many times with no significant changes, thus fulfilling oral historian Alice Hoffman's litmus test of reliability, as stated by O'Mack (2004:170), as the "consistency with which an individual will tell the same story about the same events on a number of different occasions." For example, the hitchhiking to prison story of Dr. Hirabayashi's is contained in Peter Iron's book, in Jim Erickson's newspaper articles, and in an oral interview granted to Branton and Lyon without any significant changes.

Although the inmate's interviews represent a specific social and ethnic group, many of their experiences as prisoners reflect the experiences of the camp population in general. The physical strain of wielding a sledgehammer was no less or more for a man who was incarcerated for bootlegging than for a man incarcerated for avoiding the draft.

FINDINGS: HISTORICAL AND ENVIRONMENTAL CONTEXT

In the early years of the 20th century, Tucson was a town defined by adobe houses and dirt roads. The town boasted a renowned university, but was still a rustic place that most Americans saw as a spot on the road or a railroad stop. A single high school was sufficient for the town's needs, and the Friday night football game was often the social event of the week for many people. Those with the financial means to do so would flee Tucson in the summer for California or to their cabins at Summerhaven; the rest would simply bear the heat. "Tucson was virtually deserted during the summer" (Harrison 1972:109). Coronado Forest Supervisor Thomas F. Meagher wrote in 1905, "the population of the town of Tucson is from 12,000 to 14,000 and of this number about 2000 are a shifting class, who come here to spend the winter and get the benefit of the invigorating climate; and as soon as summer comes, they leave for a more cool climate" (Meagher 1905:3).

At night in the summertime, people, both rich and poor, moved their bedding outside to screened-in porches or into the yard to escape their overheated homes. The evaporative cooler had not yet been invented, and even when it became available, many people could not afford to own one. Those who could afford one quickly realized the high humidity of the summer rainy season rendered the evaporative cooler useless. People would look to the mountains surrounding the town, knowing that up there a person could sleep through the night in comfort.

To the heat-numbed citizens of Tucson, Arizona, the promise of experiencing a cool breeze through the pines was tantalizingly close, yet incredibly difficult to realize. Most people did not possess the time or resources needed to climb the Santa Catalinas for simple recreation. They had jobs, and families, and obligations to attend to. From Tucson, it was a grueling full-day horseback ride or a two-day hike to reach the community of Summerhaven.

In the 1870s and 1880s, the Army sent convalescing soldiers, wood cutting parties and heliograph operators from Fort Lowell to Soldier Camp, situated at about 8,000 feet above sea level (Doran 1966; McDonald 1998). Once the Apaches had been contained on reservations, a few hardy souls began to build summer cabins on the mountain.

In 1881-1882, botanist John Lemmon and his wife Sara spent their honeymoon in the Santa Catalina Mountains. Their guide was Emerson Oliver Stratton, who named the highest peak Mount Lemmon after Sara Lemmon, in honor of her being the first Anglo woman to hike to the top (Granger 1982:270). The Lemmons were surprised to find men felling trees near a cabin in the current location of Summerhaven (Bowden 1987:74). These men may have been William Reed and his partner, a man named Ira Carter. They had a homestead claim in the area, which was known as Carter's Camp. Although their homestead venture went bust, a prominent canyon in the area still bears Carter's name (Alexander 1991:25; Granger 1982:283).

By the early 1900s many of the society families of Tucson began spending the summers in California and other cooler climates. Those prominent Tucsonans whose business interests would not allow them to absent themselves for long periods of time

began to spend the hot months of the year at two campgrounds in the Santa Catalinas: the Carter Canyon area and Soldier Camp. They were supplied by mule or burro trains from Tucson. The packers brought up the material and set up camps for the tourists, then kept them supplied with groceries throughout the summer with weekly trips from Tucson.

The Knagge family became the most prominent of the packers. Led by their father, Tom Knagge and his brother Ed began packing up camp supplies about 1913, when the boys were 10 or 12 years old. The family wrangled up trains of burros from Tucson to Mt. Lemmon with loads of up to 150 or even 200 pounds per animal (Tom and Ed Knagge 1981).

In 1910, Frank Weber established a 152-acre homestead on Mount Lemmon, in the area where Reed and Carter had tried to make a go of it. Soon the Weber property, which was privately owned, had been subdivided, and many prominent Tucsonans owned a cabin or were having one built in Summerhaven (Bowden 1987:74; Wilson 1995:235). The Knagges continued to pack in material for the housing boon that occurred in Summerhaven for the rest of the decade. They owned over forty mules and burros and packed up items as diverse as groceries, metal roofing, nails, lumber, and furniture (Alexander 1991:53).

By 1915, Congress authorized the Forest Service to lease public land to private citizens for the construction of recreation facilities. Under the broad definitions written into the bill, these facilities could include anything from a private residence to a resort hotel. The land and whatever structure was built on the land would not be owned outright by the lease holders, but the conditions of the lease made it the next best thing to owning

the property; the leases were good for a period of 30 years at the cost of $25.00 a year (Bowden 1987:75).

A year after Congress authorized private holdings on public land; the Coronado National Forest announced plans to survey the area around Soldier Camp for 200 summer homes. The survey was never carried out, however, because of poor access to the mountain (Wilson 1995:235-236).

Getting There

The only way to ascend the Santa Catalinas from Tucson was to hike or ride. A punishing day-long trek on a trail was simply too grueling for the majority of the public. Clearly, there had to be a better way to access the developing community of Summerhaven and to open up the Soldier Camp to summer homes. It was not long before demand for an automobile route was heard.

The need for vehicular access to the deep pines coincided with a nationwide trend of increased automobile ownership and recreational driving. In 1929, it was noted in the national publication *Middletown* that automobile ownership had tripled in the previous decade. The authors went on to claim that owning an automobile had "reached the point of being an accepted, essential part of normal living" (Bourne 1995:118). In Phoenix, Arizona, automobile ownership grew from 11,539 in 1920 to over 53,000 by 1929, a ratio of one automobile for every three people (Keane and Bruder 1999:14).

A road up the mountain was talked about for years before anyone did anything about it. As early as the 1880s people sought respite from the heat by climbing up the

nearby mountains. The *Arizona Daily Star* published the following opinion in 1881: "When adequate accommodations can be secured, there is no doubt the region will largely be resorted to by the ladies of Tucson who seek to escape the tropical climate of our heated time. Wherever the ladies go, the gentlemen will follow and thus an attractive society will be gathered; and the expense of a long and tedious trip to distant states will be averted" (Harrison 1972:109).

In 1905, Forest Supervisor Meagher appealed to his supervisors in Washington, D.C. to support the construction of a wagon road up the south face of the Santa Catalinas. Meagher had been approached by a group of prominent citizens, led by Gustav Hoff, calling themselves the Mount Lemmon Road Builders. The group wanted federal help in constructing a road and building a resort on top of the mountain. It was estimated that the cost of construction would be "about $9000 to build a road from Tucson to the summit of the Santa Catalina Mountains, to the timbered region" (Meagher 1905:1). "It is thought that with the establishment of a good summer resort in the Santa Catalina Mountains and a good wagon road leading up to it, the class of citizens who are in the habit of going away to spend the summer every year could be induced to remain at home and also keep their money at home; and it is estimated that the keeping of this class at home would be a saving of $15,000 a year for the town" (Meagher 1905:4).

In making his pitch to the chief forester of the Forest Service, Gifford Pinchot, Meagher emphasized the benefit that opening up the mountain would have on the timber industry and how wagon access would help alleviate the fuel wood shortage then faced by Tucson. Meagher's efforts were in vain, however, as he explained in a terse letter he

sent to Mr. Hoff six weeks later, stating that Chief Forester Pinchot "has no fund at his disposal for the building of this proposed wagon road" (Meagher 1905b).

Meagher should have known better than to advocate spending $9,000 to construct a road with the penny-pinching Pinchot. In the spring he had requested funds from Washington to purchase a typewriter, so that he might more easily correspond. Instead of allocating the dollars needed to purchase a new machine, Pinchot had a surplus, and defective, typewriter shipped to Meagher.

The First Road Up

The road from Apache Camp to Soldier Camp at the top of Mt. Lemmon, a route of seven miles, was surveyed in 1917 and completed in 1920. It was the result of both the clamor for a road to the cabins of Summerhaven and the wartime need for copper. The land above Apache Camp was thought to be rich in copper ore, which was in high demand for the war effort. Though World War I was over with by the time the road was opened, the road was a welcome relief to the summer residents of Mount Lemmon, who would no longer have to trudge up the slopes of the Santa Catalinas to enjoy a cool breeze. Actual construction took only 14 months, using men, mules, and primitive equipment. A road already existed from the community of Oracle to the mine at Apache Camp; the new road began at Apache Camp and ended at Summerhaven (Wilson 1995:162-163, 237).

The newly constructed road was rough and unpaved and in places resembled little more than a trail. Some automobiles were not up to the task of navigating the 16 to 18

percent grade that existed for significant stretches of the road (Harrison 1972:60). Washouts were common, as were obstructions in the road. The route became known as the Control Road, a name it carries to this day (U.S. Department of Commerce 1951:6). It was so narrow for the last seven miles that it was in effect a one-way road. "In consequence all vehicles waited until a scheduled time to start up the grade, followed in 1 1/2 hours by a string of vehicles descending from the top. This alternating use of the road was repeated four times a day" (Wilson 1995:239). Those ignoring the rules and heading up or down at off times were subject to a fine of fifty dollars (Figure 5).

Figure 5. Control Road sign, ca.1920.

The completed road allowed Tucsonans the first access by automobile to the high reaches of the Santa Catalinas, though they were forced to go in a round-about route, from Tucson north to Oracle and then the remaining 24 miles to Soldier Camp. In the 1920s, a Tucson car dealer made the drive in 3½ hours in a stripped down Willys-Knight automobile, but the usual time for motorists from Tucson was about 5 hours (Wilson 1995:237).

The Short Road

The idea of a route up the south face of the Santa Catalinas was first explored a few years before the Control Road was built. As previously stated, an effort was made in 1905 to procure funds to build a wagon road. In 1916, the Forest Service contracted with two highway engineers to survey a possible route from Sabino Canyon to the Soldier Camp area, at a cost of $15,000 (Bowden 1987:77). The route they surveyed was impractical for automobiles; it averaged a 10% grade, and the estimated cost of $354,000 was considered prohibitive (Doran 1966:1).

Still the idea of a short route endured, fueled by the construction of other roads into other mountains. In the mid-1920s, roads were built from desert to mountain on the Mogollon Rim and Mount Graham. With the construction of the Coronado Trail from Clifton to Alpine and the resultant national publicity it generated, as well as the construction of the Swift Trail, allowing the citizens of the Gila Valley communities of Safford and Thatcher to drive to the upper reaches of Mt. Graham in the Pinalenos, the civic pride of Tucson was at stake. If these other, less-significant communities could

build a road up to the mountains, so could Tucson. An article published in *The Tucson Citizen* [*TC*] in 1928, just a few months after the inauguration of the Coronado Trail, began with the headline "Traffic Heavy Over Coronado Trail As Tourists Flee From Winter To Sunny Playgrounds-Many Pima County Autos Are Counted On Famous Highway." The article claimed that over 1,600 cars had traveled the route in the previous forty days, stating that "by far the greatest number of cars to travel the Coronado Trail in a specified period since the official opening, and dedication at Hannigan Meadow on June 19, when a conservative estimate showed more than 5,000 cars parked at the Meadow . . . from all parts of the state and the southwest" (*Tucson Citizen* [*TC*] 11 November 1928). These motorists represented a loss of revenue that left Tucson businessmen fuming. The early boosters of a road up the south face of the Catalinas touted the economic benefits that would result; an increase in tourism, a private real estate boon as lots were sold and developed in Summerhaven, and access to the timber that covered the slopes of the Santa Catalina Mountains.

Frank Harris Hitchcock, editor of *The Tucson Citizen* and a former postmaster general, was a driving force behind the short road campaign. Due in large part to his influence, a series of bond elections to fund the more direct route to Mount Lemmon were put before the voters in the 1920s, the most contentious campaign being the 1928 bond election.

The Tucson Citizen ran a series of daily editorials on the front page in the month preceding the 1928 bond vote. With an illustration of a pine cone and sprig of pine needles, sometimes accompanied by the slogan "Mt. Lemmon Ho!" the editorials

appeared under the heading "Why I'm For The Short Road." These short pieces were written by various businessmen and civic leaders, including "Russell (Tony) Bidgood, Barber Shop Proprietor" (*TC* 11 October 1928), "Herbert Chambers, Former City Councilman, Sportsman" (*TC* 16 October 1928), and "Dr. W. D. Carrell, Tucson Physician" (*TC* 4 November 1928). Each writer urged the passage of the bond to fund the road construction, citing economic reasons, access to scenic beauty, and missed opportunities for Tucson that other communities with vehicle access to nearby mountains had taken advantage of.

The *Arizona Daily Star*, the main competitor to *The Tucson Citizen*, took the opposite view, stating that a perfectly good road already existed to Soldier Camp, and that taxpayers should not be burdened with footing the bill for a second road up the same mountain. The *Star* added that water sources were inadequate to support an influx of visitors to the mountain, noting that there was "a serious shortage of water at Soldier's camp this past summer" (*Arizona Daily Star* [*ADS*] 11 October 1928).

The debate over the merits of a road up the south face of the Santa Catalinas reached a head in the days preceding the 1928 election. *The Tucson Citizen* ran a full-page ad, written by F. E. A. Kimball, a member of the Arizona legislature, in support of the road and signed by many prominent citizens (*TC* 4 November 1928). The following day the *Citizen* published an extensive article, under the headline " 56 Permanent Water Supplies In Catalina Mountains" featuring a map showing the water sources, describing the abundant sources of reliable water in the Catalina Mountains (*TC* 5 November 1928). Meanwhile, the *Arizona Daily Star* ran an article based on the report of an engineer

named James W. Brown, stating that a road such as the one envisioned by Hitchcock would not be feasible and would cost three times more that the bond supporters claimed (*ADS* 4 November 1928).

On November 6, 1928, the bond election to fund a route from the Tucson side of the Catalinas to the summit was defeated by the voters of Pima County. The *Citizen* vowed to try again, stating in an editorial two days after the election, "Again, we say, the Mount Lemmon Short Road will be built; it is inevitable" (*TC* 8 November 1928).

Two years later, undeterred by the world-wide economic and social crisis that became known as the Great Depression, Hitchcock and his supporters brought up the short road for another bond election. Supporters of the 1930 bond election opened a downtown office, complete with pine cone decorations in the windows, to encourage citizens to vote their way. It had little effect, the citizens of Tucson again voted down the proposal (Bowden 1987:78).

Hitchcock, who affected the title "General," had many connections in Arizona and in Washington. In 1931, he proposed another federal survey be conducted. Hitchcock's Washington friends came through. As a result, another survey was commissioned in April of 1933 (*ADS* 14 April 1933; USDC 1951:7). In one of the last acts of his presidency, Herbert Hoover signed an act that authorized the construction of a prison camp to house the inmates who would build the road (*ADS* 14 April 1933).

Engineers from the U.S. Bureau of Public Roads conducted the survey east of the previous one, at the mouth of Bear Canyon near Gibbon's Ranch. The engineers concluded that a road could be built from Gibbon's Ranch to Summerhaven, a distance of

27.5 miles at an average grade of 6%. Virtually the entire route was on land administered by the Coronado National Forest. The estimated cost for a 20-foot-wide paved road was about $30,000 per mile, for a total cost of $1,153,000 (USDC 1951:9). Interestingly, the estimated cost was very near that predicted by the *Star's* consultant in 1928, a figure that was derided by Hitchcock at the time (*TC* 2 November 1928).

Further investigation of the route was conducted by engineers and personnel from the Bureau of Public Roads, the Forest Service, the State of Arizona, and Pima County. They concluded that the proposed route "would provide sufficient benefit to the public and to the Forest Service to justify its inclusion in the Forest highway system." The recommendation was approved by the Secretary of Agriculture on March 13, 1933 (Doran 1966:2).

A Modest Proposal

Just because the project had the approval of the Forest Service did not mean it had funding. The cost of the project still made it prohibitive, especially during the Great Depression. While the New Deal sponsored many public works projects under Franklin D. Roosevelt's umbrella of "relief, recovery, and reform," a project such as the Catalina Highway had virtually no chance of being funded. It was, in effect, a road to nowhere, serving no practical use except to shorten the drive from the desert to the pines for the citizens of Tucson. Other, more useful endeavors were given priority in the New Deal's new way of doing things.

In May 1930, the U.S. Congress had enacted legislation allowing federal prisoners to engage in a highway construction project. This plan would reduce the cost of the project while providing the prisoners "a means of rehabilitating them physically, mentally and morally with the hope and expectation of making them good citizens before granting them freedom" (USDC 1951:13).

At about the same time, General Hitchcock contacted Sanford Bates, the director of the Federal Bureau of Prisons, on the feasibility of using convict labor to construct the road. German prisoners-of-war had been used successfully in World War I to repair and reconstruct roads in the Meuse-Argonne region of France, and the feeling was that this experience could be replicated in the United States (USDC 1951:14).

Convict labor was nothing new in the United States. Chain-gangs were a familiar sight across the country, particularly in the southern states, where platoons of convicts labored on farms and along roadways clearing brush and repaving roads. What made Hitchcock's idea of inmate labor a novelty was the complexity and the scope of the project. Convicts would not be used only in the unskilled, heavy work of maintaining an already existing road; they would be used to construct an entire road, from scratch. The work required skilled labor to run hydraulic drills, operate bulldozers, power shovels, and dump trucks; to drill, blast, and grade a road out of a granite mountain in extreme conditions, subjected to summer heat and winter cold.

Hitchcock's argument was persuasive, and Bates dispatched a representative to Tucson in late March to meet with the interested parties and examine the proposed project. The result was a five-page contract (including signature page) that authorized the

construction of a permanent prison camp in the Catalina Mountains and the use of federal prisoners to assist in the construction of the camp and the highway. The highway would be officially known as Forest Highway #33 (USDC 1951:14-18). The camp was designated Prison Road Camp Number 10 (U.S. Department of Justice [USDJ] 1933).

General Hitchcock did not live to see the completion of his beloved road. He died just a few years after construction commenced, but his influence in initiating the road was not forgotten. In an editorial from 1936, Hitchcock's former nemesis, none other than *The Daily Star*, honored him, calling the Catalina Highway "a project of such value to the community that those responsible for it deserve to be remembered and honored. . . . The person responsible for this fine piece of work has conferred a lasting benefit upon the community. The community by all means should at least show its appreciation by naming the road after its sponsor, Mr. Frank H. Hitchcock, late publisher of the Citizen" (*ADS*, March 31, 1936).

It was quickly realized that Tucson had no secure place to house the number of inmates required to construct a road. Long-term plans called for the construction of a permanent facility half way up the mountain, but it would be years before the chosen site was accessible. In the meantime, two temporary camps were planned for, one at the mouth of Soldier Canyon at the bottom of the proposed project at an elevation of 2,800 feet, and the other near the Boy Scout Camp at the top of Mt. Lemmon, elevation about 8,000 feet. The higher-elevation camp would be a tent camp, while the lower-elevation camp would have constructed barracks (*ADS* 6 April 1933). The lower "temporary" camp was in operation for 6 years.

Construction Begins

The first prisoners arrived in Tucson in early June of 1933. Camp equipment, tents and hand tools for the construction of two temporary camps had arrived by rail the month before. It was deemed too hot to begin work on the lower end of the road, so the prisoners were trucked up the Control Road to Mt. Lemmon where they established a tent camp near Boy Scout Springs. The camp was "a good and well managed tent camp in very pleasant surroundings. Inmates sat on logs around camp fires during cool evenings, singing and telling stories" (USDC 1951:22). A javelina began hanging around the camp and was adopted by the men, who named her "Sally." She reportedly enjoyed table scraps and having her back scratched. She became a favorite pet and was moved to the lower camp in October with the inmates (Doran 1966:2) (Figure 6).

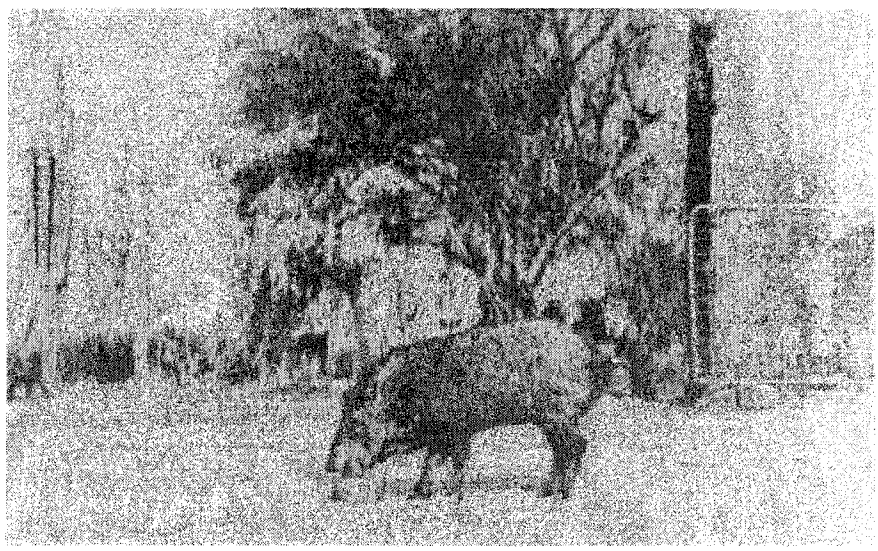

Figure 6. Sally the javelina

The first camp consisted of 60 inmates, 5 guards, an engineer and a "first-class powder man" (Doran 1966:2). Their first job was to improve an existing trail from Soldier Camp to the Boy Scout Camp, a distance of four miles, and rework it into a road. This task was completed by July, and at that time they began working on what would become the Catalina Highway (Hensel 2003:114-115).

All work was done by hand in the first months. "Drilling is being done by hand methods, churn drills being used for the deeper holes. Considerable sledging and block holing is necessary to break the rock small enough for the men to handle [with wheelbarrows]" (USDC 1951:23). The work was strenuous; saws and axes were used to clear the brush and trees from the route. The inmates drilled holes in the granite by hand while the powder man placed charges in the holes and blasted the rock into rubble. Then the inmates broke the rubble into manageable pieces with sledgehammers and loaded them on wheelbarrows and hauled them away. Progress was good through August, but by September the pace began to lag and morale suffered due to "discouragement on the part of the workmen at the futility of drilling the hard granite by hand methods and moving the excavated material long distances in wheelbarrows" (USDC 1951:27).

As the weather turned cooler, the project directors began to consider moving the camp to the lower-elevation site. The move was hastened by an invasion of skunks into the camp at Boy Scout Springs. The camp disposed of their garbage by throwing it over a rock ledge near the camp. This attracted scavengers, including skunks.

"All went well until the night of the first heavy and cold rain. Skunks . . . dislike rain and as no other shelter was immediately available they moved into the inmate's tents

to get out of the rain. Their presence was not appreciated and the transfer to the foot of the mountain was commenced the following day" (USDC 1951:26-27).

The lower camp was located on a piece of leased private land near the Coronado National Forest boundary at a place known as Gibbon's Ranch, near the mouth of Soldier Canyon. It was a level area with a well and close to the point where the highway would begin its climb out of the desert floor. A small frame house on the property served as the administrative office. The prisoners were put to work constructing a kitchen and mess hall out of lumber. They would continue to live in tents until September, when rough frame barracks were completed. The desert was cleared for a baseball field, and the inmates played the local Civilian Conservation Corps in "well matched baseball games" (Doran 1966:3-4). Needless to say, the inmates were always the home team. The camp at Gibbon's Ranch would continue operations for the next 6 years (Figure 7).

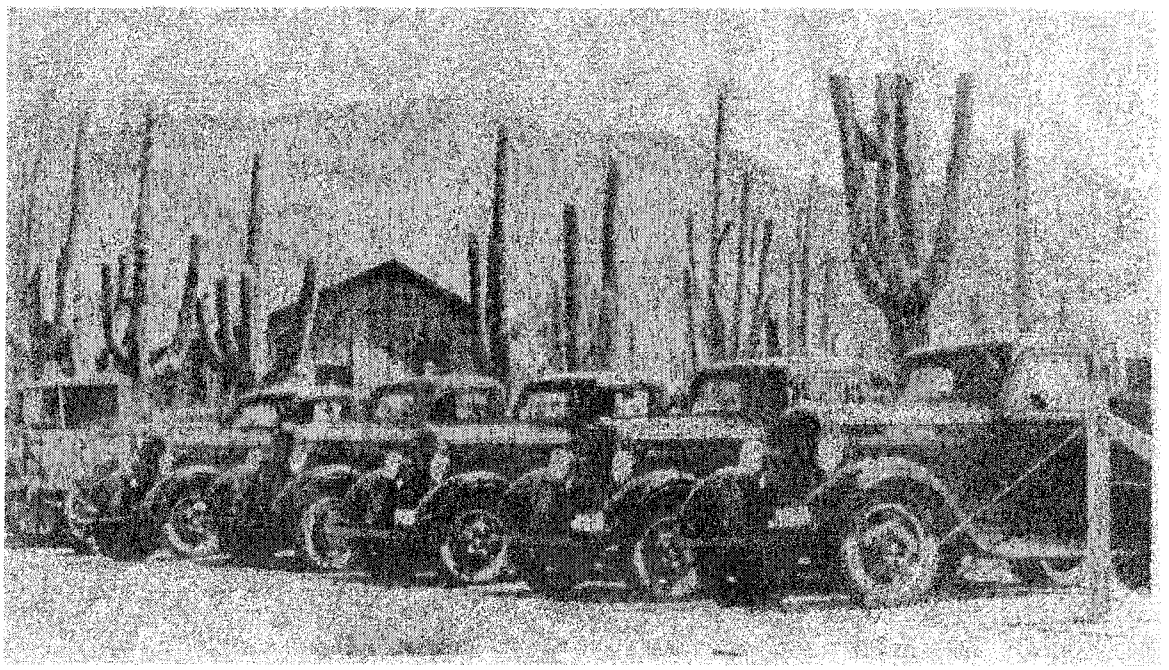

Figure 7. New Dodge trucks at Gibbons Ranch camp.

The Catalina Federal Honor Camp

Vail Corral, located midway up the mountain at an elevation of 4,800 feet, was designated as the site for a future permanent camp; the Catalina Federal Honor Camp (Doran 1966:2-3).

To see the site, anyone with some familiarity of the landscape of the Southwest would proclaim it a rare piece of property. It is a level area in a landscape of mountains, cut by a shallow creek, which is sometimes running, and boxed in on three sides by steep hills and on the fourth by the imposing front range of the Santa Catalina Mountains. Three species of oak grow here, along with alligator juniper and pinon pine. Cottonwoods and sycamores shade the riparian strip and grass and manzanita form the under story. It is the only flat piece of land for miles around, and that fact alone makes it valuable property. Add to that the intermittent water nearby, and it becomes an even rarer commodity.

People have recognized the attractiveness of this spot for centuries. Petroglyphs occur on the cliff face of a tributary of Soldier Creek (AZ BB:10:14 [ASM]). Bedrock mortars, metates, and plainware sherds are also in evidence (Farrell 1986; McDonald 1998).

Beginning in the 1870s, the U.S. Army used the location as an overnight camp on their treks from Fort Lowell to Soldier Camp at the top of the Catalinas. Later, in the 19th century and early 20th century, it was used as a place to gather cattle for branding and roundup. Cowboys and their families camped and enjoyed the cool air at the place

that became known as Vail Corral, after cattleman Walter Vail (Barnes and Granger 1982:286; McDonald 1998) (Figure 8).

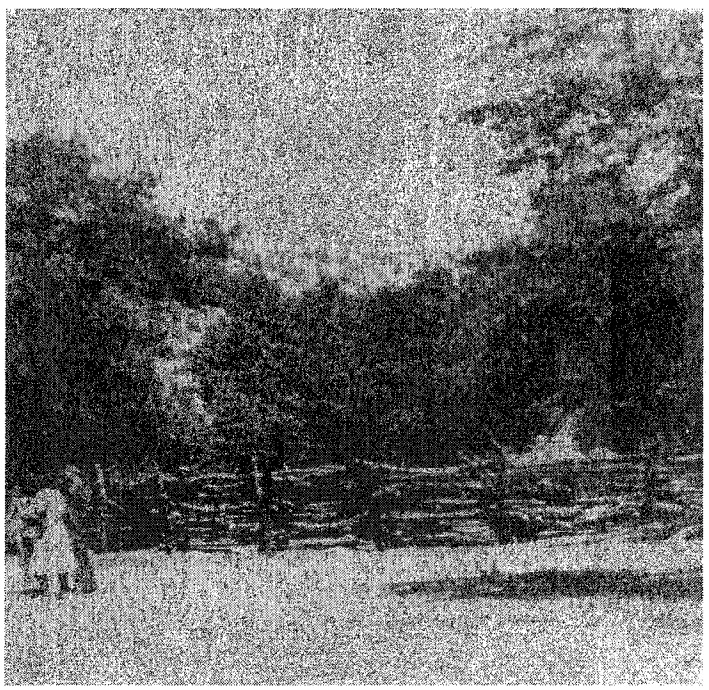

Figure 8. Vail corral, ca 1920.

In about 1913, the area was used as a study area for the Bureau of Entomology, under the direction of Dr. McDougle and Dr. Shreeve. They hosted entomologists from all over the world, and a nearby spring became known as Bug Springs in recognition of the scientists (Knagge 1981).

In spite of its appealing setting, Vail Corral was not easily accessible. A bone-jarring wagon road led to the spot, but it was 17 miles from Tucson. The last leg of the journey was a 7-mile hike or ride up steep hillsides and canyons from the base of the foothills.

The site was a natural setting to place a construction camp. The area had access to water, it was relatively level, and the canyon was wide enough to accommodate the layout required to house several hundred men. Best of all, it was located along the proposed route of the highway, which would cut down on the time and the hazards of trucking the inmates from the Gibbon's Ranch camp.

Road access to the Vail Corral area was achieved in December 1937, and work began almost immediately to clear and level the area in preparation for constructing the permanent camp. The burst of activity was short-lived, however. Equipment breakdown, inclement weather, and the fact that the prisoners were clad in summer-weight clothing halted work until spring (USDC 1951:55).

A site for a new well was "witched" by a local, Ralph A. Wetmore, using a forked mesquite stick. It took 45 days to drill the well through the bedrock granite, but it provided the workers with adequate water to build the camp (Alexander 1991:83).

Providing enough water for a camp full of inmates was another matter, however. A lesson learned by the Department of the Army in setting up CCC camps throughout the Southwest was that it took a minimum of 3,000 gallons of water a day to provide for the needs of 200 men (Otis 1986:29).

Water for the new camp came from two sources: gravity fed from Bug Springs and pumped in from Sycamore Springs. Sycamore Springs, located north of the camp, was selected as the primary water source, and in the summer of 1938, a pump and chlorinator were installed, and four-inch cast iron pipe was laid to bring the water to a

newly excavated reservoir cut into "solid rock in a hilltop above Vail Corral Camp, to provide storage and gravity pressure" (USDC 1951:62) (Figure 9).

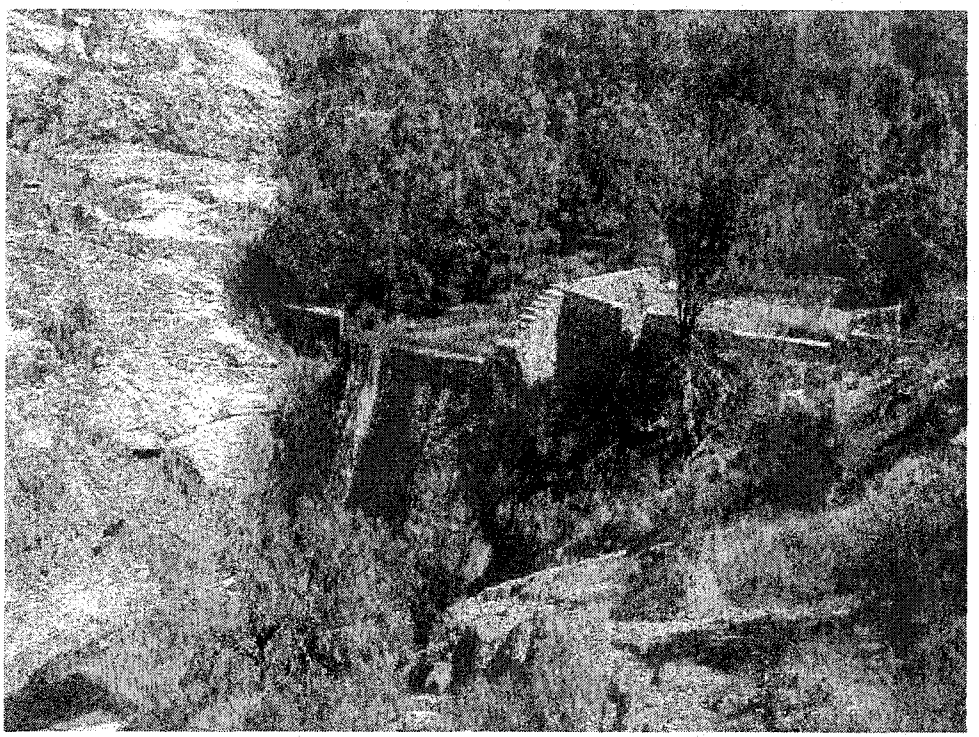

Figure 9. Sycamore Dam, ca 2003.

One prison camp resident recalled that by the 1950s, the water was so rust-laden that it stained sinks, toilets, and showers. The water "was red and nasty. You couldn't drink it" (*TC* 29 November 1993). In addition to the water system, a septic system was built in Soldier Canyon, below the camp. The water supply remained adequate until the dry summers of 1947 and 1950, when it became insufficient to support the large camp population. The number of inmates was reduced in both years until late summer rains filled the reservoir (USDC 1951:115-116). More than any other single factor, the

availability of potable water determined the size of the prison camp population and thus the progress of the road.

The camp was completed and ready for the prisoners to move into by February 1939, over two years after driving access was established, and more than six years since the beginning of the project. The move took place "during one of the few snowfalls that extended down to that 4,800 foot elevation. The snow soon melted and all were quite happy with the fine camp buildings" (USDC 1951:64) (Figure 10).

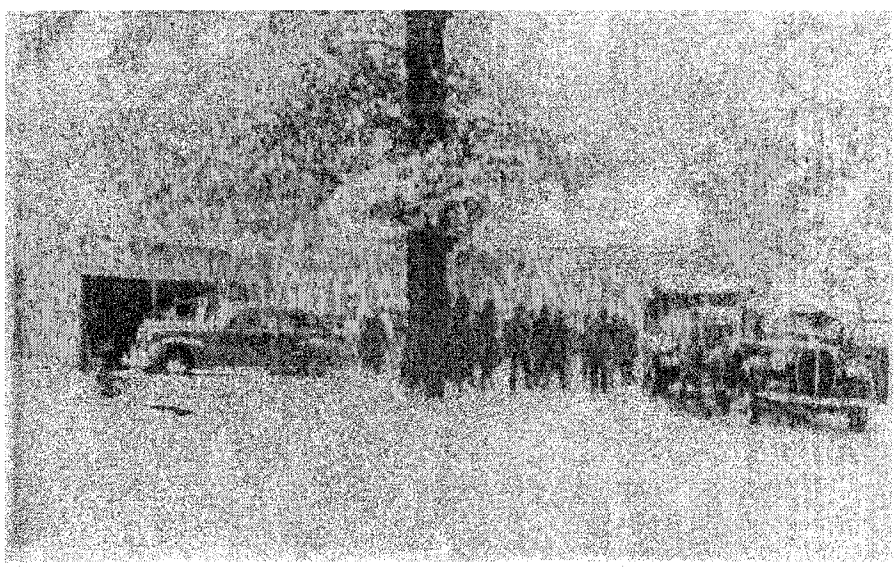

Figure 10. Catalina Federal Honor Camp, February, 1939.

The completed camp was laid out in a rough rectangle, and consisted of "an administration building, two barracks, kitchen and mess hall, power and steam heating plant, laundry, a small manual training shop and garage. These frame buildings were built of good lumber to conform to plans prepared in Washington. Some inmates

who were well-qualified building tradesmen were provided for this camp construction" (USDC 1951:62) (Figure 11).

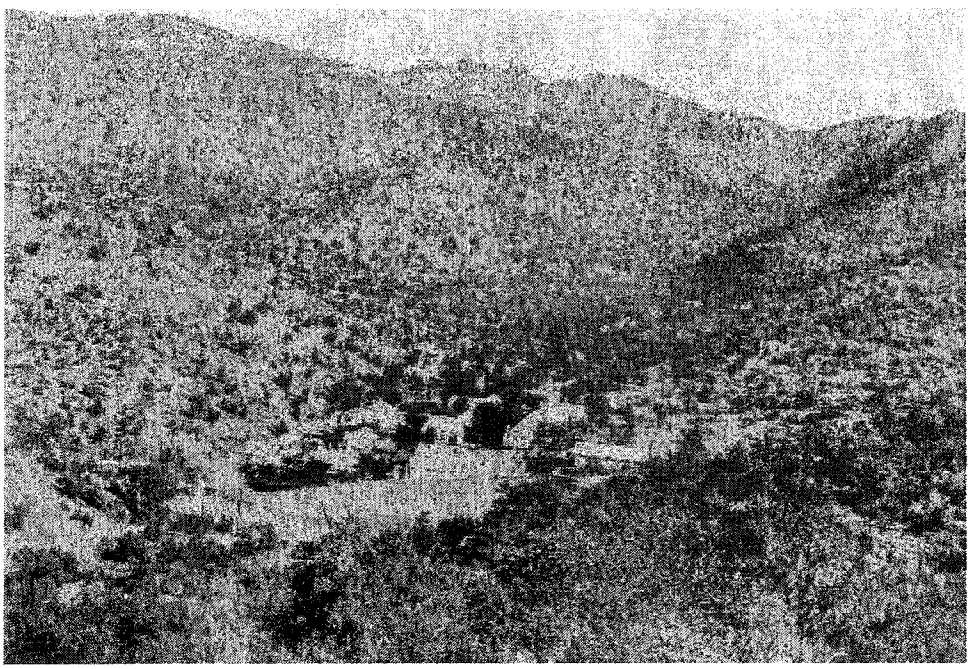

Figure 11. View of the Catalina Federal Honor Camp, looking northeast, ca. 1945.

Inmate Susumu Yenokida recalled a pair of large oak trees on either side of the front door of the administration building. Each tree was "huge . . . . You could not put your arms around it" (Yenokida 2002:22-23).

The warden's residence sat on top of a terraced knoll, overlooking the main camp, and evoked French philosopher Michel Foucault's thoughts on designed Panopticism, the ability to see everything from one vantage point.

Foucault described how hierarchical power is displayed and manifests itself in the organization and physical design of industrial barracks, boarding schools dormitories,

military barracks and prisons. As his model of hierarchical observation, he uses "an almost ideal model: the military camp-the short-lived, artificial city, built and reshaped almost at will" (Foucault 1985:189); where the officers may observe every mundane task of their men and yet remain unobserved themselves. The constant feeling of being watched and judged has the effect on the men of self-regulating and censoring their own behavior. In effect, they have created prisons within themselves to regulate their own actions and eventually, their own thoughts. "The camp is the diagram of a power that acts by means of general visibility. For a long time this model of the camp, or at least its underlying principle, was found in urban development, in the construction of working-class housing estates, hospitals, asylums, prisons, schools: the spatial "nesting" of hierarchized surveillance" (Foucault 1985:190).

Foucault went on to state, "A whole problematic then develops: that of an architecture that is no longer built simply to be seen . . . . but to permit an internal, articulated and detailed control-to render visible those who are inside it; in more general terms, an architecture that would operate to transform individuals : to act on those it shelters, to provide a hold on their conduct, to carry the effects of power right to them, to make it possible to know them, to alter them. Stones can make people docile and knowable. The old simple schema of confinement and enclosure-thick walls, a heavy gate that prevents entering or leaving-began to be replaced by the calculation of openings, of filled and empty spaces, passages and transparencies" (Foucault 1985:190).

The barracks were wood-frame buildings situated on cement piers. Many of the other buildings had concrete foundations with wood-frame structures. The foundations

often served as a floor, as in the case of the guard's quarters. The camp buildings roofs "were covered with galvanized iron then painted the Forest Service shade of green" (USDC 1951:64) (Figure 12).

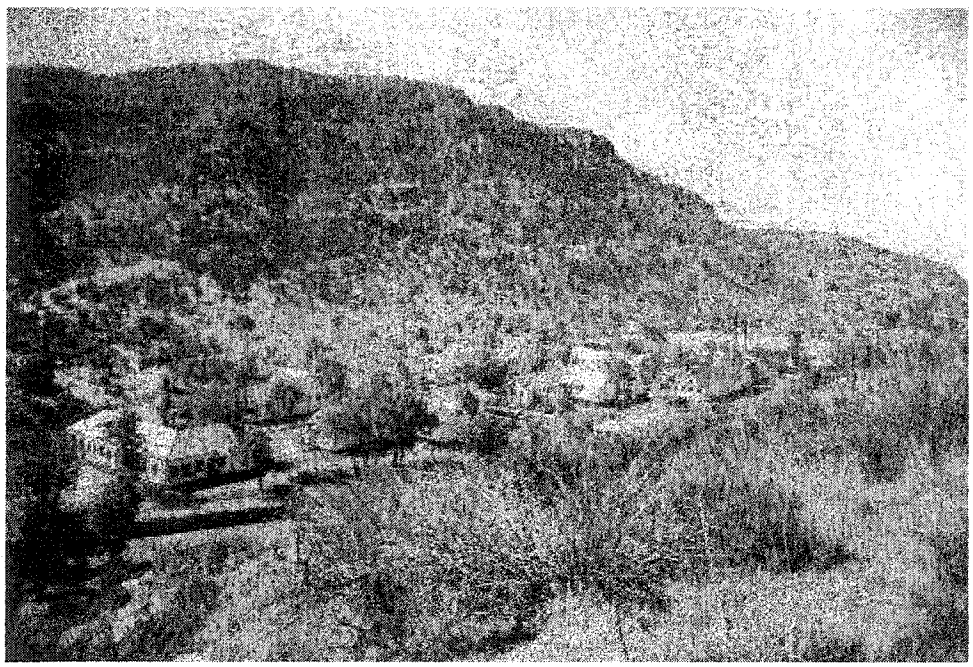

Figure 12. View of the Catalina Federal Honor Camp, looking southwest, ca. 1945.

In time, more barracks and administrative buildings would be added. Bridges and culverts would be built to span Soldier Creek and the numerous small drainages that cut through the site. Culvert tubes for the camp were created by welding steel drums end to end, setting them in cement and facing the ends with arches made out of coursed stone (Figure 13).

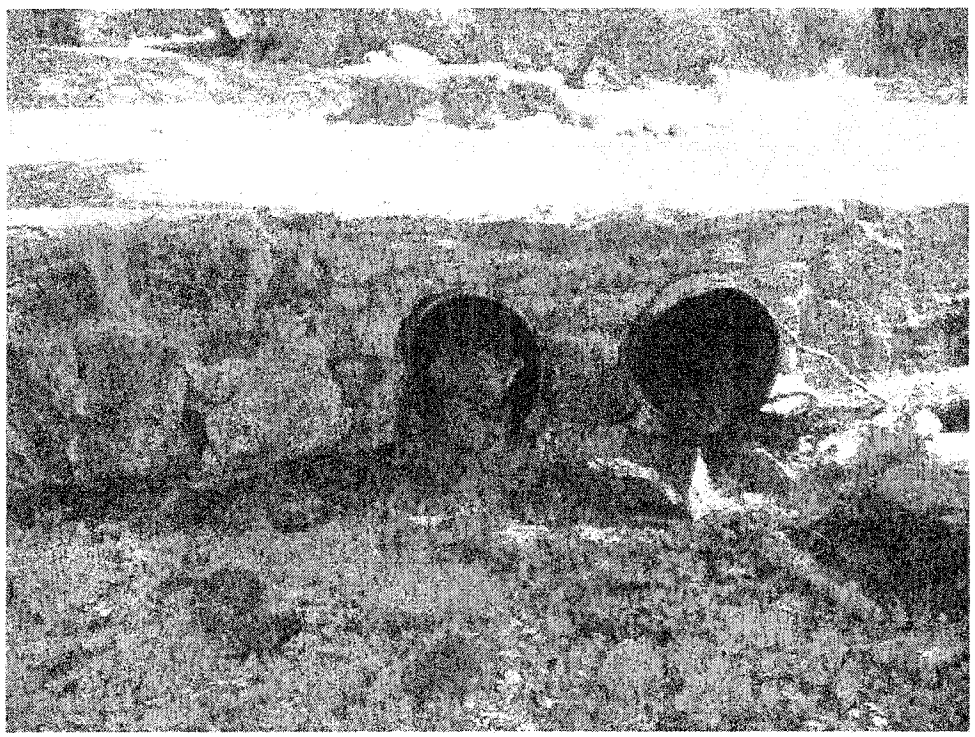

Figure 13. Steel drum culverts set in stone bridge.

It is not surprising that the Catalina Prison camp resembled a CCC camp in both layout and routine. The architectural outlay for CCC camps had proved a successful model for over five years for housing large numbers of men, and it was only natural that the Bureau of Prisons would adopt a similar plan. The *Arizona Daily Star* reported that the new camp would house 175 inmates and cost $30,000 to build (*ADS* 2 February 1938).

Due to a chronic shortage of housing in Tucson, "the Prison Bureau built several substantial granite masonry cabins for the officers and guards on the hillside of the camp" (Doran 1966:5). Jean Oberg, who lived in the camp in the 1950s as the daughter of a guard, recalls their small house. "Inside, everything was knotty pine-cupboards, ceilings, walls-and the floor was cement that was painted red "(*TC* 29 November 1993).

The best personal descriptions we have of the camp come from several of the Japanese-American resisters who served their time between 1943 and 1946. By that time a third barracks had been built, followed by a fourth.

Prisoners slept in bunk beds arranged in rows along the walls of the barracks, with a passage way along the center of the room. Bed checks were conducted by the guards approximately every hour. Joe Norikane recalled that the barracks were segregated by race and background: "A" Barracks housed the Anglo American Jehovah's Witnesses and conscientious objectors; "B" Barracks housed African-American, Native American, and Mexican citizens convicted of immigration laws; and "C" Barracks housed the Anglo American prisoners who were considered professional criminals (Norikane 1999). There was an infusion of this latter class of convicts in 1942, when the Navy took over Terminal Island in San Diego, and the hardened criminals incarcerated there were distributed to other prisons (Alexander 1991:84).

Gordon Hirabayashi stated that "There were no barbed wires. . . and no bars and no handcuffs or guard towers. Some of those large rocks [on the hills surrounding the camp] would be painted white, and you'd visually draw a line between this stone and that stone, and that was the line beyond which you weren't supposed to go" (Erickson 30 August 1998). Ironically, Hirabayashi and the other inmates at the Catalina Federal Honor Camp enjoyed more freedom of movement than the Japanese-American families living in internment camps had. The internment camps were enclosed with barbed wire and had machine gun towers at the corners staffed by U.S. Army soldiers or prison guards (Hirabayashi 1999). As a rule, the Federal Bureau of Prisons guards at the prison

camp did not walk around armed; their weapons were kept under lock and key in the administration building (Norikane 1999; USDC 1951). Ken Yoshida recalls that compared to the internment camp, the Catalina Federal Honor Camp was "a summer resort. And the food wasn't bad" (Norikane 1999:7).

Gordon Hirabayashi and many of the other Japanese-American inmates also praised the quality of the food. Compared to the mess halls of the internment camps and the greasy food they were served in the county jails while awaiting sentencing, the food at the Honor Camp was wholesome, plentiful, and somewhat boring. Ken Yoshida said the food was good, but "We didn't get T-bone steaks, let's put it that way" (Norikane 1999:15). Upon arrival at the Honor Camp in 1943, Hirabayashi was so impressed by the quality of the bread, pies, and pastries that were served, that he wrote a letter to the chief baker, a burly man who had gained his baking experience from years working at an Indian School in Oklahoma. Intrigued by the letter, the baker looked up Hirabayashi in the mess line one day. He told the young man that "the only letters he ever got were complaints, and so he wanted to find out who it was" who complimented his cooking. A couple of weeks later, the man offered Hirabayashi a job in the bakery (Hirabayashi 1999:1-2).

Not everyone liked the food. One Native American inmate who served eight years at the prison camp became so jaded by the macaroni and cheese that was a staple item that he was unable to eat it nearly 60 years after his release.

An infirmary was located just behind the administration building. A Public Health Service doctor visited the camp on Monday, Wednesday, and Friday afternoons,

and specialists were on call when needed. In cases where hospitalization was required, inmates were sent to Saint Mary's Hospital, which was also under contract for X-ray services (USDJ 1938:133).

Some of the Native American inmates received permission to build a retreat of their own on the hill to the south of camp. About 30 Hopi inmates constructed a ramada, a fire pit, a hut, and a sweat lodge to conduct ceremonies. Gordon Hirabayashi was invited to the retreat about a week after his arrival at the prison. His hosts washed his hair with herbs and treated him to a massage, sweets, and hot tea. The Hopi's hospitality did not extend to everyone. "Some of the college kids that I met immediately after I arrived-they were conscientious objectors- they had been trying to get invited up for I guess a month or two and not getting any bites. The Hopis, they look quite Oriental, and it was just that I looked more like them. It was like reverse racism" (Erickson 30 August 1998; Hirabayashi 1999). The white inmates were not alone in being snubbed; other Native Americans at the camp, particularly Navajos, were also not invited to the ramada (Hirabayashi 1999). Ken Yoshida, who was invited to the retreat, recalled, "They had their hogan, and they did their own thing up there" (Norikane 1999).

The prison leased land near the Agua Caliente and Tanque Verde washes to establish a farm, where inmates worked and raised vegetables for the mess hall. Surplus produce was sold in town. In addition to the farm, the prison had a poultry farm located near the Catalina Honor Camp, where they raised turkeys and chickens (Yenokida 2002).

A baseball field was constructed by November 1939. "Capt. Gladden, Prison Superintendent, hopes to secure greater contentment among the prisoners by the use of

this field. The electric lighted and steam heated barracks now are fully completed and the camp presents a substantial and comfortable appearance" (USDC 1951:67) (Figure 14).

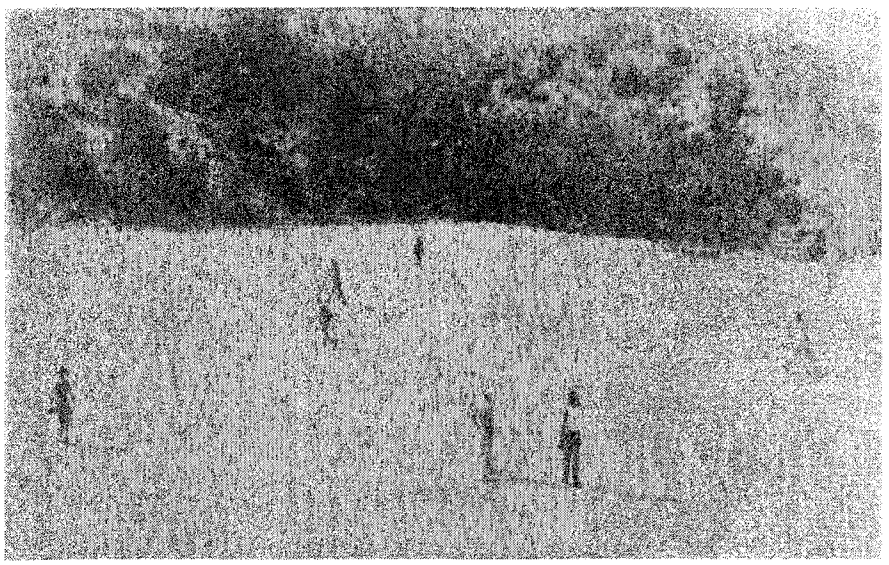

Figure 14. Baseball field at the Catalina Federal Honor Camp, ca 1940.

By the time Gordon Hirabayashi was incarcerated there in 1943, a handball court and basketball court had been added (Erickson 30 August, 1998).

According to *The Road Runner,* the camp newspaper, the camp fielded a baseball team known as "the Feds" and played against teams from the University of Arizona, the CCC, and local military bases. Baseball was not the only athletic activity the prisoners competed in. They also participated in track and field events against the same opponents (*The Road Runner* [*RR*] 1945:13, 32).

In the mid-forties, other athletic pursuits at the camp included gymnastics, ju-jitsu, boxing, wrestling, table tennis, weight lifting, horseshoes, and handball. Non-

athletic activities were dominated by the Jehovah's Witnesses, with 22 Bible classes scheduled per week. Secular classes included Spanish and Russian lessons, a typing class, barbering, and crafts (*RR* 1945:31, 33). Harry Yoshikawa and Ken Yoshida learned how to make woven cotton belts from some of the Hopi inmates, and Yoshida also learned woodworking and together with his brother taught martial arts classes (Yenokida 2002; Yoshida 2001). The prison also had a library and sponsored a bi-weekly film series with such titles as *Mold and Yeast, Blessings of Grass, Mosquito; Public Enemy* and *Disease Carriers*. Inmates contributed news and features to *The Road Runner* and engaged in an inter-prison exchange of newspapers (*RR* 1945:31, 33).

During their leisure time, prisoners had time to think about life outside the prison. They were encouraged to keep active. Ken Yoshida remembers "we sat around on Saturdays and Sundays wondering what we're going to do. People were playing baseball, and trying to keep themselves busy" (Yoshida 2001:6).

One of the popular pranks to pull on the new arrivals was to tell them with great enthusiasm about the beautiful springs located on the hill to the south of the prison camp. It was a site called twin springs, and the new inmates were encouraged to hike up the steep slope to locate the spot. Upon arrival, they discovered that twin springs was in fact a pair of car springs hanging from a tree (Yoshida 2001).

Although conditions were better at the Catalina Federal Honor Camp than in conventional prisons, it was still a prison filled with men who would rather be someplace else. There was often tension between individual inmates, between guards and inmates, and between groups of inmates. Fights broke out over inconsequential matters, as with

the fight Harry Yoshikawa witnessed over a game of dominos (Yenokida 2001). One night, the Japanese-American resisters expected an attack on their barracks from some of the Mexican nationals. The resisters armed themselves; "we got all kinds of sticks and knives from the kitchen" and waited, but the attack never materialized (Yenokida 2001:23).

Escape attempts were rare, but they did occur. While no official record has been located that states how many attempts were made, the escapees were usually noted missing during the night check by the guards and apprehended the following morning. Two Mexican nationals tipped off guards to their plans when the guards noted the inmates took great care in shining their shoes one evening (USDC 1951:23). Unfortunately for the escapees, the most viable route of escape was to follow Soldier Creek as it headed down toward the Tucson basin. The drainage quickly becomes a closed-in, steep canyon that funnels a hiker through an ever-narrowing chute. As the canyon reaches the desert floor, it begins to widen out where it crosses the Catalina Highway. The guards would simply wait at the road for the prisoners to arrive. The escapees, by then tired out from their over night hike and often pin cushioned by cactus thorns, were then apprehended and sent to a regular prison (*TC* 29 November 1993).

After completion of the Catalina Highway in 1951, the prison camp continued to house Federal adult inmates until 1957, when it was converted to a Federal Youth Camp. On February 7, 1967, it was turned over to the State of Arizona and was used as a reform school for Indian youths. Throughout that time, the inmates were used for work with the Forest Service (Diestel 2000). In addition, the camp was used to house Forest Service

fire crews. The camp closed in 1973, and soon thereafter it was torn down (McDonald 1998:19).

Hard Times

With the election of Franklin D. Roosevelt as President of the United States in 1932, the country began, by means of public relief projects, to climb out of the economic dumps of the Great Depression. To put people back to work and get the economy moving, the United States initiated a series of programs like the Works Progress Administration (WPA) (later named the Works Projects Administration in 1939) and the Civilian Conservation Corps (CCC). These programs not only put people to work, but gave them hope. The WPA administered public construction projects and sponsored music, art, photography, and writing projects, while the CCC mobilized enormous numbers of young men to work on National Parks, National Forests and Indian Reservations (Olsen 2001:56, 319).

In the United States, in the spring of 1933, at precisely the same time the first inmates were arriving in Tucson to begin road construction, hundreds of work camps throughout the country were constructed. Since the establishment of the Civilian Conservation Corps in March 1933, the need to house this army of young workers was paramount. In the first months of its existence, there were 25,000 men between the ages of 18 and 25 enrolled in "Roosevelt's Tree Army" (Otis 1986:7). In the first year, Arizona would host about 4,000 men quartered in 20 camps throughout the state; 18 located on National Forest land, and 2 on land administered by the Park Service (Otis

1986:11). Enlistment was for six months at a time, and the men were paid $30.00 a month, of which $25.00 had to be sent home. Food, clothing, medical care, and housing were provided (Collins 1999:209).

The camps followed a general architectural plan and were organized and administered by active duty Army officers. The CCC program in Arizona and New Mexico was administered by the U. S. Army out of Fort Sam Houston, Texas. Military discipline and order were the rule of the camps. The grounds were policed regularly and the walkways were delineated by rows of white-washed rocks and other vestiges of military posts. Work projects were planned and conducted by the Forest Service. Veterans and Forest Service personnel acted as the foremen of many of the CCC projects, adding their expertise and experience to the mix. This arrangement worked as a multiple benefit for the cash-starved U.S. Government; the CCC employed previously unemployed and restless veterans, it put a large portion of the nation's young men to work on valuable public works and conservation projects that in normal times would have been too expensive to undertake, it infused the stagnant economy with cash, and it provided practical administrative training for the officer corps. In addition, the CCC helped raise the self esteem of not only the young men who were enrolled, but of the nation as a whole. To this day, Americans still look with pride on the work the CCC accomplished (Otis 1986:6-8, 29; Collins 1999:208).

CCC enrollees destined for duty in Arizona and New Mexico were sent to Fort Bliss, near El Paso, Texas for two weeks of physical conditioning and training. Later, Fort Huachuca, Arizona, became another conditioning and training center (Otis 1986:29).

The parallels between the CCC enrollees and the inmates who constructed the Catalina Highway are apparent. The men were housed in camps where the layout was standard, and rules existed and discipline ruled. In a general sense, both groups consisted of physically fit young men: the CCC enrollees were anywhere between the ages of 17 and 24 years old (Olsen 2001:56), while the inmates tended to be young, between 21 and 40 years old. Both groups consisted of largely unskilled labor. They formed work details, and their work was supervised carefully. Both groups worked outdoors in all the extremes of weather and climate and engaged in hard physical labor. They ate in a mess hall and showered in a common area and they had little privacy or private time; their focus was on the group, not the individual.

A comparison of the stone faced culverts constructed by the CCC in Rucker Canyon in the Chiricahua Mountains with the stone-faced culverts built by the inmates on the Catalina Highway project is striking. One also notes similarities with the CCC constructed stone retaining walls and water chutes along the Box Canyon road in the Santa Rita Mountains with similar inmate-constructed features on the Catalina Highway. The stone bridges in Sabino Canyon, constructed by both CCC and WPA crews, also bear similarities in masonry work with comparable features along the Catalina Highway. It is little wonder that there exists a popular misconception that the CCC built the Catalina Highway.

The Prisoners

The Department of Justice report of fiscal year 1933-1934 states, "The work of the camp is being watched with interest and the Bureau of Prison hopes to demonstrate that roads and trails can be satisfactorily built by prisoners without the expenditure of substantial sums of money and without interfering with employment opportunities for free labor" (USDJ, Federal Bureau of Prisons 1934:9).

The *Arizona Daily Star* reported, under the headline "Only Genteel Convicts Will Build New Mt. Lemmon Road, Uncle Sam Pernickety About Who Shall Be Sentenced To Hard Labor In Catalinas," that inmates assigned to the road project would be required to meet certain conditions. Quoting U.S. Marshall Al Sittel, the *Star* outlined those conditions. "Prisoners must be able bodied and capable of hard work; they must possess such family ties as will operate against their seeking to escape custody, the camp being more or less an "honor" institution; addicts of narcotics, or those with other charges pending against them will not be sent to the camp; and those possessing long criminal records such as to cause them to be classed as habitual criminals, or who have been convicted of a serious charge of violence, are barred from this camp, as are also those whose cases have attracted wide public attention" (*ADS* 2 May 1933). Thomas Knagge described the first prisoners as "prohibition . . . bootleg cases and . . . some immigration cases" (Knagge 1981). Gordon Hirabayashi described the prison population as a mix of professional criminals, Mexican "border jumpers," and political prisoners such as himself (Hirabayashi 1999).

In all, 8,003 inmates were rotated through the prison camps associated with the construction of the Catalina Highway (USDC 1951:118). Serving time in a prison camp was considered far better than in a typical prison. The food was better, the environment was healthier, and the security was more relaxed. Prison records state "as a reward for conscientious effort, inmates are allowed a deduction of three days from their sentences for every month in Camp" (USDJ, Federal Bureau of Prisons 1938:133). Hirabayashi characterized the camp as "a fairly liberal camp" (Hirabayashi 1999:22).

There were other benefits as well. Inmates were occasionally called upon to assist the Forest Service in fighting forest fires. They were paid 30 cents a day for this duty and traveled throughout the Catalina, Chiricahua, and Santa Rita mountains fighting fires (USDC 1951:79; Doran 1966:6). Otherwise, the inmates received no monetary compensation for their work (Yoshida 2001).

All of the prisoners had been convicted of Federal crimes. In reality, not only "genteel convicts" would be used on the project. Offenses ranged from the non-violent; such as narcotic and liquor law violations, income tax fraud, immigration law violations, auto theft, and forgery, to the more serious; armed robbery of banks and post offices, murder of Federal agents, and violent crimes on Indian Reservations (Anne Diestel 2000:correspondence, USDC 1951:Introduction).

The inmates arrived from a variety of places. Many were sentenced locally, such as the Mexican nationals detained for crossing the border illegally. While there were undoubtedly many Mexicans who worked on the project, their numbers are impossible to estimate. The numbers of Mexican inmates were never accurately compiled by the

Federal Bureau of Prisons because they were sentenced by local magistrates in southeast Arizona, usually for thirty days in jail, and they came and went with great frequency and fluidity. In addition to the Mexicans, others who were sentenced locally were, as C. B. Mead, Catalina Honor Camp Superintendent put it, "misdemeanants ordinarily confined in the county jails . . . where idleness is predominant" (Harrison 1972:213). Some prisoners were sentenced directly by Federal Judges from the western states; others were already in the Federal Prison system. Prior to 1936, most of the inmates were transferred from the reformatory at El Reno, Oklahoma. After that time they came in from McNeil Island, Washington, Atlanta, Georgia, and Leavenworth, Kansas. "The men from Leavenworth and the South are particularly well fitted for the type of work to be done . . ." (USDJ, Bureau of Prisons 1938:131) (Figure 15).

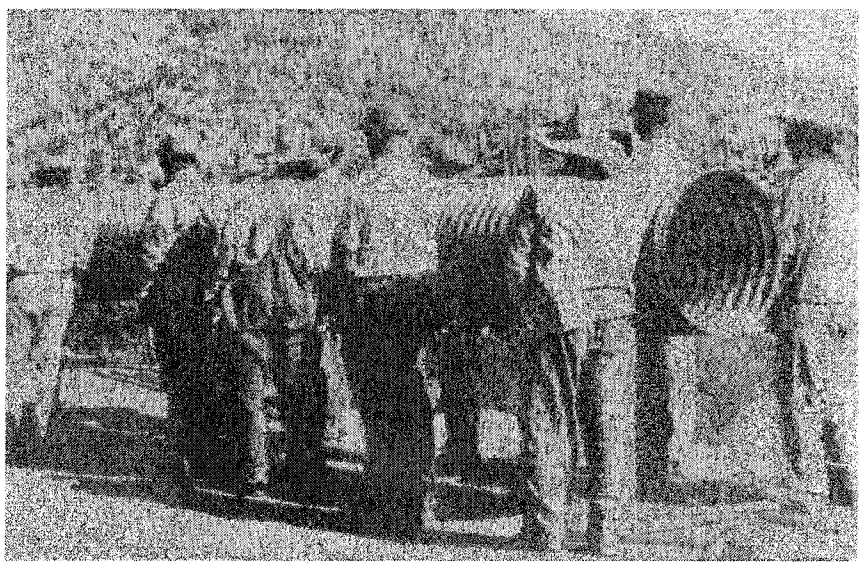

Figure 15. Prisoners carrying a manufactured pipe culvert.

Prison records and the highway report mention repeatedly that the roadwork was slowed due to the very nature of convict labor. Inmates were constantly rotating in and out of the camp as their sentences commenced or expired. Most prisoners were untrained upon arrival. Most had no construction experience at all. One inmate applied his skills as a safecracker to designing a foolproof lock for the explosives bunker. Another, an accountant convicted of tax evasion, kept the camp's records. Some were physically unfit for the strenuous work required (USDC 1951:45, 75).

Before the end of World War II, the men worked eight hour days, six days a week, Monday through Saturday (Norikane 1999). At the end of the war, they were given Saturday and Sunday off. Ken Yoshida recalled that when the extra day off was introduced, "everybody didn't know what to do with themselves. They were sitting around over there, smoking cigarettes, like they were lost" (Norikane 1999:36). The prisoners work day started at 6 am, when they were roused from their bunks by the guards. Those who worked in the kitchen began their work day considerably earlier, (Hirabayashi 1999). After breakfast in the mess hall, the men went off to their work assignments. Men who worked on the construction project were transported to the work site by truck, which usually took a half-hour to an hour each way (Yoshida 2001).

Work assignments for the prisoners varied with the men's interest, physical ability, and skill levels. Gordon Hirabayashi worked in the bakery and also as a groundskeeper at the baseball field. Joe Norikane broke rocks with a sledge hammer and then moved on to less punishing work. Noboru Taguma had been raised on a farm and was assigned to work on the prison farm. So was Susumu Yenokida, who later

transferred to the metal shop where he sharpened the drill bits used to cut through the granite to prepare the rock for blasting (Yenokida 2002). Ken Yoshida did a variety of jobs, starting with breaking rocks with a sledge hammer, then drilling holes with a jackhammer, then repairing jackhammers and other equipment, and finally, the best job of all; a member of the blasting crew. Rather than sweating and gouging holes in the granite rock of the mountain, the blaster's job was to pack dynamite into the drilled holes and blow up the rock. They were supervised not by the prison guards, but by the blasting foreman who was a civilian employee, and his assistant. The blasting crew consisted of the foreman, the assistant, and three inmates. "That was the easiest job there was. They used to blow up the road about every day. I told them, what are we doing blowing up every day? Let's blow it up every two days . . . Then you don't have to do nothing for two days" (Yoshida 2001:7-8) (Figure 16).

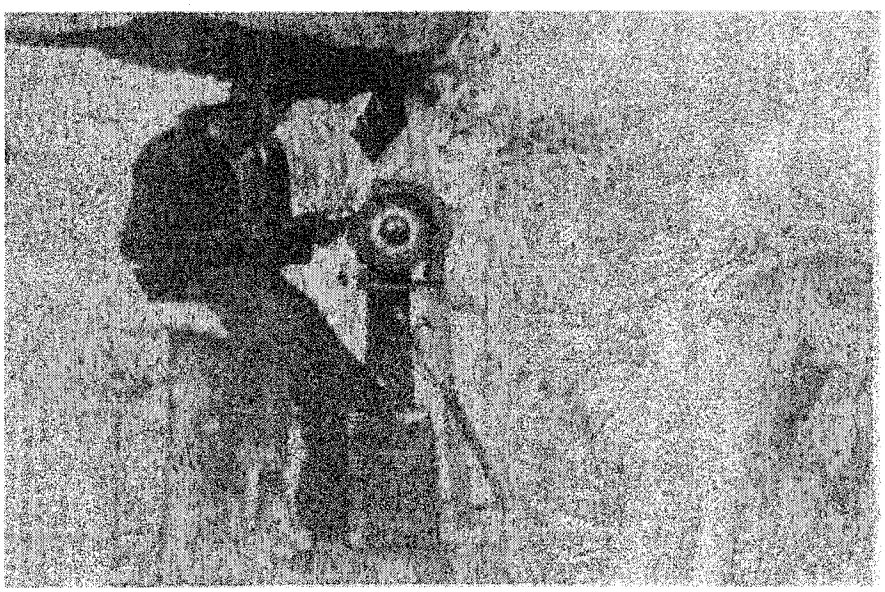

Figure 16. Prisoner sharpening drill bits with a grinder.

Population at the camp ranged from 60 inmates to almost 300. Some were shirkers and some were hard workers who were eager to learn. "However, it seemed to be the rule that when such a man became really efficient in his assignment . . . he would be paroled on the termination of his sentence" (USDC 1951:114). Although Bureau of Prison policy discouraged it, on two occasions trained inmates were retained as salaried workers upon completion of their sentences (USDC 1951:114).

In addition to the highway, the inmates also developed over 18 miles of gravel forest roads, built numerous campgrounds, picnic tables, masonry toilet buildings and spring boxes (USDC 1951:111).

Working on the Highway

Initially, work on the lower portion of the road from milepost 1 progressed well until "the first cut in very hard granite . . . making it very hard to drill and to break down to wheelbarrow size. Wheelbarrow loads became smaller and hand drillers lengthened their rest periods . . ." (USDC 1951:28).

Just like the work that began on top of the mountain, it was exhausting, physically demanding work. Morale dropped with each crank of the hand-operated churn drill, or each swing of the sledgehammer, or each load of rock pushed with a wheelbarrow (Figure 17).

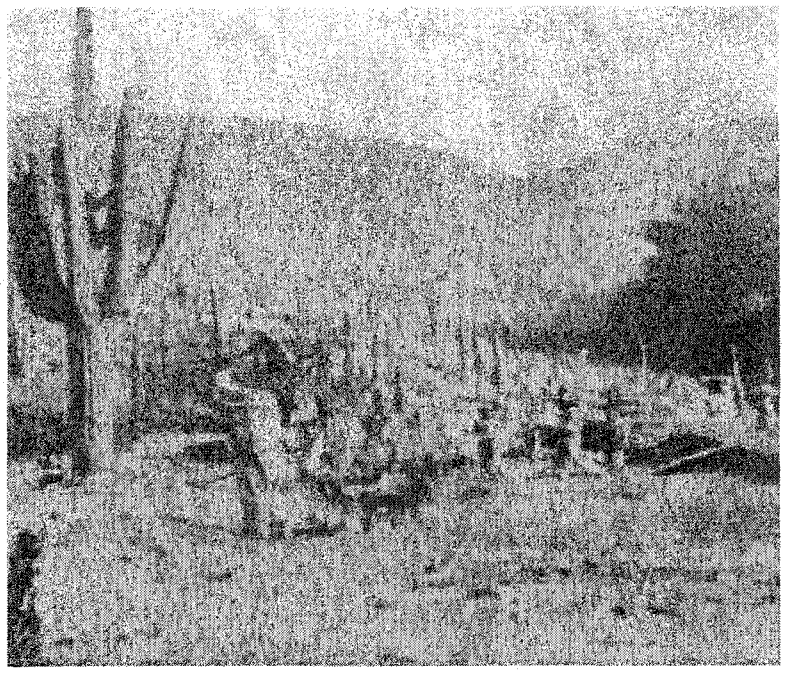

Figure 17. Milepost 0, ca 1933.

Morale and efficiency greatly improved in mid-November with the arrival of air-powered drills and a dump truck. At first, it seemed none of the guards or inmates knew how to work an air drill. Some of the Mexican inmates who had been employed as menial workers at the Cananea Mine in Mexico had seen jack hammers in use there and were assigned to the air drills. "They worked hard and became very capable operators. On completion of their sentences. . . they sent word to the Prison Bureau that they had been able to secure employment as jack hammer operators in the mine at a much higher rate of pay than their former pay as muckers" (USDC 1951:33-34).

The air drills were so large and unwieldy that tall tripods and block and tackle rigs were erected above the drills to guide and stabilize them as the workers drilled into the rock. The work was hard and took a toll on the men, as they struggled to stabilize the

drills. Once a cluster of holes was drilled, dynamite was packed into the cavities and the rock was blasted to pieces (USDC 1951:47). Harry Yoshikawa operated an air-powered jackhammer while an inmate in 1944. He recalls that "The jackhammer was rough, man. Dusty, dirty, noisy. Shakes your whole body. We were drilling holes for the dynamite. Maybe 20, 30, feet. 40 feet some of them" (*ADS* 31 August 1998) (Figure 18).

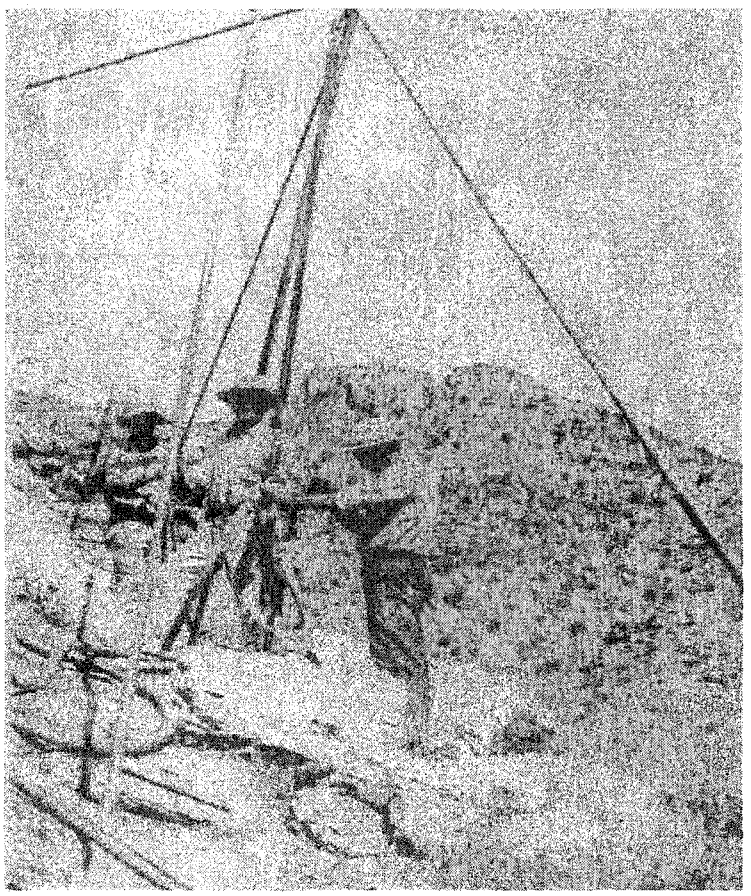

Figure 18. Drill on tripod.

The debris was further broken down by gangs of men with sledgehammers and picks. The reduced rocks were collected onto wheelbarrows and loaded on to dump

trucks, where it was deposited in the next low spot along the route. There is some indication that the road fill material was not entirely conventionally approved construction material. According to a present-day construction engineer who observed the condition of the original road bed in the aftermath of a flood in Rose Canyon in 1999, the foundation of the road bed also included non-mineral debris, such as branches of manzanita and oak, leaves and other vegetative material (Robert Cummings, personal communication, 2004). Appropriately sized and shaped rocks were set aside for the masons to construct walls, culvert facing, and other masonry projects along the route and in the camp (Figure 19).

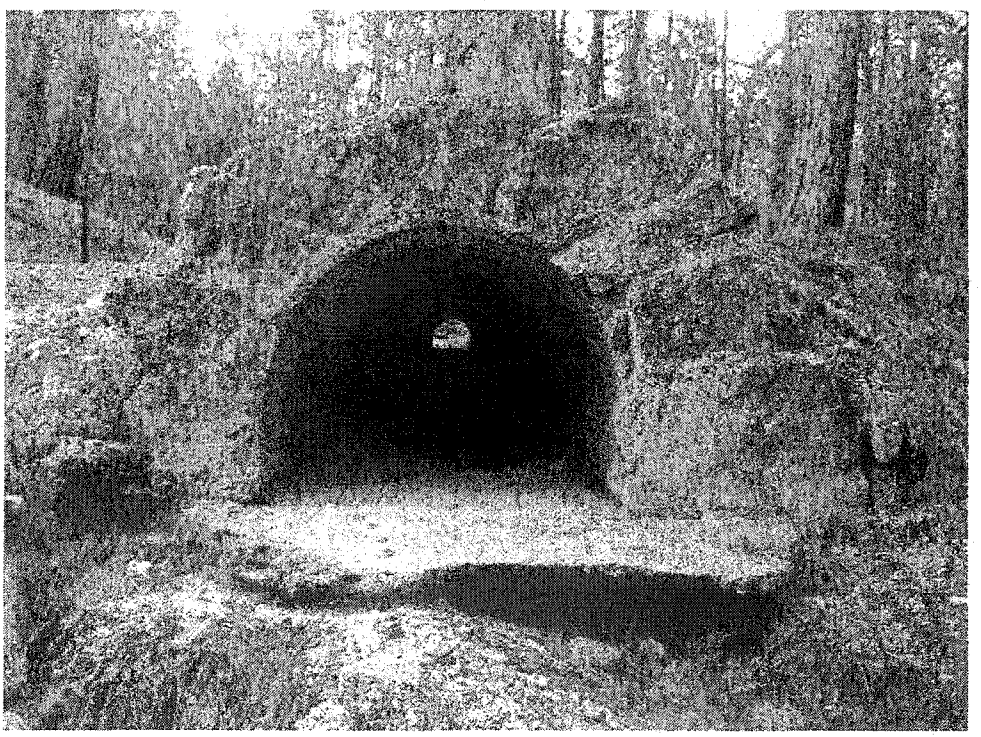

Figure 19. Concrete conduit culvert with masonry keystone arch.

Whenever possible, locally procured material was used in the construction effort. The chief engineer stated in his final report, "Because of the availability of an unlimited supply of wedge shaped hard granite in one-man and two-men sizes and good concrete sand in the dry washes it was considered economical and efficient to utilize the inmate labor in the construction of masonry arches for drainage structures" (USDC 1951:45).

As time went on, more heavy equipment was acquired, but there was still plenty of work that required the basics of construction work; hard labor with hand tools. Inmate Joe Norikane recalled his first days on the project in August of 1944. "Before I went to the Honor Camp, I thought prisoners only broke rocks with picks in cartoons" (Norikane 1999).

More equipment arrived through the winter, including a bulldozer, a tractor, a steam shovel and some small-gauge railroad ore cars from a mining operation. This railroad in miniature was dubbed the "Catalina Short Line Railway" by General Hitchcock (USDC 1951:36) (Figure 20).

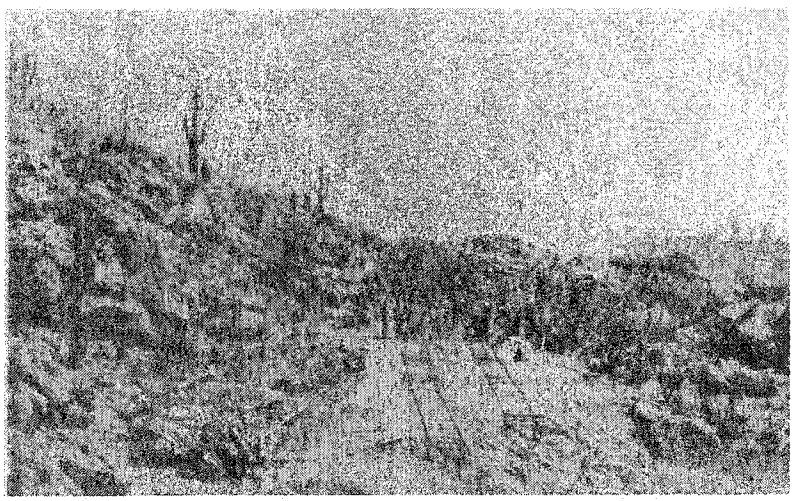

Figure 20. Loading ore car on the "Catalina Short Line Railway."

With mechanized equipment on hand, the road progressed steadily up the mountainside. Many problems were encountered along the way, and the engineers were kept continually busy adjusting the route and grade. Work was delayed by prison bureaucracy, snowstorms, forest fires, equipment breakdowns, and accidents.

Two inmates were killed when a dump truck rolled over in October 1934 (Doran 1966:4). The *Citizen* carried this account; "A truck which was carrying about 25 men to work left the road and toppled over. . . . The trip to convey the men up to the portion of the road under immediate construction is made every morning and four or five trucks are used for that purpose. . . . Considering the number of men employed on the project it is rather remarkable that no accident whatever has hitherto occurred in so long a lapse of time" (*TC* 5 October 1934). Another inmate was seriously hurt in a rollover in 1937 (USDC 1951:55). Amazingly, no other serious accidents occurred during the course of the project (Figure 21).

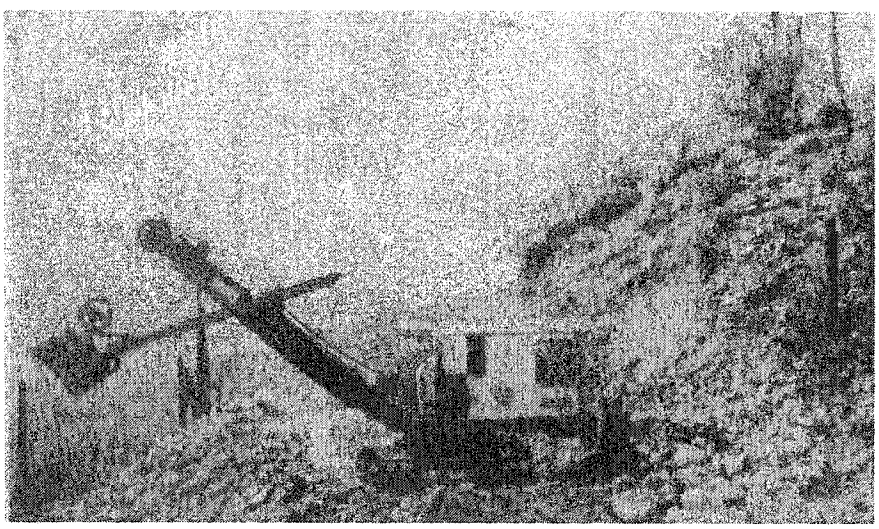

Figure 21. Power shovel near Soldier Canyon, ca.1935.

In the first 15 months, two miles of road had been constructed. It would take four years to reach the Vail Corral site selected for the permanent camp, and another fourteen to complete the project. By the end of 1940, the road had been built to Bear Canyon, at milepost 12.

In the spirit of the innovative use of steel drums for culvert tubes in the prison camp, the road construction project constructed many of the culvert tubes on the spot, using locally gathered sand and rock mixed with cement and cast in plywood forms to create the tubes out of concrete. Inmates acted as masons for the finishing work. The chief construction engineer was proud of this money-saving creativity. "Neither stone cutters nor stone masons were available therefore a "Telford" type of masonry was adopted. Selected stones were set like Telford on the radii of sectional wood arch forms and the interstices were filled with smaller stones and cement mortar. Sharp points on the stone provided some space above the forms and the result was a concrete lined barrel with none of the stone showing. . . . It was assumed that since the granite was completely 'embalmed' in the mortar that there would be no disintegration. As a factor of safety the arch rings were made 50% to 100% thicker than would be used for normal concrete" (USDC 1951:45).

As the drilling and blasting and digging and hauling proceeded, a transformation was taking place. Not only was a long narrow scar slashing across the face of the mountain, but one landscape was being altered and replaced with another. The mountain itself assisted in this transformation, providing the necessary material. Every rock that was blown to smaller bits and hauled away was moved to another spot on the route. As

each dump truck and wheelbarrow load was crushed and reduced and laid in the low spots in the drainages and canyons of the route the construction engineers had laid out, the landscape became transformed by itself. A natural landscape was being modified into a cultural landscape as the road crept on its inevitable course. The culture of the slow and steady way of foot paths and mule trails, where the getting there was as much a part of the journey as the destination, was being replaced by the modern requirement for speed and convenience and instant gratification, where the journey was simply a method of arrival. The culture of the automobile had arrived and added its mark to the transformation of the mountain (Figure 22).

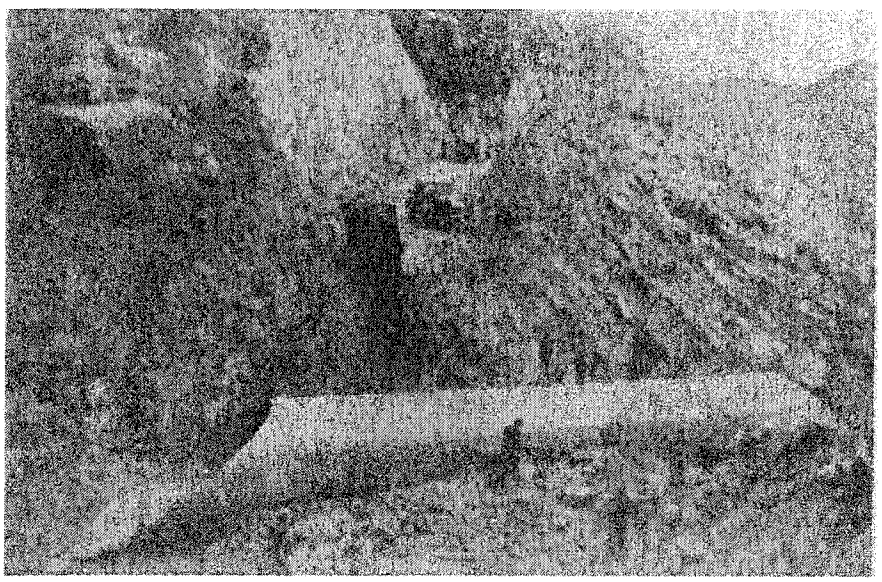

Figure 22. Installing manufactured culvert at Catnip Crossing.

Most winters during the construction, the workers were moved to the lower elevations to improve the road, but in January 1941, the construction proceeded through

the winter to Windy Point, at milepost 14. "The southeast exposure up the steep and nearly bare slope . . . was well adapted to winter work. Many of the inmates had been provided with heavy canvas jackets and other winter clothing, therefore it was possible to continue construction at the front" (USDC 1951:71).

The following winter of 1942-1943, work continued through the high country "without much loss of time due to snow because of good exposure, and by December 1, 1942, the construction had been advanced to Mile 16, Lizard Rock Saddle, when snow in the pine timber beyond the Saddle stopped construction" (USDC 1951:74). The roadwork progressed in this manner through to the end of the project.

After the end of the war, military surplus equipment replaced the worn out shovel and dump trucks and work increased greatly. The road was punched through, though only in a gravel state, to Soldier Camp at milepost 23 on November 20, 1946.

By the fall of 1947, motorists from Tucson were able to drive 21 miles up the road. Pima County Sheriff's deputies counted over 500 cars on the road on a typical Sunday. These same deputies estimated that over 30,000 people drove up on Labor Day weekend, 1947 (USDC 1951:95).

The entire project was completed, inspected and approved on February 28, 1951. "Arizona Forest Highway No. 33, otherwise known as Catalina Forest Highway, Mt. Lemmon Road, and General Hitchcock Highway . . ." (USDC 1951:112) now connected Tucson to Mt. Lemmon with a paved road (Figure 23).

Figure 23. Finishing touches - painting the centerline stripe.

The Control Road was now connected to the Catalina Highway on the crest of Oracle Ridge, near Summerhaven. It was possible, for the first time, to drive over the Santa Catalina Mountains, from Tucson to Oracle.

The Catalina Mountains would never be the same again.

A New Kind of Inmate

The outbreak of hostilities that marked the United States' entrance into World War II had little immediate affect on the progress of the highway or the demographics of the prison population. As the war progressed, however, events in the United States would come to have a profound effect on the Catalina Highway project. Beginning with a group of Hopis who were imprisoned in 1942 for failing to register for the draft, a new type of inmate was introduced into the mix of federal prisoners: the political prisoners. The Hopis explained their situation to Gordon Hirabayashi by telling him "we know you

guys are engaged in a white man's war, in Europe . . . We have no interest in fighting in your war" (Hirabayashi 1999:3).

In the wake of the attack on Pearl Harbor on December 7, 1941, by the Imperial Forces of Japan, jittery U.S. officials were concerned that Americans of Japanese descent would conduct espionage and sabotage along the West Coast. This concern was revealed in the statement by Lieutenant General John DeWitt, commander of the Western Defense Command. "A Jap's a Jap. They are a dangerous element . . . . It makes no difference whether he is an American citizen . . . . You can't change him by giving him a piece of paper" (Uyeda 1995:31). The Hearst-owned newspapers on the West Coast began an editorial campaign in January 1942 to remove Japanese-Americans from the coast and forcibly move them inland. In April, California fired all Japanese-American state employees (Uyeda 1995:66, 68). The hysteria was not confined to the West Coast. Westbrook Pegler, an editorial writer for *The Washington Post* wrote "The Japanese in California should be under armed guard to the last man and woman and to hell with habeas corpus until the danger is over" (Irons 1983:60-61).

In this climate of fear, President Roosevelt signed Executive Order 9066 on February 19, 1942, which authorized the Secretary of War to designate strategic areas from which "any or all persons may be excluded" (Executive Order 9066). This exclusion order had the effect of removing approximately 117,000 people, two-thirds of them United States citizens, from their homes in "California, western Oregon and Washington and southern Arizona in the single largest forced relocation in U. S. history" (Burton1999:1).

The Japanese-Americans were "relocated" to 10 internment camps placed primarily in remote areas in the western United States for up to 4 years. Two additional camps were constructed for the "hard cases" that were considered troublemakers. These internment camps were generally in operation from the spring of 1942 until the fall of 1945, though the last one did not close until March of 1946 (Uyeda 1995:54-55).

As an historical aside, the American public's fears of a fifth column of Japanese-American spies were unfounded; no American of Japanese ancestry was ever charged with espionage in World War II (Uyeda 1995:66).

During World War II, many conscientious objectors, pacifists and draft evaders served time at the prison, providing a different mix from the usual run of the mill criminals. In the last year of the war, there were 87 selective service act violators, comprising 43% of the prison's population (Diestel 2000). These were the men that Gordon Hirabayashi refers to as political prisoners. "But they [the guards] treated us like law abiders" (Hirabayashi 1999:23). These inmates were a mixed bag of college students, Jehovah's Witnesses, Japanese-Americans, and Hopi Indians. In 1943, they organized a short strike to protest the use of the road by the military for a training exercise. In spite of the strike, the conscientious objectors were highly regarded by the authorities, who considered them "the most satisfactory labor assigned to this project" (USDC 1951:78-79). President Truman pardoned all selective service violators on December 23, 1947 (*ADS* 30 August 1998; National Archives 1947).

From 1943 to 1946, 45 Japanese-American men served time at the Catalina Federal Honor Camp for resisting conscription into the military. They were sentenced to

terms ranging from three months to two years for refusing to register for the draft, while their families were held in internment camps.

These men, because of their common backgrounds and the circumstances of their incarceration, became fast friends while serving time at the Catalina Federal Honor Camp. The friendships continued after they were released from prison. The group of men dubbed themselves the "Tucsonians," and have held reunions periodically since 1946 (Figure 24).

Figure 24. A group photo of the first reunion of the "Tucsonians," ca 1947.

The resister's argument was summed up by Noboru Taguma five decades later, when he said "I told them (selective service officials) to release my parents and family from the camp and then I'll go, because I'll know what I'm fighting for" (Erickson 1999).

The resisters were not all conscientious objectors; a few even served in the Korean War in the early 1950s. They were protesting the policy of interring American citizens behind barbed wire simply because of their heritage. Still, in spite of their dedication to what they believed to be the right course, the resisters numbers are dwarfed by those whose dedication led them down a different path: all told, 315 Japanese-American men went to prison for resisting the draft, while over 33,000 served in the military in World War II (Uyeda 1995:70, 76).

The Japanese-American resisters, though ostensibly just another part of the alphabet soup of prisoners serving their time in a federal corrections facility, actually transcended the categorization of inmate to something more sublime, something Jefferson might have recognized as patriotic. In explaining why he decided to resist the curfew imposed on Japanese-Americans, Gordon Hirabayashi said that he would regularly leave the university library before his fellow students to make it back to his dorm room before the 8 o'clock curfew. Then one night, he had what amounted to an epiphany: "Then one time I'm dashing back, and the question comes up boldly, and I stopped-why am I dashing back and my dormmates not? I have things to do too. . . . But I never looked at it that way before. I'm just obeying the law, because I'm taught to obey the law at home and at school, and so on. . . . Just stopping to face that question in black and white, you know, not covered with other things, I said gee, I can't accept that. I don't want to be a second class citizen now. If I want to be a citizen, I want to be a good one, and I want to be a first class citizen" (Hirabayashi 1999:10).

The young Japanese-American men who resisted registering for the draft had likewise made the difficult decision to defy the laws of their country in the early years of a war when there were few battlefield victories that the United States could claim. The destruction of a large part of the Pacific fleet and air power at Pearl Harbor and the fall of the U.S. garrison in the Philippines was just the beginning of a series of military setbacks for the United States.

The resisters proved to be true Americans, making unpopular decisions in the face of public and family pressure to do otherwise. With the exception of a group from the Heart Mountain Internment Camp in Wyoming, where 63 young men were convicted in a mass trial (Uyeda 1995:77), they came to their decisions not as a unified group, or an underground movement that spread through the 10 internment camps, but rather in the loneliness of their own consciences. While the pervasive attitude among Japanese-Americans was to volunteer for service to prove their patriotism on the battlefield, the resisters chose a different path. These were 18, 19, and 20-year-old boys who defied not just the laws of their country, but also of their traditional culture that emphasized sacrifice of the individual for the good of the group, to do what they felt was the right thing. Gordon Hirabayashi wrote that the norm in the Japanese community was "don't rock the boat, or do not do anything to attract attention, for right or wrong, or you'll have to suffer for it: a Japanese proverb describes the principle: . . . the nail that sticks out is the one that gets hit" (Hirabayashi 1985:9).

In many cases, they went against the wishes of their family, and brought shame to their parents. Joe Norikane recalled that his mother was told in the internment camp

"Don't walk so proudly in camp, because your son is in jail, not the Army" (Norikane 1999). In spite of cultural pressure, social pressure, and pressure from the government, these young men chose to resist the draft. What could be more American than that?

The schism between the families of the resisters and the veterans persists to this day in Japanese-American society. In a 1999 article about the division in the Japanese-American community, resister Mits Koshiyama asks "How could we have fought for democracy and freedom overseas when we were denied the very same rights by our own government?" Veteran Karl Kinaga still considers the resisters to be "traitors" who "didn't want to get shot at" (*The Wall Street Journal* [WSJ], 25 June, 1999).

The Most Famous Prisoner

The most well-known of the resisters, Dr. Gordon Hirabayashi, is the subject of a documentary film and several books. Gordon Hirabayashi is something of an icon among Americans of Japanese descent, whether they served in the armed forces or resisted the draft. Hirabayashi bridges the often factious groups in the community as a man of courage and integrity who stood up for his rights as an American under the Constitution in the most trying of circumstances.

Initial resistance to the exclusion order was almost non-existent. According to Gordon Hirabayashi, the military official charged with rounding up Japanese-Americans in the northwest for transportation to internment camps, a Captain Ravisto, claimed that the Western Defense Command reported a 100% success rate in every other state, except Washington. Gordon Hirabayashi was the sole exception on the entire west coast when

he refused to obey the exclusion order and did not report for transportation to an internment camp (Hirabayashi 1985:16-17) (Figure 25).

Figure 25. Gordon Hirabayashi, ca 1940.

The time he served at the Catalina Federal Honor Camp was not the result of his resistance to the draft, but rather his decision to defy the curfew and exclusion orders issued in the early days of 1942. On October 20, 1942, Hirabayashi was convicted and sentenced to 90 days in federal prison. Though Hirabayashi was born in Washington, the presiding judge required Hirabayashi's parents to testify at the trial, "to give evidence of my Japanese ancestry" (Hirabayashi 1985:10). His parents were brought in from the Tule Lake internment camp in California to Seattle and, rather than being provided with a

hotel room, as is customary, they were placed in jail for 10 days prior to the trial, a move whose "callousness . . . depressed and shocked me to the core" (Hirabayashi 1985:29).

After his conviction, Hirabayashi appealed the decision. His case went all the way to the U. S. Supreme Court, where his conviction was upheld on June 21, 1943 (Uyeda 1995:75). "I thought when I got to the Supreme Court, the Supreme Court justices, whose primary reason for existence is to defend the constitution. How could they accuse me of violating the constitution as I'm standing up to it? But during the war, objectivity goes out the window. The judge even said that if we lose the war, what good are civil rights" (Hirabayashi 1999:16)? After exhausting his appeals, Hirabayashi was sentenced to the Catalina Federal Honor Camp.

The government refused to pay for his transportation from Washington to Tucson, so Hirabayashi requested permission to hitchhike. The district attorney in Spokane, where Hirabayashi had been working while awaiting his fate, provided him with an official letter authorizing the unorthodox mode of transportation. It was a journey that took him a long time to complete. He stopped on the way to visit his parents, who were by then out of the internment camp and had found work on a sugar beet farm in Idaho.

After two weeks of traveling, he got past Salt Lake City, spending some nights sleeping in ditches beside the road. As he traveled farther south, Hirabayashi became less comfortable about sleeping outside. "I didn't know where there were snakes and other things . . . . A lot of animals that I am not familiar with are crawling around, you know" (Hirabayashi 1999:20).

Hirabayashi had to use the letter from the district attorney only once. In Utah, one of the people who gave him a ride was the local county sheriff, who expressed amazement that a man would hitchhike to prison. In his surprise, the sheriff "almost went off the road and slammed on the brakes." After examining the letter, the lawman continued on with his passenger, then wished him well as he dropped him off (Hirabayashi 1999:19-21).

Upon arrival at the U.S. Marshall's Office in Tucson in early September 1943, Hirabayashi was told that they had no orders to process him, and that as far as they were concerned, he could go home. He suggested they look around their office for his paperwork, because "it took me quite a while to get here . . . and in due course, you're going to find my name, and then I'll have to come back again" (Irons 1983:250-251).

After sending Hirabayashi off to an air-conditioned movie theater, the officials found his paperwork. When he returned several hours later, they had a car waiting to take him to prison. "I guess they figured that if I hitchhiked for two weeks down the road and insisted on serving the sentence rather than going home, I guess they figured it wasn't necessary to handcuff me" (Erickson 30 August 1998; Hirabayashi 1999:21).

After his release from the Catalina facility, Hirabayashi returned to Washington, where he married and began a family. By 1944, he had become a Quaker, but was again arrested and convicted for violating selective service laws. Hirabayashi spend nine months in the federal prison on McNeil Island, Washington (Erickson 30 August 1998).

Even when Gordon Hirabayashi was in the King County jail on the first charges brought against him in early 1942, his fame spread through the internment camps; here was a lone person standing up against the internment of 117,000 people.

Noboru Taguma, in the internment camp in Amache, Colorado, clipped out a photo of Gordon Hirabayashi from the local newspaper and hung it on his wall. Taguma said, "He was my hero" (Yenokida 2002:22).

On the first day of her arrival at the Tule Lake Internment Camp, Hirabayashi's mother received a visit from some Japanese-American women from the Los Angeles area who had been inmates in the camp for some time. Initially, Hirabayashi's mother had opposed his refusal to report to the internment camp. She worried about his safety and did not want him to "rock the boat." The visit from the women at Tule Lake changed all that. The women had heard of Hirabayashi and wanted to meet the woman who raised him and "say thank you for your son." The visit lifted the spirits of Gordon's mother as well as Hirabayashi himself. "The weight I was carrying, the guilt feeling I was carrying disappeared" (Hirabayashi 1999:13).

Gordon Hirabayashi went on to become a professor in sociology and is now retired. Hirabayashi's federal convictions were overturned by the U.S. Court of Appeals in 1983, and the government officially apologized. He remains a legend in Japanese-American circles, respected by veterans as well as resisters for the courage he showed as a young man. This esteem is suggested by the number of Japanese-American boys born during the war years whose first name is Gordon.

Consequences of the Catalina Highway

The completion of the Catalina Highway did more than make a cool mountain getaway accessible to the common man and woman. It opened the Santa Catalinas to a level of human exploitation which its sister range to the southeast, the Rincons, will never experience.

With accessible land came development in the form of summer homes leased from the Forest Service in Loma Linda and Soldier Camp, as well as increased home density and decreased lot size in the private land around Summerhaven. With increased home density came water problems and septic problems, as sewage fouled the streams around the developments.

Summerhaven grew from a village of a few dwellings, when the prospect of a road was being considered, to an overcrowded community when the Aspen Fire of 2003 burned more than 200 houses to the ground. Few would completely agree with writer Charles Bowden when he wrote that the primary point behind writing *Frog Mountain Blues* was to "blow up the only paved highway leading into the mountain and then leaving the mountain alone to heal" (Bowden 1987:160).

But few would argue that the road has fundamentally changed the mountain and complicated the dynamics of the natural order. Without the highway there would not have been the overdevelopment. Without the summer homes there would not have been the half-century of aggressive forest fire suppression, where the front range of the Catalinas was designated as the highest priority wildfire area on the Coronado National Forest and every small fire was attacked with all available resources.

Of course, there are the inevitable consequences when fire is excluded from an ecosystem. In over a half-century of this policy, small stands of stunted pine trees crammed together in "dog-hair thickets" have flourished. Without periodic low-intensity ground fires to weed them out, these stands of small-diameter trees have paradoxically increased the fire danger the policy was adopted to reduce. Thus, fuel-loading has run rampant on the mountain, with the result that when a fire is not immediately suppressed, the thickets provide food for the fire and act as a ladder that leads the fire into the tallest trees. This scenario led to the Aspen Fire burning a swath through Summerhaven and the other communities on the mountain.

One need only look at the fire history of the Catalinas and compare it to that of the Rincons to see what a difference a road and development can make. The Rincon Mountains have no road to the top, only trails for hikers and horseback riders. No summer homes are nestled among the conifers in the Rincons, only the historical cabin at Manning Camp, now used as crew quarters for the Saguaro National Park's fire crew.

Both mountains receive the same volume of lightning strikes each year, and experience about the same number of lightning fires. Both mountains share much the same topography and have identical species of flora, but there is a difference in the way both mountains are managed. Under the management of the Coronado National Forest, lightning fires have been traditionally suppressed in the Santa Catalinas, while under the management of Saguaro National Park, most lightning fires in the Rincons have been allowed to run their course. In addition, the Santa Catalinas have a vastly increased volume of human-caused fires. This is simply because there are more people on the

Catalinas than the Rincons. There are humans on the mountain because they can drive up to its highest reaches.

The Bullock Fire in 2002 burned 30,500 acres east of the Catalina Highway, and the Aspen Fire the following year burned 85,750 acres west of the highway. Both fires were human-caused. The Catalina Highway became an effective fire line during the two fires, successfully halting the forward progress of the flames; compartmentalizing the fires with a neat border.

Both the Rincon and Catalina ranges are steep, rising from the desert floor to the deep conifers in a very short relative distance. Yet, the Rincons are the more arduous of the two. Only serious hikers consider ascending the Rincons, and no dream of a road up to the top of the Rincons was ever seriously contemplated. Thus it is that their own steepness is what has saved the Rincons from the fate of the Catalinas. That, and the fact that the Rincons are administered by the National Park Service, in the U.S. Department of Interior, which does not follow the policy of multiple use that is the lynch pin of the U.S. Forest Service's mission; to make the federal land under its watch a viable place for commercial and recreation interests alike. This policy, in places where people have summer cabins, translates into suppressing every fire that occurs.

Most of the people rebuilding their burned houses in Summerhaven are doing so on a grand scale. Where there were once cobbled-together humble structures made of pressed wood siding, or Lincoln-log style cabins from kits, there are now elegant, palatial log houses being erected. The square footage of most of the rebuilt houses has increased significantly from the houses they are replacing. The new houses often exceed

the size allowed by the county for a septic tank to exist on the same lot. However, in the wake of the "tragedy" of the Aspen fire, Pima and Pinal Counties are relaxing the building codes to accommodate the homeowner's wishes for bigger and more luxurious houses.

There are currently plans being proposed to the County Board of Supervisors and the Coronado National Forest to develop a resort and exclusive gated community on the forested land of Oracle Ridge, to the northwest of Summerhaven. There is every reason to believe that the necessary permits and permissions will be granted to the developers. Development continues to grow, but wisdom does not. The mountain will recover from the wildfires. The question is, can it recover from the people?

CONCLUSION

Discussion

Some of the questions posed in the Project Overview section have been answered by the findings of this thesis while others have not. It has been amply demonstrated how the materials and labor to construct the highway were procured during scarcity and economic hard times through the material culture of the highway and prison camp and by the use of federal convicts to be used as laborers. This also has helped to establish how social and economic conditions of the times were reflected in the material culture of the road and prison camp.

Likewise, the working and living conditions of the prisoners have been covered through the oral interviews of former inmates and the content of the original copies of the camp newspaper, *the Roadrunner*.

Less clear, however, is the question of how the project and the men who participated in it perceived by the local community. As mentioned previously, media coverage of the project, once it was underway, was minimal. This could be taken as a sign that the convicts were a group of disenfranchised people who were shunned by mainstream society as reflected in the lack of newspaper coverage in the project once it was underway. Or it could simply be a matter of "out of sight, out of mind." The location of the project placed it far enough from the city of Tucson that most people would not have noticed it on a day-to-day basis.

In talking to people old enough to recall the road construction, most emphasize that the inmates were nonviolent. Jean Oberg, who lived at the camp in the late 1950s, well after the highway was completed, states in her article in the *Tucson Citizen* that "We came into contact with the inmates a lot. Many of them, I am sure, were good kids" (*TC* 29 November 1993). In an interview with retired forest ranger Thomas Knagge in 1981, he states the site of the camp was "an ideal place for a prisoner to be because all they had to do was eat and try to behave themselves, and do a little bit of work." He then went on to describe a prisoner who was an Apache convicted of murder as "apparently non-violent and didn't give them any trouble because if the prisoners gave them too much trouble they sent them to Terminal Island or someplace like that" (Knagge 1981:5).

So it remains to be conclusively determined how the prisoners were perceived by the local citizens. Like everything else, it is likely that the people of Tucson had a wide and diverse range of opinions on the matter.

The information gathered for this thesis has relied heavily on historical and ethnographic methods, often, it would seem, at the expense of archaeological methods.

The reason for this tipping of the scales in favor of the documented material is simple; there was more information available in documented form than was available in the archaeological record. Most of the original features of the Catalina Highway were reduced to rubble in the last few years. Fittingly, much of it was crushed and re-used as road fill for the current road-widening project. The majority of the archaeology associated with the Catalina Federal Honor Camp was removed, buried, or incorporated into the campground design over thirty years ago. What remains at the prison camp site

has been relatively unchanged since the 1970s; concrete slabs, a natural rock staircase, and rock and concrete bridges.

My overriding interest in writing this thesis was to tell the story of the Catalina Highway by every means available. The fact that the archaeology of the project is rather thin does not mean that the story can be told without using what little archaeology is available. Without the recorded mortar and stone culverts under the highway and the re-used steel drums at the prison camp, we would have no tangible archaeological evidence that the project was dependent on locally procured materials and the ingenuity of those involved in the construction of it. Without the archaeology, all we would have are some newspaper articles about the cost of the road and a few references in the engineer's report of how the road was built by the most economical means possible. The archaeological features substantiate the documents, and the documents explain the features.

In many ways, the Catalina Highway itself represents the archaeology of the project. While driving up the highway, one need only stop the car, get out, and contemplate the landscape and how the highway has become a part of that landscape. The road folds and rises and drops as the landscape does, corresponding with the natural features as much as is possible for an asphalt feature to do. The route is the same one the engineers laid out nearly 80 years ago. The view is the same one that countless inmates contemplated when they stopped to take a break or perhaps smoke a cigarette. Every dip and curve and rise in elevation is the archaeological record of the Catalina Highway. The road alignment and destination have not changed since it was laid out, in fact, the

alignment of the road alone is enough to make it eligible to the National Register of Historic Places under Criterion C (Keane and Bruder 1999:126).

No single method can tell the story of the Catalina Highway and Honor Camp. Just as a three-legged stool cannot stand when one leg is removed, so this thesis would not have been possible without the three disciplines used to write it.

The available records consulted were invaluable sources of information about the desire of Tucsonans to see a road ascend the mountain that is literally in their back yard. The oral interviews were likewise an insightful source of information on the road project and the human dimension involved. The archaeological reports and the surveys conducted confirmed that the road and prison camp were built by the most economical and expedient means possible, as reflected in the archaeological record.

All That Remains

To see it as it exists today, one would have no clear picture of what was on the site. The stacked juniper corrals of cattleman Vail's day are long gone, replaced by barracks and workshops, which in turn have been replaced by picnic tables and fire rings. The structures of the camp were torn down in the mid-1970s and the area scoured clean by the Forest Service. Since then, generations of campers and partiers have deposited their own artifacts to mark their passing. New litter is heaped upon old and mixed together until eventually it all gets hauled off or becomes part of the soil.

The setting is extraordinarily peaceful and commands a magnificent view. All that remains of the Catalina Federal Honor Camp are the traces of the original buildings

and structures; a stone staircase that led to the warden's house, portions of low stone retaining walls that the creek has tumbled about, a score of flat, rectangular concrete pads and a pair of stone-faced cellars. Farther up a side creek are more concrete pads, smaller and not as regularly positioned. This was the guard's housing area. Red pigment was mixed with the concrete of these pads to dye them dull ochre. Fragments of metal water pipe and ceramic sewer pipe are scattered in the creek bed or lay partially exposed where they were originally laid. The regularity and positioning of the concrete foundations suggest the existence of a military post, a Civilian Conservation Corps camp or perhaps a prison.

There is no discernable trace of the Hopi's ramada area today. The slope it was located on was spared much damage from the Aspen Fire and remains wooded. None of the former inmates can recall exactly where it was located. They just know it was there.

Today, the Catalina Highway is undergoing a road-widening project. Most of the original features built by the convicts have been destroyed and replaced. The stone-faced culverts, from the inauspicious stacks of rocks to the grand arched ones, which withstood traffic, fires, floods, and freezing temperatures for over 50 years, were deemed to be too narrow to accommodate the new road surface and have been demolished. Prior to demolition, the culverts were photographed and measured by archaeologists. Only a handful of stone-faced culverts remain, as do other prisoner-constructed features.

The reservoir created by Sycamore dam is filled with silt as a result of the floods of 1993. The dam still stands, holding back the debris from the mountain. The pipeline from the reservoir to the prison camp was dismantled when the camp was razed in the

1970s. Most of it has been hauled off, but sections of rusted pipe can still be found. The concrete buttresses that supported the pipeline still line up across the landscape like ancient mile stones, their presence baffling to modern hikers.

Honoring an Ideal

In November of 1999, the prison camp was re-christened the Gordon Hirabayashi Recreation Area in a ceremony attended by Dr. Hirabayashi himself and seven other resisters, all but two of whom served time at the Catalina facility. U.S. Congressman Jim Kolbe joined other dignitaries to honor Dr. Hirabayashi and his contributions (Figure 26).

Figure 26. Guests of honor, 2001. Left to right: Roger Nasevama, Ken Yoshida, Gordon Hirabayashi, Susumu Yenokida, Harry Yoshikawa, and Noboru Taguma.

The place that was familiar to prehistoric farmers, cavalry troopers, Vail's cowboys, and over 8,000 prisoners has a new purpose. An interpretive trail, campsites and an information kiosk explaining the story of the wartime internment of 117,000 U. S. citizens and the men who stood up to the injustice of it all were completed in the summer of 2001. Again the resisters, the self-proclaimed "Tucsonians," would gather to remember in the oak-lined canyon that they once knew so well, their ranks thinned since the last visit by the passing of time.

The camp that housed federal inmates for crimes committed against the United States will now be remembered for its most renowned inmate, Gordon Hirabayashi, who took the Constitution at its word and was imprisoned for his conviction that the constitution is more than an abstract document made of high-minded words but a living, tangible, ideal to live by.

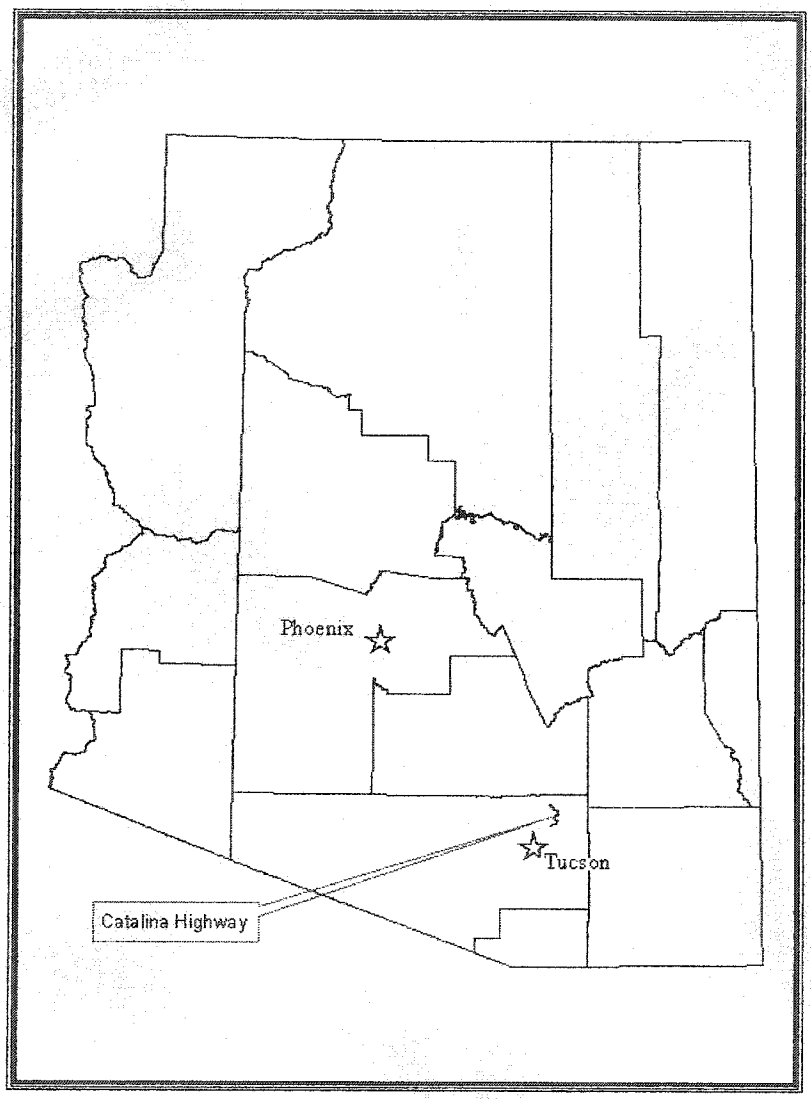

Figure 27. Location of the Catalina Highway within Arizona.

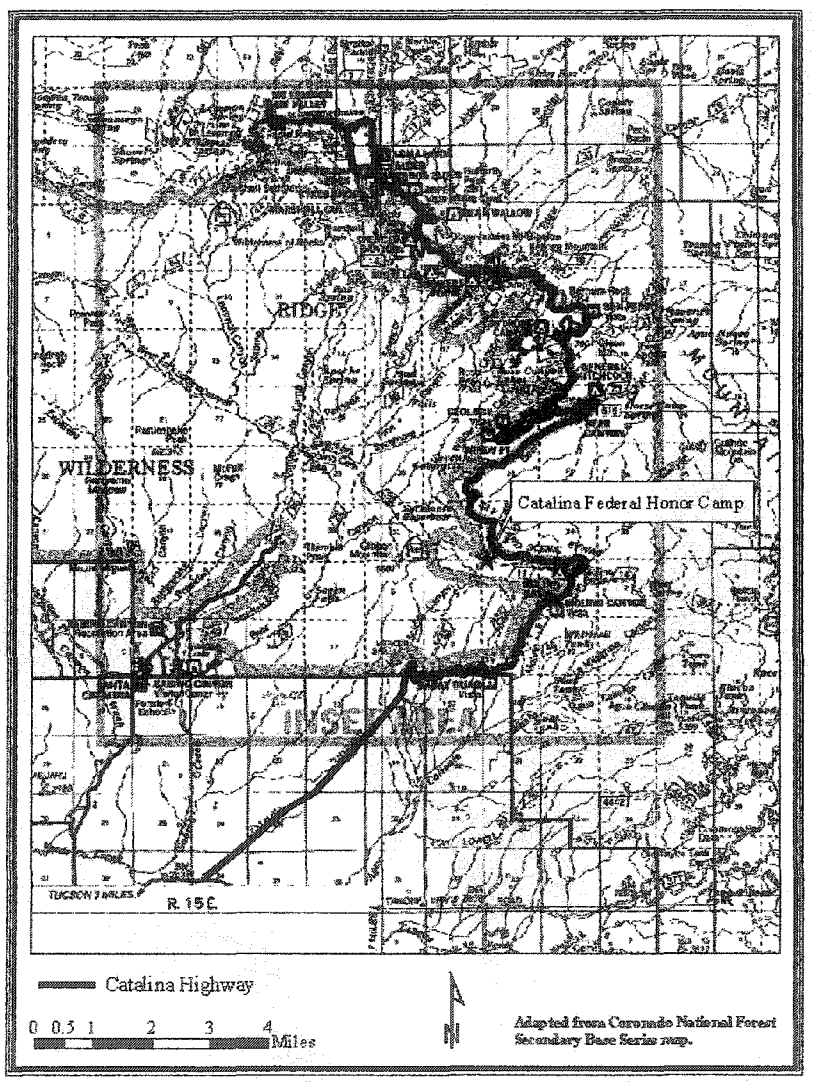

Figure 28. Location of the Catalina Highway and Catalina Federal Honor Camp.

APPENDIX A: ELIGIBILITY

The Mount Lemmon Highway and the prison camp are considered eligible for listing to the National Register of Historic Places under the following criteria.

Criterion A (association with or significant contribution to the broad patterns of our history).

The highway was constructed during two of the most significant periods of 20th century history, the Great Depression and World War II. Keane and Bruder, in their discussion of the eligibility of roads to the National Register, have identified eight themes of significance under criterion A, and the Catalina Highway represents at least two. These two themes are "Depression-Era Road Projects, 1934-1939", and "Road Construction during World War II, 1942-1945" (Keane and Bruder 1999:75).

Criterion B (association with the lives of persons who are significant to our past).

Gordon Hirabayashi is something of an icon among Americans of Japanese descent, whether they served in the armed forces or resisted the draft. Hirabayashi bridges the often factious groups in the community as a man of courage and integrity who stood up for his rights as an American under the Constitution in the most trying of circumstances. In 1999, the prison camp was officially dedicated "The Gordon Hirabayashi Recreational Area", the only occasion in the United States in which a draft resister has been so acknowledged. Gordon Hirabayashi is certainly a significant figure in our past.

Criterion C (employing characteristics of type, period, or method of construction).

The construction methods on the Catalina Highway ran the gamut from low-tech to the most modern equipment available. Whether it was men with picks and wheelbarrows or huge power shovels and rock crushers, the project engineers employed every method known at the time to build the road and meld it to the surrounding terrain.

The sheer audacity of planning and executing a road up a steep and inhospitable mountain qualifies the Catalina Highway for eligibility to the National Register under the following definition, "An important part of the history of road development are those outstanding feats of engineering, design, and construction that put highways around, over, and sometimes through the natural obstacles of hills, canyons, and stone walls.

Within the context of road building in Arizona, we have identified the following theme of engineering and construction that pertains to criterion C: Outstanding Road Engineering, 1912-1956" (Keane and Bruder 1999:77).

As an example of Arizona roads that qualify for nomination to the National Register, Keane and Bruder cite the Catalina Highway project "another example of construction through extremely difficult terrain" (Keane and Bruder 1999:126).

In spite of improvements and modernization over the half-century since it was built, the Catalina Highway still retains much of its original feel. It was a winding mountain road that gained over 5200 feet in elevation in the first twenty-one miles when it was first built, and it remains so today.

Upon completion of this thesis, the Catalina Highway and the Gordon Hirabayashi Recreational Area (Catalina Federal Honor Camp), will be nominated for listing to the National Register of Historic Places.

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