OUTLOOK:
THE FOREST'S PAST

INVENTORY AND ANALYSIS OF CULTURAL RESOURCE SITES AND THEIR RELATIONSHIP TO OTHER RESOURCE USES

Rogue River National Forest

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AND
THEIR RELATIONSHIP TO OTHER RESOURCE USES

Rogue River National Forest

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This monograph inaugurates the Studies in Cultural Resource Management series of USDA Forest Service Pacific Northwest Region.

We are pleased to begin our series with this particular study, because it illustrates one of the basic tenets of our Regional Cultural Resource Management program: the management of cultural resources is a task which can, and should, be integrated into the management of all other resources.

The inventory, protection, and enhancement of our cultural heritage involves collection, analysis, and interpretation of data; development of methods of location, evaluation, and conservation of cultural resources; and integration of these data and techniques into our ongoing management of other resources on the National Forests. But just doing these tasks is not enough.

Research results, methodological developments, and management strategies must be disseminated to scientists, to managers, and to the public. Monographs, workshops, and interpretive materials are appropriate media for such communication, along with displays, tours, and hands-on experiences. Together, these things comprise the enhancement of cultural resources.

Our Studies in Cultural Resource Management series is part of our Regional enhancement program. It will provide a forum for communication among scientists, managers, and the public, without which we can never "insure future generations a genuine opportunity to appreciate and enjoy the rich heritage of our Nation."

R. E. WORTHINGTON
Regional Forester
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INTRODUCTION: SCOPE AND PURPOSE

The cultural resource program on the Rogue River National Forest is still in its infancy. Like other Federal land-managing agencies, the U. S. Forest Service has had the legal responsibility for inventory and protection of "antiquities" since 1906. Such concerns were largely ignored for over half a century. Recently we have seen the formulation of more specific laws and regulations dealing with antiquities, or cultural resources. This phenomenon, one result of a growing national concern for the "total environment", has increased the Forest Service's awareness of its duties in this area. The laws have also helped to develop practical guidelines with which the agency can fulfill its legal responsibilities.

Cultural resource management on the National Forests is in widely different stages of development. As yet there is little in the way of "standard operating procedure". There is much variation in the scope and intensity of cultural resource programs between the several Regions, as well as those of the individual Forest and Ranger Districts.

The Rogue River National Forest has been involved in the Region Six Cultural Resource program for slightly over two years. In the past six months, the personnel involved have increased from a Coordinator and four District-level technicians to include the temporary services of an anthropologist (CETA), a historian (CETA) and an architectural historian (volunteer). During this time, the Forest's cultural resource site inventory has taken a quantum leap, both in the number of sites listed and in the quality of site information.
Part One of this report is designed to consolidate and synthesize the data contained in the Cultural Resource Preliminary Inventory (C.R.P.I.) Using this Inventory as a source-bank, the report identifies the number, categories and location-type of cultural resources presently known on the Forest. It gives some general indications regarding their relative significance. The report also attempts some guesses as to:

(1) what kind of heretofore unlocated cultural sites remain to be added to the inventory; and (2) where they would most likely be located.

Part Two relates cultural resource management to the Forest's larger system of land management practices. It describes the potential impacts of the Forest's various ground-disturbing activities upon cultural sites and offers suggestions on how to lessen or eliminate these impacts.

Cultural resources are here defined as "the remains of sites, structures, or objects used by man in the past" (Wildesen, Cultural Resource Management, 1975, p.1). As such, cultural resources can be considered as discrete, mapable entities.

It is difficult to place an economic value on such resources. They can yield important information on the area's past to the archaeologist or historian. As part of the nation's cultural heritage, they offer valuable possibilities for interpretation to, and enjoyment by, the public. A cultural resource is thus more than simply a prehistoric house-pit or an old homestead cabin; it is the intellectual, and even emotional, benefit such sites can give us.
In contrast, the Rogue River National Forest provides many other kinds of resources which have a direct impact on the regional economy. Management of such resources (e.g., timber, range, minerals, recreation) often result in some form of on-the-ground disturbance. Until recently, utilization of these resources has proceeded with little understanding of the potential impact on prehistoric and historic sites. Archaeological sites have been looted by relic-hunters or obliterated by roads; historic structures have been burned or leveled by timber-cutting activity.

The major land-disturbing activity on the Rogue River National Forest is timber harvesting. Consequently this report uses the Timber Land Use classification system (as shown on current stand maps) to plot the geographic distribution of cultural sites. This classification system is basically a function of such natural features as vegetation type, slope, elevation and proximity to major streams. For cultural resource management it serves two functions. First, it places cultural sites within the context of their physical environment. Second, it can provide a rough scale of the potential for future, human-caused disturbance.
PART ONE:

ANALYSIS OF CURRENT INVENTORY
The Rogue River National Forest has developed a Cultural Resource Preliminary Inventory, largely the result of work conducted since January 1976. The Inventory has grown from several areas of research including a record search of the Forest's archives (early Forest maps, reports, photographs and memoirs), review of relevant historical literature (regional histories, newspaper articles) and documents (State mining records, General Land Office tract books, etc.), as well as interviews with amateur archaeologists and "old timers". The rather sparse archaeological literature of the region has also been consulted. This effort was aimed at identifying all previously-known prehistoric and historic sites located on the Forest.

The limitations of the Preliminary Inventory should be made clear. The initial phase has been largely confined to archival research; very little field work has been done. Consequently, the Inventory data does not include the actual condition of most of the listed sites. Some are known to have been destroyed; many others have probably been less adversely impacted. The inventory process is far from complete. Additional sites will continuously be added as on-going research and increasing field work expands our knowledge about the Forest's past.

For the purposes of this report, those sites documented in the RRNF's Cultural Resource (C.R.) Job File have been added to the Preliminary Inventory. The file is the result of on-going archaeological-historical field work. C.R. Jobs are conducted on certain Forest lands which will be affected by future projects (i.e., recreation development, timber harvest, land exchange). The reconnaissance activity is gradually increasing the number of acres which have been examined for possible
cultural resource sites. To date, approximately 10,000 acres (or less than 2%) of the Rogue River National Forest have received field coverage. The intensity of the work has been highly variable.

THE INVENTORY: A QUANTITATIVE BASE

Slightly over 500 cultural resource sites are presently listed on the Forest's Preliminary Inventory. One hundred of these sites are eliminated from consideration in this report for one of two reasons: (1) the site is actually located on private land or land administered by another agency; (2) the site is merely a name or refers to the unspecified location of a past event.

This leaves some 400 cultural sites. The following section of the report, however, deals with cultural resources as members of different functional groups or site categories. The original listing of the Preliminary Inventory was too inclusive (i.e., several sites, widely separated in time and type of use, were lumped together because of their close physical proximity). Some sites have served two or more dominant functions (e.g., prehistoric gathering and historic grazing use) during their history of use. Tabulation of the sites relative to the inferred dominant use-patterns of each site, resulted in a sum of 454 cultural resource sites. This total is the quantitative base for the numbers and percentage figures of the Preliminary Inventory analysis.

It should again be stressed that the term "preliminary" is an apt description. The Inventory will certainly undergo modification and expansion. Still, it is the "current state of the art" on the Forest.
While remaining aware of its present limits, we can utilize it in order to better understand the kinds and distribution of cultural resources on the Rogue River National Forest.

THE INVENTORY: ANALYSIS AND SYNTHESIS

In addition to having four Ranger Districts, Rogue River National Forest is divided into four Planning Units. A Planning Unit forms the geographic focus of the Forest's Land Management Planning system. Land use allocations are made at the Planning Unit level. The Inventory was originally compiled on a District basis. For this report the sites have been reorganized to correspond to the Planning Unit boundaries.

The Ashland Planning Unit is a mountainous region containing several important watersheds. It was one of southwest Oregon's first areas to be explored and settled during the historic era. Much of the non-Indian activity centered on mining. This Planning Unit accounts for 142 inventoried sites (31% of the 454 sites on the C.R.P.I.).

The Upper Rogue Planning Unit is located in the northern extreme of the Forest. It is a heavily-forested area of relatively high elevations, containing several huckleberry-gathering sites. The Cascade Range here is bisected by the drainage of the North Fork of the Rogue River which forms a natural travel route. In addition to containing numerous historic features, this Planning Unit has the highest number of reported aboriginal sites. It has a total of 133 inventoried sites (29% of C.R.P.I.).

The McLoughlin Planning Unit covers all of the Forest's High Cascade plateau as well as portions of the older, dissected Western
Cascades. Prehistoric evidence is relatively abundant here. The area was also the scene of much homesteading around the turn of the century. This Planning Unit has 121 inventoried sites (26% of C.R.P.I.).

About one third of the North Siskiyou Planning Unit is located in the southwest corner of the Forest. It has an extremely rugged topography. Historically, it has been the least accessible section of the Forest. It possesses by far the fewest number of reported aboriginal sites, although mining has been an important factor since the 1850's. The RRNF portion of this Planning Unit contains 58 inventoried sites (12% of C.R.P.I.).

The 454 sites include a number of different kinds of cultural resources, ranging from prehistoric Indian villages to rustic-style shelters built in the 1930's. The Inventory has therefore been subdivided into 11 major site categories. These categories are an attempt to place each site within a combined functional-temporal context. The functional context includes the major use-pattern of a site (e.g., mining, grazing, agriculture). The temporal context places the site within a general time frame (e.g., prehistoric, turn of the century, Depression-era, etc.). These site categories are admittedly somewhat arbitrary; however, the groupings are arranged in a way that illustrates the general direction of changes in intensity of land use through time.

The following sections deal separately with each site category. In each case, an attempt is made to answer several interrelated questions: (1) what are the prominent physical characteristics of the category? (2) what is the most common type of location? (3) is the potential high or low for more (uninventoried) sites of this kind? (4) what is the cultural resource significance of these sites relative to the total
Inventory, as well as to similar sites found outside of the Forest boundary?

1. **Prehistoric**

Most of the land within Rogue River National Forest was once claimed by the Takelma Indians, although other peoples are believed to have utilized this area at various times. These included the Shasta, the Applegate Athabascans and, by late prehistoric times, the Southern Molala. These groups spoke widely differing languages; yet most of them probably shared many cultural traits.

The Takelman economy is thought to have been largely based on cooperative hunting-gathering among kinship groups. Anadromous fish were taken from the streams of the Rogue River drainage. See Hopkins, Allison and LaLande, 1976, pp 8-15, for a good synthesis of the ethnographic knowledge of the Takelma.

On the eastern margins of the Forest, the Klamath Indians camped seasonally in certain areas to gather huckleberries. The Karok to the southwest and the Upper Umpqua to the north were probably occasional visitors to the area.

The prehistoric site category includes any location where evidence of aboriginal habitation or use has been found. The sites range from house-pit villages and rock shelters with probable cultural fill to surface flake scatters and rock cairns associated with the adolescent vision-quest.
So far, the Forest's prehistoric sites seem to be concentrated in the kinds of locations where one would most expect to find them. The result may at first seem to be the result of a sampling bias. The Inventory, however, was aimed at including any place where Indian artifacts were found. Relic-hunters and Forest Service personnel were interviewed regarding all such sites they might have come across during their years of experience, either through purposeful searching or by casual discovery. Dominant locations include alluvial terraces, ridge tops and saddles, bases of rock outcrops and margins of meadows and lakes. Very few sites have been reported for steep side slopes.

Of the Forest's 59 prehistoric sites, nearly one-half (28) fall within the Standard, Commercial Forest Land (CFL) class. Another 10 are located in the Special class. Most of the remaining sites are found in areas classed as Non-Forested, Unproductive.

It is likely that a large number of prehistoric sites have yet to be added to the Forest's Inventory. In contrast to the open, sagebrush plateau east of the Cascade Range, the Rogue River National Forest embraces an area of rugged topography and heavy vegetation cover. Aboriginal sites are often obscured by forest litter or brush fields.

Until recently, virtually no professional archaeological surveys had been conducted on the Forest. The few contracted surveys of the past two years have been very limited in extent. They were confined to several land exchanges and the proposed recreation sites of the Applegate Reservoir.

The Archaeologist in Oregon's State Historic Preservation Office has projected an average of three prehistoric sites per section of land.
Rogue River National Forest covers approximately 970 sections, giving us a total of 3,000 "potential" sites. This formula is purely hypothetical; a few sections may contain a complex of a dozen or more sites while many others are likely to have none. Southwest Oregon needs a broad-spectrum archaeological survey; one which covers a representative sample of all the various environmental location-types.

Prehistoric sites are among the most important cultural resources on the Forest. They are highly significant for a number of reasons. At present the prehistory of southwest Oregon-northwest California is not well understood. Disease, warfare and forced-removal eliminated most of the native population soon after white settlement began. Reliable ethnographies are few. Southwest Oregon is still essentially a "blank spot" as far as professional archaeology is concerned. Less than a dozen excavation projects have been carried out in this area. Most projects have been limited to salvage operations at sites to be inundated by reservoirs and only the barest outline of a regional prehistoric sequence has begun to emerge. This sequence has more than a local importance, for it can increase our understanding of man's development within the whole Pacific Northwest region. A span of human occupation dating at least from late Pleistocene times (circa 12,000 years before present) is accepted for the Intermountain Plateau. The possible relationship of the Southern Cascades and Klamath Mountain provinces to this sequence of habitation is virtually unknown.
Many of the Forest's sites have undoubtedly been adversely impacted, both by private individuals and Forest-related projects. Numerous amateur archaeologists live in southwest Oregon. Many have been active over several decades. Some have done work which could be valuable for scientific analysis. Many, however, are simply "collectors" and numerous sites have been looted, especially along lower elevation streams. Over 120 years of mining, agriculture and construction have also destroyed an unknown number of prehistoric sites.

Still, the Forest has good potential for valuable information on the prehistory of the region. Due to its relative remoteness, the Rogue River National Forest can be seen as something of a de facto "archaeological preserve".

American archaeology has been going through a period of transformation. Methodologies and research priorities are changing. Interest in prehistory is focusing on the small, seasonal-use sites. Although these do not possess the large assemblage of artifacts or complex of features common to semi-permanent villages, such sites are important for understanding the total picture of prehistoric culture. Use of a summer camp may represent up to half the time-span of an Indian band's annual cycle of resource gathering.

The increasing sophistication of archaeological techniques has even enabled the professional to glean surprising amounts of information from the simple scatter of obsidian flakes.

Unlike many historic features, prehistoric sites obviously cannot be even partially reconstructed by archival data. Once an unrecorded site has been destroyed, the resource is gone forever. The artifacts may remain, but it is their original context that makes interpretation
possible. The Forest's prehistoric cultural resources should receive the highest priority for inventory and management.

2. Mining

The discovery of gold brought about the first non-Indian settlement of southwest Oregon-northwest California. Mining was extremely important to the economic development of the area. It also helped create a distinctive personality among some of the people and places of the region. Although mining has declined drastically this regional personality persists, albeit in a somewhat self-conscious form.

Mining in the Rogue River National Forest has taken many different forms and has gone through several historic phases. Almost all of this activity took place in the present-day Ashland and North Siskiyou Planning Units, within the heavily-mineralized Siskiyou Mountains.

The physical evidence of over a century of prospecting and mining is a significant part of the Forest's cultural heritage. Historians, historic archaeologists, and others have a stake in protecting a representative sample of these cultural resources for future study.

The Forest's mining sites are here grouped into five subcategories corresponding to their general time period. At first this seemed unnecessary. Further study made it plain that not only do the number of sites between the subcategories vary, but the characteristics and significance of each group can also be quite different.
a. Early Mining (1850's - 1860's)

With the 1851 discovery of gold in southwestern Oregon came a flood of fortune-seeking immigrants. Various ethnic groups were represented including French-Canadians, Hawaiians, Chinese, Mexicans, "Yankees" and Europeans. The Oregon boom was actually a northward extension of the California gold rush.

To date, there are only five early mining sites listed on the Preliminary Inventory. Two of these are characterized by small, semi-rectangular "platforms" excavated into the slopes above streams. These features were possibly built to provide level ground for tents and can sometimes be identified by the presence of bottles, hand-forged tools, etc.

Early gold mining was largely confined to small-scale placer operations. Being located close to streams, the sites have been subject to recurrent flood damage. A great percentage have undoubtedly been washed downstream. Later mining activity must have obliterated many others. Hay ranches and retirement homes are located on the alluvial terraces of the Applegate drainage; these have probably impacted early mining as well as prehistoric sites. Cinnabar (quicksilver) was mined also, although no such mid-nineteenth century sites are listed on the Inventory. Cinnabar was used in the gold-amalgamation process and retorts were built of brick to process the mercury ore. The inventoried early mining sites are all located within either Standard or Special Commercial Forest Land (CFL).

Written documentation of the Forest's mid-nineteenth century mining is almost nonexistent. The records that do exist deal with financial returns; locations or descriptions of mines are given only in
general terms. Due to the vulnerable location-type, there are probably only a small number of these sites left in an undisturbed condition.

Primary sources dealing with the lifestyle of the early miners of southwest Oregon are rare. This is especially true for the Orientals, Hawaiians and other minorities. Protection of the area's early mining sites is important for several reasons. Once numerous, they are now quite rare. Archaeological investigation of some of these sites may be able to increase our understanding of the "pioneer" era. Finally, they have intrinsic value as the only remaining evidence of the first phase of non-Indian occupation. Sites falling into the early mining category have high significance as cultural resources.

Figure 1. A nineteenth-century miner working a placer claim somewhere in the Applegate River drainage; the use of the "rocker-box" was typical of much early mining. (Courtesy of Jacksonville Museum Archives.)
b. **Hydraulic Mining**

The next phase of mining in this area began around the 1870's. Some "hard-rock" operations took place (e.g., the Steamboat mine), but most of the activity was by hydraulic methods. Hydraulic mining was essentially a continuation of the earlier placer mining, but on a higher technological level. As the stream gravels gave out, the miners focused their attention on the ancient alluvial deposits. These formed the terraces and lower slopes of the Applegate River drainage.

Hydraulic operations required large outlays of capital and labor. Work-gangs of Caucasians and Orientals were employed. Miles of ditches were dug into the contours of the ridges; these diverted stream water to the mine sites. The water was fed into pipes, creating a sufficient head of pressure to expel it out of nozzles (often called "Giants") with great force. The spray was directed at the gold-bearing deposits, washing the finer material into sluice boxes and thus carving out huge gouges in the terraces and hillsides. Although most are now revegetated, these hydraulic excavations remain as indelible marks on the Forest landscape. Larger rocks were hand carried out of the way, forming piles. Some of the rocks were fitted to make thick walls. This was probably done along narrow drainages because the walls (some of them up to 8' high and 6' wide) could store more rock within less space than random piles of tailings.

There are six inventoried hydraulic sites. The Siskiyou Mountains of the Rogue River National Forest contain scores of old ditches, however. Many were built for mining, others for agriculture, and some were used for both. At present, only two of the better known mining ditches are listed on the Inventory (Sterling Ditch and China Ditch). Hydraulic
excavations account for the remainder of the sites. Hydraulic cuts will be found along the margins of medium-to-low excavation stream courses. Of the inventoried sites, four fall within Standard CFL. The remaining two are located in the Non-Forested, Unproductive and Unregulated classes.

More hydraulic sites are certain to be added as the Inventory receives continued input from District personnel.

There is a growing curiosity on the part of archaeologists and historians about the activities of the West's Chinese communities. Most of the documentation concerning Chinese in this region is based on secondary sources and hearsay. The period from around 1875 to 1890 apparently saw a second influx of Oriental miners into southwest Oregon, most of them involved with hydraulic operations. Some of them, however, formed their own mining companies (Haines, 1964, p.34 and 52).
The Forest's hydraulic mining features are important remnants of the region's past. They are prominent modifications of the landscape and some have potential for historic interpretation to the public. A representative sample of these sites should be protected from further man-caused impacts.

c. Turn-of-the-Century Mining

This is a fairly inclusive category dealing with mining activity between 1890 and the 1920's. Gold mining of both the placer and lode varieties continued through the late nineteenth and early twentieth centuries. Other minerals increased in importance: copper, chromite, quicksilver and antimony deposits were located and exploited. These were the Rogue Valley's boom years and some mining operations were quite extensive. Small settlements like Joe Bar City and Eileen sprang up to serve the work crews. Many other mines were merely the prospect cuts and short adits of the individual "sourdough" miner.) Limestone and granite quarries were promoted after 1900. Again, most of the activity was centered in the Ashland and North Siskiyou Planning Units. The Buzzard (later renamed the Al Sarena) Mine began operations during this time, one of the few such sites located in the Upper Rogue Planning Unit.

Most of the large-scale mines became patented land and are thus not on the Preliminary Inventory of this report. The listed sites include: one stamp-mill, one arrastra, the Eileen townsite, tunnels, adits, and numerous miner's cabins and cabin sites. The cabins are generally log or shake-and-pole structures.
Most of the Forest's turn-of-the-century mining sites have probably been included on the Inventory. The remaining number should be added by research and field reconnaissance. The mining activity of this era is fairly well documented by State and Federal reports and many sites are described in detail. Histories of development, equipment used and values produced are often given. The record is certainly not complete but far more is known about turn-of-the-century mining than that of the preceding years.

These sites are not confined to one location type. They can be found on steep slopes, along streams or perched upon high ridge tops; in short, wherever the minerals occurred. Half of those listed are found on land classified as Standard CFL; most of the rest is contained in Marginal or Special CFL.
Of the 15 categories this contains the third largest number of sites (59). This total is somewhat too low, for some sites have been destroyed by logging and road construction, and many turn-of-the-century miner's cabins have been removed by the Forest Service to prevent occupancy trespass. Some turn-of-the-century mining sites are probably eligible for the National Register of Historic Places and should be protected until they can be evaluated.

d. Depression Mining

During the economic distress of the 1930's, small gold mining operations proliferated. The 1934 increase in the price of gold brought about a level of activity unseen since the nineteenth century. With the lack of jobs, mining became a means of survival for some people. Jackson County even sponsored gold prospecting classes in hopes of lessening the relief rolls (Haines, 1964, p.94-5).

Gold-dredging took place in the lower Applegate drainage but the Forest's mines were small placer and quartz operations. Cinnabar and antimony prospecting also continued. With the advent of World War II, federal regulations and higher wages elsewhere combined to end most of the area's mining.

Many miners reworked earlier sites. This was especially true in the Steamboat and Palmer Creek areas. Their cabins were built of logs, shake-and-poles, or dimension lumber. Primitive truck roads were often built to the higher elevation mines.
Figure 4. A group of Depression-era miners near the Applegate River, possible on Palmer Creek. Note the use of the early-style "rocker-box". (Courtesy Jacksonville Museum Archives).

Depression mines occur in the same variety of location types as the "2" category. Four-fifths of the 25 inventoried sites are located within Standard CFL. Most of the remainder fall inside the Special class.

In the Oregon portion of the Forest, this site-category is very well documented. The Metal Mines Handbook (Oregon State Dept. of Geology and Mineral Industries, 1942) is essentially a catalog of the area's 1930's mines. Names, dates and descriptions are often given. California has apparently not published such a comprehensive sourcebook. It is probable, however, that most of the Forest's California mines are listed on the Preliminary Inventory. Many persons who were active miners during this time still reside in the area; they provide another source of information.
As cultural resources, Depression mining sites do not have the same intrinsic significance as the earlier mining categories, although some may be considered "neoteric" sites (see Category 11). Most features in this category are probably not eligible for the National Register. This is not to say that these sites have no value. They represent one facet of an era which had profound effect on the region and the nation. Some Depression mining sites may become valuable interpretive resources. A selected sampling of them should be thoroughly inventoried, researched and protected from disturbance.

e. Recent Mining

Only a few sites of this category are listed; they were included on the Inventory primarily as an aid to future field work. Documentation of some recent mines during the Preliminary Inventory stage will possibly lessen confusion for those persons engaged in on-the-ground reconnaissance. Most of the inventoried sites are high-elevation chromite mines dating from the 1950's. Chromite prospecting was important in the Ashland and North Siskiyou Planning Units until the Federal Government halted its stockpiling of "strategic metals" in 1956 (Ramp, 1961, p.ii). Chromite mines are found in association with serpentine areas.

One of the recent mining sites, the Bobbit Mine arrastra, has definite importance as a cultural resource. It is an ingenious example of modern artifacts (oil drums, a truck rear-end) being used to build one of the earliest kinds of ore mills. This 1951 mining feature probably qualifies as a "neoteric" site (see Category 11).
3. **Historic Transportation Routes**

One of the sites in this category, Siskiyou Gap, marks the probable location where the first known European explorers, an 1827 party of Hudson's Bay Company trappers led by Peter Skene Ogden, entered the upper Rogue River basin. Although there is no physical evidence of the event, the site is included because of its historical importance.

Trails and roads linked the early Rogue Valley settlers with other regions. Most of these were located outside the present boundaries of the Forest but several historic routes are listed on the Inventory. In some instances, the wheel ruts and cutbanks of the original road grades are still visible. Two military wagon roads were built in the 1860's. The "Rancheria Trail" (McLoughlin Planning Unit) and the "Union Creek
"Trail" (Upper Rogue Planning Unit) were used to transport men and supplies from Jacksonville to Fort Klamath. The Union Creek route evolved into the old Crater Lake Road, predecessor of present-day Highway 62. The "John Day Trail", a circa 1860-70 route used to reach the mines of northeast Oregon, later became the first Diamond Lake Road. Other historic travel routes (including four important trails constructed by the early Forest Service) are on the Inventory. In addition, several campsites connected with use of these roads and trails are listed.

There is a total of 31 sites in this site category. In most cases, the term "site" is misleading. Transportation routes are linear and they pass through a variety of location-types. For most of their lengths, these features pass through acres allotted to Standard CFL.

The Preliminary Inventory probably accounts for most of the Forest's historic roads and trails. In some cases, the exact path of travel has been lost, either through revegetation or obliteration by newer roads.

Early transportation routes are tangible evidence of an area's pioneer past. As such they are often zealously protected by local historical societies. This is increasingly true in Jackson County. Witness the formation of a Historic Trails Committee by the Southern Oregon Historical Society and the 1976 wagon train re-enactment along the Applegate.

It would be impractical for the Forest to preserve every mile of these features. As stated above, some sections have already become absorbed into the Forest Service road system. Tractor logging has impacted others. What is ultimately needed is a complete field survey
of those portions of historic roads and trails which pass through Rogue River National Forest. The survey should locate those segments which have remained relatively undisturbed. Some of these sections could then be identified as cultural resource sites and managed accordingly.

4. Grazing

Stock-raising was nearly as important to the early local economy as was mining. The two were actually complimentary; the ranchers found a nearby market and the prospectors were supplied with beef. During the 1860's and 1870's, thousands of head of Rogue Valley stock were trailed over the Cascades to help begin the cattle empire of Eastern Oregon (cf Oliphant, 1968). Local cattlemen continued to graze their herds in what is now Rogue River National Forest but sheep-grazing had become increasingly important by the late nineteenth century. In some instances, this represented a reverse flow from Eastern Oregon. Sheepmen from the Prineville-Silver Lake area grazed their flocks on the high meadows of the Southern Cascades (Bartrum, 1918, P.58 and Crater N.F., Grazing Atlas, 1923).

Figure 6. Travelers on the old Crater Lake Road between Prospect and Union Creek, circa 1910. (RRNF Historical Photograph Collection.)
With the low wool prices and the 1937 passage of the Taylor Grazing Act, Oregon's sheep industry went into decline. Summer cattle-grazing has continued on Rogue River National Forest to the present day.

The vast majority of the inventoried sites date from between 1890 and 1930. Most of these are the simple camps of cattlemen and sheep-herders. Although the sites often saw annual use over a long period of time, physical evidence is probably sparse. Some of these sites include log cabins and/or pole corrals. Several cabins bear the carved names and dates of early visitors. Another type of feature found at such sites is the hollowed-log water trough. There are a few circa 1850's sites located in the Ashland Planning Unit; it is not known if features or artifacts remain. The Inventory also includes some Depression-World War II era line-shacks which are still in use.

The Forest's grazing sites are usually located between 4,000 and 6,000 feet in elevation, along stream courses or at the edge of meadows. Nearly one-half of them fall within the Standard CFL class; a large number of the remainder are located in the Non-Forested, Unproductive class.

Historic grazing sites compose the largest site-category on the Preliminary Inventory. Seventy-two of them are scattered throughout the Forest. Over half are located in the Upper Rogue Planning Unit where sheep-grazing was especially heavy. So far as this group of cultural resource sites is concerned, the present Inventory is probably nearly complete, although some early sites may not yet have been listed. Virtually all of the post-1890 stockmen's camps, etc., have been located through research of Forest Service maps and grazing atlases.
Figure 7. Herd of cattle being driven to summer range on the Rogue-Umpqua divide, circa 1940. The log drift-fence can still be seen just north of the Union Creek Recreation Complex. (RRNF Historical Photograph Collection)

Taken as a class, these sites have moderate cultural resource significance. This is due to several factors: they are quite abundant on the Forest and are certainly not unique to this region. Many have seen continued use by hikers and other recreationists, creating a mix of early and modern features and artifacts. Most (but not all) historic grazing sites probably have only minor potential for professional study. The pattern of their areal distribution is important to the historical geographer and this can be studied from maps. This is not to imply that this site category is unimportant. Grazing sites are remaining physical evidence of an activity which was significant to local inhabitants and the early Forest.
Many of the listed sites have undoubtedly been altered or destroyed. A cross-section should be thoroughly inventoried and a representative sampling of these features (i.e., camps, old corrals, water troughs, possible shepherder cairns, cabins) should be identified and protected.

5. **Trapping and Hunting**

The search for wealth through beaver pelts brought the first Europeans into the Rogue River drainage. This was over two decades before the 1850's gold rush brought about permanent settlement. The exploitation of fur-bearing animals continued to be important for over a century. As with Depression mining, some people used fur-trapping as a means of securing cash during the 1930's.

During the early historic period of Southwest Oregon, the hunting of game for food and sport became a part of the region's way of life.

This type of seasonal use of the Forest has left behind evidence in the form of campsites and cabins. Most of the trappers' dwellings are crude log structures dating from circa 1890 to 1920. Some of the later cabins are of shake-and-pole construction.

Due to their short periods of use, hunters' camps often amount to little more than a rock fire-ring surrounded by hard-packed earth and a scatter of rusted cans. Several early-twentieth century fishing camps along the North Fork of the Rogue River are also included on the Inventory.
Most of the sites in this category are either located along the Rogue-Umpqua divide (Upper Rogue P.U.) or on the Southern Cascades plateau (McLoughlin P.U.). They are usually found along old trails and near stream courses or meadows. Standard CFL accounts for nearly one-third of the sites and Special for approximately one-quarter of the remainder.

The list of 22 trapping, hunting and fishing sites has been collected largely through interviews with old timers, including retired F.S. employees. Early Forest Service recreation reports were also used. A majority of the Forest's possible sites (i.e., those at which some evidence remains) are probably recorded on the Preliminary Inventory.

Figure 8. Scene at turn-of-the-century hunters' camp somewhere in Jackson County. Crude log cabin was typical of trapping and hunting shelters. (Courtesy Jacksonville Museum Archives.)
Trapping and hunting were the earliest historic uses of what is now Rogue River National Forest. One of the sites listed in this category is potentially of very high significance. This puzzling feature is located in the Upper Rogue Planning Unit. It is a large rock with the name "Vanauken" and the date 1815 inscribed on its surface. Members of the South Umpqua Historical Society are attempting to trace the history of this site through research of early records of British, Canadian and American fur companies. Although its story may never be definitely known, the Vanauken Stone is possible evidence of European presence within the Rogue River drainage much earlier than is currently accepted by historians.

Another possibly early trapping feature is the Daley Prairie Cabin site (McLoughlin Planning Unit). The structure has been almost totally destroyed by past logging activity. According to the preliminary research this cabin may have dated from the early 1870's, making it one of the oldest known buildings on the Forest.

The remaining sites in this category are equal in significance to the Forest's other turn-of-the-century camps and cabins. In one respect, trapping-hunting sites are more important than other kinds of contemporary features. The history of many homesteads and stockmen's cabins can be learned through federal records. On the other hand, very little is definitely known about the solitary trappers of this period. The sites themselves are often the only form of documentation we have. A representative sample should be preserved for study and future interpretation.
6. Homesteads

"Permanent" settlement of what is now Rogue River National Forest began around 1890 and lasted for around three decades. Scores of people (many of them from the East) moved into the Forest's mountains in order to claim homesteads. Various public land laws were used in an attempt to gain title; many persons were simply "squatters" who had arrived ahead of the surveyors. This local phenomenon became part of what was, essentially, America's last free-land rush. The major goal in this area seems to have been to obtain ownership of valuable timber (Swenning, 1909, p.6-7). When the entryman received his patent, he was free to sell the trees to a waiting timber company. Many sold their land as well (Sherman, 1914). Although most of these homesteaders merely served as middlemen between the General Land Office and the large-scale capitalist, some of them were probably sincere in their attempt to make a home in the Forest.

Living quarters were one of the minimum requirements of the homestead laws and most of the Forest's sites have some structural remains. From early photographs, we know that many of these cabins were built in various styles of notched-log or shake-and-pole construction. Others, perhaps depending on the proximity of a sawmill, were of board-and-batten type.

An entryman was required to live on his claim for a certain minimum period. Consequently, homesteads tend to have evidence of longer-term occupation than contemporary stockmen or trapper cabins. Typical features can include: privy, sheds, fencing, spring-box and extensive dump-scatter. Evidence of agricultural improvement may be a cleared garden-plot and, at lower elevations, fruit trees. Wagon road traces often lead to homestead sites.
Nearly two-thirds of the 34 inventoried homesteads are found in the McLoughlin Planning Unit. Land-seekers seemed to naturally prefer the gentle uplands of the Southern Cascades plateau to the rugged, and often sparsely-forested, canyons of the Siskiyous. Homesteading activity was also quite intense in the Prospect and Elk Creek areas (Upper Rogue Planning Unit). Most of these parcels went to patent and are not included on the Inventory.

Although usually found on reasonably level land and near a water source, these "stump ranches" can be expected almost anywhere in the low-to-medium elevation Cascades. Circa 1910 photographs of "squatter locations", taken by Federal Claims Examiners, show some perched on forty percent slopes. Almost three-quarters of the inventoried sites are located within Standard CFL. This is entirely logical given the fact that many claims were entered with the eventual timber harvest in mind.

Figure 9. Homestead in the Upper Wagner Creek drainage, 1910. Note cleared timber and garden plot. (RRNF Historical Photograph Collection.)
Additional sites are likely to be added to this site category. Much of the future inventory work can be accomplished through continuing research of government records. General Land Office tract-books and early Forest Service maps can locate the legal land descriptions of most homesteads. The Rogue River National Forest recently sent for and received ten cartons of 1907-1930 "L-Lands Records" of the Crater National Forest. These records contain examination files for most, if not all, the Forest's homestead and squatter claims. Many of the files contain photographs or detailed maps. Some include notes on the personal background of the claimant. Once these files have been properly cataloged, they will provide an invaluable means for documenting the true character and extent of the Forest's homesteads. By using this "data-bank" to plot the homesteads on overlay maps, the potential sites (i.e., those where physical evidence may or may not remain) will have received full inventory. Future surveys could then use this information to aid on-the-ground reconnaissance. Field work can then either determine or deny the existence of a manageable cultural site.

We can assign this category a more certain level of significance after a total field inventory has been completed. Once this has been accomplished we can better decide which are the most important cultural resources and which are not. Ideally, this process should apply to all of the Forest's cultural resources; homesteads are relatively unique, however, in the large amount of contemporary documentation they received. Until then, these sites should be protected from disturbance so that a sample of them will remain. We know that many of the inventoried sites have already been destroyed by Forest projects. There is probably a feeling among some Forest Service personnel that if an old structure is
already far down the road of natural deterioration, then the site has little remaining value. This idea may have been partly responsible for the loss of several inventoried homestead cabins to logging activity.

Historic archaeology is a growing discipline in the Pacific Northwest. It is becoming common for the professional archaeologist to conduct his investigations at turn-of-the-century logging camps and homesteads. Even those sites without structural remains can still reveal a good deal of information. Archaeologists and historians study sites in their entirety; the outlying features (e.g., privy, sheds, etc.) are an integral part of the site. This fact should be remembered when drawing protective boundaries around any cultural resource.

7, Early Resorts

By the late nineteenth century, several locations in the Cascades were being used by Rogue Valley residents for health and recreation purposes. These sites were popular for a variety of reasons. All offered relief from the Valley's summer heat and some were located near berry patches or soda springs. This site category does not attempt to include the Forest Service's later campgrounds and resort area developments.

Seven turn-of-the-century resort sites are listed on the Inventory. Several are berry-picking areas such as Huckleberry City. Two "health spas", Dead Indian and McAllister Soda Springs, are listed. Union Creek, an early rest stop for Crater Lake excursionists, is also included. No other sites of this kind are known for the Rogue River National Forest.
Some of these sites continue to be used while others have been abandoned. They represent an early form of Forest recreation use, a factor which has become increasingly important to the region's economy. The presently-used sites have been modified to varying degrees by modern features, but are protected from timber-harvest projects by being placed in the Unregulated class. As cultural resources, the currently-used sites may be susceptible to damage through future development. The old campsites at Huckleberry City should be protected from development. Care should be taken that recreational improvements do not destroy the historical-aesthetic quality of such places as Union Creek and Dead Indian Soda Springs.
8. **Early Forest Service** (1900 - 1930)

President Grover Cleveland created the Cascade Forest Reserve in 1897. A portion of the Reserve's Southern Division was reorganized as Crater National Forest in 1908. It retained this name until 1932 when it was changed to Rogue River National Forest to avoid confusion with Crater Lake National Park.

In the early years, the typical Forest Service "Ranger" spent much of his time fighting fires. He also built trails and lookouts, administered grazing allotments and examined homestead claims. These men often worked alone and traveled by horse from camp to camp. Favorable camp locations gradually evolved into administrative sites.

This site category includes a variety of features associated with the first thirty years of Forest Service activity. A large percentage of the inventoried sites are the remote, first "ranger stations" (e.g., Cinnamon Ranger Station, Lucky Ranger Station, Dead Indian Ranger Station). Although these places were shown on Forest Service maps, most amounted to little more than a corral for the packhorses and a wall-tent to house the summer Forest Guard. There is probably little remaining evidence at these sites. Many of them have become popular camps for hikers and fishermen. Some of these sites saw continued Forest Service use over the years and cabins were built (e.g., Brown's Cabin, Big Elk, Fir Glade). Photographs show that they were built in the same functional style that was used for private structures on the Forest. A few of these early administrative buildings remain standing. Most have been destroyed and are marked only by a foundation outline. It wasn't until the Depression that Forest Service architecture achieved a self-consciously distinctive style.
Figure 11. Lookout tree on Yellowjacket Ridge, 1917. The long-abandoned crow's nest is still in place. (RRNF Historical Photograph Collection.)

The Preliminary Inventory includes most of the Forest's pre-Depression lookout sites. Three of these are the remnants of lookout trees (Huckleberry Mtn., Brush Mtn. and Yellowjacket Ridge). Two sites include the two remaining cupola-type lookout structures (Dutchman Lookout and Hershberger Lookout).

A unique feature listed in this site category is the "Crater National Forest Portal". The site contains the remains of the Forest-boundary entrance sign which spanned the old Crater Lake Road.
Over two-thirds of the 59 inventoried sites are found within the McLoughlin and Upper Rogue Planning Units. These were historically the Forest's most important homestead and timber areas; this probably explains the intense Forest Service presence. In addition, the Crater N.F. originally included what is now the Klamath District of the Winema N.F. necessitating much communication between the two sides of the Cascade divide. Half of the early Forest Service sites fall within the Standard CFL land class. The remainder are fairly evenly divided among the other land classes.

Archival research of early Forest Service features has been exhaustive. It is doubtful that any additional sites of this kind remain to be added to the Inventory.

Although this category is one of the largest on the Preliminary Inventory, most of the sites no longer retain any significant physical evidence. Many old Forest Service cabins and lookouts have been abandoned and destroyed; some have been replaced by more recent buildings. Out of nearly 60 inventoried sites, less than a dozen are known to retain any structural integrity and of these, most are badly deteriorated.

Mr. Robert Fink, architectural historian, recently completed a field inventory of over 50 Forest Service structures (Fink, 1976). His report was confined largely to Depression-era buildings, but at least two sites dating from the 1920's, Dutchman Lookout and Big Elk Guard Station, are included. Fink's evaluation states that both are eligible for the National Register of Historic Places. Similar conclusions may
be warranted for several of the remaining early Forest Service features (e.g., three lookout trees, Hershberger Lookout, Fir Glade and Huckleberry Guard Stations).

The list of early Forest Service sites presents a fairly well-documented entity. A program of on-the-ground inventory and evaluation should continue. When completed, the information will allow us to make further judgments as to site quality.

9. **Logging**

Sawmills had been producing lumber from southwest Oregon's forests since the earliest days of white settlement. The town of Ashland, for example, grew up around an 1852 water-powered mill. Most of these sawmills were small operations built to supply local needs. The vast stand of virgin timber in the surrounding mountains was not seriously exploited until the closing years of the nineteenth century. Better logging methods and transportation systems were chiefly responsible for the increased activity. The 1897 Neil Creek Mill (Ashland Planning Unit) is thought to have produced the first commercial rail shipment of Jackson County lumber to California (O'Hara, 1964-74, 3/6/66).

Large timber sale projects in the present-day Rogue River National Forest did not occur until around World War I. The Fourbit Creek Sale (McLoughlin Planning Unit) involved a huge volume of pine and fir, most of it railroad logged. Southwest Oregon timbermen used much the same methods as other Pacific Northwest loggers. Steam-powered engines ("donkeys") were used to haul and load the hand-felled logs. Movable camps were located in the woods near logging shows.
By the late 1920's, lumbering was beginning to challenge the orchard industry for dominance of the Rogue Valley's economy. During the Depression numerous truck roads were constructed and these helped to pave the way for the fantastic post-World War II lumber boom.

Most of the Forest's early logging features date from the late 1890's through the early 1930's. Abandoned sawmills are characterized by little more than piles of rotting slabs or sawdust. Two logging camps are included on the Inventory. No structural evidence is left at these sites although dump-scatters may be present. Railroad logging during the 1920's has left segments of road grade. One outstanding example of railroad bed and one cribbed-log trestle are included on the Preliminary Inventory. Two "donkey" sleds, probably dating from the Depression years, are also listed.

The Butte Falls area was the center of RRNF's early logging activity and over half of the 15 inventoried sites are located in the McLoughlin Planning Unit. Logging sites are of several varieties (mills, railroad grades, etc.) and can be found in just about any location-type that was near the big timber. Standard CFL accounts for over 50% of the inventoried features and Special CFL contains most of the rest.

There is moderate potential for more early logging sites to be added to the Inventory. Some historic sawmills may not have been listed. To date, however, most of the old mill sites within the Forest boundary are located on parcels of private land. Pieces of abandoned logging equipment (e.g., sleds, boilers, "disconnect" rail-trucks) may yet remain at old logging shows. The Fourbit Creek Sale railroads are well documented by Forest Service records. Railroad logging also
occurred in the Indian and Willow Creek drainages, on what was then Oregon and California Railroad (or private) land but this activity is not documented in any of the research material. Most additional sites will probably be discovered during the course of pre-sale reconnaissance by District technicians.

Logging has become a dominant element in the lifestyle of Rogue Valley residents. Artifacts and features left behind by the early timbermen have local historic significance. Some of the better examples should be documented and managed as cultural resources.

The history of logging methods has been thoroughly recorded by historians. So far as professional study is concerned, the Forest's early logging sites probably do not have high importance. Their greatest significance lies in their potential interpretive value for the public.
Not all of these sites will be amenable to management as cultural resources. For example, many of the railroad grades have been absorbed into the Forest Service road system. Even so, the Forest probably retains about eight miles of relatively undisturbed grade. Of these, only the best preserved and most interesting segments need be given special consideration as historic features. A complete field inventory would be necessary before such a determination can be made.

10. Depression-Era, Civilian Conservation Corps

The Federal "make-work" projects of the 1930's had a tremendous effect on the Rogue River National Forest. The Civilian Conservation Corps (CCC) had been created in 1933 and it brought hundreds of young men to work in the mountains of southwest Oregon and northwest California. They fought fires, replanted burns and built roads. Four headquarters camps were located in or near Rogue River National Forest. Smaller spike camps were scattered throughout the Forest near the current work projects.

Today the most distinctive and appreciated element of the Forest's CCC-era is its architecture. Crews built ranger stations, warehouses, ski shelters and a variety of campground features. All of these were in the purposefully "rustic" style that became the hallmark of CCC construction. At least one site, the Dead Indian Soda Springs development, was actually the work of an Emergency Relief Administration crew of unemployed local men. The Second World War ended the activity of the CCC. The camps were abandoned and their structures were transferred to the Navy Department for use elsewhere (CCC 1934-43).
The Forest's CCC sites range from warehouse compounds and ranger station complexes to "community kitchens" and trail shelters. Most administrative structures (including residences) are characterized by knotty-pine interiors, clapboard siding and multi-paned windows.

Figure 13. Forest Service Ranger (left) poses with 2 CCC men in front of ski shelter at Union Creek, soon after its completion in 1935. The structure has been destroyed, but the massive stone fireplace remains. (RRNF Historical Photograph Collection)

The Forest Service "pine tree" symbol was often used for decoration on shutters and gable-ends. The typical recreational shelter was constructed of a massive, peeled-pole framework covered by cedar shakes. "Community kitchens" often show decorative wood and rock work, while the small trail shelters were purely functional. The CCC also made rustic-style picnic tables from half-split logs. Camp fireplaces were made from large pieces of native rock cemented around a steel firebox.
Approximately three-fifths of the inventoried CCC sites are located in the McLoughlin Planning Unit. This area contains numerous back-country lakes, trout streams and huckleberry patches. The recreation use of the Butte Falls-Dead Indian country was probably one of the highest on the Forest.

CCC structures are clustered in two kinds of areas: those with heavy recreation use and those which were Forest Service administrative-service centers. The Union Creek complex combines both. Over half of these sites are found in either the Unregulated or the Productive Reserve, Deferred land class. The remainder are located within the boundaries of Special or Standard CFL.

The Preliminary Inventory is probably a complete listing of the Forest's CCC structures. A large percentage of those listed have already been physically inventoried and evaluated by Mr. Robert Fink (Fink, 1976). Documentation of the remaining features is needed. The Forest has retained the 1934-1943 CCC work-project records; these should prove valuable when a total field inventory is undertaken.

Structures built by the CCC are important reminders of the vast Federal employment program during the Depression; many show outstanding craftsmanship and architecture. Despite their relative recentness, CCC features are subject to the same guidelines of cultural resource management as earlier sites. The National Park Service has advised that CCC structures are worthy of assessment for nomination to the National Register of Historic Places. Fink's study determined that several of the CCC buildings covered by the inventory are eligible for the National
Register. It did not deal with any of the CCC trail shelters. These shake-and-pole shelters are becoming rare; out of an estimated dozen original structures, less than six exist today.

11. Miscellaneous

This category includes 10 cultural resource sites which do not fall into the previous groupings. Most of these are burials dating from the historic period. One important feature included here is the "Congressional Tree" (Mcloughlin Planning Unit). This Shasta red fir tree bears an inscription with the date of 1888 and the names of five individuals thought to be inspecting the area's potential as a Forest Reserve. This site is probably eligible for nomination to the National Register.

Most of the remainder of the 26 inventoried sites are natural history (rather than cultural) resources. Under "Special Interest Areas" the Forest Service Manual states that the management policies "for natural history resources are the same as for cultural history" (FSM 2362.03). Some of these sites have been placed on District-level map overlays (see the Prospect Ranger District, "Minor Special Interest Areas", 1973). To date, none of them have been formally established as Special Interest Areas as provided for in 36 CFR 294.1.

About one-half of the Inventory's natural history sites are areas that contain rare plant species or unusual plant communities. Several known or reported caves are included as geological areas. These features are located either in Mesozoic limestone (North Siskiyou Planning Unit) or Tertiary volcanics (Upper Rogue Planning Unit) Finally, one paleontological area is listed on the Inventory (Elkhorn Fossil Beds - Upper
Rogue Planning Unit) Local rockhounds know of its existence and fossil collecting is becoming popular there. Paleontological sites, like cultural resource sites, are legally protected by the Antiquities Act; the scientific-interpretive values of the Elkhorn Peak deposits should be preserved from wholesale, unsupervised exploitation.

In time, additional natural history resources will undoubtedly be listed on the Forest's Inventory.

Although the term has been mentioned previously in this report, the Preliminary Inventory does not include a "Neoteric" category. This group is defined as "sites and areas containing outstanding examples of man's modern culture which will obviously become historic properties in the future" (FSM 2361.23). For example: 20 years from now it is possible that an abandoned counter-culture commune of the 1960's will be considered a cultural resource site.

The Bobbit Mine arrastra should probably be considered a neoteric feature; it has been included under "mining" in this report. One site which could also conceivably be listed under this heading is the so-called Big Foot Trap (Ashland Planning Unit). This recent feature was built under special-use permit in the hopes of capturing a "Sasquatch" or Big Foot.

We have described, in very general terms, the Preliminary Inventory of the Forest's cultural resource sites. What does this list of 454 items mean in terms of land area? Some of the inventoried sites may be over 10 acres in extent. From current data, it seems reasonably certain that the overwhelming majority occupy less than two acres in area. Let us assign an average of five acres per cultural resource. This admittedly subjective figure is probably much larger than necessary; it
should be seen as a maximum potential average. Using the five-acre formula, we arrive at a current total of 2,270 "cultural resource acres" on the Rogue River National Forest. This is well under .4% of the Forest's acreage.

Of course, the Inventory will expand, but we cannot say by how much. The potential for more prehistoric sites is great. On the other hand, many of the historic site-categories are nearing the stage of complete listing. Increasing the Inventory by a factor of 10 would still involve less than 5% of the Forest's total land area. While at first glance, 5% appears to be a fairly insignificant amount of acreage, it must be remembered that the Rogue River National Forest has a number of different resource uses. Some complement each other, others are often in competition. Cultural resource management fits within this larger scheme of resource management.
PART TWO:

MULTIPLE-USE MANAGEMENT IMPACTS

AND

CULTURAL RESOURCES
INTRODUCTION TO THE LAND CLASS ANALYSIS

Cultural resource management comprises but one aspect of the land management activities of the Rogue River National Forest. Other resources, usually having far greater socio-economic effects on the region and the nation, are actively utilized on this Forest. The multiple-use concept of the Forest Service is an attempt to derive the greatest long-term benefit from a variety of these natural resources. The various Forest projects, from timber sales to campgrounds, are a response to the resource needs of the American public; it is for this same public that we are striving to conserve the cultural evidence of the past.

Any proposed system of cultural resource management will have to articulate with the existing Forest planning infra-structure. Little purpose would be served if the management of cultural resources was conceived of as being something apart from or even directly opposed to normal operations (Jermann and Mason, 1976, p.167).

The potential for conflict between cultural resource preservation and natural resource utilization will never completely disappear, but it can be greatly lessened by proper inventory and management guidelines. The site-inventory stage is underway; what is still needed is a systematic attempt to place the Inventory within the larger scheme of resource uses on the Rogue River National Forest.

Pare two of this report is a first step in the integration of cultural resource management into the Forest's multiple-use concept. It will cover some of the potential impacts on cultural resource sites caused by Forest projects and it will give a general, geographic analysis of where such impacts are likely to be concentrated.
Any analytic discussion must be based on a systematized framework; this not only gives structure to the data, it creates a basis for comparison and evaluation. Part One of this report was based on a functional-temporal series of site categories. The following sections rely on a modification of the Timber Land Use Classification system. This system, largely based on natural features such as soil, slope and vegetation, was adapted in the previous section to help draw some conclusions about the predominant location-type of each site category. Here it serves as a useful frame of reference for the discussion of on-the-ground resource management impacts relative to cultural sites.

Because of the dominance of timber management on the Forest, it is appropriate that we use the Timber Land Use Classification system. Approximately 99% of the revenue generated by the Rogue River National Forest comes from timber sales and over 75% of its operating costs are related to various timber management projects. Commercial Forest Land (that acreage devoted predominantly to the growth and harvesting of forest products) accounts for nearly 85% of the Forest's total land area. Although the Timber Land Use Classification system was developed primarily for timber management it has been adapted in order to discuss several other resource uses as well.

The Forest has revised (1976) a series of 1972 "stand maps" covering the four Planning Units. These Forest Land Class maps, which use a slight modification of the Timber Land Use Classification system, represent the present allocation of acres to the various levels of timber management. These maps have been used to plot the location and distribution of cultural resource sites relative to six major land classes:
A. Non-Forested, Unproductive
B. Productive Reserved, Deferred
C. Unregulated
D. Marginal
E. Special
F. Standard

It became obvious that many of the Preliminary Inventory's cultural sites were located on or very near the boundaries between two or more land classes. Given the fact that Forest Land Classes are derived from natural land types, the large number of interface sites is entirely logical. The ecological blending-area between two different land types is usually richer in natural resources than either of the land types taken alone. Human beings have often followed the example of wildlife in preferring these ecotones for habitation and other uses.

As a precaution, whenever there was any doubt as to within which land class a cultural resource site would actually be located, the site was treated as falling inside the class which has a greater potential for adverse impact.

Part two discusses each land class in terms of its general characteristics, focusing on three questions:

1. What is the potential of this land class for a significant number of additional cultural resources? (This is a subjective interpretation based largely on the data and analysis of Part One.)

2. What is the major type(s) of land-altering resource use in this land class... and what kind of impacts will this activity have on cultural sites?

3. How can cultural resource management and other land-use management practices be brought into harmony within this land class?
A. Non-Forested, Unproductive Forest Land

This combined land class accounts for slightly more than 11% of the total acreage of Rogue River National Forest. Non-Forest land is composed of lakes and impoundments as well as meadows, rock outcrops and massive landslides. (Also included are formerly-forested lands such as roads and rock pits; these will be discussed in a later section.) Unproductive Forest Land is defined as land on which the growth potential is less than 20 cubic feet per acre/per year. Such land is not producing nor does it have the capability to produce a merchantable timber crop. Typical Unproductive lands include south-facing slopes with scrubby growth, rocky-soil areas with scattered "pioneer" trees and some non-commercial stands of lodgepole pine.

This land class contains 53 (just over 10%) of the inventoried cultural resource sites, the third largest number for any of the six T.L.U. classes. Most of these are either prehistoric or grazing sites; this is to be expected when we consider the physical character of the land involved. The submerged shores of two impounded lakes (Fish and Squaw Lakes) account for several prehistoric sites. Some rock outcrops contain habitation sites in sheltered overhangs; probable ceremonial (i.e., vision quest) sites occur on the summits of others. Aboriginal artifacts have been found in many of the high elevation meadows of the Forest, from the Rogue-Umpqua divide on the north to the Siskiyou crest of the southern boundary. Historic grazing sites are also concentrated along the margins of these natural forage areas.
Non-forested, unproductive (N-F,U) lands have a very high potential for more cultural resources. One reason is simply that sites are often more visible, and hence easier to find, in N-F,U areas than in most other land classes. Based strictly on the Preliminary Inventory data, it still seems likely that this land class will account for a large number of additional prehistoric sites.

The impact of timber management on lands in this class is low to nil. A limited number of selected trees can be harvested in unproductive acres but it is rarely economical to do so.

-Range Management-

Activities associated with stock-grazing produce some of the major impacts on Non-forested, unproductive acres. The various kinds of range improvements can have direct consequences on cultural resource sites. Some of the Rogue River National Forest's range management projects have only minor potential for adverse effect. New fencing and stock driveways involve a very limited amount of ground disturbance. Poison plant eradication (largely confined to hand-grubbing larkspur in the Hershberger Allotment) is another example of an isolated project which probably does not pose much danger to cultural resources. Some of these projects involve linear-type disturbance patterns similar to some methods of archaeological sampling. They may actually be able to help locate sub-surface prehistoric sites or those features obscured by brush.

Seeding projects can involve a greater amount of ground disturbance at prehistoric sites than other range improvements. An exception is
the erosion control and forage seeding done after the harvesting of a timber sale. This kind of project, usually found in Standard and Special CFL areas, takes place subsequent to the impact of logging. It is accomplished by broadcast seeding; seeders are sometimes mounted on a tractor-type vehicle and the soil is redisturbed to improve the quality of the seedbed. Recent discing and seeding of prime range areas has been restricted to a few natural meadows in the McLoughlin and Ashland Planning Units. These improvements are done by means of a rangeland seed-drill, creating ground disturbance up to 10" in depth. The Rogue River National Forest has a maximum of 1,000 acres that could be potentially affected by this kind of activity. Forage seeding projects have already occurred at several reported prehistoric sites (e.g., Little Elk Prairie, Silver Fork Basin). A 1976 surface survey at one such past project area, Daley Prairie, failed to locate any trace of Indian occupation; yet prehistoric sites are known in similar, nearby meadows. The Daley Prairie range improvement project may have been partially responsible for the lack of surface archaeological evidence. It is possible that Indian artifacts or features were never present at Daley Prairie but this is unlikely.

Since mid-to-high elevation meadows are known to be prime locations for the Forest's prehistoric sites, any future seeding project should include an archaeological reconnaissance in its E.A.R. Normally, such projects should include a follow-up survey to determine if the activity had unearthed any concentrations of sub-surface artifacts.

Stock-watering developments are another potential threat to prehistoric sites. Small catchment basins are excavated to hold snow or runoff. Although these features can be located at almost any elevation
within a stock allotment, they are often developed at existing springs in areas that receive heavy grazing (N-F,U, meadows). Prehistoric artifacts have been found at such sites and any excavation should be preceded by an archaeological survey.

Historic features can also be damaged by these projects. If it is feasible to place the proposed water development at an alternative location, a hollowed-log trough can be left at its original site. The Forest's wooden watering-troughs are gradually being replaced by metal basins; the old troughs are usually hauled a short distance away. An attempt should be made to preserve a sample of these historic features in their original site condition and context.

Cabins and corrals are built and maintained by cattlemen under special-use permit. Unlike troughs (which are range "improvements" and thus under government control), old line shacks and pole corrals are considered private property and can be replaced by the permittee. If and when valuable cultural resources are to be affected, the Forest should attempt to work out a historic preservation agreement with the rancher or stock association. Modern improvements could then proceed, but not at the expense of a historically significant structure. Most local ranchers would probably be more than willing to cooperate.

B. Productive Reserved, Deferred Forest Land

This combined land class accounts for just over 10% of the Rogue River National Forest's total acreage. It includes nearly 5,000 productive forest acres reserved from timber management because of their special qualities (e.g., Scenic, Geological, and Research Natural areas). In addition, almost 60,000 acres are presently "Deferred" from
timber management. This land (Sky Lakes Wilderness Study Area) is under study for potential inclusion in the National Wilderness System. If declared a Wilderness, these acres will pass into reserved status.

Among the six major land classes, Productive Reserved, Deferred (P.R., D.) encompasses the third largest acreage on the Forest. However, it contains the smallest number of inventoried cultural resources, (29). CCC, early Forest Service and grazing features are dominant at present. Some P.R., D. acres (Sky Lakes Wilderness Study Area) have moderate-to-high potential for additional prehistoric sites.

Forest activities in this land class have the least potential for adverse impact on cultural resources. The P.R.,D. status, by its very definition, prohibits virtually all "unnatural" management practices. Controlled grazing is presently allowed in a small number of P.R., D. acres (i.e., Abbott Butte Research Natural Area, Halifax C&H Allotment in northern extreme of Sky Lakes Wilderness Study Area). Range improvement projects are excluded. Timber management activities are also minor to non-existent. Some P.R.,D. areas could conceivably be the scene of limited salvage operations in the event of severe insect-infestation or other ecological "emergency". Wildfires which threaten contiguous forest land would be suppressed as quickly as possible within the limits prescribed by management regulations.

Wilderness areas provide people with an opportunity for back-country recreation experience. Although Research Natural Areas are primarily set aside for scientific study, they also receive some use by hikers, hunters, etc. Dispersed recreation probably accounts for the major impact on cultural resources in the P.R.,D. land class. Example:
CCC trail shelters are often the victims of casual vandalism by those campers too lazy to gather firewood; malicious destruction happens in many cases. Some of these features have lost up to one-third of their cedar-shake covering in this manner. In the past, several trail shelters within P.R., D. acres had been allowed to reach such a state of deterioration that the Forest Service felt that burning down these structures was justified.

The 1964 Wilderness Preservation Act makes specific provisions for the protection of historic features. Because of the remoteness of most P.R., D. cultural resources they can be difficult to manage. Such sites are often at the mercy of visitors. With increasing use of areas like Sky Lakes, the Forest should increase its commitment to educate back-country recreationists to the cultural values found therein.

The 1964 Wilderness legislation definitely does not relieve the Forest Service of its responsibility to "inventory, protect and enhance" the cultural resources found in such areas. While posing some difficult problems, a program for the preservation (and maintenance, if necessary) of historic structures in P.R., D. lands is preferable to the site-by-site destruction of these features, whether by private individuals or by the Forest Service.

C. Unregulated, Commercial Forest Land

Unregulated, Commercial Forest Land accounts for just over 3% of the Forest's land area. Approximately three-quarters of unregulated land is allocated to various Special Interest Areas (largely Scenic).
The remaining acres encompass existing and proposed recreation sites, special-use permits (e.g., organization camps, summer homes, and resorts), and Forest Service administrative sites. A relatively insignificant amount (about 30 acres) of Unregulated, CFL is under agricultural (including Forest Service seed orchard) use.

While Unregulated, CFL contains the smallest amount of land of the Forest's six land classes, it ranks fourth in percentage of cultural resource sites. Forty sites are presently inventoried for the Unregulated acres. Forest Service campgrounds, Ranger Stations and the like often seem to be placed at locations which were favored by previous occupants of the area. Most of the early sites in the Rogue River National Forest's Unregulated lands are associated with historic grazing use. Other structures in this class are predominantly the early Forest Service and CCC features found at present administrative and recreation sites.

Unregulated status is a means of designating that certain commercially-productive forest lands are considered more important for other uses. Timber management in such areas is done only when it will enhance the reason the land was identified as Unregulated. Timber can be harvested for the visual enhancement of a scenic area as the need arises. Dead and "danger" trees will be eliminated from campgrounds or Ranger Station compounds. Tree-felling projects should be carefully planned so as to not damage historic structures.

Some Unregulated acres (e.g., scenic areas) may receive impact from grazing use. Construction projects within special-use or administrative sites can effect cultural resources. Demolition or replacement of "obsolete" buildings should occur only after they have been evaluated for historic values.
In many Unregulated acres concentrated recreation development has the greatest potential for impacting cultural resources. Virtually all of the Forest's developed recreation sites are classed as Unregulated land and, as stated above, there is often a high incidence of cultural resources within these heavy recreation use areas. Many of the Rogue River National Forest's campgrounds have seen over 40 years of continued use by the public. Artifact-scatters and other vulnerable features at these locations have long since been obliterated by collecting or campsite development.

Over the next decade, additional developments will probably be limited to the expansion of existing recreation sites. These projects will include road, trail, water and sewage improvements. Only small areas contiguous to the present facilities will be affected; any possible cultural resources within them may have already been just as heavily impacted as those within the current developments. Archaeological reconnaissance can determine if any evidence remains.

As a Forest resource, recreation has had undeniably adverse effect on some historic and prehistoric sites, resulting from both public use and Forest Service projects. Recreation also has the potential for aiding the ultimate purpose of cultural resource management: the interpretation of and appreciation for humanity's past. Some recreation sites can be developed around a historical theme; Jackson Picnic Ground is a good example. With proper planning, the sturdier historic features can be incorporated into a recreation site design, enhancing both the cultural and recreation resource values.
D. Marginal, Commercial Forest Land

At the present time Marginal, Commercial Forest Land embraces 6.5% of the Rogue River National Forest. This classification pertains to productive forest land on which it is not now physically or economically feasible to harvest the timber. Most Marginal, CFL land is so classified because of unstable soils; mass-slumping would be a likely result of road building or timber cutting. Over 10,000 acres within the incised pumice canyons of the Upper Rogue Planning Unit are classified as Marginal; harvesting in these areas would drastically accelerate erosion. Almost 14,000 acres are designated Marginal according to the factor of "gross economic deficiency". This simply means that timber values in such lands are too low relative to the present high cost of harvesting (road building, etc.)

The Marginal land class is one of the smallest on the Forest; it also contains the second lowest number of inventoried cultural resources. No particular site category predominates, although turn-of-the-century mining, historic transportation and grazing sites are the most common. A significant portion of Marginal, CFL is composed of steep slopes or other historically inaccessible areas. Human use of this kind of terrain has probably always been ephemeral. The sparseness of the inventoried cultural evidence within Marginal land is entirely logical given the topographic constraints to most human occupation.

The Ashland Creek drainage accounts for nearly one-third of the Marginal cultural resource sites. The Ashland Creek watershed has seen fairly intensive use during the historic periods; mining, grazing, and early Forest Service sites occur. Prehistoric artifacts have been found
along lower Ashland Creek and near its headwaters at Grouse Gap. It has been classed as Marginal largely because of Municipal Watershed (City of Ashland) considerations. Although this drainage is known for its unstable soils, it is not really typical of most Marginal land.

Aside from occasional artifacts, most Marginal, CFL acres will have low potential for prehistoric sites. Hunting blinds and trails may be found. Additional historic features could include ditches, mines and their associated habitation sites. Archaeological sites pre-dating the destruction of Mt. Mazama may yet lie buried beneath the incised pumice deposits of the North Fork of the Rogue River; the question as to such a possibility will remain unanswered until either man or nature removes more of the overburden.

Mining, grazing and dispersed recreation can impact cultural resources in Marginal, CFL. Timber management does not have a significant effect at this time. Timber harvesting will continue to be extremely limited on these lands until the status is modified to Standard or Special, CFL. Change will come about only after the physical-economic factors which first determined the Marginal classification are overcome.

E. Special, Commercial Forest Land

The Special classification is applied to just over 3% of the land area of the Rogue River National Forest. It is Commercial Forest Land which is treated silviculturally but which, because of other, higher-priority goals, cannot be managed for the full potential of timber production. Special, CFL includes over 12,000 acres of Visual Foreground Retention area, managed so that the scenic values of major travel routes are not lost. Water Resource Management areas (or Streamside
Management Units) account for nearly 7,500 Special acres. Their purpose is to retain adequate shade, and consequent colder water temperatures, primarily to enhance game fish populations. Some Special lands combine both visual and water resource management. (Two small areas designated "no-yield" are included in the Special classification. They are essentially defacto Unregulated lands and will not be discussed here.)

Special, CFL is only slightly larger in area than Unregulated, the smallest land class on the Rogue River National Forest. Despite this fact, Special ranks second in number of inventoried cultural resource sites. Almost every site category is well represented but prehistoric, turn-of-the-century mining, homestead and early Forest Service sites predominate.

Drainage patterns have often served to channel travel routes and concentrate settlement along the stream margins. The Special, CFL class has a very high potential for additional cultural sites, both prehistoric and historic, especially the acreage under Water Resource Management.

Timber management is the major impact in the Special land class. Although harvesting is under some constraints as to total yield, the physical effects of logging are much the same as in Standard, CFL. In the Special class fewer trees are cut within a given span of time, but the on-the-ground impacts of the various methods of logging (i.e., tractor, skyline, etc.) can be just as severe. The question of timber management relative to cultural resources is discussed in the following section.
F. Standard, Commercial Forest Land

The Standard land class designates those areas in which timber management can attain "maximum intensity of production". It amounts to over 65% of the Rogue River National Forest. In Standard lands, the various activities associated with logging and reforestation have a very high potential for negative impacts on cultural resources.

Two sub-classes of Standard, CFL are included in this section. Standard, Non-Stocked classifies about 25,000 acres of CFL (about 4% of RRNF) where reforestation projects are needed to insure a sustained yield. Standard, Advanced is a classification applied to generally steep-sloped areas which are relatively near existing roads and landings. It is something of a "fringe" area between Standard and Marginal which can be harvested with present advanced logging systems. About 11% of the Forest is classified as Standard, Advanced CFL.

Lands classed as Standard account for both the largest area and the highest number of inventoried cultural resources on the Rogue River National Forest (245 sites, 54% of Inventory). Standard, CFL includes a wide variety of natural land-types: level, fairly open forests; steep, heavily-timbered slopes, and numerous secondary streams. All of the site categories are found within Standard acres. Taken as a whole, this land class has a very high likelihood for additional cultural resource sites.

-Timber Management-

Although it is not confined to any one land class, the impact of timber management reaches its highest level of intensity in Standard, CFL.
Pre-commercial thinning is a form of silvicultural treatment for dense stands of young timber; this activity does not usually involve serious on-the-ground impact. Commercial thinning and regeneration harvesting, however, can definitely have adverse consequences on cultural sites. The predominant type of regeneration cut on the Rogue River National Forest is the shelterwood method, which removes the mature trees in two or more entries. Like clearcutting, it is an even-aged system of management.

While the shelterwood method may soften the visual impact of timber harvesting, it can still involve severe site-disturbance, the amount depending on the system of logging that is practiced. Tractor-logging is usually found on level to moderately sloping ground. It can destroy archaeological sites which are located on or just beneath the surface. There have been several tractor-logging projects that are now known to have damaged prehistoric sites. The high-lead and short-span skyline methods, whereby logs are yared by cables directly to the landing, probably decreases the amount of disturbed area. Advanced logging systems (e.g., helicopter, balloon, multi-span skyline) limit the amount of on-the-ground impact even further. The problem still remains that those acres where tractor logging is the most economic method (and thus is most often employed) are often the same acres that are most likely to contain cultural resource sites.

No matter which kind of yarding system is used on a timber sale project, this activity can cause severe damage to historic structures and other surface features. There are several ways in which to avoid such impacts once a cultural resource has been identified within a sale
area. The most common procedure has been to merely "boundary" the site so that it falls outside of the project. This method does not always guarantee against accidental damage.

An alternative is to clearly identify any relevant cultural resources within the timber sale contract. Contract specifications can prohibit any felling or skidding activity within a certain distance (e.g., one tree length) of the site. The contractor should also be held responsible for prohibiting any relic-collecting or other vandalism by his employees. This method would create protective zones around cultural features. What is the proper amount of land to include? This question cannot be definitively answered; the radius of the zones will vary from site to site. In most cases all the associated features will be included within one site area. Ideally, this "core" zone would receive strict protection from disturbance. If possible, a buffer zone for visual screening should be left relatively undisturbed. An extra 40 foot radius beyond the core area would be adequate in most cases.

In some instances, valuable timber will be located within the limits of a cultural resource site. If harvesting of this timber becomes necessary, special requirements for felling procedures can be developed. Example: "danger" trees should be specially marked before the sale and then felled away from (and not on top of) a historic structure.

Cultural features may sometimes be suspected to be present within a project boundary but will not be visible on the soil surface. Such areas may call for periodic inspection during the logging operation in order to salvage artifacts and information. A subsequent survey should follow logging operations.
The completion of logging on a timber sale doesn't end the potential for impact on cultural resources. Post-sale activities connected with hazard reduction and reforestation projects can entail varying amounts of ground disturbance. Pushing logging debris (i.e., slash) into piles with tractors usually removes much of the duff layer, exposing a sufficient amount of mineral soil for proper regeneration. This type of activity causes even more severe disturbance to the cultural site than log skidding.

Dense brushfields are often found in Standard, Non-Stocked areas. The brush is often windrowed in the same manner as in slash disposal. Reforestation of such acres may include terracing projects. This involves one of the heaviest possible alterations of the original ground surface; its impact on cultural sites is obvious. These projects should definitely be preceded by an archaeological reconnaissance.

Timber management does not necessarily have to pose major problems for cultural resources (or vice versa). With pre-sale reconnaissance and proper planning, most sites can be identified and protected with little or no adverse economic effects upon timber sales.
OTHER IMPACTS ON CULTURAL RESOURCES

Although none of the Forest's resource uses are limited to the boundaries of one land class, there are some activities which are so non-specific as to location-type that the land use classification model breaks down; two of these are discussed here.

-Transportation Management-

There are currently about 3,000 miles of system and non-system (temporary) roads on the Rogue River National Forest. While a majority of the mileage has been built for timber access, the Forest's road network is not confined to CFL. This transportation system has been increasing at an average rate of 65 miles per year; approximately 500 miles of new road will probably be added over the next decade.

Major Forest transportation routes often follow stream drainages where the potential for cultural sites is quite high. No matter where it is located, road construction can involve a significant amount of ground disturbance. At this time, there is no information stating how many cultural sites may have been adversely impacted by Forest road projects but the number is probably appreciable.

All future road construction and reconstruction should be preceded by a cultural reconnaissance.

The excavation of rock for road-surfacing material is another aspect of transportation management. There are approximately 80 rock quarries on the Rogue River National Forest, most of them now inactive and most less than one acre in extent. Instead of allowing the number to proliferate, the Forest is trying to use a few, selected quarries and still increase the volume of material.
There is probably no more drastic impact to a prehistoric site than excavation by means of blasting and heavy equipment. There are already visual and streamside constraints to the location of rock quarries; cliffs, prominent rock outcrops and alluvial terraces are avoided. While these controls may incidently protect some sites, there is always the possibility that a new rock-source development will be placed in an area with high cultural values. Seismic testing (as well as other exploratory work connected with proposed rock quarries) involves a good deal of observation of the ground surface. The Forest's geological technicians should become aware of and report any artifacts or features found within the general limits of a proposed quarry. In some cases, an intensive archaeological survey may be necessary.

With the increasing use of advanced logging systems, the Rogue River National Forest's need for additional roads will decline. The Forest's transportation system is presently undergoing total inventory and some roads will be selected for closure. One contributing, if not decisive, factor in this decision process could be whether or not a road provides too-easy access to a vulnerable cultural resource site.

-Minerals Management-

The Rogue River National Forest's mining operations are concentrated in the North Siskiyou and Ashland Planning Units; they can be located almost anywhere without regard to land classification. The extraction of mineral resources cannot be considered a Forest Service activity. However, it is important enough to warrant some discussion in this report.
Mining activity today is much less than in the past. Still, numerous mining claims are filed on Rogue River National Forest land each year; most of them within the Applegate Ranger District. It is not possible to conduct a mineral examination of each claim; if it were, the overwhelming majority of them would probably be declared invalid. A large percentage of claimants file with the intention of making a temporary home on a set of claims.

Less than a dozen mining claims on the Rogue River National Forest are presently clearlisted (i.e., examined and found valid). Since 1960, most of the Forest's actual mining activity has been of the "weekend prospector" variety.

Early placer mines are thought to have destroyed a large number of prehistoric sites along the stream terraces of the Klamath River drainage system. A California archaeologist has written:

> Working with a variety of simple hand techniques, the early miners were forced...to confine their activities to the shallow deposits of the lateral gulches and small creeks entering the main...river. It was at the mouth of these small creeks where most of our archaeological sites were located, and without a doubt a considerable loss of the latter must have occurred (Treganza, 1958, p.9).

The same thing has undoubtedly happened to many sites along the Applegate River and its major tributaries. Late nineteenth century hydraulic mining is believed to have obliterated much evidence of a large Athabascan village at the mouth of the Little Applegate River. We can only surmise that many other prehistoric sites have been washed downstream by hydraulic operations.

In 1967 a limited archaeological survey of the lower Applegate River failed to locate any evidence of aboriginal occupation. Local residents were interviewed but none reported ever finding any Indian
artifacts along the stream terraces. This led the author of the survey to conclude "that occupation (of the Applegate Valley) by prehistoric natives was minimal" (Hendrickson, 1967, p.6). It is quite possible that mining was more to blame for the lack of evidence than was any "minimal" occupation.

Lode-mines are usually clustered near heavily-mineralized zones. Old mines can be brought back into operation by new claimants. Early adits and shafts may be reopened; original equipment and structures may be either modified or dismantled and hauled away. The reworking of some mines could reduce or destroy the historic values of such sites.

Mineral rights on the public lands pre-date the establishment of the National Forests (as well as the passage of the Antiquities Act). The basic legislation is still the Mining Law of 1872 which declares that "all valuable deposits" are free and open to mineral entry (except those areas specifically withdrawn by later regulations). Although the miner does not have a "carte blanche" on his claim, the Forest Service is limited in the constraints it can place on his operations.

Because patenting is often a complicated and expensive process, most genuine miners seek only to get their claims clearlisted as a validated mineral entry. While the land remains in public ownership, the claimant gains possessory right to the locatable minerals. Under current Forest practice, cultural resources are not very protectable from the effects of mining. Example: a person makes a valid gold placer discovery within a prehistoric-house-pit village. If he so chooses, the miner is free to destroy the site during his operation. It is also hypothetically possible for a historic structure to be torn down and the lumber then used for support-timbers in a mine.
What can the Forest Service do to mitigate the impacts of mining on cultural resources? Interpretations of the parameters of both mining and antiquity laws vary. The inter-relation of the two can be confusing to say the least. It has been suggested that important sites could be delineated and submitted for withdrawal from mineral entry. However, this is sometimes a time-consuming process and may be inappropriate for areas as small and numerous as cultural sites.

The Multiple-Use Mining Act of 1955 gives the Forest Service the right "to manage and dispose of the vegetative surface resources thereof and to manage other surface resources thereof" (except locatable mineral deposits). Section 4cc further states:

Except to the extent required for the mining claimant's prospecting, mining or processing operations and uses reasonably incident thereto, or for the construction of buildings or structures in connection therewith, or to provide clearance for such operations or uses...no claimant of any mining claim hereafter located under the mining laws of the United States shall, prior to issuance of patent therefore, sever, remove or use any vegetative or other surface resources thereof which are subject to management or disposition by the United States...(emphasis added)

Although the 1955 Act was primarily aimed at protecting stands of commercial timber, the above section could be read to include some cultural features (e.g., historic structures) among the "other surface resources."

Most of the Rogue River National Forest's mining claims are subject to the provisions of this Act. As yet there has been no definitive legal interpretation which would make this law specifically applicable to historic or prehistoric sites. Bearing this fact in mind, the Forest Service should attempt to gradually establish some controls over cultural resources within mining claims. This will have to be done on a case-by-case basis, aiming principally for the consent and cooperation of the
miner. As the law is written the Forest Service is probably powerless with regard to sub-surface sites. If such a site is to be impacted by mining, the Forest could seek a voluntary agreement with the claimant to allow for the salvage of archaeological materials.

Active mining claims should receive high priority for survey and documentation of historic and prehistoric sites.

Local miners are often extremely independent-minded individuals who resent any real or imagined governmental interference in their affairs. Any program for protection of cultural resources on mining claims will have to evolve from rational dialogue between the Forest and the miners.

A miner is required to file an operating plan with the Forest Service before undertaking any major activity. The operating plan can serve as a "red flag" for possible negative impacts. Hopefully, it will also provide a channel for joint decision-making as to the protection of cultural resource sites.
CONCLUSIONS
This report has been based on the present reality of some 450 reported cultural resource sites on the Rogue River National Forest. Combining the Inventory information with the continuing potential for adverse impacts from Forest projects, we are led to several inescapable conclusions regarding the needs of cultural resource management on this Forest.

1. There is a definite need to continue the cultural resources inventory process:

   a. One necessary aspect of this program is to conduct on-the-ground inspection of all sites presently listed on the Preliminary Inventory. At present only a few of these have been the subject of field work; many sites may already have been totally obliterated and should be so noted on the Inventory. Without a comprehensive program of recording known sites the practical use of the Inventory becomes extremely limited. It should be able to serve as an accurate data-bank on the number, kind and condition of the Forest's cultural sites.

   "In-field verification" (Jermann and Mason, 1976, p. 173) of sites should receive priority within areas where the potential for damage is high. This would include most Standard and Special CFL, certain Unregulated and other areas with high visitor use, and active mining claims. Preliminary data could be collected by the District archaeological technicians. However, the Forest is mandated to carry the inventory process on to the evaluation stage. This includes the nomination of sites to the National Register of Historic Places; site-recording should be more intense than a mere "yes" or "no" as to its existence. Site-maps, measured drawings, photographs, written descriptions and background research will be needed when an existent cultural resource is found.
b. **Continued reconnaissance for additional sites** is a second aspect of the Inventory process. The District technicians conduct surface archaeological surveys on timber sale projects. While these reconnaissance surveys often prove valuable in locating obvious, "impactable" sites, they do not usually proceed by a systematic land-sampling technique. Such a method, usually planned and directed by a professional archaeologist can be extremely helpful in providing a "predictive model" for the location of prehistoric sites. The increased level of interest in archaeology at Southern Oregon State College may eventually be channeled for the Forest's benefit. Implementation of a professionally-directed survey of prehistoric land use patterns in the Rogue River National Forest (either using F.S. personnel or students) could mesh the research needs of the College with the site-inventory needs of the Forest Service.

Awareness of the archaeological importance of the Western Cascades is growing. Referring to this geographic province, D. K. Grayson has stated that "it is extremely likely that... it will rapidly become possible to predict archaeological site locations on the basis of a very few environmental variables, and that, as a result, archaeological surveys...will become brief, inexpensive and productive." He further warns that continued lack of (cultural resource management) compliance by federal agencies in this region "suggests that the archaeological community should give serious thought to taking legal action which would halt timber harvesting on federal lands that have not been adequately surveyed for cultural resources" (Grayson, 1976, p.501).

Historic sites have received some literature documentation and their locations are thus somewhat easier to predict. Due to these archival sources, some site categories (i.e., depression mining, early
Forest Service) have probably reached total inventory. Historical records give the Forest the capability to list all of the Homestead and CCC sites as well. The Rogue River National Forest should continue a program of historical research pursuant to a complete Inventory.

2. The Forest should expand its management of cultural sites relative to their protection from project impacts:

   a. A cultural resource reconnaissance should be conducted previous to all ground-disturbing Forest projects. Although the timber sale is the major type of Forest activity, it is by no means the only one. The extent and intensity of each reconnaissance will vary between different kinds of projects.

   In the long run, the locating of areas which lack cultural resources can be just as important as knowing where specific sites are found. Whether or not a project-related reconnaissance adds a cultural site to the list it still increases the total amount of ground coverage and thereby adds to the efficacy of the Inventory.

   There should be a system of post-project site evaluations in order to ascertain that the recommended management procedures were followed and actually proved effective in mitigating impacts.

   In some cases, severe impact on a cultural resource will be unavoidable. If a historic site is determined to be of low significance (e.g., there are other better examples of the site category on the Forest), it can usually be impacted after a relatively brief and inexpensive site documentation. When a highly significant cultural resource is to be affected, it will be necessary to contract with a professional (archaeologist, historic architect, etc.) for the salvage of site information.
b. **Cultural resource management should continue to be part**
of the Rogue River National Forest's **long-range planning objectives**.
The problem of "stop-gap" site protection on Forest projects can be
lessened by decision-making at higher levels. Land management policies
are made on the **planning unit level**.

As a part of long-range planning, Forest Service research programs
should be developed to actually delineate and quantify the kinds of
cultural resource damage caused by Forest projects such as timber harvest.

By means of maps and written "overviews", cultural resource input
can delineate historically sensitive areas and thus help planners draw
up land use alternatives. A **total** Cultural Resource Inventory (including
National Register nominations) is not feasible for some time. Interim
protection of sites which fall on or near land class boundaries might be
enhanced by placing them within that land use classification which has
the lesser potential for ground disturbance. District Rangers have
recognized the significance of some cultural resource sites and have
developed plans for them as special interest areas.

Finally, the Forest Service should continue to educate both its own
employees and the Forest-using public to respect and preserve the
cultural resources found within the Rogue River National Forest.
TABLES
This report has used a series of tabulations relating the inventoried sites to Planning Unit, site category and Timber Land Use classification. (The Preliminary Inventory work sheets, showing the relevant information for each site, are on file, see 2360, Special Interest Areas, C.R. Job #RR-90). The following tables are a representation of this data; they will hopefully provide an on-going graphic framework in which to place future sites as they are added to the Cultural Resource Inventory.

Ultimately, these tables may prove useful in the development of area-reconnaissance and site-protection priorities.

Tables 1 and 2 are fairly self-explanatory. Table 1 deals with the geographic distribution of inventoried cultural resources; Table 2 shows the kind and number of sites within each of the major land classes.
Table 1.

NUMBER OF CULTURAL RESOURCE SITES
BY SITE CATEGORY AND PLANNING UNIT.

<table>
<thead>
<tr>
<th>Cultural Resource Site Category</th>
<th>Planning Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ashland</td>
</tr>
<tr>
<td>Prehistoric</td>
<td></td>
</tr>
<tr>
<td>Early Mining</td>
<td>3</td>
</tr>
<tr>
<td>Hydraulic Mining</td>
<td>5</td>
</tr>
<tr>
<td>Turn-of-Century Mining</td>
<td>40</td>
</tr>
<tr>
<td>Depression-Era Mining</td>
<td>19</td>
</tr>
<tr>
<td>Recent Mining</td>
<td>3</td>
</tr>
<tr>
<td>Early Transportation</td>
<td>4</td>
</tr>
<tr>
<td>Grazing</td>
<td>16</td>
</tr>
<tr>
<td>Trapping</td>
<td>1</td>
</tr>
<tr>
<td>Homesteads</td>
<td>8</td>
</tr>
<tr>
<td>Resorts</td>
<td>0</td>
</tr>
<tr>
<td>Early Forest Service</td>
<td>10</td>
</tr>
<tr>
<td>Logging</td>
<td>3</td>
</tr>
<tr>
<td>CCC</td>
<td>5</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>142</td>
</tr>
</tbody>
</table>
Table 2.
NUMBER OF CULTURAL RESOURCE SITES
BY SITE CATEGORY AND LAND CLASS

<table>
<thead>
<tr>
<th>Cultural Resource Site Category</th>
<th>Forest Land Class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Forested, Unproductive</td>
</tr>
<tr>
<td>Prehistoric</td>
<td>12</td>
</tr>
<tr>
<td>Early Mining</td>
<td>0</td>
</tr>
<tr>
<td>Hydraulic Mining</td>
<td>1</td>
</tr>
<tr>
<td>Turn-of-the-Century Mining</td>
<td>4</td>
</tr>
<tr>
<td>Depression-Era Mining</td>
<td>1</td>
</tr>
<tr>
<td>Recent Mining</td>
<td>4</td>
</tr>
<tr>
<td>Early Transportation</td>
<td>2</td>
</tr>
<tr>
<td>Grazing</td>
<td>13</td>
</tr>
<tr>
<td>Trapping</td>
<td>1</td>
</tr>
<tr>
<td>Homesteads</td>
<td>1</td>
</tr>
<tr>
<td>Resorts</td>
<td>1</td>
</tr>
<tr>
<td>Early Forest Service</td>
<td>8</td>
</tr>
<tr>
<td>Logging</td>
<td>1</td>
</tr>
<tr>
<td>CCC</td>
<td>0</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>52</td>
</tr>
<tr>
<td><strong>% of Preliminary Inventory</strong></td>
<td>12</td>
</tr>
</tbody>
</table>
Table 3 proceeds from the objective data of the previous tables. It is a somewhat subjective attempt to make some inferences regarding several aspects of cultural resource management for each site category:

A. "Likelihood of Additional Sites to Discover"
   This column estimates the potential for the presence of a large number (i.e., over one dozen) of unknown sites.

B. "Level of Documentation of This Activity"
   This broadly describes the relative amount of historically-descriptive literature for each site category. Prehistory is, of course, "Low"; the few ethnographies give us only a glimpse of pre-contact Indian lifestyles. On the other hand, the activity of the Civilian Conservation Corps is extremely well-documented.

C. "Possibility for Complete Inventory from Records"
   The intensity and/or extent of regional historic records can decide how many sites can be listed without prior discovery by field reconnaissance. Contemporary documents dealing specifically with early mining sites were rare; later, homestead and Forest Service features were subject to descriptive reports and intensive mapping.

D. "Public Interpretation Potential" Column D addresses itself to the value that a properly protected site would have as a historic-intrepretive feature. It does not describe the feasibility of developing such a feature.

E. "Professional Interest Value"
   Site categories differ as to their potential significance for the professional researcher (e.g., archaeologist, technological historian, historical geographer, historical architect).

(The meaning of the combined rankings, i.e., "Medium - High", should be explained: They do not refer to increments between ranks. The first term describes the suspected norm; the second refers to the "exceptional" level.)
<table>
<thead>
<tr>
<th>Cultural Resource Site Category</th>
<th>A. Likelihood of Additional Sites to Discover</th>
<th>B. Level of Documentation of This Activity</th>
<th>C. Possibility for Complete Inventory from Records</th>
<th>D. Public Interpretation Potential</th>
<th>E. Professional Interest Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prehistoric</td>
<td>High</td>
<td>Low</td>
<td>None</td>
<td>High</td>
<td>Very High</td>
</tr>
<tr>
<td>Early Mining</td>
<td>Low-Medium</td>
<td>Low-Medium</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Hydraulic Mining</td>
<td>Medium-High</td>
<td>Medium</td>
<td>Low</td>
<td>High</td>
<td>Medium-High</td>
</tr>
<tr>
<td>Turn-of-the-Century Mining</td>
<td>Medium</td>
<td>Medium-High</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Depression-Era Mining</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td>Low-Medium</td>
</tr>
<tr>
<td>Recent Mining</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Medium-High</td>
<td>Low-Medium</td>
</tr>
<tr>
<td>Early Transportation</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Grazing</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium-High</td>
<td>Medium-High</td>
<td>Medium</td>
</tr>
<tr>
<td>Trapping</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Medium-High</td>
<td>Medium-High</td>
</tr>
<tr>
<td>Homesteads</td>
<td>Medium-High</td>
<td>High</td>
<td>High</td>
<td>Medium-High</td>
<td>Medium-High</td>
</tr>
<tr>
<td>Resorts</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Medium-High</td>
<td>Low-Medium</td>
</tr>
<tr>
<td>Early Forest Service</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>Medium-High</td>
<td>Low-Medium</td>
</tr>
<tr>
<td>Logging</td>
<td>Medium-High</td>
<td>High</td>
<td>Medium</td>
<td>Medium-High</td>
<td>Low</td>
</tr>
<tr>
<td>Civilian Conservation Corps</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>Medium-High</td>
<td>Low</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Variable</td>
<td>Variable</td>
<td>Variable</td>
<td>Medium-High</td>
<td>Medium-High</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY
This annotated bibliography is meant as a research aid for District archaeological technicians and other persons dealing with the Rogue River National Forest's cultural resources. It will be revised periodically as new research material is evaluated. Emphasis has been placed on those sources which have some potential for helping to locate or explain actual, on-the-ground cultural features. Some broad-interest works have been included to give adequate background.

The references are generally grouped under the same headings as Part One. The "Ecology" section can aid in the preparation of State archaeological forms. The "Prehistory" section, has included most of the archaeological and ethnographic reports for this Region; other categories have been more selective. Those references which have been reviewed include a brief summation. Some potentially useful material has been gleaned from other bibliographies without having been read and evaluated; these references are without annotations.

Most citations are immediately followed by a coded symbol within parentheses. The symbols indicate: (a) the presence of helpful illustrations included with the text, and (b) which area library has an available copy. (Some material is not available locally but can be obtained through inter-library loan via either PACFORNET or local library systems.)

JCPL: Jackson County Public Library (Medford and/or Ashland Branch.)

JM: Jacksonville Museum, Archives.

KCM: Klamath County Museum, Archives.

LMP: Land Management Planning Section, RRNF

RRNFL: Rogue River National Forest, S.O. Library.

SOSCL: Southern Oregon State College Library.

I: Photographs or drawings which may be of use to the researcher.

*: Copy available from the RRNF Cultural Resources Coordinator ("CRF" indicates the indexed CR Files; LMP indicates CR material held in Land Management Planning Section.)
BAILEY, Vernon
- The inferred and reported ranges (i.e., previous to white settlement) of all the mammals of Oregon. (Big Horn Sheep, Pronghorn Antelope, Grizzly Bear, and Northwestern Timber Wolf are among the species which previously inhabited the Rogue Valley and surrounding mountains.)

BALDWIN, Ewart M.
1964 Geology of Oregon, University of Oregon Cooperative Book Store, Eugene. (JCPL)
- Brief historical geology sections dealing with the Western and Southern High Cascades and the Klamath Mountains.

FRANKLIN, Jerry F. and C. T. Dyrness
- An inventory and description of the typical vegetation communities found in this area.

MCKEE, Bates
- A very general treatment of Klamath Mountain and Southern Cascades historical geology.

SOIL CONSERVATION SERVICE
1974 "General Soils Map, Jackson County, Oregon", USDA - SCS, Portland. (JCPL)
- The soil map covers a few of the RRNF's mountainous soils and some of the alluvial soils of the Western Cascades and Northern Siskiyou drainages.

WELLS, Francis G.
- The Forest's geologist has a series of updated (1975) geological maps for each District, prepared from all available references.
BAUMHOFF, M. A. and J. S. Byrne
   - A provisional chronological and stylistic classification of side-notched points from California archaeological sites. The authors assign a late (c. 1450 A.D.) date for introduction of this type of point into northern California (including Siskiyou County); they point out the discrepancy of this date w/Cressman's (1956) report on the Klamath Basin which would give a probable date of between 250 B.C. and 150 A.D. for side-notched points.

BEDWELL, Stephen F.
1975 Fort Rock Basin - Prehistory and Environment, University of Oregon Books, Eugene. (*)
   - This report deals with both the climatic and material-cultural change at Oregon's oldest known archaeological site. Although not directly applicable to this area, it can be of use in understanding the prehistoric chronology east of the Cascade Range. The changing relationships between the climate and human populations on either side of the Cascades is not yet understood.

BERREMAN, Joel V.
   - The standard work on ethnographic distribution for the State.

   - Report on archaeological excavation at the Lone Rock Ranch site, near Brookings. Similar artifact assemblage to other late shell-mound sites of the northern California and southern Oregon coast.

BRAUNER, David
1976 Archaeological Reconnaissance of the Proposed Sewage Treatment Facilities: City of Jacksonville, Oregon, Dept. of Anthropology, Oregon State University, Corvallis. (*)
   - Results of limited field survey in the Jackson Creek drainage; largely negative findings.

BROWN, Richard M.
1952 "Indian Relics on Mt. Mazama", Crater Lake Nature Notes, #8, Crater Lake National Park. (*)
   - Short article describing and illustrating a white "chalcedony", stemmed-and-shouldered projectile point; only the eighth prehistoric artifact recorded for the Park.
CALDWELL, W. W. and R. L. Carlson

CARD, Virginia
(JCPL)
- A compilation of the archaeological and ethnographic knowledge of the Takelma.

CHARTKOFF, Joseph L. and Kerry K.
1972 "Test Excavations at the May Site, Seiad Valley", Klamath River Project Report #2, Dept. of Anthropology, Michigan State University. (*)
- Brief report on the excavation by random sampling methods of a portion of an extensive habitation site on the Middle Klamath River. Chipped stone tools predominated, 40% of them made from obsidian. Point types, obsidian hydration tests indicate a late site. The May Site "is among the ten largest known Karok sites" (circa 100,000 square feet with depth up to 8').

1975 "Late Period Settlement of the Middle Klamath River of Northwest California", American Antiquity, vol. 40, #2 (*)
- Report on settlement pattern study of 160 Karok sites. Two obvious constraints to settlement were verified: steep topography and lack of good fisheries. Large, medium-high terraces on the lower river were favored. "Although the ethnographic records are explicit about the correlation between settlements and the river, it must be restated that so far little surveying has been done away from the river... until (then), the correlation cannot be accepted as demonstrated".

CLARKE, William J.
1885 "Rock Piles and Ancient Dams in the Klamath Valley", American Antiquarian, Vol. 7. (KCM)

COLE, David L.
1965 "Report on Investigations of Archaeological Sites in the Reservoir Areas of Sucker Creek Dam, Applegate Dam, Elk Creek Dam, Lost Creek Dam, Willow Creek Dam, and Collier State Park", Report of the Museum of Natural History to the National Park Service, University of Oregon, Eugene.


CRESSMAN, Luther S.
- First report on the Gold Hill excavations. In addition to obsidian (red and black varieties) ceremonial blades, burial goods included California-species pine-nut beads and northwest California-style pipes. Cressman feels that the changes in burial practices through time show the increasing influence of the Northwest Coast "wealth" culture.

- This report is the result of the first archaeological project in this area; it reports on excavation of a habitation and burial site on the south bank of the Rogue River, near Gold Hill. Ceremonial obsidian blades were found with "early" burials. Local jasper was the favored material for stone tools. Cressman infers a change in projectile point styles over time; from ovoid ("Gold Hill type" of Davis, 1974) through stemmed-and-shouldered, and side-notched to the basal-notched style w/projecting barbs ("Gunther-barbed", Treganza, 1958). Marine shell ornaments point to trade relations with the Coast. Cressman points out that all "diagnostic culture traits" at this site moved upriver from Lower Klamath area. The ceremonial blades were evidently not made at the site (lack of obsidian flakes) and may have been traded from the Lower Klamath River.

1956 Klamath Prehistory, American Philosophical Society, Philadelphia. (I *)
- A report on excavations of a rock shelter, house pit village and midden, and burials along the lower Sprague River. Cressman puts occupation of the Klamath Basin at least before the Mazama eruption (6,600 B.P.). He postulates a Great Basin "Desert-type" of culture moving into the area before the drying period (Altithermal) and this population gradually adapting to the unique ecological niche of the Klamath Basin; hunting declining in favor of specialized gathering and fishing. Later, some traits from the Northwest Coast were borrowed. Cressman's projectile-point typology has been adopted as a fairly standard tool by some Oregon archaeologists. Also, includes photographs and narrative on two archaeological features which have been found in the upper Rogue drainage: vision-quest monuments (rock cairns) and peel-scarred pine trees (inner bark used for early-spring food resource).
DAVIS, Wilbur A.

- Report on negative findings of surveys at these two N.P.S.-administered areas. (Survey found only three flakes in C.L.N.P.). Includes detailed descriptions of 10 projectile-points previously found within C.L.N.P. Davis has compiled the existing archaeological and ethnographic knowledge of this region. (The lack of evidence for the Oregon Caves portion of the survey - covering RRNF land - is somewhat surprising. At least one site - Greyback Ridge - has been located in this area by Applegate R.D. personnel.)

1968 "Salvage Archaeology of the Elk Creek Dam Reservoir: Final Report", Report to the National Park Service, Oregon State University, Corvallis.
- Report of excavations in the Elk Creek Valley, near the Prospect R.D., (drawings: housepit floors, artifact assemblage, etc.)

1968 "Salvage Archaeology of the Lost Creek Dam Reservoir: Final Report", Report to the National Park Service, Oregon State University, Corvallis.
- Similar to above report, a more extensive site.

1974 "Lost Creek Archaeology, 1972: Final Report", Department of Anthropology, Oregon State University, Corvallis. (I *)
- Davis postulates a local hunting/fishing economy with persistent cultural affinities with Willamette Valley and Western Cascade traditions; and later influence from Northwestern California coast (Klamath River) cultures. The report attempts a provisional prehistoric sequence for the Rogue River basin on the basis of changes in artifact types and assemblages:
  Phase I (c. 6,000 B.P.: Gold Hill (leaf-shaped, similar to Cascade) points, "generalized" small tool-kit.
  Phase II (c. ? - c.3,000 B.P.): "defined by the appearance of the side-notched point types, keeled-end scrapers, and milling stones."
  Phase III (c. 3,000 - c. 500 B.P.): mortars, pestles, micropoints; triangular, stemmed points, scraping and incising tools.
  Phase IV (c.500 - c.200 B.P.): hopper mortars (from development of sophisticated basketry?) and Gunther-barbed points.

DIXON, Roland B.

1907 "The Shasta", Bulletin #17, American Museum of Natural History, New York. (SOSCL)
- Ethnography of the Shasta Indians of the middle Klamath drainage (believed to have inhabited some of the southern portion of RRNF). Includes description of hunting/gathering cycles, ceremonials and religious beliefs, etc.
DORSEY, J. Owen
- Gives territorial limits and village locations as well as some pre-reservation ethnography of the Athabascan peoples of the lower Rogue drainage. The Takelma are mentioned briefly.

DRUCKER, Philip
1936 "The Tolowa and Their Southwest Oregon Kin", Publications in American Archaeology and Ethnology, Vol. 36, University of California, Berkeley. (JCPL)
- An ethnography of the Tolowa Indians of the Smith River, California and their fellow Athabascan neighbors of the Chetco and lower Rogue drainages. The appendix includes a brief section dealing with the Upland Takelma (Latgawa) of the upper Rogue area; the only direct ethnographic account of this group.

ELSASSER, Albert B. and Robert F. Heizer
1966 "Excavation of Two Northwestern California Coastal Sites", Reports of the University of California Archaeological Survey No. 67, Berkeley. (*)
- Short discussion of similar archaeological materials from Patrick's Point and Humboldt Island on the northwest California coast. Authors state: "It has been suggested, though without much evidence to support this proposition, that the northwestern coast of California was the last area of the state to be permanently settled. This may be true, but it may also be wrong... On present evidence, though this is admittedly slender, there is general agreement that all of the presently known archaeological sites from Eureka north along the Oregon coast are very late in time..."

FREDRICKSON, D. A.
1973 Early Cultures of the North Coast Ranges, California, unpublished Ph.D. dissertation, University of California, Davis.

GOLDSCHMIDT, Walter, R. and Harold E. Driver
1943 Hupa White Deerskin Dance, University of California Press, Berkeley. (SOSCL)
- Describes this important ceremony, one that was widespread in this area.

GOULD, Richard A.
1966 Archaeology of the Point St. George Site and Tolowa Prehistory, University of California Press, Berkeley. (I *)
- Using predictive information supplied by elderly Tolowas, Gould excavated a protohistoric plank-house site near Crescent City. The earliest (pre-house) level showed that the site had once been a specialized "quarry" area for the manufacture of flint tools. The last level was within the floor of a rectangular, vertical-plank house; sea lion bones were the predominant animal remains. From informant interviews, Gould learned that the site was finally abandoned after an epidemic, possibly cholera, sometime before white contact.
GRAYSON, Donald K.
1976
"Recent Archaeological Surveys in the Western Cascades: Prehistory and Conservation Archaeology", Archaeology Studies in the Willamette Valley, University of Oregon, Eugene. (A)
- Describes several sites located within the heavily-forested lands of Willamette N.F. From artifact-style similarities Grayson postulates a Western Cascades cultural subarea running from the Mt. Hood region south at least to the Umpqua drainage (it can probably be extended into the Rogue drainage). Somewhat surprisingly the evidence points to this "subarea" having stronger ties to the Plateau and Great Basin cultures to the east; while the "interplay (with the Willamette Valley) had not been great". For Federal C.R. management, one of the report's most important statements is "The Western Cascades as a whole contains a sizeable archaeological resource base."

HAMILTON, T. M.
1932
Tobacco Among the Karuk Indians of California, Bureau of American Ethnology, Washington, D.C. (SOSCL)
- Tobacco-culture was reported among the Takelma and other southwest Oregon Indians. This book gives an ethnographic account of the locations and methods used by a neighboring California group.

HASTIE, Colin C. and Jeffrey M. LaLande
1976
"Cultural Resources Report for the Proposed Medford Forest Nursery", C.R. Job #RR-26. RRNF, Medford. (A)
- Results of archaeological and historical field survey. Contains brief ethnographic summary of the Upland Takelma, largely drawn from Drucker.

HEFLIN, Eugene
1966
"The Pistol River Site of Southwest Oregon, Report of University of California Archaeological Survey, #67, Berkeley. (A)
- Report on the excavation of a housepit village and associated shell midden on the south Oregon coast. Projectile-point types and other artifacts point to protohistoric occupation.

HEIZER, Robert F.
1953
- Description of the carved river boulders thought to be used in weather magic by the Shasta and other Klamath River groups. The "Gotteville Rain Rock" displayed at Fort Jones Historical Museum is said to have been used in the annual First Salmon ceremony.
HEIZER, Robert F. and Albert B. Elsasser
1964 "Archaeology of Hum-67, the Gunther Island Site in Humboldt Bay, California", Report of University of California Archaeological Survey #62, Berkeley. (I *)
- Report on excavation (as recorded by local amat archaeologist) of shell-mound and associated burials. The material from this site helped establish the picture of culture movement up the Klamath River from the coast. The stone artifact assemblage included chert, Gunther-barbed points (the predominant type); large, red-or-black obsidian ceremonial blades, zoiform steatite clubs ("slave-killers"), incised bone and perforated shell ornaments, baked-clay figurines, bone fish-hooks and harpoons. The pre-burned burial pit (sometimes with a partially cremated skeleton) was most common. Carbon-dating placed use of the site around 1,000 A.D.

HENDRICKSON, Otto E.
(n.d.) "Preliminary Report - Archaeological Survey of the Pipeline Distribution System, Applegate Division of Rogue River Basin Project", Northwest Archaeological Research Institute, Oregon State University, Corvallis. (*)
- A report on the negative findings of a 1967 survey of several irrigation pumping-plant sites between Ruch and Wilderville, Oregon.

HOLT, Catherine
- Covers much of the same material as Dixon, but better organized.

HOPKINS, Joseph W.
1976 "Culture Resources in the Area to be Affected by the Proposed Dam on Applegate Creek, Douglas County, Oregon", Southern Oregon State College, Ashland. (*)
- Report on the negative prehistoric findings and the largely negative (one site mentioned) historic findings of an archaeological survey. Includes good regional bibliography.

- Report on brief salvage excavation at proposed recreation site at the Lost Creek Dam Reservoir. Two possible occupation layers found near the mouth of Big Butte Creek. Artifact materials were largely jasper (with a small number of basalt and one obsidian) flakes. The one "diagnostic" tool was a jasper Gold Hill-type projectile point. The prehistoric evidence was light but suggests a similarity to Davis' (1974) sites across the Rogue River.
HOPKINS, Joseph W., John Allison and Jeffrey M. LaLande
1976 "Cultural Resources Report for the Applegate Reservoir Project Area", C.R. Job #RR-13, RRNF, Medford. (*)
- Allison has written an excellent overview of all the known and inferred ethnographic information of the Takelma Indians.

JOHNSON, Leroy and David L. Cole
- List of archaeological reports, graduate dissertations, articles, etc.

LALANDE, Jeffrey M.
(I * C.R. Job #RR-49)
- Report on extensive field survey along Soda Creek near its confluence with the South Fork of Little Butte Creek. Petroglyphs, rock shelter, surface finds of Gunther-barbed points, bone awls and numerous jasper flakes. Contains an ethnographic section as well as a "food resources calendar" for the vicinity.

LEATHERMAN, Kenneth and Alex D. Kreiger
1940 "Contributions to Oregon Coast Prehistory", American Antiquity, Memoir #1, Menasha.

LEONHARDY, Frank C.
- Report and analysis of archaeological excavations at a house-pit site (occupied c. 1400-1600 A.D.) on the Klamath River near the California-Oregon border. Houses were apparently round, conical bark structures, not the rectangular plank houses of the ethnographic Shasta. Artifact assemblage is similar to contemporary sites in northwest California and southwest Oregon. Leonhardy states that the Iron Gate culture "is viewed as one which is transitional between three culture provinces: northwest California, central California, and the Klamath Lakes." Regarding one variation of the Gunther-barbed point, Leonhardy says "projectile points with one short barb and one long barb which extends beyond the stem may well be an index artifact for N.W. California and immediately adjacent areas." Baked-clay artifacts were found at this site.
LEWIS, Albert Buell
- Refers to the burial practices of the Upper Umpqua Indians. "The dead...were doubled up and buried in the ground, the grave covered with stones and the person's property piled around."

LOVIS, William A.
- Describes a method of one-foot square "test-pits" (clearing of duff layer, no real excavation) at 100' intervals within heavily-forested areas. May be applicable in this area.

LYON, William S.
1975 Cultural Resources Overview of the McLoughlin Planning Unit", C.R. Job #RR-8, RRNF, Medford. (*)
- A literature-research report on the potential for prehistoric resources within the planning unit. Makes some general predictions as to where sites would most likely be located. Doesn't attempt to describe or evaluate historic resources.

MACK, Joanne M.
1975 Archaeological Survey of the Lower Rhody Sale, Douglas County, Oregon", Department of Anthropology, University of Oregon, Eugene. (*)
- Results of a research-designed survey of a timber sale in Umpqua N.F. Archaeological sites (2) were confined to ridge tops and absent from the forested slopes. No streamside areas were located within the T.S. boundary. One site was a small flake-scatter. The second contained a complex of vision-quest cairns; recommendations included detailed mapping and lichen-growth dating of those features.

MARCHIANO, Patricia J.
1965 A Technological and Statistical Analysis of Upper Umpqua River Artifacts, M.A. Thesis, Department of Anthropology, University of Oregon, Eugene. (*)
- Analytical treatment of the Lilligren collection (artifacts from the Tiller R.D., Umpqua N.F.) which "represent an isolated, culturally simple, homogenous group of settlements." The range of material, manufacturing techniques and styles are narrow. The artifacts probably represent temporary use of fishing sites by small, familial groups.

MILLS, John E.
MOORE, Earl F.
1973 Silent Arrows: Indian Lore and Artifact Hunting, Muse Press, Trail, Oregon. (JCPL)
- Written by a long-time Rogue Valley amateur archaeologist. Numerous photographs of artifacts including the ornamental-ceremonial (?) "Skyline Site" cache of obsidian "figurines" which Mr. Moore excavated on the Rogue-Umpqua divide.

NEWMAN, Thomas M.
1959 "Final Report on Archaeological Salvage, Emigrant Dam Reservoir, Rogue River Project, Oregon", Department of Anthropology, University of Oregon, Eugene. (*)
- Salvage archaeology at two "recent" habitation sites near Ashland; the small artifact assemblage included "late" style projectile points (Gunther-barbed), scrapers, manos. Newman postulates a possible Coastal-Interior Valley "cultural transition" for those two sites. (The report does not use available ethnographies and it shows some carelessness in using data from tribal distribution maps; i.e., it seems to place the Applegate Athabascans within the southern Bear Creek Valley.)

1959 Tillamook Prehistory and Its Relation to the Northwest Coast Culture Area, M.A. Thesis, Department of Anthropology, University of Oregon, Eugene. (*)
- Report includes description of excavation of small house-pit village on the Curry County coast. Houses were apparently rectangular, gabled and used vertical planks, as recorded in ethnographies of southern Oregon and northern California coastal and riverine groups. Animal remains from midden contained large land mammal bones, unlike contemporary northern California coast sites where sea mammal remains were an important component. Presence of trade goods place occupation of the site within the protohistoric-historic period and abandoned prior to 1850 A.D. This site shows more cultural affinities with northwest California coast culture area than with regions to the north. Newman believes that the northwest Coast culture had not reached the Oregon Coast until around 1400 A.D. Occupation by earlier cultures is unknown.

1971 "The Crisis in Oregon Archaeology", Tebiwa, Vol. 14, #1, Pocatello. (*)
- Assesses the increasing rate of destruction of Oregon's sites by local pothunters; sees them as a fast dwindling resource; urges intensive survey and moratorium on excavation by professionals until more sophisticated research designs are developed.
NEWMAN, Thomas M. and Luther S. Cressman  
1959 "Final Report on Archaeological Salvage Program in the Big Bend Project of Copco on the Klamath River, Oregon", Report for the California and Oregon Power Co., University of Oregon, Eugene. (*)  
- Report on salvage archaeology at two rock shelters and one open site; concludes that the sites date after 1000 A.D. and show cultural similarities to both the Klamath Basin and northwest California. Crude ceramic artifacts were found.

REDMAN, Charles L. and Patty Jo Watson  
- Describes methods of collecting and recording surface artifact-scatters.

REETZ, Charles A.  
1949 The Cultural Position of the Klamath Semi-Subterranean Earth Lodge in Western North America, M.A. Thesis, Department of Anthropology, University of Oregon, Eugene.

SAPIR, Edward  
1907 "Notes on the Takelma Indians of Southwestern Oregon", American Anthropologist, Vol. 9, #2 Menasha. (JCPL)  
- Compiled from interviews with one of the few remaining Takelman speakers. This is the major source of information on this group. Deals with material economy, social framework, relationships with neighboring peoples, etc.

SCHENCK, Sara M. and E. W. Gifford  
- A listing of edible and useful plants of the Karok Indians of the middle Klamath drainage; can probably be utilized in this area as well.

SCHUMACHER, Paul  
- Early account of exhumation of burials at the mouth of the Rogue River; all were flexed, most were facing the "Rancheria" (settlement site). Burials were covered by a low pile of rocks.

SMITH, C. E. and W. D. Weymouth
1952 "Archaeology of the Shasta Dam Area, California", Report of University of California Archaeological Survey. #18, Berkeley. (*)
- Report on excavations along the McCloud and upper Sacramento Rivers. Regarding site-distribution the authors state: "The essentially rugged character of the region limits habitable areas to the occasional flat places along the river courses or away from the river near a spring or stream. Infrequently sites are noted on ridge points, but most of them are found on lower or middle elevation terraces...a spot with southerly exposure abutting on some rise in ground to the north was especially favored... Again, these late sites show cultural affiliations (point types, etc.) with northwest California coastal province overlaying similarities to central California and the Klamath Basin... The question must remain, does this short period of occupation mean the region was only recently occupied, or that there are somewhere in the area sites of greater antiquity?"

SPIER, Leslie
1927 "Tribal Distribution in Southwestern Oregon", Oregon Historical Quarterly, Oregon Historical Society, Vol. 27. (JCPL)
- A compilation of the territorial boundaries for such groups as Takelma, Shasta, Tolowa, etc., based on early histories and ethnographic reports. Spier points out conflicting evidence when it occurs; distributions should be taken only as approximate for the opening of the historic period.

1930 Klamath Ethnography, University of California, Berkeley. (JCPL)
- This work is an in-depth ethnographic account. It contains references to Klamath and Molala use of Huckleberry Mountain as well as several accounts of Takelma raids in the area north of Klamath Lake. Some sections dealing with the material culture mention the differences between Takelma artifacts and those of the Klamath. The Klamath are said to have referred to the Upland Takelma as Walumskni - people from the Snowy Butte (Mt. McLoughlin?).

TREGANZA, A. E.
1958 "Salvage Archaeology in the Trinity Reservoir Area, Northern California, Part One", Report of University of California Archaeological Survey, #43, Berkeley. (*)
- Report on archaeological excavations of several late house-pit sites on the Trinity River. Postulates occupation of the area by ancestral Wintu c. 900 A.D. "Prior to this time it is assumed that the region was not occupied by man."
Includes discussion of the distribution and date (c. 1400 A.D. or later) of the "Gunther-barbed" style of point. Section on "Post-Indian Alteration of the Landscape" details the destruction of archaeological sites by historic mining and modern highway construction.

1958

- Report on excavation of historic-period Wintu dance house; this feature was probably a late import from the Central California Valley along with various ceremonial practices.

WALLACE, W. J. and Edith S. Taylor
1952

"Excavation of Sis-13, A Rock Shelter in Siskiyou County, California", Report of University of California Archaeological Survey #15, Berkeley. (*)
- A report on the excavation of a large rock shelter about five miles east of Yreka. Artifacts included numerous basketry fragments, preserved from decay by the protected nature of the site; several clay artifacts, including the fragment of a possible figurine, were found. The points (largely obsidian) were predominantly "Gunther-barbed" style. Plant food remains included: acorns, manzanita, juniper, camas, and Brodiae lily. Conclusion: a late (c. 1750-1820 A.D.) site seasonally used by small groups of hunter/gathers.

-MINING-

ASHLAND GRANITE COMPANY
C. 1925

"The Open Door to an Opportunity in the Granite City of Oregon", privately printed, Ashland. (I JCPL)
- Promotional brochure for the Neil Creek Quarry operation, adjacent to RRNF. Numerous photographs.

BAILEY, Edgar H. (ed.)
1966

"Economic Deposits of the Klamath Mountains", Geology of Northern California, Bulletin #190, California Division of Mines and Geology, Sacramento.
- Gives some historical background on various kinds of mining in the region from 1850 to the present. Contains good background material on the copper sulphide "boom" throughout the region after the turn of the century. Some brief mention of the Blue Ledge Mine.
BARRY, Frances
1973 "Chinese in the Mining Camps", unpublished research paper, Department of History, Southern Oregon State College, Ashland. (*)
  - Very general treatment, basically a compilation of some primary sources dealing with the nineteenth century Oriental population in southwest Oregon and northern California. Some good background material but little information that would be helpful in locating sites.

BLUE, George Vern

BROOKS, Howard C.
1963 "Quicksilver in Oregon", Bulletin #55, Oregon State Department of Geology and Mineral Industries, Salem. (I *)
  - Gives incomplete (limited largely to 20th century records
  1 listing of cinnabar mines in southwest Oregon, including as much historical background as was available for each mine. Contains good general history of quicksilver mining and uses, including drawings of typical brick retorts.

BROOKS, Howard C. and Len Ramp
1968 "Gold and Silver in Oregon", Bulletin #61, Oregon State Department of Geology and Mineral Industries, Portland, (JCPL)
  - Listing of southwest Oregon's gold mines from about 1900 to 1967. Excellent gold mining background in introduction; history of each mine as available.

CALIFORNIA STATE MINING BUREAU
1898 Register of Mines and Minerals of California - Siskiyou County, Sacramento.
  - Contains brief reference to only one mine within RRNF, located on either Elliott Creek or the Middle Fork of the Applegate River.

CALLAHAN, Eugene and A. F. Buddington
  - The only relevant "historical" reference is a brief section dealing with the Al Sarena-Buzzard Mine. Describes various mining prospects within present BLM land also.

FOSTER and Gunnel
1904 "Mining Map of Southern Oregon", Grants Pass.
  - Shows very few mines for RRNF land (most in the Squaw Creek area); seems to have concentrated on Josephine County and should probably not be taken to mean that the Applegate River drainage had few mines at this time.
HAINES, Francis D. and Vern S. Smith
1964 Gold on Sterling Creek, A Century of Placer Mining, Medford.
(I JCPL)
- Narrative and pictorial history of some of the hydraulic operations in the Little Applegate River drainage. Deals with the Sterling Ditch which heads on RRNF land and mentions the scheme to extend it to Squaw Lakes.

HUNDHAUSEN, R. J.
- Contains maps, stereogram, and background history of the Blue Ledge Mine.

MEAD, H. L.

OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES - STAFF
1942 Oregon Metal Mines Handbook, Vol. 2, Sec. 1 - (Josephine County), Portland. (JCPL)
- Listing and histories of numerous mineral properties after 1900, drawn from all available sources, including personal interviews.

1943 Oregon Metal Mines Handbook, Vol. 2, Sec. 2 (Jackson County), Portland. (JCPL)
- Same as above; excellent bibliography.

RAMP, Len
1961 "Chromite in Southwestern Oregon", Bulletin #52, Oregon State Department of Geology and Mineral Industries, Salem. (*)
- Some historical background on the "strategic" mining of chromite in the area during W.W. I and II and into the 1950's. Includes a chapter and map on the "Red Mountain Chrome Area" within RRNF; histories of specific mines.

SHENON, Philip J.
1933 "Copper Deposits in the Squaw Creek and Silver Peak Districts, Southwestern Oregon", Circular #2, U.S. Geological Survey, Washington, D.C. (*)
- Contains maps, tunneling diagrams, and text on both the "Pacific States Mines" on Squaw Creek and the Blue Ledge Mine. Historical data or descriptions of structures are few.

STOANE, Howard N. and Lucille
- Combination of text, drawings, and photos telling the story of mining; numerous sections dealing with California and the Northwest. Good descriptions of various methods and general chronology of mining techniques.
SURFACE MINING AND ENVIRONMENT - STAFF
(n.d.) Anatomy of a Mine, U. S. Forest Service - Intermountain Region, Ogden. (I RRNFL)
- Contains a brief history of the U.S. Mining Laws. Includes descriptions (with diagrams) of different mining and milling techniques.

UNIVERSITY OF OREGON
- Largely general and non-specific data. Some then-current information on Jackson County mines given, including several brief entries for the Upper Applegate and Ashland mining districts.

WAGNER, Norman S.
1944 "Antimony in Oregon", G.M.I. Short Paper #13, Oregon State Department of Geology and Mineral Industries, Salem (JCPL)
- Contains background information and description of two antimony mines within RRNF, on Kinney Creek and Kanaka Gulch.

-TRANSPORTATION-

ANONYMOUS
1879 "Railroad and Township Map of Oregon". (SOSCL)
- Shows post office locations and major transportation routes of this region.

APPLEGATE-GOOD, Rachel
1941 History of Klamath County, Klamath County Historical Society, Klamath Falls. (JCPL)
- Contains information on the building and use of the Forest's two trans-Cascadian military roads.

COBO, Marilyn
1960 "Fourmile Lake Road", unpublished research paper, Department of History, Southern Oregon State College, Ashland. (I JM)
- A brief history of the "Rancheria Trail" (Military Wagon Road). Includes records of interviews. Portions of the road were located on the ground, photographed, and mapped (one section identified as wagon road is actually a c. 1925 logging railroad grade).

GENERAL LAND OFFICE
1906 "Willamette Meridian Survey", Field Notes and Plat; T40 and 41S, R1E and 1 W.
- Notes and map showing route of the old "Grouse Creek Trail" from Ashland to the Beaver Creek drainage of the Klamath River (these G.L.O. surveys often contain the most accurate trail and road locations).

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JACKSON, W. Turentine
1949  "Federal Road-building Grants for Early Oregon", Oregon Historical Quarterly, Vol. 50, #1, Oregon Historical Society, Portland. (SOSCL)
- Has brief mention of military use of the Union Creek Wagon Road.

SHAVER, F. A.
1905  "Klamath County", An Illustrated History of Central Oregon, Western Historical Publishing Co., Spokane. (SOSCL)
- Contains a brief history of the building of the Union Creek Military Wagon Road.

U. S. GEOLOGICAL SURVEY
1893  "Reconnaissance Map - Rancheria Trail", Washington, D.C. (KCM)

-GRAZING-

CRATER NATIONAL FOREST
1918  "Inter-Forest Grazing Report", Medford (* CRF #4)
- Compilation of correspondence and reports from 1909 to 1918 dealing with the long controversy over sheep allotment boundaries on the Rogue-Umpqua divide. Mentions names and camp locations of early sheepmen.

1923  "Range Atlas", Medford. (* CRF #34-1)
- District sheep and cattle allotment boundaries and developments (fencing, trails, cabins, etc.) shown on large-scale 1916 Forest base map. Has been helpful in C.R. reconnaissance and research.

OLIPHANT, J. Orin
1968  On the Cattle Ranges of the Oregon Country, University of Washington, Seattle. (JCPL)
- Excellent treatment of the history of ranching in Oregon. Although concentrating on eastern Oregon, it discusses the importance of Rogue Valley stock-raising, c. 1855-1875.

ROGUE RIVER NATIONAL FOREST
1942  "Range Atlas". Medford. (* CRF #34-2)
- Drawn on 1936 base map, shows changes in allotments and grazing features (cabins, corrals, etc.) since 1923 Atlas.
BOYLE, Lawrence
1974 "The Rock", Pioneer Days, #7, South Umpqua Historical Society, Canyonville, Oregon. (I)
- Brief article, with photographs, describing the "Vanauken Stone" near Long Prairie Camp, in the Upper Rogue Planning Unit.

DAVIES, K. G. (ed.)
1961 Peter Skene Ogden's Snake Country Journal 1826-1827, Hudson's Bay Record Society, London. (SOSCL)
- The daily journal of Ogden during his Hudson's Bay Company trapping expedition, the first known party of whites in this region. Editorial footnotes give known or inferred locations for the events described.

DILLON, Richard
- A very general treatment of the activities of the Hudson's Bay Co. and American trappers in northern California and southern Oregon.

MCLEOD, Alexander R.
1968 The Hudson's Bay Company's First Fur Brigade to the Sacramento Valley, ed. by Joyce B. Nunis, Fair Oaks Book Collectors Club, Sacramento.
- Special printing of McLeod's memoirs, including his travel through the Rogue Valley. Has not been evaluated.

ROSS, Alexander
1956 The Fur Hunters of the Far West (1855), ed. by Kenneth A. Spaulding, University of Oklahoma Press, Norman. (JCPL)
- General description of early trapping activity (1818 and later) in the Umpqua drainage, among other places.

-HOMESTEADS-

CRATER LAKE NATIONAL FOREST
1908-20 "L-Lands-Homesteads Examinations", Medford. (*)
- Ten cartons of entry examinations for homesteads and squatter claims within what was then Crater N.F. Many of the files include photographs, diagrams, and useful background information.
GENERAL LAND OFFICE
circa 1900-20 "Tract Books - Roseburg District", (Photostatic copies available by Township and Range from BLM Branch of Records and Data Management, Portland).
- Gives homestead entry information by section; although usually confined to names and dates, can be extremely helpful in dating a structure.

SHERMAN, E. A.
1914 "Land Classification Report to the Chief Forester", Crater N.F., Medford. (* CRF #20)
- Recommendations (negative) concerning proposed elimination of lands near Butte Falls from Crater N.F. for homestead entry. Some specific sites are mentioned and described.

-RESORTS-

CRATER NATIONAL FOREST
1920-34 "Miscellaneous Recreation-Site Maps and Reports", Medford. (* CRF #25)
- Various maps and general reports dealing with such early Forest recreation and summer home sites as Union Creek, Fish Lake and Dead Indian Soda Springs.

HELFRICH, Devere
1968 "Fort Klamath Issue", Klamath Echoes, #6, Klamath County Historical Society, Klamath Falls. (I JCPL)
- Contains some information on military roads, excellent series of personal reminiscences of turn-of-the-century camping at Huckleberry Mountain.

-EARLY FOREST SERVICE-

BARTRUM, S. C.
(n.d.) "History of Early Forest Work", unpublished typescript, (* CRF. #7)
- Recollections of the early days of the Forest by the Cascade Forest Reserve (South) supervisor, 1902-07. Mostly general information but contains interesting anecdotes...
"There were no trails into the interior of the Reserve...(except) old Indian trails, indistinct and impassable in many places, routed to reach the apex of all high points, presumably for observation purposes, regardless of location or grade...
There were no Govt. improvements such as...Ranger Stations, buildings, or storm shelters, except an occasional dilapidated and deserted trapper's or squatter's shack...unfit for use."
BROWN, Carroll E.
- Invaluable sourcebook for information (names, dates, site-locations, etc.) concerning the early Forest Service. Includes annual list of Forest activities.

BURNS, Findley
- Short summary of major resources of the Forest, detailed description of 1910 fires.

CRATER NATIONAL FOREST
(filed at Ashland R.D.)
- Topographic sheets showing major trails, structures, (F.S. and some private) and roads on the original Crater N.F. Has proven quite useful for reconnaissance and research purposes on several Cultural Resource projects.

1909-11 "The Crater Ranger", Medford. (* CRF #8)
- Semi-monthly newsletter for F.S. personnel; the often humorous articles have been helpful for learning names, dates, and locations relative to early F.S. activities.

1916-17 "Monthly Log of Forest Service Activities", Medford.
(* CRF #7)
- The dates of various projects and events for each month are briefly noted. Example: "August 1, 1916, Fire at Lightning Gulch (10 acres - Burton advised Wm. Dietrich who started the fire to leave the country) ... February 1917, built Dead Indian Soda Springs road".

LIEBERG, John B.
- Comprehensive description of most of present Forest (and adjacent areas): geological, timber types, mining, roads; and detailed descriptions of land by Township and Range (500 pages).

ROGUE RIVER NATIONAL FOREST
(n.d.) "I - Studies, Historical Information", Medford. (* CRF #4)
- This file contains correspondence and reminiscenses relating to the early days of Crater N.F. Some of this material provided information for Brown's History of RRNF.
UNITED STATES FOREST SERVICE
- A question-and-answer format for the F.S. Ranger.
- Contains some interesting facts on the early Forest Service.
- Sample: "How can I identify a Ranger Station? Answer: A Ranger Station is painted grey with white trim and has a green roof".

-LOGGING-

ADAMS, Kramer A.
- Explanatory text and numerous photographs.

ANDREWS, Ralph W.
1954 This Was Logging !, Superior Publishing Co., Seattle. (I JCPL)
- Text and numerous photographs from the 1880's through the 1950's, dealing with the various technologies and lifestyles of Northwest logging. Photos are not from this region but helpful nevertheless.

1957 This Was Sawmillers, Superior Publishing Co., Seattle. (I JCPL)
- Explanatory text and photos showing the development of the Northwest's sawmill technology.

CRATER NATIONAL FOREST
1915-23 "Fourbit Creek Sale - Progress Reports", Medford. (Filed at Butte Falls R.D.)
- Fairly complete history of Owens-Oregon (Medco) Lumber Co. activity on this timber sale. Includes maps of railroad grades, descriptions of equipment, job descriptions and number of men employed, etc.

GRAVES, W. Frank (ed.)
1975 "Hilt Issue", The Siskiyou Pioneer, Vol. 4, #8, Siskiyou County Historical Society, Yreka. (I JCPL)
- Although this publication does not directly deal with RRNF lands, it does describe and illustrate the railroad logging activity in the Cottonwood Valley, south of Mt. Ashland (Klamath N.F.). Some photographs may be helpful in identifying various early logging features.

LABBE, John T. and Vernon Boe
1967 Railroads in the Woods, Howell-North, Berkeley. (I JCPL)
- Brief text, numerous well-documented photos about the history of railroad logging in the Pacific Northwest. Good descriptions of equipment and methods used.
MCCULLOCH, Walter F.  
- Glossary of current and dated logging terms: "Whistlepunk", "bull donkey", etc.

PROUTY, Andrew M.  
- Excellent narrative on the development of the Northwest logging industry told in human terms; explanations of many kinds of logging activities and technologies are given. Good insight into the often brutalized lifestyle of the early loggers.

RANKIN, Hugh B.  
1921 "Management Plan", Crater N.F., Medford. (* CRF #4)  
- This report (and also the attached "Policy Statements" for 1924 and 1927) contains some general historical background on the Forest but concentrates on actual and proposed timber-cutting. Sawmills within or near the Forest boundary are cited.

-CIVILIAN CONSERVATION CORPS-

BROWN, Carroll E.  
- Year-by-year inventory of CCC activities. Construction dates for CCC features can usually be learned from this source.

CIVILIAN CONSERVATION CORPS  
1934-43 "Selected Records of Camps Located in the Rogue River National Forest", Medford. (* CRF #1)  
- CCC camp work projects, menus, education projects, newspaper clippings, lay-out diagram for Camp Applegate, building inventories, etc.

1938 Official Annual, Medford District - Ninth Corps Area. (I *)  
- Group photographs of all the CCC camps in northern California and southern Oregon. Gives the organizational history of each company.

FINK, Robert  
1976 "Inventory of Civilian Conservation Corps Structures", C.R. Job #RR-35, Rogue River National Forest, Medford, (I *)  
- A historical-architectural inventory of the major complexes of CCC structures on RRNF. Recommends National Register for several of them.
ROGUE RIVER NATIONAL FOREST
1938-41 "The Rogues", quarterly Forest newsletter, Medford. (* CRF #17)
- Human interest articles dealing with Depression-era Forest Service and CCC activities. Reference to various construction projects sometimes gives names and dates.

-GENERAL HISTORY-

ATWOOD, Kay
1975 "Jackson County History Resource Guide", Jackson County Intermediate Education District, Medford. (JCPL)
- Cross-referenced bibliography of locally-held historical sourcebooks; some citations included here but not in this report may be helpful.

1975 Jackson County Conversations. Jackson County Intermediate Education District, Medford. (JCPL)
- Series of narrative interviews with old-timers concerning various aspects of local history, logging, mining, railroads, etc.

BAILEY, Marylin
- Brief history of the early families of Prospect and their settlement of the area.

BECKHAM, Stephen Dow
1971 Requiem for a People, The Rogue Indians and the Frontiersmen, University of Oklahoma, Norman. (*)
- Brief ethnographic description, fairly detailed narrative of the events of the Indian-white conflict, 1851-56. Some events may have taken place on or near the present National Forest.

BINKER, Elmer J.
1967 "Jackson County Post Offices...the First Fifty Years", Siskiyou Sites and Sagas, Vol. 2, #1, Medford. (JCPL)
- Listing of all Post Office establishment (and closing) dates from 1850 to 1900. Shows population growth in the more remote areas in the late nineteenth century.

BUTTE FALLS RANGER DISTRICT
1949 "Recreation Plan - South Fork, Rogue River Sub-Unit", Rogue River National Forest. (* CRF #7)
- Contains some place-name histories of such features as creeks and campsites.
1954  "Recreation Plan – Big Butte Creek Sub-Unit", RRNF (* CRF #7)
- Some brief references to place-name histories and early Forest Service activities.

CRATER NATIONAL FOREST
1915-21 "L-Boundaries, General", Medford. (* CRF #20)
- This file contains over a dozen reports dealing with proposed withdrawals and/or additions to the Crater N.F. These often include general descriptions of nearby communities, ranches, etc., as well as a section-by-section land inventory. Good source of background for research reports.

DALEY, Venita
1948 "The Rogue River Valley's Early History", (collection of articles from Medford Mail Tribune series on local history). (JCPL)
- Includes place-name histories, list of Indian battle locations.

HOPKINS, Joseph W., John Allison and Jeffrey LaLande
1976 "Cultural Resources Report for the Applegate Reservoir Project Area", C.R. Job #RR-13, RRNF, Medford. (I *)
- "Land-use phase" treatment of the history of the Upper Applegate drainage...trapping, mining, etc.

JACKSON COUNTY ABSTRACT COMPANY
- Shows transportation routes and townsites, gives owner's names for all land parcels outside of municipal areas. A good preliminary source when researching property ownership history.

JERMANN, Jerry V. and Roger D. Mason
- Comprehensive prehistoric-historic summary of south central Washington; offers specific research and management guidelines for the Forest Service.

LALANDE, Jeffrey M.
1976 "A Cultural Resources Overview of the Sky Lakes Wilderness Study Area", C.R. Job #RR-20, RRNF, Medford. (*)
- General prehistoric and historic background, from available literature and personal interviews, of the higher elevations of the McLoughlin Planning Unit.

1977 "A Review of the Cultural Resources of the Upper Rogue Planning Unit", C.R. Job #RR-93, RRNF, Medford. (*)
- Prehistoric and historic background, by "land use phases", of the North Fork-Rogue River drainage within the Forest boundary.
MCARTHUR, Lewis A.
- Gives the place-name history of numerous natural and cultural (towns, etc.) features in the RRNF.

O'HARA, Marjorie
1964-74 From the Desk of Marjorie O'Hara, Medford Mail Tribune (Xerox compilation), 2 volumes. (JCPL)
- Collection of special interest columns dealing with historic events and places in southwest Oregon. Most information from secondary sources and personal interviews. Several articles deal with sites located within RRNF; e.g., Neil Creek Sawmill, Huckleberry Mountain, Blue Ledge Mine, etc.

OREGON HISTORICAL SOCIETY - STAFF
- Compilation of over 2,000 titles dealing either generally or specifically with prehistoric, historic or natural facets of the region.

PEARSON, Frances
c. 1958 "The History of Prospect", (unpublished typescript). (* CRF #9)
- A good source of information, some legendary but mostly factual, concerning the early development (logging and homesteading) of the Prospect region.

PORT, Lee
1945 "Notes on Historical Events - Applegate Ranger District", (unpublished typescript), RRNF, Medford. (*)
- Ranger Port's personal recollections and early stories of men, places, and events in the Applegate country. Includes many place-name histories.

PROSPECT RANGER DISTRICT
1973 "Miner Special Interest Areas", RRNF, Prospect, (*)
- Brief descriptions of several historical and natural features located within the District.

SMITH, Larry
- "Log" includes events which occurred (and features found) within the Upper Rogue Planning Unit.

SUTTON, Dorothy and Jack
1969 Indian Wars of the Rogue River, Josephine County Historical Society, Grants Pass. (I JCPL)
Much of the material comes directly from Frances F. Victor's *Early Indian Wars of Oregon* (1892); with some excerpts from diaries, correspondence, and contemporary newspapers. Includes an account of the "Battle of Star Gulch" (from Walling, 1887) which apparently took place near Star Ranger Station. Excellent collection of early photographs including photos of Indians taken at the Siletz Reservation and the lower Klamath River.

SWENNING, Samuel
1907
"Review", Crater N.F., Medford. (* CRF #8)
- A 30-page document providing an overview of the newly-formed Crater N.F. Includes sections on history, topography, timber-types, grazing and the region's economy. Mentions the proposed "High Line Canal" from Prospect to Grants Pass, supposed to serve as a log-flume as well as a mining and irrigation ditch.

TUCKER, William
1931
"The History of Jackson County, Oregon", M.A. Thesis, Department of History, University of Washington, Seattle. (JCPL)
- Contains place-name histories of several features within RRNF (information which is not found elsewhere).

VAUGHN, Thomas (ed.)
1974
*Space, Style and Structure: Building in Northwest America*, Oregon Historical Society, Portland. (JCPL)
- Excellent regional history of residential, agricultural, industrial and public architecture. Useful for dating and classification of cabin, barn styles, etc.

WALLING, A. G.
1884
*History of Southern Oregon; "Comprising Jackson, Josephine, Douglas, Curry and Coos Counties, Compiled from the Most Authentic Sources"*, A.G. Walling Printing and Lithographic House, Portland. (JCPL)
- "Walling" is the standard pioneer-era history of the region. A good sourcebook for mining activity, Indian battles, etc.; however, it is usually not very specific about sites.

WELLS, Harry L.
1881
*History of Siskiyou County, California*, D. J. Stewart Co., Oakland. (JCPL)
- Another "pioneer history", good source for Indian-white conflicts, early mining and grazing.

WHISTLER, John T. and John H. Lewis
1916
*Rogue River Valley Project, Department of Interior - Bureau of Reclamation, Denver*. (RRNFL)
- Describes actual and proposed irrigation projects. Written during the Rogue River Valley's pear orchard boom, it gives specific locations of a few early mining canals.
WILDESEN, Leslie
1975 Cultural Resource Management, Region Six - U.S. Forest Service, Portland. (*)
- Summary of the purpose, procedures and legal requirements for Cultural Resource Management by the U.S.F.S.

-AIDS TO HISTORIC FEATURE/ARTIFACT IDENTIFICATION AND DATING-

ANDREWS, Wayne
1960 Architecture in America: A Photographic History From the Colonial Period to the Present, Atheneum Publishers, New York. (JCPL)

ARIZONA ARCHAEOLOGICAL AND HISTORICAL SOCIETY
- A very detailed history and description of the various styles of square nails.

- Detailed description of the history of tin cans from their invention around 1800 through the twentieth century. Gives several valuable "index artifacts" for dating historic sites; using such commonplace items as sardine cans and condensed milk containers.

BEITZ, Les
- Very general text (with a few photographs and drawings) dealing with the common historic artifacts of the American West. Some dates-of-manufacture given. Discusses such items as miners' tools, barbed-wire varieties, etc.

CHANCE, David L. and Jennifer S.
GODDEN, Geoffrey A.  
- The more affluent early settlers often used English-made dishware. Much of this early crockery was present in this region due to the trading influence of the Hudson’s Bay Co. Excavation of U. S. Army garbage-fill at Ft. Vancouver shows that English wares continued in use well into the late-nineteenth century. This book gives identifying trademarks and dates of manufacture of common varieties of stoneware, earthenware and porcelain found at historic home-sites.

GOODELL, Dugway  
- Contains some good background material on the types of bottles used in the nineteenth century in the far West.

KENDRICK, Grace  
- A good, general treatment on the chronology of the technical developments in bottle making. Has proved useful in dating several early-mining site bottles found during RRNF reconnaissance.

MUNSEY, Cecil  

NELSON, Lee H.  
1968 "Nail Chronology as an Aid in Dating Old Buildings", History News, Vol. 24, #11 (Technical Leaflet #48), American Association for State and Local History. (I *) 
- Machined, square-cut nails began replacing hand-forged square nails, c. 1820-30 and were dominant from 1850 to 1890. They continued to be manufactured into the twentieth century. Wire, or "round", nails became dominant by the 1890's."

NEWMAN, T. Stell  
1970 "A Dating Key for Post-Eighteenth Century Bottles", Historical Archaeology, Society for Historical Archaeology, Lansing, Michigan.

RUSSELL, Carl P.  

TOULOUSE, Julian H.  
1970 "High on the Hawg - Or How the Western Miner Lived, as Told by Bottles He Left Behind", Historical Archaeology, Society for Historical Archaeology, Lansing, Michigan.
WESLAGER, C. A.  
- General history of the log cabin, its origins, geographic styles, and methods of construction. Includes discussion of various notching techniques, etc. Good source for standard terminology.

WIGGINGTON, Elliot  
- This volume includes a section on methods of log cabin building among the mountain people of Appalachia. Photographs and drawings show several styles similar to some turn-of-the-century structures found on RRNF.

WOODWARD, Arthur  
1965  "Indian Trade Goods", Society Publication #2, Oregon Archaeological Society, Portland. (I JCPL)  
- Brief descriptions with photographs of typical beads, axe-heads, pots and other trade items.