archeological investigations
volume 2

MOORE CABIN AND HOUSE / SKAGWAY

KLONDIKE GOLD RUSH

NATIONAL HISTORICAL PARK / ALASKA

ARCHEOLOGICAL INVESTIGATIONS
IN SKAGWAY, ALASKA
VOLUME 2:
THE MOORE CABIN AND HOUSE
KLONDIKE GOLD RUSH NATIONAL HISTORICAL PARK

by
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ABSTRACT

Archeological investigations at both the present and original locations of the William Moore Cabin (1888-1900) offered an unusual opportunity to study the construction and use of an early twentieth century Alaskan frontier cabin as it changed through both time and space. In addition to the traditional archeological excavations of stratified soil deposits, data were recovered from the attic of the Moore Cabin. These assisted in the interpretation of remains on the original cabin site. Approximately 4000 artifacts were found in stratified sheet trash deposits, including items associated with the original settlers of Skagway. Their analysis provided not only details about the lives and incidents of the Moores and their successors, the Kirmses, and the structures in which they lived, but also provided insight into human behavior on America's most recent frontier.

In the Moore Cabin attic, remains of clothing used as chinking material provided a glimpse of the frugal life of Skagway's pioneers. The spatial distribution of nails and roofing fragments suggested that the east roof was covered with split shakes and the west half by sawn shingles.

Special studies include: 1) the spatial distribution of the modal nail types, structural materials, bottle glass and window glass, and locational information of features in the absence of structural remains; 2) the change in the modal thickness of window glass through time; 3) a comparative study of jars and tin cans; 4) the way sheet trash was deposited around residential and subsidiary buildings; and 5) the variable deposition rate of sheet trash in times of fluctuating economic conditions.

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PREFACE

On the south bank of a small creek in the Skagway River Valley, Captain William Moore and his son Bernard built a cabin during the summer of 1888. In 1896, they began construction of a house for Bernard and his family a few feet to the south of their original cabin. Over the next few years, the Moores witnessed the last great gold rush of the nineteenth century.

In a matter of a few weeks after the discovery of Klondike gold was announced to the world, the Moores' 160 acre homestead was overrun by eager prospectors. They set up tents and started building without payment to Moore, the landowner. A survey instrument was left as collateral for a grubstake with a man who knew how to use it, and, before long, the town had been platted with broad streets and uniform lots. In the process, Captain Moore's sawmill bunkhouse was found to sit in the middle of one of the new intersections, now 5th Avenue and State Street. Indignant, he held off an entire miner's committee with a crowbar before finally acceding to the demands of progress and allowing the removal of the building to a less trafficked place (Bearss 1970:79).

In telling the story over the one hundred years since 1888, the bunkhouse became identified with the log cabin that now sits a few feet west of the house Bernard built in 1896. During the research of the history of the house and cabin that the National Park Service undertook preparatory to renovating both structures, it became obvious that the bunkhouse of the well-told story and the log structure built in 1888 were not the same. Photographs taken in 1896 clearly show the cabin sitting behind the house.

About this same time, it became obvious that the house would require a new foundation, which would result in substantial disturbance to soils in its vicinity. Archeological investigations of the area behind the Bernard Moore House were undertaken in 1980 to determine whether any archeological remains of the original cabin site were still intact. When such remains were discovered, additional excavations were planned to recover all evidence of the cabin before the foundations and new utility lines were installed. These salvage excavations took place in 1983. At the same time, sample tests were placed along the east side of the William Moore Cabin in its present location to provide comparative data to that found on the original site. Finally, in 1985, prior to the actual renovation work on the cabin, data recovery of nails and other structural materials in the cabin's attic completed the archeological investigations of the Moore Cabin. The result is this study of a homesteader's cabin as it changed over the years in both space and time.

This report constitutes Volume 2 in a series of reports on archeological investigations in Skagway, Alaska. Volume 1 discusses excavations at the White Pass and Yukon Route Broadway Depot and General Offices Building (Blee 1983); Volume 3 details test excavations of a gold rush era trash dump found at the Peniel Mission (Rhodes 1987); and Volume 4 will describe a number of limited test excavations around the community, all undertaken as a part of the National Park Service's renovations of eleven gold rush buildings in Klondike Gold Rush National Historical Park.

CHAPTER 1

BACKGROUND INFORMATION

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ENVIRONMENTAL BACKGROUND

Ecological, prehistorical, and historical background information on Skagway is detailed in Volume 1 (Blee 1983) and is only briefly recounted here for orientation. Skagway is located about ninety air miles northwest of Juneau, Alaska, at the end of the Lynn Canal, the last leg of the Inside Passage (Figure 1). The community of about 600 permanent residents sits on the east bank of the Skagway River, a glacier-fed stream within a narrow valley. The moist maritime climate, noted for its mild winters, warm summers, and the lack of permafrost, is conducive to the growth of Pacific Northwest rain forest, consisting of hemlock, spruce, alder, pine and a dense herbaceous understory. Large mammals are seen infrequently, and include mountain goats, moose, bears and wolves as well as harbor seals and whales in Lynn Canal. A variety of smaller birds, mammals, and fish are more common, however, and provided a rich environment for the native Tlingits who inhabited the area before Euroamerican incursion.

Soils

The Skagway Valley was covered with a local glacier as thick as 5,000 feet during the last interglacial period. A radiocarbon date of marine shells dating to 2,880 ± 250 years was taken 32 feet above mean sea level near the mouth of the river (Yehle and Lemke 1972:17). This date indicates that as recently as 3,000 years ago, the lower portion of the Skagway Valley was below sea level. Subsequent uplift after the glacier melted brought it to its current elevation. A characteristic thin blue marine deposit has been found in wells less than 20 feet deep. The alluvial wash of the braided channels of the Skagway River overlie the intermingled marine and deltaic deposits. These consist of well-sorted, well-bedded gravels, sands, cobbles, and boulders. River flooding and excessively high tides loaded with glacial silts have occasionally left silty

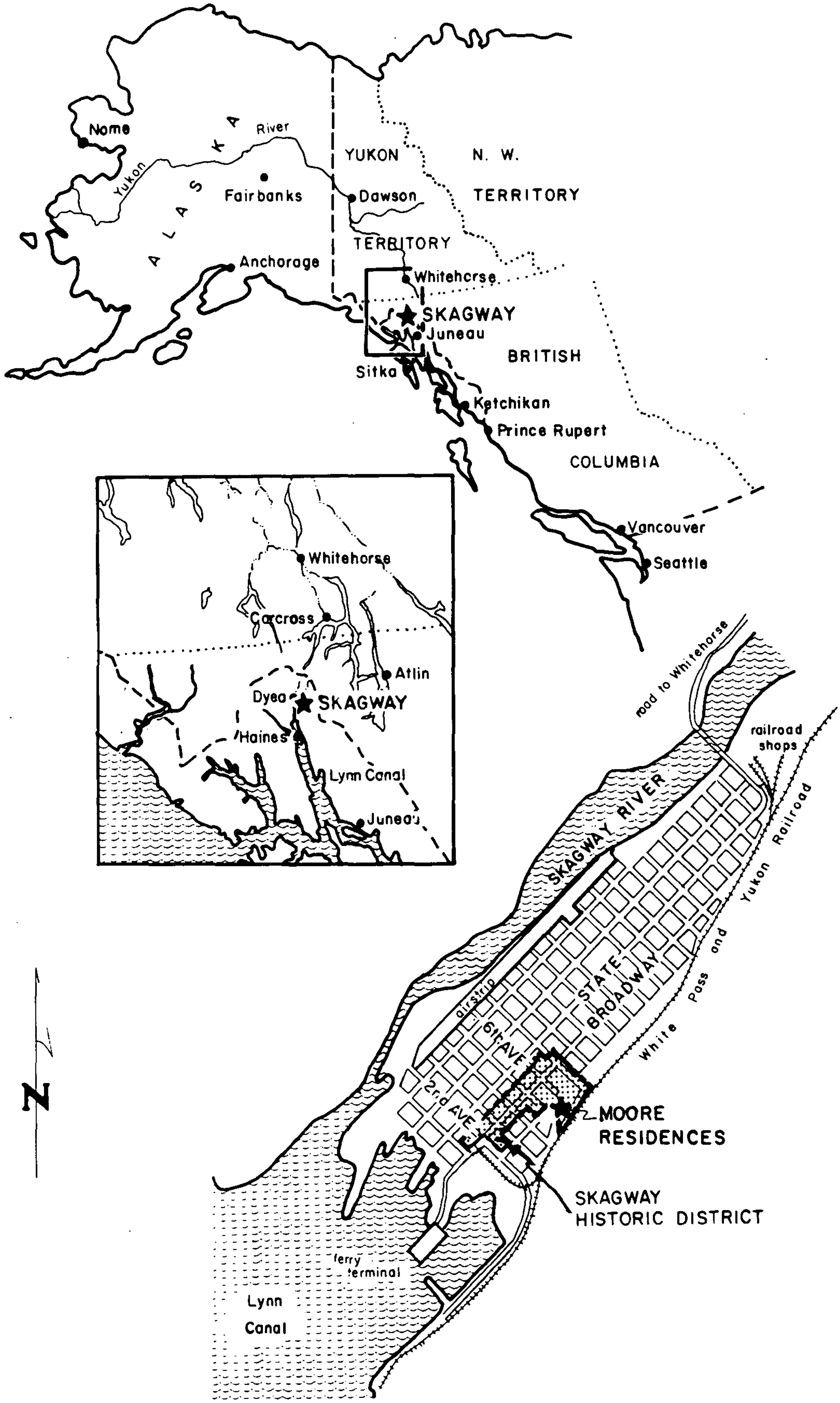


Figure 1: The Location of Skagway, Alaska.

deposits in low areas. Floods were known to have occurred in 1901, 1909, 1919, 1936, 1937, 1943, 1944, 1949, and 1967 (Yehle and Lemke 1972:16, 17, 30, 31, 89).

Stratigraphic evidence suggests that the overlying organic deposits, at least in the area of the Moore residences, accumulated only since the historic occupation of the site. An 1895 photograph shows the cabin sitting at the edge of the forest on the beach deposits (Figure 2). Geologic uplift has been rapid in the area, the land rising as much as 0.07 feet annually since the last glaciation (Twenhofel 1952:523-548). It is likely that the area became vegetated for the first time after the Moores built their cabin at the edge of the encroaching forest. The presence of the building and other human activities assisted in the formation of sandy organics since it presented a wind trap for leaves and other debris.

HISTORICAL BACKGROUND

No humans were living in the valley when William Moore first saw it in the summer of 1887. However, he reported evidence of human activity, including axe marks on trees, deadfall traps for animals, and an old canoe as well as "places where camps had been made long ago" (Moore 1968:15).

It is unlikely that the Tlingit Indians had used the area on a year round basis. Their economic schedule dictated residence in permanent villages near lucrative fishing streams. They dispersed to isolated hunting camps in the summer and were involved in formalized trade networks with interior Athabaskans. The trade was conducted over clan-owned routes, which insured the protection of trade monopolies. One such route was over the Chilkoot Pass via the Taiya River drainage somewhat to the northwest of Skagway. The White Pass, accessed through the Skagway River drainage, was a somewhat longer route and was not used.

Figure 2: An 1895 photograph of the Moore Cabin at the edge of the tree line (University of Alaska Archives). Looking north.

The large, permanent Tlingit villages of the area were located along the Chilkat River 15 miles to the south, where the salmon fishing was particularly lucrative. The Skagway River was a much poorer fishing resource in comparison. Its use was probably restricted to seasonal hunting, an activity normally undertaken after the June salmon runs.

One Tlingit family lived over the ridge to the west of the valley when William and Bernard Moore first came into the valley in 1887. The two White men did not visit the area in the winter before the gold rush began so they would have no reason to know if a man named Nan-Suk was a permanent resident; given Tlingit culture, it is unlikely that he lived there all year long.

The Moores Come to Skagway

William Moore was born on March 30, 1822, in Germany and moved to the New World in 1845 or 1846. In 1851, he followed the gold rush to California and throughout the 1850s worked on ships from Peru to the Queen Charlotte Islands. In 1861, he began to work earnestly in the far Pacific Northwest when gold was discovered on the Stikine River. He operated stern wheelers and barges, worked mines in that vicinity for several years, and in 1869 built a pack trail from the Skeena River to Bakeen Lake (Andrews 1930:195, 197-203). He and his growing sons got $5,000 out of a Cassiar district gold claim in the early 1870s and were able to build another trail from the Stikine River to Dease Lake. They operated several river steamers on the Stikine from about 1875 to 1885, where William earned the appellation "Captain" (Andrews 1931:34-37). Moore's career was typical of the floating population of specialists on the mineral frontiers of the late nineteenth century, who participated in a movement of commodities and mineral wealth in the aftermath of the industrial revolution (Wolf 1982:310-353).

The monopoly of trade enjoyed by the Chilkat Tlingits with their use of the Chilkoot Trail in prehistoric times developed into an exclusive control of labor with the appearance of Euroamericans. White men bound for the interior did not wish to carry their own supplies over a trail too steep for dogs and sleds so they hired Tlingit packers. A road conducive to animal packing was much in the interests of the Euroamericans entering the Far North. Captain Moore's oldest son, W.D. Moore, was working in the Yukon River area in 1886 when he wrote to his father. "Had a long talk with one of the Indians who could talk a good deal of Chinook Jargon, and found that by way of the Skagway River was a long route but not so high a pass to cross [as the Chilkoot]" (Andrews 1931: 38). The following summer Captain Moore joined a Canadian survey party headed by William Ogilvie; both men were interested in finding the pass. Moore found that a man by the name of Skookum Jim was willing to show him the way. As he and his guide crossed White Pass in 1887, he became convinced that a pack trail for animals and wagons could be built to service the increasing numbers of hopeful prospectors making their way to the headwaters of the Yukon River (Bearss 1970:18-23).

Once he had fulfilled his obligation to Ogilvie, Moore and his son Bernard returned to the Skagway Valley in October, 1887. There they staked a 160 acre claim and began to build a wharf and cabin. The cold north wind drove them to Juneau in mid-November, but they returned the next summer and succeeded in finishing the cabin (although it lacked doors and windows) and the wharf. They each visited the site periodically over the next eight years but did not stay for any length of time. By 1896, Captain Moore was able to find a financial backer who advanced him the funds to construct several buildings, and he began work on White Pass Trail. Bernard, moving his Tlingit wife, Minnie, and their two children into the cabin, oversaw the operations (Bearss 1970:77; Moore 1968:178).

Gold is Discovered in the Klondike

On August 17, 1896, the same Skookum Jim who guided Moore over White Pass, along with his partners, Tagish Charlie and George Carmacks, discovered a very rich claim on Rabbit Creek, a tributary of the Klondike River. Word of the strike travelled fast, and within days be opened for development. By August 9, 1897, a town had been surveyed and lots staked, not even four weeks after the world learned of the strike in the Klondike. Skagway was born.

The Construction of the Moore Cabin

On Saturday, November 12, 1887, Bernard and his father began work on their cabin. The former's diary tells the story of its construction:

> Laid the foundation logs for our future cabin measuring sixteen by sixteen feet on the bank, about twenty feet from the creek where it forks, and about a quarter of a mile farther up the valley from our present camp on the left hand side of the creek going up . . . Worked all forenoon [Sunday, November 13, 1887] getting out more logs for our cabin some of which we float and haul down this creek (Moore 1968:105-106).

They left for Juneau on Tuesday, November 15, 1887, without doing any further work on the cabin. They did not return until the following spring. The two men cut logs for the cabin and wharf on May 28, 1888, and placed the first layer of logs on June 1. Work on the cabin was sporadic, the wharf being of primary concern. It appears that logs were being cut for both structures at once, and whenever enough of the appropriate size for the cabin were obtained, the two men and their Tlingit assistant Nan-Suk stopped work on the wharf to spend a day at the cabin.

They placed more logs on June 10, started putting pole rafters on the roof on June 14, and cut a hole for a door and "cased it up" on June 15. The next day, they put up their tent inside the cabin frame, using the log walls for a windbreak. They chinked logs on June 15 and 19, and July 17. The rafters were completed on June 18. Since they had brought only a limited number of sawn shingles with them from Juneau, they were forced to make split shakes for one side of the roof. The men placed shakes on one side of the roof on July 7. The next day "[we every inch of the renamed Bonanza Ceek had been staked by prospectors working in the area. Because the Yukon River froze before any miner could leave the Far North, it was not until the following June that word of the Klondike riches reached the outside world. Two ships carried the gold and miners south. The Excelsior reached San Francisco on July 15, 1897, and the Portland landed in Seattle two days later. The second ship alone carried 68 miners and almost two tons of gold. The rush to the Klondike had begun in earnest (Bearss 1970:41-48).

Both Canada and the United States were recovering from an economic depression, described by Wolf (1982) as affecting most of the capitalist world.

> The halcyon period of machine-made machines and massive railroad building between 1848 and 1873 gave way to the Great Depression of 1873-1894. This downturn was marked by a growing export of capital and by efforts to reduce the costs of raw materials. Its political manifestation was intensified competition among rival European powers for spheres of influences and for access to raw materials abroad. The brief boom of 1894-1913 reaped the harvest of the preceeding period's capital exports and enhanced raw material production, and labor productivity increased sharply through the introduction of a new technology (Wolf 1982:304-305).

The lure of easy riches offered relief for many sectors of the North American economy--farmers, policemen, teachers, physicians, and retail merchants alike. Unbeknownst to them, most of the lucrative claims had long since been staked; the people who made money from the rush were the well-seasoned sourdoughs who were in the north before the gold was found, and the people who established services for the novice prospectors.

The Moores were in the path of the approaching onslaught of people. Their wharf and homestead were overrun. Frank Reid, with a transit left as collateral for a loan, surveyed the town plat. He warned the Moores to fence off about five acres of land to keep as their own; the rest must were] obliged to put in some extra pole rafters on the other side of the house in order to work our shingles in" (Moore 1968:125). The roof work was finished on July 10. The next day Bernard wrote "[we] finished digging a trench around our house and banking up the ground all around the lower logs" (Moore 1968:126), presumably for drainage purposes. The last mention of the cabin was on August 1, 1888, when "[we] packed our necessary gear--tent and other stuff--into the boat, locked up our log cabin with its few odds and ends, and left Skagway" (Moore 1968:127). The cabin at this point was unfinished. Holes had been cut for windows and doors; but none had been installed, nor were the inside walls finished. It is difficult to understand how they were able to "lock" such a structure.

Bernard mentioned visiting the cabin briefly in 1894, stating that neither it nor the wharf had been improved for six years due to lack of money (Moore 1968:169). His father apparently resumed working in Skagway shortly after this time (Moore 1968:171). In February, 1895, Bernard and another man attempted to cross White Pass. They did not stay in the cabin, but camped in their tent:

> . . . in a sheltered spot among the tall spruce and hemlock near the edge of the creek and about five hundred yards up the valley north of our log house, because the log cabin was out in the open where the winds struck it hard. We were more comfortable in the tent. Besides, this log cabin was not completed as yet, it lacked a door, proper windows, and so forth (Moore 1968:173).

Bernard mentions that two other parties of prospectors used White Pass that winter so it is apparent that the route was becoming known to others.

Not until 1896, were any further improvements made to the cabin. When Captain Moore finally found some financial backing, he moved his son, daughter-in-law, and two grandchildren into the cabin. Bernard has written:

> My wife and I worked together fixing up the log house, chinking it better, putting in a good window, a back and a front door, a rough floor, and making pieces of rough bunks and furniture out of poles (Moore 1968:178).

So it was not until that time that the cabin was occupied continuously or that it was even habitable. For archeological purposes, it is unlikely that many artifacts would pre-date this 1896 occupation, other than those associated directly with its construction.

Bernard Builds the House

By the following summer, Bernard had begun construction of a 14 foot by 16 foot, one-and-one-half story frame house, which became the core of the Moore House (Figures 3 and 4). This structure was placed about 6½ feet to the south of the cabin, based on evidence found during the archeological investigations (see Chapter 2). By fall, he had enclosed the area between the two structures and added a 10 foot wide shed on the east side of the cabin. A June 1898 photograph shows a small closet-like extension on the northwest corner of the cabin (Figure 5). In the meantime, Bernard continued to add rooms to the core of the house. Figure 6 details the construction sequence of importance to this discussion. Sometime in the winter of 1899-1900, he moved the cabin 50 feet to the west, to its present location, in order to enlarge the house (Figure 7). In 1901, he made the last major alteration to the house by adding the 14-foot-3-inch wide northern section, which overlapped the original cabin location by about seven feet.

At its new location, the cabin had pier-type foundations, which stood one to two feet off the ground (Figure 8). By the spring of 1901, a shed-like addition had been added to the north of the cabin (Figure 9). After that time, no major structural changes were made to either the house or the cabin.

Figure 3: Bernard Moore and Bernard Moore, Jr., with the Moore House and the cabin in the rear, July 1897 (J.B. Moore Collection, Archives, University of Alaska, Fairbanks).

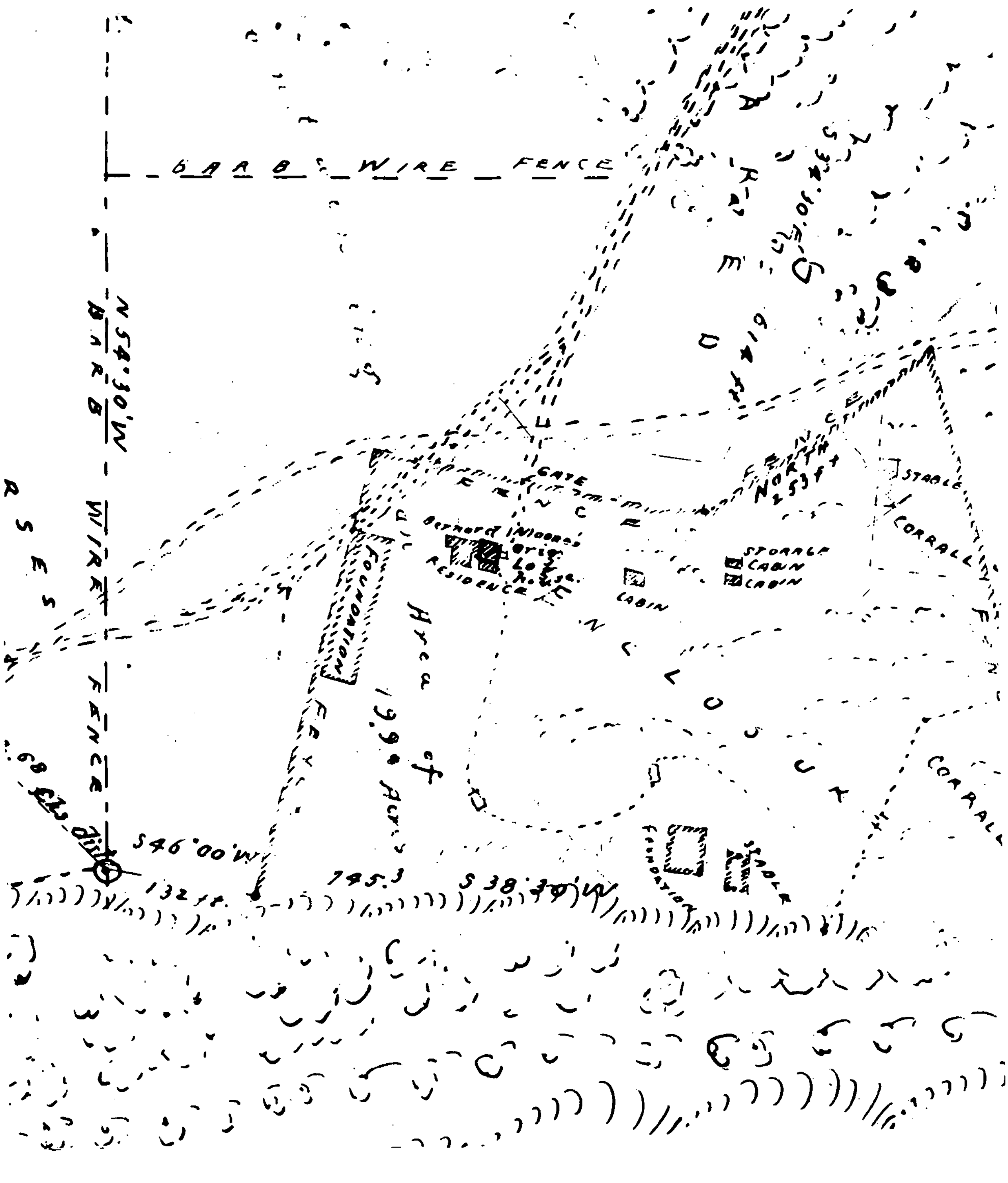


Figure 4: The 1896 survey map, drawn by Charles W. Garside, U.S. Department of Survey (National Archives).

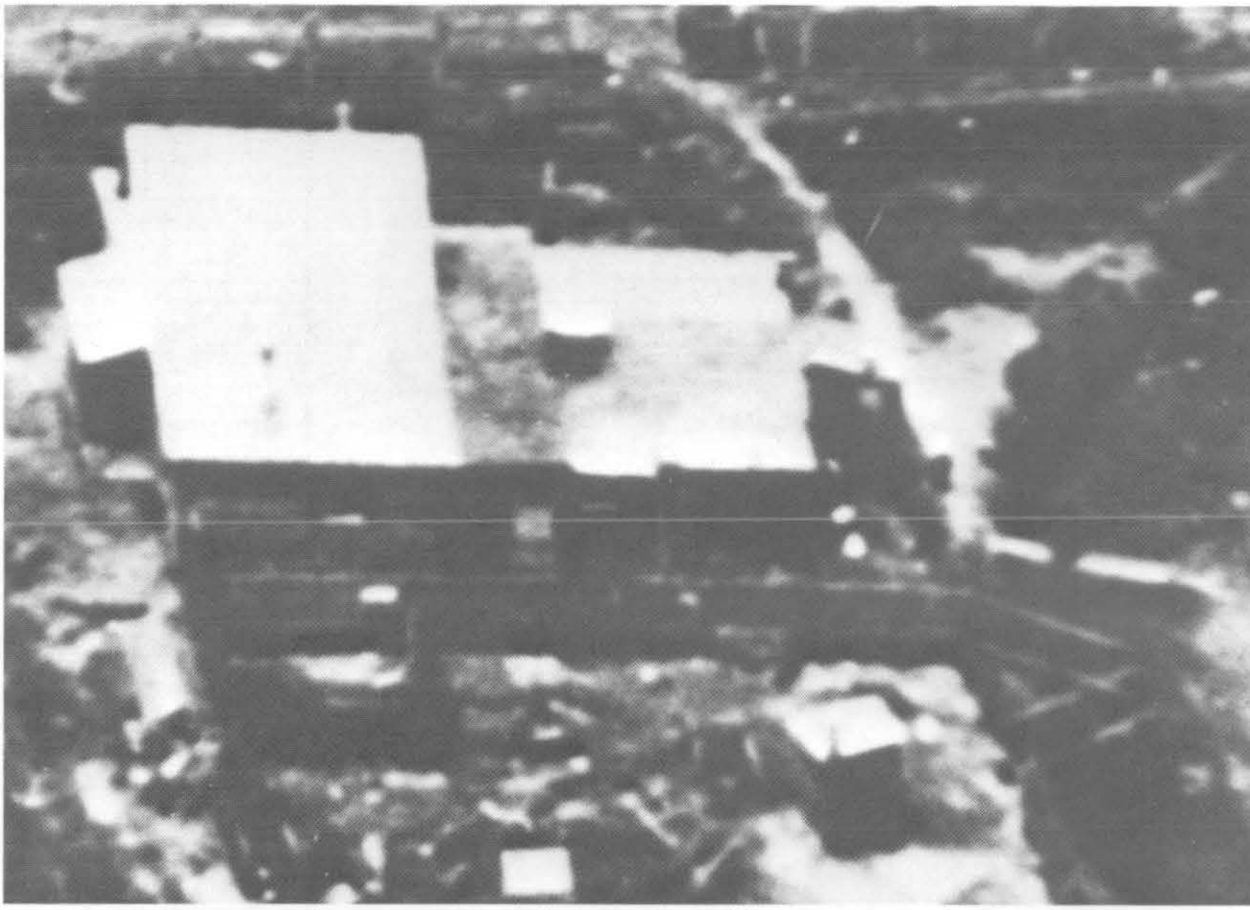


Figure 5: Two photographs of the Moore House and Cabin from above, taken in 1898 (Top: Barr Collection, Archives, University of Alaska, Fairbanks; Bottom: Kodiak Historical Society).

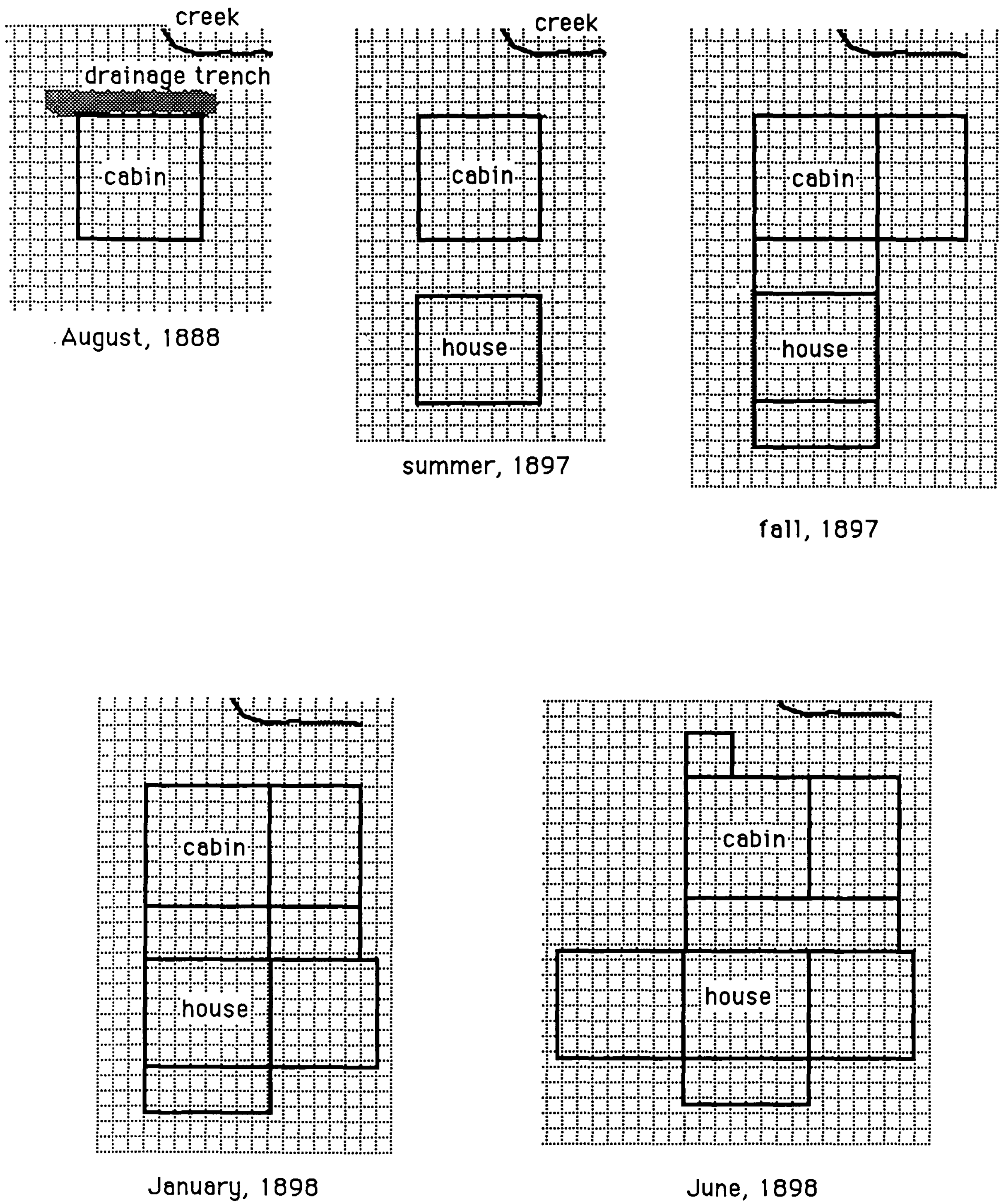
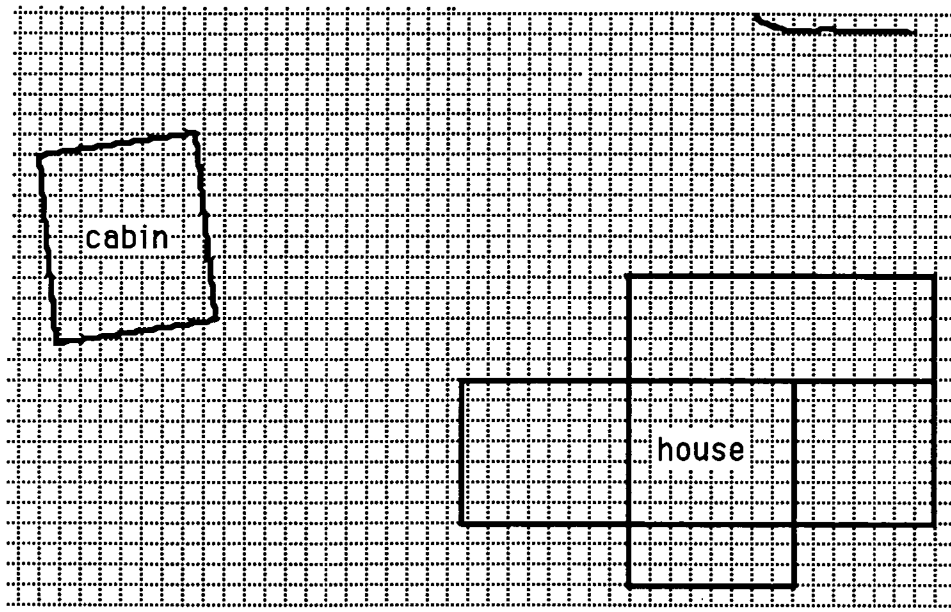
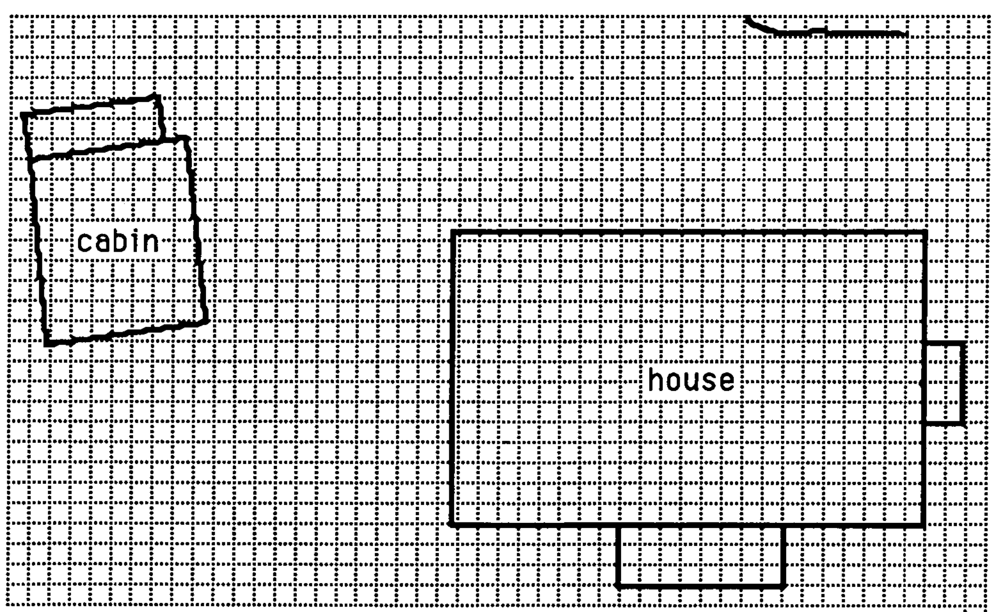


Figure 6: Moore Residences building sequences taken from historic photographs, 1888-1898.



Spring, 1900



1901

Figure 7: Moore Residences building sequences taken from historic photographs, 1900-1901.

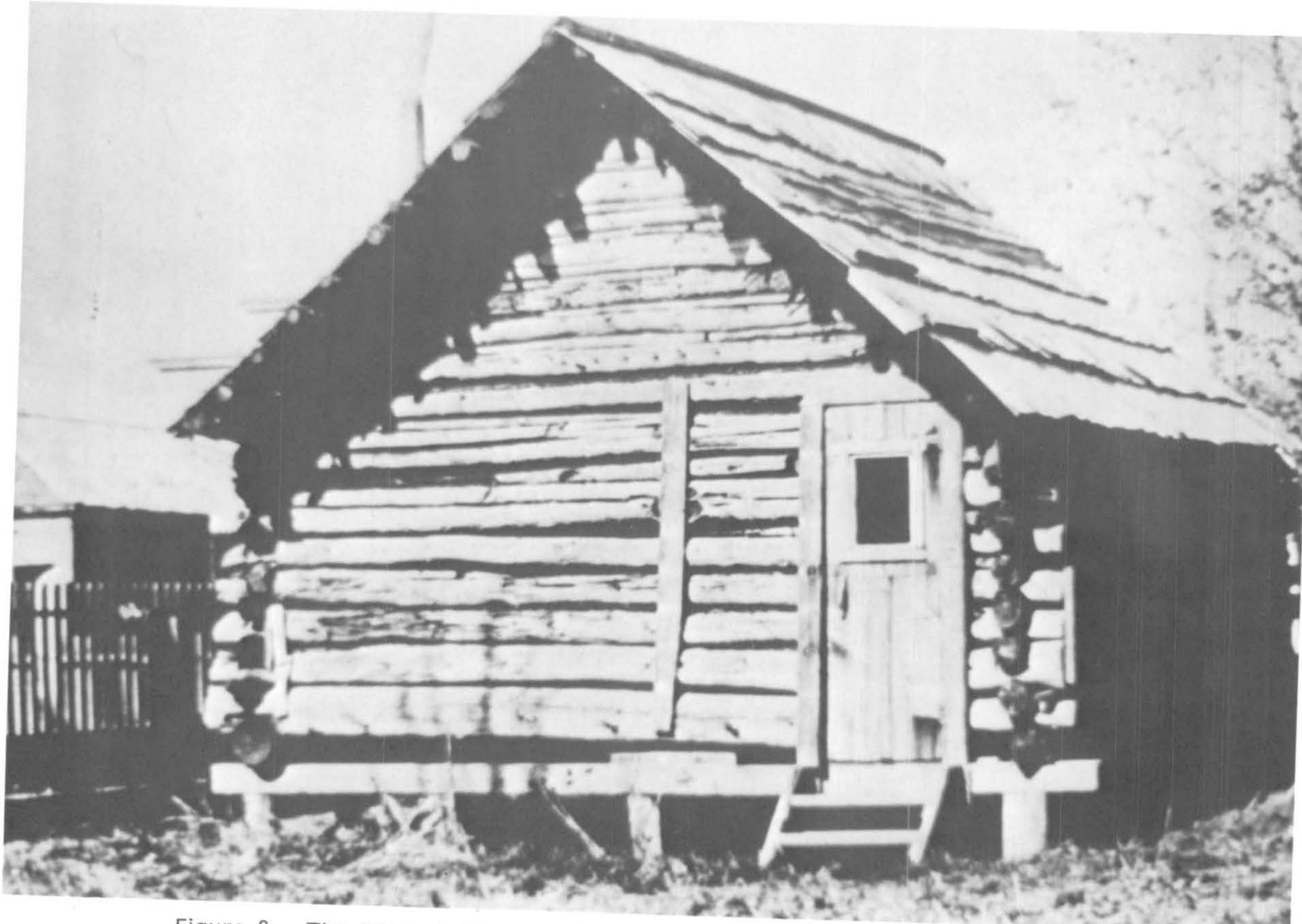


Figure 8: The Moore Cabin, ca. 1900 (Anchorage Historical and Fine Arts Museum).

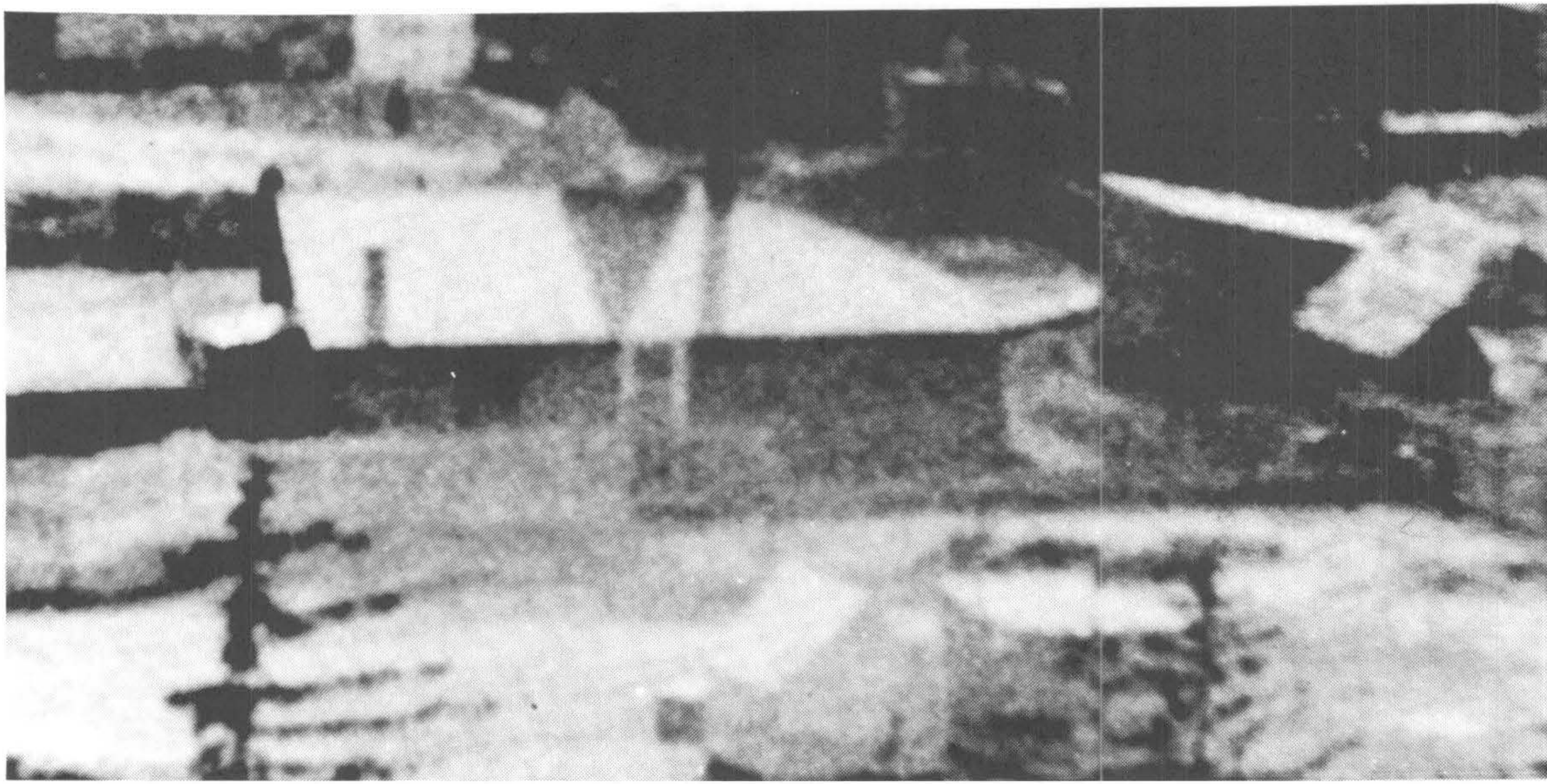


Figure 9: The rear of the Moore House and Moore Cabin (to far right), showing shed addition, ca. 1905 (Klondike Gold Rush NHP).

As early as 1901, Bernard began to promote the historic significance of the cabin:

> The rooms still contain the old crude furniture, books, etc., which Mr. Moore used during his first years in Skagway, and he intends to preserve the building and contents in their entirety as a momento of the city. In time it will probably grow into a museum of city history that tourists will be glad to visit (Daily Alaskan, January 1, 1901).

The Kirmses Move into the House

Bernard and Minnie Moore divorced in 1906, and he moved to Tacoma, Washington. The house was then rented to Hazel and Herman Kirmse (Blee et al. 1984:277). A prominent jeweler and curios vender, Herman was killed in a boating accident in 1912 (Georgette Kirmse 1985). His widow purchased the house from Bernard in 1914 and remodelled the interior shortly afterwards, including new windows, the addition of the west fireplace, and the installation of a toilet and sink. Earlier photographs show a privy on the northeast corner of the property, suggesting that the house had no indoor plumbing before that time. Red asphalt siding was added to the house in the 1940s (Blee et al. 1984: 277-278).

The cabin appears to have been used for the storage of gold rush memorabilia until its acquisition by the National Park Service in 1978. It was reroofed in the 1960s, the original shingles and shakes being replaced with a plywood base and new shingles. As shown in Chapter 3, very little disturbance to the attic has occurred since that time, and that area appears to have been entirely unused.

RESEARCH METHODOLOGY

Research Objectives

Prior to renovation work on the two structures, test excavations were undertaken at the Moore House and Cabin in order to establish whether significant archeological remains were present. Although no architectural investigations had been completed by 1980, it was anticipated that new foundations, at the very least, would be required for both buildings. Robert Spude (Historian, National Park Service) had just completed the draft of his historic study of the two buildings (Blee, et al. 1984:296-364). He found that the cabin had originally stood behind the house, although photographic evidence was not sufficient to determine its exact location. A pronounced depression directly north of the house suggested that something of interest, suspected to relate to the cabin, lay below the surface. Initial excavations in that area were designed to test the depression, determine its function, establish whether any significant archeological evidence of the cabin still remained, and evaluate the need for further work.

Based on the results of the 1980 tests at the Moore House, and in view of the extensive disturbance that was required for renovation, complete salvage of the original cabin remains was recommended (Blee et al. 1984:289). This work was implemented in 1983. Reporting of the 1980 season's work was delayed in order to incorporate all of the archeological data into one document.

The 1980 testing at the Moore Cabin appeared to produced little significant archeological information so no further work was conducted in 1983. However, during analysis of the artifacts it became apparent that comparative information was needed to properly interpret artifact clustering on the original site. The interior of the cabin had not been investigated, but architectural reports indicated that the attic contained an earthen insulation layer. Since the roof had been replaced in the 1960s, it was suspected that many of the original roof nails might have fallen into the attic and could answer some of the plaguing questions posed by the nail distribution on the original site. It was believed that the well-protected nails in the dry cabin attic could provide a sort of experimental control assemblage not normally available in the scientific analysis of archeological data. Therefore, it was recommended that an archeologist salvage the earth layer in the cabin attic before renovation began (Blee et al. 1984:303). This salvage was conducted in 1985.

Research Questions

Three basic types of research questions were posited during these investigations: 1) how the material remains could be used to elicudate specific historical questions about the Moore and Kirmse occupations; 2) how the material remains could increase our understanding and interpretation of gold rush life in Skagway; 3) and how the excavations might contribute to the methodological framework for future archeological work in the town.

The specific historical questions included the following:

- Before it was moved, what was the exact location of the Moore Cabin in relationship to the Moore House?

- What evidence existed of maintenance activities on the house and cabin? When did these occur? Were there any original remains of the cabin roof?

- What was the configuration and placement of the fence along the north side of the property? How was the fence along the west side of the property constructed?

- How were the yards used by both the Moores and Kirmses? Was there a difference between the two families' use of space? How were the yards landscaped?

Problems of how the archeological remains could increase our understanding and interpretation of gold rush life in Skagway were considered through the following questions:

- What was the economic situation of each family who occupied the property, and how was this situation manifested in the archeological record? How did this record reflect the social and economic situation of Skagway in general?

- Can changing economic conditions be discerned from an analysis of sheet trash deposits? Were the effects of the Great Depression and post-World War II prosperity evident in the artifact assemblages?

- Did the Moores and Kirmses conform to a model of sheet trash disposal outlined by Moir et al. (1982) in which trash was disposed at least 25 feet away from a household, to keep the yard "clean," but less than 40 feet away, to avoid having to haul it too far? Could this be part of a uniform sort of cultural behavior among twentieth century Euroamericans?

The final type of question deals with how the investigations might contribute to the methodological framework for future archeological work in the town. The artifacts at the Moore House and Cabin were mostly dropped as part of a generalized sheet refuse, which must be analyzed and interpreted differently than deliberate dumps or remains that formed in place as the result of a specific activity. In addition, four stratigraphic layers were discernible in the excavations, permitting some specific association of artifact assemblages with either the Moores or the Kirmses. Thus, a comparison of assemblages through time was possible. The following questions deal with methological issues.

- What accounted for artifact clustering on the site?

- Did depositional processes, as a whole, change after the Kirmses moved into the house? What factors account for any changes that might be observed?

- How does the length of time it takes a sheet trash to accumulate affect the number and types of artifacts found in the deposit? To what extent do special types of activities, such as building construction, repair or demolition, affect the composition of artifact assemblages?

The rather well-dated, stratified deposits permitted special analysis of three types of artifacts for their ability to yield temporal or functional information in certain archeological contexts:

- Can the modal thickness of window glass fragments be used as a temporal indicator in Skagway archeological projects?

- Is the deposition rate of ceramic dish fragments constant through time? If it varies, then intersite comparisons must be modified according to the length of occupation at a site.

- Is bottle glass color correlated with temporal change or the contents of the bottles? This question has implications for interpreting the assemblages taken from sheet trash where artifacts are extremely fragmented. Also, it is sometimes very difficult to determine the original contents of bottles.

Excavation Methodology

The area behind the Moore House was gridded into five foot square units with a datum point established near the mid-point of the north wall of the Moore House (Figures 10 and 11). Each excavation unit was named by the distance of its northeast corner from the datum point. The grid was oriented square with the house. The entire excavation area was labeled Operation 17. Ten full units and one 3 foot by 5 foot unit were excavated (Figure 11).

Figure 10: Photograph of Operation 17 before excavation in 1983. Looking west.

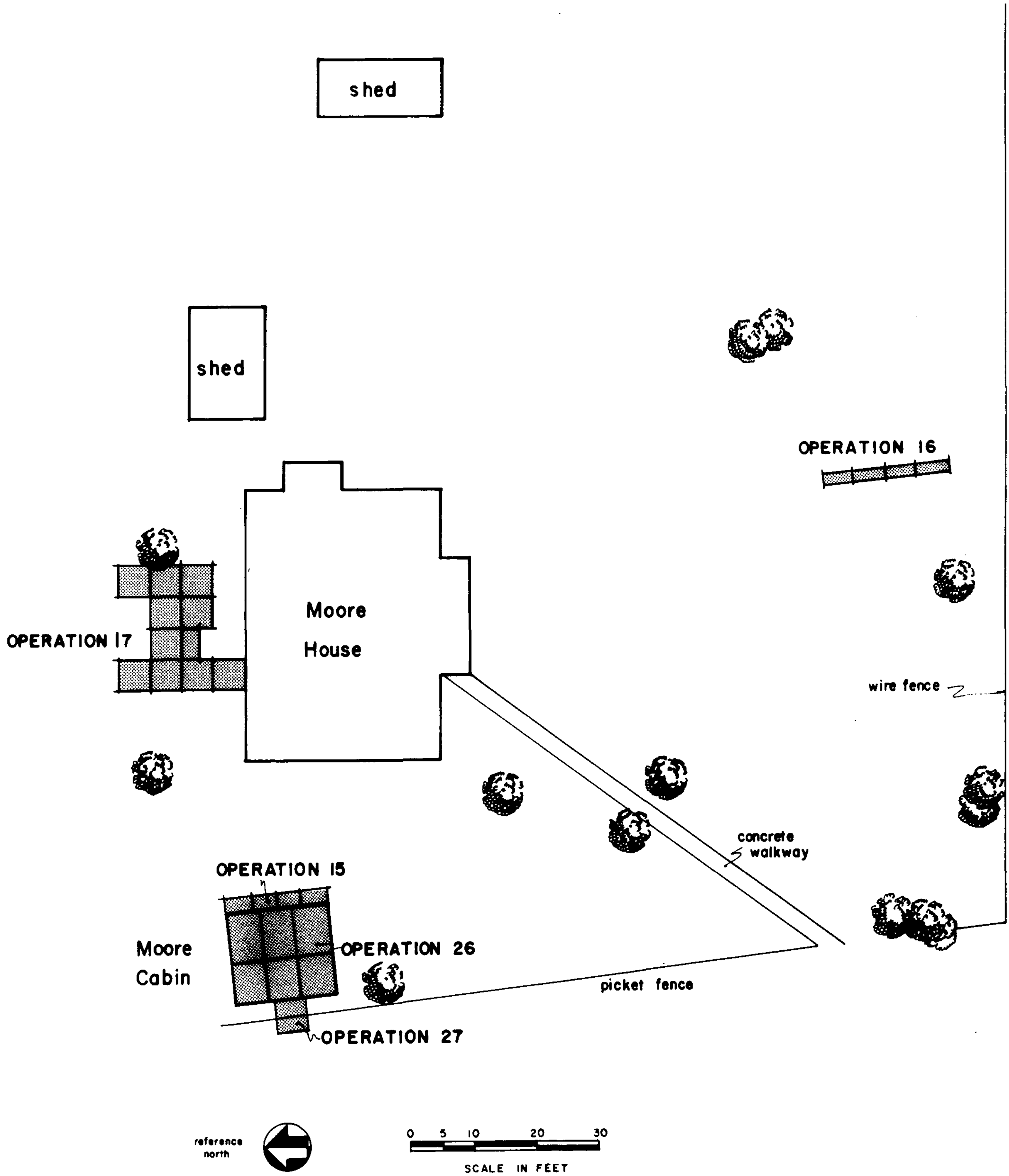


Figure 11: Plan map of the Moore House and Moore Cabin archeological excavations.

The excavators used trowels to dig the 5-foot-square units in natural stratigraphic levels. The levels were defined by a consistant color and texture, and were labeled with uppercase letters from top to bottom as they were encountered during excavation. Features were considered to be any major disturbance or intrusion into the stratigraphic sequence. These were assigned arabic numbers in the order they were encountered. All stratigraphic levels and feature surfaces were mapped prior to excavation. Stratigraphy was recorded at the end of excavation of a given 5-foot-square unit; all four profiles were drawn to scale and photographed in both black-and-white and color.

Three areas were sampled at the Moore Cabin (Figure 11). A 3-foot-wide trench was placed along the east wall, and divided into four sections; this was called Operation 15. A single 5-foot-square unit (Operation 27) was placed under the west window to sample the nail distribution from the re-roofing event and to determine whether the window glass in the cabin was original. This unit also overlapped the original fence line along the west edge of the Moore property.

In addition, the entire attic was gridded into six roughly equal-sized units (Operation 26). Since the spatial distribution of the nails was the primary concern in this endeavor, each artifact was plotted in place before being collected. "Excavation" was done with a 30 gallon, industrial-sized shop vacuum cleaner, and the contents were screened through 1/4 of an inch mesh to insure that no item larger than that escaped collection. Once the technique was mastered, very few nails were found in the screen. All remains of shingles, nails, chinking and any other incidental artifacts were plotted and collected.

One final test trench (Operation 16) was placed through an apparently anomolous depression 68 feet south of the Moore House (Figure 11). This trench was 2 feet wide and 20 feet long, and was bisected into four units. Once the nature of the depression was determined, only the southern two units were completely excavated.

Because total assemblage analysis was considered important in determining generalized behavior, every artifact was collected and counted. Each sherd of window glass was considered as important as a whole bottle. The fragments of styrofoam packing and plastic taco wrappers were as informative as the turn-of-the-century cartridge cases. All excavated materials were screened through 1/4 of an inch mesh; all culturally altered material was collected. But because over 3000 individual items were recovered, only large whole artifacts and obvious clusters were mapped in situ. Only coal, clinkers, cinders, and slag were sampled.

Treatment of Artifacts

All artifacts were shipped to the Denver Service Center archeological laboratory, where they were cleaned by washing and mechanical brushing. No conservation methods were believed to be necessary beyond the stabilization of bone, which was treated in a solution of distilled water, ethyl alcohol, and ethulose 400. Vessels were reconstructed to the point where identification was possible, but not beyond. All items were numbered. Individual catalogue cards were prepared describing diagnostic attributes, classification criteria, provenience, and any information about the item that could be found in the literature. Assemblage analysis was enhanced by use of a Macintosh computer using Multiplan software, which is a standard spreadsheet program.

ARTIFACT CLASSIFICATION

Many archeologists have argued that the best way to estimate the types of activities taking place in a given area from the material culture residue is by means of a classification system based on functional categories (e.g., Binford 1965:205; Deetz 1967:75-80; Hayden 1984:83-85; South 1977:93; Sprague 1980:252). Hayden (1984) demonstrates that the closer the archeological and emic or ideational categories are to one another, the more likely the archeologist can extract information that deals with function. Investigators working on sites where the use of the artifacts cannot be determined by their form or analogy to familiar items (such as on many prehistoric sites) usually will group them by the materials from which they are made. However, on recent historical sites, a good portion of the artifacts are familiar to people living in the 1980s. Their form implies their use, and their use implies their function in Euroamerica society. Nails were used to hold pieces of wood together, flat glass is usually used in windows, and dishes are used to hold food that has been prepared for consumption. To lump tin cans, nails, and a child's top together in one category just because they are all made of iron does little in clarifying the human activities that took place at a site. However, lumping pressed glass, ceramic dishes, and tin plates together in one category and comparing their number to the amount of nails, shingles, and window glass in another category can demonstrate how important the consumption of food was compared to the construction of a shelter at that particular location. Comparing the quantity of items that had to do with food on the Moore House site to those found on other similar sites indicates, for example, whether these activities are under- or over-represented, and suggests how Alaskan pioneers were similar to or different from their contemporaries in other parts of the country. Without a system of classifying artifacts that groups things of like function together, it is not possible to hypothesize what people were doing with such items.

In order to create statistically meaningful categories that can be compared to assemblages on other archeological sites, it is sometimes necessary to lump different things together. Items as different as screws and staples may be lumped because they appear infrequently. Nails, which are very frequent, may be separated out even though they all can be used to hold pieces of wood together. Artifacts that appear very commonly and in large frequencies on most historic sites (e.g. window glass), therefore constitute separate classes within over-all groups, whereas items which ordinarily appear in very low frequencies (e.g. staplers, scissors and paper clips) might be grouped together.

ARTIFACT GROUPS

The classification system used here was created to determine overall site activity through the original functions of the artifacts found. At the same time, it was necessary to account for such varibles as the differential disposal of costly and inexpensive items, the breakage of fragile versus durable objects, and the differential preservation of artifacts in the ground.

Another factor contributing to the relative distribution of grouped artifacts in an assemblage is the way they are deposited. Artifacts on historic sites tend to accumulate as a result of either continuous, low density, long-term, gradual deposition (e.g., sheet trash) or as the result of unique, short-term events that result in many items being lost all at once (e.g., the breakage of a window). The activities associated with the construction, repair, or demolition of a building tend to be associated with the latter sort of deposition.

Structural Artifacts, as defined here, are largely a function of activities associated with the physical presence of a building or other structure, such as a fence. The Non-Structural Artifacts, on the other hand, tend to be deposited as a result of daily human activity on the site; they, more likely than not, appear in the ground because people lost them in the course of their daily routine, not because of occasional events such as the construction or removal of a building. This is not to say that none of the Structural Artifacts are lost during daily activities; most assuredly an occasional nail is lost inside a house when a picture is taken down, or a chair leg repaired. However, the number of these items tend to be very limited compared to the large numbers lost as a result of construction, repair, or demolition of the building itself.

STRUCTURAL ARTIFACTS

The Structural Group consists of five classes of artifacts.

1. The Window Glass class consists of all flat glass that was not obviously part of a bottle or other vessel. Its presence can betray the original proximity of windows in a building. It usually appears in a deposit as the result of accidental breakage while the window was in place. Studies of window glass show that the modal thickness in a given assemblage tends to increase in a predictable manner throughout the nineteenth century (Chance and Chance 1976:248-255; Roenke 1978). The ubiquity of window glass on archeological sites that had permanent structures and its ability to be dated are the major reasons that it is regarded as a separate class.

2. The Nails Class, like the window glass, was considered a separate class because its attributes vary significantly in time and by function. Analysis of temporal and functional variables would be impeded by inclusion of other types of fasteners that do not have the attributes in question. At least by the middle of the nineteenth century, nails were common and relatively inexpensive and so represent a major component of any archeological site that contained buildings with some wood in their construction.

Nails are sized according to pennyweight (d), which is the number of pounds that 1000 nails weigh. In other words, a thousand 2d nails weigh two pounds; one thousand 60d nails weigh 60 pounds. A 60d nail is six inches long, and a 2d nail is one inch long. Obviously a 60d nail would not be used to connect pickets to a fence, nor would a 2d nail be used to connect a rafter to a beam. The predominant nail sizes in an assemblage can yield information about the types of structures being built in a given area.

In addition, the shape of the nail head provides functional clues. Very narrow heads that can be countersunk and filled are often used for finishing work where the appearance of the structure is important to the user. Wide, flat heads are necessary for the attachment of roofing materials to prevent the loss of the head through deterioration.

Finally, some dating information is available from nail assemblages. From the late eighteenth century to about 1850, nails were cut from metal sheets. They were square or rectangular in cross section. After 1850, an increasing number of nails were made by drawing out a wire, and furnishing it with a head and point. These wire nails finally superceded cut nails in price and popularity in about 1890. Overall use of cut nails has decreased substantially since the turn of the century (although they still have their uses today, such as to attach brick or masonry to wood). Therefore, the frequency of cut nails relative to wire nails in an assemblage can be used as a dating tool.

3. The Hardware Class includes items that could be used in any of a number of ways as fasteners or parts of buildings and their accoutrements. They are the sort of items one would expect to find in the hardware section of a hardware store, and include things such as screws, tacks, bolts, washers, nuts, wire, handles, and locks.

4. The Materials Class includes fragments of the materials used in the construction of a structure, such as the wood, brick, siding, roofing materials, insulation, paint, tar paper, and linoleum.

5. The Utilities Class includes those objects which have to do with the basic utilities supplied to a structure, such as sewer, water, electricity, lighting, heating, and telephones. Because a light bulb implies electrical lighting, it is important that it be included in this class; however, a kerosene lamp chimney has nothing to do with electrical systems, but serves much the same function as a light bulb. For that reason, lamps are included in a subclass called lighting, which incorporates all types of lighting fixtures, not just electrical systems.

NON-STRUCTURAL ARTIFACTS

Domestic Group

The Domestic Group artifacts are those items which were deposited as the result of daily, routine activities within a household. They tend to be owned and used by most of the members of the household, and relate mostly to the storing, preparation, and consumption of food, although other household activities are represented in this group. The following classes characterize this group.

1. Food Storage artifacts are those which were used to store food until ready for consumption. This class includes jars, tin cans, and condiment bottles. It has been shown on other late nineteenth and early twentieth century sites that bottle glass color has a slight correlation with the function of the bottle (Blee et al. 1986:45-46; Teague and Shenk 1977:114-143). For that reason, unless embossing and/or marking suggest otherwise, clear, aqua, and light green glass was presumed to have been part of food storage bottles.

2. Beverage Containers were separated from the Food Storage Class because their use tends to satisfy social rather than nutritional needs. The use or non-use of alcoholic beverages on a given site often offers substantive information about the value systems of the users. Because of the slight correlation between glass color and bottle function, it was assumed that the brown and green glass sherds were from bottles that held beverages.

3. The Food Preparation class includes all those objects that are used in the preparation of food, such as pots, pans, and can openers.

4. The Food Serving class consists of all those items that were used in the serving and consumption of food. Most thin-bodied ceramics were used for dishes, cups, and serving vessels. In addition, pressed glass bowls, glass tumblers, and serving utensils are included in this class.

5. The Food Remains are the actual remains of meals, usually butchered bone and fruit pits.

6. Pharmaceuticals are items associated with household health, especially such products as cough syrup, patent medicines, and thermometers.

7. Furnishings are small, movable items used within the house that are not associated with the storage, preparation or serving of food. They can include knickknacks, pictures, and mirrors as well as larger pieces of furniture.

8. Housekeeping items relate to the cleaning and routine maintenance of the household and its contents. The class includes such diverse items as clothespins, broom straws, and Clorox bottles.

Personal Group

These are artifacts which tend to be owned and used by a single person. They include coins, clothing, cosmetics, personal ornamentation, and other personal items such as pocket knives and eye glasses.

Activities Group

These items relate to specific activities that occur outside the "normal" routine of a household. They may include the presence of certain members of the group (e.g., children), or such specialized activities as hunting, playing games, or stabling animals. The classes within the group are pretty much determined by the types of artifacts found. This situation is made clearer during the discussions of the individual items.

Unclassifiable Group

These are artifacts whose function cannot be determined but which might have some sort of analytical contribution to make. The group can be divided into two classes. Whatsits are items the classifier cannot identify. However, it is possible someone, somewhere could do so. Unknowns are types for which material and shape can be described but are so fragmentary or deteriorated that it is doubtable whether anyone would ever know its function. Both classes can be typed only by material and form.

CHAPTER 2

THE ORIGINAL CABIN SITE AND THE MOORE HOUSE

OPERATION 17

THE EXCAVATIONS

STRATIGRAPHY

Introduction

As indicated in the earlier section on methodology, each 5-foot-square unit was excavated following the natural stratigraphy. The natural layers were labeled A, B, C, etc. as they were encountered in each individual unit. An example of this can be seen in Figure 13, Profile A, in which the fine sandy layer is called D in unit N10W5 and B in N15W5. Likewise, features were numbered consecutively upon being encountered. Since two to four excavators were working simultaneously in non-contiguous units, occasionally a feature that transected several units received more than one numerical designation.

While this system served to avoid confusion during fieldwork and is useful in differentiating artifact provenience, it makes analysis and description far from clear and concise. To aid in the interpretation of depositional events, an amended version of a device known as a Harris Matrix was used. It was constructed by Edward Harris (1974) for use on the archeological complex of Winchester, England, where he found over 300 different depositional events. It is a means of matching stratigraphic sequences that are not identical in physical appearance on discontiguous parts of a site. It allows the investigator to place an intrusive event within a relative depositional sequence and assists in the dating of unknown events by their position relative to known events.

Turning to Figure 12, the reader can see the application of a Harris Matrix to the excavations of Operation 17. The lowest layer encountered was a sand and gravel alluvium labeled stratum F in unit N5W5, stratum D in unit N10W5, stratum E in N15E5, and stratum E in N20E10. This layer is truncated by Feature 43 in unit N20E10. Because some alluvial deposits formed discrete layers on one portion of the site and not on

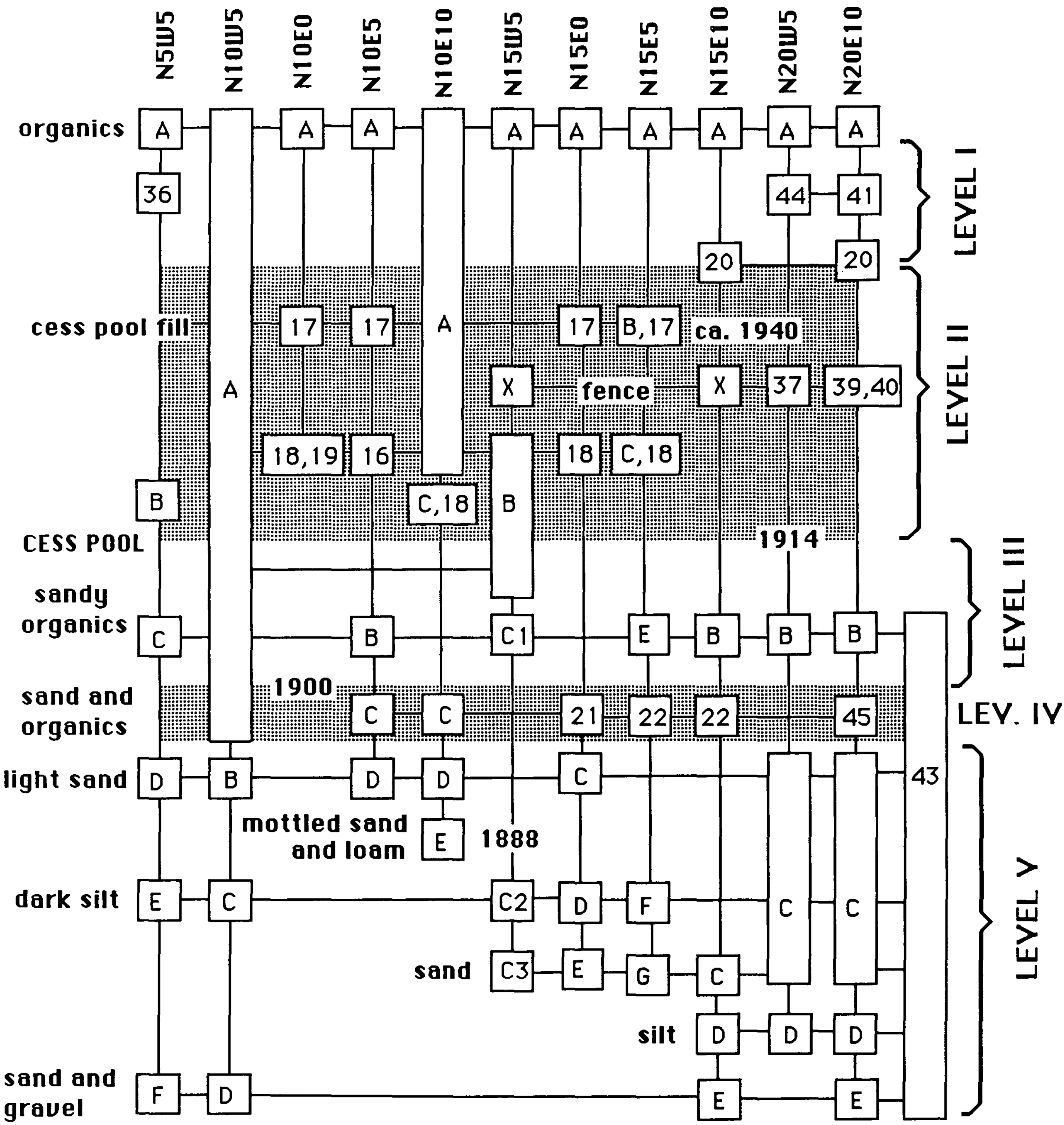


Figure 12: Harris Matrix of stratigraphy north of the Moore House.

another, there may be cases where a continuous, homogenous deposit in one unit corresponds to two or three in another. In Figure 12, this condition can be seen where stratum C in N20W5 (a sandy alluvium) accumulated at the same time the sandy alluvium of stratum C in unit N15E10, the dark silty stratum D of N15E0, and the light sandy stratum C of the same unit all were being deposited. This phenomenon cannot be discerned directly from the profiles.

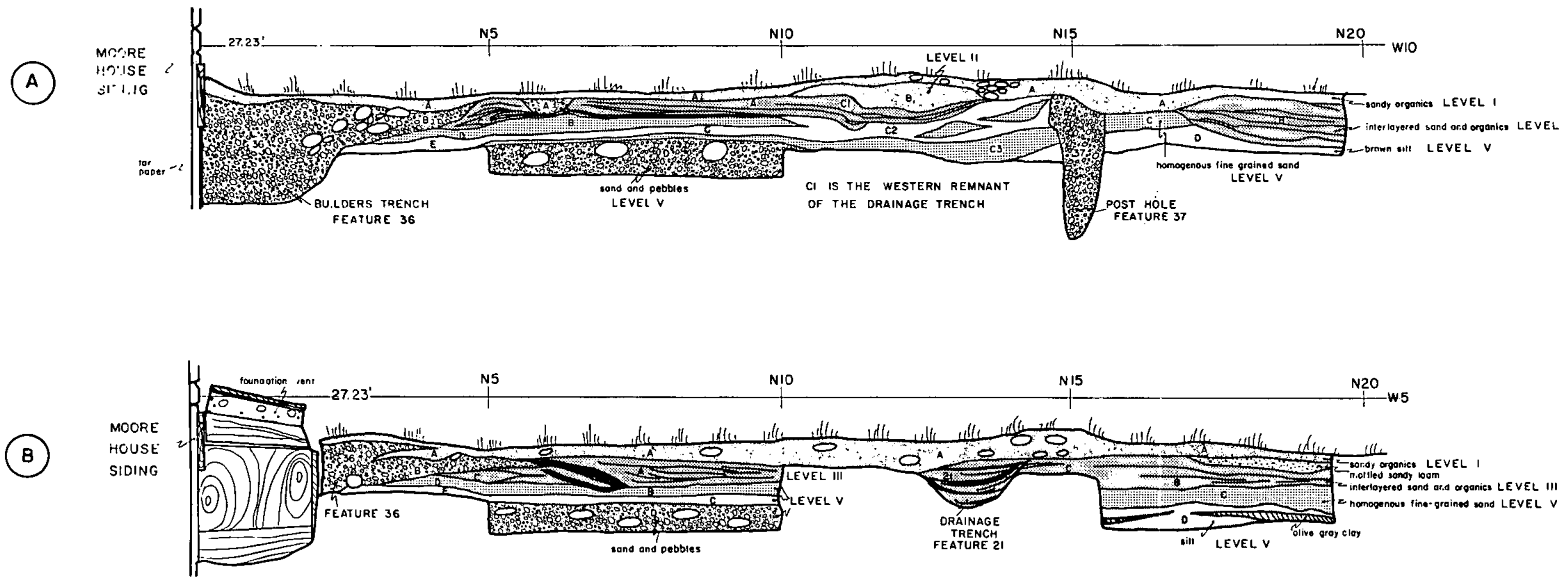
For the sake of clarity in the following discussions, short descriptive terms rather than the number/letter designations are used for the different levels (e.g., sand and gravel, dark silt, light sand, cess pool fill, organic layer, and mixed sand and organics). These will be combined with a level designation (Level I, Level II, etc.), which refers to a temporally identifiable stratigraphic unit containing a given artifact assemblage.

In the profile drawings (Figures 13-15), stratigraphic stippling indicates consistent deposit types; open circles and dots indicate pebbly gravels; closely spaced dots are silts; and widely spaced dots are coarse sands. The symbols were chosen with the physical appearance of the deposits in mind.

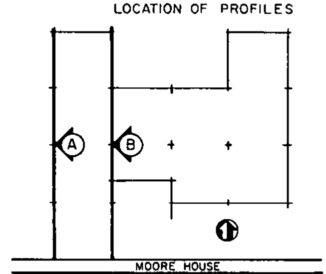
Stratigraphic Levels

The lowest deposits did not contain cultural material, and consisted of well-sorted, well-bedded silts, sands and gravels, usually containing cobbles up to ten inches in diameter. Unit N15E10 was excavated to ground water, 3 feet 10 inches below the surface (23.43 feet AMSL) in order to confirm that no deeper prehistoric deposits were present (see especially Figure 15, lower right). All material below the first evidence of the Moore occupation was of fluvial origin and completely undisturbed. These deposits are itemized in the Harris Matrix (Figure 12, Level V). Their exact appearance and configuration can be seen by reference to the stratigraphic profiles (Figures 13-15).

Figure 13: West stratigraphic profile of the Moore House Operation 17 excavations at West 10 and West 5. Facing west.



LOCATION OF PROFILES



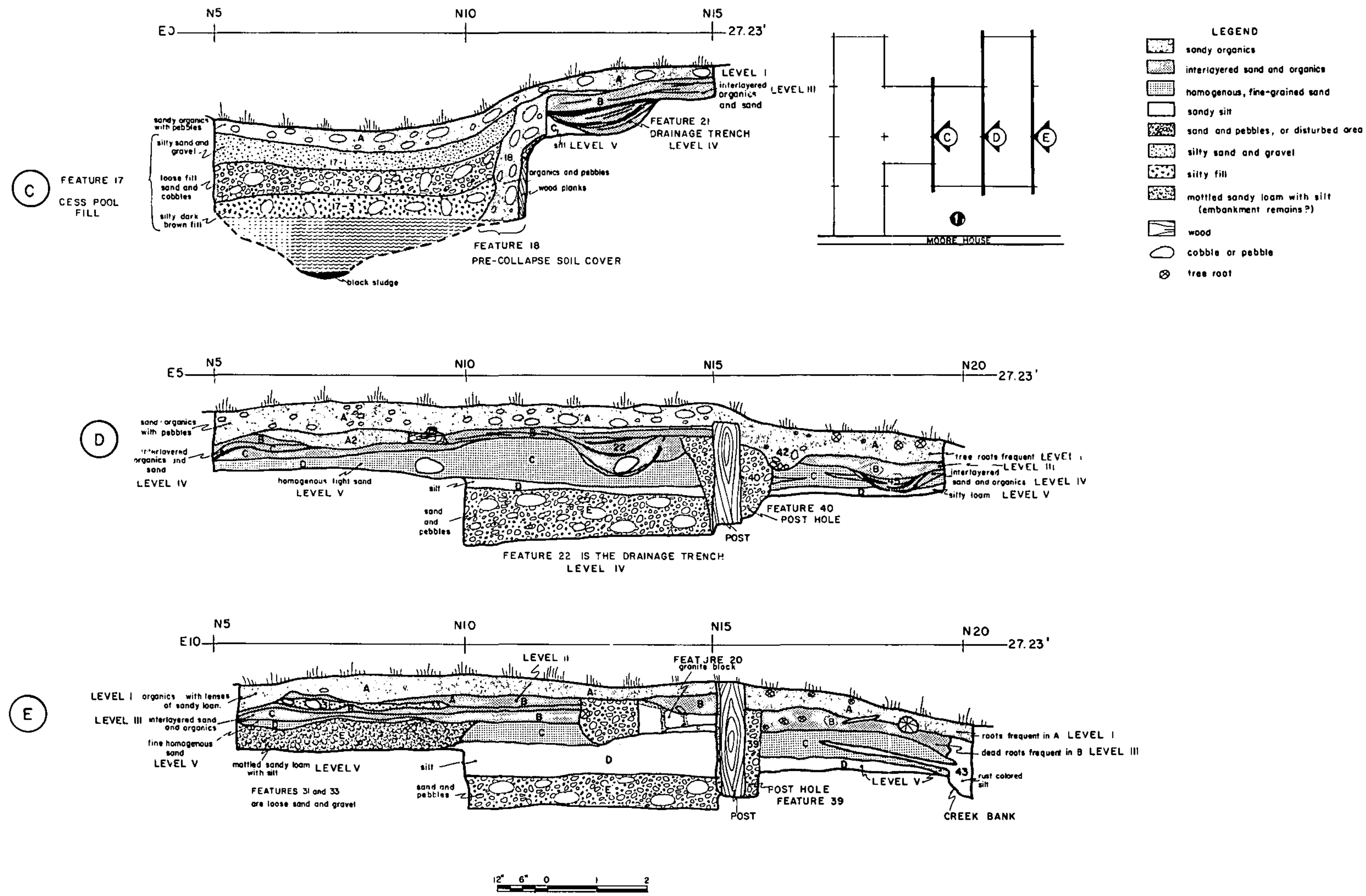
12" 6" 0 1 2
SCALE IN FEET

LEGEND

- sandy organics
- interlayered sand and organics
- homogenous fine-grained sand
- sandy silt
- sand and pebbles, or disturbed area

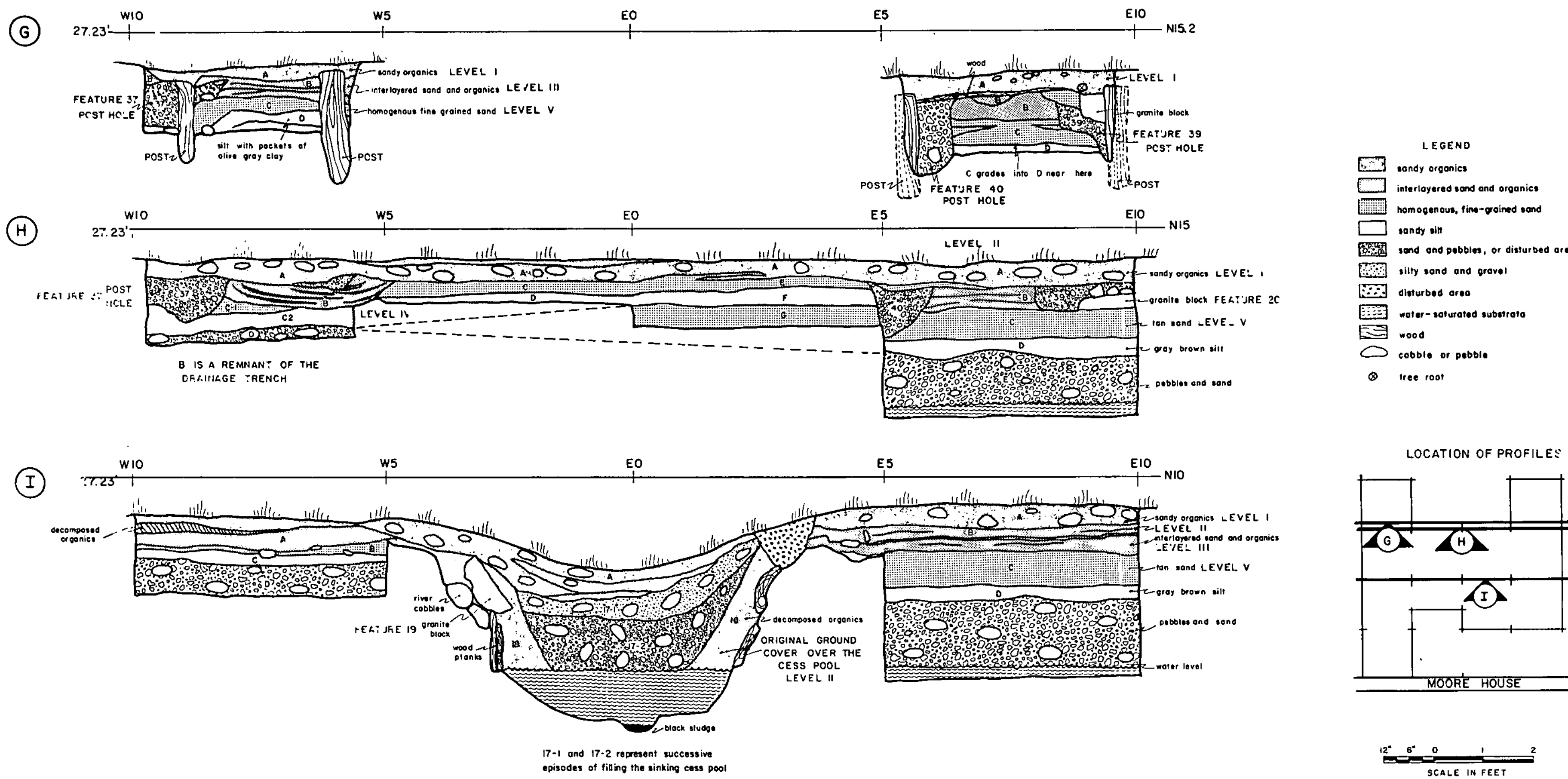
DESIGNED	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
BLEE		WEST PROFILES	461
DRAWN: BLEE		AT WEST 5 and WEST 10	25026
TECH. REVIEW:		OPERATION 17	PKG. NO. 114 / SHEET 4 OF 4
DATE: 4/87			

Figure 14: West Stratigraphic profiles of Operation 17 at East 0, East 5 and East 10. Facing west.



DESIGNED: BLEE DRAWN: BLEE TECH. REVIEW: DATE: 4/87	SUB SHEET NO	TITLE OF SHEET WEST PROFILES AT EAST 0 EAST 5 and EAST 10 OPERATION 17 MOORE HOUSE	DRAWING NO. 461 25026 PKG. NO. 114 SHEET 3 OF 4

Figure 15: North stratigraphic profiles of Operation 17 at North 15.2, North 15 and North 10. Facing north.



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A single mottled sand unit in this level (N10E10, Stratum E; Figure 14, Profile E) may represent the bank of sandy soils that was placed by the Moores around the lower logs of the cabin (see discussion on page 11). This cultural event was the earliest on the site. The over-riding light-colored sand probably accumulated between 1888, when the cabin was banked-up, and 1896, when the site was occupied on a continuous basis.

The lowest culture-bearing deposit (Level IV) consisted of a series of finely interbedded sand and decomposed organics. It probably represents a series of seasonal depositions, aeolian sand being trapped by encroaching vegetation in the fall and winter and the organics originating from summer growth.

The next deposit is also a sandy organic level (III) but mixed with cobbles and pebbles left after the excavation of a cess pool in the center of the site (Figure 16). The collapsed structure was the origin of the depression first noted behind the house. Lined with horizontally placed wood planks, it measured five feet from east to west. The northern edge of the pool was ten feet north of the house; its southern edge was not located. At least two layers of sand and cobble fill material (Figure 14, Profile C) overlay the collapsed structure, suggesting it sank gradually, and the resulting depression filled with imported material. Artifacts found in this fill layer were not considered a part of the Moore House assemblage as they were probably imported from elsewhere.

Level II is an organic sand filled with cobbles which marks the surface covering the cess pool after its construction. It is called Features 16 and 18 on the profiles and Harris Matrix (Figure 14, Profile C; Figure 15, Profile I).

The uppermost level (I) consisted of pebbles and cobbles interlaced with dense root systems and decomposed organics. The cobbles may have been remnants from the initial excavation of the cess pool. Frost heave tends to keep larger rocks from being entirely covered by the more fluid

Figure 16: Photograph of the cess pool, partially excavated. July, 1980.

sand (Butzer 1982:103; Wood and Johnson 1978:343). The soils surrounding the rocks formed in situ, however, and the artifacts appear to relate to on-site activities.

FEATURES AND INTRUSIONS

Five features that could be interpreted were found in these excavations; several others were undiagnostic soil units or disturbances that had no bearing on overall site activities. All features are listed in Table 1. The most important are discussed below.

The Creek Bed

In a speech at the Pioneer's Banquet on August 2, 1904, Bernard Moore reminisced about "Skagway in Days Primeval." He recalled the setting of the cabin and the creek behind it:

> We often saw mallards swimming in the creek back of my present residence, and where the courthouse now stands. We frequently dined upon them. This creek is a small branch of a stream that has since been filled but which in those days flowed where the barracks are now built and on around the back of my dwelling. Through its waters, during the freshet, we floated most of the logs for my first cabin--which I have since raised, and moved some fifty-feet west (Moore 1968:16-17).

This creek can be seen in a survey map of 1896 (Figure 4) contained about three feet of water on July 3, 1888, when the Moores and their Tlingit companion, Nan-Suk, shot seven mountain goats at 1:00 a.m. (Moore 1968:123) (see discussion on page 63).

The edge of this stream was found at the far northeast corner of the excavated area (Feature 43). It was filled with a dark greyish brown sandy silt that alternated with rusty ferrous stains (Figure 17; Figure 14, Profile E).

Table 1: List of Features

(Note: Feature numbers were assigned consecutively for all operations conducted by this investigator. "Missing" feature numbers were assigned to operations not reported in this volume.)

Feature 16 - N10E5: A sandy organic deposit with large cobbles formed above the wood planks covering the cess pool (Figure 15, Profile I), called Feature 18 in units N15E5, N15E0 and N10E0.

Feature 17 - Units N10E0, N15E0, N15E5, and N10E5: The cess pool fill that is comprised of loose sand and cobbles with some silts. It consists of three layers (17-1, 17-2, 17-3; Figure 14, Profile C), which may have been deposited at separate times to fill the gradually sinking cess pool.

Feature 18 - N15E5, N15E0, N10E0: A sandy organic deposit with large cobbles formed above the wood planks covering the cess pool (Figure 14, Profile C; Figure 15, Profile I), called Feature 16 in unit N10E5.

Feature 19 - Unit N15E0: A large, cut granite block at the northwest corner of the cess pool (Figure 17).

Feature 20 - Units N15E10 and N20E10: A large cut granite block at the northeast corner of the site (Figure 17; Figure 14, Profile E; Figure 15, Profile G).

Feature 21 - Units N15E0 and N15E5: The north drainage trench for the Moore Cabin (Figure 17; Figure 13, Profile B; Figure 14, Profile C), a continuation of Feature 22.

Feature 22 - Unit N15E10: The north drainage trench for the Moore Cabin (Figure 17; Figure 14, Profile D), a continuation of Feature 21.

Features 31 and 33 - Unit 10E10: Loose sandy fill with cobbles that appear as a continuous lens along the east side of the site (Figure 14, Profile E). It is probably debris left from the excavation of the hole for the cess pool.

Feature 34 - Unit N15E: A large hole which may have contained a stone like that of Feature 19 (Figure 17).

Feature 36 - Unit N5W5: The Moore House builder's trench (Figure 17: Figure 13, Profiles A and B).

Feature 37 - Unit N20W5: Fence post and post hole (Figure 17; Figure 13, Profile A; Figure 15, Profiles G and H).

Table 1 (Cont.): List of Features

Feature 38 - Unit N20W5: Fence post and post hole (Figure 17; Figure 15, Profiles G and H).

Feature 39 - Unit N20E10: Fence post and post hole (Figure 17; Figure 14, Profile E; Figure 15, Profile G).

Feature 40 - Unit N20E10: Fence post and post hole (Figure 17; Figure 14, Profile D; Figure 15, Profile G).

Feature 41 - Unit N20E10: Small, unexplained trench that post-dates the fence holes (Figure 17; Figure 14, Profile D).

Feature 43 - N20E10: Silted-in creek bed, lined with decomposed ferrous stains (Figure 17; Figure 14, Profile E).

Feature 44 - Unit N20W5: Area of disturbance of unknown and recent origin (Figure 17).

Feature 45 - Unit N20E10: East to west trench filled with alternating decomposed organics and sand (Figure 17; Figure 14, Profile D).

It was located 19 feet, 2 inches north of the house, and 6 feet, 11 inches north of the south edge of the drainage trench. The rusty lenses may be the badly deteriorated remnants of tin cans or other ferrous artifacts.

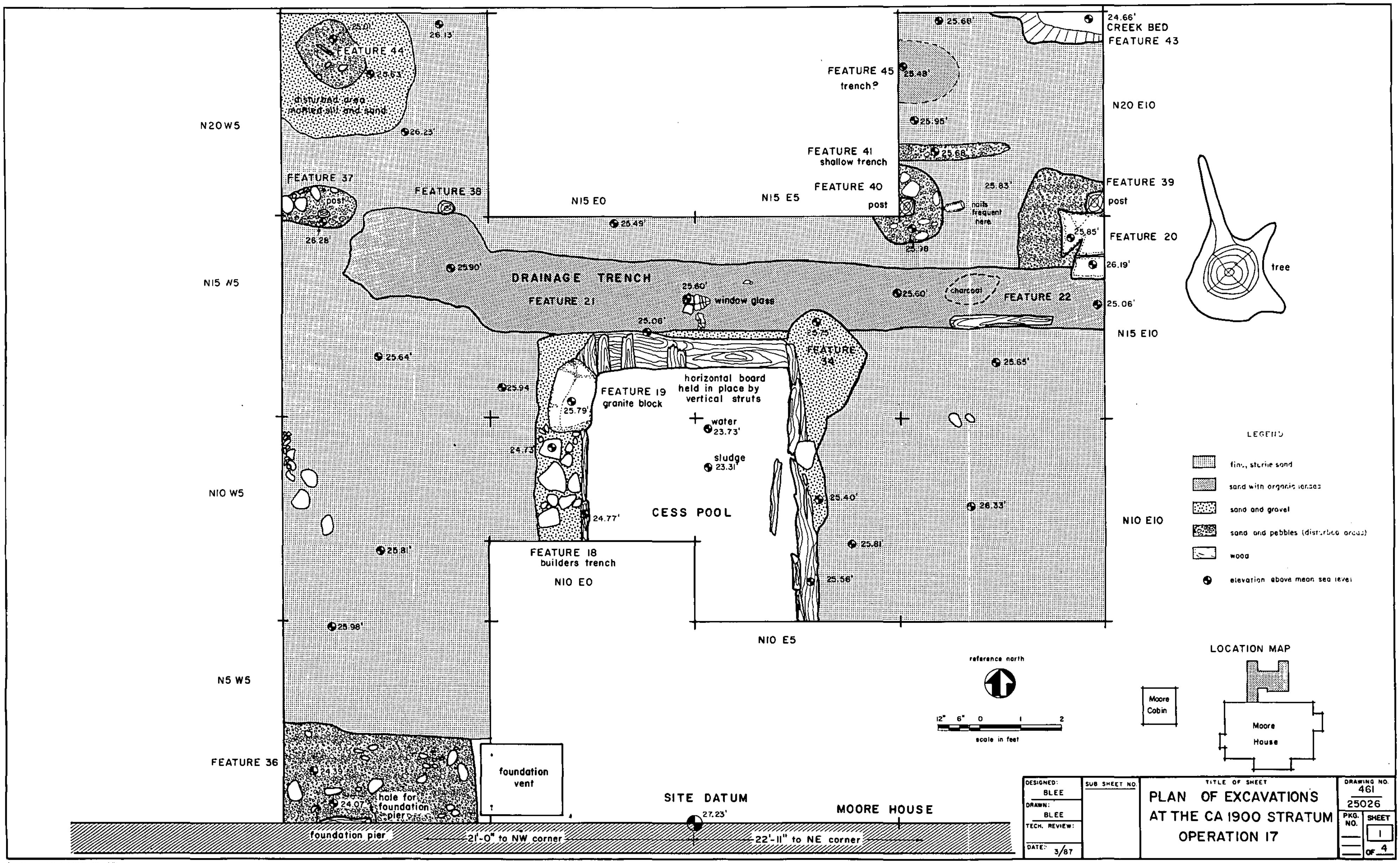
This stream can be seen quite clearly in a June, 1898, photograph (Figure 5) with a narrow foot bridge crossing it. The bank on the cabin side is almost vertical as was the edge of feature 43. There does not appear to have been any water in the creek at this time, and it is possible that development or dumping had diverted the stream. The same creek was also found in the Peniel Mission excavations, filled with gold rush era trash (Rhodes 1987:73).

The Moore Cabin Drainage Trench

The most important feature found on the site, which justified complete salvage of the area, was an 18 inches wide by 8 inches deep trench extending along the entire north edge of the site from 12 to 13.5 feet north of the house wall (Features 21 and 22) (Figure 17; Figure 13, Profile B; Figure 14, Profiles C and D). It is the earliest cultural feature on the site, cutting into undisturbed alluvial sands, and filled with the finely interlaced sand and decomposed organic layer. The bottom of a trench contained a number of artifacts, especially window glass, nails, tin can fragments and hardware. It is probably the drainage trench excavated by the Moores on July 11, 1888 (see page 11). The artifacts no doubt relate to the original construction and earliest habitation of the cabin.

This trench was filled with the alternating organics and sand of Level IV. Artifacts associated with the trench were found concentrated along its base as if deposited before the trench was slowly filled with sand and organic matter (probably dead grass, weeds and leaves).

Figure 17: Plan map of the Operation 17 excavations.



25.01'
26.13'
FEATURE 44
25.63'
disturbed area
mottled silt and sand
26.23'
N20W5
25.68'
24.66'
CREEK BED
FEATURE 43
FEATURE 45
25.48'
trench?
N20 E10
25.95'
FEATURE 41
shallow trench
25.66'
FEATURE 40
post
25.83'
nails
frequent
here
FEATURE 39
post
25.85'
FEATURE 20
25.98
26.19'
tree
FEATURE 37
post
26.28'
FEATURE 38
N15 E0
N15 E5
25.49'
N15 W5
25.90'
DRAINAGE TRENCH
FEATURE 21
25.60'
window glass
25.60'
charcoal
FEATURE 22
25.06'
25.06'
N15 E10
25.64'
FEATURE 34
25.65'
25.94
horizontal board
held in place by
vertical struts
FEATURE 19
granite block
25.79'
water
23.73'
sludge
23.31'
24.73
LEGEND
fine, sterile sand
sand with organic lenses
sand and gravel
sand and pebbles (disturbed areas)
wood
elevation above mean sea level
N10 W5
25.40'
26.33'
24.77'
CESS POOL
N10 E10
25.81'
FEATURE 18
builders trench
25.81'
N10 E0
25.56'
25.98'
N10 E5
LOCATION MAP
reference north
N5 W5
Moore
Cabin
12" 6" 0 1 2
scale in feet
Moore
House
FEATURE 36
24.39
foundation
vent
24.07
hole for
foundation
pier
SITE DATUM
27.23'
MOORE HOUSE
foundation pier
21'-0" to NW corner
22'-11" to NE corner
DESIGNED:
BLEE
DRAWN:
BLEE
TECH. REVIEW:
DATE: 3/87
SUB SHEET NO.
TITLE OF SHEET
PLAN OF EXCAVATIONS
AT THE CA 1900 STRATUM
OPERATION 17
DRAWING NO.
461
25026
PKG. NO.
SHEET
1
OF 4

As mentioned earlier, the mottled silt and loam found in Level V may be remnants of the east bank. No other direct evidence of the cabin's presence on the site was found; there were no foundation remnants.

Shaped Stones

Two cut granite stones were uncovered during the excavations which have no readily apparent purpose. The first (Feature 19) measured 1 foot 4 inches by 1 foot 10 inches by 4 inches thick and was located at the northwest corner of the cess pool (Figure 17). From its stratigraphic position, it appears contemporary with that feature. It might have served to stabilize the cess pool covering.

The second stone was 1 foot 8 inches long, 3 inches thick, and, since it was not entirely uncovered, its width is unknown. It was found next to and partially covering the fence post hole at the northeast corner of the site (Feature 20; Figure 17; Figure 15, Profiles G and H). Its purpose is even more ambiguous but may have been installed to prop up a fence post (Feature 39). Both stones are of local granitic rocks and appear to have been deliberately shaped into rough rectangles. Perhaps they were salvaged from some other construction site. It is apparent that the effort that went into shaping the stones was not necessary for their purposes on the Moore House site.

The Fence Posts

Intruding through deposits associated with the excavation of the cess pool, but pre-dating a 1940 builder's trench, are four posts and post holes for a fence that ran about 15 feet north of the house (Features 37, 38, 39 and 40; Figure 17; Figure 13, Profile A; Figure 14, Profiles D and C; Figure 15, Profile G). A fence north of the house is seen as early as 1898 (Figure 5), but it appears to be six to eight feet further north than the fence posts located in these excavations. Sometime between 1914 and

1940, then, the fence was moved a few feet south from its original location.

The presence of the fence line in this location had been hypothesized before the post holes were located. The cobbles in the most recent deposits seemed to cluster in a barely discernable ridge line about 15 feet north of the house, and three liquor bottles were discovered in stratum A of unit N15EO; they were aligned end to end along the north edge of the unit as if they had rolled against a fence and been hidden from view by grass or weeds (Figure 18). The finding of the post holes merely confirmed the location of the fence.

The Cess Pool

The most obvious intrusion into the site was the cess pool, already described. Despite the fact that its construction destroyed a major portion of the original cabin site, its presence bestows some benefit since it serves as a temporal indicator.

After Hazel Kirmse purchased the house from Bernard Moore in 1914, she made several interior changes. A new toilet and sink were added to the bathroom at that time, suggesting a need for a cess pool or septic system since a municipal sewer system was not built until 1940 (Jack Kirmse 1985). Photographs prior to that time suggest that the Moores made use of an outdoor privy. Artifacts substantiate the 1914 date of excavation. This horizon provides a 1914 marker for the other deposits, indicating that the two layers (III and IV) cut through by the cess pool pre-date 1914 and are thus associated with the Moores.

Moore House Builder's Trench

Another intrusion of note is the builder's trench for the Moore House (Feature 36; Figures 13 and 17). Unit N5W5 was excavated particularly

Figure 18: Photograph of three bottles found in situ (scale in inches).

to find this feature, anticipating that it would provide a method for determining the pre-1900 deposits. However, the trench contained numerous fragments of red asphalt siding and plastic artifacts, suggesting that it was dug out in the 1940s when Jack Kirmse made a number of major house renovations. A sandy organic layer with some pebbles, which was deposited between the excavation of the cess pool and the Moore House builders trench, can be dated with some confidence to ca. 1914-1940.

CONCLUSIONS

These features, whose appearance can be dated by reference to the historic record, help to date the five layers. Level V (sterile fluvial deposits) pre-dates the Moore occupation of 1888. Level IV (interbedded sand and decomposed organics) relates to the early Moore occupation. This layer fills the north drainage trench. It is capped by Level III, a more homogenous sand and organic stratum, which probably formed after the Moore Cabin was moved in 1900 as it extends over the area where the cabin was situated. These strata are truncated by the excavation of the cess pool in 1914. Level II, an organic sandy deposit, covers the cess pool; artifacts from this deposit dated as late as ca. 1940. Fill dating to ca. 1940 (Feature 17) indicates general collapse of the cess pool. This coincides with the construction of a city sewer system at this time. The organic, sandy, cobble-filled deposit (Level I) post-dates 1940.

THE ARTIFACTS

As stated in the section on methodology, all artifacts that could be caught by the 1/4 inch mesh screen were retrieved and inventoried. The following discussion describes the more diagnostic of these items, and places them within their stratigraphic and temporal context.

THE 1888-1900 DEPOSITS

A total of 230 classifiable artifacts were recovered from contexts associated with the Moore Cabin (Table 2), which are basically the drainage trench (Features 21 and 22) and the interbedded sand and organics (see Figure 12 for a full listing of proveniences). Although these deposits are dated between 1888 and 1900, they are more likely related to the post-1896 activities on the site. It does not appear that anyone actually lived in the cabin for any duration until that time. These items represent the initial construction activities in 1888 and the relatively limited domestic activities that occurred there in the five years before the cabin was moved.

Artifact rain, as used in the following discussions, is the average number of artifacts deposited per year of continuous occupation of a site. Since most artifacts were likely deposited after 1896, the length of continuous occupation of this initial deposits was five years (1896-1900, inclusive). Artifact rain was therefore 46 artifacts per year.

DOMESTIC GROUP

Most of the 41 items in the Domestic group were probably tin can fragments. They were all in an advanced state of deterioration, and no diagnostic attributes were recovered. It is possible that these flat,

Table 2: Inventory of artifacts in the 1888-1900 deposits, Operation 17

Food Storage		32	
tin can fragments	30		
clear glass sherds	2		
Beverage Containers		1	
brown glass sherd	1		
Food Serving		1	
undecorated porcelain sherd	1		
Food Remains		7	
Bones	7		
DOMESTIC TOTAL			41
Clothing		1	
Ferrous buckle w/leather strap	1		
PERSONAL TOTAL			1
Hunting/Warfare/ammunition		6	
.45-70 UMC cartridge case	1		
.22 short blank cartridges	4		
.22 long blank cartridge	1		
ACTIVITIES TOTAL			6
Window glass		39	
Nails		135	
Hardware		3	
screw	1		
strap	1		
washer	1		
Materials		5	
mortar, plain	2		
plaster	1		
siding, red asphalt	1		
wood, shaped,unpainted	1		
STRUCTURAL TOTAL			182
TOTAL CLASSIFIABLE ARTIFACTS			230

ferrous pieces were part of enamelled cooking ware sets, or tin dish sets, but given the preponderance of tin cans on most frontier sites, and the relatively unlikely chance that dishes or pans would become unusable in such a short period of time, it seems likely that they were the remnants of the Moores' beans, condensed milk, fruit or sardine cans.

The remaining glass and porcelain sherds were unmarked and undiagnostic.

The Food Remains

Seven bones were recovered from the earliest deposits. (A complete listing of all faunal elements is presented in Appendix A). All were found in the same unit (N10E10) away from any door or window. Three fragments of part of a cow's (*Bos taurus*) right pelvis (ilium) appear to have been cut as part of a beef roast. Another cow bone was cut from the upper portion of the spinal column as it attached to the head (atlas). One other bone compared favorably to a steer and was one of the small chunky bones in the lower part of the fore legs (unciform).

The unfused end (epiphysis) of the back, right upper leg (femur) of a medium large animal was probably from a young pig (*Sus scrofa*). The final bone recovered was from the back portion of the skull (occipital condyle) of a medium large mammal (order Artiodactyla), and may be either sheep, goat or deer. It is tempting to relate this bone to some mountain goats killed by the Moores and Nan-Suk on July 3, 1888 (Moore 1968:123), especially since it is from a part of the body not normally purchased in a butcher shop.

The variety of species present in such a limited sample accentuates the variety of meat available to the Moores even in the very earliest occupation of the site. Both the cow and pig bones indicate that Moore did not rely entirely upon wild game species for subsistence.

PERSONAL GROUP

Only one item that could be assigned to the group of personal items was recovered. Given the relatively small size of the assemblage and short length of occupation, that is not surprising. Personal items tend to be valued more than utilitarian ones and are not as readily broken or lost. The single item in the Personal Group is a small ferrous buckle with a portion of the leather strap still attached (Figure 19a). There is nothing particularly diagnostic about it. Although classified as a piece of clothing, it is also possible that it could have been part of a harness for a backpack, dog, or horse.

ACTIVITIES GROUP

A .45 caliber, center-fired cartridge case was also found in the early deposits (Figure 19b). It was designed to hold 70 grain powder and was made by the Union Metallic Cartridge Company of Bridgeport, Connecticut, which was formed in 1867. The company merged with Remington in either 1902 (Logan 1948:10) or 1910 (Fontana and Greenleaf 1962:80); authorities disagree on the date. The UMC headstamp pre-dates that merger, and is consistent with the interpretation that the deposits formed during the nineteenth century.

The cartridge may provide a direct link with the Moores. Bernard's diary entry of July 3, 1888, details the use of their guns.

> Was aroused from sleep this morning at one o'clock by the loud and fierce barking of dogs belonging to our Indian Nan-Suk. On getting up and hurriedly throwing on our clothes to ascertain the cause of this disturbance, we were met at the entrance to our house by our Indian, Nan-Suk, who had rushed over from his tent right near our cabin. He asked for our Winchester rifle, saying "Sheep! Sheep! Mountain sheep. Plenty!"
>
> We handed him our gun and my father snatched up his long, ivory-handled Smith and Wesson six-shooter he had carried all

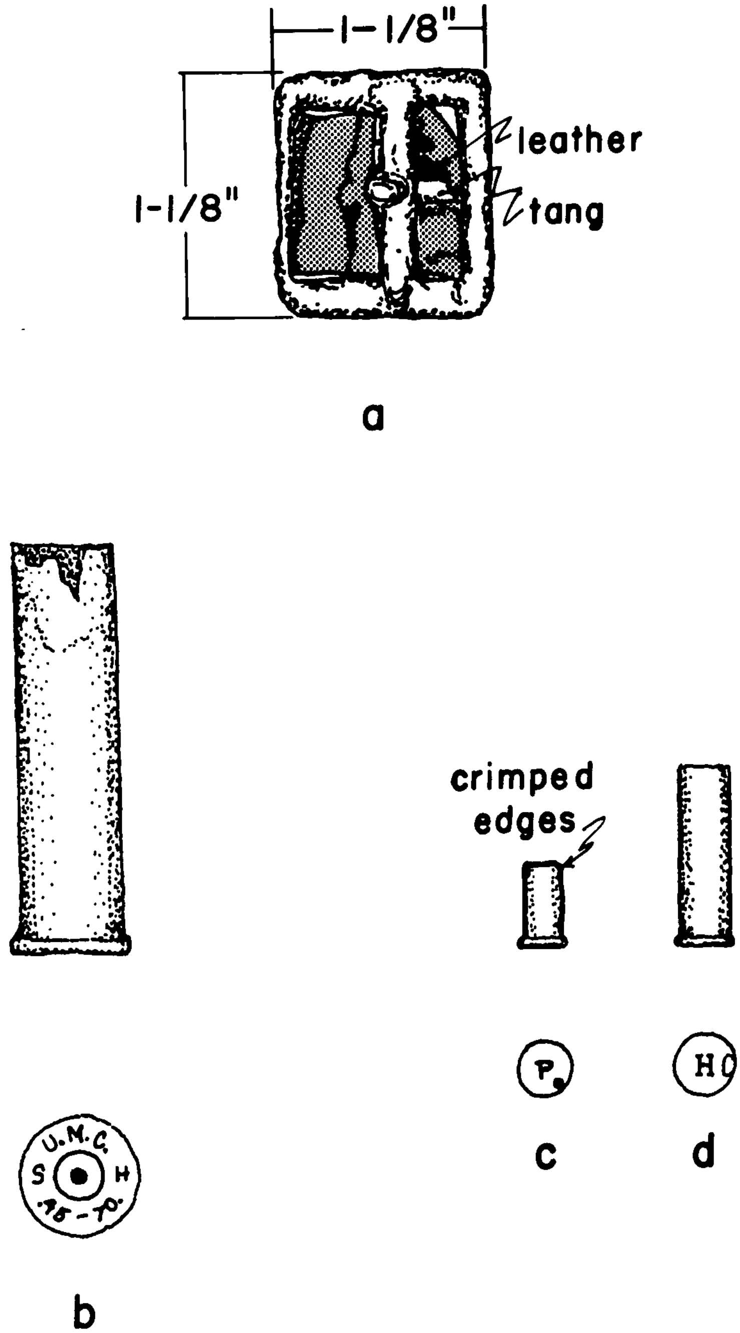


Figure 19: Personal and Activities Groups artifacts from the 1888-1900 deposits: (a) buckle; and cartridges: (b) .45 caliber rifle, (c) .22 caliber blank, (d) .22 long.

> through the Cassiar country in 1873-1874. We all started for the rear of our cabin right near the creek, and were astonished to see there perhaps thirty mountain goats, large and small, scampering through the brush and willows to within forty feet of our cabin; some were jumping into the creek, which was about three feet in depth. Nan-Suk had by this time fired several shots, and my father also was blazing away at the sheep (Moore 1968:123).

In the Hartley and Graham Arms and Ammunition 1895-1899 Sporting Goods Catalogue, several Winchester rifles are described. Only two of the models for sale would have been available to Moore in 1888: the Winchester Repeating Sporting Rifle, Model 1886; and the Winchester Single Shot. Both were adapted to accept the .45-70 rifle cartridge (West 1972:24, 25). If several shots had been fired by the time father and son reached the rear of the cabin, it was most probably the Model 1886 repeating rifle that Nan-Suk was using.

Given its location in the trench, which had not been excavated by July 3, 1888, it is unlikely that the cartridge was lost during that particular event. However, it could very well have been fired from Captain Moore's rifle.

Five .22 caliber cartridge shells were recovered from unit N10E10, an area which would have been under the cabin or just outside the east wall. They all have rim fire marks (Figure 19c). The four short cartridges are marked with a "P", the mark of the Peters Cartridge Company, dating from 1887 to 1934 (Logan 1948:9, 10, 190). All four are crimped down at the top, suggesting that they held cardboard plugs rather than bullets (Greene 1986). They were therefore used as blanks.

The .22 caliber long rifle cartridge (Figure 19d) is marked with a stamped "H". This was produced by the Winchester Repeating Arms Company, formed in 1866 (Fontana and Greenleaf 1962:81) and purchased by the Western Cartridge Company in 1932 (Logan 1948:10).

STRUCTURAL GROUP

The Structural Group is the most frequent in the original cabin deposits, comprising 83.9% of the assemblage. Given the short period of occupation, the relatively large proportion of items related to the cabin's construction is logical. Non-structural items are deposited in a leisurely fashion as the result of daily activities, taking more time to accumulate than structural items, which are deposited in a much more sporadic fashion during isolated events such as building construction, repair or demolition. Most of these structural artifacts were found lying flat along the bottom of the drainage trench, implying deposition during initial construction. They might have washed into the trench during rainstorms, so may not be in their original place of deposition.

The 39 fragments of Window Glass comprise 21.4% of the Structural assemblage. All but two sherds were located in the trench. Of these, more than two-thirds (27) are 6/64 of an inch thick, the known measured thickness of the window in the north door of the cabin. It is quite obvious that the window was broken sometime after 1896 when Bernard installed the doors and window.

The 135 Nails (Table 3) are the most informative artifacts in the deposit. (The assemblage as a whole is compared to the other nail assemblages from the site on pages 143-158.) Almost 70% of the early nails that could be sized were smaller than or equal to 4d, and 40% were cut nails, a much larger percentage than any of the later deposits. In 1888, cut nails comprised 80% of the total nail production in the United States; by 1895, only a quarter of the total nails made were cut (Fontana and Greenleaf 1962:48).

Most of the nails were found in the west end of the drainage trench and along the west side of the house. The location, combined with the small size, suggest that they were originally lost during the finishing of the window frame on the west side of the cabin. They also may relate to the small shed-like addition on the northwest corner of the structure

Table 3: Inventory of Nails in the 1888-1900 deposits, Operation 17.

type	head	size			
cut					54
	common			39	
		3d	1		
		4d	20*		
		8d	5		
		10d	2		
		12d	1		
		20d	3		
		unknown	7		
	unknown	unknown		15	
wire					81
	common			40	
		2d	3		
		3d	17*		
		4d	1		
		5d	7		
		6d	1		
		7d	1		
		8d	3		
		10d	2		
		12d	1		
		50d	1		
		30d	2		
		40d	1		
	fine	2d		6	
	roofing	4d		1	
	unknown			30	
		2d	13		
		3d	5		
		unknown	12		
unknown	unknown	unknown		4	
TOTAL					135

* modal size

seen in an 1898 photograph (Figure 5). A number of shingles still remain tacked up to the north wall of the cabin (Figure 20) to cover an unusually large gap between logs. Some of the nails may have been lost during this kind of light finishing work.

Three pieces of iron Hardware were recovered in the early deposits. A wood screw had a 3/8 of an inch diameter head and was 1-1/8 inches long. A piece of strapping iron had one rounded end; the other was broken, making the fragment 5-5/8 inches long. It is 1 inch wide, and 1/16 of an inch thick. A ferrous washer is 11/16 of an inch in diameter with a 3/16 of an inch hole in the center. None are temporally diagnostic; all could have been in use during the gold rush.

The Structural Materials are sparse and also undiagnostic. The only item of interest was one fragment of red asphalt siding recovered from Stratum C of unit N15E10. This sterile sandy layer was cut through by the drainage trench. The siding was placed on the structure in the 1940s. A portion of the fence post hole (Feature 39) intrudes through this layer, and it is possible that the item was introduced during its excavation.

In addition to the artifacts whose function could be identified with reasonable certainty based on their form, 16 small lumps of a ferrous oxide were recovered. These, probably, were nails originally, but had so deteriorated that their form could not be distinguished.

In conclusion, artifacts recovered from the original Moore Cabin deposits are mostly undiagnostic. Only the cartridge cases could be reasonably dated and associated with the Moores. It is interesting to note that the high frequency of tin-can fragments relative to other food related items (73.1% of the Domestic Group) suggests the Moores were indulging in a mode of food consumption typical of the frontier (i.e, the consumption of commercially canned goods). The presence of domesticates in the faunal remains indicates that reliance on wild foods was not especially important.

Figure 20: Photograph of the north side of the cabin, 1979 (Klondike Gold Rush, NHP).

THE 1900-1914 DEPOSITS

The 1900 to 1914 deposits are the homogenous sand and decomposed organics that comprise Layer III. The precise proveniences can be seen in the Harris Matrix (Figure 12).

A total of 320 artifacts was recovered from the late Moore occupation of the site. This number is a greater absolute quantity than was found in the earlier deposits; however, the longer time span accounts for the greater number of artifacts. An average of 46 artifacts were deposited per year of continuous occupation in the 1888-1900 deposits but only 23 in the next deposit, indicating that depositional processes had changed somewhat. The lighter rain of artifacts will be explored in the section on comparative analysis (page 133).

DOMESTIC GROUP

Only 56 items compose this group, 42.9% of which were Food Storage artifacts (Table 4). Of these, 19 were unmarked, clear glass sherds, and one was clear with an amethyst tint. The purple tint results when clear glass is clarified with manganese and then exposed to sunlight. Manganese was used as a clarifier from about 1880 to 1917 (Ward et al. 1977:240). These findings correspond well to the stratigraphic dating.

All the clarified glass was probably from canning jars. In the Food Storage class, there is a marked difference from the earlier deposits, which consisted largely of tin-can fragments. The difference is explored in the section on the comparative analysis (pages 175-179).

Only one item in the class was functionally diagnostic: a key of the type of can that is opened by removing a strip of metal from around the edge, common on sardine cans (Figure 21a and b). Although available as early as 1866 (Rock 1984:100), this method of opening cans was not

Table 4: Inventory of artifacts in the 1900-1914 deposits, Operation 17.

Food Storage		24	
tin can fragments	3		
roll key opener	1		
clear glass sherds	19		
amethyst tinted glass sherd	1		
Beverage Containers		3	
brown glass sherd	2		
lead seal	1		
Food Serving		5	
whiteware sherd, undecorated	2		
whiteware, pink and green transfer print	1		
porcelain, black transfer print	1		
glass, pressed, clear	1		
Food Preparation		13	
cast iron pot fragments	13		
Pharmaceutical		2	
clear panelled glass	2		
Furnishing		1	
flowerpot fragment	1		
Food Remains		8	
DOMESTIC TOTAL			56
Clothing		5	
knitted wool fabric	3		
ferrous button	1		
cuprous disc	1		
Writing Paraphanalia		1	
wood pencil with lead	1		
PERSONAL TOTAL			6
Window glass		40	
Nails		191	
Hardware		4	
disc, ferrous (horse tack?)	2		
hook, ferrous	1		
tack, ferrous	1		
Materials		20	
brick fragments	4		
mortar	7		
paint chips, green	2		
tile, hard red ceramic	1		
wood, unpainted	6		
Utilities		3	
lamp glass, clear	2		
telephone insulator, ceramic	1		
STRUCTURAL TOTAL			258
TOTAL CLASSIFIABLE ARTIFACTS			320

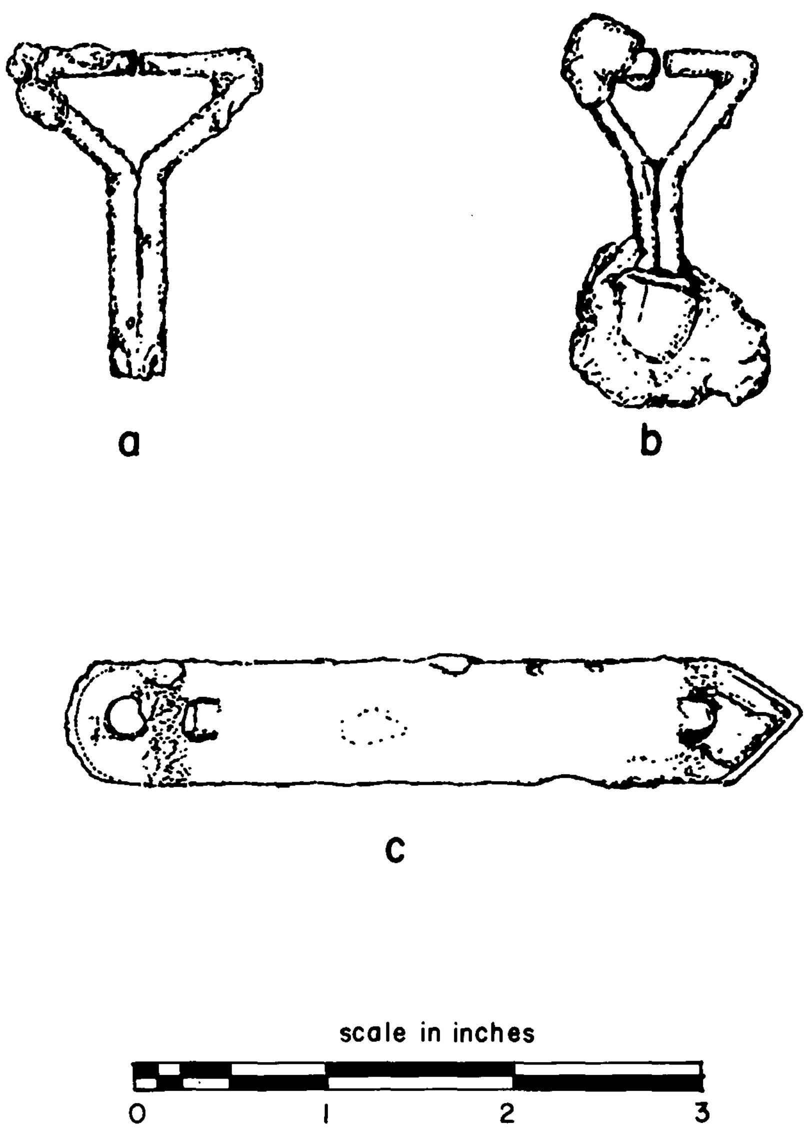


Figure 21: Can openers from Operation 17: (a) can key; (b) can key with roll strip; (c) "church key" type opener.

patented until 1906 in Europe (Fontana and Greenleaf 1962:71). The roll-strip opener was common until the 1960s when tabs were attached to plastic sealed aluminum tops that could be pulled off the can. The almost 100-year time range for this artifact makes it largely undiagnostic for temporal analysis.

The deposit only contained three remnants of Beverage Containers: two unmarked brown glass sherds and a lead foil seal with the letter "G" stamped on it. No information could be found about this item.

In the Food Serving class, two items of interest were found. The first is a fragment of a pressed glass bowl or dish. A sherd of a porcelain cup decorated with a black transfer-printed design mended with nine others scattered throughout the upper deposits. It was found in stratum B of unit N10E5, which has no discernable 1914-1940 deposit and probably represents a later addition to the surface of the level.

The Food Preparation class is represented by 13 fragments of a cast iron pot, clustered in one unit of the north central portion of the site. No diagnostic features were present.

Of the food remains, none of the eight bones that were recovered from the later Moore deposits could be identified as to species. All are mammal bones; five are from a large mammal and are cow-sized. Four of these were the unfused ends (epiphyses) of the vertebra on which the head pivots (axis), indicating an immature animal. The fifth is a rib that had been cut with a saw. A lower vertebra (lumbar) of a medium to large-sized mammal was also recovered (deer? goat? pig? sheep?). The lumbar vertebral region provides T-bone steaks (Halliday and Noble 1928:263).

One other bone was a rib fragment from a large mammal, and the remaining three bones were mere fragments and were unidentifiable. The small sample precludes any useful interpretation of diet.

The Pharmaceutical class was not particularly informative. The two sherds of clear, unmarked panelled glass had little diagnostic value other than their contribution to the understanding of functional processes.

A single fragment of soft red earthenware suggests the presence of a broken flowerpot in the Furnishings class. Such flowerpots can be seen in the 1895 Montgomery Ward catalogue (1969:537), and potted plants are shown in a ca. 1904 photograph of the interior of the Moore House (Blee, et al. 1984:324).

PERSONAL GROUP

Approximately 103 square inches of a bluish-green, ribbed, knitted-wool fabric were uncovered in the early twentieth century deposits. A single ferrous button with a 5/16 of an inch diameter had two small holes for attachment.

The most interesting item in the Personal group was a cuprous disc with a hole in the center (Figure 22). It was a little larger than a quarter, slightly convex on one side and concave on the other. The face had a hand-stamped design around the edge. It might have been used as decoration on clothing. Similar items were found at the Grouse Fort site in Glacier Bay National Park, a Tlingit house occupied from about 1820 to 1850 (Ackerman 1968:32, 33, 43). The Skagway example is very similar to early nineteenth century brass buttons, and it may have been adapted for use on aboriginal clothing. It should be mentioned that Bernard Moore's wife was Tlingit, as well as the man Nan-Suk, who helped build the cabin.

A single, hexagonal-shaped, wooden-pencil nib with a lead core was found in these deposits. The top had been shaved down to receive a metal collar for an eraser. Such pencils were available through the 1895 catalogue of Montgomery Ward (1969:115).

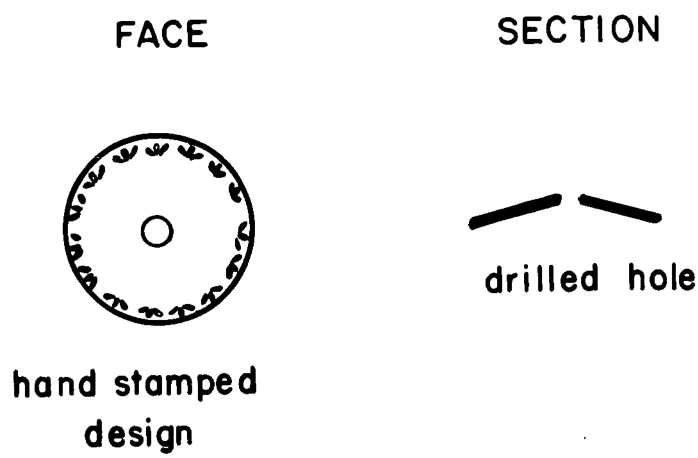


Figure 22: Cuprous disc found in 1900-1914 deposits, Operation 17.

ACTIVITIES GROUP

No artifacts reflective of any specialized activities were discovered in these deposits. This finding suggests a very generalized sheet deposit with no unusual activities taking place in the back yard. The categories that form this group are usually indicative of commercial or public enterprises that specialize in certain aspects of Euroamerican life. It should be noted that on a residential site such as this specialized activities are expected to be very low in frequency. Given the small sample size of the entire assemblage, the absence of Activities artifacts is not particularly surprising.

STRUCTURAL GROUP

As with the late nineteenth-century deposits, most of the 1900-1914 artifacts are in the Structural Group: 80.6% of the entire assemblage are associated with the construction activities on the site. This finding is not surprising in view of the fact that during this time the cabin was moved, and the north addition to the house was constructed. The construction of the frame siding and three windows logically contributed a large percentage of Structural artifacts.

Window Glass Class

The 40 sherds of window glass were scattered fairly evenly across the site. The modal thickness of the glass found in the early twentieth century deposit was 5/64 of an inch, somewhat thinner than in the earlier deposits. This circumstance is anomalous to the expected tendency, which predicts a stabilized thickness after the turn of the century (Roenke 1978).

Nails Class

Nails are well represented in this deposit, again composing the most important class of artifacts in terms of the amount of information they yield about site processes and activities (Table 5). Wire nails comprise 81.7% of the assemblage, a much larger percentage than seen in the earlier deposits. The modal nail size is 8d, a utilitarian nail used for most basic carpentry such as framing. Most of the 8d nails were found next to the house. It was probably the size used to build the walls and attach the siding to the north addition of the house. Nails of all sizes tended to be concentrated in the northeast corner of the site, about 12 feet north of the house. It will be shown later that various construction materials were also concentrated in this location, and may represent the storage of debris resulting from renovations before it was hauled to a municipal dump.

Hardware Class

The four pieces of hardware include a large ferrous hook (Figure 23a) which may have been used as part of a block and tackle, as suggested in Bernard's diary entry of June 3, 1888.

> Worked all day; got out four large logs for the wharf. Had to use our blocks and tackle to haul them out of the woods into the little creek back up a way from where we are building our house (Moore 1968:116).

Captain Moore bought the block and tackle in Juneau on May 9, 1888 in anticipation of the heavy timber work they were going to do in Skagway that summer (Moore 1968:114).

Also found were two oval shaped ferrous disks, 3/4 of an inch long and 1/2 of an inch wide. An unusual shape and a central opening suggest <u>decorative</u> <u>tack</u> on horse harnesses. The remaining piece of

Table 5: Inventory of Nails in the 1900-1914 deposits.

type	head	size		totals	
wire					156
	common			63	
		2d	3		
		5d	8		
		6d	2		
		8d	33*		
		9d	5		
		10d	3		
		20d	7		
		30d	1		
		55d	1		
	fine	2d		1	
	finishing			3	
		2d	1		
		3d	1		
		6d	1		
	unknown			88	
		2d	5		
		3d	4		
		4d	5		
		6d	1		
		8d	1		
		12d	2		
		unknown	70		
unknown	unknown	unknown			10
cut					25
	common			11	
		2d	1		
		3d	3		
		4d	1		
		5d	1		
		6d	2		
		8d	2		
		12d	1		
	siding	4d		1	
	unknown	unknown		13	
TOTAL NAILS					191

*modal size

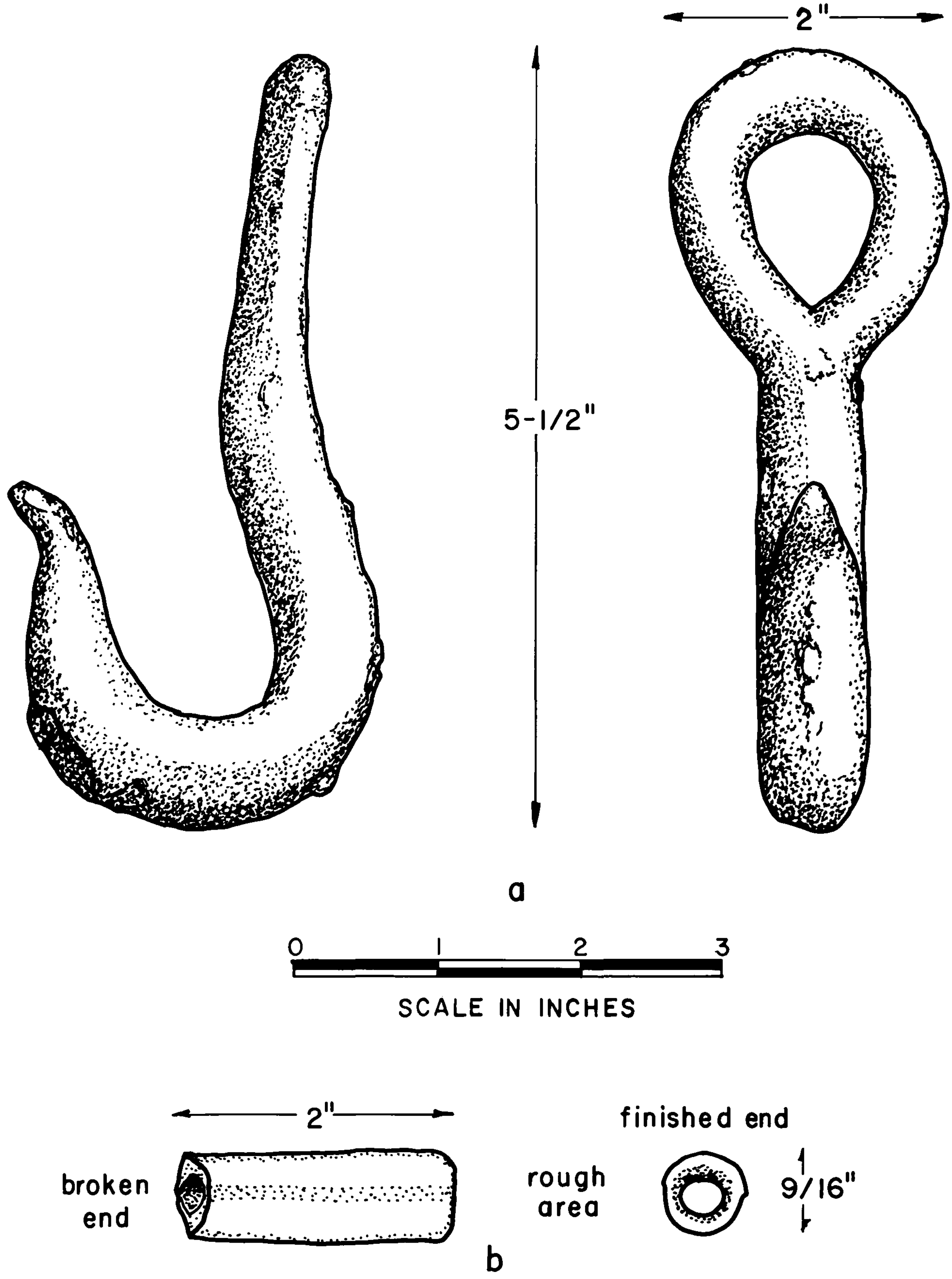


Figure 23: Structural artifacts in the 1900-1914 deposits: (a) large wrought iron hook; (b) white porcelain knob and tube wire insulator.

hardware is a 1 inch long wire tack with a round, flat head, still imbedded in a piece of wood.

Structural Materials Class

The 20 fragments of construction materials were assorted and appeared to represent renovation or repair activities. Besides the construction of the north addition to the house in 1901, the 1900-1914 period witnessed the replacement of the metal flue on the northwest corner of the central-core structure with a brick chimney, the building of a shed to the northeast of the house, and the repainting of the home. The two paint chips were bluish green and may represent the trim color of the house. Most of the Structural Materials were concentrated in the vicinity of the assorted nail cluster. Together they may represent the temporary storage of construction debris before it was hauled to a permanent dump site.

Utilities Class

The two fragments of thin clear glass were probably from the chimney of a kerosene lamp. Since lamps provided lighting just as electricity did, they have been included in the Utilities Class. The knob and tube insulator was a hollow porcelain tube, with a 9/16 of an inch diameter (Figure 22b). Such tubes were placed through studs and used to insulate electrical wires until World War II. Insulation on the wire itself was then developed, and the tubes were no longer necessary. They are described accurately in the 1902 Sears, Roebuck catalogue (1969:661).

UNCLASSIFED MATERIALS (not listed in Table 4)

A "T"-shaped item was embedded in a lump of ferrous oxide, which could not be identified. It is possibly a piece of hardware of some sort. In addition, there were 20 amorphous ferrous lumps that were so badly deteriorated that they could not be identified. As in the earlier deposits, these were probably nails that had deteriorated due to the wet soil conditions.

THE 1914 TO 1940 DEPOSITS

As mentioned earlier, these deposits are bracketted by the excavation of the cess pool on the lower horizon and the 1940s builder's trench on the upper end. This Level II is comprised of mixed sand and decomposed organics. See the Harris Matrix (Figure 12) for a list of individual proveniences. During this time, the cess pool had begun to sink, and at least two layers of fill (Feature 17) were added to the resultant depression. Because of the possibility that this fill was imported, artifacts from Feature 17 have been eliminated from the comparative analysis that follows the descriptive analysis.

The absolute frequency of artifacts increased to almost double the number found in the earlier two periods, but the average rate of deposition actually decreased slightly from 23 artifacts per year to 20 per year.

DOMESTIC GROUP

Food Storage Class

As in the 1900-1914 deposits, the tin-can fragments are considerably less in quantity than in the earliest occupation (Table 6); glass outnumbers tin cans almost two to one. The purple-tinted sherds date from about 1880 to 1917 (Ward et al. 1977:240), which is at the beginning of the period of deposition. One plain, roll-strip key and two keys with the strip of metal rolled around them were recovered (Figures 21a and 21b). As mentioned, these items post-date 1866 and were most common on sardine cans.

One of the embossed sherds is marked with the letters "SEL"; not enough of the bottle was found to be more specific in the identification. The other is a bottle base, 2-3/4 inches in diameter, with two sets of

Table 6: Inventory of artifacts in the 1914-1940 deposits.

Food Storage		28	
tin can fragments	6		
roll key opener	1		
roll key with strip	2		
clear glass sherds	13		
clear glass sherd, marked	1		
base, purple tinted glass	1		
jelly jar sherd, purple tinted	1		
aqua colored glass sherd	2		
light green glass sherd	1		
Beverage Containers		29	
beer bottle finish, brown glass	1		
kickup, dark green glass	1		
bright green glass sherd	1		
dark green glass sherd	1		
olive green glass sherd	17		
green glass sherd	2		
brown glass sherd, marked	2		
brown glass sherd	4		
Food Serving		28	
creamer, porcelain cow-shaped	11		
cup, porcelain, black transfer, with gold luster	5		
porcelain, undecorated	1		
whiteware, brown transfer print with gold lustre	1		
whiteware, flow blue	1		
whiteware, undecorated	9		
Food Remains		10	
peach pits	6		
bones	4		
Pharmeceutical		7	
embossed panelled glass, purple tint	3		
embossed pannelled glass, clear	1		
pannelled glass, clear	1		
prescription finish, purple tint	1		
homeopathic vial, aqua	1		
Furnishing		8	
flowerpot fragments	7		
double hook, ferrous	1		
DOMESTIC TOTAL			110
Clothing			
button, prosser	1		
PERSONAL TOTAL			1

Table 6 (continued): Inventory of artifacts in the 1914-1940 deposits

Window glass		69
Nails		248
Hardware		14
bolt	2	
screw	2	
staple	2	
tacks	2	
washer	1	
wire fragments	5	
Materials		82
brick fragments	23	
insulation	1	
linoleum	24	
paint chips	2	
siding, green	1	
siding, red	20	
siding, white	1	
tar paper	5	
wood, red painted	2	
wood, white painted	1	
wood, unpainted	2	
Utilities		7
lamp glass, clear	3	
sewer pipe, ferrous	2	
sewer pipe, ceramic	2	
STRUCTURAL TOTAL		420
TOTAL CLASSIFIABLE ARTIFACTS		531

mold seams. The outer seam looks like a cup bottom mold mark, yet the side seams cross it and extend to the lower, inner seam. It likely resulted from the use of a post-bottom plate mold. The mark "BBG Co/311" is possibly that of the Ball Brothers Glass Company, in operation from 1919 to 1969 (Toulouse 1971:66).

Beverage Containers Class

The brown glass beer bottle top is fragmentary but does not appear to have a crown-cap finish. Although the crown cap was invented in 1892 (Ward et al. 1977:237), some manufacturers continued to stop their beer bottles with corks for another two decades or more (Adams 1977:49), placing the bottle well within the depositional period.

One of the brown glass sherds is marked with the letters "YG/GIN", and again is too fragmenary for identification. It might have been part of a gin bottle (?).

The dark green glass base sherd is part of the deep kick-up from a wine or champagne bottle. The 17 olive green glass sherds are part of a bottle was deposited on top of the layer. Most of the rest of it was retrieved from Level I deposits and is described in the section on the post-1940 deposits (page 108).

Food Serving Class

Two items are of special interest from the 1914-1940 deposits. The first is a porcelain creamer in the shape of a cow (Figure 24). The animal's open mouth served as a pouring spout, and an opening on its back was where the cream or milk was put into the vessel. It was painted a reddish-brown color over the glaze. No identifying marks remain, and it cannot be dated.

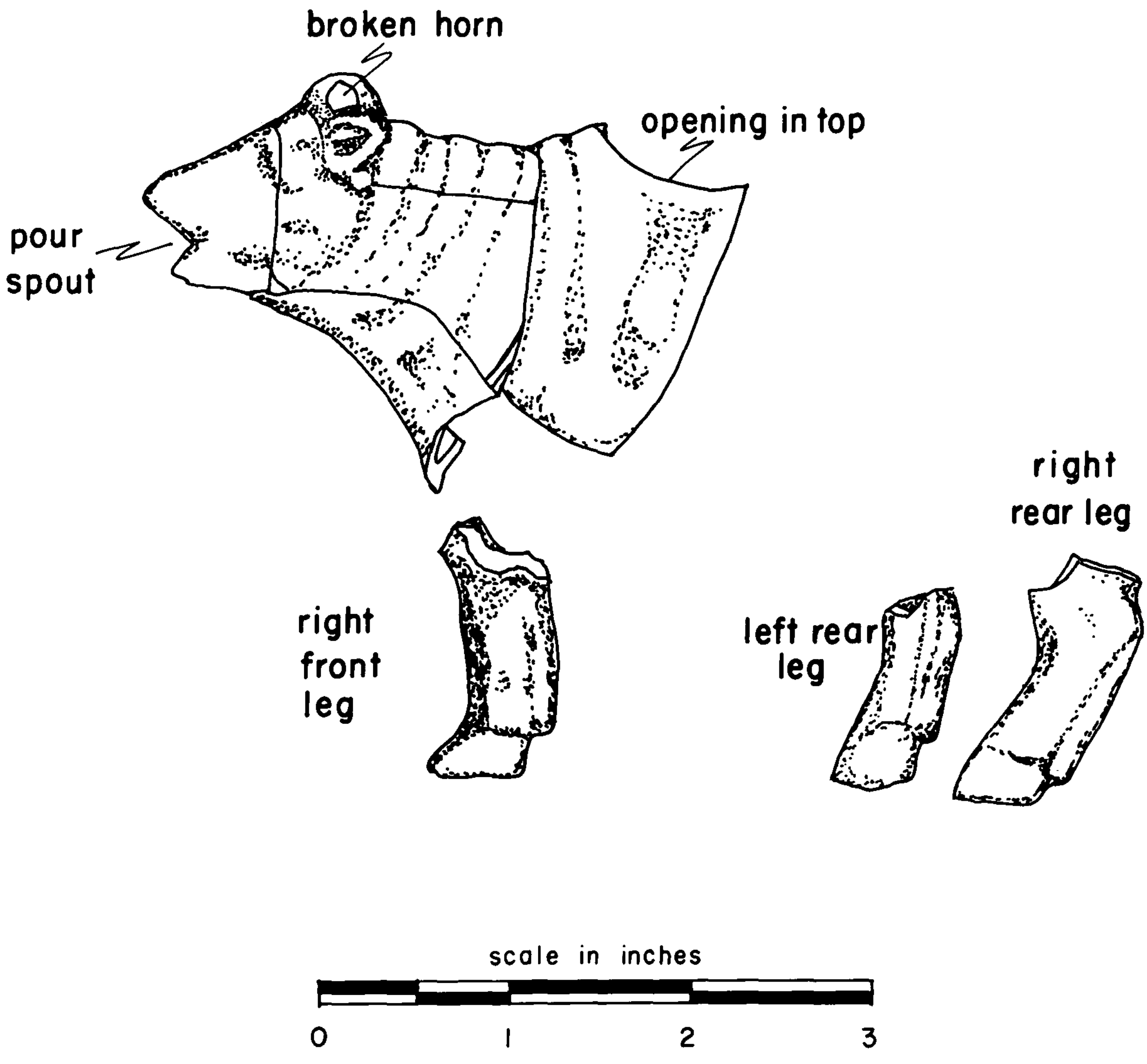


Figure 24: Porcelain creamer in the shape of a cow. Painted with a red over-glaze.

The second item of interest included five sherds of a porcelain tea cup, decorated with an aqua-colored, transfer-printed basal stipple near the top (Figure 25). A white panel was left in one area on which a Tlingit blanket was printed in black, labelled with a banner reading "ALASKA." A filigreed gold lustre was applied over the glaze. It is quite obviously an item manufactured for the tourist trade. These five sherds mend with another five found in the later deposits, suggesting that it was introduced at the juncture between the two deposits.

Neither the cup nor the creamer is the sort of thing that would be purchased as part of a set of dishes. They were likely to have been bought individually on impulse or as a gift. Curio shops have a long tradition in Skagway. Jeweler Hermann Kirmse operated a curio store as early as 1897. Just previous to the 1929 Depression, Skagway was visited by almost 10,000 visitors a year (Foscue 1934: 428). Before World War I, Native-made curios dominated the sovenir market. After that, "tourists wanted items which were either useful within the context of white society or symbolically Alaskan" (Norris 1987:11). These curios are consistant with the incidence of tourism during the 1914-1940 period.

Food Remains Class

Six peach-pit fragments were recovered as well as four bones, all of which had been cut with a saw. Two of the latter were from unidentifiable large mammals. One was the mid-section of a long bone and the other a portion of a shoulder blade (scapula) or pelvis. And one of the remaining bones was a portion of the pelvis (ilium) of a cow (*Bos taurus*), probably representing a beef roast (such as sirloin). The remaining bone compares favorably with a portion of the left rear knee (patella) of a cow and could have been found in a round roast.

The limited sample suggests that beef roasts were the favored meals during this period.

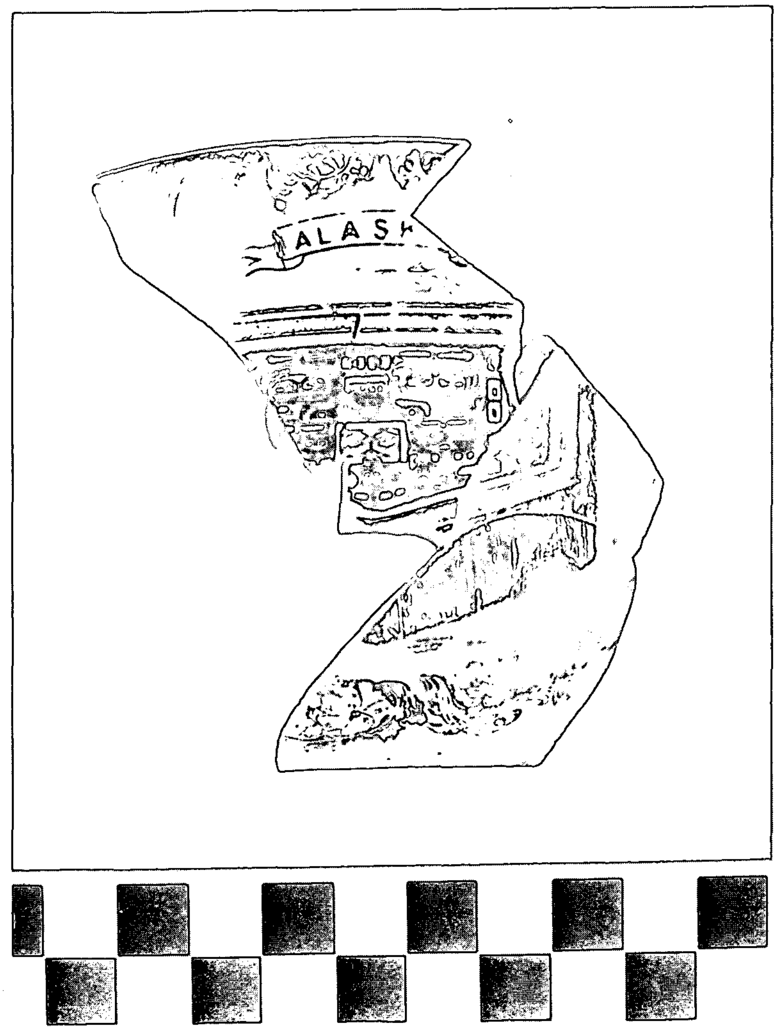


Figure 25: Souvenir tea cup. White porcelain with aqua background, black transfer-printed design and gold overglaze filigree.

Pharmeceutical Class

Three sherds of purple-tinted, panelled glass probably came from one or two medicine bottles. The first is labelled "OU/T" and cannot be identified. The second reads "LO" and "OR/PIERCE" and might have contained one of the patent medicines manufactured by Dr. R.V. Pierce of Buffalo, New York. Pierce sold a variety of cure-alls between 1870 and 1930 (Hanson 1971:93). The exterior of the glass has a hammered metal appearance, characteristic of the use of a chilled iron mold. The purple tint suggests a pre-1917 date (Ward et al. 1977:240). Carley et al. (1981:96) found a medicine bottle made by Dr. Pierce in a 1924-1932 context; it may have been purchased for the alcoholic content of the medicine.

A single, clear glass, embossed sherd is illegible and could not be identified. The purple-tinted prescription finish from a relatively wide-mouthed vessel was hand-finished. Both its color and finishing technique suggest a pre-1917 date.

The base and body portion of a small, aqua-colored homeopathic vial was blown in a two-piece mold and had a polished pontil suggesting a nineteenth or early twentieth century date. Homeopathy was a method of treatment of the late nineteenth century that advocated the use of small doses of substances which, in larger quantities, would produce symptoms similar to those suffered by the patient (Leake 1975).

Furnishings Class

The seven flowerpot fragments, representing an unknown number of pots, were undiagnostic, suggesting only that Hazel Kirmse was fond of house plants. The double hook was the type that might be screwed into the ceiling to hold a suspended lamp or hanging plant. Neither could be dated. A hanging plant can be seen in a ca. 1904 photograph of the interior of the northwest bedroom (Blee et al. 1984:315), which suggests a hook in the ceiling at that location. They might have been discarded when Hazel Kirmse renovated the house in 1914.

PERSONAL GROUP

Only one item could be regarded as a personal artifact, which is not surprising in view of the small sample size. The single Prosser button is white with four holes and has a 13/32 of an inch diameter. The Prosser brothers first manufactured white ceramic buttons in 1841 and can still be purchased today (Chance and Chance 1976:116-119).

ACTIVITIES GROUP

No artifacts could be associated with specialized activities, suggesting that only routine accumulation of residential sheet trash and routine structural repairs were occurring in this area between 1914 and 1940.

STRUCTURAL GROUP

As in the earlier deposits, most of the artifacts (79.1%) are the result of structural construction, repair, or demolition. Recorded activities between 1914 and 1940 include the construction of the cess pool, the addition of a chimney to the west end of the house, and the attachment of the red asphalt siding--events that bracket the deposit. Stratigraphic evidence suggests that the fence was constructed during this period as well.

Window Glass Class

The 69 sherds of flat glass have a modal thickness of 5/64 of an inch, similar to the 1900-1914 assemblage. As with most of the artifacts in this deposit, the window glass tends to cluster in the vicinity of the cess pool, suggesting that the sinking cover served as a "trap" for artifacts. Their spatial distribution in this period is not informative.

Nails Class

The nails comprise 60.0% of the Structural artifacts (Table 7). As with the window glass, most nails cluster in the vicinity of the cess pool and may be associated with the construction of the structure itself. However, there is a slightly greater concentration all along the fence line, which suggests that some might be associated with its construction. A bimodal distribution of 2d and 8d nails substantiates this conclusion, since the 8d nails could logically have connected the rails to the posts, and the 2d nails could have been used to repair broken fence pickets (see also Figure 45).

Only 5.2% of the nails are cut. By this 1914-1940 period, cut nails were mostly being used to attach wood to mortar and concrete. The construction of the west chimney may partially account for their presence as well as limited repairs to older parts of the property. A gate in the fence behind the house probably gave access to the alley. There, scrap material could be loaded onto a truck and hauled to a permanent dumping area, thus accounting for artifacts associated with events taking place on other parts of the site.

Hardware Class

The two bolts recovered from these deposits resemble fat nails with common heads but have an unusual shape. They are flat on two opposing

Table 7: Inventory of Nails in the 1914-1940 deposits, Operation 17.

type	function	size	#	sub-total	total
wire					235
	common			133	
		1d	4		
		2d	8		
		3d	6		
		4d	8		
		5d	15		
		6d	7		
		7d	5		
		8d	39*		
		9d	11		
		10d	9		
		12d	2		
		20d	8		
		30d	6		
		40d	4		
		unknown	1		
	spike	8"		1	
	fine	2d		4	
	finishing			19	
		2d	6		
		3d	11		
		6d	1		
		8d	1		
	roofing	5d		1	
	unknown			77	
		1d	3		
		2d	28*		
		3d	1		
		4d	5		
		5d	1		
		6d	3		
		7d	2		
		8d	2		
		9d	1		
		12d	1		
		20d	1		
		unknown	29		

*modal size

Table 7 (continued): Inventory of nails in the 1914-1940 deposits, Operation 17.

type	function	size	#	sub-total	total
cut					13
	common			7	
		2d	2		
		4d	1		
		6d	1		
		7d	1		
		10d	1		
		unknown	1		
	finishing	2d		1	
	unknown			5	
		2d	2		
		4d	2		
TOTAL					248

sides and rounded on the other two. One is 2-3/4 inches long, and the other is 3-3/4 inches long. One screw has a 1/2 of an inch diameter head with a shank 1-5/8 inches long. The other has a broken shank and a 3/8 of an inch diameter head. A bent wire staple is 2 inches long; the other is broken and about 1-1/2 inches long. A flat-headed wire tack is 9/16 of an inch long; and a square cut tack is only 3/4 of an inch long. The single washer is 1/8 of an inch thick, has a diameter of 1-3/4 inches, and a 5/8 of an inch wide opening. Four fragments of single strand ferrous wire total about 30 inches long; an additional segment is twisted into a loop.

Structural Materials Class

Most structural materials are undiagnostic, but their presence is somewhat informative. The linoleum fragments are fairly ubiquitous and varied in color (Table 8). It is possible that all were fragments from one ornately colored type.

Table 8: List of colors found on fragments of linoleum in the 1914-1940 deposits north of the Moore House.

Color	Fragments
black and white	5
black, buff, beige and brown	4
black, white and peach	12
blue and white	1
pink, yellow and white	1
salmon, buff and white	1

Twenty fragments of red asphalt siding were deposited at the juncture between the 1914-1940 deposit and the most recent one. This siding was added to the house in the 1940s, and both the siding and linoleum were concentrated in unit N15E5 just to the north of the cess pool. It appears that scrap materials left after re-siding the house and old linoleum, possibly, that had been removed from inside the building were temporarily piled along the fence before being hauled to a permanent dump site. The presence of a gate in the fence behind the house at this location was verified in a personal communication with Jack (son of Herman and Hazel Kirmse) and his wife Georgette in 1985.

Utilities Class

The two fragments of ceramic sewer pipe and two of ferrous pipe that were probably related to the cess pool appear to have been about 2 to 3 inches in diameter. Three pieces of thin clear glass probably came from a lamp chimney.

UNCLASSIFIABLE MATERIALS (Not on Table 6)

A total of 23 lumps of ferrous oxide could not be identified as to form and function. Given the high frequency of nails and low frequency of other ferrous artifacts, it is likely that they were originally nails.

THE 1940 FILL

At least two layers of fill were placed on top of the cess pool as it began to sink. It is presumed that at least some of the 280 items found in these deposits were imported. However, some artifacts in the fill mend with others in the surrounding deposits. It is apparent, therefore, that some are indigenous to the site. An inventory is shown in Table 9 for general information. As it is possible that the assemblage is "contaminated" by imported material, only a few notable items that help to date the fill are discussed.

Table 9: Inventory of Artifacts in the ca. 1940 fill above the cess pool.

Food Storage		**19**	
tin can fragments	6		
bottle neck, clear glass	1		
glass sherd, clear	8		
glass sherd, aqua	1		
aluminum foil	2		
plastic wrap	1		
Beverage Containers		**2**	
glass sherds, brown	2		
Food Serving		**11**	
creamer, porcelain, cow-shaped	1		
porcelain sherd, embossed, bisque	1		
porcelain sherd, molded	1		
whiteware, undecorated	8		
Food Remains		**3**	
Housekeeping		**1**	
clothespin spring	1		
DOMESTIC TOTAL			**36**
Children		**2**	
marble, porcelain, green painted	1		
doll (?) porcelain, arm	1		
Packaging		**2**	
wrapping paper, brown	2		
ACTIVITIES TOTAL			**4**
Window Glass		**68**	
Nails		**66**	
Hardware		**2**	
screw	1		
tack	1		
Materials		**104**	
brick	14		
insulation	4		
linoleum	2		
mortar	1		
siding, red asphalt	71		
tar paper	10		
wood, painted green	2		
STRUCTURAL TOTAL			**240**
TOTAL CLASSIFIABLE ARTIFACTS			**280**

Plastic wrap did not become easily available to most consumers until 1940 with discovery of polyethylene (Sacharow 1978:88). Its presence suggests that the fill was added after World War II. The 71 fragments of red-asphalt siding substantiate this date as this material was added to the house in the 1940s (Blee et al. 1984:285).

Only two of the artifacts are of interest. The porcelain doll or figurine arm is painted brown, pink, and yellow on an unglazed surface (Figure 26b). The porcelain marble has orange and green stripes painted over the clear glaze (Figure 26a). It is 1/2 of an inch in diameter. Such marbles were made even before 1800 in Germany. No end date is available (Randall 1971:104) so it does not provide any important dating information.

Food Remains

Three bones found in this fill are of large mammals, and two of them compare favorably with cows. One was the upper end of the upper left rear long bone (left proximal femur). The other was the midsection of the back end of the pelvis (right ischium). Both could have been parts of round roasts. The rib of a large mammal completes the faunal assemblage for the fill above the cess pool. The type of food represented by these bones is not inconsistent with deposits above and below the fill.

THE POST-1940 BUILDER'S TRENCH (FEATURE 36)

The Moore House builder's trench (Feature 36) contains a mixture of all earlier deposits and so presents a mixed assemblage. It is inventoried in Table 10. As with the cess pool fill, very few artifacts were found to be diagnostic so they will not be described extensively here. Only a few are worth mention.

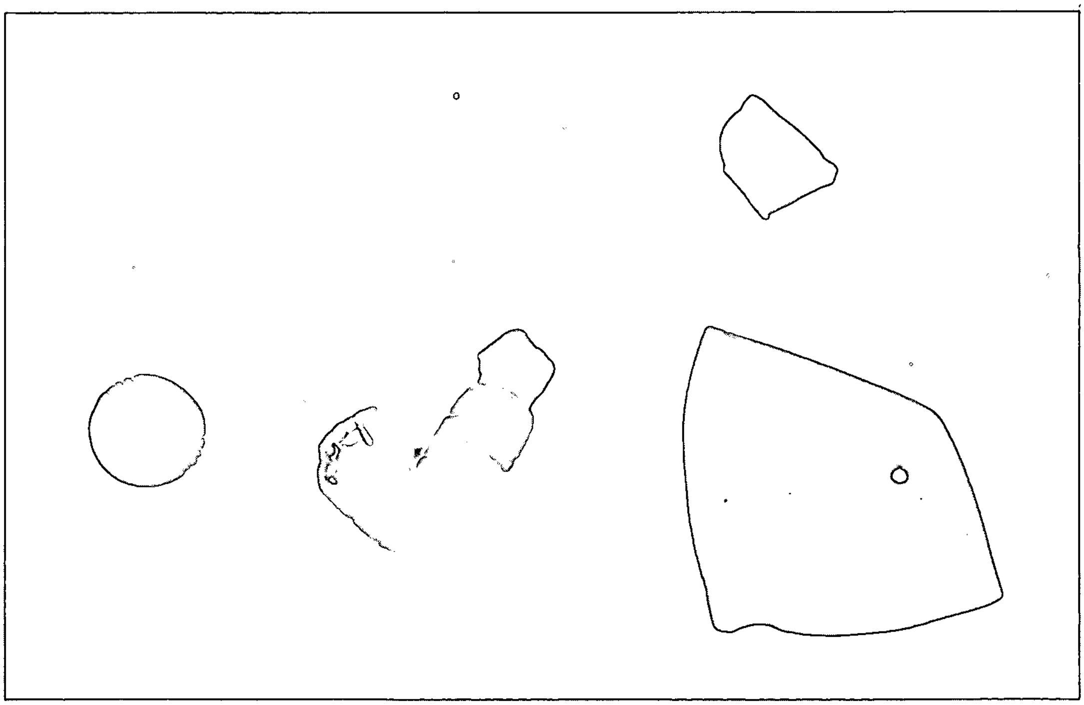


Figure 26: Artifacts from the post-1940s context: (a) porcelain marble, painted with green and orange stripes; (b) porcelain figurine arm, glazed light-brown sleeve, flesh-toned hand; (c) bisque porcelain doll's head fragments, colored pink.

Table 10: Inventory of artifacts in the post-1940 builder's trench for the north wall of the Moore House.

Food Storage		18	
tin can fragments	16		
seal, gold foil, Heinz 57	1		
glass sherds, clear	1		
Food Serving		11	
bowl, heavy whiteware	7		
porcelain sherd, undecorated	2		
whiteware, undecorated	2		
Food Remains		2	
DOMESTIC TOTAL			31
Children		2	
doll (?) porcelain, pink bisque	2		
ACTIVITIES TOTAL			2
Window Glass		11	
Nails			55
Hardware		2	
screw	1		
tack	1		
Materials		208	
brick	16		
siding, red asphalt	113		
tar paper	77		
wood, unpainted	2		
STRUCTURAL TOTAL			276
TOTAL CLASSIFIABLE ARTIFACTS			309

The 113 fragments of red asphalt siding date the trench to the post-1940s renovations. The 77 fragments of tar paper no doubt peeled away from the water barrier placed on the lower wall boards (Figure 27).

The only diagnostic item is the gold foil seal from a Heinz 57 sauce bottle. Heinz adopted the "57" slogan in 1896 (Toulouse 1971:237).

The two pieces of pink painted porcelain bisque mend with three pieces found in the post-1940 deposits and are from the smashed head of a doll (Figure 26c).

The two bones recovered in the builders trench compare favorably with beef (*Bos taurus*). The lower end of the upper-right-leg bone (distal humerus) probably was from a shank cut. The other is a thoracic vertebra, which connects with the ribs. Both represent slightly more economical cuts than the hind quarter roasts represented in the earlier deposits.

THE POST-1940 DEPOSITS

Recent assemblages are often treated in a perfunctory manner in most archeological studies. More attention was paid to the recent Moore House collection in this investigation because it acts as a temporal link to the earlier deposits and because the most recent occupants could help with the interpretation of the remains in these layers. The most recent artifacts are inventoried in Table 11. Only the diagnostic artifacts are discussed in this section. This deposit contains more artifacts than all the preceding deposits combined. The 1444 items were deposited at an average rate of 36 artifacts per year, which is much greater than during the previous two periods. This high rate contrasts with 20 per year found in 1914-1940 deposits and 23 in the 1900-1940 level. It is not as high as the rate of 46 per year found in the earliest levels.

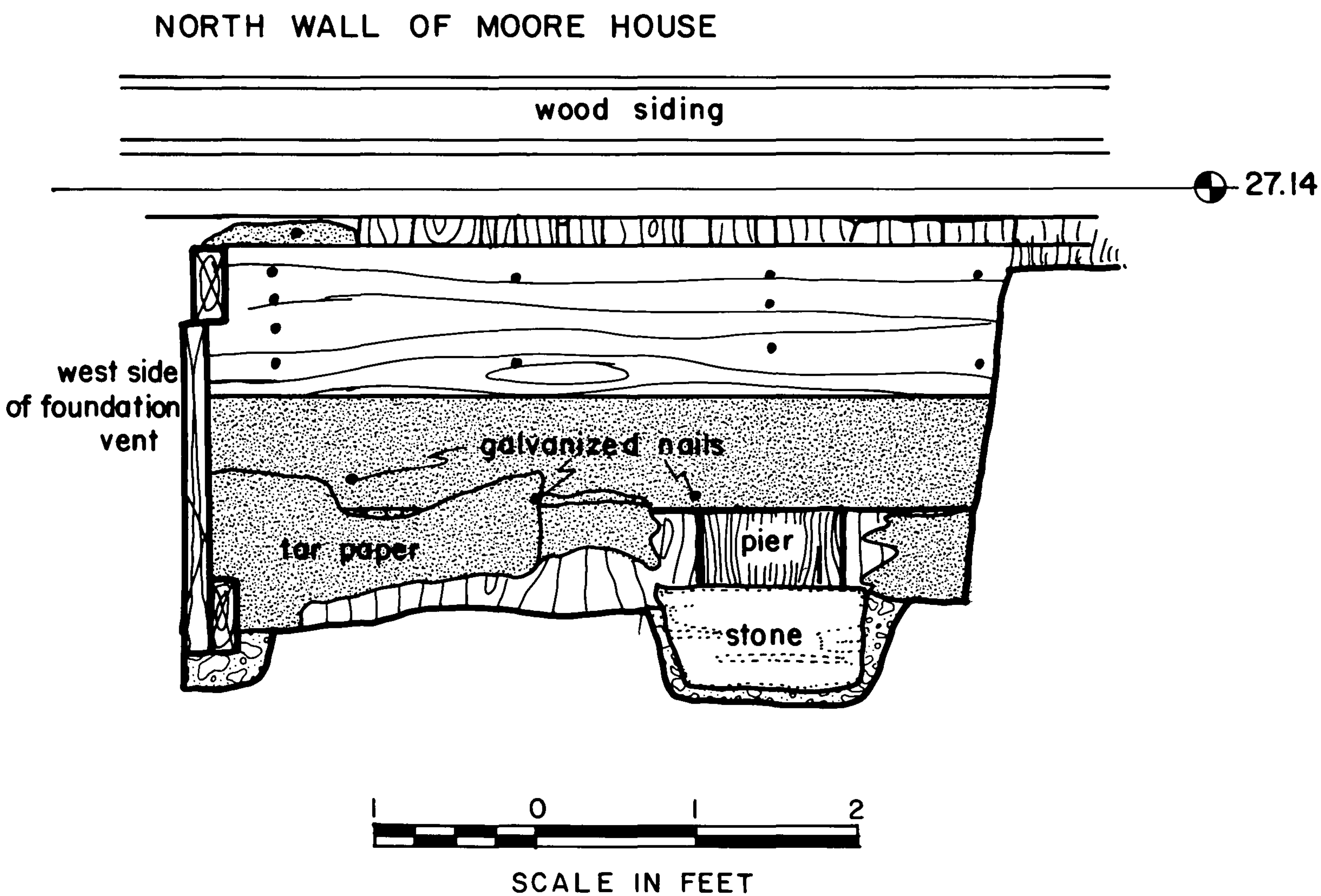


Figure 27: Elevation drawing of the foundation of the Moore House between West 5 and West 10. Looking south.

Table 11: Inventory of Artifacts in the post-1940's deposits, Operation 17.

Food Storage		**149**
tin can fragments	18	
milk bottle sherd, clear	1	
canning jar sherd, clear	1	
jelly jar sherds, clear	3	
jar base, clear	1	
jar rim, clear	1	
sherds, embossed, clear	3	
sherds, clear glass	50	
sherds, aqua glass	11	
sherds, light green	31	
aluminum foil	12	
plastic wrap	13	
foil and plastic wrap	4	
Beverage (all glass)		**105**
beer bottle, brown glass, whole	1	
brandy finish, purple tinted glass	1	
champagne bottle, dark green glass, whole	1	
wine bottle, olive green sherds	39	
whiskey bottle, clear, whole	1	
bottle neck, brown, crown finish	2	
sherds, bright green	1	
sherds, dark green	8	
sherds, olive green	15	
sherds, green	3	
sherds, brown, embossed	1	
sherds, brown	32	
Food Serving		**58**
bowl, ferrous, tin enamelled	1	
creamer sherds, porcelain, cow shaped	1	
cup sherds, porcelain, aqua and gold lustre	4	
cup sherd, styrofoam	5	
cup handle, porcelain, gold lustre	1	
plate sherds, whiteware, green and pink transfer print, silver lustre	7	
saucer sherd, whiteware, polychrome decalcomania	1	
porcelain sherd, black transfer print	2	
porcleain sherd, embossed	2	
porcelain sherd, gold lustre band	1	
porcelain sherd, molded	1	
porcelain sherd, undecorated	4	
whiteware sherd, molded	1	
whiteware sherd, undecorated	27	

Table 11 (continued): Inventory of artifacts in the post-1940 deposits, Operation 17.

Food Preparation		85	
can opener, church key	1		
pail fragments, ferrous	49		
stove leg, ferrous	1		
pot, ferrous, enamelled	34		
Food Remains		34	
coconut shell	6		
bones	28		
Pharmaceutical		8	
panelled glass sherds, clear	5		
panelled glass sherds, purple tinted, embossed	1		
panelled glass sherds, brown	2		
Housekeeping		3	
clothespin spring	3		
Furnishings		6	
flowerpot sherds, ceramic	2		
milk glass sherd	2		
knick-knack part, clear glass rod	1		
drawer handle, ferrous	1		
DOMESTIC TOTAL			448
Clothing		6	
boot lace tip, brass	1		
button, prosser	1		
overalls fastener, ferrous	1		
strap fasteners	2		
snap, two-piece	1		
Grooming and Hygiene		2	
cold cream jar, milk glass	1		
cold cream jar lid, ferrous	1		
Writing Paraphanalia		1	
wood pencil with lead	1		
PERSONAL TOTAL			9
Hunting/Warfare		3	
bullet and cartridge, .44 caliber	1		
cartridge, .38 caliber	1		
ammunition bag, plastic	1		
Leisure Activities		7	
cigarette filter, fibrous	3		
cigarette holder, plastic	1		
camera film, .35 mm	2		
pipe, ball clay bowl fragment	1		
Children		5	
doll, porcelain, pink bisque	4		
top, ferrous	1		
ACTIVITIES TOTAL			15

Table 11 (continued): Inventory of artifacts in the post-1940 deposits, Operation 17.

Window Glass		**187**	
Nails			**466**
Hardware		**34**	
band, yellow metal	1		
screw, ferrous	3		
door spring fragments, ferrous	18		
staples, ferrous	3		
tack, ferrous	4		
tube, aluminum	1		
wire, ferrous (9" total)	4		
Materials		**267**	
brick	122		
insulation	1		
linoleum	15		
mortar	6		
paint chips, bluish green	10		
paint chips, green	6		
paint chips, green over black	2		
paint chips, red over green	1		
paper, painted green	1		
sheeting, plastic	2		
siding, asphalt, green	4		
siding, asphalt, painted green	1		
siding, red asphalt	71		
tar paper	6		
wood, painted green	5		
wood, painted green and black	3		
wood, painted red	1		
wood, painted white	2		
wood, unpainted	8		
Utilities		**18**	
lamp glass, clear	13		
electrical ring terminal	1		
aluminum electrical disc	1		
sewer pipe, ceramic	2		
water pipe, ferrous, 1/2" diameter	1		
STRUCTURAL TOTAL			**972**
TOTAL CLASSIFIABLE ARTIFACTS			**1444**

DOMESTIC GROUP

Food Storage Class

Eight sherds of clear glass mend to form part of what appears to be a syrup bottle. Brand name or manufacturer could not be determined. Another embossed, clear-glass sherd bears the letters "GAL.", which is probably a capacity indicator. Like the syrup bottle, the sherd fluoresces yellow under both short and long wave ultraviolet light, suggesting that they are part of the same bottle.

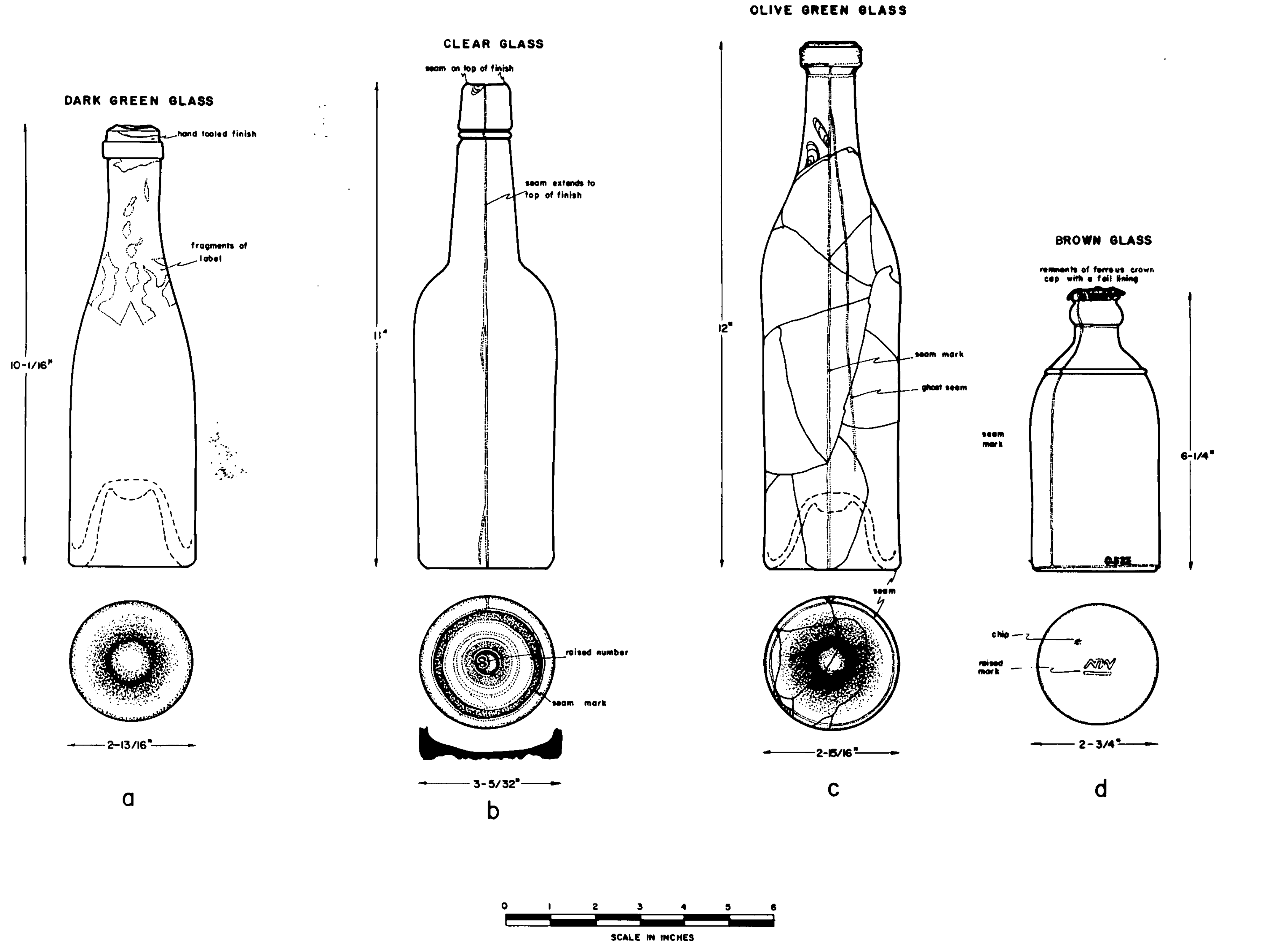
One of the plastic wrappers was marked with yellow and brown printed advertising: "RED'S ONE DOZEN CORN TORTILLAS, SAN FRANCISCO, CA." The plastic indicates a post-1945 date; the contents suggest that Alaskan palates are not restricted to bland foods, which is scarcely a surprise. Plastic and styrofoam artifacts found in these upper layers may not be associated with the Kirmses since the wind could have transported the lighter artifacts from just about any place in town.

Beverage Containers Class

A high kick-up and the champagne finish identify one of the three whole, unbroken bottles found at this site as a dark green champagne bottle (Figure 28a). Fragments of the neck label still adhere. The tooled finish suggests a pre-1925 date of manufacture (Miller and Sullivan 1984:94).

The second complete bottle is of clear glass, but its shape suggests a use as a whiskey bottle (Figure 28b). The finish is of the brandy type, which held a cork. The wandering "ghost" seam and side seam extending to the top of the bottle identify it as having been manufactured by a machine. The bottle could date as early as 1889 (Miller and Sullivan 1984:93-94). The "8" on the base may be a year indicator, suggesting a 1908 date of manufacture.

Figure 28: Bottles from the 1940-present period, Operation 17: (a) dark green champagne bottle; (b) clear whiskey bottle; (c) olive green wine bottle; and (d) brown beer bottle.


DARK GREEN GLASS
hand tooled finish
fragments of label
10-1/16"
2-13/16"
a
CLEAR GLASS
seam on top of finish
seam extends to top of finish
11"
raised number
seam mark
3-5/32"
b
OLIVE GREEN GLASS
12"
seam mark
ghost seam
seam
2-15/16"
c
BROWN GLASS
remnants of ferrous crown cap with a foil lining
seam mark
6-1/4"
chip
raised mark
2-3/4"
d
0 1 2 3 4 5 6
SCALE IN INCHES

These last two bottles were found placed base to base in a line paralleling the fence (Figure 18). They had probably rolled up against the fence, then were hidden by grass or weeds. This suggests that lawn and fence maintenance behind the Moore House was not fastidious after the second World War.

A third bottle lay next to these last two but had been crushed in place. Seventeen sherds had been pushed into lower strata; 39 were recovered in this deposit. The sherds of olive green glass came from a wine bottle (Figure 28c) that has a deep kick-up and a cup-bottom mold seam. The wine finish appears to be machine-made. The numerous swirls, bubbles, and glass imperfections suggest that it was blown of glass that was slightly too cool when the bottle was formed. Wavy "ghost" seams near the side seams are likewise characteristic of bottles made by machines and, therefore, post-date 1889 (Miller and Sullivan 1984:93-94).

The dark green bottle base is only 2-1/4 inches in diameter and was probably from a wine split. It has a post-bottom-mold seam and an Owen's-type cut-off mark. The number "5" is embossed above the base on the side. All these characteristics suggest a post-1904 date of manufacture (Jones and Sullivan 1985:39).

The complete beer bottle is of the squat type (Figure 28d). It was machine-made with a cup bottom mold. The crown cap is still intact and attached to the bottle. An embossed capacity mark above the base reads "0.523". The connected "NW" on the base identifies it as a product of the Northwestern Glass Company, Seattle, which started business in 1931 and is still in operation (Toulouse 1972:390). This artifact is more in keeping with the dates provided by the red-asphalt siding and plastic in the deposit.

The purple-tinted bottle neck has a brandy finish, so it has been categorized as a beverage container. It has no seam lines and was probably stopped with a cork. The purple tint dates the bottle to before 1917 (Ward et al. 1977:240).

The marked, brown bottle glass sherds are largely undiagnostic. One reads "KY" and might have been part of a Kentucky bourbon bottle. The other is embossed with "M/T".

Food Serving Class

A ferrous bowl covered with white tin enamel was found north of the fence line with its bottom entirely rusted out (Figure 29a). These types of wares have been in use since the late nineteenth century and are not particularly diagnostic.

One fragment of the porcelain cow-shaped creamer and four sherds of the aqua, black and gold porcelain souvenir cup described earlier were recovered from the upper levels. They may have been brought to the surface during excavation of the builder's trench.

Food Preparation Class

All items in this class are of some interest. The "church key" type of can opener (Figure 21c) was invented in 1935 specifically for use with the beer can (Martells 1976:43); with the invention of the aluminum pull-tab cans in 1962 (Kaplan 1982:117), this use of "church keys" has declined substantially. More commonly, they are used to open bottles today. The brewing industry originated the pointed end as a way to open the newly developed beer can. The 3-7/8 inches long opener found in these excavations is somewhat smaller than those made originally, which were 5-1/2 inches long. As can lids became thinner with improved production techniques, the openers were made smaller (Martells 1976:43). This one probably dates to the 1950s.

The ferrous pail parts found north of the fence could be identified only because they were all located together with part of a wire handle still attached to one fragment. A large ferrous stove leg (Figure 29b)

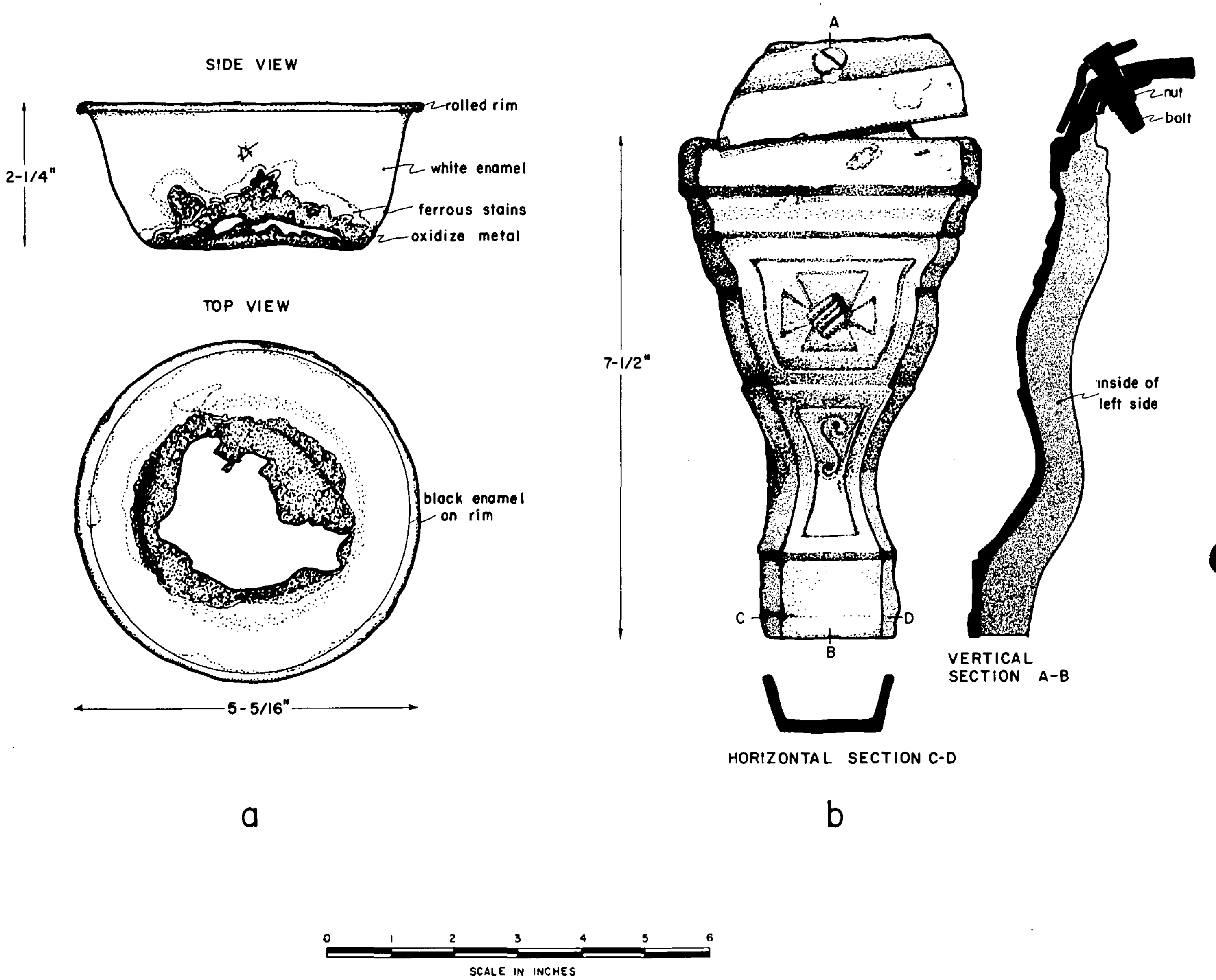


Figure 29: Large artifacts from the 1940-present period, Operation 17: (a) white tin-enamelled bowl with black rim; (b) cast iron stove leg.

probably represents butchering waste. A single, medium-sized mammalian long bone may also have been from a sheep.

One bone is the midsection of a chicken thigh (Gallus gallus, femur). It bears some peculiar pitting that may be tooth marks, but it is difficult to determine whether they were made by a human, dog, or cat.

The remaining three bones are mere fragments and could not be identified. Two are calcined, suggesting that they have been burned.

The variety of meal types represented by this assemblage is not surprising. Pork, beef, mutton, and chicken are all represented. Fish is not present, but that may be a function of preservation or recovery technique, not a lack in the diet. The cuts come from both the more expensive loins and chops and the more economical heads and toes, precluding conclusions about socioeconomic status. The coconut shell as well as the taco wrapper, discussed earlier, reflect the well-developed, wide-ranging trade networks characteristic of any American community today. It is interesting to note that no locally available foods are represented in the assemblage.

Pharmeceutical Class

Only one of the panelled-glass sherds contained any marks, a purple-tinted sherd embossed with "R.Y" or "R.V". It could not be identified.

Housekeeping Class

The ferrous clothespin springs are of two different types (Figure 30a), and both look like the springs found on clothespins today. The 1902 Sears, Roebuck catalogue shows a clothespin with a spring (1969:596), and it appears that the devise has not changed substantially was found north of the fence and is typical of designs popular in the early part of the century.

In the immediate vicinity of a single gray enamelled ferrous sherd, 33 ferrous fragments were found, probably all from the same graniteware pan. It is called "agate iron ware" in the 1895 Montgomery Ward catalogue (1969:431) and "enamelled ware" in the 1902 Sears, Roebuck catalogue (1969:580). These catalogues demonstrate that this type of pan was available throughout the twentieth century.

Food Remains Class

The food remains consist of six coconut shell fragments and 28 bones (see Appendix A for complete listing). This faunal sample is larger than that found in the earlier deposits.

The predominant animal present in the faunal assemblage is the pig (*Sus scrofa*), represented by eleven bones from the right side of a single skull. A toe bone compares favorably with pig and may represent a meal of pickled pig's feet. An additional four bones are from a medium large mammal and may also be pig. They include three vertebrae and a long bone. One vertebra is from the neck and another from the short loin section (pork chops?).

None of the bones could be firmly identified as cow, but three compared favorably with *Bos*. One is a rib, another is from the sirloin end of the pelvic area (ilium), and the third is a vertebra that connects with the ribs (thoracic vertebrae). All were cut by a saw. The ilium had carnivore tooth marks on it. One long bone was from an unidentifiable large mammal.

Sheep (*Ovis aries*) was represented by two bones: an upper right toe (metacarpal) and the upper end of the left shoulder blade. The metacarpal is not normally a portion of the body that is eaten and

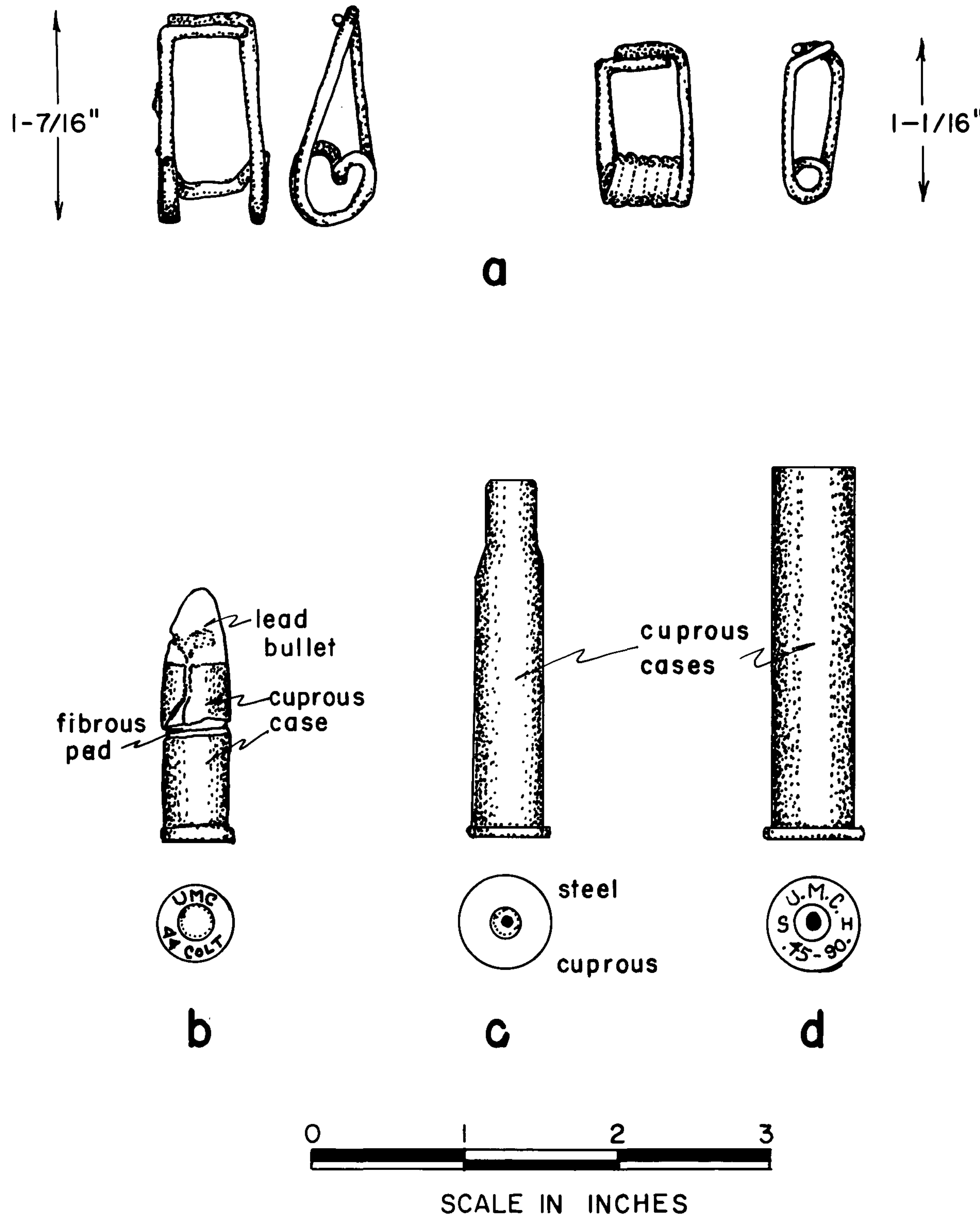


Figure 30: Small artifacts from the 1940-present period: (a) ferrous clothespin springs; (b) .44 cartridge; (c) .30-06 cartridge case; (d) .45-90 cartridge case.

throughout the century. The presence of the springs implies a clothesline in the backyard; Georgette Kirmse (1985) verified this conclusion.

Furnishings Class

The ferrous drawer handle is badly corroded and undiagnostic.

PERSONAL GROUP

Clothing Class

The Prosser style button has four holes, and is 7/16 of an inch in diameter. The Prosser brothers first manufactured white ceramic buttons in 1841 for use on utilitarian garments like shirts and underwear. Such buttons can still be purchased today (Chance and Chance 1976:117-119).

The chrome plated overalls fastener is similar to one found at Silcott, Washington, in a pre-1930s context (Adams 1977:41). Two pieces of a strap fastener mechanism may have accompanied the overalls set. A yellow metal, two-piece snap with a fragment of coarse brown cloth still attached has a 7/16 of an inch diameter. It is stamped "DENTS" on one side, and "DAC/DF Co." on the other.

Grooming and Hygiene Class

A milk glass cold cream jar and matching ferrous lid were also recovered. The base mark consists of an "A" under the bar of the "H", which has curving sides. It was probably manufactured by the Hazel-Atlas Glass Company, of Wheeling, West Virginia. Such a mark was used between 1920 and 1962 (Toulouse 1971:239).

Writing Paraphernalia Class

A wood sheathed pencil is 1-3/4 inches long with a diameter of 3/8 of an inch. There is no paint remaining on it.

ACTIVITIES GROUP

Hunting/Warfare Class

A .44 caliber cartridge was found near the location of the gate opening in the fence (Figure 30b). The fibrous plug between the lead bullet and the cartridge case was installed because a full load of powder was not necessary for whatever gun would have been used to fire it. This type of ammunition was introduced in 1871 and was available until about 1940 (Barnes 1980:183). The head-stamp identifies it with the Union Metallic Cartridge Company, which did not use the initials UMC after 1902 (Logan 1948:10).

The .30-06 cartridge case (Figure 30c) was developed in 1906 (hence the 06 nomenclature) and is considered "the most flexible, useful, all round big game cartridge available to the American hunter" (Barnes 1980: 52). Its versatility precludes speculation on the type of rifle that might have fired it. With no head-stamp, it cannot be more precisely dated.

The .45-90 caliber cartridge case (Figure 30d) was developed for use with the Winchester Model 86 repeater or single shot and was very popular around the turn of the century. It was introduced in 1886 (Barnes 1980:124), by the Union Metallic Cartridge Company, which was absorbed by the Remington Cartridge Company in 1902 (Logan 1948:10). The .45-70 cartridge found in the pre-1900 levels could also be fired from this rifle. As shown earlier, this could have been the kind of rifle owned by Captain Moore (see discussion on pages 63-65). The cartridge was probably introduced into recent levels when the builder's trench was excavated around the house.

A plastic bag that contained powder loads was found in the recent deposits. It was labelled "SPEED POWDER LOADS K-P-22". The plastic helps date the deposit to after World War II.

Leisure Activities Class

Cigarettes did not routinely come with filters attached until the 1960s (Encyclopaedia Brittanica 1973:768); the four filters recovered probably were deposited sometime within the last 20 years.

The ball clay pipe bowl was a bit surprising but is not unknown in other excavations in Skagway (Blee 1983:70). The widespread distribution of ready-made cigarettes to young soldiers during World War I began the decline in popularity of the previously ubiquitous and inexpensive ball-clay pipes. By World War II, they had become mostly a novelty. The appearance of this pipe in the most recent deposits is probably due to the later intrusions. Neither Jack Kirmse nor his father, Herman, smoked a pipe, but his grandfather, Hiram Cleveland, did (Georgette Kirmse 1988). It may have been broken while he was visiting his daughter, Hazel Cleveland Kirmse.

Children Class

The fragments of pink bisque porcelain are identical to those found in the builder's trench. One piece has a small ear on it (Figure 26c), identifying all the fragments as a smashed doll's head. Another piece has a small hole near a finished edge, which would have been used to attach a wig or cloth body. A third has a number of impressed letters on it, but, unfortunately, they are illegible and do not assist identification. Pink-tinted bisque dolls were common in the nineteenth and early twentieth centuries but cannot be dated with any accuracy. Dolls are highly coveted items so often date long before an archeological deposit was formed.

A ferrous object may be a child's small spinning top. It is also not dateable.

Children were a part of both families who lived at the Moore House. Bernard and Minnie Moore had two children: Bernard, Jr., born in 1891, and Edith Gertrude, born in 1893 (Moore 1968:162,166). Jack and Georgette Kirmse had no children while living at the Moore House. Jack had an older stepsister, Gladys Kirmse, who had a doll's trunk filled with doll's clothes (Georgette Kirmse 1988). She was the most likely owner of the doll, even though she was an adult by the time they moved into the house.

STRUCTURAL GROUP

Window Glass

The modal thickness of the window glass in the post-1940 deposits is 5/64 of an inch, as in all deposits but the very earliest. There is no apparent patterning to the spatial distribution of the glass.

Nails Class

The 466 nails found in the most recent deposits are classified as shown in Table 12. They, as in all earlier deposits, constitute the largest class in the assemblage. Nails comprise 48.6% of the Structural Group and 32.6% of the total classified assemblage. The modal size is 8d, with an almost normal distribution about the mode. This finding suggests that most activities involving nails on the site were utilitarian framing jobs. The nails tend to cluster near the northeast corner of the site about fifteen feet north of the house wall near the fence line. Possibly scrap lumber was dumped in this area during house renovations and the nails lost.

Table 12: Inventory of nails found in the post-1940's deposits, Operation 17.

type	function	size	#	sub-total	total
wire nails					450
	common			383	
		2d	12		
		3d	8		
		4d	32		
		5d	22		
		6d	45		
		7d	18		
		8d	103*		
		10d	55		
		12d	8		
		16d	1		
		19d	7		
		20d	8		
		30d	2		
		35d	2		
		40d	3		
		50d	2		
		60d	2		
		unknown	53		
	casing	20d		1	
	finishing			15	
		5d	1		
		6d	9		
		8d	4		
		9d	1		
	roofing			4	
		2d	1		
		5d	3		
	unknown	unknown		47	
cut nails					16
	common			15	
		2d	2		
		3d	1		
		4d	1		
		7d	1		
		8d	1		
		9d	2		
		unknown	7		
	unknown	4d		1	
TOTAL NAILS					466

*modal size

Hardware Class

Two of the ferrous screws are 1/2 of an inch in length. One has a flat slotted head, and the other is too corroded for identification. The third is 21/32 of an inch long. The 18 fragments of door spring appear to be from the same item. Two of the staples are 2-1/4 inches long, and the third is 2 inches long. Two tacks measure 3/4 of an inch long, and two others are 7/8 of an inch long. A hollow aluminum tube may be a rivet of some sort. The variety of these items argues against the use of the area for any specific events using hardware.

Utilities Class

The electrical-ring terminal was used for connecting electrical wires. It was intended for a 12-10 wire and a #10 stud as indicated by an impressed mark.

An aluminum disc is embossed with the words "PAT DEC 2"; unfortunately, the year of patent was on the portion that had broken away. The artifact might have been used as part of an electrical system.

UNCLASSIFIABLE GROUP (Not included in Table 11)

There were 34 ferrous lumps. This finding represents a proportionately smaller amount than in the earlier deposits that is no doubt due to the shorter time iron artifacts had to deteriorate. In addition, there was one small piece of slate that could have been used for roofing or as a writing slate.

CONCLUSIONS

The post-1940 deposits are dated by their context with the ca. 1940 builder's trench against the Moore House. This stratigraphic dating is corraborated by the artifact assemblage, which includes plastic that was available in wide supply for the average consumer after the second World War. The high frequency of red asbestos siding further confirms an association with the repairs done in the 1940s. The post-1931 beer bottle and post-1935 "church key" can opener provide independent confirmation of the date.

The presence of much earlier dating artifacts such as the bottles, the cartridge shells, the ball clay pipe, and the children's toys are not so problematic as they might seem at first. The extensive excavation along the walls of the Moore House (Feature 36) probably resulted in the removal of a large portion of the deposits carrying earlier artifacts. Those cleaning up the site later then missed these small items.

THE MOORE HOUSE FRONT YARD: OPERATION 16

A slight depression recorded during an initial site visit, measuring 10 feet north to south and about 18 feet east to west, was noted 68 feet south of the house. Only clover grew inside the depression, and around it, a mixture of grasses and low-lying plants. It was decided that a narrow test trench through the depression was necessary to determine its cause.

Operation 16 consisted of a two feet wide, 16 foot long trench oriented approximately north to south through the center of the depression. The trench was divided into four 4 foot long units, labeled A-D from south to north (Figures 11 and 31). The trench was excavated by following the natural strata, and a distinction was made between the sod (stratum A, level 1) and the light silt on which it laid (stratum A,

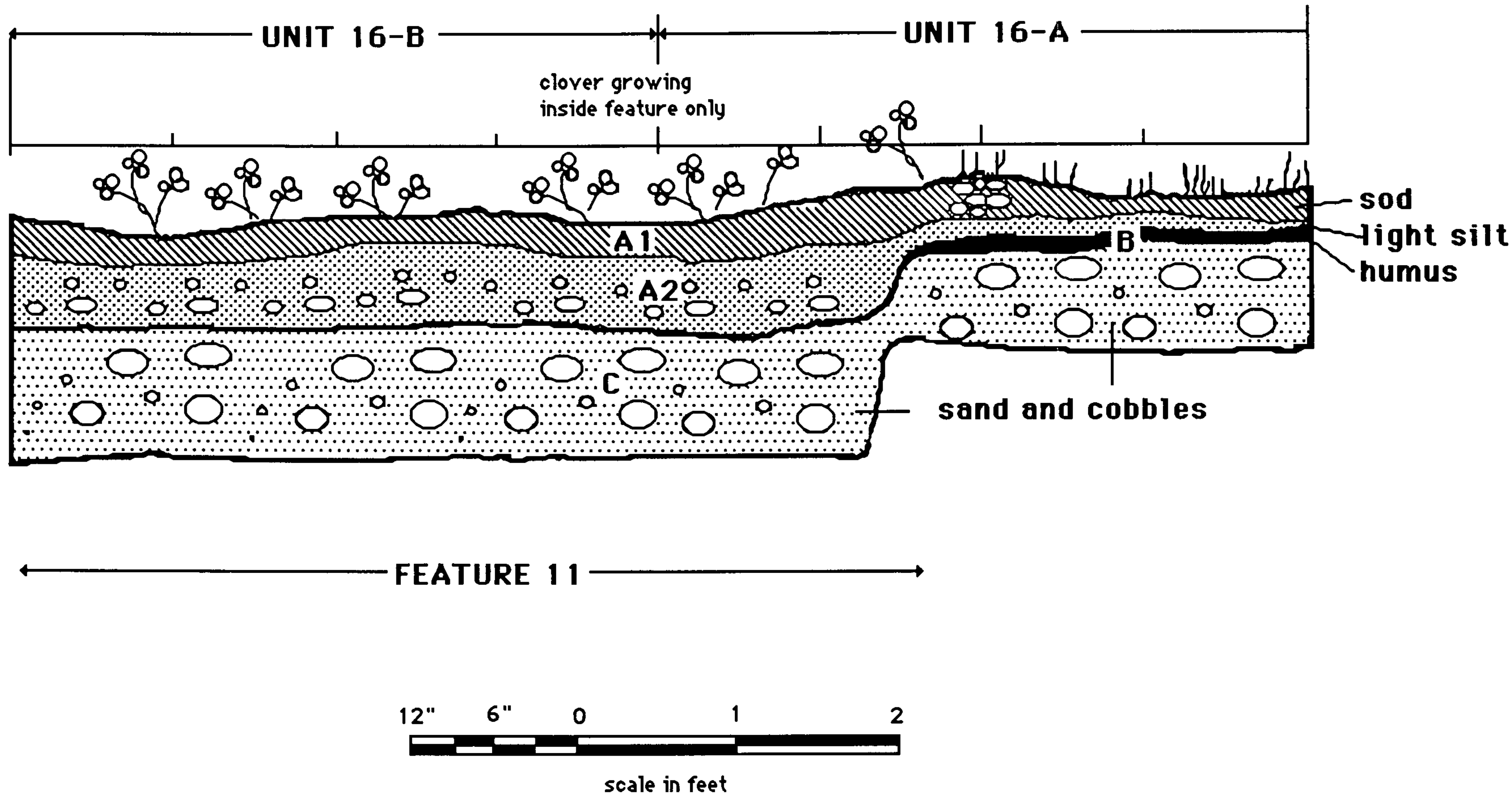


Figure 31: The stratigraphic profile of Operation 16. Looking east.

level 2). This silt appeared to be fill left over from the excavation of the depression. Stratum A-1 was excavated in all four units. Later, in the interest of saving time, it was decided to excavate only the southern two units (A and B).

Stratum B was a thin, dense organic layer, apparently the original ground surface. It had been penetrated when the depression was created. The depression itself was filled with a fine sandy organic deposit (Feature 11), which terminated about 9 inches below the ground surface. It was quite clearly the remains of a planting bed. This interpretation was confirmed by Georgette Kirmse (1985).

Stratum B rested on a sand and pebble substrate (stratum C), obviously alluvial in origin. A single nail and lump of ferrous oxide were the only cultural items found in the layer, and they were probably intrusive.

ARTIFACTS

Stratum B contained only two items, both bones (Table 13). One was from a large adult mammal, probably a cow (Bos tarsus). It is the lateral condyle and trochlea, broken away from the distal end of the right femur at the intercondylar fossa. The bone bears extensive puncture marks that suggests chewing by a carnivore (probably a dog). The other bone is the partial left femur of a juvenile, medium-sized mammal, possibly a domesticated sheep (Ovis aries). Both ends are missing; they seem to have been chewed off. This bone, too, may have constituted a dog's repast.

A photograph dating to the ca. 1920s (Figure 32) shows a small box-like structure in the vicinity of these excavations. It is possible that it is a dog house, thus accounting for the carnivore-chewed bones. The Kirmses had an airdale named Patty at that time (Georgette Kirmse 1988).

Table 13: Inventory of Artifacts in Operation 16.

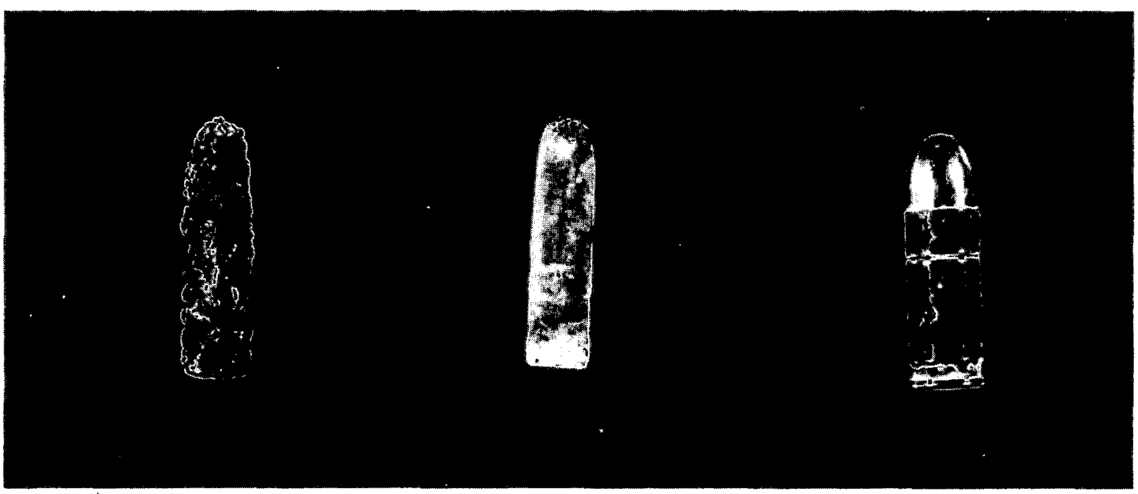
	Stratum A	Feature 11	Stratum B	Stratum C	TOTAL
DOMESTIC					
Food Storage					
bottle sherd					
clear glass	4	-	-	-	4
clear glass, aqua tint	-	1	-	-	1
can fragments, rolled rim, ferrous	-	2	-	-	2
wrapper, thin plastic	3	-	-	-	3
Beverage	-				
bottle sherds, glass					
brown	6	2	-	-	8
brown, stippled	2	-	-	-	2
bright green	1	-	-	-	1
dark green	-	1	-	-	1
crown brown	-	-	-	-	1
Food Serving	-				
cup sherd, burned whiteware	-	1	-	-	1
Food Remains	-				
large mammal bone, distal femur, chewed	-	-	1	-	1
med. mammal, long bone, chewed (?)	-	-	1	-	1
Pharmaceutical	-				
bottle glass sherd, clear-purple tint	-	1	-	-	1
PERSONAL					
squeeze tube top, cuprous	-	1	-	-	1
ACTIVITIES					
Children					
tea cup fragment, light blue opaque plastic	1	-	-	-	1
Gardening					
flower pot sherd, unglazed redware	7	1	-	-	8
Hunting/Warfare					
bullet	2	2	-	-	4
STRUCTURAL					
Window Glass					
sherd 0.070" thick	-	1	-	-	1
0.102" thick	-	1	-	-	1
Nails					
cut					
common, 8d	-	1	-	-	1
wire					
common, 2d	1	1	-	-	2
common, 5d	1	-	-	-	1
common, 6d	1	-	-	-	1
common, 8d	-	-	-	1	1
Materials					
brick fragment	-	1	-	-	1
Hardware					
bolt and washer, machine type, galvanized	1	-	-	-	1
screw, 1" wood type, ferrous	1	-	-	-	1
Utilities					
insulator fragment, aqua colored glass	-	1	-	-	1
UNCLASSIFIED	-				
Unknown	-				
ferrous lump	1	-	-	1	2
light green glass, rim sherd	-	1	-	-	1
	-				
TOTAL	33	19	2	2	56

Figure 32: A ca. 1920s photograph of the Moore House. Looking west. Note dog house (?) in front yard. Klondike Gold Rush NHP.

Nineteen items were found in the churned soil of Feature 11, the "plow zone" of the flower bed. As presented in Table 13, they comprise a variety of miscellaneous, non-diagnostic items. The low frequency makes statistical analysis very difficult. The only items of real interest are two spent steel jacketed bullets (Figure 33a), probably from a rifle that took .32 caliber cartridges. A copper-sheathed bullet of the same size (Figure 33b) was found in the sod overlaying the fill as well as an unfired .38 caliber cartridge (Figure 33c). Jack Kirmse received his first rifle when he was nine years old (ca. 1915) and "carried bullets everywhere on the place" (Georgette Kirmse 1988). He killed his first mountain goat on Dome Mountain when he was twelve years old (ca. 1918). At about this same time, Hazel Kirmse, his mother, built a play area in the front yard, which included a sandbox and a set of swings (Georgette Kirmse 1988). Jack may be the loser of these bullets and cartridges.

CONCLUSIONS

The low frequency and miscellaneous character of the artifacts recovered in this area emphasize their distance from a structure. The chewed bones suggest that a dog used the area, which may be related to the small box-like feature seen in a ca. 1920 photograph. The spent bullets and unused cartridge may suggest child's play in the yard. The depression itself was a flowerbed, as attested to by the 9 inches thick "plow zone" and a few flower-pot sherds. This excavation also showed that, in areas away from main household activity, organic deposition is very limited; undisturbed alluvial deposits were discovered only 3 inches below the ground surface.



a. b. c.

Figure 33: Weapon projectiles from Operation 16: (a) steel jacketed bullet; (b) copper sheathed bullet; (c) .38 caliber cartridge.

ASSEMBLAGE ANALYSIS

The discussions to this point have described the specific artifacts found at the site. Individual artifacts have some limited scientific value; it is somewhat interesting to know what kind of ceramic dishes the Kirmses used and to find rifle cartridges that probably were fired out of Captain Moore's gun. In addition, there is a great deal of information available from the artifacts when they are grouped and compared to other assemblages. In a very real sense, the whole is much greater than the sum of the parts.

This section deals primarily with two types of comparative data: the distribution of grouped artifacts through time, and the distribution of grouped artifacts through space. An analysis of the way types of artifacts cluster in space can yield important clues about what artifacts were associated with what specific, past activities and lead to elucidation of previously unsuspected activities taking place on the site. An analysis of the change in the composition of the assemblage through time can inform about corresponding changes in activities, technology, or social processes occurring at the site.

The artifacts from two deposits were eliminated from the following discussions. Those found in the imported fill could not be sourced so the activities contributing to its assemblage could not be determined. Furthermore, this fill could not be dated. Like the artifacts from the Feature 36 builder's trench, these pre-1940 assemblages could not be compared to those from the more precisely dated deposits.

THE CLASSIFIABLE ARTIFACTS

There are two basic types of artifacts on any historical archeological site, which result from two basic types of activities. Structural Artifacts, as defined here, are deposited during the construction, repair or demolition of a building. They have very little to do with the daily activities taking place within a structure; they are largely a function of the near presence of a building or other structure such as the fence. The Non-structural artifacts, on the other hand, tend to be deposited as a result of daily human activity on the site. They, more likely than not, appear in the ground because people lost them in the course of their daily routine, not during an occasional event such as the construction or removal of a building. This is not to say that none of the Structural Artifacts are lost during daily activities; most assuredly, an occasional nail was lost inside a house when a picture was taken down or a chair leg repaired. However, the number of these items tend to be limited compared to the large numbers lost as a result of construction, repair or demolition of the building itself.

A comparison of Structural and Non-structural artifacts behind the Moore House yields some interesting information about the processes occurring at the site as a whole. As can be easily seen in Figure 34, almost 73% of the artifacts in the backyard are in the Structural Group. It is interesting to note, however, that Structural artifacts comprise a larger proportion of the assemblage in the early three levels than in the latest.

Several factors might be responsible for this difference. The more construction, repair or demolition taking place at the site, the more Structural artifacts would be found and the greater the relative frequency of Structural artifacts. This appears not to be the case, however. As Figure 34 shows, the deposits with the greatest number of Structural artifacts have the lowest percentage compared to Non-Structural artifacts. Furthermore, when the deposits are ranked in order of the known amount of construction, repair or demolition taking place at the site, there is no correlation (Figure 35). The activity that is predicted to leave the most Structural artifacts was the removal of the cabin and construction of the north addition to the Moore House. Yet, the 1900-1914 deposits contain only about a third of the Structural artifacts of the recent deposits, about the same percentage as in the earliest deposits. Likewise for the

	STRUCTURAL		NON-STRUCTURAL		TOTAL
1940-1980	972	67.3%	472	32.7%	1444
1914-1940	420	79.1%	111	20.9%	531
1900-1914	258	80.6%	62	19.4%	320
1888-1900	182	79.1%	48	20.9%	230
TOTAL	1832	72.6%	693	27.4%	2525

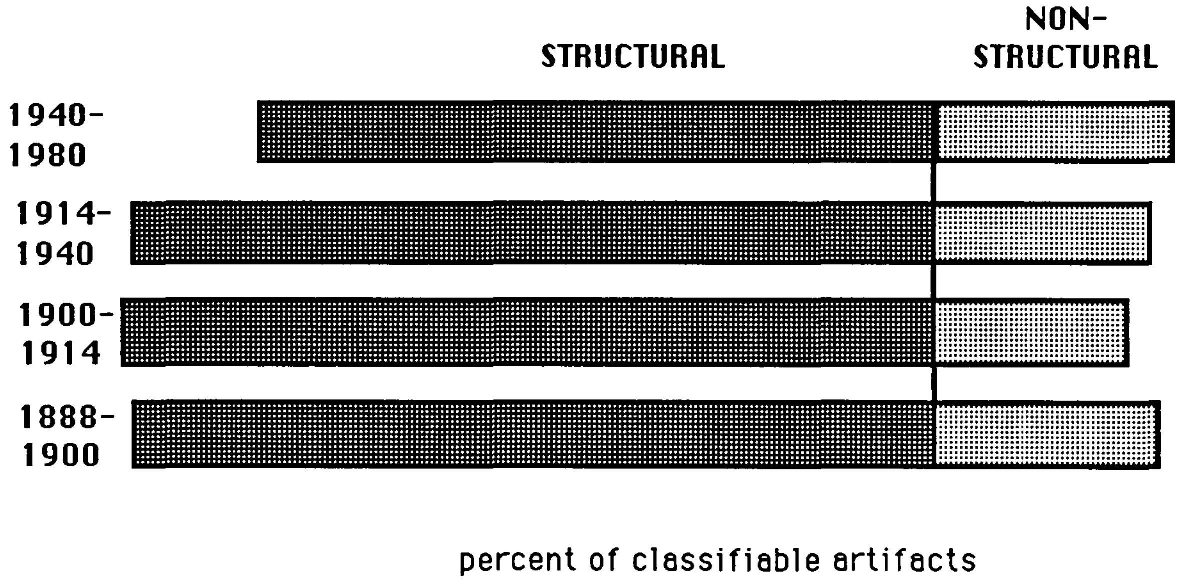


Figure 34: Temporal distribution of Structural and Non-Structural Artifacts at the Moore House.

date	#	%	kinds of activities	rank
1940-1980	972	67.3%	add siding	3
1914-1940	420	79.1%	minor repairs/fence built(?)/septic tank	4
1900-1914	258	80.6%	remove cabin/build north addition	1
1888-1900	182	79.1%	build cabin	2

Figure 35: Frequencies of Structural Artifacts and the kinds of structural activities taking place at the Moore House through time.

other deposits, there is no apparent correlation between the amount of known construction activities taking place at the site and the absolute frequency of Structural Artifacts. And there is only a weak correlation between the percent of Structural artifacts relative to all classifiable material and the amount of construction.

An alternative explanation for the decreasing relative frequency of Structural artifacts through time is the fact that the older the deposit is, the shorter the length of occupation while the deposit was being formed. The earliest deposit, for all intents and purposes, was only occupied continuously after 1896 or for 5 years. The next occupation was for 14 years, the next for 26 years, and the last for over 40 years. South (1978:146-147) suggests that a newly constructed site would have only architecturally related artifacts on it, and a kitchen dump would contain no architecturally related artifacts. Hence, he proposes that the longer a site is occupied, the greater the relative frequency of kitchen-related items. At the Moore House, it appears that this is indeed the case. The decreasing frequency of Structural artifacts may be a function of an increasing frequency of Non-Structural items. The longer the deposit collected artifacts, the greater is the percentage of Non-Structural items in the deposit.

This tendency can be seen more plainly in Figure 36 in which the absolute frequency of Non-Structural artifacts is plotted against the length of continuous occupation. The rule makes sense in that the number of artifacts falling to the ground (the artifact rain) during daily activities will be directly dependent on the amount of time that passes. However, the disposal of Structural artifacts tends to be the result of isolated events that generate large frequencies of items that are deposited all at once. Their number would be more dependent on the number of times these events occur, not the number of days or years that pass. Of course, the longer the period of time, the more likely that more than one construction, repair or demolition event would occur. In that sense, the overall frequency of Structural artifacts might be affected by the length of continuous occupation. The relative frequency of Structural artifacts,

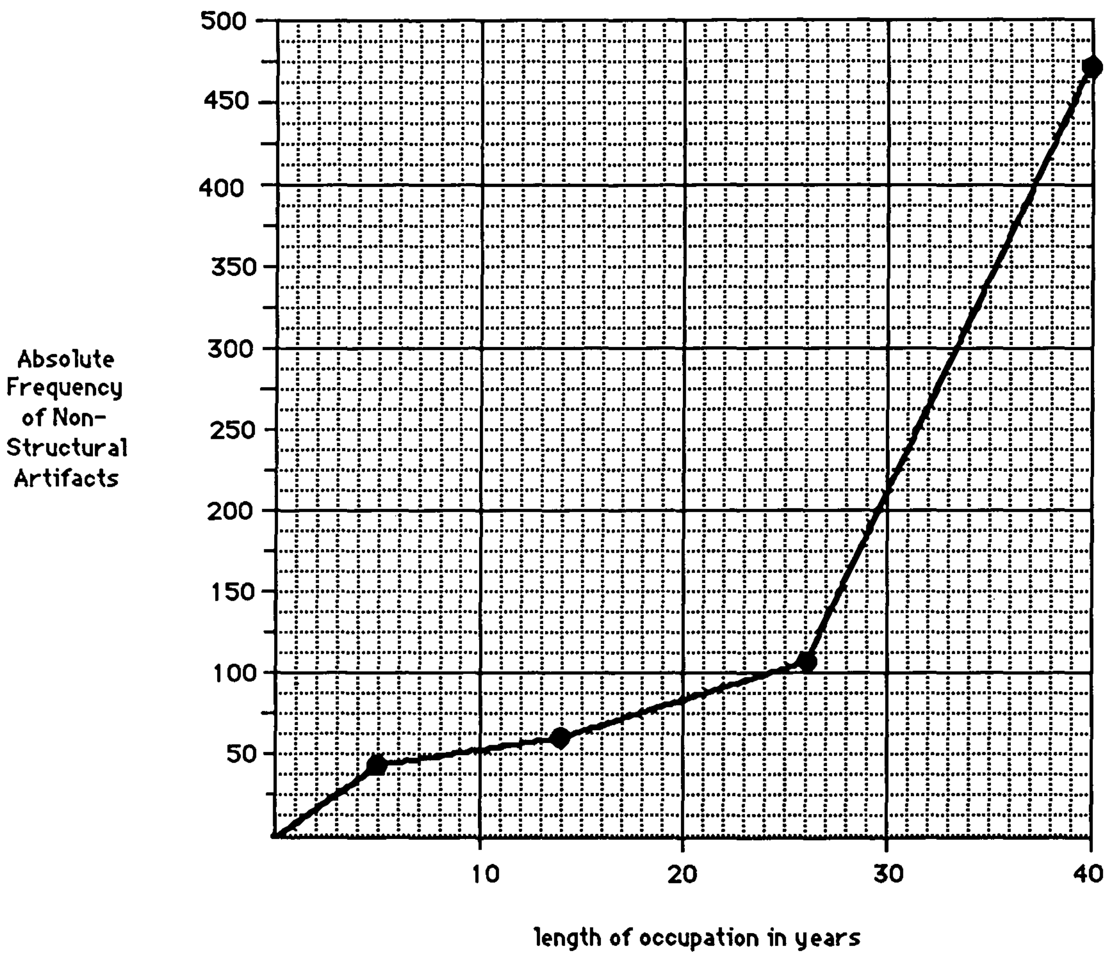


Figure 36: Graph of the absolute frequency of Non-structural Artifacts to the length of occupation at the Moore House.

nevertheless, would tend to decrease as that of Non-Structural items increases.

It should be noted that the increase correlated with length of occupation is not uniform. This attribute may be a result of the changing disposal habits of Euroamericans in the post-World War II years, discussed in more detail later.

In order to compensate for the effect of time on the grouped frequencies, the average number of artifacts that would have been falling to the ground in any one year was calculated by dividing the total artifacts found in a given deposit by the number of years it took the deposit to form (Figure 37). The year 1980 was chosen as a cut-off point for the latest deposit because the first season of excavation was conducted that year. The 1896-1900 period is inclusive of both beginning and ending years; all other periods are exclusive of the first year and inclusive of the last.

The greatest rain of Structural artifacts occurs in the 1888-1900 period; the recent period, which, based on the known construction activities taking place, should have the lightest rain is actually the next most abundant. It is interesting to note that the heaviest rain of all artifacts occurs during the most prosperous times in Skagway history--the gold rush period and the time since World War II. The first half of the century in Skagway witnessed first a local economic slowdown following the gold rush, then the Great Depression of the 1930s. The isolation of Skagway was likely to have exacerbated the dampening effects of the depression on the availability of goods. It is likely that during those times, people were more frugal with such items as nails and bottles and reused them for other purposes, which likely explains the differential rain of artifacts during the four periods. The relatively high proportion of Structural artifacts in the most recent period may be a result of unrecorded construction or repair events as explored shortly.

BEGINNING DATE	1940	1914	1900	1896
ENDING DATE	1980	1940	1914	1900
MEAN DATE	1960	1927	1907	1898
NUMBER OF YEARS OF OCCUPATION	40	26	14	5
STRUCTURAL	972	420	258	182
STRUCTURAL PER YEAR	24	16	18	36
NON-STRUCTURAL	472	111	62	48
NON-STRUCTURAL PER YEAR	12	4	4	10
TOTAL ARTIFACTS	1444	531	320	230
ARTIFACTS PER YEAR	36	20	23	46

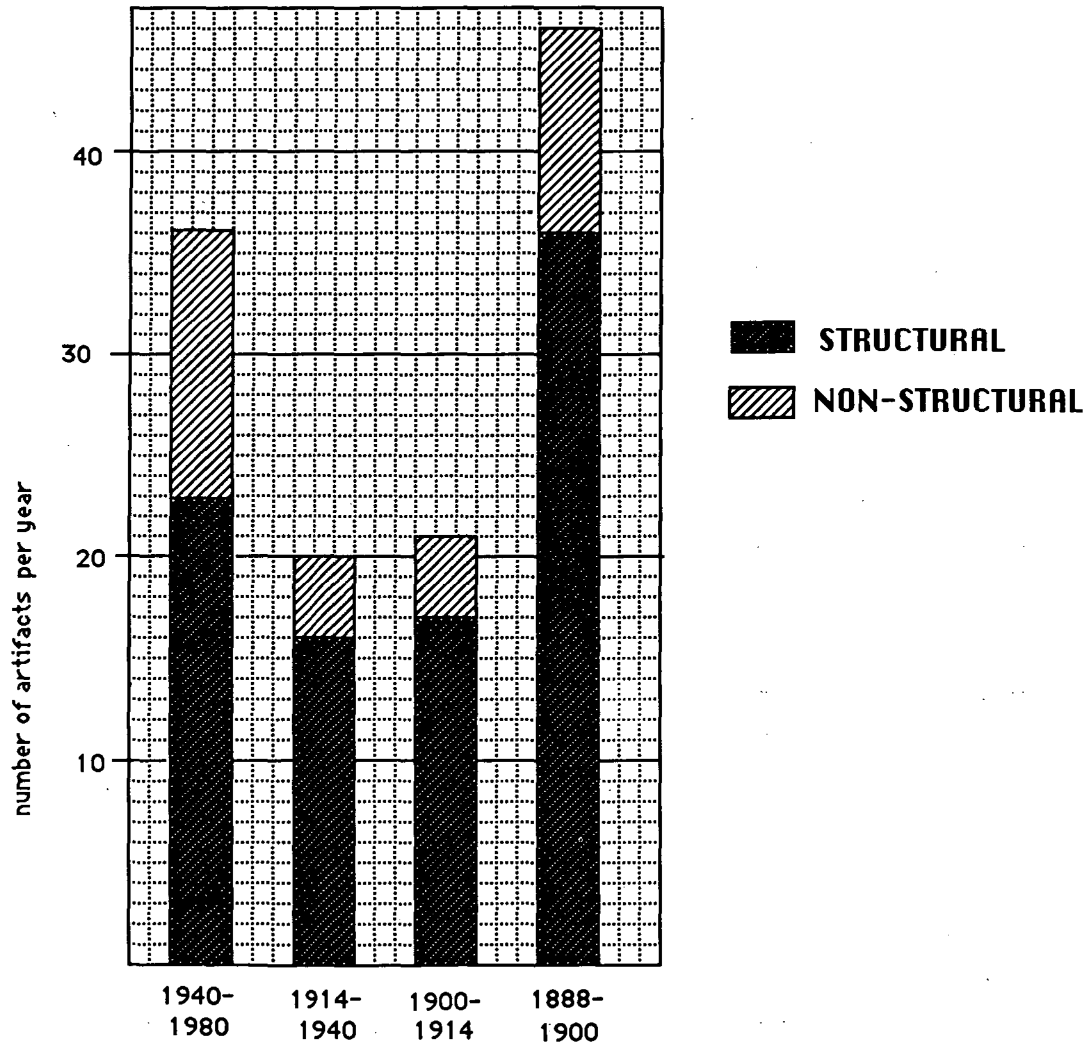


Figure 37: Rain of artifacts per year on each deposit at the Moore House.

The spatial distribution of artifacts also tends to vary significantly through time (Figure 38). In the early period, the artifacts are most densely clustered in the units that are 15 feet north of the house where the drainage trench for the cabin was found. They also appear to be relatively dense immediately next to the house, probably as a result of the construction of the north addition. In the middle period, 1914-1940, the artifacts are most dense above the cess pool. The depression caused by the sunken cover may have acted as an artifact "trap." Please note that the imported fills have been eliminated from this analysis. The pooling effect makes a spatial analysis of artifacts deposited in the middle period very difficult, and few meaningful conclusions can be drawn from its study.

Finally, the post-1940 deposits show a very interesting spatial distribution. Here the greatest concentration occurs north of the fence line; in fact, the artifact density contours appear to follow the creek bed alignment. It is very likely that the low area north of the fence was used to store rubble before being taken to a city dump, or it may even have been used for final dumping without further removal.

STRUCTURAL GROUP

As stated earlier, the Structural artifacts are items associated with a building or other structure such as the cess pool or fence. Three of the five classes occur in relatively high frequencies: the Window Glass, Nails, and Structural Materials. The Hardware and Utilities Classes are present in such limited amounts that for the purpose of this discussion they are not statistically important.

As with all artifacts, each of the Structural classes increase in absolute frequency with the length of time the deposit was formed. As shown above, this is a function of the length of time the deposits accumulated. The longer the occupation period, the more likely that construction, repair or demolition events were to occur. The relative

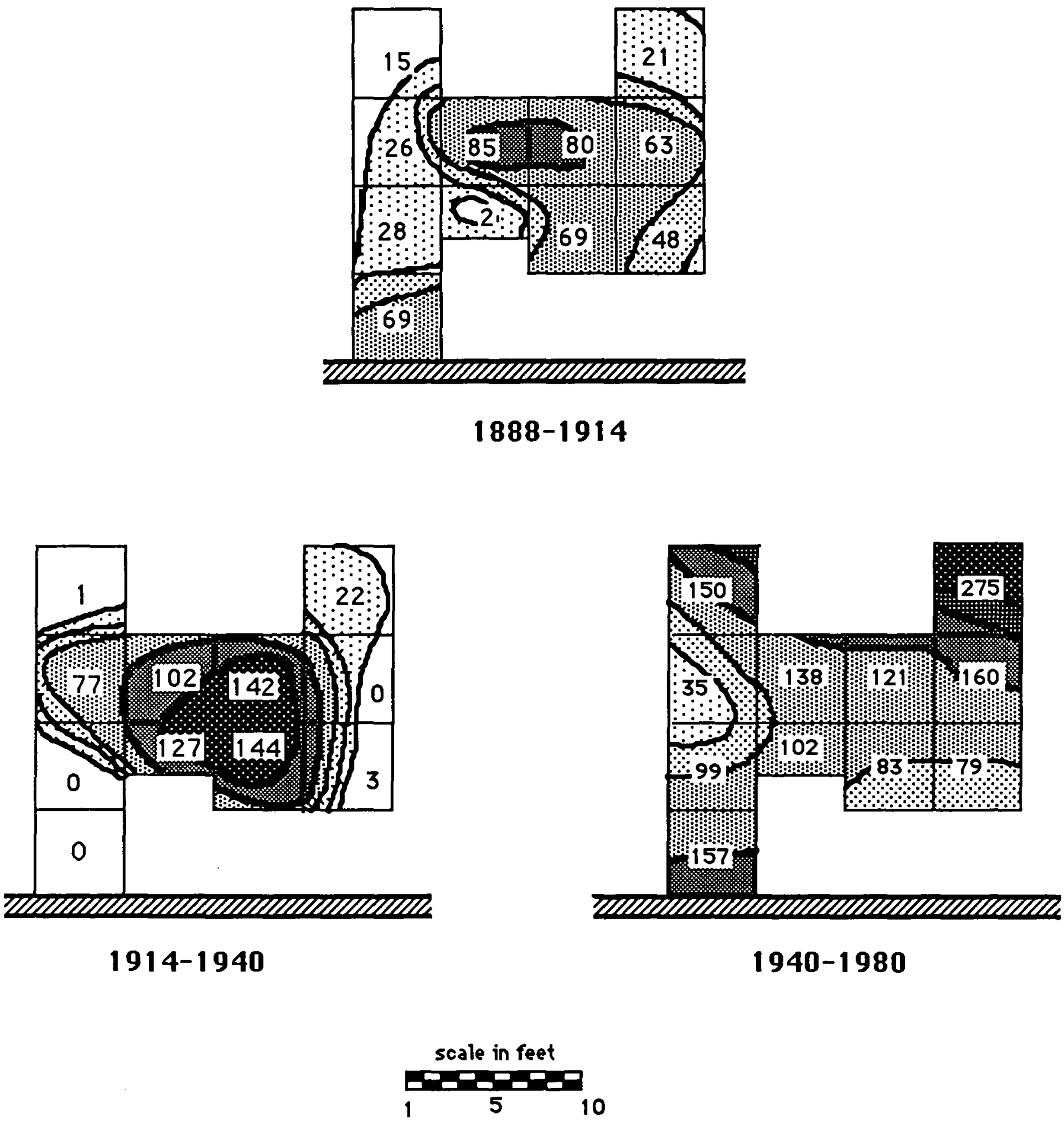


Figure 38: The spatial distribution of all classifiable artifacts in the three major deposits at the Moore House.

frequency of each class within the group, however, behaves somewhat differently (Figure 39).

Structural Materials Class

There is a consistent increase in the relative frequency of Structural Materials through time. This phenomena is probably a function of the types of materials being used in each time period. From 1888-1900, the major types of building material were wood logs, planks, shingles, and organic log chinking. It is presumed that the latter, if deposited, has since deteriorated in the wet ground. The larger logs and planks, unless they splintered, were unlikely to be manifested in the artifact assemblage. After 1900, however, the Moore House, built to the south, had brick chimneys, linoleum floors, painted trim, and, later, asbestos shingle siding. All are prone to fragmentation and hence could find their way into the ground. Table 14 is the inventory of Structural Materials found behind the Moore House and shows the variety of materials represented in the later deposits.

Figure 40 indicates the spatial distribution of the Structural Materials in each of the three major time periods. Note that, in the 1914-1940 period, units without any fragments at all have a relatively dense cluster in the 1940-1980 deposits. The spatial distribution of the Structural Materials makes little sense when viewed in these two temporal segments. However, when both deposits are combined, we see a distribution that has a great deal more meaning (Figure 41). It appears that most of the items cluster in three areas: in the central portion of the site in an area somewhat north and east of the cess pool location; next to the house where construction would likely be occurring; and to the northwest of the fence towards the alley. Most of these artifacts are red asbestos siding, linoleum fragments, and brick fragments. In an interview, the Kirmses (1985) indicated that there was a gate in the fence north of the center of the house. The clustering of Structural Materials suggests that when

CLASS	1940-1980	1914-1940	1900-1914	1888-1900
Window glass	19.2%	16.4%	15.5%	21.8%
Nails	47.9%	59.0%	74.0%	74.2%
Hardware	3.5%	3.3%	1.6%	1.6%
Materials	27.5%	19.5%	7.8%	2.7%
Utilities	1.9%	1.7%	1.2%	0.0%
TOTAL NUMBER	972	420	258	182

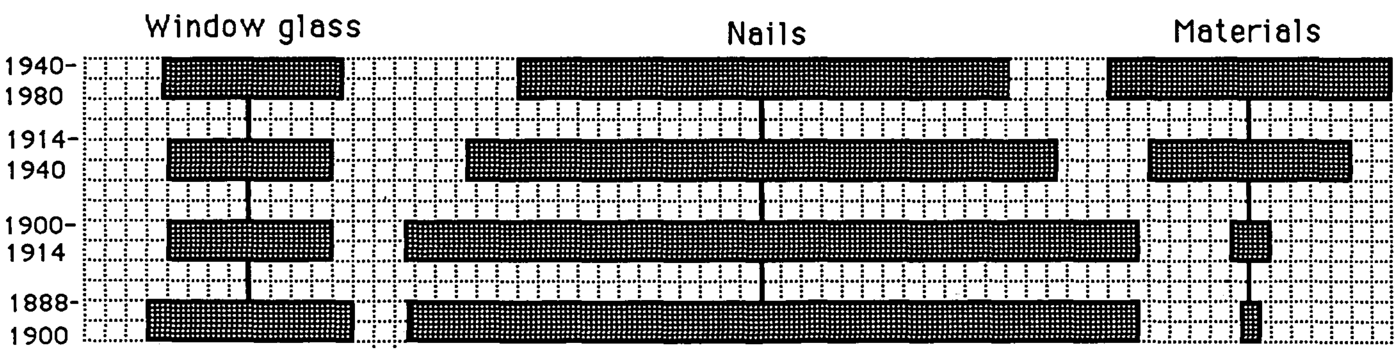


Figure 39: Temporal distribution of the Structural classes at the Moore House.

Table 14: Inventory of Structural Materials, Operation 17.

TYPE	DESCRIPTION	1940-1980	1914-1940	1900-1914	1888-1900	1940 fill	Builder's trench	TOTAL
brick								
	burned fragments	7	6	-	-	6	-	19
	plain fragments	115	17	4	-	8	16	160
insulation, fibrous		1	1	-	-	4	-	6
linoleum								
	black and white	-	5	-	-	-	-	5
	black, buff, beige, brown	-	4	-	-	-	-	4
	black, white and brown	4	-	-	-	-	-	4
	black, white and peach	-	12	-	-	-	-	12
	blue and white	-	1	-	-	-	-	1
	pink, yellow and white	2	1	-	-	-	-	3
	salmon, buff and white	-	1	-	-	-	-	1
	white	-	-	-	-	1	-	1
	white, yellow, red and brown	-	-	-	-	1	-	1
	unspecified colors	9	-	-	-	-	-	9
mortar								
	plain	6	-	1	2	1	-	10
	burned	-	-	6	-	-	-	6
paint chips								
	bluish green	10	1	1	-	-	-	12
	green	6	-	1	-	-	-	7
	green over black	2	-	-	-	-	-	2
	red over green	1	-	-	-	-	-	1
	white	-	1	-	-	-	-	1
paper, heavy, painted green		1	-	-	-	-	-	1
plaster		-	-	-	1	-	-	1
sheeting, plastic		2	-	-	-	-	-	2
siding,asphalt								
	green	4	1	-	-	-	-	5
	green painted	1	-	-	-	-	-	1
	red	71	20	-	1	71	113	276
	white	0	1	-	-	-	-	1
tar paper		6	5	-	-	10	77	98
tile, hard red ceramic		-	-	1	-	-	-	1
wood, shaped								
	painted green	5	-	-	-	2	-	7
	painted green and black	3	-	-	-	-	-	3
	painted red	1	2	-	-	-	-	3
	painted white	2	1	-	-	-	-	3
	unpainted	8	2	6	1	8	2	27
TOTALS		267	82	20	5	112	208	694

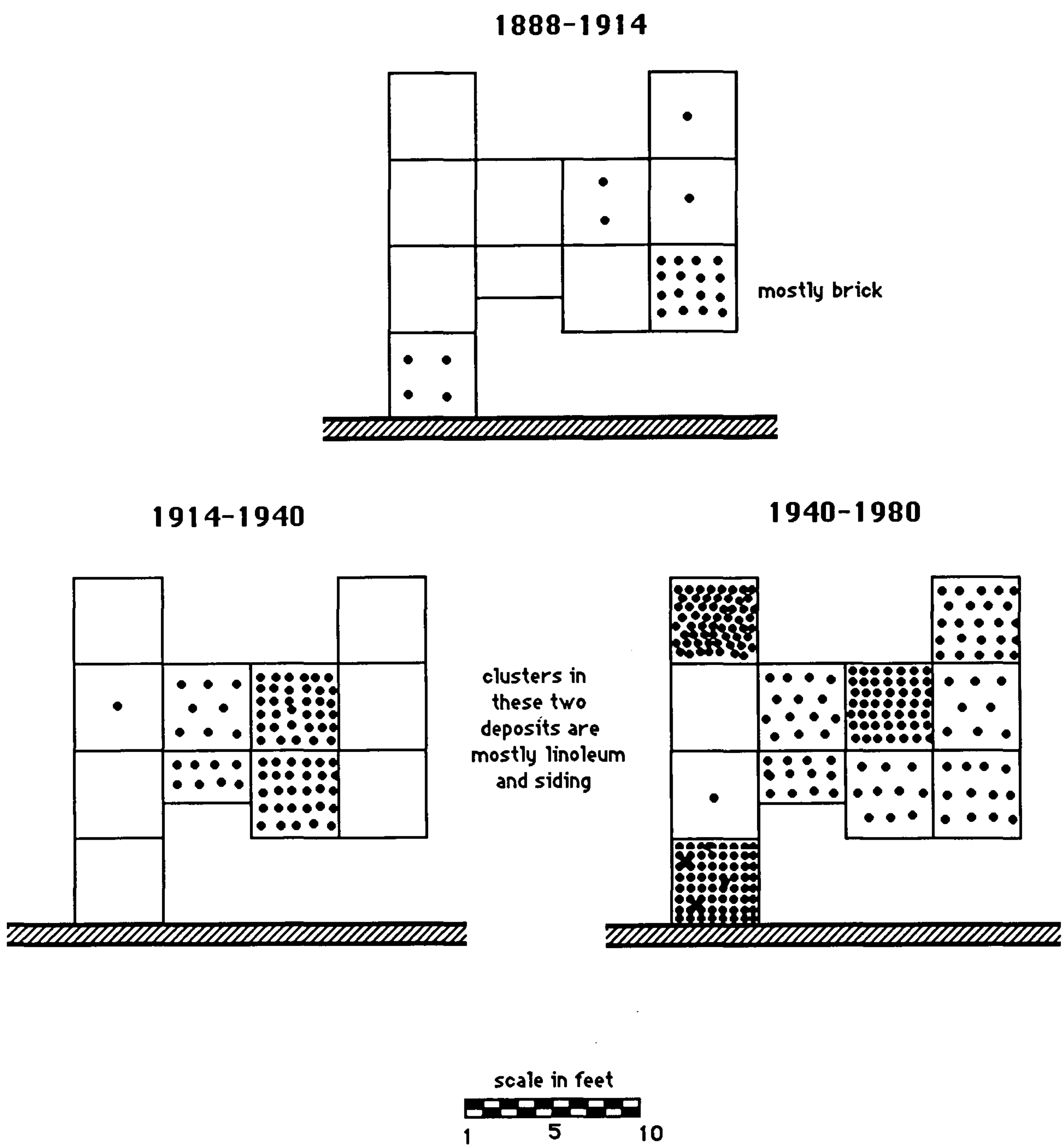


Figure 40: Spatial distribution of Structural Materials in the three major deposits at the Moore House.

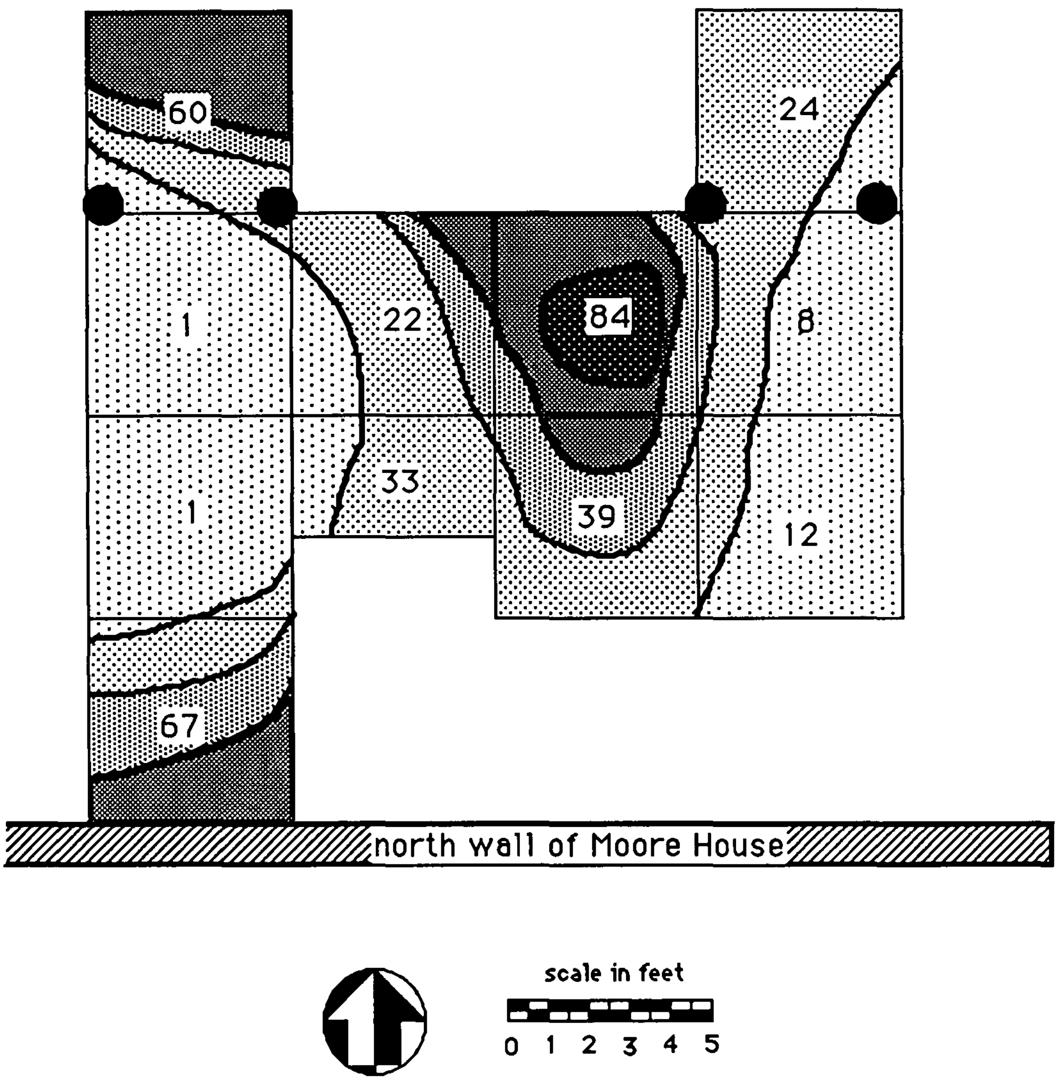


Figure 41: Spatial distribution of all Structural Materials at the Moore House in the post-1914 deposits.

repairs were being done to the house, probably in the 1940s, the left-over or waste materials were temporarily dumped just to the south of the gate, then carried to the northwest, probably to a truck parked in the alley behind the Moore Cabin where they were hauled away.

This repair work probably took place about 1940 at the juncture between the 1914-1940 and 1940-1980 deposits, thus accounting for the peculiar clustering seen when the two deposits were separated. The work probably included the replacement of linoleum on the floors in the Moore House as well as the addition of the red siding to the house.

Returning to the earliest deposits (Figure 40), there is a clustering of Structural Materials somewhat southeast of the later cluster. This cluster is composed largely of brick and mortar fragments and probably represents a similar temporary dumping of scraps left when the west chimney was added in 1914.

Note in Table 14 that one fragment of red asbestos siding is in these lower deposits, indicating that some mixing has occurred. However, it appears to be minimal and probably does not affect the generalized tendencies towards artifact clustering.

Returning to Figure 39, it becomes clearer why there is a dramatic increase in the relative frequency of Structural Materials through time at the Moore House. The renovations that the Kirmses undertook in about 1940 involved the use of materials that fragmented easily, especially the red asbestos siding and linoleum. The left-over pieces and the old linoleum were probably temporarily stored in the back yard before being hauled to the city dump. The 1914 renovations, on the other hand, involved the use of the more durable, less friable materials such as brick and mortar. These left fewer remains but, like the materials from the later deposits, were stored in the back yard before being removed.

Nails Class

Of the Structural artifacts, nails tend to be most representative of structural activities on a historical archeological site. They are ubiquitous, inexpensive, and easily lost (especially when a carpenter is working on a ladder or scaffold). And they are more likely to stay where they fall than larger or lighter items. Their types and sizes can be indicative of the types of detailed activities involved during construction, repair or demolition.

As can be seen in Table 15, the absolute frequency of nails increases through time as the frequency relative to all other Structural artifacts decreases through time. Neither appear to correlate with the intensity of construction activities known to have occurred on the site. In particular, the 1914-1940 period has a greater percentage of nails than might be expected.

Calculation of the nail rain (average number of nails lost in each deposit per year of continuous occupation) compensates for the effect of the length of time the deposit took to form (Table 16). Once this calculation is made, the correlation between construction intensity and nail frequency is much closer. The nail rain is high during the two periods of greatest construction activity: i.e., the building of the cabin, and its removal, along with the subsequent construction of the north wing of the house. A low nail rain occurred in the later periods when only minor repairs and renovations were taking place. At least at the Moore House, there is a correlation between the average number of nails deposited per year of continuous occupation and the intensity of construction, repair or demolition activities.

Despite the fact that the absolute frequency of nails increases through time, both the percentage of nails to other Structural artifacts and to the nail rain decrease through time. This finding demonstrates the value of using compensatory statistics when doing comparative studies.

Table 15: The temporal distribution of Nails relative to all other Structural artifacts in Operation 17.

DATE	#	%	KINDS OF ACTIVITIES	rank
1940-1980	466	47.9%	add siding	3
1914-1940	248	59.0%	minor repairs/fence built(?)/septic tank	4
1900-1914	191	74.0%	remove cabin/build north addition	1
1888-1900	135	74.2%	build cabin	2

Table 16: Rain of Nails at the Moore House.

time of deposit	number of years	total nails	nail rain	construction rank
1940-1980	40	466	12	3
1914-1940	26	248	10	4
1900-1914	14	191	17	1
1888-1900	5	135	27	2

Evaluation of the spatial distribution of the nails sheds further light on their use. Figure 42 shows the horizontal distribution of all the nails in all time periods. There are two clusters 15 feet north of the house in the location of the cabin drainage trench. In addition, nails are slightly more dense near the house and on the northeast portion of the site. When the nails are broken out by time period, their patterned scatter across the site is more intelligible (Figure 43). In the cabin period, it appears that the nails are distributed along the west side of the original cabin location and in the trench along the north side. It is notable that they are least dense north of where the door would have been located.

In the deposits of the early twentieth century, the cluster shifts to the north and east and is difficult to explain in terms of known historic events on the site. However, it does tend to coincide with a cluster of structural materials, largely brick and mortar, and may have resulted from the piling of construction debris in that location.

The 1914-1940 deposits clearly show the influence of the cess pool as discussed earlier. However, the presence of the fence line is more clearly seen here than before. This finding reinforces the idea that the fence found in the archeological record was not added until after the Kirmses acquired the house.

The most recent deposits cluster northeast of the fence line and also near the house, where the siding was added. This patterning is very different than that of the Structural Materials. Perhaps waste lumber with nails attached was dumped into the abandoned creek bed after about 1940.

More specific estimations of nail use become apparent when the sizes of nails are compared for each time period. Nail size is measured in pennyweight (d). The term "penny" originated in Medieval England, where hand-wrought nails were sold by the hundreds. For instance, a silver pence (d) bought one hundred 1d nails (Nelson 1968:2). By the nineteenth century, machine technology permitted larger batch production,

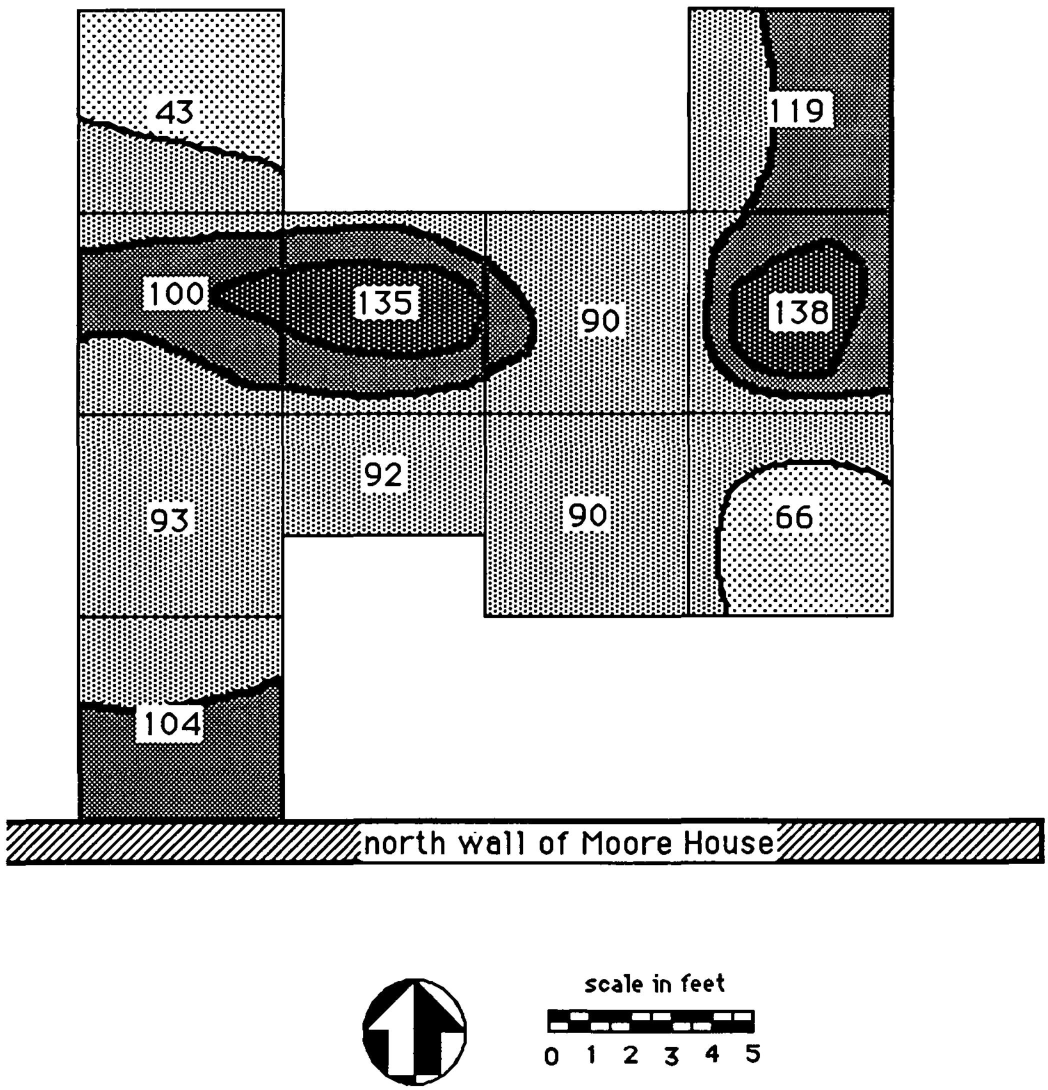


Figure 42: Spatial distribution of all nails at the Moore House.

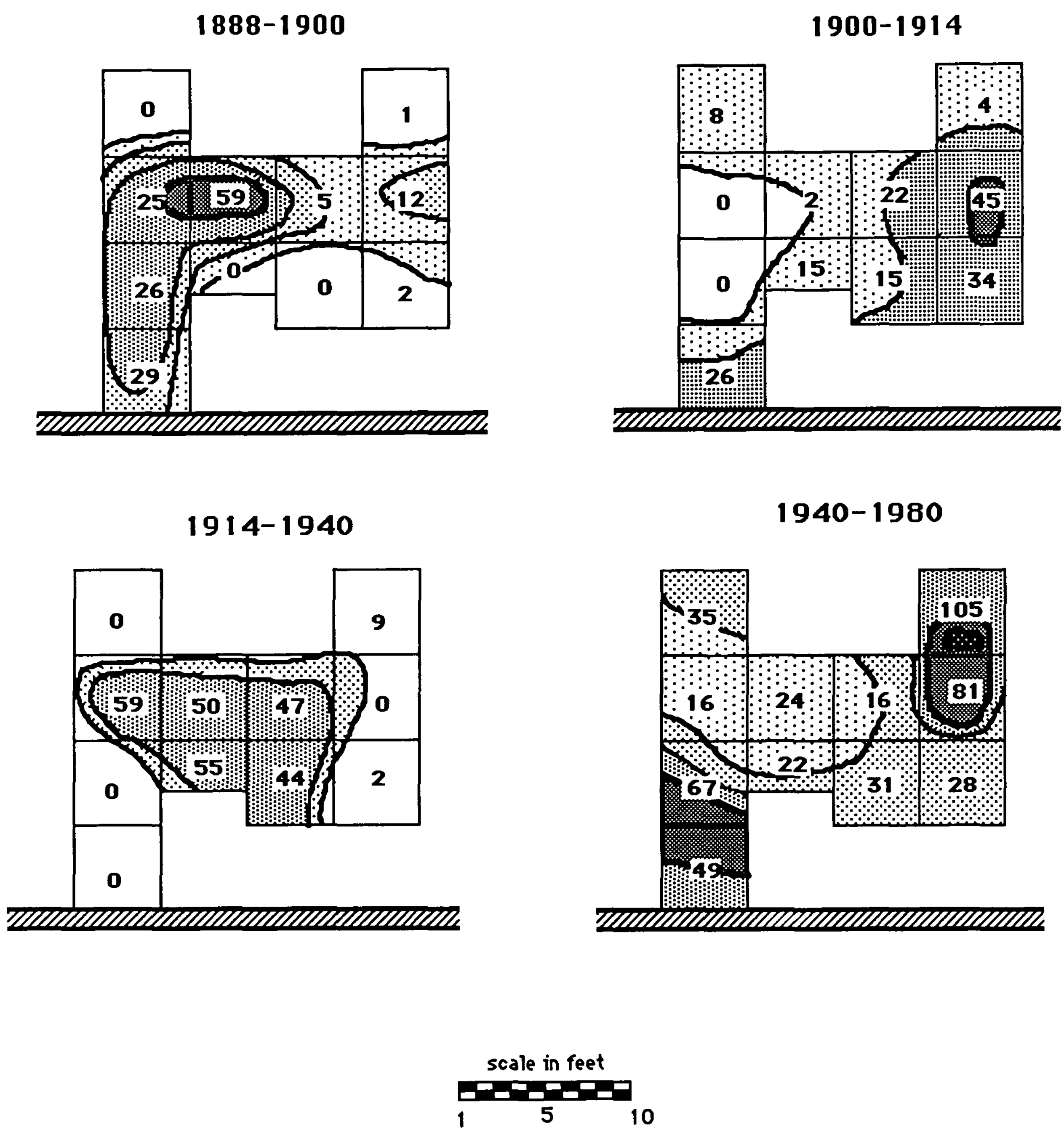


Figure 43: Spatial distribution of all nails in each of the four deposits at the Moore House.

and it was no longer efficient to count nails out for the customer. Instead, they were sold by weight, and sized accordingly. By the new standards, a thousand 1d nails weighed one pound, a thousand 2d nails weighed two pounds and the same number of 60d nails weighed 60 pounds. Today, the 2d nail is only 1 inch long, the 8d nail measures 2-1/2 inches, and a 60d nail is 6 inches long. The fine 2d nails are more useful for finishing tasks, the medium-sized 8d nails for utilitarian type carpentry, and the large 12d to 60d for heavy, structural framing.

Figure 44 shows that, in the most recent deposits, there is an almost normal distribution about the medium-sized 8d nails. This trend might be expected during a period of moderate repair activities to the house and fence.

In the 1914-1940 period, however, there is a bimodal distribution, indicating two different nail uses occuring at the site. The 1d-2d nails represent a greater proportion of the nail assemblage than the 7-8d nails. There appears to be a concentration of the small nails (1d-4d) near the fence, and large nails tend to be somewhat more frequent over the cess pool (Figure 45).

The normal distribution is also manifest in the 1900-1914 deposit. In the spatial analysis of 8d nails, we see that they cluster near the house (Figure 46); they were probably associated with the construction of the north addition.

In the earliest deposit, the distribution is greatly skewed to the small sizes (Figure 44). These are distributed where the west side of the cabin would have been originally and in the drainage trench along the north; they are clearly associated with the cabin (Figure 47). Since the cabin had no siding, the small nails probably are associated with the window frame on the west side, the small shed-like addition placed on the northwest corner in 1898 (Figure 5) and the shingles which were placed over large gaps between logs on the north side (Figure 20).

size	1940-1980 #	%	1914-1940 #	%	1900-1914 #	%	1888-1900 #	%
1-2d	15	42.%	55	25.9%	10	10.5%	22	22.7%
3-4d	43	12.0%	35	16.5%	14	14.8%	45	46.4%
5-6d	80	22.3%	29	13.7%	15	15.8%	8	8.2%
7-8d	127	35.4%	50	23.6%	36	37.9%	9	9.3%
9-10d	58	16.2%	22	10.4%	8	8.4%	4	4.1%
12-20d	25	7.0%	12	5.7%	10	10.5%	5	5.2%
30-60d	11	3.1%	10	4.7%	2	2.1%	4	4.1%

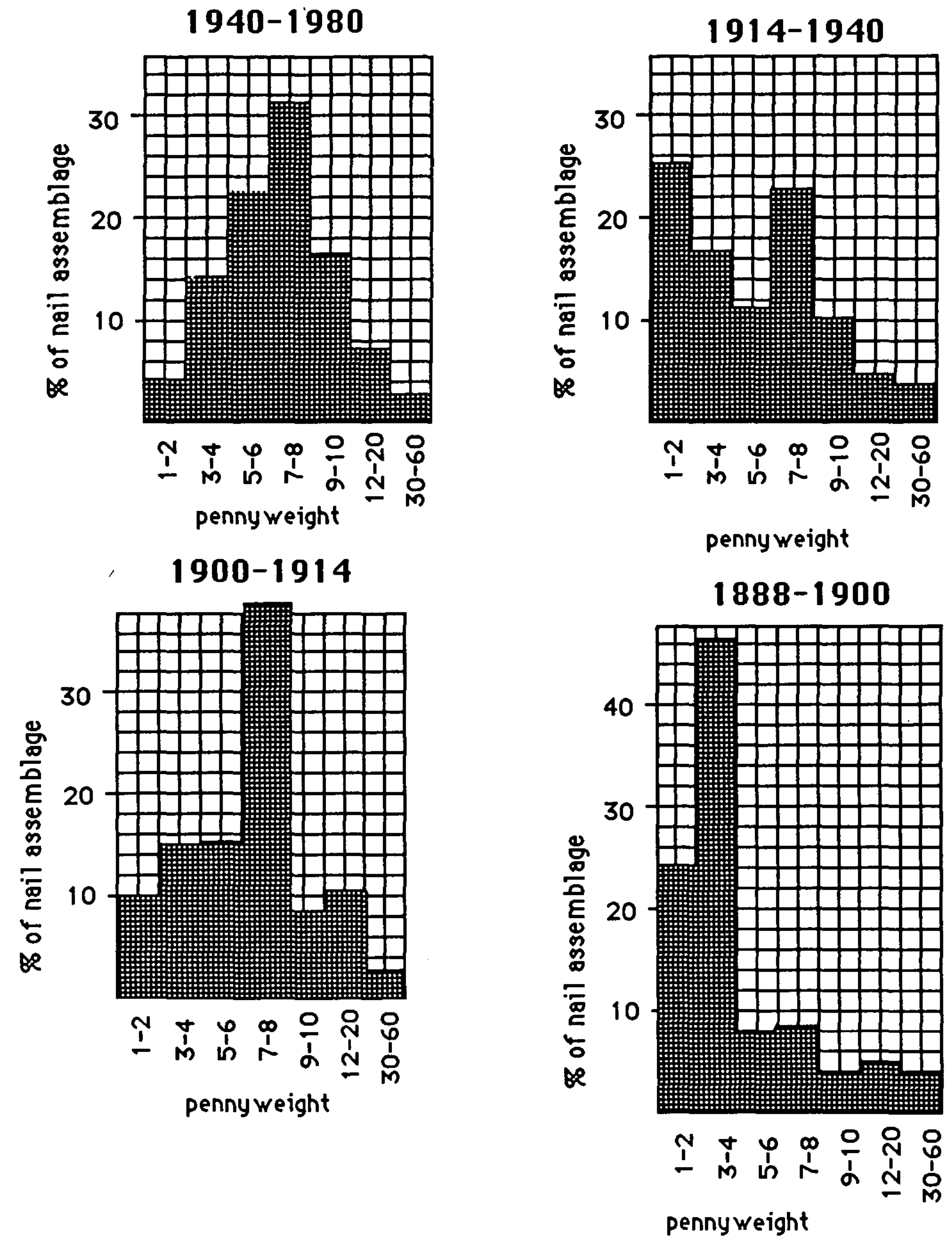
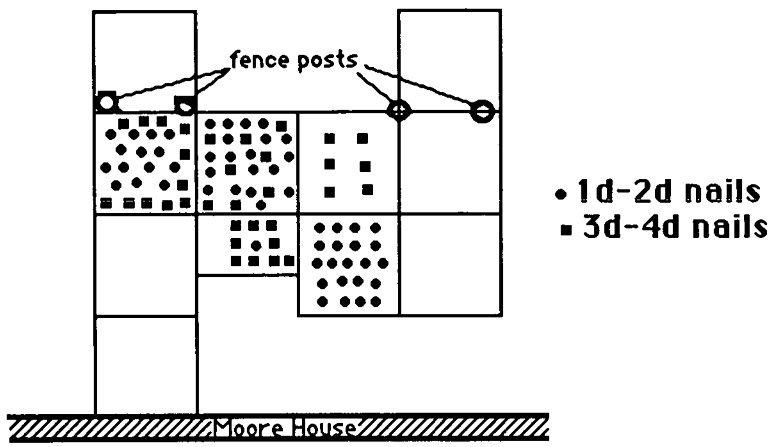


Figure 44: Size distribution of nails in Operation 17.



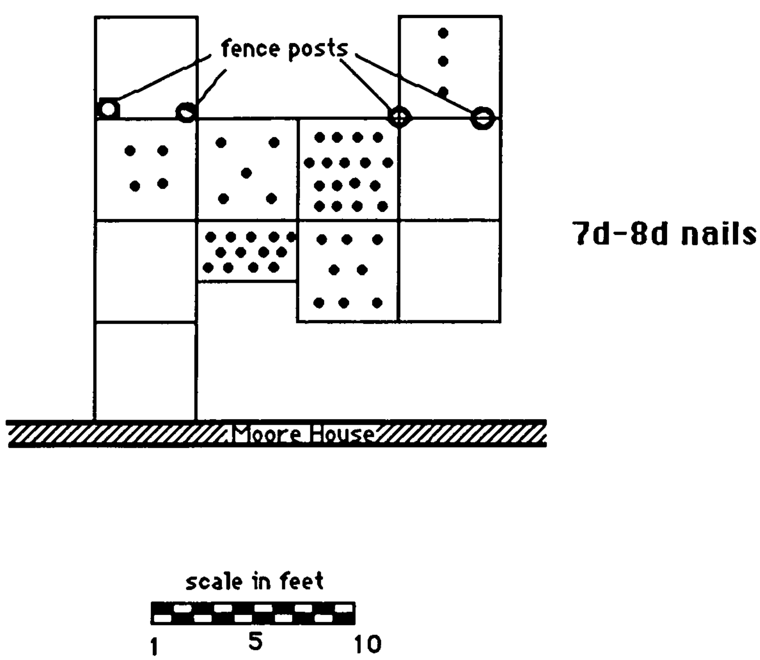
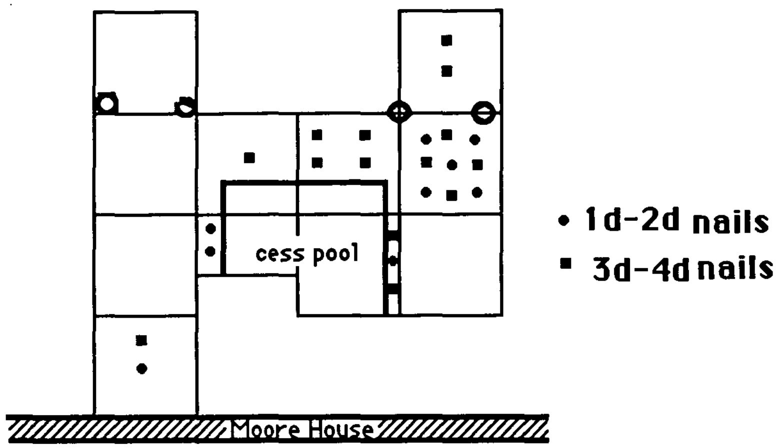


Figure 45: Spatial distribution of 2d, 4d and 8d nails in the 1914-1940 deposits at the Moore House.



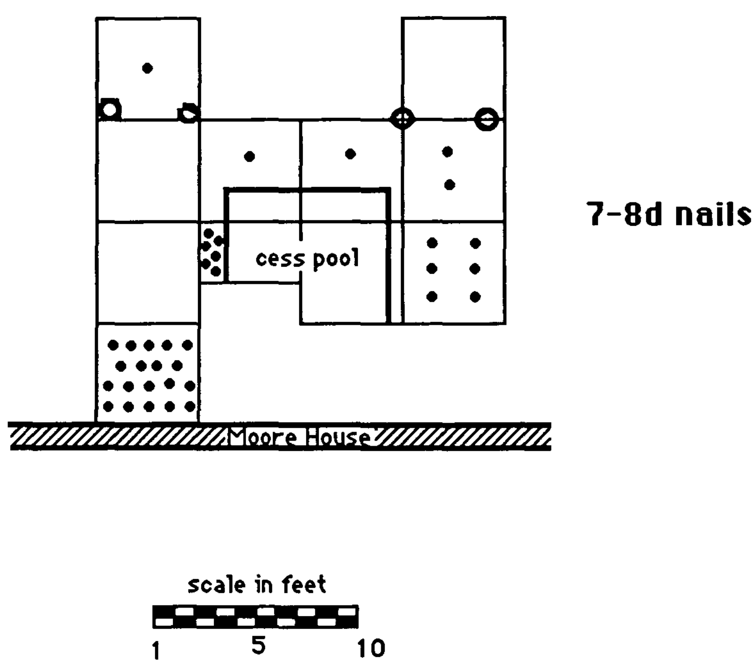


Figure 46: Spatial distribution of 2d, 4d and 8d nails in the 1900-1914 deposits at the Moore House.

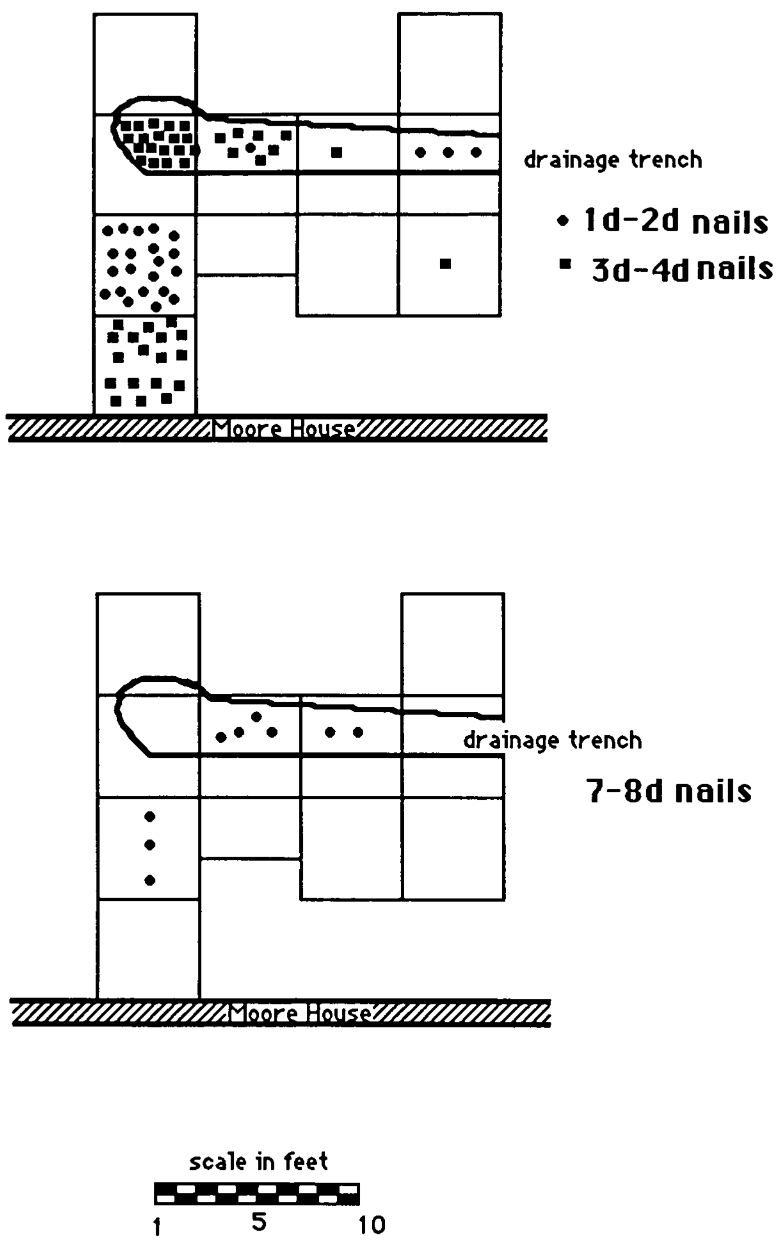


Figure 47: Spatial distribution of 2d, 4d and 8d nails in the pre-1900 deposits at the Moore House.

The cabin's presence can be seen even more clearly when the distribution of cut and wire nails are compared at the Moore House site. As might be expected, the relative frequency of cut nails decreases dramatically through time (Table 17). The sale of wire nails exceeded that of cut nails in 1896 (Fontana and Greenleaf 1962:49-50), just in time for the big rush to Alaska. After that time, cut nails were used mostly for special purposes such as to attach wood to mortar or bricks. There was a short resurgence in interest in cut nails in 1900 when it was found that the heads of wire roofing nails used ten years before were corroding off; the 1901 invention of the galvanized roofing nails with large heads, like those used today, solved the problem (Fontana and Greenleaf 1962:48-50). It is not surprising, then, to find a larger percentage of cut nails in the deposits associated with the cabin than in the later deposits.

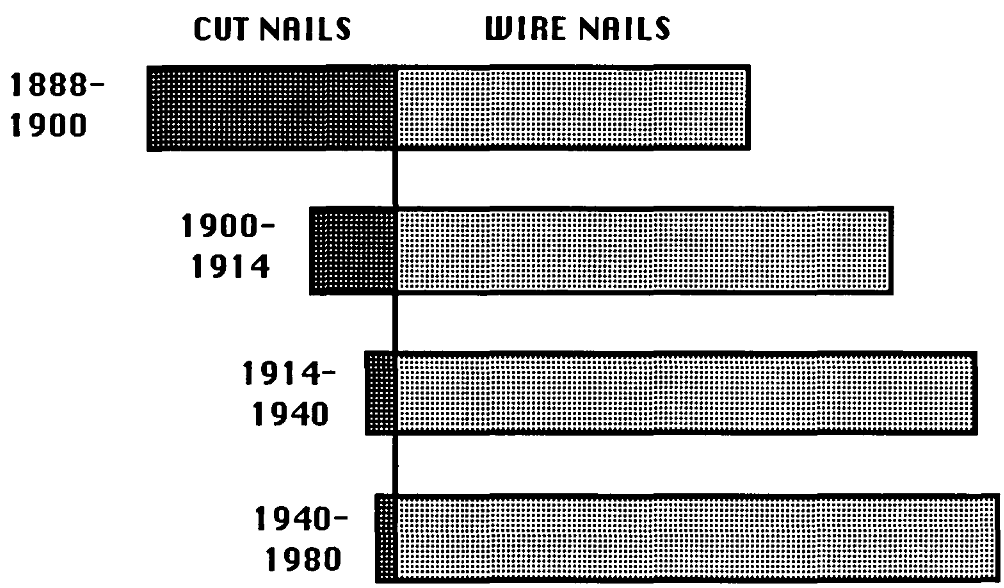
The spatial analyses of cut and wire nails in the cabin deposits (Figure 48) show that most of the cut nails were being used along the north side of the cabin, with the wire ones falling towards the west. The framing of the west window was probably done with wire nails. It is interesting to note that a number of shingles had been attached to the north side of the cabin (Figure 20), possibly to cover some large cracks between the logs in that location. The small cut nails in the drainage trench appear to coincide in location with these shingles, suggesting that the shingles were placed on the cabin while it was in its original location.

In the 1900-1914 deposits (Figure 49), the cut nails coincide with a cluster of brick and mortar fragments, just to the south of the fence in the northeast corner of the site. Since cut nails were used largely for the attachment of wood to brick or concrete after 1900, the appearance of the two materials together is not surprising. This fence location is probably where construction materials were stored when one of the brick chimneys was added to the house in 1901 or 1914.

In summary, nails on the site were used in a number of different ways. When the cabin occupied the site, cut nails were used to attach

Table 17: Temporal comparison of cut and wire nails at the Moore House.

	cut		wire		total
1888-1900	54	40.0%	77	57.0%	135
1900-1914	25	13.1%	156	81.7%	191
1914-1940	13	5.2%	235	94.8%	248
1940-1980	16	3.4%	450	96.6%	466



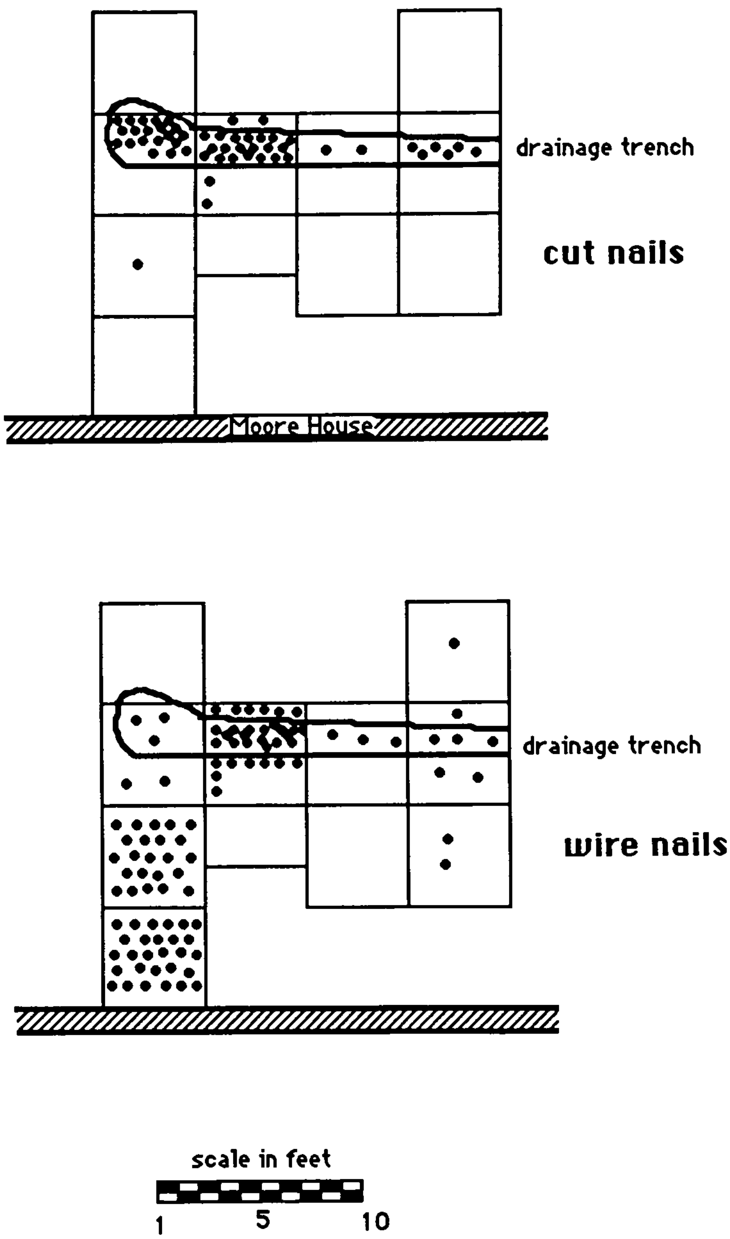


Figure 48: Spatial distribution of cut and wire nails in the pre-1900 deposits at the Moore House.

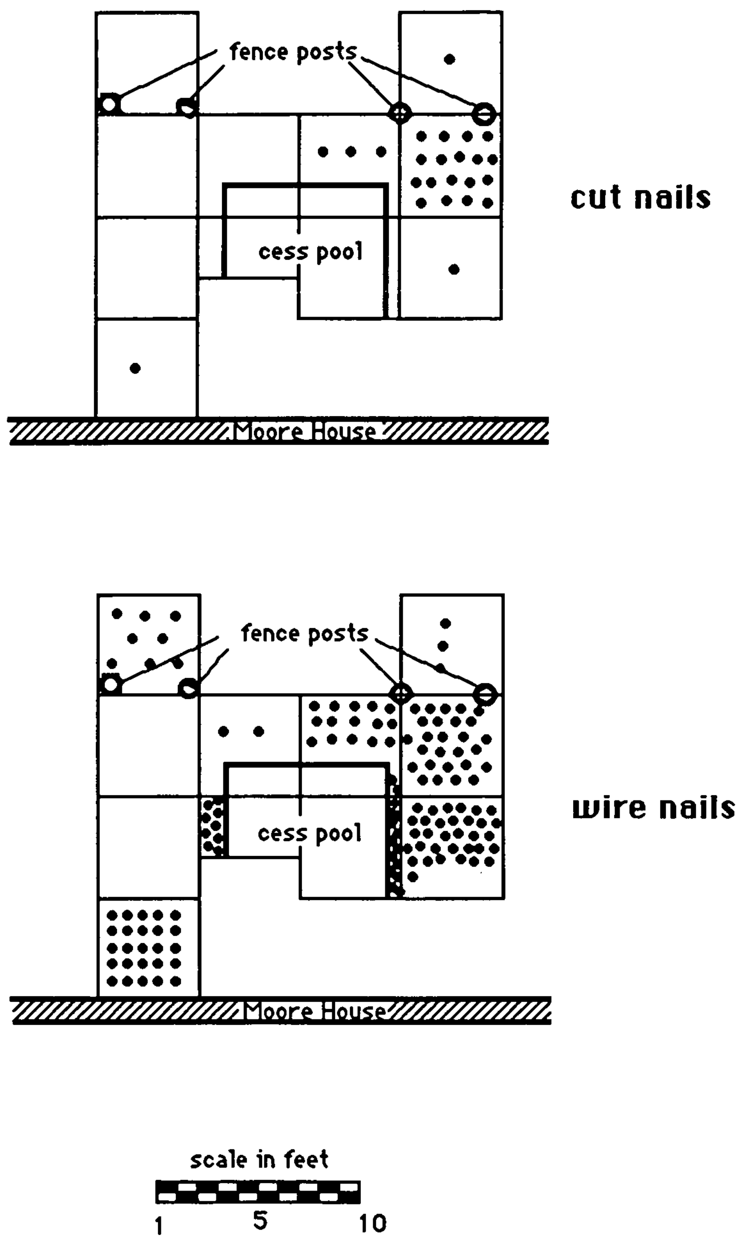


Figure 49: Spatial distribution of cut and wire nails in the 1900-1914 deposits at the Moore House.

shingles to the roof and to cover gaps between the logs; small wire nails were used to attach the window frame on the west side. The relative lack of nails in the unit where the door would have been suggests that the door was constructed elsewhere before being mounted into the frame.

Between 1900 and 1914, cut nails cluster with brick and mortar, indicating the storage of materials for the construction of one of the chimneys. The fence, indicated by the post holes, was constructed in this period, which is evidenced by the small 4d nails used to attach the pickets. Larger, 8d nails were used to construct the north addition of the house.

Fence repairs in the 1914-1940 period are evidenced by the clustering of nails along the north fence line. As a result of the collapse of the cess-pool cover, nails may also have been concentrated in the center of the excavation area.

Finally, nails in the most recent period are associated with two events: the attachment of the red asbestos siding to the house and the dumping of construction debris north of the fence in the abandoned creek bed.

Window Glass Class

The presence of window glass on an archeological site indirectly betrays the presence of non-extant structures by the implication that windows must be present before the glass could be broken, especially in a sheet trash deposit such as that behind the Moore House. Unlike the Structural Materials and Nails classes--which represent construction, repair or demolition events--the window glass tends to accumulate as the result of occasional accidental breakage. As with Non-structural artifacts, its frequency tends to increase with the length of occupation, since the longer a window is present, the greater its chances of being broken sometime during that period. Calculation of the window glass rain

(Table 18) shows that while absolute frequencies do increase with length of deposit, the rate at which glass was being broken varied by the activities taking place, and possibly as a result of economic cycles. The greatest rain occurred during the short, earliest period, with an average of eight sherds being lost a year. This is surprising in view of the fact that only two small windows were in the cabin and were therefore less likely to contribute to the overall assemblage. It should be noted, however, that the difference is not as significant as it appears. A chi-square test of the number of years represented and number of window glass sherds in each of the deposits shows that there is no significant difference in the artifact rain from period to period (Figure 50). Windows were apparently broken at a fairly uniform rate throughout time.

The spatial analysis is ambiguous for all but the earliest deposit. Distributions for each of the twentieth century deposits are almost identical and cluster in the vicinity of the cess pool (Figure 51). The problems created by the sinking cess-pool cover have already been discussed. It is possible that the greatest concentrations were within 5 feet of the house as is suggested by the slightly higher frequency in N5W5. Since only one unit was excavated that close to the building, it is difficult to determine whether that was indeed the case. It should be noted that at the Russian Bishop's House and the Old School in Sitka National Historical Park, Alaska, a dramatic increase in window glass frequencies within three feet of the buildings was noted (Blee 1985:117-121).

The spatial distribution of window-glass fragments in the deposits associated with the cabin (1888-1900) are much more informative. All but two of the 40 sherds were found in the bottom of the drainage trench, indicating breakage in the very earliest development of the deposit, probably soon after the window was installed. The cluster in N15E5 suggests that the door, with its single six-pane window, was close to this unit. This information permits us to estimate the locations of the east and west walls (Figure 51).

Table 18: Window glass rain at the Moore House

period of deposit	number of years	number of sherds	window glass rain
1940-1980	40	187	5
1914-1940	26	69	3
1900-1914	14	40	3
1888-1900	5	39	8

Null hypothesis: There is no significant difference in the number of window glass sherds compared to the number of years of continuous occupation in the four deposits at the Moore House.

Alternate Hypothesis: There is a difference.

Level of significance: 0.05

Degrees of Freedom = 3

Critical Value = 7.82

	years		window glass		total
provenience	observed	expected	observed	expected	
1940-1980	40	45.94	187	181.06	227
1914-1940	26	19.23	69	75.77	95
1900-1914	14	10.93	40	43.07	54
1888-1900	5	8.90	39	35.10	44
total	85		335		420

chi square =7.18

Chi square <7.82, therefore, **do not reject** the Null Hypothesis. There is no difference in the number of window glass sherds deposited each year at the Moore House.

Figure 50: Chi-square test of number of years of continuous occupation and the number of window glass sherds in each of four deposits at the Moore House.

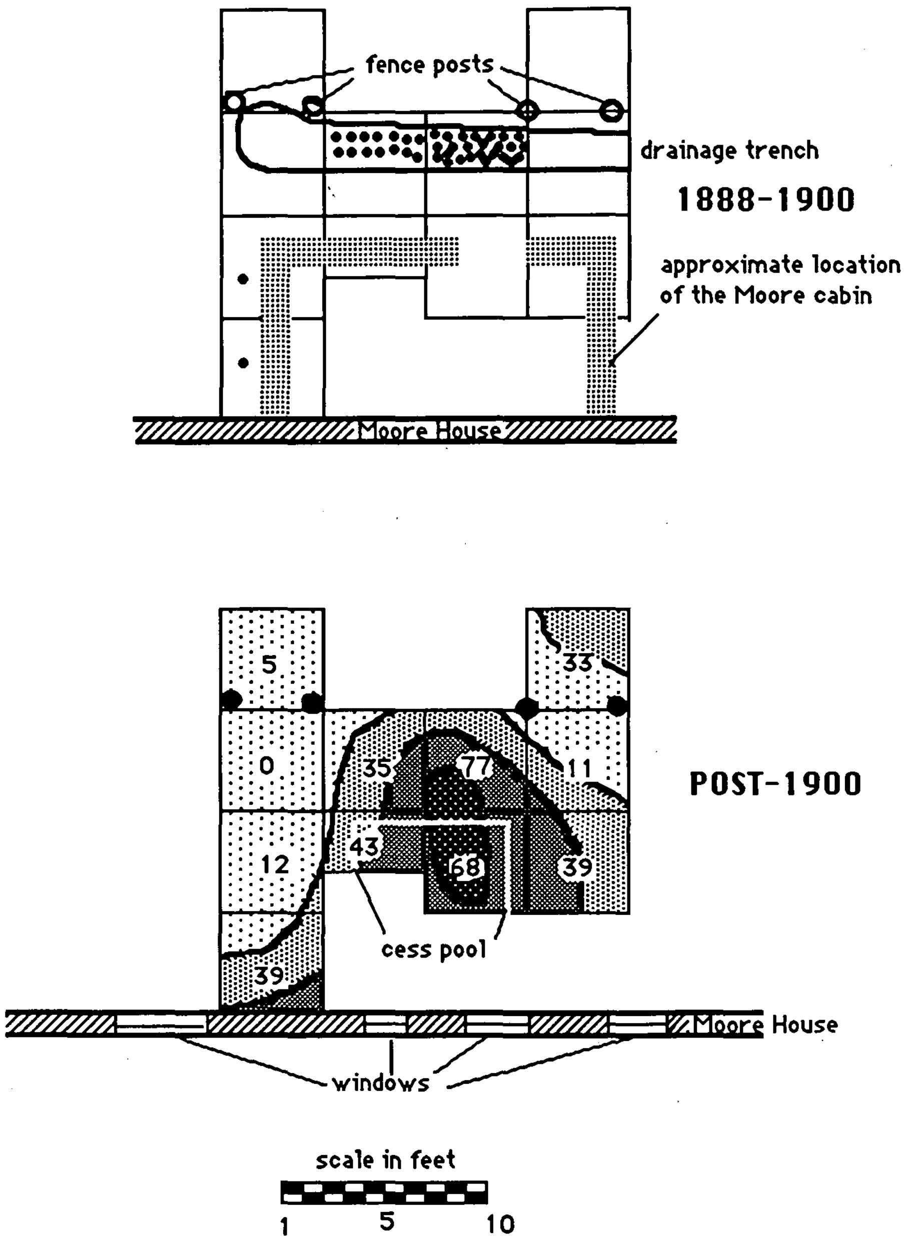


Figure 51: Spatial distribution of window glass north of the Moore House.

Window Glass Thickness

A number of studies of window glass on archeological sites have shown that the thickness of glass panes has increased in a predictable manner throughout the nineteenth century (Chance and Chance 1976; Fiero 1984; Roenke 1978; Teague and Shenk 1977; Wentworth 1979). It is believed that this phenomenon occurred as the glass industry developed cheaper techniques for producing larger panes. The greater surface area of the window pane required a thicker glass to support its own weight. These studies have concentrated on data from the nineteenth century. Since most of the archeology in Skagway dates to the twentieth century, the stratified assemblage from the Moore house might assist in dating other Skagway sites. This study was attempted to establish whether the trend of increasing thickness continued into the twentieth century.

Each sherd was measured to the 0.001 of an inch with a pair of sliding calipers. These data were rounded to the nearest 1/64 of an inch for graphic purposes, since window glass is traditionally sold in 1/64 of an inch increments. In the other studies mentioned, the mode was the measurement used for comparative purposes. The mode in the cabin deposits was 6/64 of an inch (0.094 inch), but only 5/64 of an inch (0.070 inch) in the later ones (Figure 52). It should be noted that the existing window glass in the cabin door is 6/64 of an inch thick (Blee et al. 1984:299). At Harmony Borax Works in Death Valley, California, a site dating from 1884 to 1888, the mode was also found to be 6/64 of an inch (Teague and Shenk 1977:126), and Roenke (1978) gives 6/64 of an inch as the modal thickness for window glass from a number of sites in the Pacific Northwest dating from 1870 to 1900. These compare favorably with the original cabin deposits behind the Moore House.

Two of the studies predict a continuing trend of increasing modal thickness until about 1915 with the invention of automatic window glass rolling machines (Roenke 1978; Whelan 1986). According to each of their predictive models, the Moore House would date from 1850 to 1865, yet we know that it post-dates 1896. In contradiction to this model, Whelan

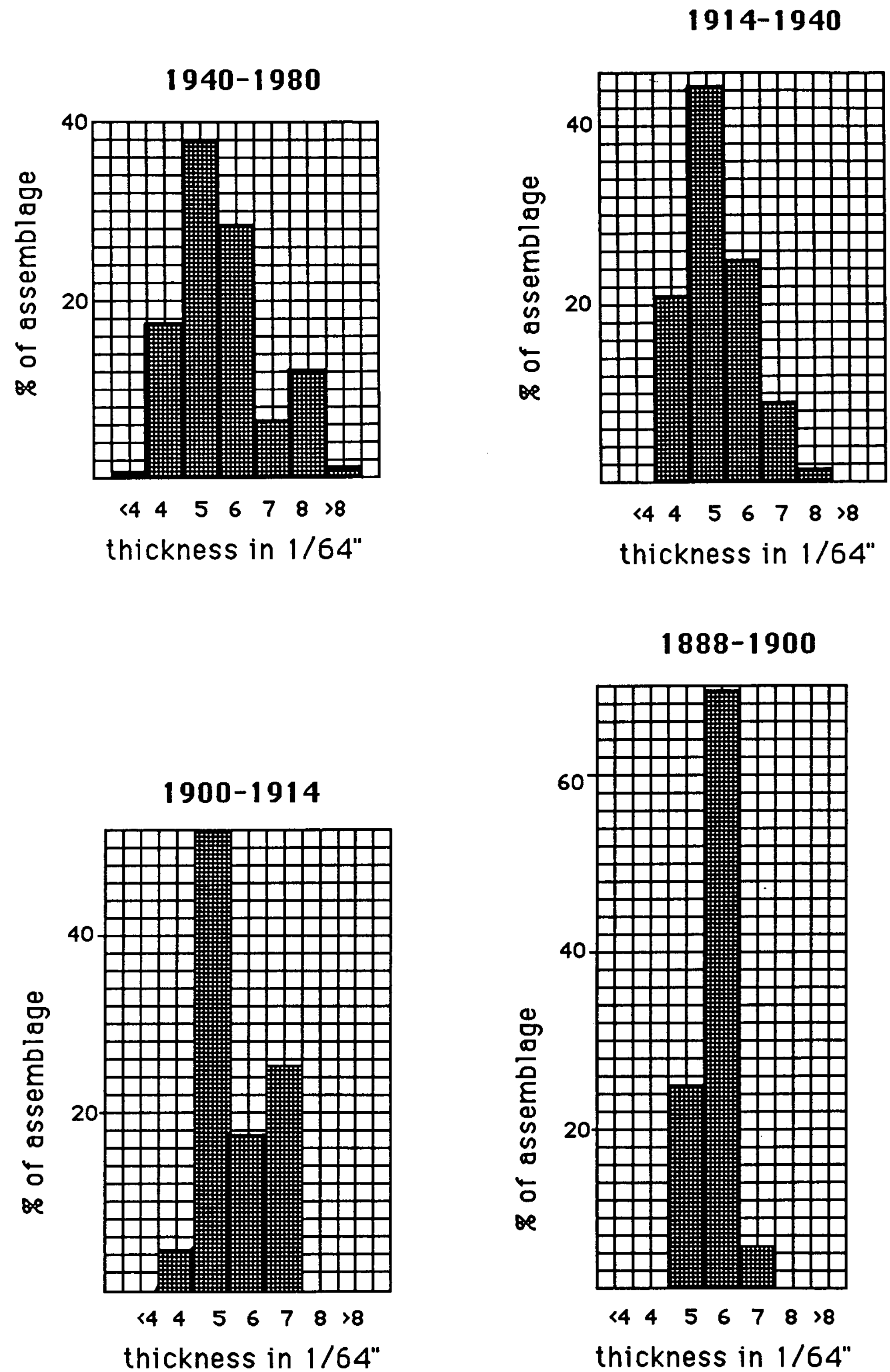


Figure 52: Distribution of window-glass thickness in each of four deposits at the Moore House.

(1986) notes that the Goodland Sawmill site in Chacahoula, Louisiana, dating from 1903 to 1917, had modal window glass thicknesses ranging from 4/64 of an inch (1.55 mm) to 5/64 of an inch (2.15 mm) contrary to the predicted 6/64 of an inch (2.35 mm) to 7/64 of an inch (2.55 mm). His modal thickness, like that at the Moore House, actually decreased after the turn of the century. Based on the Moore House data, and somewhat substantiated by Whelan's findings, it is instead proposed that modal thickness may have actually decreased from 6/64 of an inch to 5/64 of an inch (0.078 inch; 1.95 mm).

Economic rather than technological factors may have been responsible for the decrease, for the 1890's were a time of economic depression in the country. Child labor laws and the unions were just beginning to make major advances in improving working conditions and wages in the glass factories (Scoville 1948:81). Manufacturers may have been seeking ways to economize in order to meet union demands. Thinner window glass is cheaper window glass both to produce and to purchase.

In summary, the distributional analysis of window glass at the Moore House suggests two important things: 1) the door of the cabin may have been located near unit N5E5, suggesting the location of the east and west walls; and 2) modal glass thickness decreased to 5/64 of an inch after the turn of the century. It is possible that window glass in Skagway buildings constructed during the gold rush will have a modal thickness of 6/64 of an inch, but those built after 1900 will have a modal thickness of 5/64 of an inch.

NON-STRUCTURAL GROUP

Non-structural artifacts in a sheet trash generally tend to accumulate slowly over a long period of time as a result of daily activities on the site. In a backyard situation, concentrations of items might be expected to indicate pathways to places where household trash was discarded or to areas of where specialized activities occurred. As shown earlier, the frequencies of Non-structural items behind the Moore House are low relative to the Structural artifacts, suggesting it was neither an area where trash was deliberately deposited nor a place where domestic or special activities took place. The Non-structural items present, however, are relatively informative of certain social processes taking place in Skagway.

The Non-structural rain can be seen in Table 19. A chi-square test of the number of years of continuous occupation for each period and the number of Non-structural artifacts indicates that there is a significant difference in rain from period to period (Figure 53). Two-by-two contingency tests of each period against all others show that the 1940-1980 period has a greater than average rain (chi-square = 13.99, cv = 3.84). Both the 1900-1914 and 1914-1940 periods have lighter than average rains (chi-square = 4.05 and 3.84, respectively). The 1888-1900 deposit has an average rain compared to the other three assemblages (chi-square = 0.02). These phenomena can perhaps be explained by overall economic conditions. The 1900-1940 period was characterized first by locally depressed conditions following the gold rush, then the Great Depression. At those times, it was economical to reuse bottles and not replace broken items so quickly as in more prosperous times. Furthermore, it is likely that fewer commercial products were imported to Alaska and consumed during these relatively hard times.

The more recent period, besides being more prosperous for everyone, also saw the emergence of plastics that deteriorate slowly in the ground. Plastics have made possible the inexpensive production of disposable products, replacing products that had been recycled in earlier eras. The heavier rain since 1940 might be a widespread American phenomena and would be worth further investigation.

Four classes of Non-structural items are present in large enough quantities to permit some quantitative analysis: Food Storage, Beverage Containers, Food Serving, and Food Preparation artifacts. For the sake of this discussion, all other Non-structural items are lumped into a single

Table 19: The Rain of Non-Structural Artifacts at the Moore House

	# of years	artifacts	rain
1940-1980	40	472	12
1914-1940	26	111	4
1900-1914	13	62	5
1888-1900	5	48	10

Null hypothesis: There is no difference between the number of Non-structural artifacts deposited and the number of years of continuous occupation in the four deposits in Operation 17.

Alternate hypothesis: There is a difference.

Level of Significance = 0.05
Degrees of freedom = 3
Critical value =7.82

provenience	years observed	years expected	Non-structural observed	Non-structural expected	total
1940-1980	40	55.94	472	456.06	512
1914-1940	26	14.97	111	122.03	137
1900-1914	14	8.30	62	67.70	76
1888-1900	5	5.79	48	47.21	53
total	85		693		778

chi square = 18.74

Since chi square is more than 7.82, **reject the null hypothesis** in favor of the alternate hypothesis. There is a difference in the rate of deposition of Non-Structural artifacts with length of deposit.

Figure 53: Statistical argument for the difference in the rate of deposit of Non-structural artifacts in the four deposits at the Moore House.

category. As can be seen in Figure 54, there is no apparent pattern to the relative distribution of these five classes in the four time periods. A progressive elimination of widely varying classes demonstrated that each class in each period maintained its rank relative to other classes and other periods, suggesting that no substantial biasing is present in any of the assemblages. The assemblages might be considered repesentative of differing types of domestic activities taking place in each period.

Beverage Containers Class

Of all classes, the temporal distribution of Beverage Containers is the most simple to understand. In the post-1914 deposits, which are associated with the Kirmses, 23% of the Non-structural assemblage consists of this class. By comparison, it represents less than 4% of the assemblage in the pre-1914 deposits associated with the Moores. This pattern is decidely at odds with that observed on other late nineteenth and early twentieth century sites. In general, beverage bottle glass appears to decrease in frequency with the advent of National Prohibition in 1919 (Teague 1980:140; Carley et al. 1981:191). These studies probably reflect a cultural trend in which there is a change from the drinking of commercially made alcoholic beverages to the consumption of home-made beverages from canning jars or the alcohol available in patent medicines and extracts (see Carley et al. 1981 for an example of the increased consumption of vanilla extract in the 1920s).

At the Moore House, there is the opposite trend. A dramatic increase in the relative frequency of Beverage Containers occurs with the change in occupants of the house. This suggests that the Moores consumed less alcohol at home than did the Kirmses. In fact, the youngest son, William Domingo Moore, describes his father as follows:

> Father was not an educated man. Had he been so, his life would have read in a different way. He was head strong and aggressive, full of ambition, never would give up. He used to smoke when he was young. He gave it up. <u>He did not drink to excess</u>. He did not gamble. He was fond of his wife and children (quoted in Andrews 1931:41, emphasis added).

CLASS	1940-1980	1914-1940	1900-1914	1888-1900	TOTAL
Food Serving	12.3%	25.2%	8.1%	2.1%	92
Food Storage	31.6%	25.2%	38.7%	66.6%	233
Food Preparation	18.0%	0.0%	21.0%	0.0%	98
Beverage Containers	22.2%	26.1%	4.8%	2.1%	138
Other Non-Structural	15.9%	23.4%	27.4%	29.2%	132
TOTAL	472	111	62	48	693

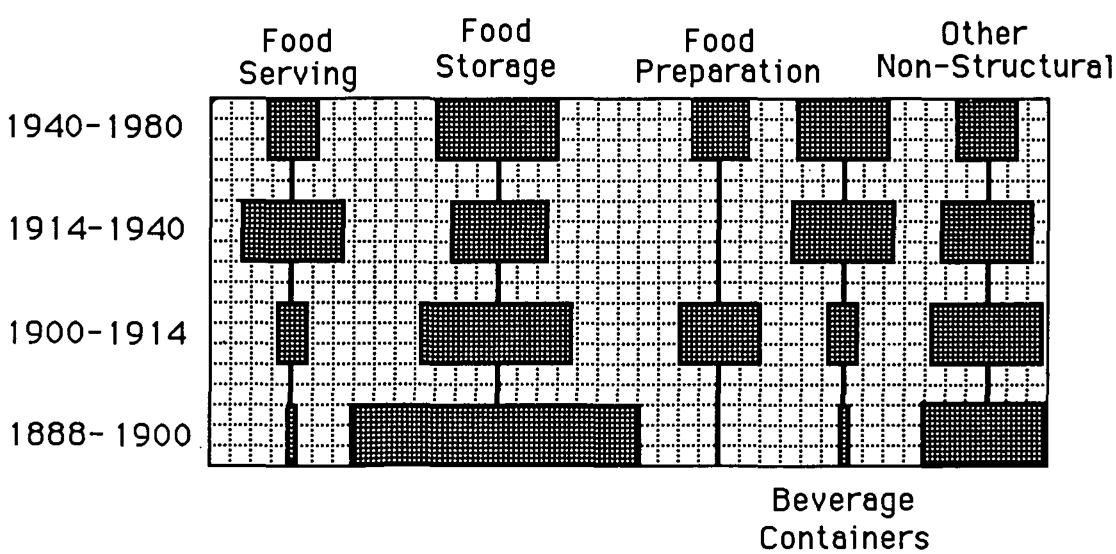


Figure 54: The temporal distribution of Non-structural artifacts in Operation 17.

This is not meant to imply that the Kirmses were great consumers of alcohol; 23% of the total Non-structural assemblage is still fairly low. The Beverage to Other Non-structural ratio at the Russian Bishop's House was 30.2% (Blee 1985); 30.2% at the Old School in Sitka (Blee 1986); 22.7% at Reward Mine (Teague 1980); 51.7% at Harmony Borax Works (Teague and Shenk 1977); and 19.5% at Nez Perce (Carley, et al 1981; extracts were counted as beverages). When compared to the Moores, however, it is obvious that overall consumption increased after the Kirmses began living in the house.

The spatial distribution of Beverage Containers is somewhat informative (Figure 55). A substantial cluster appears south of the fence; 33 of the 74 sherds in this unit were from a single wine bottle that was crushed in place. The crushing occurred next to two whole bottles that had rolled up against the fence line (Figure 18). Grass growing along the fence no doubt hid the three bottles so that they were never picked up. Even without these sherds, the density is relatively high in this unit, reinforcing the idea that the gate in the back fence was somewhere in this vicinity. Since it is unlikely that the bottles would have remained *in situ* in front of the gate, the fence probably extended along the west half of unit N15EO before terminating in a fence post as suggested in Figure 55.

The second cluster appears north of the fence in the unit nearest the abandoned stream bed; all of these artifacts were found in the 1940-1980 deposits. Their presence reinforces the earlier conclusion that the old stream bed was being used for trash disposal in fairly recent times.

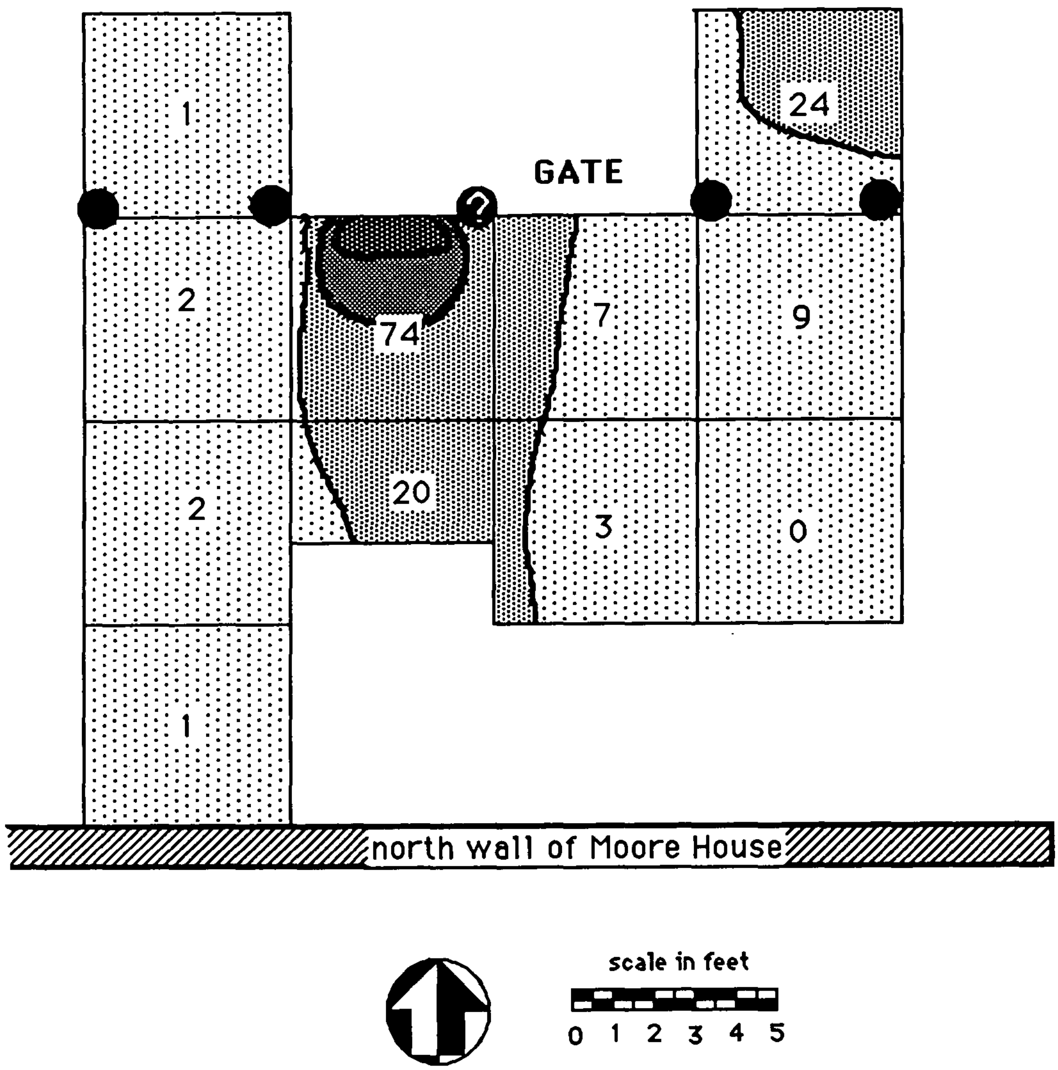


Figure 55: Spatial distribution of Beverage Containers from all periods at the Moore House.

Food Storage Class

Thirty of the 32 sherds in the pre-1900 deposits appear to be fragments of tin cans and were so classified as food storage containers. They account for the large proportion of this class in the earliest deposit and may account for the paucity of other classes in that period. Tin cans and tin dishes were essential to the late nineteenth century pioneers.

> We would fill our tin plates--some used granite pans a couple of inches deep--with boiled beans and bacon, then ate a big plateful of boiled rice and mixed dried stewed prunes and apples; then we had from two to three large tin cups of tea, and several pieces of our homemade camp bread with very little butter, for this luxury had already pegged out, as had also our condensed Eagle Brand milk (Moore 1968:47).

The beans, rice, and flour were no doubt packaged in oil-cloth sacks and the dried fruit in wooden boxes. The butter, milk, baking powder for the bread, tea, and possibly the beans were all packaged in tin for the gold rush (Archibald 1981:88-95).

The spatial distribution of this class in the earliest period shows its association with the north cabin door (Figure 56); all thirty flat ferrous fragments were found in the drainage trench to the west of the door opening, where either tin cans or plates might easily have been tossed.

Food Storage artifacts are most dense north of the fence in the 1900-1914 period, a phenomenon not observed with other types of artifacts. It may suggest that the Moores were also using the abandoned stream bed for some trash disposal, but only of domestic trash, and not the construction-related trash dumped by the Kirmses. This concentration shifts to the west in the post-1940 deposits, suggesting that by that time, domestic trash was being hauled away to a municipal dump. The alley, where a vehicle could be loaded, is somewhat further to the west.

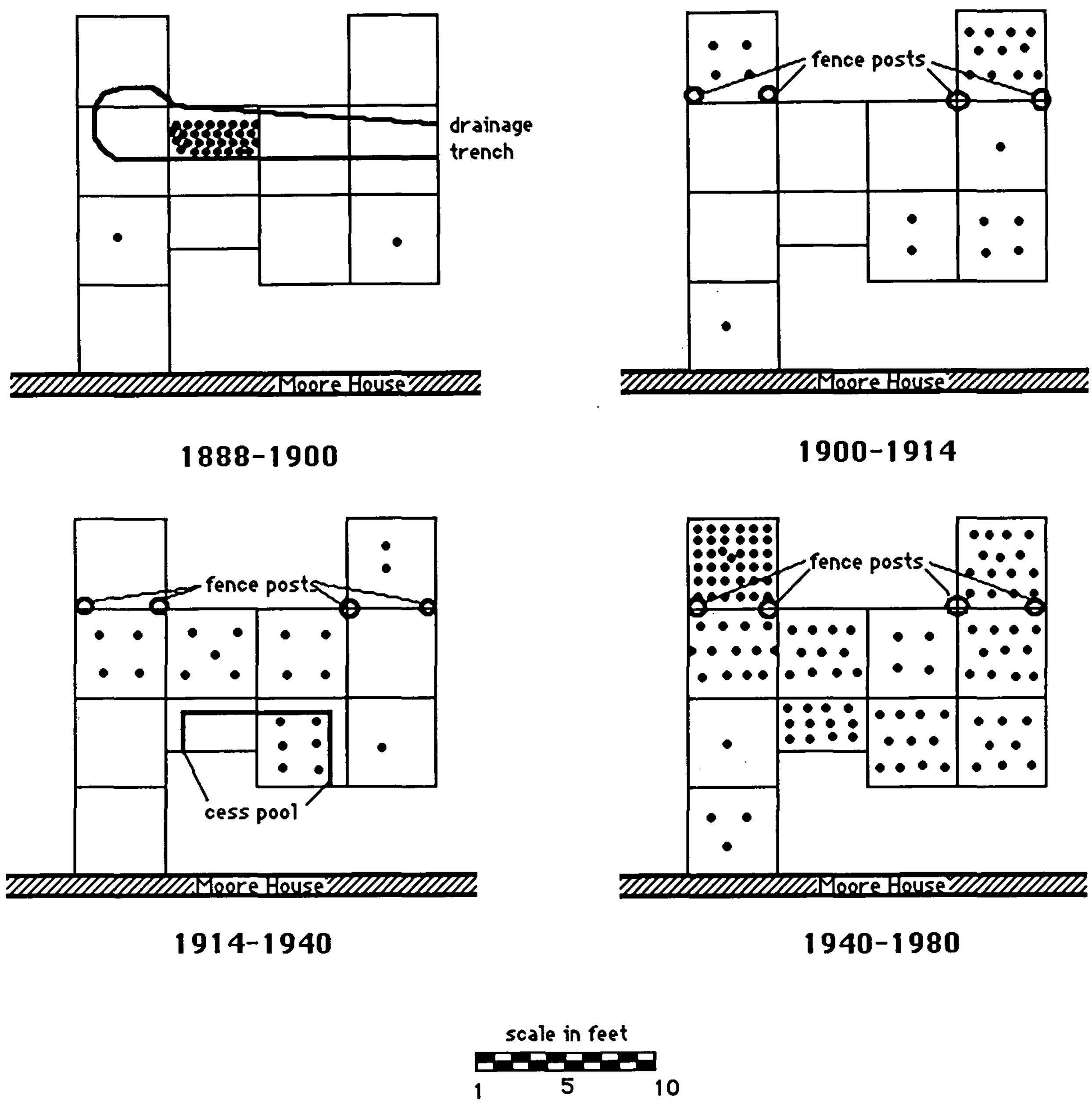


Figure 56: Spatial distribution of Food Storage artifacts in the four major deposits at the Moore House.

The Relative Distribution of Can and Jar Fragments

Archibald (1981:88) lists a number of staples and luxuries available in the Dawson market. She states that coffee beans, apples, butter, syrup, baking powder, fruit, vegetables, cocoa, meat, milk, and cream were packaged in tin cans; cheese, pickled goods, olive oil, jams, jellies, sauces, olives, mustard and other condiments were packaged in bottles or jars. From this study, it is evident that the necessities of meat, milk, fruit, and vegetables were most often purchased in tin cans and that jars held the "luxuries." In addition, most home-canning was done in jars, not tin cans.

Figure 57 shows the temporal distribution of can, food bottle, and jar fragments in the Operation 17 excavations. It is quite easy to see that there was a dramatic change in the relative frequency of the two types of food storage containers after 1900: almost 94% of the two groups in the earliest period consisted of tin-can fragments, but it drops to between 13% and 24% in the later three periods. It has been suggested that perhaps this phenomenon resulted from the presence of a woman on the site, who might be more likely to can foods at home than would men in a male-only household (Barnes 1987:3). This particular hypothesis is rejected, however, on the basis that Minnie Moore occupied the Moore Cabin from 1896 to 1900, the entire period of continuous occupation of the cabin. She was also domiciled at the Moore House in the following period, when the change first occurred. It does not seem likely that the presence or absence of a woman in a household could account for the change in relative frequencies. What other type of behavior might have led to this anomaly in the archeological record?

Changing economic conditions do not appear to have affected the relative frequencies of cans, and bottles and jars. Skagway's most prosperous periods, pre-1900 and post-1940, show entirely different distributions. If economic hardship correlates with an increase in home canning, why then does the most locally depressed period, 1914-1940, have a greater relative frequency of cans than the periods before and after?

	CAN FRAGMENTS			JAR AND BOTTLE FRAGMENTS			TOTAL
	#	%	rain	#	%	rain	
1940-1980	18	15.0%	<1	102	85.0%	3	120
1914-1940	6	24.0%	<1	19	64.0%	<1	25
1900-1914	3	13.0%	<1	20	87.0%	1	23
1888-1900	30	93.7%	6	2	6.3%	<1	32

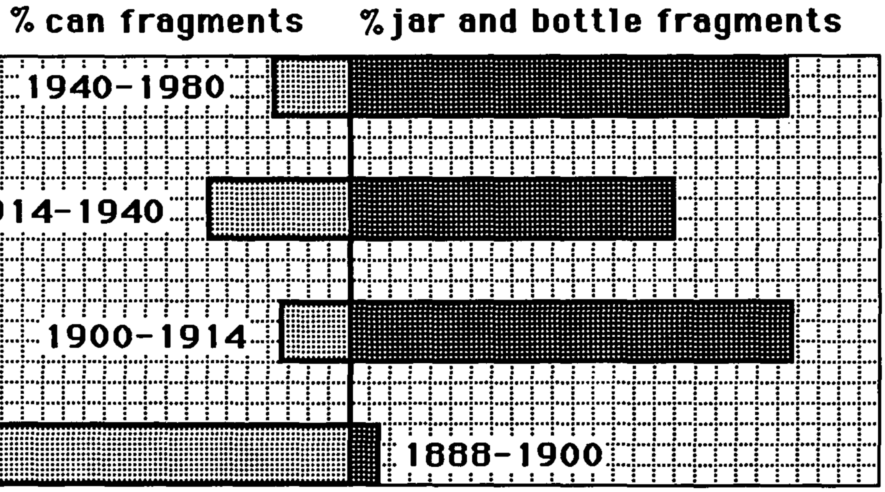


Figure 57: The temporal distribution of can versus bottle and jar fragments in the deposits north of the Moore House. The bar graph shows the relative frequency in each time period.

An alternative hypothesis involves varying supply sources. Conlin (1986:111-135), in his study of gold rush food habits, showed that prospective miners consumed fancy foods, even before finding gold, as a means of participating in the "good life." Rhodes (1987:447, 450), indicates in one context that champagne was preferred over whiskey during the gold rush in Skagway, substantiating this suggestion. Why not, then, indulge in the jellies, sauces, condiments, and flavorings available from glass bottles at the same time? Once the gold rush began, Skagway became an extension of the Seattle market, and all goods available to the rest of the United States were available in northern ports. Thus, it does not seem logical that the deposits behind the Moore House that date to the gold rush period should be so parsimonious of home-canned and "luxury" goods.

Although inadequate supply sources in the earliest period might have been somewhat of a problem between 1895 and 1897, Skagway was probably better supplied during the years of the gold rush than just about any other time. Ships and people from Seattle and other points south arrived daily. Yet, as recently as 1987, the community grocery store received supplies only once a week. It is possible that a decrease in the frequency of supply may have resulted in an increase in the amount of home canning that was done, rather than a decrease in the consumption of canned foods.

But was there, indeed, an increase in the use of glass containers? Figure 57 shows the average number of sherds that were deposited per year of occupation in each of the deposits (rain). An average of five tin can fragments were deposited per year between 1895 and 1900 (the period of continous occupation), but less than one per year after that time. Only one glass container sherd, on the other hand, was deposited per year between 1895 and 1940. This suggests that the differences seen in the relative distribution of cans and glass containers is not because more glass containers were being used in the later periods, but rather that more tin cans were being used in the earliest period.

The fact that more tin cans were deposited before 1900 than after this time may be explained by the way in which these glass containers were discarded differentially, not by the different ways they may have been used. The yards of Skagway were not exactly the archetype of Victorian groomed landscapes during the days of the gold rush, as exemplified by the following newspaper article entitled "Garbage and Refuse":

> Greater danger from sickness threatens Skagway if some concerted action is not taken before long to remove the many tons of filth, garbage and other refuse that has been allowed to accumulate throughout the winter in alleys, backyards and even on some of the streets. This is becoming more apparent every day since the thawing weather has set in and with the passing away of the ice and snow this refuse will all be exposed and will become a menace to the community. The matter is aggravated by the lack of drainage and water for flushing purposes, hence the only available remedy will be the employment of a number of men with teams to haul away the refuse to tidewater. Delay will be dangerous for much of the matter is in the shape of garbage in backyards, alleyways and even under houses, the rapid decomposition of which, with the advancing season, must necessarily spread fever germs and threaten the health of every man, woman and child in the community. Unfortunately there is no legal power invested in anyone in Alaska to enforce such sanitary measures as would insure the health of the citizens, and the matter is one that has to be left to the conscience and good sense of everyone who lives here. The City Council at its last meeting passed a motion requesting the citizens to get rid of the accumulated garbage on their premises, and it is a pleasure to chronicle that a few of the citizens have already done so. This is only a very small percentage, however, and many places today are in such a shameful condition that those responsible for it would be quickly indicted if in any other community than Alaska. This matter will grow more serious with every recurring warm day unless promptly attended to (Daily Alaskan, March 17, 1899:2).

By May 19, 1899, the Fire Warden (who apparently was responsible for the community's health) was beginning to prosecute people who dumped their garbage in other places than on the tidal flats during low tide (Daily Alaskan, May 19, 1899:4). June 8, 1899 was declared "Skagway Day," when "all good citizens" turned out to clean up the streets and alleys (Daily Alaskan, January 1, 1900:14).

It is obvious, therefore, that a concerted community effort at keeping the immediate environs of the household clean was not made until almost 1900 in Skagway.

How this would affect the differential distribution of cans and glass containers becomes clear when the way these items fragment is considered. Note that no whole cans, food bottles or jars were recovered; the numbers used in Figure 57 are sherd counts. Cans tend to fragment only when they are allowed to remain in the damp ground to slowly deteriorate. Glass containers, however, fragment when dropped or stepped on. It is significant that the food bottle and jar fragments were isolated; that is, only a few sherds of any individual vessel could be found. This indicates that when a bottle was broken in the backyard most (but not all) of the broken pieces were picked up and discarded elsewhere. Since a can does not shatter on being dropped, it was salvaged in its entirety. It was only when cans were allowed to remain on the ground that they became fragmented, thus contributing to the archeological record.

Therefore, differential discard before and after 1900 most convincingly explains the change in relative frequency of cans and glass containers at the Moore House.

Food Serving Class

This class of artifacts consists almost entirely of ceramic sherds. Since dishes are continually reused, and usually discarded only when they break, it can be presumed that some time would pass after a site is first occupied before ceramics would appear. At the early twentieth century community of Silcott, Washington, Adams and Gaw (1977) show that ceramics were broken an average of 22 years after their manufacture. If the rule follows for Skagway, ceramics purchased by the Moores in 1896 would not be broken until about 1914. No ceramic sherds were found in the 1888-1900 deposits, as might be expected by the model;

only 6 sherds were found in the 1900-1914 period, and the absolute frequency increased after that. Rules were meant to be broken, and a rule suggested by a single study is not inviolate. However, it does suggest a good reason for the complete lack of ceramics in the early deposits.

Relative frequencies of the Food Serving classes do not increase gradually as do the absolute frequencies (Table 19, Figure 54); instead, there is a dramatic increase in relative frequency during the 1914-1940 period. Since neither the absolute frequency nor the ceramic rain increase at this period, it is probable that the increase is a function of the decreased relative frequency of Food Storage and Food Preparation artifacts. As mentioned before, the 1914-1940 period was marked by a local economic downturn followed by the Great Depression. During this time, it is likely that bottles were reused rather than thrown away when they had served their initial function. It is also possible that fewer bottles were being bought. Ceramics, which are continually reused, may not decrease in breakage during this time. Compared to the decreased discard of fruit jars, jelly jars and condiment bottles, the ceramics only <u>appear</u> to increase in rate of disposal; the increase is only relative to the other classes.

The spatial distribution of Food Serving artifacts is uninformative, probably due to their small sample size (Figure 58). There does appear to be a slightly greater concentration in the northeast corner of the site just south of the fence, perhaps as a consequence of being along the pathway to the alley.

Food Preparation Class

A rather unusual clustering, both spatially and temporally, of the Food Preparation artifacts is caused by the presence of two highly fragmented artifacts (Figures 54 and 59). The recent deposit contains 49 (out of 53 total) fragments of a single ferrous pail deposited northeast of

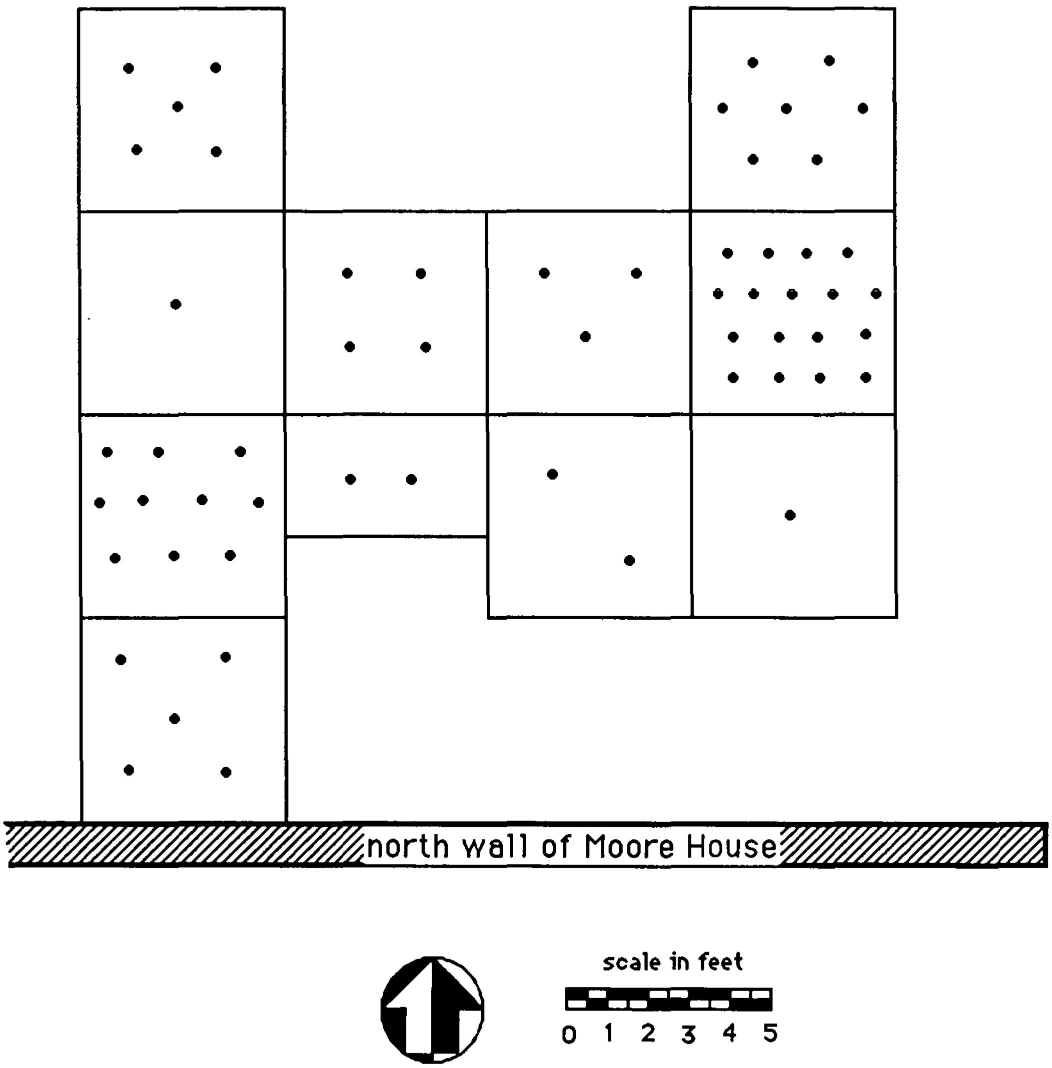


Figure 58: Spatial distribution of Food Serving artifacts in the post-1940 deposits behind the Moore House.

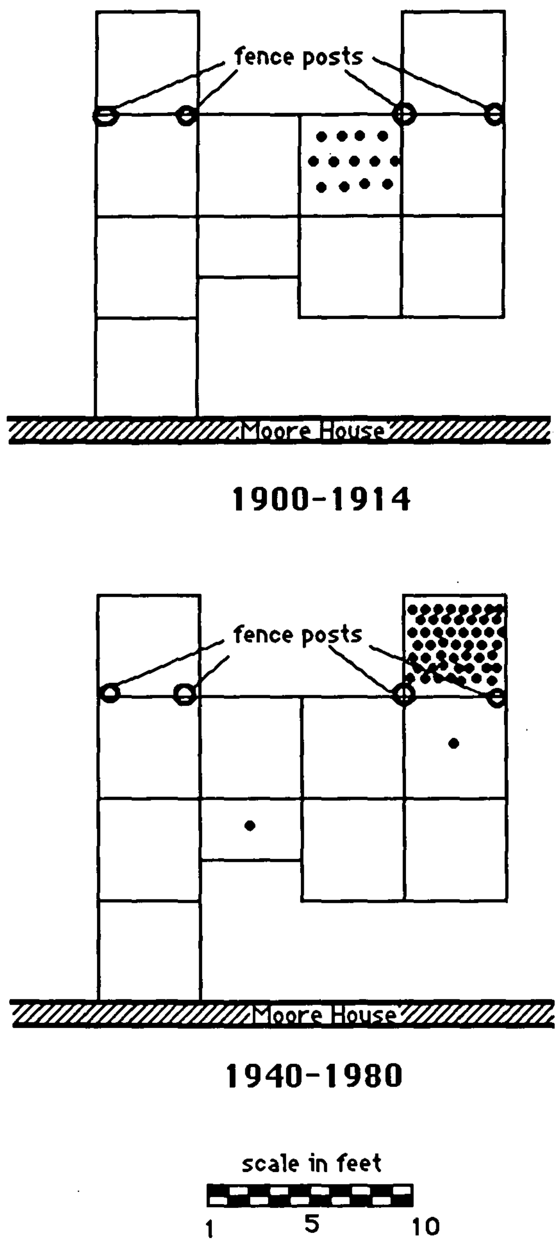


Figure 59: Spatial distribution of Food Preparation artifacts in the 1900-1914 deposits and the 1940-1980 deposits at the Moore House.

the fence in the vicinity of the abandoned stream bed. The 13 sherds in the 1900-1914 deposits are all from a single cast iron pot lost just to the south of the gate. Since these items do not represent the sort of normalized, low frequency artifact rain characteristic of a sheet trash, their presence tells us little about long term social or economic trends at the site.

Bottle Glass Color

The following discussion is based on a continuing study by the author to establish the degree to which the bottle-glass color correlates to either the function of the original container or the time in which a deposit was formed. It is not intended as a comprehensive test of either hypothesis. Which of the two variables may have affected the distribution of bottle-glass color at the Moore House was studied here.

To test for temporal variability, bottle glass was initially identified by nine different color catagories (aqua, clear, light-green, clear with a purple tint, brown, green, bright-green, dark-green, and olive-green). Other color categories would have been used if they had been present. Only four colors were present in quantities greater than 5% of the total bottle glass assemblage: aqua, clear, brown, and olive-green glass. These were also the colors that had been found to be temporally diagnostic in a similar study at the Russian Bishop's House (Blee 1985:96-102). Therefore, the light-green and purple-tinted glass was combined with the clear to make a single category, and all other green glass was combined with the olive-green to produce categories of sufficient size for statistical manipulation. Given the further small size of the assemblages in the pre-1940 deposits, all three periods were combined into a single temporal category. To test whether there was a significant change in the color of bottle glass before and after 1940, the two assemblages were tested with a Chi-Square Test of two independent samples (Figure 60). There was no difference in the two assemblages; therefore, glass color could not be regarded as temporally diagnostic after the turn of the century at the Moore House.

Null hypothesis: There is no difference between bottle glass assemblages as categorized by color in the deposits before and after 1940.

Alternate hypothesis: There is a difference.

Level of Significance = 0.05
Degrees of freedom = 3
Critical value =7.82

color	1940-1980 observed	1940-1980 expected	1888-1940 observed	1888-1940 expected	total
aqua	11	10.13	3	3.87	14
clear	99	105.69	47	40.31	146
brown	38	34.75	10	13.25	48
green	67	64.43	22	24.57	89
total	215		82		297

Chi-square = 3.27

Since chi-square is less than 7.82, **do not reject the null hypothesis.** There is no difference in bottle glass color assemblages.

Figure 60: Chi-square test of glass colors in the deposits before and after 1940 at the Moore House.

	Navajo sites (Ward, et.al. 1977)	Harpers Ferry (Blee 1984)	Skagway Depot (Blee 1983)	Harmony Borax (Teague and Shenk 1978)	Reward Mine (Teague 1980)	Russian Bishop's House (Blee 1985)	Moore House
begin pre-1890				+	+	+	
end post-1930	+	+	+			+	+
more than 50 years	+	+	+			+	+
mean date before 1930	+			+	+		
residential site	+	+		+	+	+	+
unrestricted drinking				+	+	+	+
Beverage %	22.1%	17.6%	40.6%	65.7%	67.2%	77.9%	65.7%
sample size	572	1986	982	2725	3364	761	297

Figure 61: A comparison of the temporal and functional variables that may affect the relative frequency of Beverage bottle glass at seven late nineteenth and twentieth century sites.

As noted earlier, other investigators had found that glass color and bottle function tend to correlate when the bottle function could be identified. Aqua- and clear-colored glass most frequently contained foods, and brown- and green-colored glass most frequently contained beverages. Glass color at the Moore House could indicate function rather than period of manufacture.

To test this hypothesis, the glass color from six other late nineteenth and twentieth century sites were compared. Aqua and clear glass was combined into a single <u>food storage</u> category, and green and brown into a <u>beverage</u> category, thus connecting function with color. The number of beverage sherds compared to all bottle glass sherds was then calculated as a percentage (Figure 61).

The six sites in the comparative study were all those that could be found to contain twentieth century assemblages.

1) The Navajo sites (Ward, et al. 1977) were excavated as part of a survey project on the Navajo Indian Reservation in Arizona. They date from about the turn of the century to the present time and are a series of residential sites.

2) The Harpers Ferry, West Virginia, data is from an unpublished report (Blee 1984) and includes only the twentieth-century material. The assemblage was taken from the backyards of five buildings that had businesses on the first floors and residences in the upper two or three stories.

3) The Skagway Depot (Blee 1983) dated from 1898 so it also is considered a twentieth-century assemblage. The depot served railroad passengers, baggage and general administration needs. There is evidence that it housed transient workers from time to time.

4) Harmony Borax works (Teague and Shenk 1977) is located in Death Valley National Monument, California. The archeological excavations

uncovered both the commercial-processing facilities and the remains of the workers' domiciles. It was occupied from 1883 to 1889, thus providing a comparative bridge between the nineteenth- and twentieth-century material.

5) Reward Mine (Teague 1980) is located on the Papago Indian Reservation in Arizona. Archeological investigations included a study of workers' living quarters. The sites date from 1888 to about 1915.

6) Only the twentieth-century assemblage from the Russian Bishop's House in Sitka, Alaska (Blee 1985) was used in this comparison. During this period it was used as a quarters for the Russian Orthodox clergy and a boarding school for Tlingit children and later as an apartment building. The deposits date from ca. 1896 to the present.

The six sites and the Moore House were compared on the basis of four temporal variables and two functional variables. Temporal variables were chosen by the way the seven sites were distributed: three sites were occupied before 1890 before food and drug laws regulated glass containers; four sites were occupied after 1930 when Prohibition was repealed; three sites had a mean occupation date before 1930; and five were occupied more than 50 years. This last variable was considered important because a long period of deposition might be expected to have had a homogenizing effect on the assemblages.

Two functional variables were considered that may have had an effect on the distribution of Beverage and non-beverage containers on the site: whether or not the site was used for residential domestic activities, and whether or not it was in an area where some sort of social constraints were placed on the drinking of alcohol.

The results are shown in Figure 61. There is no correlation between a high-beverage frequency and any of the temporal variables. Furthermore, it does not appear that the use of the site as a residence affected the relative frequency of beverage bottles. However, it is noted that the three sites with low-beverage frequencies experienced some degree of social sanction against the consumption of alcoholic beverages. The Skagway depot was a public place where drinking was considered not entirely proper. The Navajo sites were all located on the Navajo Indian reservation where the purchase of alcohol was strictly controlled. The Harpers Ferry, West Virginia, data come from a state in which alcoholic beverages are sold only to members of private clubs or through state operated outlets. Keller and Gurioli (1976:6) indicate that West Virginians currently consume only 1.79 gallons of alcoholic beverages per capita, compared to Alaskans, who drink an average of 3.71 gallons; Californians, who drink 3.33 gallons; and Arizonans, who consume 3.05 gallons. It is suggested that the low consumption rate in West Virginia resulted in a low Beverage Container frequency.

These data tend to substantiate the hypothesis that glass color correlates with function, not technological advancements, after the turn of the century. Since this is not a definitive study, this sort of analysis should be repeated with other, similarly collected data.

CONCLUSIONS

The Non-structural artifacts at the site, although considerably fewer in frequency than the Structural artifacts, nonetheless give some valuable clues to the placement of features on the site and social processes taking place in the vicinity. The presence of the fence was reinforced by the alignment and concentration of bottles, which rolled up against its base and became lost in tall grass at its base. The gate was probably located fifteen feet north of the house and about one or two feet east of the center of the north wall. It appears that construction related trash was dumped in the abandoned stream bed after 1940, and to a limited extent domestic trash was thrown there in the earlier periods. Trash was also hauled to the alley through the gate and loaded there for transport to another dump site.

Newspaper articles suggest that trash-disposal habits as a whole changed in 1899 as the community became more settled and better organized socially. Garbage was no longer allowed to accumulate in backyards, alleys and under houses but was hauled to tidewater under threat of prosecution. This conclusion is substantiated by the relatively high frequency of tin can fragments in the earliest depsoits.

The Moore House data further suggest that a local economic downturn and the Great Depression of the 1930s may have affected the disposal habits of people, who may have begun to reuse jars and bottles. Both before and after this period, they would throw away the bottle after its initial contents were exhausted. Changes in temporal frequencies of beverage containers also suggest that the Moores drank alcoholic beverages very seldomly, although consumption after 1914 approached that seen on other sites. This should be kept in mind when comparing bottle frequencies on other sites. The 1914-1940 and 1940-1980 bottle-glass assemblages do not vary in color from each other. Thus, after the turn of the century bottle-glass color was no longer temporally diagnostic but might be considered functionally diagnostic. Archeological sites with restricted social access to alcoholic beverages appear to have low beverage frequencies as determined by glass color.

CHAPTER 3

THE PRESENT SITE OF THE MOORE CABIN

CHAPTER 3: THE PRESENT SITE OF THE MOORE CABIN

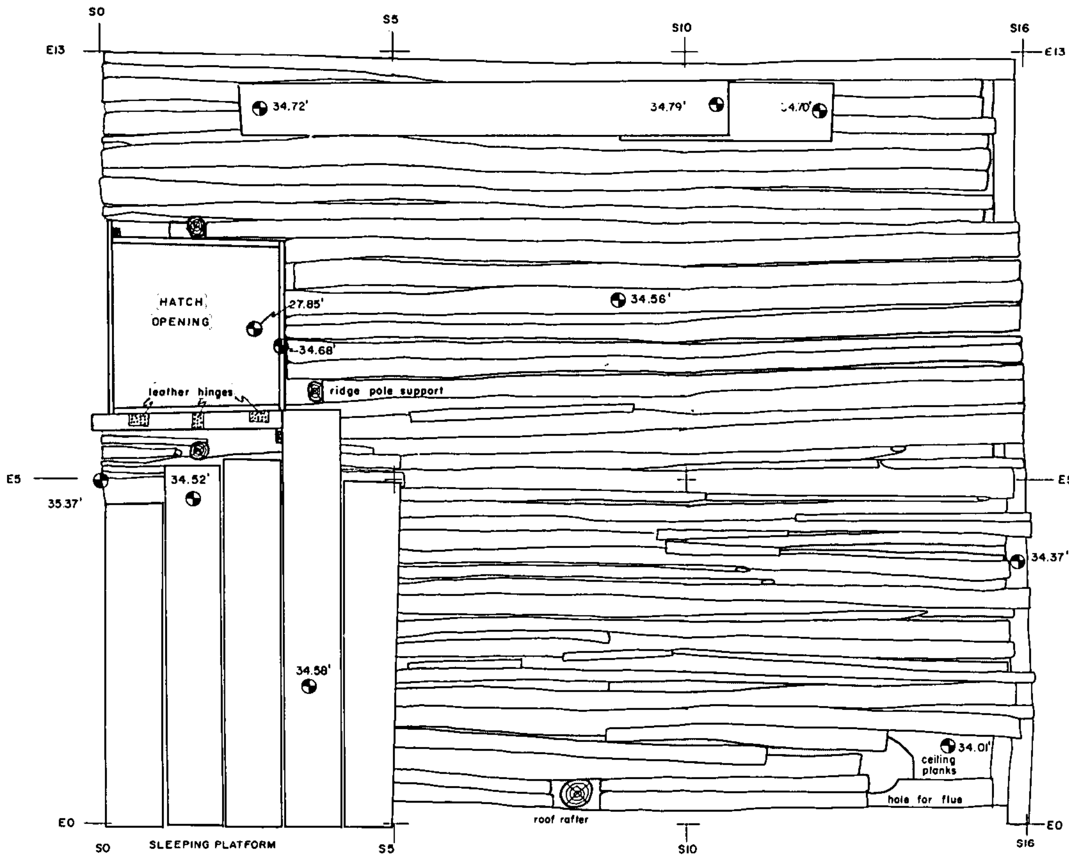
Three areas were sampled at the Moore Cabin. A 3-foot-wide trench was placed along the east wall. It was divided into four sections and called Operation 15. A single 5-foot-square unit (Operation 27) was placed under the west window to determine whether the window glass in the cabin was original. This unit also overlapped the original fence line along the west edge of the Moore property. Both the east- and west-side tests were designed to sample nail distribution from the reroofing event that occurred in the 1960s. This event was also analysed through recovery of archeological data from the attic of the cabin (Operation 26; Figure 11).

OPERATION 26: THE CABIN ATTIC

RECOVERY METHODS

Since the spatial distribution of the nails was of primary concern in Operation 26, each artifact was plotted in place before being collected. The attic was gridded into six, roughly equal-sized units named for the distance of their southeast corner from the far northwest corner of the cabin (Figure 62). "Excavation" was done with a 30 gallon industrial-sized shop vacuum cleaner, and the contents of the cleaner were screened through 1/4 of an inch mesh to insure that no larger items escaped collection. Once the technique was mastered, very few nails were found in the screen. All remains of shingles, nails, chinking and any other incidental artifacts were plotted and collected.

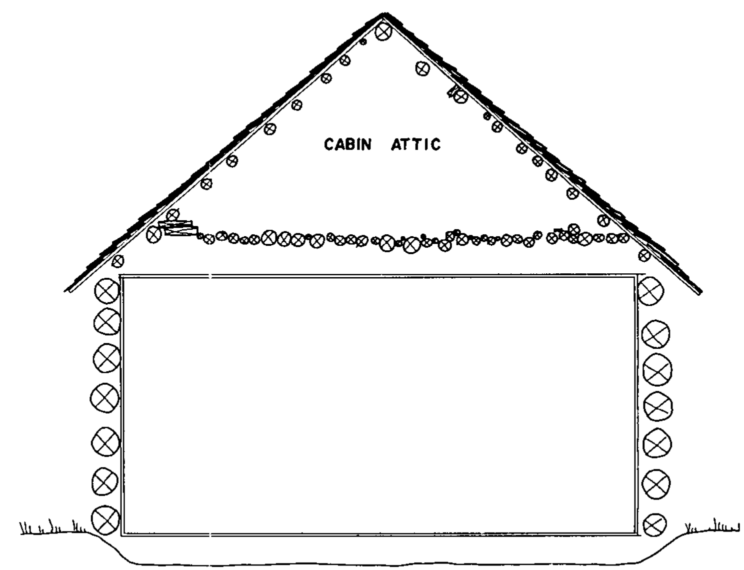
Figure 62: Plan of the Moore Cabin attic.



PLAN OF CABIN ATTIC

SCALE OF FEET

reference north



PROFILE OF THE CABIN AT S10
LOOKING SOUTH

SCALE OF FEET

THE "STRATIGRAPHY"

Access to the attic was gained from a ladder made of two-by-fours, through a 2 feet 9 inches, Z-braced trapdoor hinged with leather straps. A 4 inch diameter vertical pole, placed west of the door, served as a backstop (Figures 62 and 63). A rope and pulley assemblage mounted on the pole provided a means of opening the door and keeping it open while the attic was occupied.

The attic floor consisted of a layer of small poles oriented from north to south, which was laid over eight east- to west-oriented rafters, also made from poles. The floor poles had not been debarked, and varied from one to six inches in diameter; the smaller ones were used to cover gaps between the larger ones. A platform of five 2 inch by 12 inch boards covered the northwest corner and may have been used as a sleeping platform. Two loose 2 inch by 12 inch boards (actual measurements) lay along the east wall.

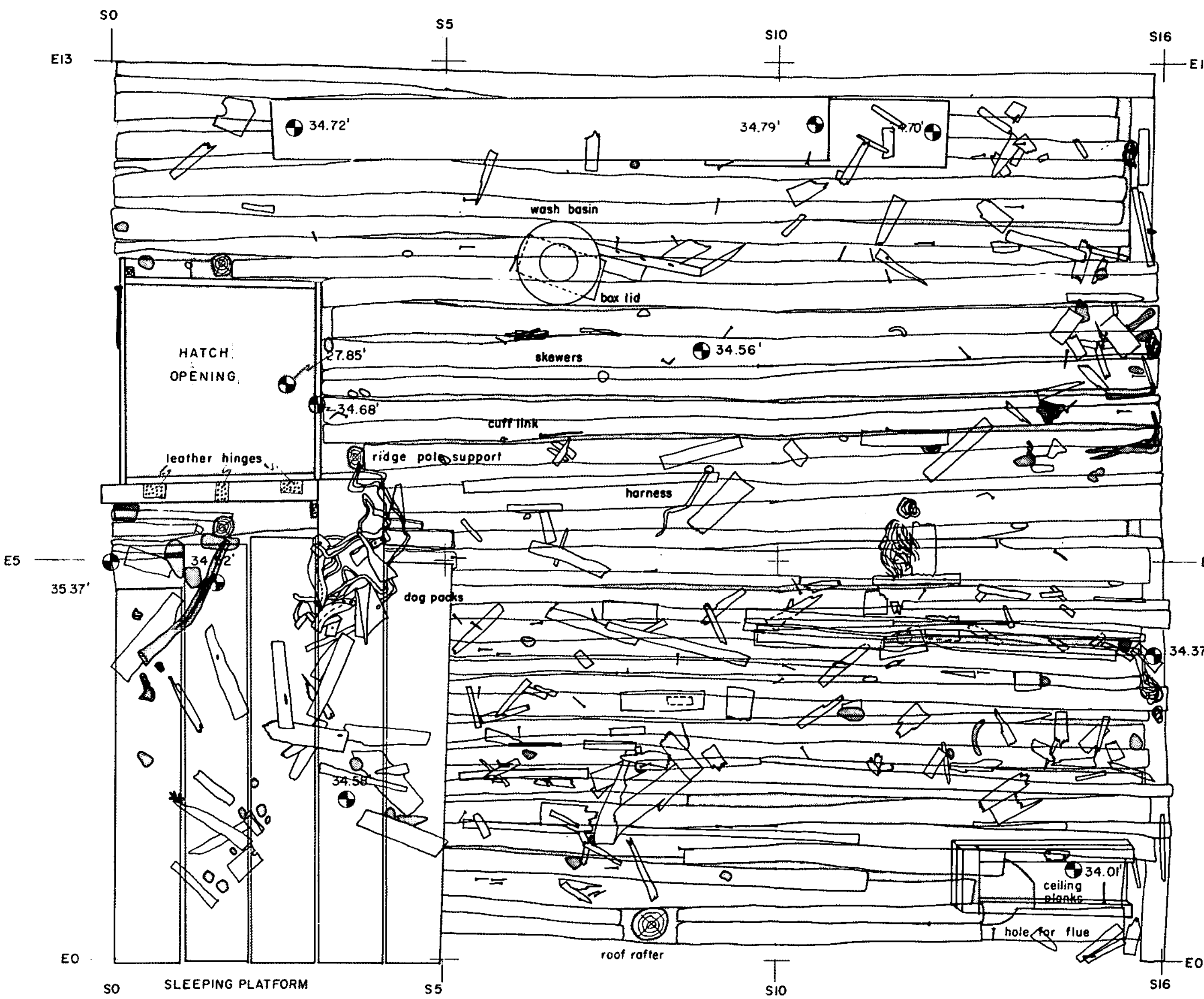
The entire floor area was covered with a layer of bark fragments, leaves, and dust. The bark had fallen from the roof rafters, and the leaves had apparently blown in through cracks between the outside wall logs. These provided a "level" surface on which dust had collected for many, many years, presenting the appearance that the attic had been deliberately insulated with soil (Blee et. al 1984:303,308). Artifacts were found scattered above and throughout this dust layer.

THE ARTIFACTS

Artifacts were mapped in place (Figure 64) and assigned consecutive numbers (Figure 65). Appendix B is a numbered inventory of these items.

Figure 63: Photograph of the north end of the cabin attic, before "excavation." The trapdoor is behind the photoboard. Looking North.

Figure 64: Location of artifacts found in the Moore Cabin attic.



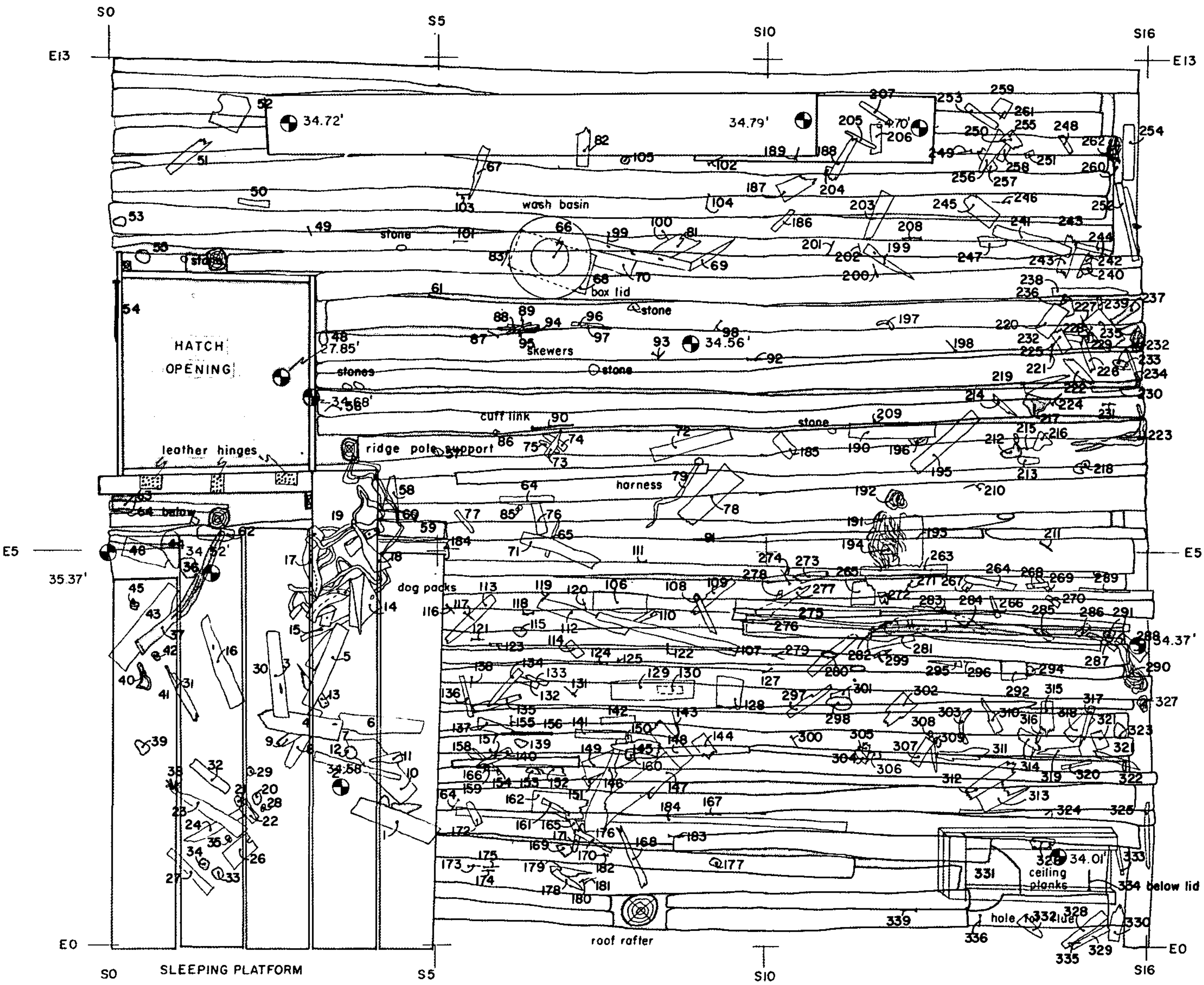
PLAN OF CABIN ATTIC

1 0 1 2

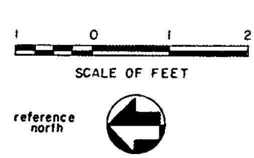
SCALE OF FEET

reference north

Figure 65: Number key to artifacts found in the Moore Cabin attic investigations.



PLAN OF CABIN ATTIC



Shingles and Shakes

The single largest category of artifacts recovered from the cabin attic consisted of fragments of the roofing material and appears to be mostly shingles. The word "shingle" is an inclusive term meaning a type of roofing material that is often thicker on one end than on the other and is intended to be placed in overlapping rows on a roof. "Shakes" are a specific type of shingle that were split from wood. Since Moore distinquished between "shakes" and "shingles", it has been assumed that the latter were the commercially-sawn type rather than the more general term.

On July 8, 1888, Bernard Moore (1968:125) recorded that one side of the roof of the cabin was to be covered with shingles and the other with shakes. Earlier that summer, he had noted that a froe for splitting shakes was included in the equipment brought from Juneau (Moore 1968:114). On June 26, 1888, a few bundles of shingles had arrived from the same city (Moore 1968:122). Moore may have intended to manufacture all of his roofing material himself, but as the summer passed, decided to invest in the commercial shinges.

Moore did not mention whether the shakes were placed on the east or west side of the roof, or whether they did indeed use the scheme proposed in the diary. Early photographs of the cabin are too indistinct for the viewer to determine which side held shakes and which shingles. The later photographs show only the east side of the cabin and suggest that shakes were on that side. Because of the ambiguity, the restoration architects chose to use shakes on both sides of the cabin roof. It was desireable to determine which side held shakes and which shingles--if there indeed was a difference--in order to assist in the interpretation of the nail distribution on the original site of the cabin.

Although most roofing fragments appeared to have been sawn, many were badly weathered, and it was difficult to determine the original method of manufacture. As a result, it was often not possible to

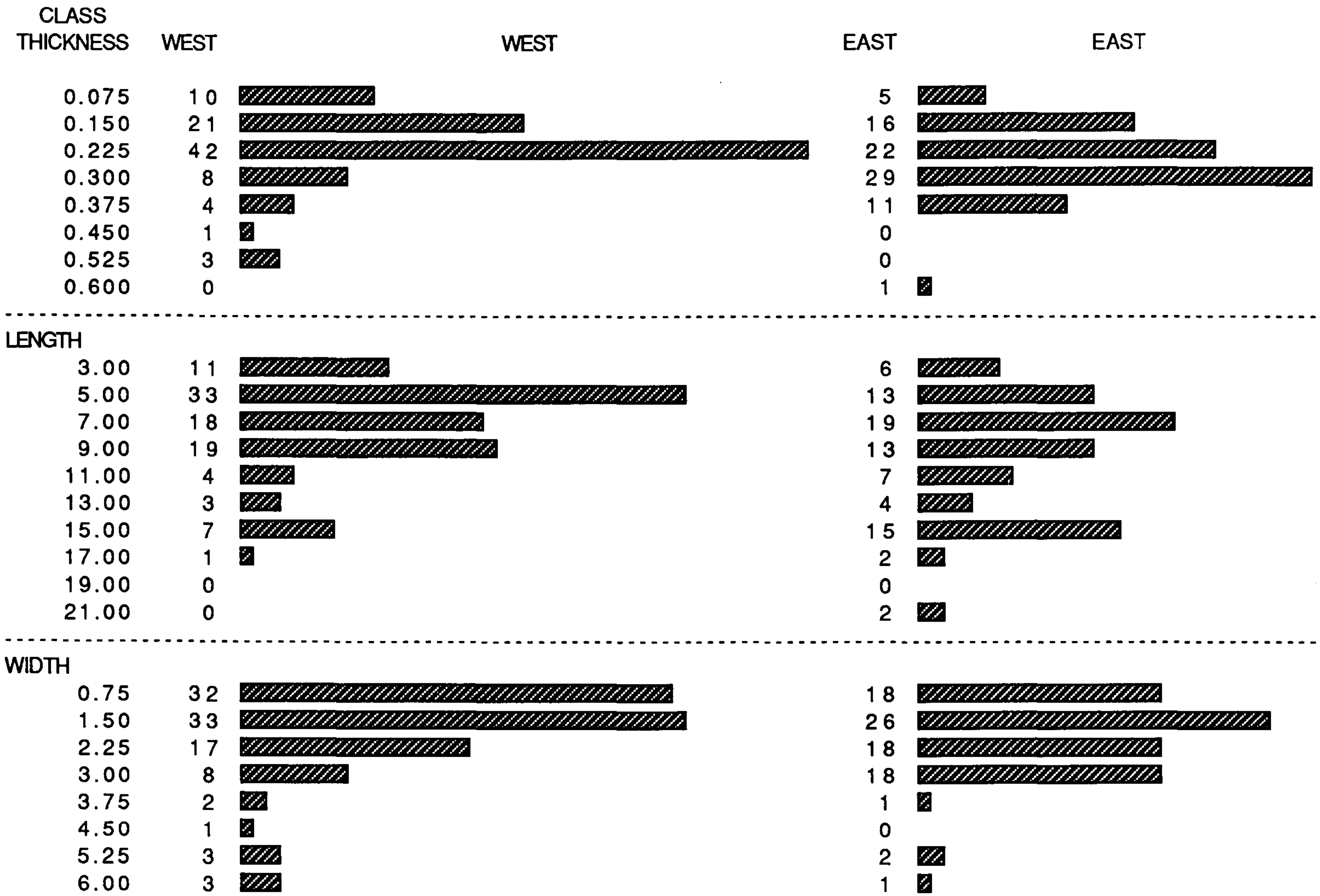


Figure 66: The size distribution of shingles on the east and west sides of the Moore Cabin attic.

distinguish weathered sawn shingles from split shakes. Other methods of determining which side held shakes were necessary.

A few of the fragments were found containing cut nails, confirming that they indeed were remnants of the original roof. In order to determine whether a difference in the configuration of the roofing materials could be observed archeologically, fragments larger than about four square inches were plotted and measured. A total of 482 fragments were recovered. Of these, 183 were plotted in situ and measured for maximum thickness, maximum length and maximum width. Shakes are hand split from blocks of wood and shingles are made with a saw. Shakes tend to be thicker and vary more in width and length than the shingles. For that reason, the thickness, width and length of roofing fragments on each side of the cabin were compared. Maximum thickness was calculated to the nearest 0.025 of an inch; maximum length and width were measured to the nearest 0.25 of an inch.

Figure 66 shows the distribution of the thickness, length and width of the roofing-fragment assemblages from each side of the cabin. The fragments appear to be slightly thicker, longer and wider on the east side of the cabin. All distributions are skewed to the left or lower end of the scale, meaning that there are more small than large fragments. In a normal distribution, there would have been an equal number of small and large fragments. It was not possible to use a parametric test, such as an analysis of variance (ANOVA), to determine whether the differences observed in the two groups of shingle fragments were significant or not since parametric tests assume a normal distribution.

The most powerful non-parametric test that can accomplish the same purpose as ANOVA is the Mann-Whitney U test (Seigel 1956:116). Figure 67 presents the statistical argument that shows that the fragments on the east side of the cabin attic floor were indeed significantly thicker than those on the west ($p=0.00011$). The same argument holds for the width ($p=0.0179$) and the length ($p=0.000016$), indicating that, overall, the fragments found on the east side were larger than those on the west.

NULL HYPOTHESIS: The roofing fragments on the east side of the Moore Cabin are the same thickness as those on the west side.

ALTERNATIVE HYPOTHESIS: The roofing fragments on the east side of the Moore Cabin are thicker than those on the west side.

STATISTICAL TEST: The two groups of roofing fragments constitute two independent groups, and the measure of thickness constitutes at least an ordinal measurement. The distribution is non-parametric, so ANOVA cannot be used. For these reasons, the Mann-Whitney U test is the appropriate test of these data.

SIGNIFICANCE LEVEL: The null hypothesis should be rejected in favor of the Alternative Hypothesis if $p<0.025$.

REJECTION REGION: Since the alternative hypothesis suggests direction, the region of rejection is one-tailed. It consists of all values of z which are so extreme that their associated probability under the null hypothesis is equal to or less than 0.025.

DECISION: $z= -3.75$. The probability of a z as extreme as -3.75 is 0.00011, which is less than 0.025.

THEREFORE, reject the null hypothesis in favor of the alternate hypothesis.

CONCLUSION: The fragments on the east side are thicker than those on the west.

Figure 67: Mann-Whitney U Test statistical argument on the thickness of roofing fragments in the Moore Cabin attic.

In view of these findings, it is suggested that the east side of the cabin was covered with shakes and the west side with shingles.

Nails

An analysis of the nails tends to confirm the deduction reached through the statistical analysis of the shingles. Of the 112 nails found lying loose on the attic floor, 83% were cut nails. Although the wire nail industry was strong by 1888, more cut nails were sold at that time than wire nails. Builders found that the heads of the wire nails tended to rust off more easily than the cut ones in situations where the head was exposed to the weather, especially on roofs. It was not until 1902 that the modern galvanized wire roofing nail was invented (Fontana and Greenleaf 1962:50). It is quite logical that Bernard and William Moore used cut nails on the roof of their cabin. Indeed, in all of the eight instances where nails were found in shake fragments, they were cut nails.

The bar graphs in Figure 68 show rather clearly that 4d nails predominated (73.6% of cut nails) on the west side and 8d nails on the east (85.0% of the cut nails). It seems logical that a thicker piece of wood (i.e., a split shake) would require a larger nail. The high frequency of large nails corresponds to the statistically thicker roofing-material fragments. It appears that the 4d nails were being used on the west side to secure the thinner, sawn shingles. This finding, of course, has bearing on the interpretation of the distribution of nails found on the original site of the cabin.

Chinking Materials

Bernard Moore spent the summer of 1896 in the cabin with his family. He states that, "My wife and I worked together fixing up the log house, chinking it better, putting in a good window, a back and a front

SIZE (d)	WEST	EAST
CUT NAILS		
2d	3	0
3d	0	3
4d	39	3
5d	1	0
6d	1	0
8d	7	34
unknown	2	0
WIRE NAILS		
2d	0	1
3d	2	1
5d	0	1
8d	4	6
10d	0	2
12d	1	0
20d	0	1

Figure 68: Distribution of nails by size in the Moore Cabin attic.

door, a rough floor and making pieces of rough bunks and furniture out of poles" (Moore 1968:178). This season was the first that the building was occupied for more than a few days at a time.

Seven kinds of materials were used to chink the logs in the cabin, based on those pieces that had fallen out and were lying on the attic floor: burlap, fabrics, yarn, leather, moss, newspaper, and grass (Table 20). Four clumps of grass were wadded tightly into balls about four inches in diameter, and were most definitely not birds' nests or incidental debris. It appears that fabric was the preferred chinking material (65%), followed by moss in popularity (19%). The remaining 16% of various materials suggests that when the supply of preferred material was exhausted just about anything that was available was used.

Note that 47% of the chinking pieces were found at the north end of the cabin and 41% at the south end. It is logical that most of the chinking materials were found at the gabled ends of the building, thus confirming that there had been little disturbance of the debris found on the attic floor.

One of the wads of newspaper bore the date December 30, 1892, suggesting that some chinking activities took place after that time. The cloth chinking, however, is more interesting than any of the other artifacts recovered from the cabin.

Description of Clothing fragments

Table 21 shows a list of the garment fragments used for chinking. All cloth pieces were cleaned by brushing with a stiff toothbrush. They were then sprayed lightly with distilled water and dried under pressure. Identification of the garment type was made with reference to The Vogue Sewing Book (Musheno 1975), the Sears, Roebuck 1902 catalogue, and the Montgomery Ward 1895 catalogue. The personal sewing expertise of Diane Rhodes was also of considerable assistance.

Table 20: Inventory of chinking materials used in the Moore Cabin.

material	unit S5E6	unit S5 E13	unit S10 E 6	unit S10 E13	unit S16 E6	unit S16 E13	total	percent of total
burlap	-	-	-	-	-	1	1	1.7%
fabric	12	10	1	-	3	11	37	64.9%
grass	-	-	-	-	1	3	4	7.0%
leather	-	-	-	-	1	-	1	1.7%
moss	5	-	4	-	2	-	11	19.3%
newpaper	-	-	-	-	1	1	2	3.5%
yarn	-	-	1	-	-	-	1	1.7%
total	17	10	6	0	8	16	57	

Table 21: Inventory of Clothing found in the Moore Cabin attic.

GARMENT TYPE	MATERIAL	WEAVE	COLOR	HAND STITCHING	MACHINE STITCHING	PATCHING WEAR	# OF PIECES
CHILD'S CLOTHING							
trousers waistband	wool/muslin	plain	black	√		√	1
WOMAN'S CLOTHING							
cape(?)	wool	twill	pale yellow		√		1
coat (?)	wool	twill	dk. brown		√		4
coat lining	cotton	plain	black and white	√			1
dress bodice	wool	twill	white	√	√	√	2
half-belt	cotton	twill	white	√	√		1
mutton-chop sleeve	wool	twill	white	√			1
skirt	wool	twill	black/red/brown		√		2
long underwear	wool/cotton	knitted	white	√	√	√	1
night shirt	cotton flannelette	twill	blue & white stripes		√		2
MAN'S CLOTHING							
blue jeans	cotton denim/canvas	twill	blue/white	√	√	√	4
coat	wool	plain	dk. brown	√	√	√	2
trousers	wool	twill	dk. brown		√	√	1
trousers	wool	plain	black	√	√	√	1
UNIDENTIFIED FRAGMENTS							
	cotton	plain	white	√	√		3
	cotton flannel	plain	red brown (small tack)				1
	wool	b. twill	brown/black				1
	wool	plain	black		√		2
	wool	plain	brown				1
	wool	twill	black				1
	wool	twill	white	√			1
	Wool	twill	yellow				2
	wool						1
TOTAL							37

Children's Clothing

The waistband from a boy's pair of trousers (#212) was found lying on the attic floor in the center of the cabin about two feet north of the south wall. It was made of black wool with a plain weave and lined with a white cotton muslin in a twill weave (Figure 69). It is the left half of the type of band that divided in both the front and back, a characteristic of trousers around the turn of the century. Clumps of thread suggest the original presence of four buttons, which were probably used for suspenders. The use of a heavy brown thread to reinforce the waist seam suggests repair activity. All seams were hand sewn, indicating a home manufacture.

The 11-3/4 inch length indicates a waist size of 23 inches, too small for most men. Women rarely wore trousers at that time. A few photographs of betrousered women do exist (e.g., Satterfield 1978:50-51), taken along the trails where mud and heavy packs made the skirts such a liability that standards of acceptable dress were temporarily suspended. In fact, the photographs were probably taken specifically because the women were dressed so unusually. It is therefore suggested that the waistband probably belonged to trousers worn by Bernard Moore, Jr. (Figure 3).

Women's Clothing

A fragment of pale yellow, woolen cloth lined with a white cotton flannelette (#63) appears to have been part of the left side of a cloak or cape. The lack of a button-hole and the presence of a small tear in the appropriate place for a button indicates that it was from a woman's garment. Since men's clothing closes left-over-right, their buttons are placed on the right side.

Three long strips (#36, 37 and 44b) and a quadrangular fragment of wool (#44c) that was dark brown and twill woven with a cotton warp were found lying on the floor close to one another on the north side of the

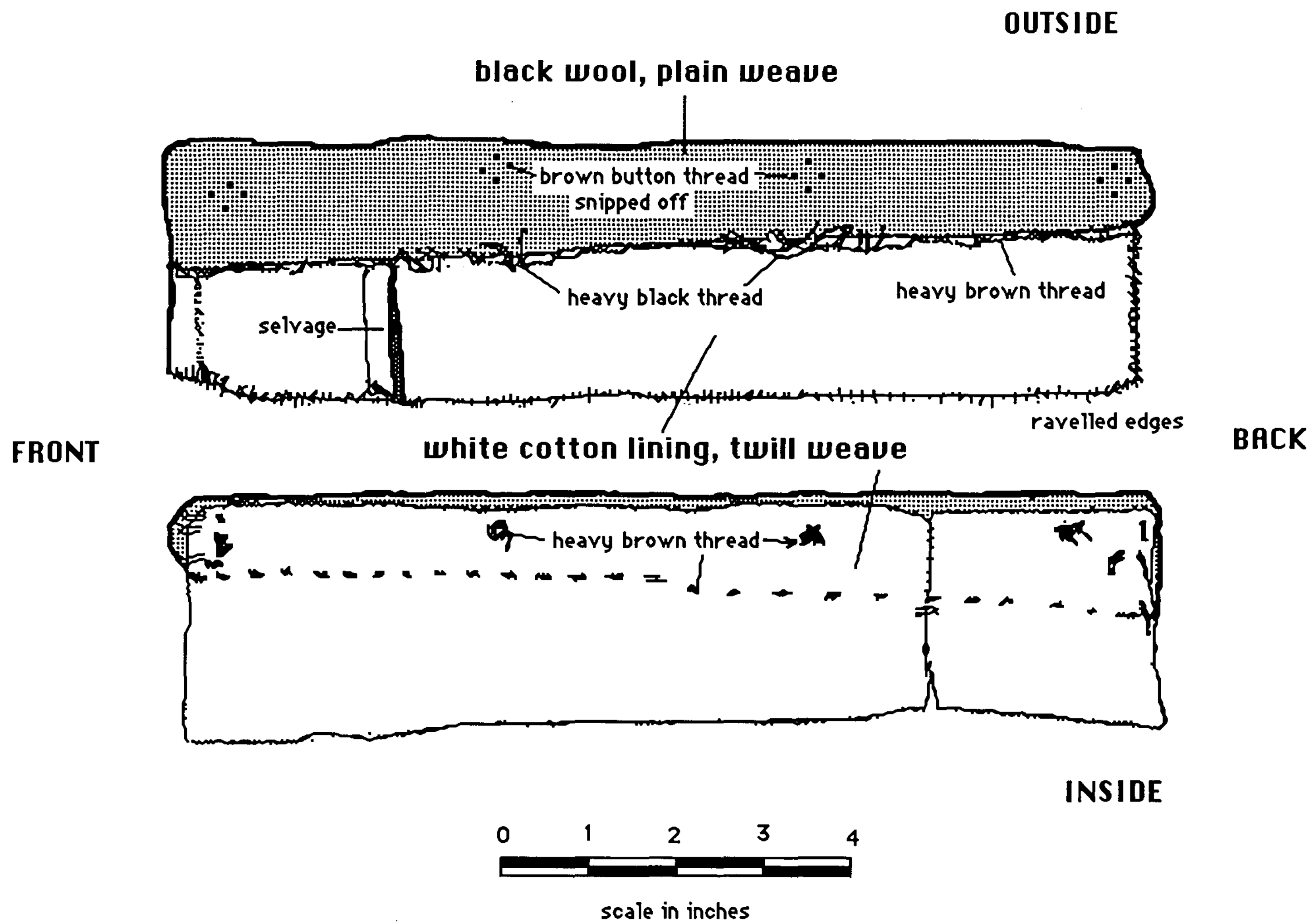


Figure 69: Waistband from a pair of boy's trousers found in the Moore Cabin attic.

cabin. The quadrangular piece had been torn from the underarm portion, and the strips were taken from various parts of the garment. Both the long length of the strips and the heavy weight of the fabric suggest a coat. One (#44b) is a portion of the bottom edge taken from the left side. As before, the lack of a button hole and the presence of a tear in the appropriate location of a button suggest a women's garment. The seam stitching had been made with a machine.

Two long strips of white cotton--plain woven and printed in a black gingham design (#63)--were found wadded together in an air pocket between the cabin ceiling and attic floor next to the north wall. They appear to be from the half-lining of a long coat. Multicolored fragments of coarsely woven twilled wool were caught in the remnants of the stitching. Each thread of the wool was a different shade of earth tones, which obviously did not match the black and white gingham. One strip was 52-1/2 inches long and composed of three shorter pieces hand-sewn with narrow, 1/4 of an inch wide seams. The designs are not matched at the seams. The length of the facing suggests a woman's garment as men's coats were much shorter at the turn of the century.

The ginghams advertised in the 1895 Montgomery Ward catalogue (1969:10) all came on 27 inch wide bolts. Two strips of cloth used to create the half-lining were 25-1/2 inches long. Both ends had selvage edges, indicating they had been cut across the width of the fabric rather than down the length. A modern seamstress would avoid this method. For a 54 inch long half-lining, she would cut a solid piece the length of the fabric to avoid not only the labour of sewing the pieces together but also the effort required to match the designs on either side of the seam. Montgomery Ward ginghams averaged five cents a yard in 1895; ten cents worth of facing fabric would have been sufficient to avoid sewing several seams. Cutting the cloth across the width is therefore an obvious cost-saving strategy.

Anyone who has taken a sewing class understands the Euroamerican ideal of matching the designs at the seams. However, doing so generally requires the use of more fabric than if matching is not a goal. The fact that the check designs did not match at the seams is further evidence that the seamstress had economized in making the coat.

Together with the mismatched colors--an earth tone wool coat with black and white gingham-like facing--the cut across the width and mismatched seams suggest that a wide variety and abundant supply of fabric was not available to the seamstress. This situation could be due to one of two things: limited economic resources or limited availability of supplies.

A piece of white wool flannel, woven in a twilled design, was found wadded up near the south wall of the cabin (#236). It consisted of several seams, both hand and machine stitched in a very intricate styling. It appears to be that portion of the bodice of a woman's dress that surrounds the right sleeve. An unusual cut to the bias and some rather unconventional sewing techniques suggest 1) there was a shortage of fabric to construct the garment, and 2) it was home-made. An additional piece of cloth may be from the same piece of clothing (#B*).

A similar fabric in a slightly tighter weave composed what appears to be the left half-belt from a woman's dress. That was a popular technique in the 1890s for closing the front of a wrapper and creating a gathered skirt (Figure 70). As on the dress bodice, a combination of both machined and hand-sewn stitching is present.

The end of a finely woven, white wool, worsted sleeve was found close to the previous two pieces. A variation in the tightness of the weave creates vertical stripes the length of the sleeve. It appears to be the lower end of a mutton-chop sleeve, a style very popular in the mid-1890s (Figure 70). It is interesting to note that the style was not

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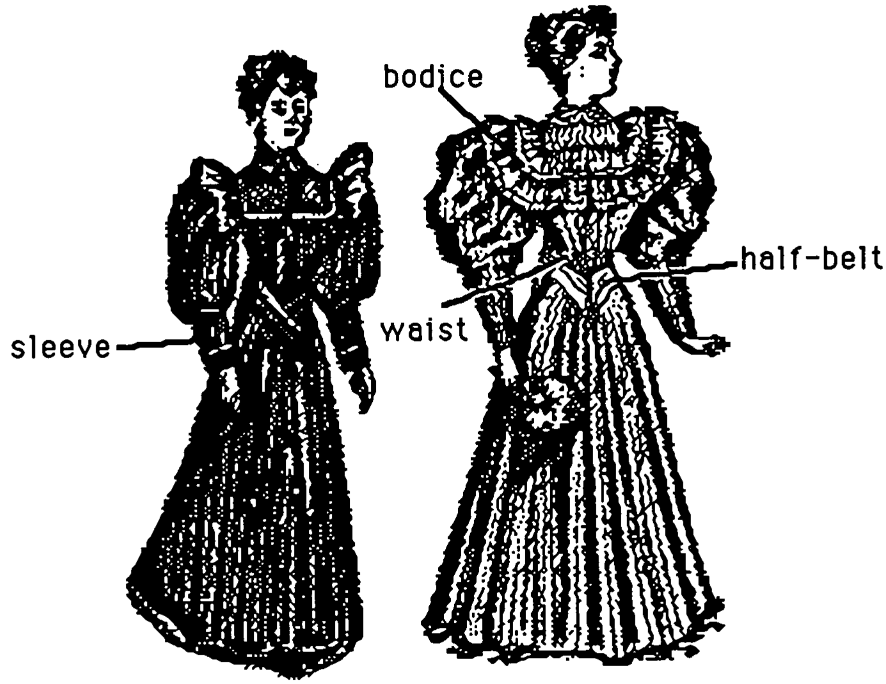
*See page 338 for a list of unnumbered artifacts.



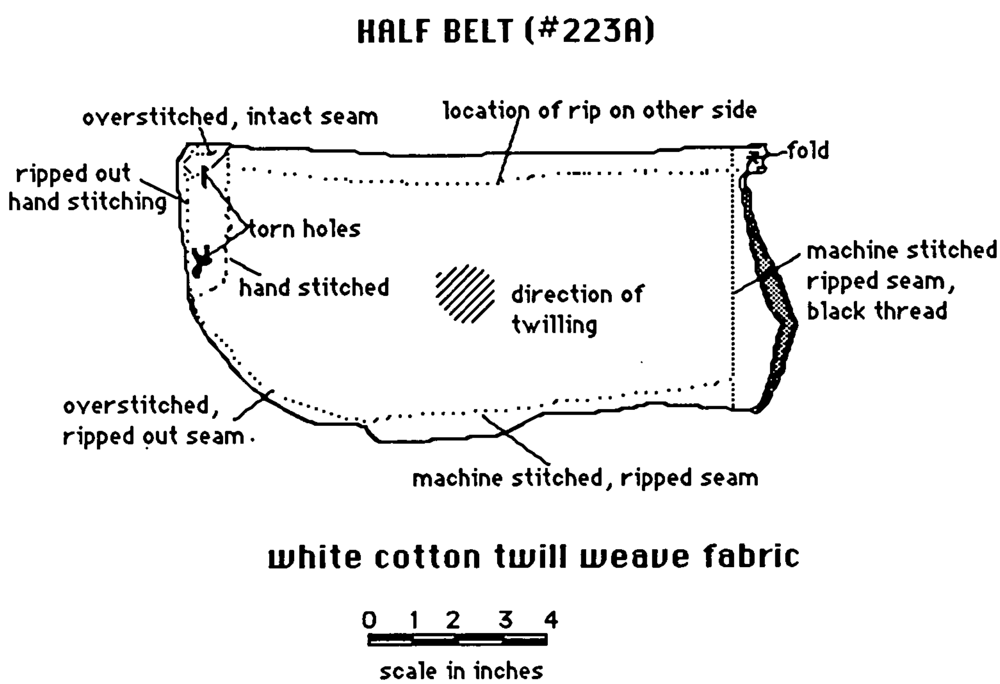


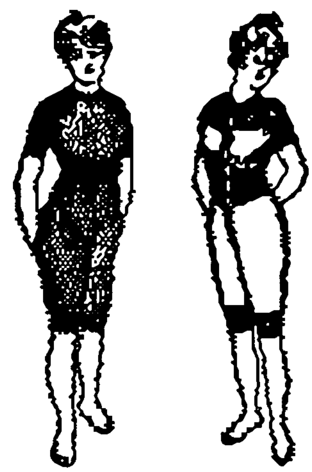
Figure 70: Women's wrappers from the Montgomery Ward 1895 catalogue (p. 35), indicating pieces found in the Moore Cabin attic.

pictured in the 1902 Sears, Roebuck catalogue, suggesting that it was no longer in fashion by that date. All stitching was hand done. A frayed cuff indicates that the garment was badly worn before being torn up for chinking.

It is quite possible that the last three items came from the same garment, given their similarity of color and proximity of location. If so, the slight variation in fabric type may indicate that cloth was not readily available to the seamstress. The pieces were probably from a wrapper or tea gown (Figure 70), which was meant to be worn only at home during the day, the 1890s equivalent of the house coat.

Two pieces of a fine twill woven wool were found near the north wall of the cabin (#29 and #36). It is black with two red warp threads every 0.3 of an inch and two brown weft threads every 0.15 of an inch, giving the fabric a subtle criss-cross design. One piece (#36) appears to be a portion of the right side and waist from a skirt or pair of trousers. The presence of two small holes 1/2 of an inch from the back placket suggests that the button was on the right side. If so, this was a woman's skirt. The fact that the waist had no band further suggests a woman's garment. All the men's trousers in the 1895 Montgomery Ward catalogue have waist bands, yet very few of the women's skirts do. The stitching at the waist was done with a machine.

Artifact #217 is the lower 9 inches of a pair of knitted white woolen long johns (Figure 71). A neatly patched hole caused by wear at the knee is four inches above the bottom ribbing. The patch was made from a cotton knit and worn in the center, suggesting considerable wear after it was repaired. If from a man's pair of underwear, it was apparently riding up onto his calf most of the time. However, both the 1895 Montgomery Ward and 1902 Sears, Roebuck catalogues show all women's underwear terminating at mid-calf in order that they not be visible below a skirt (Figure 71). It is very likely that this pair of long underwear was worn by a woman.



Sears 1902: 977

*217: White wool knit with cotton patch.

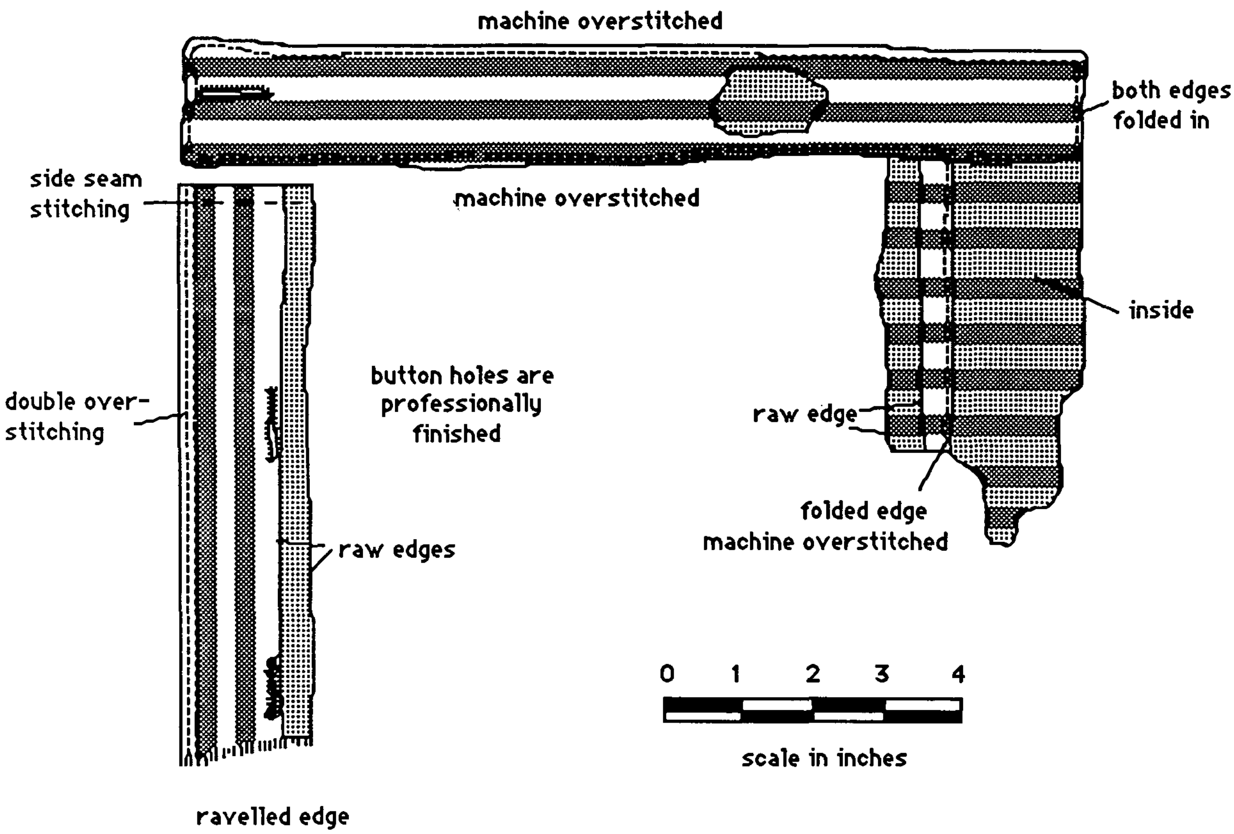
Figure 71: Models from the 1902 Sears, Roebuck catalogue and the end of a pair of women's long underwear.

Two wads of a blue and white striped cotton flannelette (#40 and 44d) proved to be parts of a nightshirt (Figure 72). The pieces consist of a plain band collar and the right placket for buttoning down the front. Button holes are on the right side, indicating a woman's garment. The 12 inch collar also suggests that the person who owned the shirt was small. All stitching was done with a machine.

Men's Clothing

The most interesting garment originally worn by a man was represented by four remnants of a pair of cotton blue jeans (Figures 73 and 74). They include portions of the left front fly and left leg (#62), the right watch pocket (#41), the right half of the seat (#12), and the right leg (#39). All seams were machine-stitched with yellow thread, and the pockets were rivetted, suggesting they were ready-made. The seat was badly worn and the right rear pocket torn open. A large white cotton canvas patch was hand-sewn over half the pocket, extending past the torn center seam. The overstitched method of attaching the patch is much cruder than the other hand-sewn items in the assemblage. The lack of attachment at the seam, the method of sewing, and the mismatched fabrics suggest that the wearer rather than an experienced seamstress repaired the garment. Splotches of grey and yellow paint on the back leg and evidence of grime around the removed patch implies they were working pants.

Two long strips of a very dark brown wool with a cotton warp in a plain weave were found at both the north and south ends of the cabin (#44a and 218). The former was torn from the right chest region of a coat and includes the seam with the right sleeve. Remnants of button threads at the right front facing confirm that it was a man's coat. The right chest area is worn. It also is splattered with blue paint. Seams were finished with machine stitches, and the facings were hand-tacked. This evidence is consistent with a manufactured article.



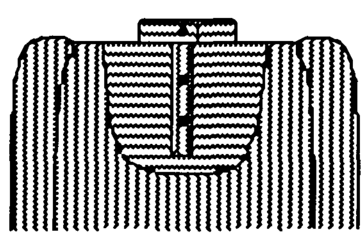
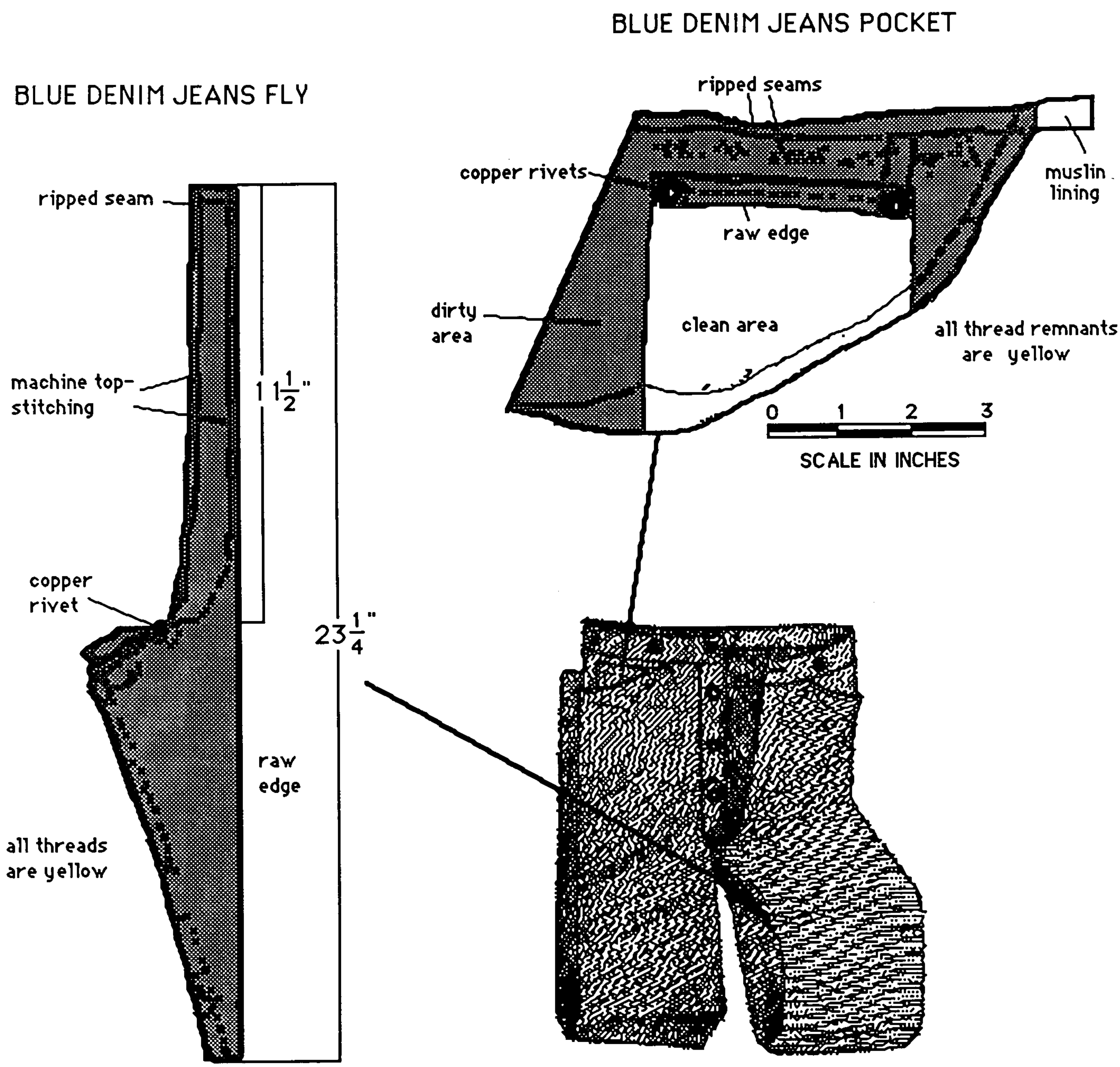
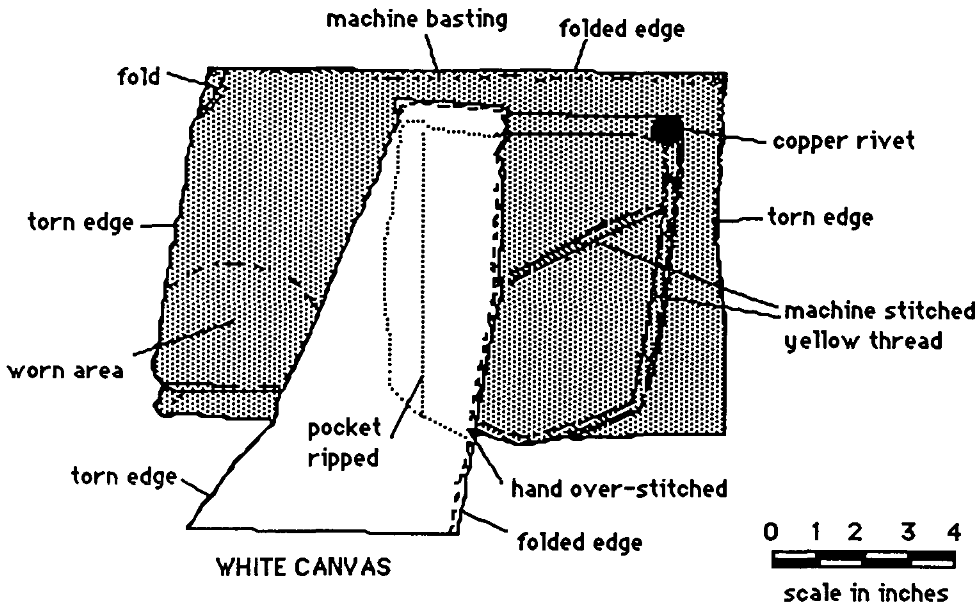


Figure 72: Fragments of a woman's nightshirt.



Sears 1902: 1154

Figure 73: Blue jeans fragments, front.



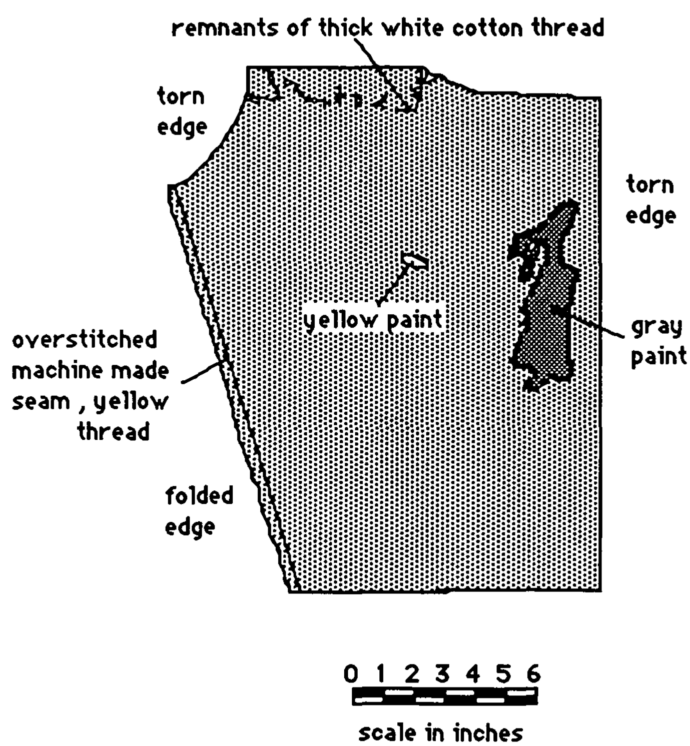


Figure 74: Blue jeans fragments, back.

A piece of dark brown wool with a cotton warp in a twill weave (#55) appears to have been the left seat of a pair of trousers. A worn area is appropriate to that part of the human anatomy. All seams were made with a machine.

The final piece of clothing that probably was worn by a man is a plain woven black wool (#232). From the conformation of the seams and the placement of a worn area, it appears to be the rear inside portion of the gussetted seam of the right leg. As with the other pieces of men's clothing, remnants of stitching on two edges suggest a manufactured item.

Other Cloth Items

With one exception, the remaining 13 fragments of clothing are too small for identification or contain no diagnostic features. A small rectangular piece of a reddish brown, plain weave flannel with a deep pile contained a single ferrous tack 1/4 of an inch long. It may have been tacked over a crack.

Conclusions Regarding the Clothing

Of the minimum of 19 garments identified by fabric composition, weave and color, 11 had evidence of the wearer's sex and/or age. Men's clothing accounted for only four of the garments. If the mutton-chop sleeve, bodice and half-belt are from the same dress, six were worn by a woman. One item was a child's. All of the men's clothing had been badly worn before being torn up for chinking, and the child's had been repaired at least once. Evidence of patching or wear was present on only two items of the women's clothing.

In his diary, Bernard Moore first mentioned chinking the cabin in 1896. He recorded that his wife assisted him in the effort (Moore

1968:178). Before that time, only men had used the cabin, and it does not appear to have been chinked before being occupied by the family in 1896. The only woman, then, who lived in the cabin was Minnie Moore, and she was instrumental in making it habitable by assisting with the chinking. In this discussion, it is assumed that the remnants of women's clothing found in the cabin attic belonged to her.

If the clothing used for chinking belonged to the members of the Moore household, certain conclusions about their economic status may be proposed. Three of the six women's garments and the child's trousers were made by hand. This finding suggests that the household could not afford a sewing machine, for it is presumed that the seamstress would not sew a garment by hand if a machine happened to be available. In addition, the economical use of materials in the gingham coat lining and white cotton dress suggests that she "made do" with whatever resources were at hand. This conclusion is reinforced by the repeated evidence of mending and repair to most items of clothing.

The 1890s were not a prosperous time in North America. Bernard Moore (1968) writes of the several small, part-time, miscellaneous jobs he held before the gold rush: canning fish, cutting wood, running mail, hauling supplies for miners--anything to make enough cash to permit him and his father to take a few weeks off and improve their homestead in Skagway. It is possible that the "rags" used to chink the cabin were the discards of others less fortunate that the Moores, but it seems most likely that these were their own, old and battered discards. It is further interesting to note that most of the chinking material consisted of seams--those odd-shaped pieces that were left when a garment was cut up for otherwise useable fabric. The larger, flatter pieces no doubt were recycled into quilts, other clothing, cleaning cloths, or patches. Combined with the documentary suggestions of limited cash resources, this evidence of frugality reinforces a picture of a hard-working frontier family at the turn of the century.

The method of construction of the hand-sewn garments is worth some mention. If Minnie Moore was indeed the seamstress, her ethnicity may be revealed in the sewing techniques. Modern seamstresses use a standard 5/8 of an inch seam in the construction of clothing and adhere to certain "rules" regarding the orientation of the bias of the cloth when it is cut. These rules were largely ignored: seams were approximately 1/4 of an inch wide, and the bias was often at an odd diagonal. These may indeed be a result of frugality, but the fact that Minnie was not Euroamerican may have influenced her "model" of the "proper way to make a dress," at least by Euroamerican Victorian standards. That she sought to be "fashionable" by those same standards as evidenced by the mutton-chop sleeves, intricate bodice, and half-belt suggests that she wished to immulate the non-Native culture. Her "unorthodox" sewing techniques may simply reflect a lack of access to the total range of Euroamerican culture.

Evidence of Child's Play

A large wooden box lid (#331), consisting of a single board measuring 5/8 of an inch by 13 inches by 31-1/2 inches and three 5/8 of an inch by 3-1/4 inch boards held together with 34 wire nails (Figure 75), was found in the southwest corner of the attic covering the stove flue hole cut through the cabin ceiling and attic floor. The remnants of a paper label were attached to one of the smaller boards with four small tacks (#326). The label appears to be an advertisement for Arbuckle Coffee. Much of one surface had been covered with pencilled doodles.

Arbuckle coffee was distributed by General Foods in 1914 (Yuban brand is its direct descendant). They shipped their coffee in wooden crates until about 1915 when fiber boxes became more economical. The product was as much in demand for the crate as for the coffee cans it contained. For instance, Ward (1977) reports that people living on the Navajo Reservation built outbuildings from the sturdy boards of Arbuckle coffee crates. Its placement over the flue hole and the ca. 1914 date indicates that it was placed in the cabin after the building was moved.

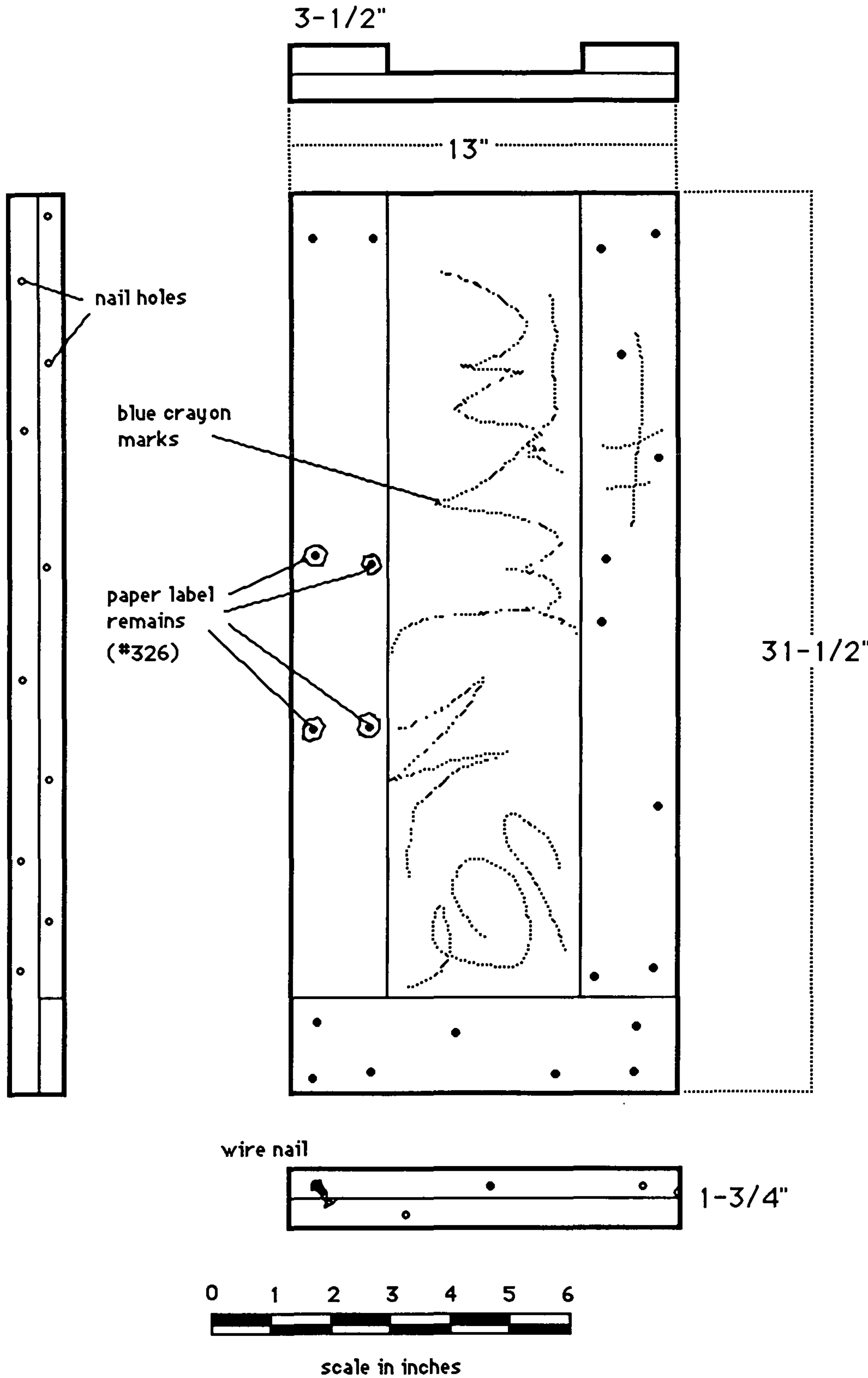


Figure 75: Arbuckle coffee crate lid.

Another, smaller box lid was found in the middle portion of the attic (#68), and it probably belonged to the type of box used for the storage of small personal possessions (Figure 76). Apparently home-made, it has a small piece of leather used as a tab to lift the lid, and it is hinged with a strip of muslin. The lid is decorated with strips of colored paper. A child (?) had doodled on the top with a pencil.

Other items suggest child's play in the cabin attic. Six wooden sticks, 5-1/2 inches long and 1/4 of an inch in diameter with pointed ends were found in a cluster near the box lid (#88, 89, 94-97). They may have been used with a game. In addition, a single cuff link (#86) was located in the same unit with the sticks and box lid. The manufacturer, "HA & Co", could not be identified. Six smooth round pebbles, about one to two inches in diameter, were found scattered about the central portion of the attic. These are exactly the sorts of "treasures" a child might value. In addition, there were three food bone fragments (#57, 91 and no #), a peach pit and a plum pit, suggestive of light, infrequent meals.

In an informal interview, Jack Kirmse (1985) mentioned that he used the cabin attic as a hideout when he was a boy. He was born in 1906, and his family did not move into the house until 1910. He probably used the attic for a play area from about 1912 until the mid 1920s. He may even have been responsible for the Arbuckle coffee crate lid over the hole in the southwest corner since the dating of the lid is consistant with this period of Kirmse's youth.

Miscellaneous Artifacts

Six items found in the attic appear to be parts of dog harness assemblies, and all are slightly different, suggesting a home manufacture. Three items appear to be the back portion of the harness (Figure 77, Type 2), complete with leather straps rivetted to a canvas band. They are identical to the harness that surrounds the rear end of the pack

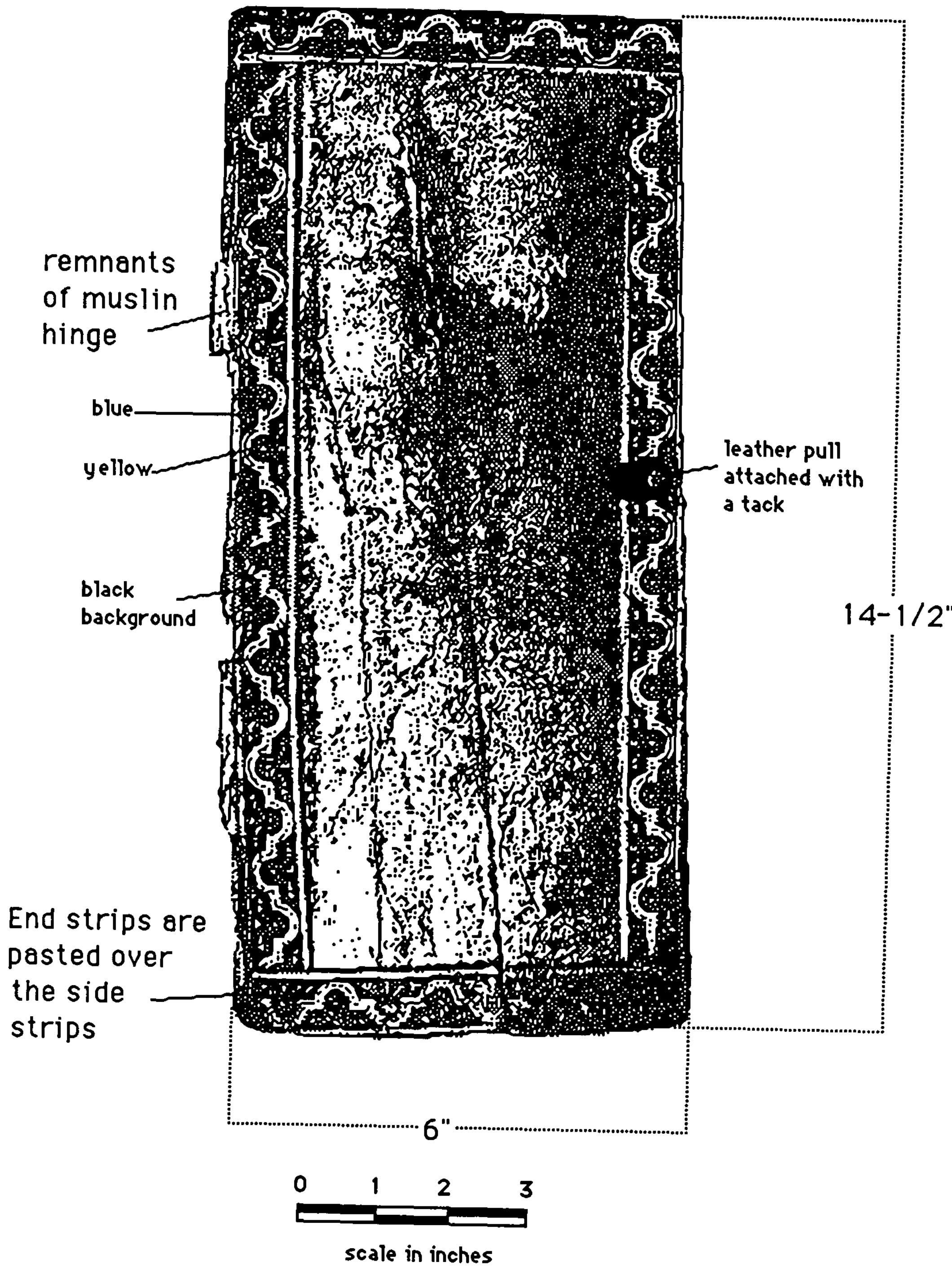


Figure 76: Homemade box lid, covered with decorated paper.

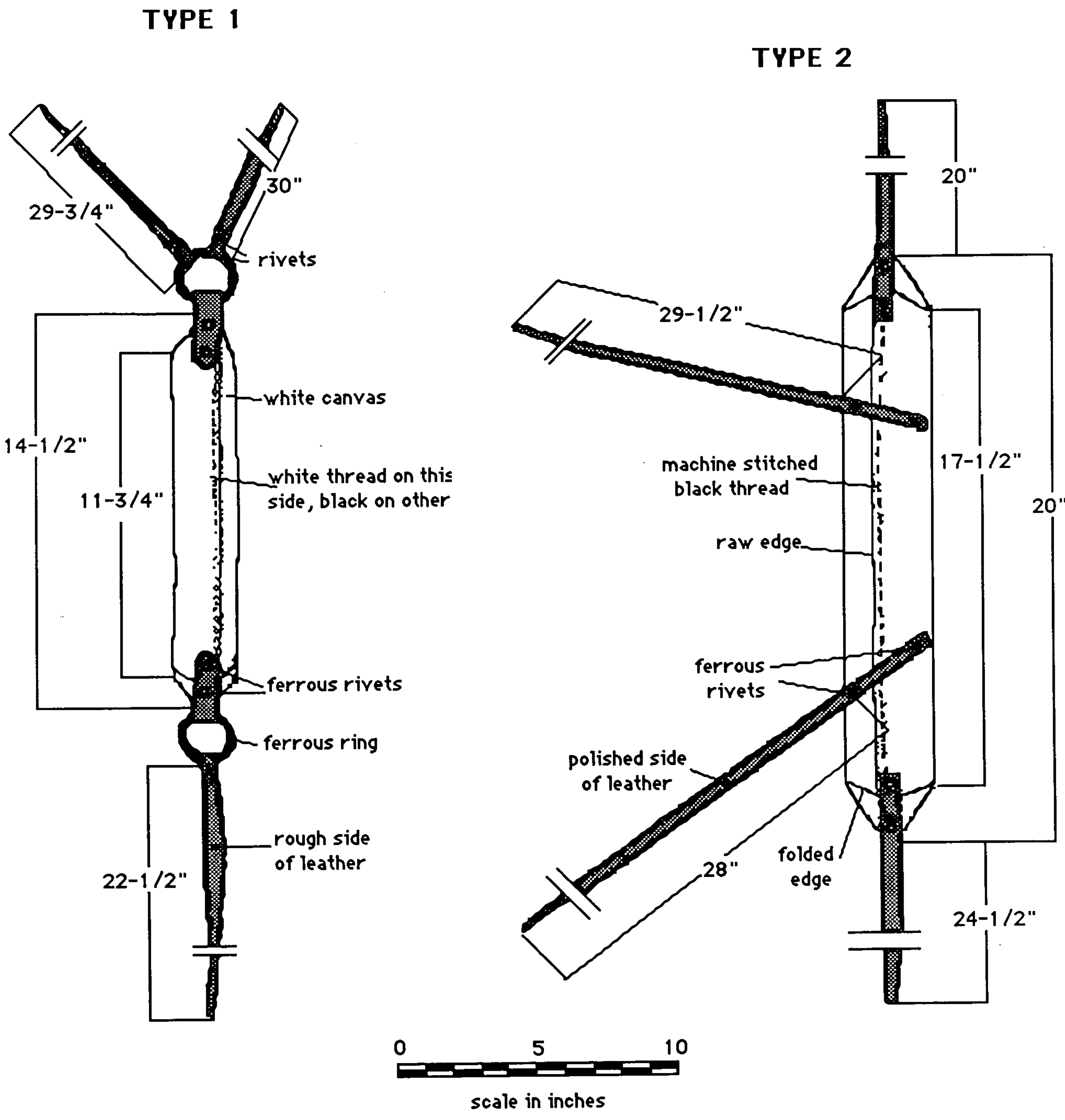


Figure 77: Dog pack harnesses.

mules shown on the cover of Spude's (1980) book on the Chilkoot Trail. They are, however, much too small to have been used with horses or mules. One of the pieces is constructed with ferrous rings rather than rivetted straps, but it, too, is probably part of the packing harness (Figure 77, Type 1). Found with these four items was a large triangular piece of leather with a hole in the small end, which might have been used with the harness. A single strap attached to a ferrous ring completes the harness assmblage.

An inventory of the cabin's contents made on October 29, 1979, before the building was acquired by the National Park Service, lists a "gunnysack full of dog packs - J. Kirmses" (Spude n.d.:3). A very similar list of items donated to the National Park Service, prepared by Jack Kirmse includes item number 25: "dog packers - 6 wooden frames plus 1 broken frame" (Jack Kirmse 1979:1). The gunnysack and wooden frames were no longer present in the building, but it is possible that these leather harnesses were part of the equipment that went with them.

A 1/4 of an inch thick, 1 inch wide, 6 feet long iron strap lay parallel to and 1 foot 9 inches away from the east wall of the cabin (#184). It contained holes every 18 inches. Its original use has not been determined. Its presence and that of the harness parts suggest that the cabin attic was used for the storage of miscellaneous items.

National Park Service Use of the Structure

Three items reflect the recent National Park Service acquisition of the cabin. One was a small gummed paper label lettered "KK 8". Another was a 2 inch long strip of cellophane tape. Both suggest architectural recording procedures or the labelling of items for accessioning into the park's collection.

Finally, a 15 inch diameter enamelled wash basin (#66) was found in the center of the cabin attic (Figure 63, far right). A piece of masking tape carried the number "403", suggesting it had once been a part of a numbered inventory. It was ornately decorated in many colors with birds and flowers, and it appeared to date to the early twentieth century, possibly the 1920's or 1930's. A National Park Service historical architect said that he had impulsively purchased the item at a church garage sale in 1980. He accidentally left the basin in the cabin. The item is therefore intrusive and not related to the cabin's use, except as an example of its most recent use, miscellaneous artifact storage.

CONCLUSIONS

Artifactual evidence in the cabin attic relates to four different time periods. The first dates to ca. 1896 when the cabin was first occupied by Bernard Moore and his family. The evidence consists of the fragments of chinking that had fallen out of the north and south walls. It appears that building and chinking materials were scarce and that whatever was available was used: old clothing, moss, newspapers, and even wads of grass. It is difficult to determine what the attic was used for during the 1896-1900 period because of a lack of evidence. The platform in the northwest corner suggests that possibly that the Moore children slept in the attic until the house was ready to be occupied. The single built-in bed in the lower section was hardly large enough to hold two adults comfortably, much less an additional two children.

The next period of activity, dating from ca. 1912 to 1920, is that of a child's hideout. Then, sometime in the 1960s, Jack Kirmse re-roofed the cabin. Remnants of the original roofing material littered the attic floor. From the nails and shingle fragments, it appears that the cabin was originally roofed with sawn shingles on the west side and shakes on the east side. The preponderance of 4d nails on the west side sheds light on the cluster of 4d nails found in the 1888-1900 levels of the west side of the original cabin site (see page 149). It is likely that these 4d nails were related to the original roofing activity in 1896.

The final period, after 1960, is further represented by the dog pack parts, iron bar, label remains and enamelled wash basin. In its latter days, the attic was used to store a few miscellaneous artifacts. However, it is unlikely that this use was intensive as the roofing fragments appear to be relatively undisturbed. Most of the storage activity probably occurred in the main portion of the cabin.

OPERATION 15: THE EAST SIDE OF THE CABIN

Operation 15 consisted of four units measuring 4 feet by 3 feet, separated by 0.5 foot wide balks along the east side of the cabin (Figure 78). These were the initial excavations at the cabin site and were designed merely to test for the presence and integrity of archeological deposits. The east side appeared to be the least disturbed and was pictured in several period photographs, facilitating the interpretation of remains. The degree of soil deposition that had occurred since the cabin had been placed on the site was of particular interest.

Two features of interest were uncovered during the excavations. The first was a line of river cobbles placed approximately 1.5 feet from the cabin wall; they appeared to frame a planting bed (Figure 79). A single course of bricks lay slightly below and outside the cobble line and may represent an earlier, larger flower bed. A 2 inch by 2 inch wooden strip lay half-way between the cobble outline and the cabin wall. Wire nails had been placed approximately 0.5 feet apart, corresponding to a line of nails on the side of the cabin about 3 feet above the ground surface.

A photograph taken sometime before 1960 (Figure 80) shows string tied between the cabin wall and the ground, providing support for a vine-like plant, probably sweet peas. Georgette Kirmse confirmed that she had grown flowers beside the cabin but claimed she never had much success with them in that location (Georgette Kirmse 1985).

The lowest log of the west side of the cabin was placed on three piers; the southernmost was composed of brick and stone and the other two were of a granitic stone (Figure 78). However, the way in which the strata had accumulated around these three piers suggest they have been on the site for some time. They do not appear to be original to the cabin as evidenced by an early photograph (Figure 8) clearly showing a wooden pier under the southeast corner.

STRATIGRAPHY

The stratigraphy at the site was very similar to that on the original site of the cabin. Approximately 1.5 feet below the ground surface lay an undisturbed, culturally sterile layer of alluvial sand and river cobbles (stratum C). Above this were a number of interlacing organic and sand lenses, which likely represent seasonal changes in the deposition of soils (stratum B). Summer growth became organic lenses and sand accumulated around the dead vegetation at other times of the year.

The uppermost layer (stratum A) was a ca. 0.25 inch thick organic deposit. It surrounded the stones and bricks that framed the flowerbeds. Its thinness may account for Georgette Kirmse's lack of success in growing flowers.

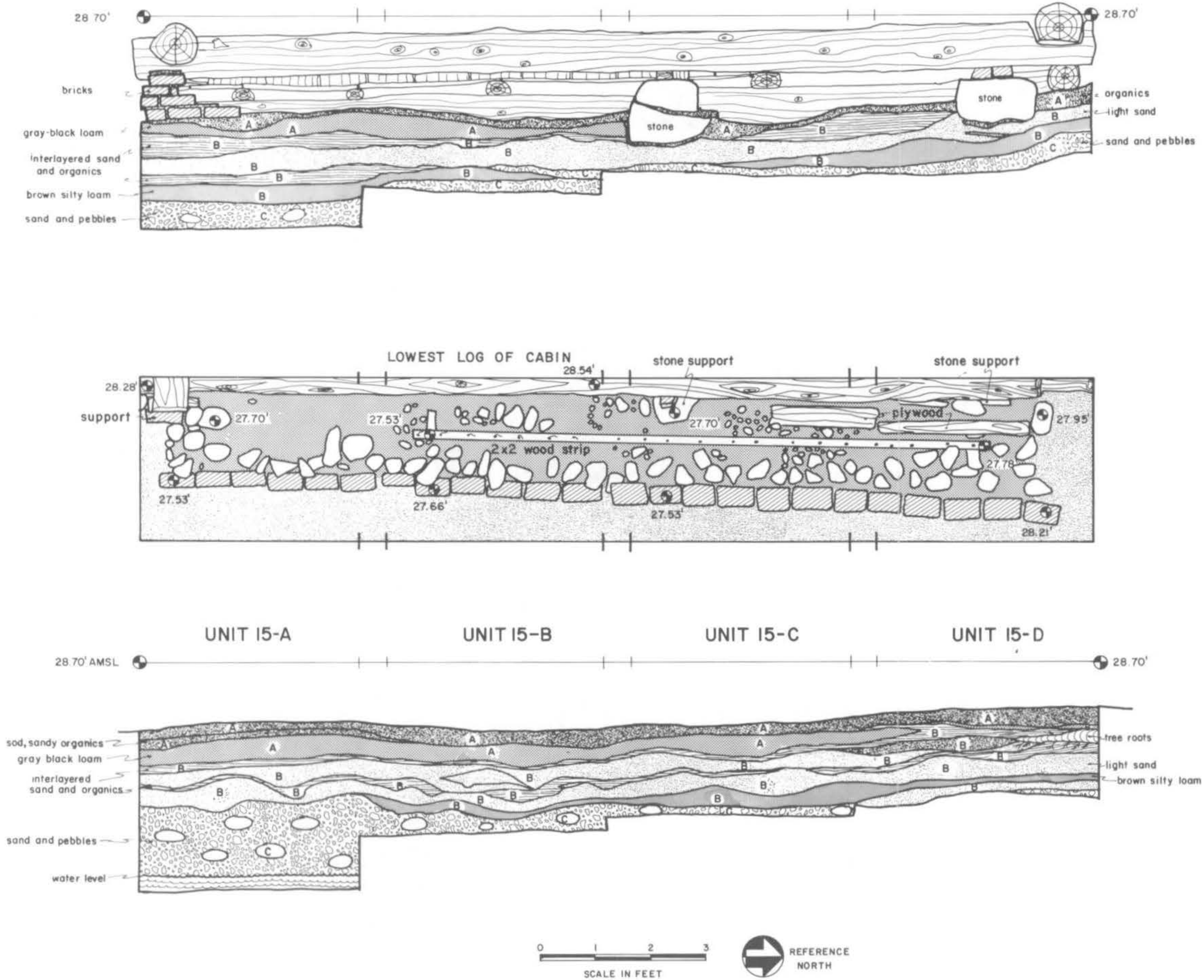
Historic Use of the East Side of the Cabin

The use of ground to the east of the cabin as a flower bed appears to have been relatively recent, although pre-dating the 1960s when Jack Kirmse replaced the roof. Photographs taken before that time suggest that the area was used mainly for the storage of miscellaneous materials, probably before being hauled to the city dump. A pre-reroofing photograph (Figure 81) from the Kirmse period shows scrap lumber lying along side the building. A ca. 1900 photograph of Bernard Moore and his new pet moose (The Daily Alaskan, March 23, 1900:1) shows fire wood piled up along the east side of the cabin.

DESCRIPTION OF THE ARTIFACTS

An inventory of the artifacts found in Operation 15 can be found in Table 22. Only those items that have a bearing on the interpretation of changing use of the area will be discussed below.

Figure 78: Plan and west profiles of the Operation 15 excavations.



28.70'
28.70'
bricks
gray-black loam
interlayered sand and organics
brown silty loam
sand and pebbles
stone
stone
stone
organics
light sand
sand and pebbles
LOWEST LOG OF CABIN
stone support
stone support
28.28'
28.54'
support
27.70'
27.53'
27.70'
plywood
27.95'
2x2 wood strip
27.78'
27.53'
27.66'
27.53'
28.21'
UNIT 15-A
UNIT 15-B
UNIT 15-C
UNIT 15-D
28.70' AMSL
28.70'
sod, sandy organics
gray black loam
interlayered sand and organics
sand and pebbles
water level
tree roots
light sand
brown silty loam
0
1
2
3
SCALE IN FEET
REFERENCE NORTH

Figure 79: Photograph of the Operation 15 excavations. Looking north. (July, 1980).

Figure 80: Pre-1960 photograph of the Moore Cabin. Note strings for peas and the steps up to the door. (Klondike Gold Rush NHP.)

Figure 81: Photograph showing lumber piled to the east of the Moore Cabin, post-1940 (Bearss 1970: Plate 4).

Table 22: Inventory of Artifacts in Operation 15.

	STRATUM A	STRATUM B	STRATUM C	TOTAL
DOMESTIC				
Food Serving				
whiteware sherd, undecorate	5	8	-	13
whiteware sherd, gold tranfer decorated	-	3	-	3
whiteware sherd, brown transfer maker's mark	1	-	-	1
porcelain sherd, undecorated	-	1	1	2
Food Storage				
tin can fragments	-	53	49	102
clear glass sherd	5	11	5	21
clear, purple tinted glass sherd	1	2	-	3
aqua glass sherd	1	1	2	4
light blue glass sherd	-	1	-	1
plastic wrap fragment	3	-	-	3
aluminum foil fragment	3	-	-	3
Beverage				
brown glass sherd	3	4	1	8
bright green glass sherd	-	-	1	1
dark olive green glass sherd	1	-	-	1
ferrous crown cap	-	3	-	3
Food Remains				
peach pit	1	-	2	3
bone	3	4	3	10
Pharmaceutical				
clear panelled glass sherd	2	10	5	17
clear, purple tint glass sherd	-	1	1	2
Furnishings				
milk glass sherd	36	3	-	39
thin clear glass sherd	1	-	3	4
PERSONAL				
Grooming				
hair roller, elastic	1	-	-	1
TP wrapper, plastic	1	-	-	1
Clothing				
buckle, ferrous	1	-	1	2
button, white milk glass, Prosser	-	-	1	1
ACTIVITIES	-	-	-	-
Children				
marble, glass	1	-	-	1
doll pieces, bisque porcelain	1	-	1	2
rubber ball	1	-	-	1
Communication				
printing block, lead, cartoon, 1899	1	-	-	1
Gardening				
brick fragments	74	5	7	86

Table 22 (continued): Inventory of Artifacts in Operation 15.

	STRATUM A	STRATUM B	STRATUM C	TOTAL
ACTIVITIES (continued)				
Hunting/Warfare				
cartridge case, cuprous, .22 caliber	1	-	-	1
Machine parts				
battery, carbon core	2	1	-	3
fuel intake spout, ferrous	1	-	-	1
turn plate	1	-	-	1
Office				
push pin, ferrous	1	-	-	1
Storage				
styrofoam packing material ("peanuts")	6	-	-	6
barrel bottom, wood	1	-	-	1
STRUCTURAL				
Window Glass				
0.063"	1	3	-	4
0.078"	-	2	-	2
0.094"	-	4	-	4
0.109"	-	1	-	1
Nails				
wire	71	56	23	150
cut	38	6	18	62
unknown	50	17	1	68
Hardware				
screw, machine rivet type	2	-	-	2
eyescrew	1	-	-	1
wire	1	1	-	2
Materials				
chips, wood	-	-	2	2
mortar fragment	1	-	1	2
painted wood fragment	2	-	-	2
wood fragment with nail hole	1	-	-	1
plastic fragment	3	-	-	3
linoleum fragment	2	-	-	2
black plastic sheeting	1	-	-	1
UNCLASSIFIED				
lumps, ferrous	6	-	4	10
unknown white, stone-like material	7	-	1	8
ball, ferrous	-	-	1	1
tube, ferrous	-	-	1	1
sherds, coarse stoneware	-	2	1	3
paper fragments	4	-	-	4
thin, brittle metal fragments	-	3	-	3

DOMESTIC GROUP

Only three Domestic Group items bore diagnostic marks. A whiteware sherd in the uppermost layer (stratum A) (#388) bore a brown printed mark "ACE," which is insufficient for identification. In the same stratum was the base of an oval pint liquor bottle (Figure 82). It has a classic "Owen's" suction scar, indicating a post-1904 date (Jones and Sullivan 1985:39). The "56" to the left of the embossed registry mark suggests a manufacture date of 1956, which is in keeping with the presumed post-1940 date of the deposit.

The sand layer with organic lenses (stratum B) contained a clear glass bottle neck with a tooled prescription finish. A body sherd fragment of the same bottle bears the letters "ADE/VA/ESI"; identification could not be made. The tooling suggests a pre-1925 date, when virtually all of the glass industry had converted to machine-manufacture (Jones and Sullivan 1985:45). At least two other clear glass fragments bore graduated measure marks.

Domestic Group artifacts are functionally distributed unevenly throughout the deposits (Figure 83). As can be seen, fully 56.1% of the Domestic Group in stratum A consists of the Furnishings Class. These are essentially thin, curved sherds of opaque milk glass, probably from a single lamp shade. Their presence so dominates the otherwise low frequency of the group that it is difficult to determine whether any other patterns exist in the assemblage. Removal of the Furnishings Class from the Domestic Group reveals other interesting trends (Figure 84).

As can be seen in Figure 84 and Table 23, the Food Storage class dominates all three strata assemblages and is especially frequent in the lower two layers. Tin-can fragments account for the high frequencies in strata B and C; there are none in stratum A. The miscellaneous bottle-glass fragments appear to be rather uniform in number and relative frequency throughout the three deposits.

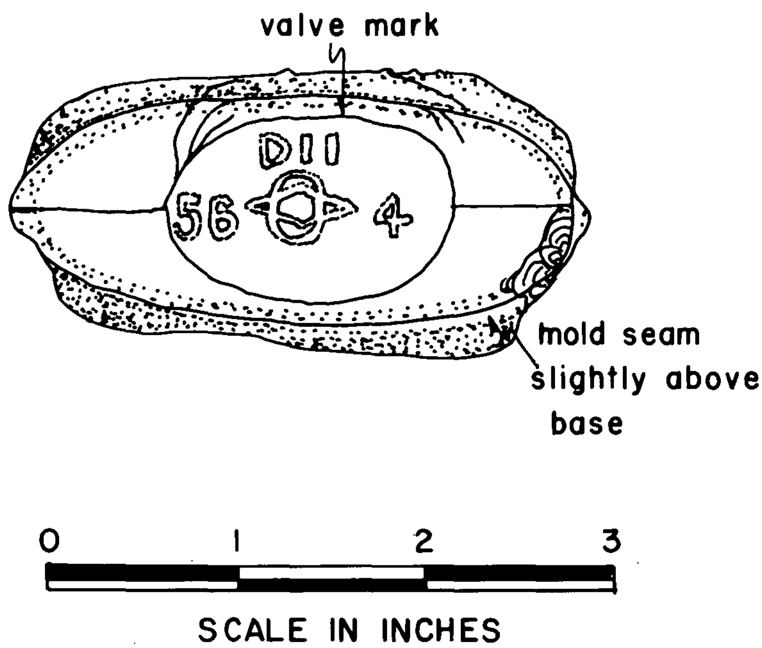


Figure 82: The base of a brown glass oval pint liquor bottle, Operation 15.

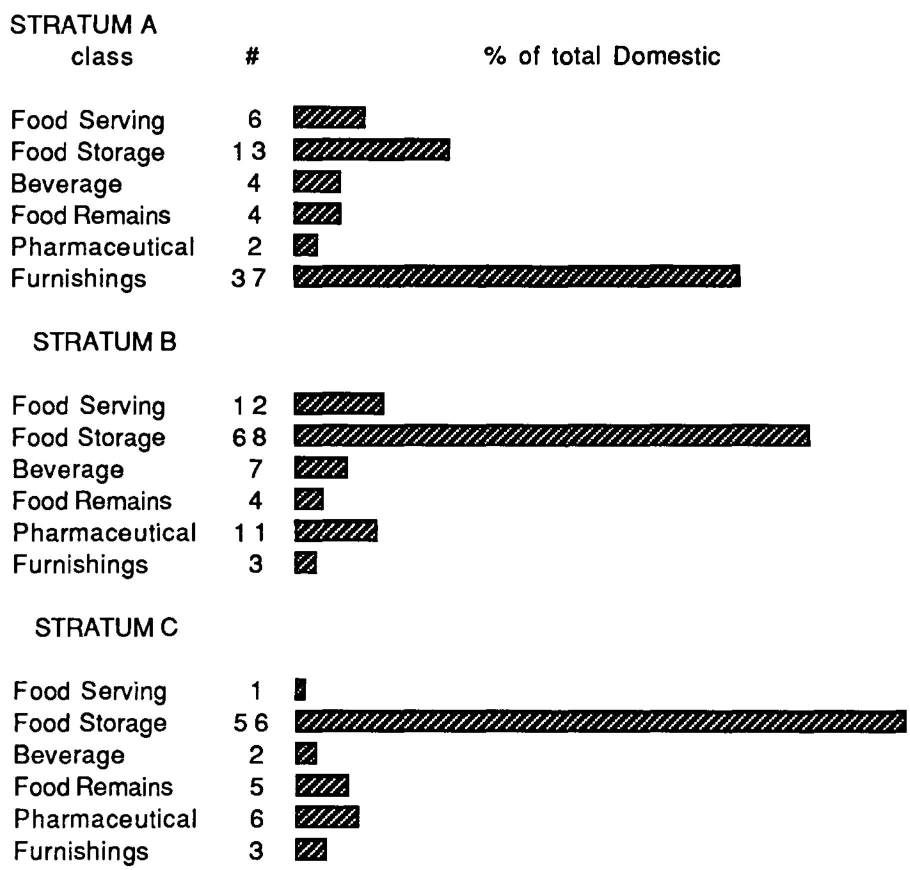


Figure 83: Summary of Domestic classes in Operation 15.

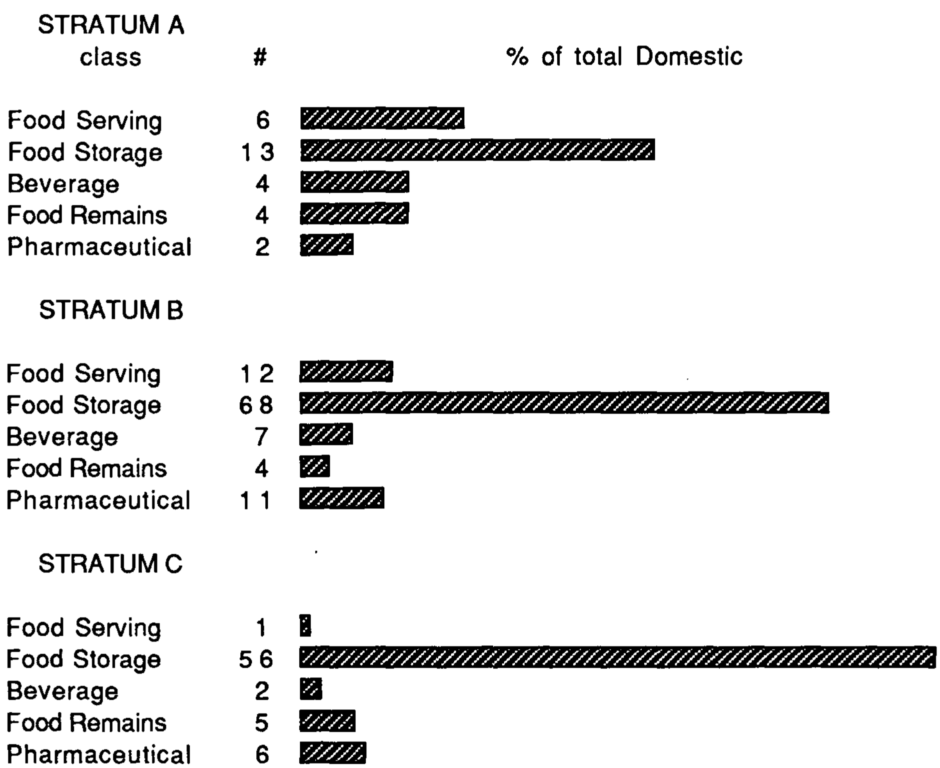


Figure 84: Summary of Domestic classes in Operation 15, without the Furnishings Class.

Table 23: The distribution of Domestic Classes in Operation 15 Strata.

CLASS	St. A	% of total	St. B	% of total	St. C	% of total
Food Serving	6	20.7%	12	11.8%	1	1.4%
Food Storage	13	44.8%	68	66.7%	56	80.0%
Beverage	4	13.8%	7	6.9%	2	2.9%
Food Remains	4	13.8%	4	3.9%	5	7.1%
Pharmaceutical	2	6.9%	11	10.8%	6	8.6%
TOTAL	29	100.0%	102	100.0%	70	100.0%

Food Serving artifacts are distributed somewhat differently. Fully 20.7% of the Domestic assemblage is comprised of this class in stratum A, but only 11.8% in stratum B, and just 1.4% in stratum C. The difference is a significant one (Figure 85), suggesting a differential deposition of Food Serving artifacts through time.

PERSONAL GROUP

Only five Personal Group artifacts were recovered from the east side of the cabin. The ferrous buckle and milk glass Prosser button in stratum C are probably older than the plastic hair roller and toilet paper wrapper found in stratum A. The latter two were probably manufactured after World War II when plastics became widely available to the public. This corresponds to the known recent deposition of stratum A. No firm dates are available for any of the items.

STRUCTURAL GROUP

Nails Class

A total of 280 nails were recovered from the Operation 15 excavations (Figure 86). More than 53% (150) were wire nails, 22% (62) were cut, and the remaining 24% (68) could not be distinguished by type since they were so badly corroded. The relatively high frequency of cut nails is no doubt due to the re-roofing event that occurred during the 1960s, because cut nails were not common after the cabin was moved to its present site. Not surprisingly, the cut nails are most frequent in stratum A. The photographic record suggests that the original roof was not removed until after the flower beds were established, and stratum A began to form. The high cut nail frequency thus dates the deposit to after 1960.

Null Hypothesis: There is no significant difference in the number of Food Serving class items compared to all other Domestic Group artifacts in the three deposits on the east side of the Moore Cabin (Operation 15).

Alternate Hypothesis: There is a difference.

Level of significance: 0.05
Degrees of Freedom = 2

Critical Value = 5.99

	Food Serving		Other Domestic		total
provenience	observed	expected		observed	expected
Stratum A	6	2.74	23	26.26	29
Stratum B	12	9.64	90	92.36	102
Stratum C	1	6.62	69	63.38	70
total	19		182		201

chi-square = 10.18

Chi-square >5.99, therefore, **reject** the null hypothesis. There is no difference in the number of window glass sherds deposited each year at the Moore House.

Figure 85: Statistical Argument for a Chi-square Test of the Operation 15 Domestic assemblage through time.

	TOTAL	STRATUM A	STRATUM B	STRATUM C
CUT NAILS				
common	48	31	3	14
finish	3	0	1	2
roofing	4	2	1	1
tack	4	3	1	0
undifferentiated	3	2	0	1
CUT TOTAL	62	38	6	18
WIRE NAILS				
brad	2	0	1	1
common	66	36	24	6
finishing	4	3	1	0
roofing	2	2	0	0
tack	3	3	0	0
undifferentiated	70	25	29	16
unknown	3	2	1	0
WIRE TOTAL	150	71	56	23
UNDIFFERENTIATED	68	50	17	1
TOTAL	280	159	79	42

Figure 86: Functions of Nails in Operation 15.

As can be seen in Figure 86, 81% of the cut nails and 86% of the wire nails that could be typed by function had common heads. Only minor quantities of other types were present in the deposits. This suggests that most of the nails represent common construction activities but very little specialized use.

Figure 87 shows the size distribution of the cut and wire nails in each of the three strata. It is readily apparent that 8d nails were most common in all but the earliest deposit where 4d cut nails are slightly more frequent than the other sizes. Thus, apparently most of the nails originated with the re-roofing event. The smaller nails in the early deposit may be the result of minor repair activities around the cabin.

Window Glass Class

With only 11 sherds of window glass found in the entire operation, no conclusions can be made about their origin. Ten of the sherds were found in stratum B (Table 24). The lack of a window along the east side and the rather heterogeneous distribution by thickness suggests that the sherds are incidental and related to the trash stored along in the area rather than to windows the cabin itself.

Other Structural Artifacts

Like the window glass, other Structural artifacts are present in such limited quantities that they are undiagnostic. All other structural artifacts, except for one fragment of wire, lay in stratum A.

ACTIVITIES GROUP

Activities Group artifacts comprise 15.2% of the total assemblage on the east side of the cabin. Of the 105 items, 91 (86.7%) were in stratum

SIZE	TOTAL	STRATUM A	STRATUM B	STRATUM C
CUT NAILS				
2d	1	1	0	0
3d	4	1	1	2
4d	8	1	0	7
5d	2	1	0	1
6d	2	1	0	1
7d	1	1	0	0
8d	32	26	3	3
9d	1	0	0	1
10d	3	0	1	2
12d	2	2	0	0
unk	2	1	0	1
CUT TOTAL	58	35	5	18
WIRE NAILS				
2d	3	2	0	1
3d	7	4	2	1
4d	6	4	2	0
5d	4	2	2	0
6d	7	6	1	0
7d	5	3	2	0
8d	33	16	15	2
9d	1	0	0	1
10d	6	4	2	0
12d	1	1	0	0
16d	5	3	2	0
20d	10	4	3	3
30d	1	1	0	0
unkn	58	18	25	15
WIRE TOTAL	147	68	56	23
UNDIFF.	68	50	17	1
TOTAL	273	153	78	42

Figure 87: Distribution of Nail Sizes in Operation 15.

Table 24: Window Glass Sherds in Operation 15.

THICKNESS		TOTAL	STRATUM A	STRATUM B	STRATUM C
0.063"	4/64"	4	1	3	0
0.078"	5/64"	2	0	2	0
0.094"	6/64"	4	0	4	0
0.109"	7/64"	1	0	1	0
TOTAL		11	1	10	0

A. Twelve of the remaining items were fragments of brick that had worked their way down into the deposits from the brick edging of the flowerbed.* The remaining two items were the carbon core of a battery in stratum B and a fragment of a bisque porcelain doll's head in stratum C. In both cases, similar items were found in stratum A, suggesting that some mixing of deposits had occurred.

The Activities Group artifacts are varied and show only limited patterning of function (Table 22). The attempts at gardening mentioned by Georgette Kirmse and suggested by the flower-bed edging represent the majority of artifacts in the group: 86 (or 81.9% of the group) are fragments of brick. A glass marble, two fragments of a bisque porcelain doll's head and a red rubber ball suggest the Kirmse children's play in the yard and near the cabin. The storage of miscellaneous materials and trash is suggested by three carbon cores of batteries, a fuel intake spout, and the turn plate of a piece of heavy machinery. Perhaps Jack Kirmse repaired his truck or car in this area.

The only item of intrinsic interest is a newspaper's printing plate of a cartoon (Figure 88). It appeared in the September 14, 1899, issue of the Daily Alaskan (page 2) and was printed at least once more a few months later, on April 7, 1900 (page 3). This suggests that the editor, knowing the transient nature of most of his customers, kept such things as cartoons for fillers rather than melting them down and reusing the lead in other types of plates. The Kirmses' interest in curios and gold rush memorabilia may account for its presence alongside the cabin.

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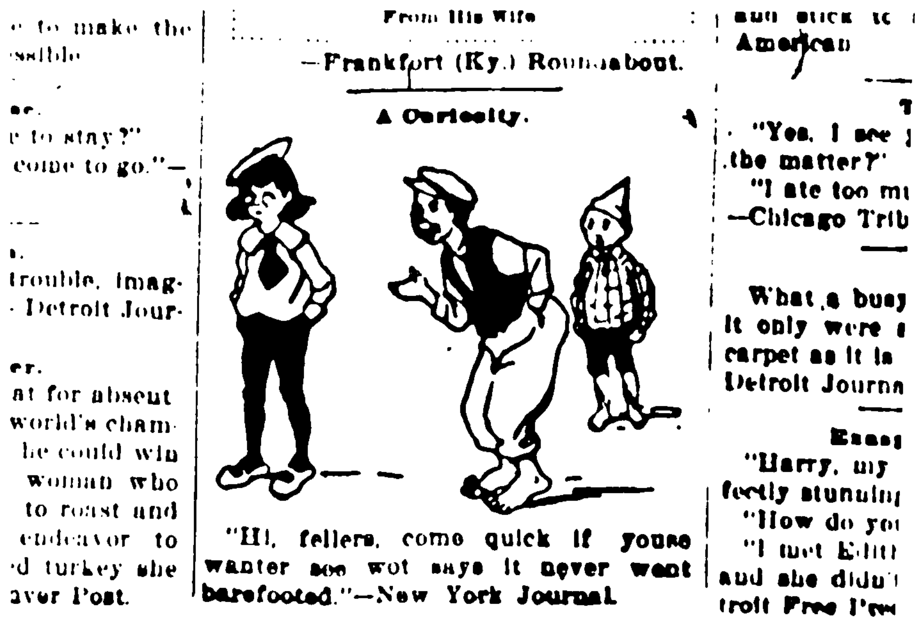
*Bricks were placed in this group due to their obvious use for gardening, not as part of a building.



—Frankfort (Ky.) Roundabout.

A Curiosity.

"Hi, fellers, come quick if youse wanter see wot says it never went barefooted."—New York Journal.

Figure 88: Cartoon and printing plate from the September 14, 1899, issue of the Daily Alaskan.

CONCLUSIONS FROM OPERATION 15

Approximately 15 to 18 inches of alternating decomposed organics and sandy lenses have accumulated on the present site of the Moore Cabin since 1900, when it was moved from behind the Moore House. Artifact density was relatively low before about 1960, after which time the increased frequency of artifacts and the unpatterned nature of their functional distribution suggest that the area was used to store construction debris and household trash for at least a portion of the year. The presence of two consecutive flower beds, the earlier edged with brick, the later and smaller one with cobbles, suggests a summer planting use. The occasional trash storage logically would have occurred during the winter season to avoid crushing the flowers.

It is evident that some mixing of artifacts had occurred below the tilled zone of stratum A, although enough differentiation of functional types is present to indicate this mixing was only incidental. Tin-can fragments and nails characterize the pre-1960 layers; a more homogenous distribution occurs in the post-1960 deposit. The preponderance of 8d cut nails in stratum A is no doubt due to the re-roofing event that took place in the early 1960s. The more homogenous distribution of nail types and sizes in the earlier layers suggest that the area may have been used as a work site for carpentry activities.

Other than the distributional data on the nails, very little of significance was recovered from these tests. It was believed that further excavations around the building were not necessary.

OPERATION 27: THE WEST SIDE OF THE CABIN

Operation 27 consisted of a single 5 foot by 5 foot excavation unit placed 5 feet north of the southwest corner of the cabin, along the west side (Figure 89). The south edge of the unit approximated the middle of the single cabin window. It was excavated to gather data related to three phenomena: 1) the fence Moore built to protect his land; 2) nail distribution related to the ca. 1960 re-roofing; and 3) the thickness of the glass in the window.

The fence along the west side of the Moore property is significant because it is pertinent to the story of the development of Skagway. It represents Moore's boundary between his original homestead claim and the encroaching gold rushers. Between July 26 and August 8, 1897, over 3000 people landed on the tidewater at Skagway. Frank Reid and Harry Suydam began surveying town lots on August 18, and the stampeders began staking claims all over the Moore homestead. Reid advised Moore to fence off five acres of land around the cabin and house. The property lines were not surveyed; they only approximated the orientation of the town lots (Spude 1985). As a result, the tract extends about 30 feet into Fifth Avenue, and the west property line is approximately 3° east of the town plat lines. The fence, therefore, is not square with the street.

Since the fence is useful in telling the story of the storming of Skagway, it will be reconstructed by the National Park Service. One purpose of the Operation 27 excavation was to determine whether any remains of this original fence were present and to gain insight into the details of its construction.

FEATURES

One post and post hole and the bottom 2 inches of a fence were recovered 3 feet 6 inches west of the cabin (Figure 89). A 1 to 3 inch deep trench extended 3 inches to the east and 6 inches to the west of the fence line (Feature 207). The post hole (Feature 208) was 15 inches in diameter and 15 inches deep. The post measured an even 6 inches by 4 inches with the longer dimension oriented north to south. It was not in the center of the hole but offset to the south and east (Figure 90).

The bottom pieces of the fence consisted of two 1-1/2 inch by 3-1/2 inch (two-by-four) boards lying on their narrow edges. They were joined to the north and south sides of the post with single 16d nails inserted on the diagonal (Figure 89). The bottom 3 inches of pickets were found on the west side of the two-by-four. The centers of the pickets averaged 6 inches apart. The pickets were 3/4 of an inch by 2-1/2 inches, and attached to the two-by-four with two 4d wire nails. Remnants of paint indicate the fence was painted white. The shallow trench surrounding the two-by-four had apparently been dug in order to keep it level with the rest of the fence.

Another feature of interest was a galvanized water pipe 1-1/2 inches in diameter, running north to south 3 feet 2 inches west of the cabin. It was covered by 2 inches of sod and silt. The pipe lay on top of the ground a few feet to the south so its presence was no surprise.

A very small, almost unnoticeable dripline was visible ten inches from the outside of the bottom log (Figure 91). This dripline, of course, corresponded to the edge of the roof.

Cut into the lowest culture-bearing deposits (stratum C) was a 3 inch deep trench that extended a foot west of the bottom log of the cabin. It appears to be associated with the placement of the cabin on the site and may have been dug for drainage purposes.

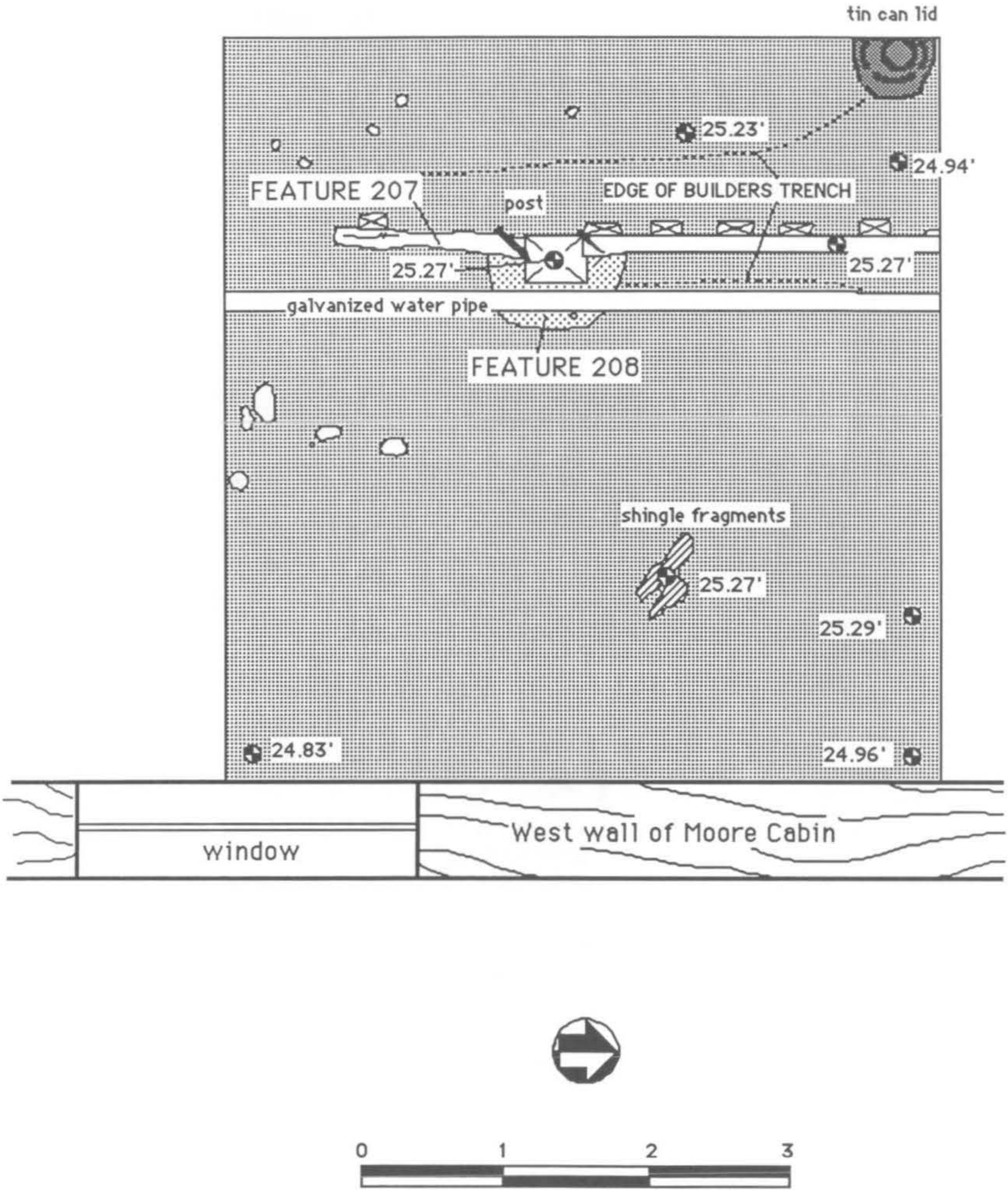


Figure 89: Plan of the Operation 27 excavations, at Stratum B (scale in feet).

Figure 90: Photograph of the fence post in the Feature 208 post hole, July 1985. (Scale in inches).

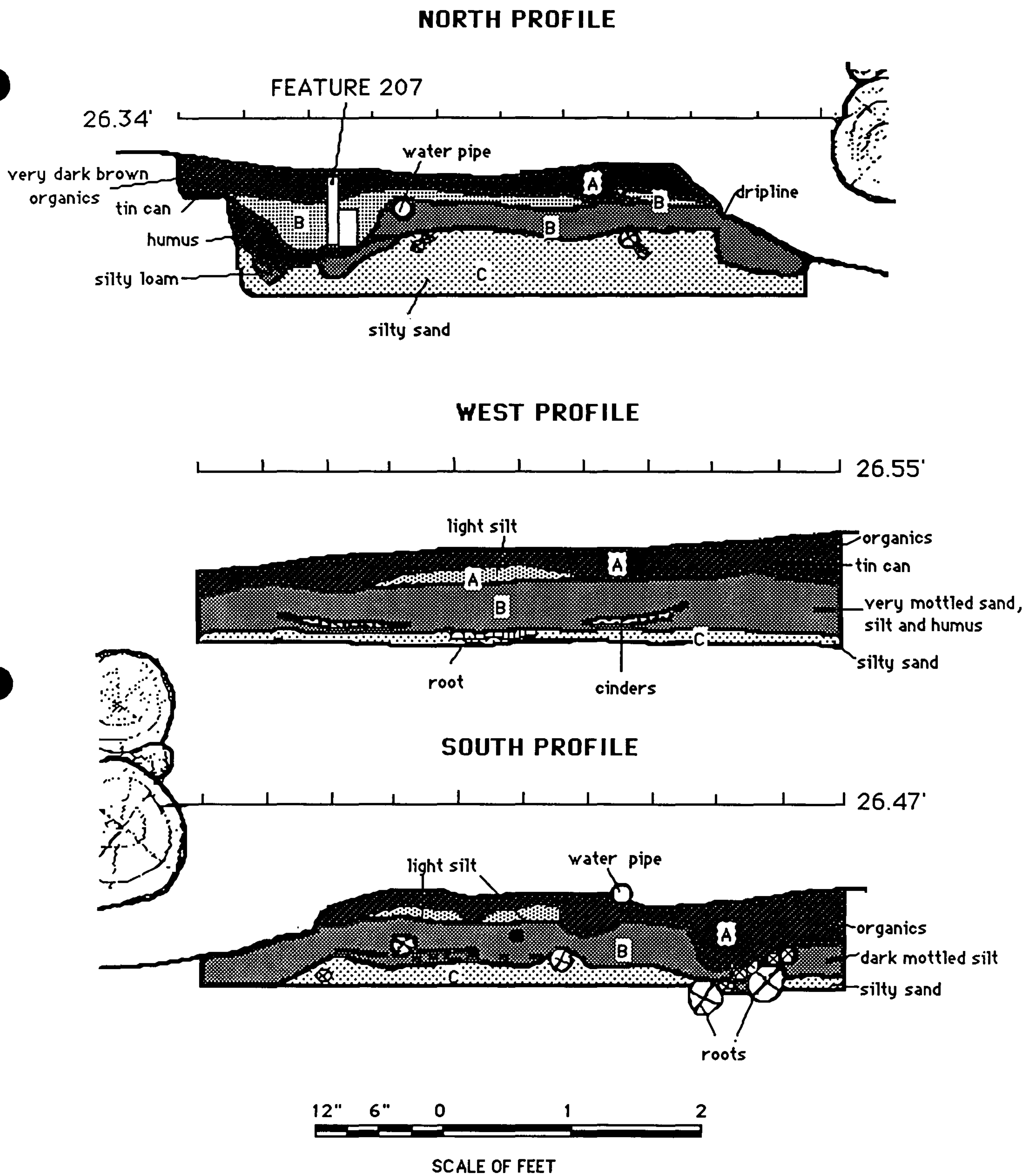


Figure 91: Stratigraphic profiles of Operation 27, Moore Cabin

STRATUM C

The lowest layer, stratum C, consisted of a pale brown (10YR6/3) sandy silt (Figure 91). Other than a few artifacts found in the top 1/2 inch of the layer, it was culturally sterile. These items were probably pushed into the layer by trampling or root intrusions during the earliest occupation of the site. As was mentioned in the first part of this report, the vicinity of the house and cabin was a sandy outwash and tidewater area outside the tree-line at the time that the Moores first built in the area. The cabin's drainage trench had been cut into stratum C, further strengthening the supposition that C was the base deposit. The humic deposits on top of stratum C have accumulated, therefore, since 1888.

The four items found at the top of stratum C include two undiagnostic pieces of very thin, clear glass, probably from a lamp chimney. A single 3d wire nail and an undiagnostic fragment of wood complete the assemblage.

STRATUM B

Stratigraphy

Overlying the sterile sand was an organic deposit that included some patches of matted sod (stratum B). It was dense and darkly colored between the fence and the cabin. The portion of the layer along the fence was more mottled, containing pockets of sand. A mature cottonwood, growing about ten feet to the south, contributed several large tree roots lying horizontally to the ground surface in this layer. They probably caused the mixed appearance of the soils. The roots were concentrated in the vicinity of the fence line. Their presence suggests that some mixing of the artifact assemblages in strata B and C had probably occurred.

Stratum B included a trench excavated to level the two-by-four on the bottom of the fence (Feature 207) and the post hole (Feature 208). Feature 207 was later slowly filled with the silt and decomposed organics of stratum B, suggesting that this activity had taken place during the slow evolution of the layer. A piece of plastic was found under the fence, suggesting that this accumulation process continued well after the 1940s. Other than the plastic, the only items found in the trench were fragments of the fencing itself (Figure 92).

Artifacts

Stratum B contained a total of 113 artifacts, which were collected in two units, one east and one west of the fence (Table 25). The 89 items found on the east side had an average density of 5.3 artifacts per square foot of area; the 21 on the east had an average density of 2.8 artifacts per square foot, suggesting a heavier distribution on the Moore/Kirmse side of the fence.

Very few of the artifacts found in the layer were diagnostic. Three yellow-ware sherds with a white slipped interior are fairly characteristic of late nineteenth and early twentieth century assemblages but offer no firm date. Wegars (1981) suggests that these heavy yellow-wares were advertised as late as 1925.

A bent and scorched dime had apparently been used in a circuit breaker. The date could not be discerned. It appears to have been a Barber or Liberty Head type dime, minted between 1892 and 1916 (French and Zeller 1980:113-114).

The Structural artifacts are of greater assistance in dating the deposit. Thirteen of the 19 roofing fragments found in the unit were in the east portion of stratum B. In addition, 5 were found in the post-hole, which had been dug through stratum B, and then presumably filled with its own backdirt. Note also that 8 of the 15 nails that could

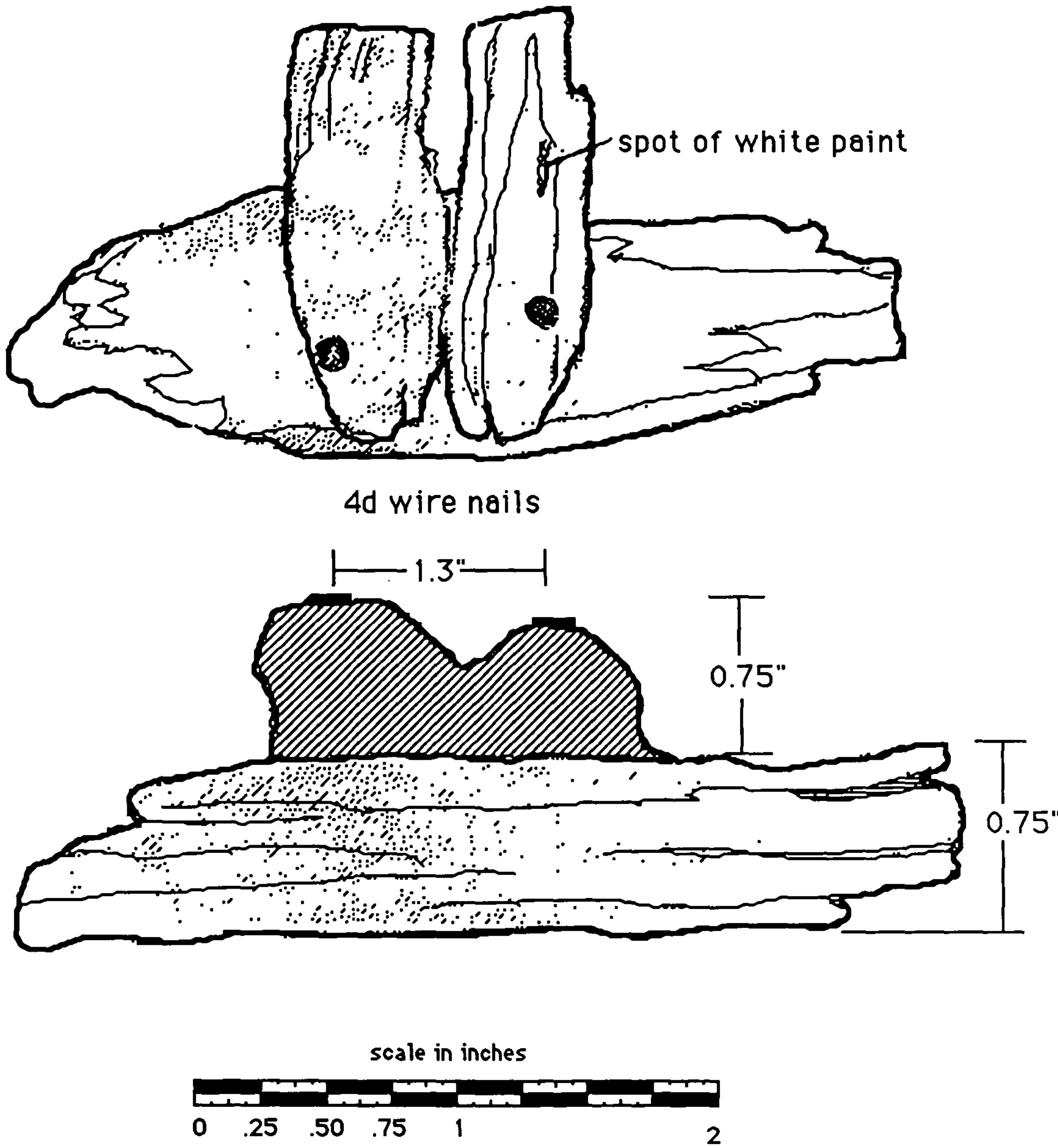


Figure 92: Drawing of fencing fragments from Feature 207, Operation 27.

Table 25: Inventory of Artifacts in Operation 27

	ST. A	B-west	B-East	St. C	F. 207	F. 208	TOTAL
DOMESTIC							
Food Storage							
bottle base, glass							
clear, melted	1	-	-	-	-	-	1
clear, round,Owen's	3	-	-	-	-	-	3
bottle sherds, glass							
clear	7	-	3	-	-	-	10
clear, aqua tint	4	-	-	-	-	-	4
clear, green tint	7	1	2	-	-	-	10
clear, purple tint	24	-	-	-	-	-	24
Sauer's extract	6	-	-	-	-	-	6
tin can fragments	17	4	-	-	-	13	34
canning jar rim, clear glass w/ purple	-	-	1	-	-	-	1
crown finish, clear, aqua tinted glass	1	-	-	-	-	-	1
wrapper							
cellaphane	6	-	1	-	-	-	7
plastic	-	-	-	-	3	-	3
aluminum foil	1	2	-	-	-	-	3
Beverage							
bottle sherd, brown glass	1	1	1	-	-	1	4
crown cap, ferrous	-	1	-	-	-	-	1
Food Serving							
bowl sherds, yellow ware, white slippe	-	-	3	-	-	-	3
dish sherds, clear molded glass	-	-	7	-	-	-	7
Food Remains							
large mammal, carpal/tarsal	-	-	1	-	-	-	1
medium mammal, tarsal	-	-	3	-	-	-	3
medium mammal, rib	2	-	-	-	-	-	2
unident. mammal, pelvic	-	1	-	-	-	-	1
unident. mammal, long bone frag.	-	1	1	-	-	-	2
bird, long bone	-	-	1	-	-	-	1
unidentified	1	-	-	-	-	-	1
Furnishings							
lamp sherds, clear thin glass	-	-	9	2	-	-	11
PERSONAL							
Clothing							
shoe rivet, whitemetal and leather	-	1	-	-	-	-	1
Coin							
dime, bent, bubbled	-	1	-	-	-	-	1
ACTIVITIES							
Fencing							
pickets ends, w/ 4d wire nails	-	-	-	-	12	-	12

Table 25 (continued): Inventory of Artifacts in Operation 27

	ST. A	B-west	B-East	St. C	F. 207	F. 208	TOTAL
STRUCTURAL							
Hardware							
whitemetal flanged nipple, female ends	-	-	1	-	-	-	1
ferrous screw ring	1	-	-	-	-	-	1
1-1/2" ferrous staple	-	-	1	-	-	-	1
Materials							
brick fragment	2	-	3	-	-	-	5
wood fragment, painted white	5	-	-	-	7	-	12
wood fragment	10	1	7	1	-	1	20
wood shingle, scorched	1	-	6	-	-	3	10
wood shingle	-	-	7	-	-	2	9
Nails							
cut							
common, 4d	16	-	8	-	-	1	25
common, 6d	1	-	-	-	-	-	1
common, 8d	10	-	-	-	-	-	10
unknown	-	-	3	-	-	-	3
wire							
common, 3d	2	-	1	1	-	1	5
common, 4d	2	-	-	-	-	-	2
common, 5d	-	1	-	-	-	-	1
common, 6d	1	-	1	-	-	-	2
common, 8d	6	-	2	-	-	-	8
common, 8d, galvanized	1	-	-	-	-	2	3
common, 9d	1	-	-	-	-	-	1
common, 12d	2	-	-	-	-	4	6
common, 16d	1	-	-	-	-	-	1
common, 20d	3	-	-	-	-	-	3
finishing, 5d	-	1	-	-	-	-	1
roofing, 6d	-	1	-	-	-	-	1
unknown	1	-	11	-	-	1	13
unknown	-	1	5	-	-	-	6
Window Glass							
0.066" think	-	1	-	-	-	-	1
0.080" thick	1	-	-	-	-	-	1
0.082" think	1	-	-	-	-	-	1
UNCLASSIFIED							
charcoal	-	1	-	-	-	-	1
coal	-	-	1	-	-	-	1
ferrous blobs	-	1	2	-	-	-	3
TOTAL	149	21	92	4	22	29	317

be typed and sized were 4d cut nails, representing a strong mode (Figure 93). It was shown earlier that 4d cut nails were used to attach the shingles on the west wide of the cabin. The most logical source of the shingle fragments and the 4d cut nails was the re-roofing of the cabin in the 1960s.

Feature 208, the post hole, contained 29 artifacts (Table 25). They no doubt were lying on top of the ground when the hole was dug, or relate directly to the construction of the fence. None of the items are diagnostic. It is notable that five shingle fragments were found in the post hole; the only other deposit to contain shingle fragments is stratum B.

STRATUM A

Stratum A consisted of a mixed organic and sand deposits, which clearly had not accumulated naturally. It was probably the remnants of the soil excavated from under the lowest cabin log in order to prevent log deterioration. This excavation is clear in Figure 91. A thin sod had since been established, indicating the excavation had taken place several years ago.

Artifacts

Some of the artifacts found in stratum A probably were deposited at the same time as stratum B, under the eaves of the cabin, but were placed on top of the layer when soils under the bottom log were removed. A number of items no doubt accumulated on top of this fill after that occurred.

It is notable that there is a much greater percentage of glass-bottle fragments in this latest deposit. A minimum of seven bottles are represented by the 54 bottle-glass sherds, a much greater variety than

TYPE	SIZE	Stratum A	Stratum B	TOTAL
cut	4d	16	8	24
cut	6d	1	-	1
cut	8d	10	-	10
cut	unknown	-	3	3
wire	3d	2	1	3
wire	4d	2	-	2
wire	6d	1	1	2
wire	8d	7	2	9
wire	9d	1	-	1
wire	12d	2	4	6
wire	16d	1	-	1
wire	20d	3	-	3
wire	unknown	1	11	12
unknown	unknown	-	5	5

Figure 93: Distribution of the size and type of nails in Operation 27.

was seen in the earlier deposit. A round clear glass base with an Owen's type suction mark suggests a post-1904 date (Jones and Sullivan 1985:30). A machine-made, aqua-tinted crown finish confirms that date. These are no surprise and not particularly helpful in dating the deposit.

An almost complete extract bottle was discovered lying beneath a very thin layer of sod (Figure 94). The "A.G.W." mark on the base indicates manufacture by the American Glass Works, which was purchased by the Sauer Company in 1909. The factory burned in 1923 (Dorsey 1987). The early date is not particularly helpful in dating the deposit since it must have been redeposited on top of the mid-century stratum B.

It should be noted that, among the 47 nails recovered in stratum A, the 4d cut nails are the modal type and size (Figure 93). Considering the wide variety of other types and sizes, it is unlikely that the other nails represent construction or repair activities. Considering the narrow passage between the fence and the cabin, it is likely the area served as a place to store construction materials or trash.

CONCLUSIONS

Stratum C was the basal deposit on the site and apparently pre-dates the cabin, which was moved to the location in 1900. Stratum B apparently accumulated between that time and sometime after the 1960s when Jack Kirmse re-roofed the cabin. This is evidenced by the shingle fragments and relatively high frequency of 4d nails in the deposit. The fence was apparently built after the cabin was re-roofed, given the pieces of shingling in the post hole. Note that the short picket fence in a 1979 photograph (Figure 95) is not the same as the taller one that appears in an early photograph (Figure 8). Therefore, these are not the remains of the original fence.

A photograph taken in April, 1898, clearly shows that the fence along the west side of the Moore property consisted of poles strung with

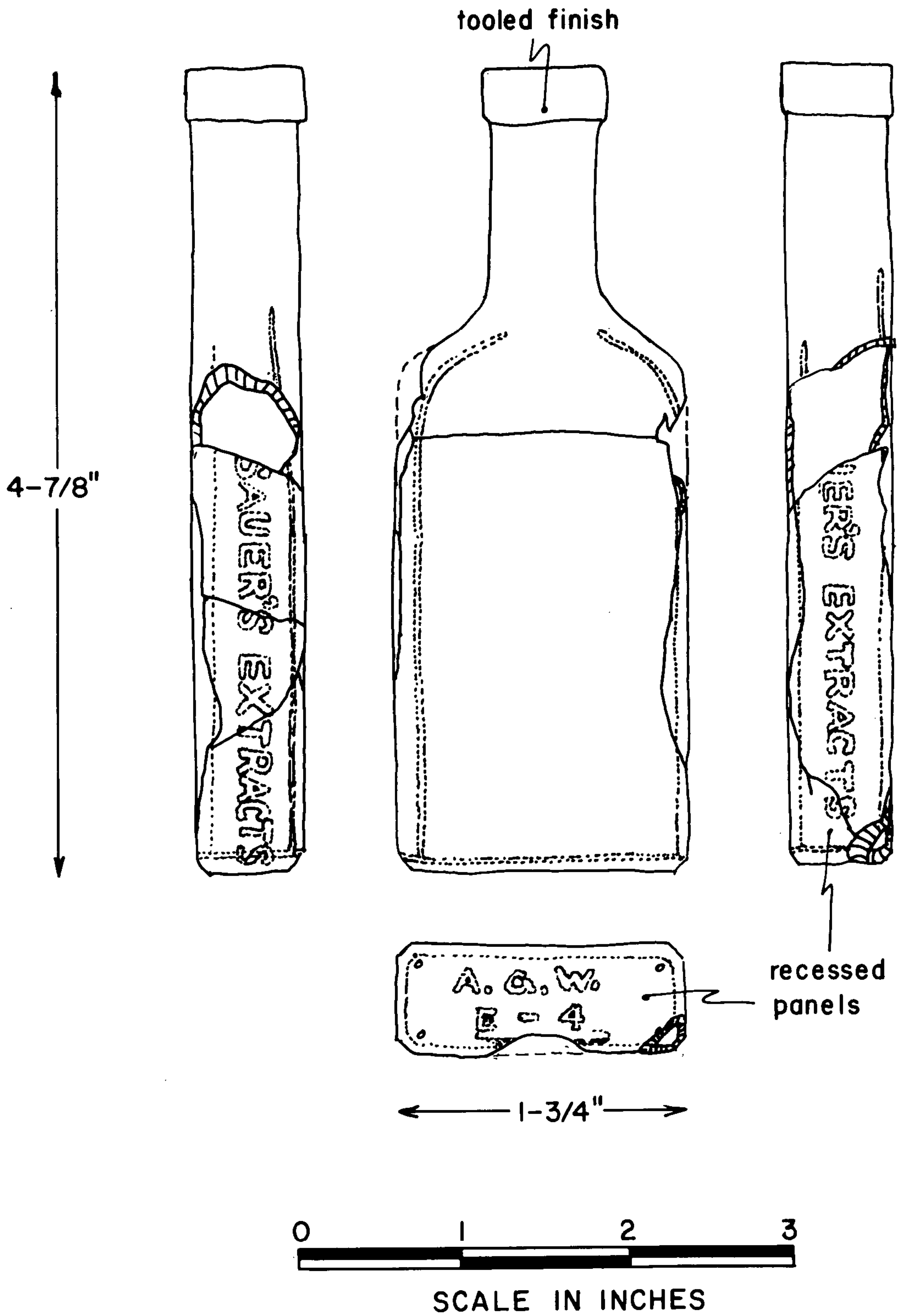


Figure 94: Clear Sauer's Extract bottle, Operation 27.

Figure 95: 1979 photograph of the west side of the cabin. Looking east. (Klondike Gold Rush NHP).

wire (Figure 96). It is not until the summer of 1900 that a post and picket fence appeared (Figure 97). If Jack Kirmse completely removed the earlier post when he replaced the taller, ca. 1900-1960s fence with the shorter, third one, he may have removed all archeological evidence of the earlier fences.

Figure 96: An April, 1898, photograph showing a post and wire fence along the west side of the Moore property (Suzallo Library, University of Washington).

Figure 97: A summer, 1900, photograph showing the board fence along the west side of the cabin (Sheldon Museum).

CHAPTER 4

ARTIFACT SYNTHESIS

Table 26: Summary of all artifact classes at the Moore Residences

CLASS	TOTAL	PERCENT OF TOTAL
Food Storage	488	12.4%
Beverage	169	4.3%
Food Serving	122	3.1%
Food Remains	90	2.3%
Food Preparation	98	2.5%
Pharmaceutical	37	0.9%
Furnishings	70	1.8%
Housekeeping	4	0.1%
DOMESTIC	**1078**	**27.4%**
Clothing	18	0.5%
Grooming	5	0.1%
Coin	1	0.0%
PERSONAL	**24**	**0.6%**
Children	16	0.4%
Communication	1	0.0%
Fencing	12	0.3%
Gardening	94	2.4%
Hunting/War	13	0.3%
Machine parts	6	0.2%
Office	3	0.1%
Storage	8	0.2%
Transportation	6	0.2%
Leisure Activities	6	0.2%
ACTIVITIES	**166**	**4.2%**
NON-STRUCTURAL	**1228**	**32.2%**
Window Glass	351	8.9%
Nails	1517	38.5%
Materials	702	17.8%
Hardware	69	1.8%
Utilities	29	0.7%
STRUCTURAL	**2668**	**67.8%**
TOTAL	**3936**	**100.0%**

CHAPTER 4: ARTIFACT SYNTHESIS

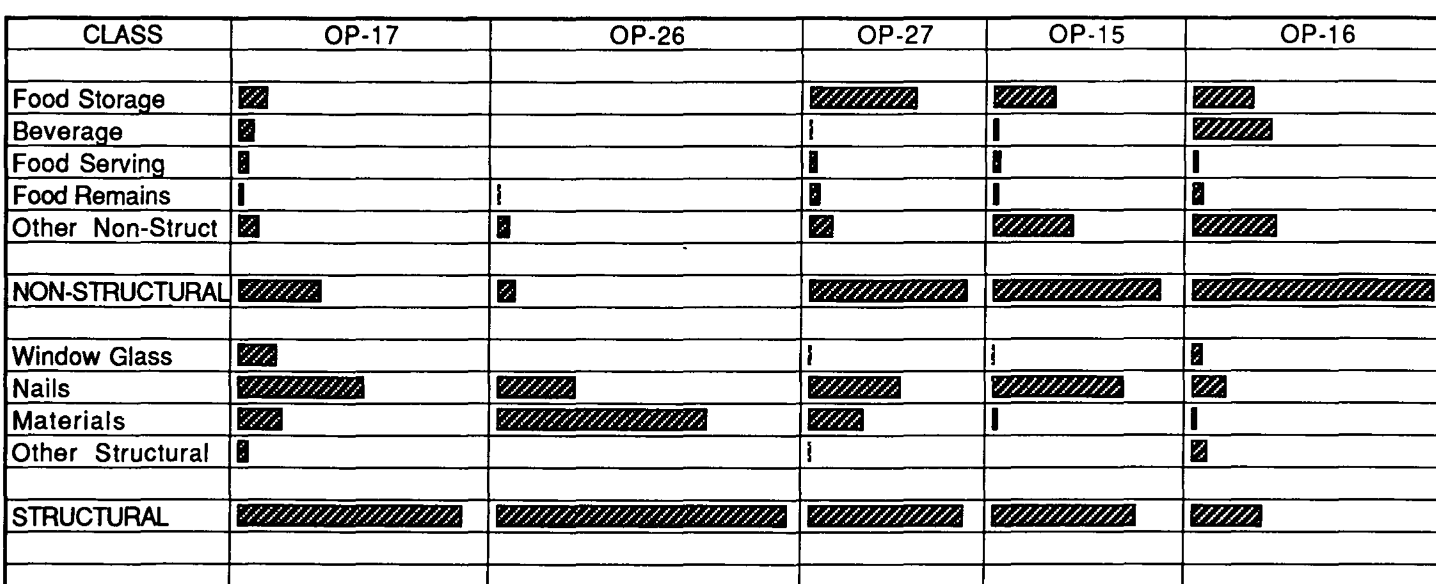
The assemblages from the five areas investigated can now be compared. Table 26 shows a summary of all the artifact classes observed in the excavations at the Moore residences. Artifacts from disturbed contexts were not included in the following analysis, particularly the imported fill above the Feature 17 cess pool and the Moore House builder's trench.

Of the 26 classes, only 8 comprise more than 2% of the total assemblage. One of these, the Gardening Class, might be considered to have an abnormally high relative frequency. Of the 94 items in the class, 74 are fragments of bricks found in Operation 15 as part of the flowerbed border. In all other excavation operations, the Gardening Class represents less than 2% of the total assemblage. For that reason, it cannot be considered one of the statistically significant classes.

In order to account for the presence of these 19 low frequency classes for statistical purposes, they are combined into two classes: Other Non-Structural, and Other Structural. The remaining seven classes and the two combined classes compose the nine statistically significant classes as compared in Table 27. As can be seen, the five operations vary considerably in the way these classes are distributed. This is partly due to the fact that the function of each site varied, and partly because the preservation was much better inside the attic of the cabin than in the outside units. For instance, 67.7% of the items found in the attic were Structural Materials, compared to only 14.7% behind the Moore House, 17.9% west of the cabin, 2.0% east of the cabin and 1.9% in the front yard. The wood roofing fragments in the cabin attic obviously survived the forty plus years better than their counterparts in the ground.

Table 27: Relative Distribution of the Statistically Significant Classes in the Five Operations

CLASS	OP-17		OP26		OP27		OP15		OP-16	
Food Storage	233	9.2%	1	0.3%	107	34.3%	137	20.7%	10	19.2%
Beverage	138	5.5%	0	0.0%	5	1.6%	13	2.0%	13	25.0%
Food Serving	92	3.6%	0	0.0%	10	3.2%	19	2.9%	1	1.9%
Food Remains	59	2.3%	5	1.3%	11	3.5%	13	2.0%	2	3.8%
Other Non-Struct	171	6.8%	17	4.4%	25	8.0%	172	25.9%	14	26.9%
NON-STRUCTURAL	693	27.4%	23	6.0%	158	50.6%	354	53.4%	40	76.9%
Window Glass	335	13.3%	0	0.0%	3	1.0%	11	1.7%	2	3.8%
Nails	1040	41.2%	99	25.8%	92	29.5%	280	42.2%	6	11.5%
Materials	372	14.7%	260	67.7%	56	17.9%	13	2.0%	1	1.9%
Other Structural	85	3.4%	2	0.5%	3	1.0%	5	0.8%	3	5.8%
STRUCTURAL	1832	72.6%	361	94.0%	154	49.4%	309	46.6%	12	23.1%
TOTAL	2525	100.0%	384	100.0%	312	100.0%	663	100.0%	52	100.0%



STRUCTURAL GROUP ARTIFACTS

Obviously, the single greatest artifact-generating event that occurred in the Moore Cabin was the removal of the original roof. The nails and roofing materials comprise 93.5% of the assemblage. The relative lack of other types of artifacts in the attic suggests that either it was seldom used or was not used for activities that generated artifacts.

In contrast, the other excavated areas have a higher proportion of Non-structural artifacts, ranging from 27.4% behind the Moore House, to a little more than 50% on either side of the cabin, to 76.9% in the front yard. The rather low relative frequency of Structural artifacts in the front yard can be easily explained by the lack of construction, repair or demolition activities taking place in that area.

In the other three locations, structural activities did take place, but they were supplemented by the accumulation of sheet trash. These are deposits resulting from the very slow, incidental deposition of pieces of household trash as it was being taken from the place it was used to its place of disposal. Sheet trash tends to reflect the daily activities of the individuals inside the buildings being studied, rather than the construction, repair or demolition activities taking place on the structure itself. These latter result in in situ deposits; the former result in secondary deposits.

THE SHEET TRASH

Comparing the relative frequency of Non-structural artifacts in the four areas subject to sheet trash accumulation does little to increase our understanding of the functions taking place within the Moore House.*

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*The Moore House is regarded as the source of sheet trash since it was the only occupied structure after 1900.

The relatively high frequencies of Food Storage containers in Operation 27 and Operation 15, for instance, could be a function of the low frequencies of Beverage and Food Serving artifacts in those two deposits. A better way of compensating for horizontal distribution is to figure artifact density or the number of artifacts of a given kind within a square foot of area. Obviously, excavations behind the Moore House yielded more artifacts because the area excavated was larger than on the sides of the cabin and in the front yard.

Table 28 presents the density of Non-structural artifacts in the four sheet trash deposits at the Moore residences. The overall density on the sides of the Moore Cabin is more than twice as great as it is behind the House. Almost all classes appear to be rather uniform in overall density, except for the Food Storage Class. It appears to be the one that has driven up the overall density of artifacts at the cabin. The density of this class is more than three times greater east of the cabin than it is behind the house and more than five times greater to the west of the cabin. Why should this be so?

On the basis of its latest known use and the miscellaneous character of the artifacts alongside the cabin, it was suggested that the cabin was used primarily for the storage of miscellaneous items, much as one might use a garage or similar outbuilding today (page 230). Of all the Non-structural artifact classes listed, the most likely to be reused is the Food Storage class. Jars make handy containers for nails, hardware, cleaning fluids, paints, seeds or any other sort of item than needs to be kept in a small, airtight container. These are the kinds of things one stores in an outbuilding. Bottles, dishes, and bones--the stuff of the kitchen--are seldom used in an outbuilding. The relatively high density of Food Storage artifacts in the vicinity of the Moore Cabin is probably a function of its use for generalized household storage.

The data above suggest that artifact density increases in the vicinity of ancillary structures on an archeological site of the historic period. In the discussion of the Operation 17 excavations, it was noted that

Table 28: The density of Non-structural artifacts in the four sheet trash deposits at the Moore Residences

CLASS	Behind the Moore House		West of Cabin		East of Cabin		Moore House Front Yard	
	#	density	#	density	#	density	#	density
Food Storage	233	0.9	107	4.3	137	2.9	10	0.3
Beverage	138	0.5	5	0.2	13	0.3	13	0.3
Food Serving	92	0.3	10	0.4	19	0.4	1	0.0
Food Remains	59	0.2	11	0.4	13	0.3	2	0.1
Other Non-Structural	171	0.6	25	1.0	86	1.8	6	0.2
TOTAL NON-STRUCTURAL	693	2.6	158	6.3	268	5.6	32	0.8

*Density equals the number of artifacts per square foot of surface area. Since length of accumulation and type of deposit are constant, depth is not a variable.

Non-structural artifacts were denser towards the fence, alley and stream bed than they were next to the house. Moir, et al. (1982:147), working on a series of sites dating to ca. 1900 in Texas, found that artifact frequencies did indeed rise in an area 25 to 40 feet away from the principle residence on rural homesteads. The Moore Cabin is 23 feet away from the closest part of the house and 40 feet from the nearest door to the house. It seems likely that this increased frequency is part of a pattern of sheet trash deposition characteristic of Euroamerican sites in general.

NAIL SYNTHESIS

Of the Structural artifacts on the site, the most frequent class is the nails. They provided some of the most useful information about site chronology and building practices. In the study of the Moore Cabin attic, 73.6% of all nails found on the west half of the cabin were 4d cut nails, and 85.0% of those on the east half were 8d cut nails (Figure 68). These findings correlated with the established thicker, longer, and wider shingle fragments found on the east half. Thicker shingles (i.e., shakes) require bigger nails for attachment. These nails were a direct by-product of the re-roofing activity undertaken by Jack Kirmse in the 1960s.

Figure 98 shows the relative distribution of all sizes of cut nails in the deposits containing evidence of the roofing activities. The 1900 to ca. 1960 deposits on the west side of the cabin and the 1960-1980 deposits on the east side contained nails lost during the re-roofing event. These have almost identical cut nail distributions as in assemblages found inside the cabin. This phenomenon can be seen even more clearly in Figure 99 where the 4d cut and 8d cut nails have been mapped in and around the cabin. It is evident that the used nails were left where they fell as the old roofing material was removed.

SIZE	Operation 26 west side	Operation 27 1900-1960s deposits	Operation 17 1888-1900 west side
2d	3	0	0
3d	0	0	1
4d	39	9	20
5d	1	0	0
6d	1	0	0
7d	0	0	0
8d	7	0	3
10d	0	0	2
12d	0	0	1
20d	0	0	2
U	2	3	16

SIZE	Operation 26 east side	Operation 15 1960s-1980s deposits	Operation 17 1888-1900 east side
2d	0	1	0
3d	3	1	0
4d	3	1	0
5d	0	1	0
6d	0	1	0
7d	0	1	0
8d	34	26	2
10d	0	0	0
12d	0	2	0
20d	0	0	0
U	0	1	6

Figure 98: Synthesis of cut nails on the east and west sides of the original and present sites of the Moore cabin.

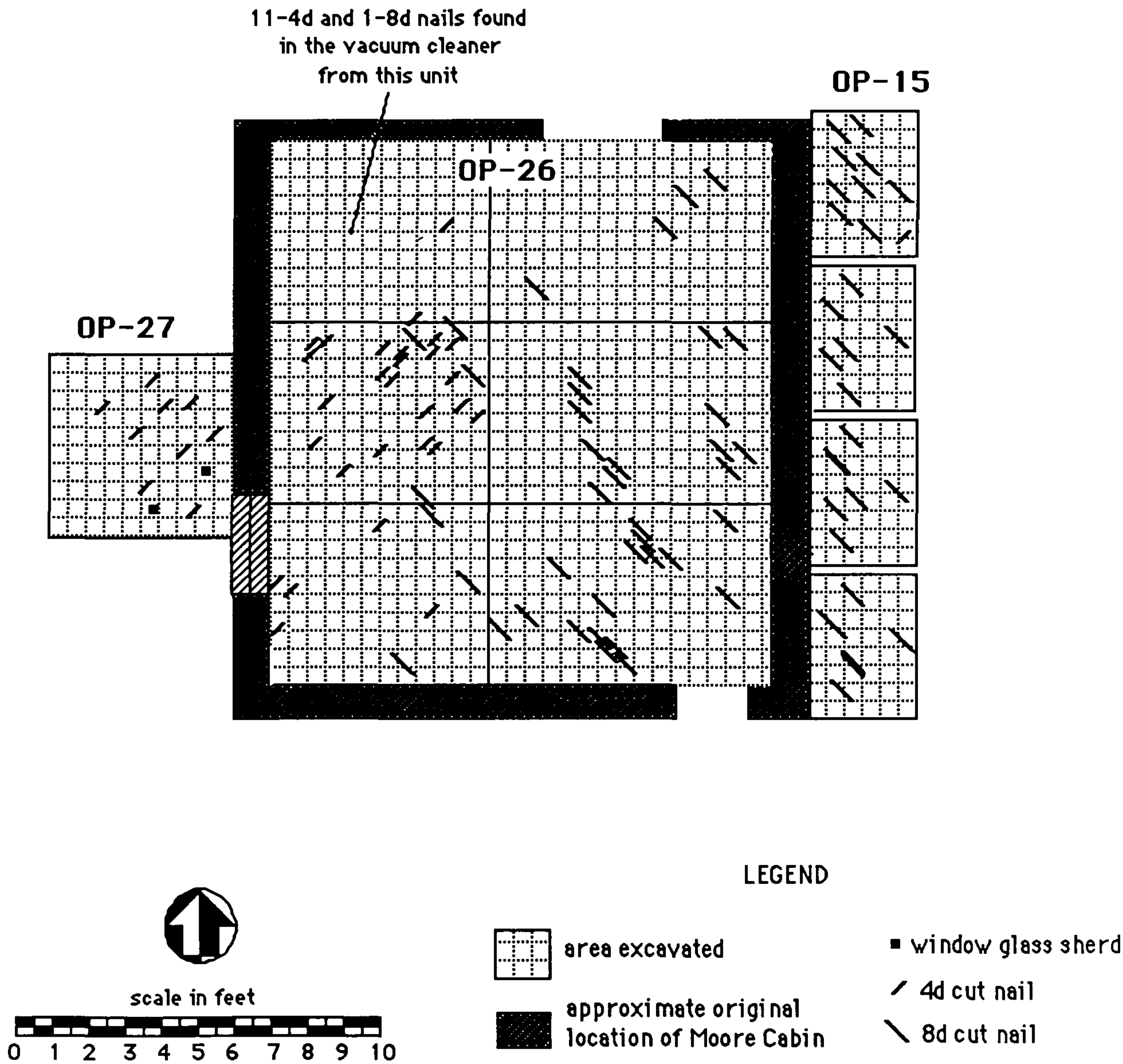

Figure 99: The location of nails in and around the Moore Cabin.

These two assemblages were next compared to the nail assemblage in the 1888-1900 deposits on the original site of the cabin in order to determine precisely where the east and west walls of the structure were situated. It was hypothesized that not all of the nails that were dropped during the construction of the roof would have been salvaged since Bernard and William, his father, and their two Indian workmen would have been on top of the cabin during the work. A high frequency of 4d nails in the western-most units would confirm the presence of the west wall in those units; likewise, a high frequency of 8d nails in the eastern units would confirm the presence of the east wall.

Figure 98 tends to confirm the hypothesis. Fully 44.0% of the cut nails in the western units were 4d size. An additional 36.0% were of indeterminable size, suggesting that the overall percentage of 4d nails was probably higher. On the east side, however, only 8 cut nails were recovered, and of these, only two could be identified by size. They were both, as might be expected, 8d nails. This distribution suggests that the cabin was not centered on the arbitrary center of the excavation area, but rather skewed to the east.

Figure 100 shows the spatial distribution of 4d and 8d cut nails in the 1888-1900 deposits on the original Moore Cabin site. The nails are not distributed in north/south orientations as might be expected from the data at the present site of the cabin. Instead, the 4d nails are concentrated at the west end of the drainage trench. As concluded earlier, these appear to relate to the attachment of shingles over a large gap between logs on the north side of the cabin, not the roofing event. Therefore, it appears that there is little or no evidence remaining of the original construction of the roof of the Moore Cabin; other evidence must be used to determine the location of the east and west walls.

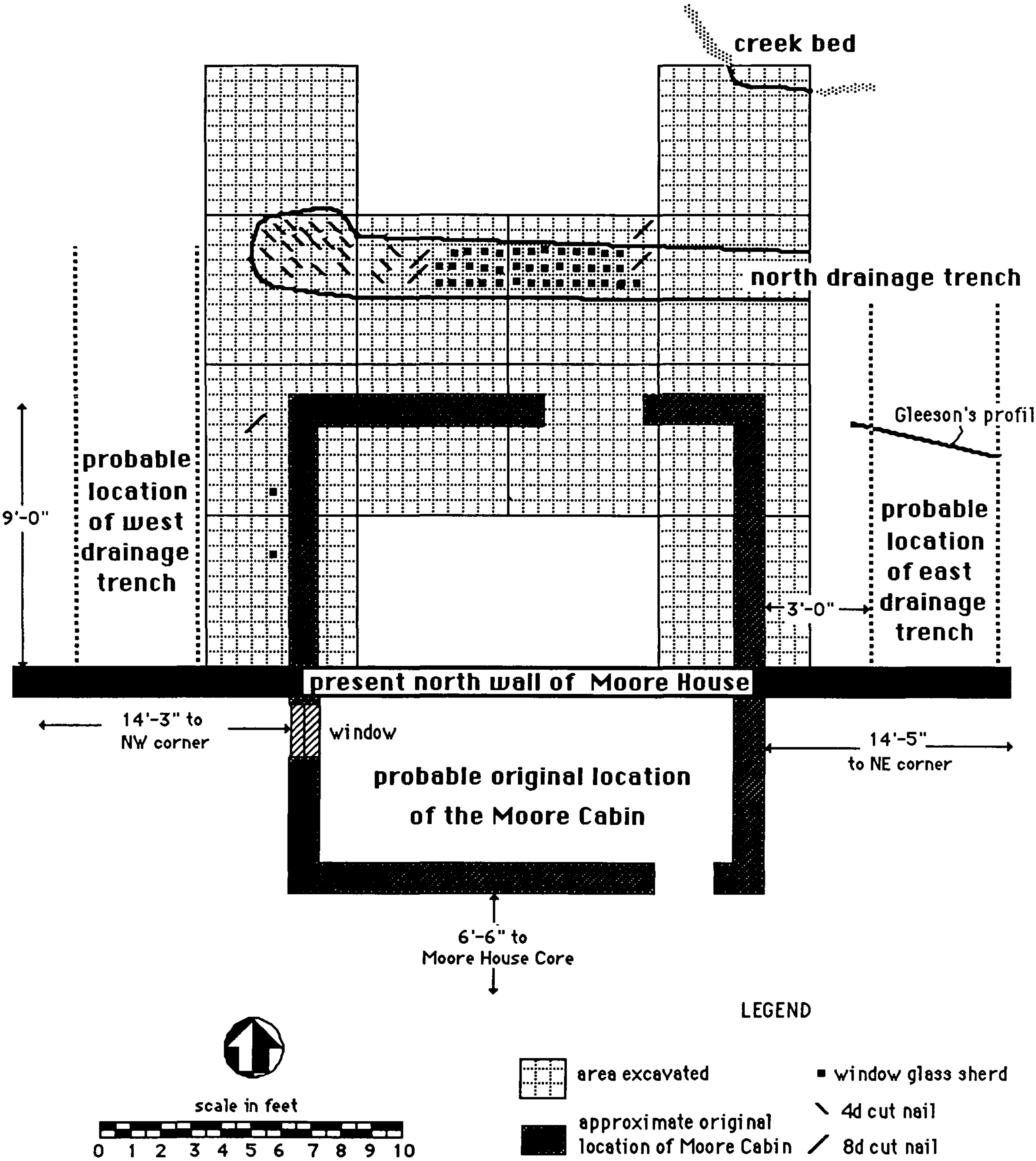

Figure 100: Probable original location of Moore Cabin, based on the location of the drainage trench and data on the spatial distribution of nails and window glass.

THE LOCATION OF THE EAST AND WEST WALLS OF THE CABIN

Why do the nails not concentrate along the east and west walls? One possible explanation is that nails were a precious commodity. Each one dropped was likely to be salvaged because it was difficult to obtain more. Although no doubt partly true, it is difficult to believe that every single nail could have been found by the dropper in the fine, soft sand surrounding the Moore Cabin. It was probably not so hard as might be expected to get replacement nails. Moore (1968:122) reports that on June 26, 1888 they received "some nails" from Juneau.

The other, and more likely explanation also explains the lack of evidence of the drainage trenches in the area excavated. Moore, on July 11, 1888, reports that they finished "digging a trench and banking up the ground all around the lower logs" (1968:126). Allowing room for the bank of soil between the trench and the cabin, the trenches would be <u>outside</u> the area excavated. Many artifacts, most notably nails and window glass, were found concentrated along the bottom of the north trench. It seems likely that nails deposited on the east and west sides of the cabin were washed down into the trenches off the banks of earth.

Independent data tend to confirm this hypothesis. Paul Gleeson (1985) monitored the construction of a utility line placed north of the house in the winter of 1985. He reported the presence of a "pit" two feet to the east of the Operation 17 excavations and 8 feet north of the house (Figure 101). This "pit" was probably the east drainage trench. It intrudes into culturally sterile alluvial gravels, and is filled with a "dark organic sand," probably similar to the interlaced organics and sand deposit observed in the north trench. This "pit" helps to determine the Moore Cabin's exact location.

Note that the mottled silt and sand stratigraphic unit labelled E in Unit N10E10 (Figure 13, Profile E) is probably the remains of the banked earth. It lay between the trench observed by Gleeson and the east wall of the cabin as indicated in Figure 100.

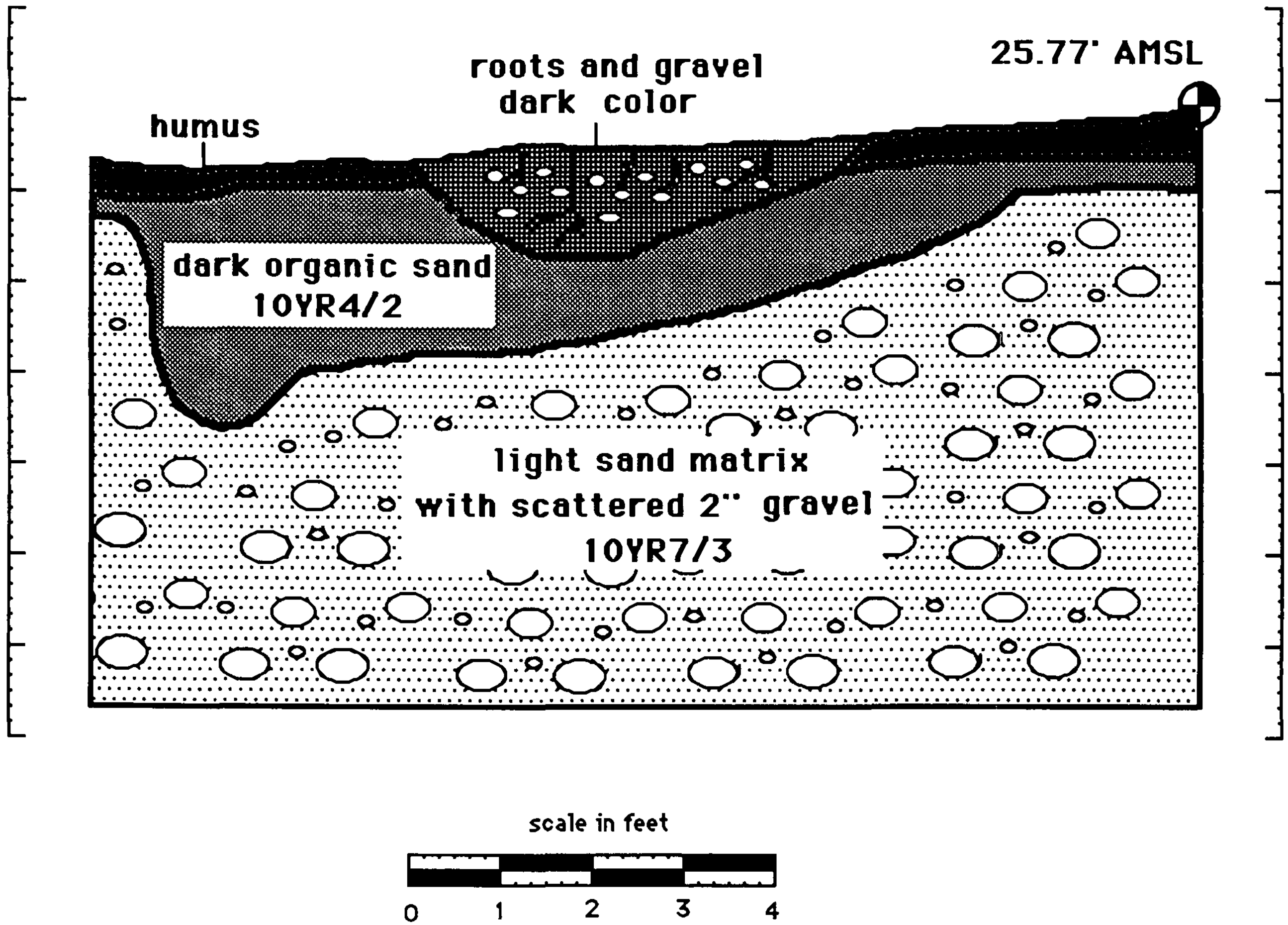

Figure 101: Profile of a portion of the utility trench cut north of the Moore House. Looking north.

The next line of evidence of some importance is the location of the Moore House core. Euroamericans tend to use symmetrical building plans when possible. Assuming that Bernard Moore followed this pattern, he would have placed his house directly in front, and square with, his cabin. The center of the core of the Moore House is at approximately East 1 on the Operation 17 grid plan. The east wall of the cabin, therefore, would be about East 9, leaving three feet between the east wall and the trench recorded by Gleeson (Figure 100). This is sufficient room for a bank of earth covering at least the bottom two logs of the cabin.

The west wall of the cabin would, likewise, have been located at about West 7 on the site grid. With three feet between the cabin wall and the trench, its east edge would have been at West 10, coinciding with the limits of excavation. Assuming the same three feet between the north trench and the north wall, the north edge of the cabin would have been located 9 feet 5 inches from the north addition of the house. This places the cabin ten feet south of the creek bed, and 6 feet 6 inches north of the Moore House core.

A third source of data confirms these measurements. A photograph taken in June, 1898, shows the house core, cabin and creek bed from an overhead view (Figure 5 and Figure 102). Assuming the cabin to be 17 feet from north to south (as measured on the cabin itself), the distance between the house and cabin scales out to 6.5 feet; from the cabin to the creek bank measures ten feet.

The archeological, architectural and photographic evidence, then, independently support the placement of the cabin as presented in Figure 100. The earthen banks between the cabin walls and the drainage trenches thus explain the lack of artifacts from the 1888-1900 period in the units to the east and west of the cabin walls. They also explain the concentration of items in the north trench. It might be instructive to other archeologists working on historic cabin sites to excavate an area at least twenty feet wider than the suspected size of the structure in order to find its associated drainage trenches and artifact assemblages.

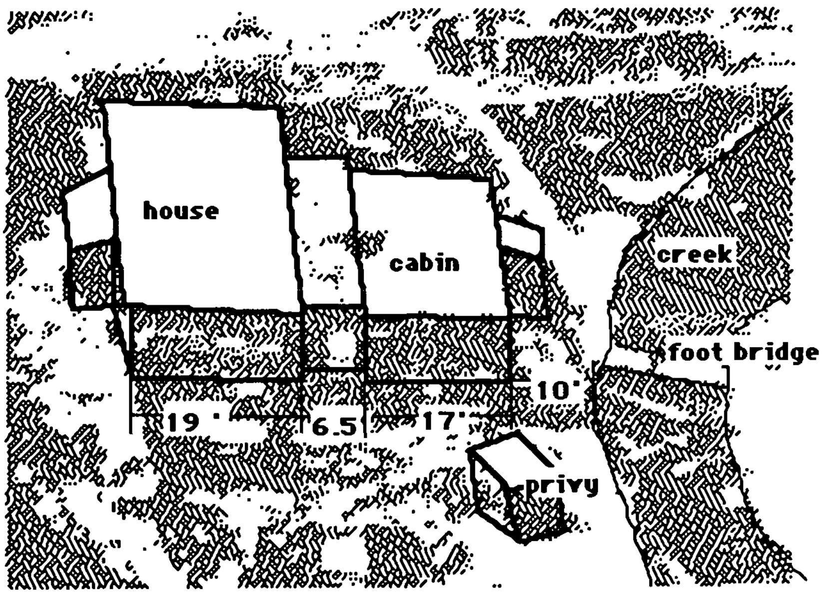

Figure 102: A digitized version of Figure 5, a photograph taken in June, 1898, with measurements indicated.

CHAPTER 5

CONCLUSIONS

CHAPTER 5: CONCLUSIONS

There are two types of conclusions drawn from this study: particularistic and generalizing. The particularistic findings are those that help to interpret precisely what happened, at what time, and to whom on the site. They are of use to the historian in establishing a sequence of events, to the interpretor in telling a story to the public, and to the archeologist in placing the findings within their cultural context.

The more generalizing conclusions are essential in developing a broader understanding of culture processes. They build on a series of "laws" about the way material culture is deposited through natural and cultural mechanisms, thus enhancing the interpretation of physical remains on other sites. These are the types of conclusions that are of use to other archeologists interpreting the results of their excavations. They also are of especial use in understanding the everyday life of average people in the past.

PARTICULARISTIC FINDINGS

Early Moore Period (1888-1900)

Historic records indicate that Captain William Moore and his son, Bernard, started to build a cabin in the Skagway Valley in the fall of 1887 and worked on it most of the summer of 1888. Bernard, his Tlingit wife, Minnie, and their two small children improved the cabin in the summer of 1896 when it was first occupied continuously. Shortly after its completion, Bernard began work building the core of the Moore House. The house was built over the next four years, in a series of additions to the central core. By 1900, Bernard had completed the front half of the house as it currently stands. In order to construct the northern portion, he moved the cabin 50 feet to the west where it sits today. He essentially completed the Moore House by the summer of 1901.

The archeological evidence provides some details to supplement this general outline. The cabin was originally situated south of a small tributary creek, which has since been filled with silt, trash, and other types of fill. Moore wrote that they dug a trench around the cabin for drainage purposes. A trench was found along the north side of the cabin, and Gleeson noted a "pit," which was probably the remains of the east trench. The distribution of cut 4d and 8d nails as shown on page 286, indicates that the cabin was surrounded by a 3 foot wide bank of soil, placing the east and west trenches outside of the area excavated. Given the 3 foot wide banks, the cabin would have been located 10 feet south of the creek bank (Feature 43).

Bernard Moore (1968:125) indicated that he and his father had planned to place sawn shingles on one side of the roof and split shakes on the other. They had brought a froe to the future site of Skagway for the purpose of manufacturing shakes (Moore 1968:114). Moore also mentioned that they bought a few bundles of shingles, which arrived by ship from Juneau on June 26, 1888 (Moore 1968:123). A "bundle" usually contains enough shingles to cover a 25 square foot area. Over 18 bundles would have been required to cover the approximately 460 square foot roof--more than just a few. On the basis of a statistical comparison of the thickness, length and width of roofing fragments on the east and west sides of the cabin, it was shown that thicker, wider and longer fragments were originally used on the east side of the cabin roof. It was also shown that 73.6% of the nails found on the west side of the cabin attic were 4d cut nails, and 85.0% on the east side were 8d cut nails. These two lines of evidence suggest that the east side was covered with split shakes and the west side with sawn shingles.

After the cabin was built on the barren-beach zone, the surrounding soils became interlaced with organic lenses, suggesting that vegetation grew near the cabin in the summer, died in the winter, and trapped sand in the natural wind-break provided by the cabin. The trenches gradually filled with soil washed off the earthen banks, carrying with it the nails and other artifacts deposited near the cabin, thus filling an artifact "trap" in the north trench.

When Bernard began work on his house in 1897, he placed it 6.5 feet to the south of the cabin. The relationship between these features is shown in Figure 100. The cabin continued to be used as an integral part of the residential complex until 1900. Increasing Non-structural artifact densities towards the north, particularly of tin cans, suggests that Bernard and his wife were using the creek for the disposal of household trash during this time period.

Archeological evidence of the 1896 occupation of the cabin includes the relatively high percentage of women's clothing fragments used for chinking. Bernard Moore wrote that his wife was actively involved in the chinking of the cabin (Moore 1968:178). A piece of newspaper chinking that bears the date December 30, 1892, confirms the fact that most of the substantive chinking activities took place right before the gold rush.

The clothing fragments may also suggest that the Moores were frugal with their material resources. Half of the women's clothing was hand-made and constructed of odd-sized, often mismatched fabrics. The pieces were cut economically, without regard to sewing convention, and resulting in extensive labor to piece them together. The seams were narrow. Larger, otherwise recyclable pieces were missing from the collection. Many garments had been repaired one or more times. Assuming these pieces were fragments of their own clothing, all of this suggests that resources were limited to the Moore family. This evidence reinforces a picture of the hard-working frontier family making the most of what was available to them.

Assuming that the women's clothing belonged to Minnie, it is possible to better understand her position in the larger society. The mutton-chop sleeves, half-belt and intricate bodice pieces, although cut from mismatched fabrics, suggest that she was making an effort to dress in the latest Euroamerican fashion. Since Minnie was Tlinget, this conclusion is interesting in the context of acculturation studies.

The Later Moore Period (1900-1914)

After Moore moved his cabin to its present location, the functional and spatial distributions of artifacts suggest that the use of both the building and its original site changed dramatically. The cabin became an ancillary outbuilding in which the items not used everyday were stored.

After the cabin was moved, the north portion of the house was added. The Moores continued to use the abandoned stream bed behind the house for the disposal of Non-structural trash. The very low relative frequency of beverage containers in these pre-1914 deposits suggests that they did not routinely consume alcoholic beverages.

The Early Kirmse Period (1914-1940)

The historic record indicates that Herman and Hazel Kirmse began to rent the house from Bernard in 1906. Herman died in 1912, and his widow bought the Moore house two years later. She undertook a number of major renovations to the house, including the construction of a bathroom. The cess pool for the new plumbing was found in the middle of the original cabin site. It seems likely that the Moores did not have an indoor toilet, given the new construction of this feature, the recorded addition of the toilet and plumbing, and the photographic evidence of a privy on the far northeast corner of the property.

The placement of fence post holes 15 feet north of the house that intruded through the early deposits indicates that this fence was added during the 1914-1940 period after the Kirmses took possession. Although earlier photographs indicate the presence of a fence, it appears to have been closer to the building and left no archeological remains.

The Kirmses appear to have used the creek only for the disposal of Structural trash or the sorts of things that would not decay and prove a health hazard. This practice probably coincides with the establishment of regulations regarding the disposal of garbage within the city limits.

This period was that of Jack Kirmse's youth, and there is evidence of his and his sister's presence in the yards and cabin. In addition to the fragments of porcelain doll heads, glass and ceramic marbles, and a rubber ball outside, a miscellaneous assortment of small items that might have been used by the young Jack Kirmse or another child was found scattered throughout the center area of the cabin attic, suggesting that it was little used for adult purposes at this time. In addition, there is a considerably higher frequency of Food Storage containers in the deposits around the cabin than there is nearer the house, reinforcing the conclusion that it was used for storage purposes.

Photographic evidence (Figure 32) suggests that there was a dog house in the front yard of the house sometime in the 1920s. This is substantiated by the presence of two bones in an otherwise culturally sterile humus deposit, both of which had been chewed by a carnivore.

The Late Kirmse Period (after 1940)

The 1940s became a time of renovation for the Kirmses. The returning economic prosperity of the country as a whole might have had something to do with their increased repair and rehabilitation efforts. The presence of a military outpost in the town during World War II most probably benefitted most businesses considerably, including the souvenir shop operated by the family. Renovations included the placement of new siding on the house and new linoleum in the house. This finding is evidenced by the clustering of Structural Materials, especially the red asphalt siding fragments and pieces of linoleum at the boundary between the 1914-1940 and 1940-1980 deposits. These items are concentrated in an area directly north of the house, suggesting a gate in the fence at that location. Its location is shown in Figure 55. Both the fact of the renovations and the location of the gate were verified by Jack Kirmse (1985).

In addition to renovations on the house, there was also evidence of re-roofing activities at the cabin. The way that sawn shingles and 4d nails are distributed along the west side of the cabin attic, 8d nails and shakes on the east side, and chinking fragments at the north and south ends suggests that there has been very little disturbance or use of the attic since it was re-roofed in the 1960s, confirming its continued use for miscellaneous storage.

About this same time, it appears that Jack Kirmse also replaced the tall picket fence originally built by Bernard Moore around 1900 by a shorter, more decorative type fence. His wife also planted sweetpeas or other plants requiring support along the south and east sides of the cabin during this period. The area excavated in the front yard was also used for a flowerbed, probably after the 1940s, when the younger generation of Kirmses began to live at the house.

GENERALIZING CONCLUSIONS

A number of the conclusions reached through this study were more generalizing in their implications, and should serve to contribute to the knowledge of archeological and social processes in Skagway in particular, and on the Euroamerican twentieth-century frontier in general.

Horizontal Distribution of Artifacts

Excavations in the front yard showed that the soil accumulation was very limited some distance from the buildings and that artifacts could be found just about everywhere, especially in deposits dating after World War II. Artifact density in the Moore House sheet trash appears to duplicate the model suggested by Moir et al. (1982) in which there is a greater material culture 25 to 40 feet away from a structure than in the intervening space. The reasons for this phenomena are not clearly understood. Perhaps the Euroamerican mind-set requires a clutter-free yard, but extends this rule only a certain distance from the house. It may also have to do with the distance deemed appropriate for the location of outbuildings. A "clean" yard may not necessarily include "clean" outbuildings. The reasons for the phenomenon do not have to be identified as long as its existance is considered when investigating archeological sites without structural remains. This "rule" could be particularly important in understanding site locations in a place like Dyea, Alaska, where most of the buildings are now missing.

The Functional Distribution of Artifacts

In the study of sheet trash deposits, when trying to ascertain area function by the relative frequencies of certain classes of artifacts, it is imperative to use compensatory statistics. Such factors as the lag time between ceramic manufacture and discard, and the intensity of Non-structural deposition over time can affect the rate at which certain classes of artifacts are deposited. It was found that artifact rain (the average number of items deposited per year of continuous occupation) is a much better statistic to use than overall relative frequency. The following conclusions are cases in point:

1) It was found that the Structural to Non-structural artifact ratio goes down with the length of time it takes for a deposit to accumulate, regardless of the amount of construction, repair or demolition activities that took place during that time. Therefore, it can be concluded that in sheet trash deposits, the longer the time it takes for a deposit to form, the greater the relative frequency of Non-structural artifacts.

2) There is a direct correlation between the average number of nails deposited per year of continuous occupation and the intensity of construction, repair or demolition activities.

3) The greatest rain of artifacts occurred during the times of greatest prosperity: 1888-1900 and 1940-1980. There is some evidence

that disposal habits were affected by the post-gold rush depression in Skagway, during which time there is definitely a lower rate of deposition. After the second World War, earlier patterns of disposal were readopted, and the rain of artifacts increased substantially. Deprivation during stressed times appears to have been followed by increased consumption and disposal during prosperous times.

4) A very heavy artifact rain was observed after World War II. A reaction to the restrictions of first the Depression, then the war, may have been combined with the increase in consumer purchasing power (translate prosperity) to create denser deposits. In addition, the widespread use of plastics made disposable packaging economical and ubiquitous. Therefore, post-1945 deposits can almost invariably be identified by their high artifact content and inevitable inclusion of plastics.

Window Glass Thickness

Studies using the modal thickness of window glass as a temporal indicator had suggested that glass thickness continued to increase at a steady rate throughout the nineteenth century, stabilizing only after 1915 (Roenke 1978; Whelan 1986). However, at Skagway, the model did not hold true. The modal thickness of window glass actually decreased after about 1900, from 6/64 of an inch to 5/64 of an inch, stabilizing after that time.

Bottle Glass Color and Bottle Function

Based on the Moore House data, it appears that there is no predictable, gradual change in the relative frequency of brown, clear, green, and aqua colored glass from the early to later parts of the twentieth century. The frequencies, which do show a characteristic progression of change (seriation) before 1900 at other sites (Blee

1985:96-102), appear to stabilize in the twentieth century. The observed differences in frequency that appeared at the Moore House occurred with a change in ownership of the property. A comparative study with other, similarly dated sites (pages 183-187) showed that people living on sites with a low relative frequency of green and brown bottle glass also consumed less alcohol, either for moral or legal reasons. This suggests that glass color is related to the function of the bottles and not the techniques used to manufacture the bottles. This study, of course, was not definitive and should be repeated when additional data are available. It does suggest that, in some circumstances, the relative frequencies of colored glass can be used as a functional rather than temporal indicator.

It is hoped that these generalizing conclusions can be of use to other archeologists working in Skagway, Dyea, or other historic sites in Alaska, in helping them to interpret the results of their own excavations.

RECOMMENDATIONS

The following recommendations are of three types: 1) how the archeological story might be told by an interpretor; 2) what architectural details might be added to the cabin to make it more authentic; and 3) what further archeological work might be attempted in the area.

FOR THE INTERPRETOR

Assuming he or she wants to convey some of these results to the public, how does the interpretor go about presenting this information? How can this study have meaning for the general visitor?

The artifacts themselves should have some interpretive value. It would be a mistake to use the cartridge shells and spent bullets to reinforce an image of a somewhat freer, more lawless society, a stereotypic view perpetuated by Pierre Berton when he wrote "The town of Skagway was conceived in lawlessness and nurtured in anarchy" (Berton 1977:149). Instead, they should be put in the context of the reality of frontier life. Guns were absolutely essential not only to protect life and property but also to procure fresh food. The fact that the caliber of the cartridge shells in the early Moore deposits matches the guns used to shoot mountain goats on the night of July 3, 1888, can help in telling this story.

Also from the Moore period, we find the remnants of a woman's clothing used as chinking (Figures 70-72), emphasizing the role of women in the development of the frontier community. These may well have been Minnie Moore's garments. Recall that William and his sons represented a breed of frontiersman that did not conform to the stereotypical illiterate, spend-thrift, gun wielding, boozing bachelor. They were literate, industrious, abstentious, married, family men. Minnie often travelled with Bernard and settled with him in Skagway when the community was still just the dream of her father-in-law. The fact that she was a Tlingit strengthens her representativeness of the turn-of-the-century pioneer, for her people had been in the area for thousands of years. Her life, like that of her relatives, has been much ignored in telling the story of Skagway. It is obvious from the remains of her clothing that she further represents the attempt of her people to adopt at least the material culture of the encroaching Euroamericans. Klingit-Sau-Yet Shotridge (Minnie) Moore was exemplary of the people involved in the expanding Euroamerican frontier regardless of her ethnic background.

If the clothes belonged to the Moore family, it is evident that Minnie made many of them out of mismatched or limited materials and repaired them often. This finding reinforces the inferences in Bernard's diary that, before the gold rush, they were not very affluent. That, too, was typical of the Alaskan frontiersman at the turn-of-the-century.

Another item associated with the gold rush period is the printing plate found outside the Moore Cabin (Figure 88). This cartoon helps to tell the story of the transient nature of the Skagway population in the early days. It was printed in the Daily Alaskan on September 14, 1899, and reprinted at least once more on April 7, 1900. The editor did not have to worry about too many people having seen it before since much of the population was merely passing through.

Other items are not as aesthetically interesting but often were more informative. The distribution of nails, window glass, and the placement of the north trench allowed us to pinpoint the location of the cabin on its original site. Markers placed at the northeast and northwest corners (Figure 100) could assist in telling the story of its archeological discovery. The creek, which now appears as a swale to the north of the house, was integral to the construction and location of the cabin, for its logs were floated down the waterway. In addition, it provided fresh fish for Bernard and his father before the gold rush.

A few items from the Kirmse period might also be worth interpretating, such as the remnants of the aqua, black and gold printed porcelain souvenier cup (Figure 25). It would serve well to illustrate the importance of tourism to the town of Skagway even from its earliest beginnings. Also it would serve as an example of the shift from Native-made souvenirs to those which were considered more "useful" in the context of Euroamerican culture.

The park interpretor will no doubt have other ideas how the story of the Moores on the Alaskan frontier might be told from the items found during this study.

FOR THE PARK MANAGER

These investigations yielded information on the architectural details of the cabin that were not available through other means. The documentary evidence suggests that one side of the cabin roof was covered with sawn shingles and the other with split shakes. Archeological evidence indicates that it was the east side that was roofed with shakes and the west side that had shingles. In the interest of authenticity, it is recommended that the west side of the roof be shingled, rather than covered with shakes as it has been reconstructed.

A cluster of 4d cut nails in the west end of the north drainage trench suggests that the shakes nailed to the outside of the north wall of the cabin were original to its construction. They were probably placed there to cover an unchinkable gap between logs. In the interest of historical accuracy, they should be maintained (Figure 20).

If the fence along the north side of the property is replaced, it should be recognized that the post holes found in these excavations were from a fence built during the Kirmse occupation. The Moore fence was probably somewhat closer to the house.

FOR THE ARCHEOLOGIST

Two types of resources may still be found on the Moore property. The first are artifacts in context with the residence themselves and which constitute primary deposits in danger of being destroyed by upcoming rehabilitation at the Moore House. The second type of resource is not now being threatened, but has the potential for yielding scientific data.

Mitigation at the Moore House

The excavations in the front yard, 68 feet south of the house and 30 feet north of the street, suggested that artifacts can be found in just about every square foot of the Moore tract. Whether all these artifacts have the potential to yield any additional scientific information about the Moores, Kirmses or life on the Alaskan frontier is doubtful. As can be seen with all the excavations in this study, artifact density is fairly low, especially for the pre-World War II deposits. In areas away from the buildings, the depositional history has been such that these cannot be distinguished from earlier ones. A mere 2 inches had accumulated in Operation 16 between 1896 and the present time.

The density of artifacts relating to the Moore Cabin and the early occupation of the Moore House is likewise very sparse. Based on the data recovered in this study, there is an average of only one fragment per 1.12 square feet in the pre-1900 deposits and one per 0.81 square feet in the 1900-1914 deposits. Density is, of course, much greater in the drainage trenches, which only means that there is a decreased density in areas outside the trenches. The value of these items lies principally in their spatial distribution, i.e., how they cluster on the site in relation to the cabin.

Portions of the east, west and south drainage trenches no doubt still remain. However, all three areas have experienced significant disturbance. In 1985, a utility trench was dug east to west across the site about 5 to 8 feet north of the house, effectively obliterating much of the remains of the east and west trenches. Evidence from the builder's trench on the north side of the house indicates that Jack Kirmse did some foundation repairs in the 1940s; holes and dirt piles in the crawl space under the structure suggests that this activity was not limited to the perimeter. It appears that much of the area under the house has been substantially disturbed.

In addition, the studies of Moir et al. (1982) were at least partially substantiated by these investigations. On late-nineteenth and early-twentieth century sites, they had found that sheet trash tends to be densest 25 to 40 feet from the doors of residential buildings. Although Structural debris concentrates near buildings, evidence of Non-structural activities appears to be limited in the immediate vicinity of a structure. This finding emphasizes the fact that evidence of activities taking place within the Moore Cabin or Moore House during the 1896-1900 period, although it may exist, is probably very limited and scattered away from the structures.

In this investigator's opinion, it is unlikely that sufficient data could be recovered to be of further use in determining cabin use and/or location in those areas that have experienced significant disturbance. The only area still left that might contain useful data is located to the north of the utility trench and west of the Operation 17 excavations (Figure 103). There may be remains of the west drainage trench and its complement of nails from the original construction of the cabin in this area. The corresponding area to the east of Operation 17 is occupied by a healthy tree whose roots have probably mixed deposits beneath it. Limited exploratory excavations under the Moore House might determine the extent of the disturbance created by the foundation repairs.

Excavations outside the front and back doors might contribute to a testing of Moir et al.'s (1982) hypothesis, and possibly yield additional data on household activities. Testing should be sufficiently extensive to

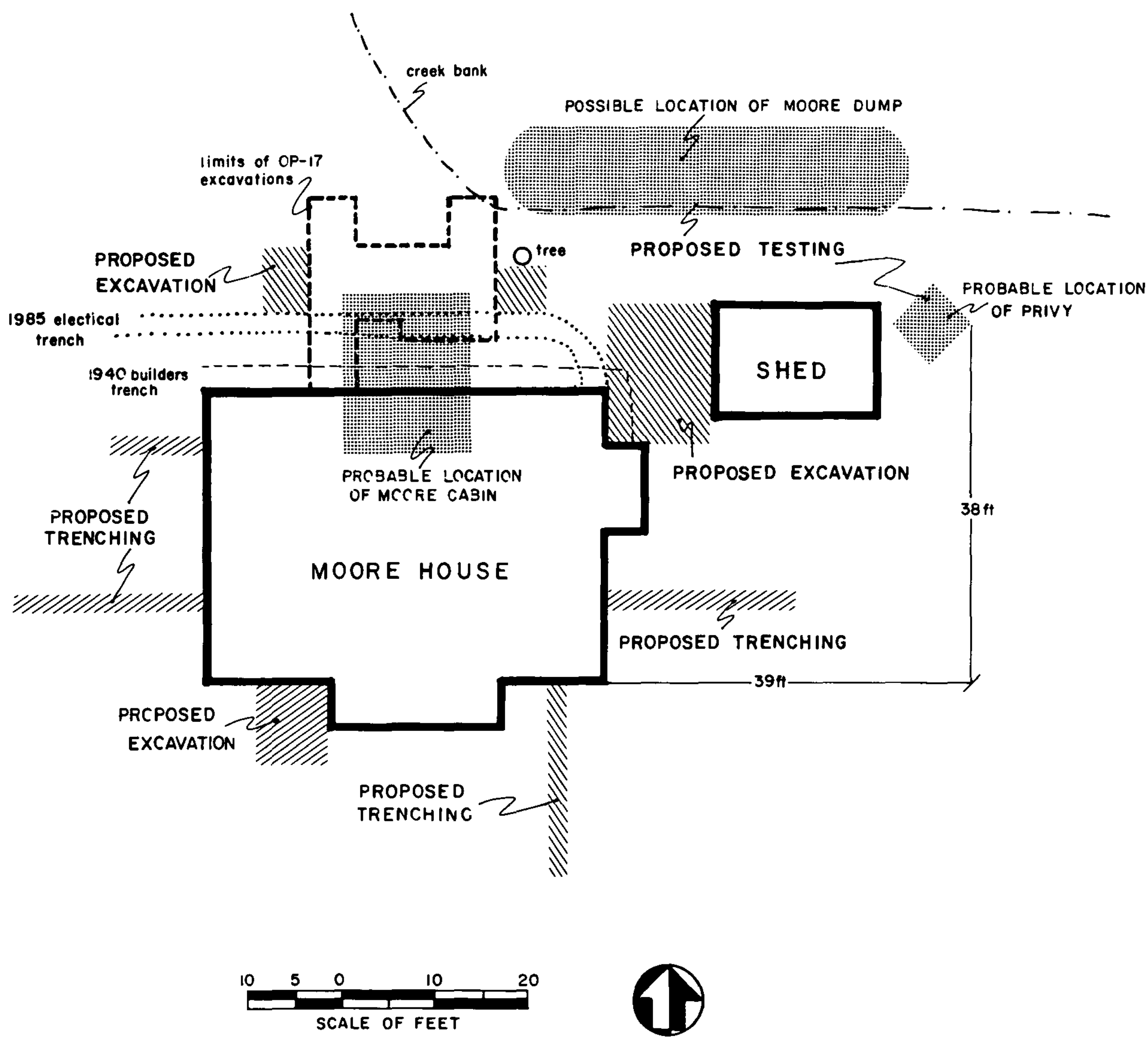

Figure 103: Recommended locations of additional archeological investigations to be undertaken at the Moore House.

gather an adequate sample of material, and all cultural materials should be collected.

Further Scientific Inquiry

The pursuit of scientific information regarding life on the pre-gold rush frontier, as exemplified by the Moores, might be enhanced by the location and sampling of the place where the Moores deposited their household trash. Dumping was probably done in the creek, about 25 to 50 feet downstream from the cabin (Figure 103). This would place the disposal area within the limits suggested by Moir et al. (1982). The creek was the most logical area of disposal because it would provide a natural flushing action. It is unlikely that many items actually remain from the time that the creek was running; once the stream was diverted, however, the Moores may have continued to use it as a trash disposal area. An article in the Daily Alaskan, dated March 17, 1899 (page 2), indicates that there was no centralized community dump at that time. The journalist complains that ". . . many tons of filth, garbage and other refuse . . . has been allowed to accumulate throughout the winter in alleys, back yards and even on some of the streets." Under these social conditions, it seems unlikely that the Moores would have been hauling their household trash off their own, rather substantial property.

The dump has the potential to yield important information on the diet of the Moores as representative of the early pioneers of Alaska. In addition, its contents could provide a source of data for testing more specific hypotheses such as those offered in this study, e.g. 1) the Moores did not consume alcoholic beverages on a regular basis, and 2) the disposal of ceramics is slower at the beginning of an occupational history. It might also provide further information on the nature and degree of acculturation experienced by Klinget-Sau-Yet (Minnie Moore). Other hypotheses of interest to anthropologists might occur to others. A systematic shovel testing program could locate this potentially valuable resource with a minimum of disturbance.

An additional resource of some importance would be the Moore privy. As mentioned earlier, it appears that the Moores did not have an inside toilet. A privy is often one of the better sources of information on diet, disease and private life. Photographs (e.g., Figures 8 and 102) suggest that the Moore privy was located some distance to the northeast of the house and cabin. Limited testing could confirm the exact location of the privy. It is possible that it is underneath the small shed located east of the house and could be impacted if new foundations are built for this structure (Figure 103).

By locating these two resources, the park would be in a much better position to protect them against destruction or deterioration. They should be conserved until such time that their excavation could solve problems of scientific concern.

AFTERWORD

The excavations at the Moore House and Cabin provided a unique opportunity to study the archeology of a household as it changed through both time and space. The original cabin location, being purely archeological in nature, was nicely complemented by the existance of the extant structure fifty feet to the west. In addition, the well-preserved remains in the cabin attic filled the gaps in the record of material remains created by the deterioration of nails and shingle fragments in the ground.

The Moore residences experienced a history similar to that of the town as a whole. Bernard Moore, starting with the grubstake of a few nails, shingles, tools and the resources of the land, built a rough cabin, brought his family, and then committed himself to the community by building a substantial frame house. Skagway, likewise, experienced a period of transient tents, tiny cabins and slap-dash pre-fab structures, followed by the construction of the more enduring buildings that survive today.

When the rush was over, the Moores left their home to be replaced by jeweler Herman Kirmse. This event epitomizes the transition of the community from gold rush boom town to a primary transportation hub. We have little evidence for the stabilizing influence of the railroad at the Moore Residences, but the Kirmses certainly represented the second great industry of Skagway: tourism. Without the railroad, tourism would never have developed in the town. It is even possible that the community as a whole would have expired without the trains as the demise of Dyea so readily attests.

The great American historian Frederick Jackson Turner wrote in 1893:

> Stand at Cumberland Gap and watch the procession of civilization, marching single file--the buffalo following the trail to the salt springs, the Indian, the fur-trader and hunter, the cattle-raiser, the pioneer farmer--and the frontier has passed by. Stand at South Pass in the Rockies a century later and see the same procession with wider intervals between (Turner 1963:12)

Melody Webb noted a slightly different procession in the North:

> Stand beside the Yukon River near the Alaskan-Canadian border fifty years after South Pass and watch Turner's frontiers, modified by the north country's unique environment, flow past in similar succession: Indian, trader, explorer, missionary, miner, soldier, riverboat man, dog-team driver, woodchopper, and finally townsman (Webb 1985:1).

The procession through Skagway was very similar but happened very rapidly: the Tlingit hunter and trader in 1880, the explorer in 1887, the homesteader in 1888, and a few seasoned miners in 1892. Then suddenly in 1897, the valley was deluged with former farmers, policemen, teachers, doctors, and people from all walks of life seeking gold in the Klondike. They brought with them businessmen and women providing food, lodging, and supplies. By 1898, a railroad was built, and by 1899, Skagway was a major transportation hub for the Yukon's mineral wealth. The transient miners had passed, and the community settled into a "civilized" way of life. The frontier had passed by in little more than a decade.

The Moore Residences and the archeological remains found there are physical reminders of this frontier process, one that has been re-enacted many times in American history. As such, it is a valuable resource to our nation's heritage.

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The 1980 crew consisted of George Meyers and Ross Becker; Julie Guda processed the artifacts. In 1983, I was assisted by Marianne Musitelli and Vicki Varra. Marianne completed the cataloguing and most of the research on the artifacts from the 1980 and 1983 seasons. She also did a preliminary inventory and cleaning of the 1985 material. Marianne's thorough, precise descriptions were continuing sources of pleasure during the analysis. Diane Rhodes and Ann Sands identified the faunal material.

The staff at Klondike Gold Rush National Historical Park, as always, were ready and willing to lend materials and a helping hand. I am particularly grateful to then park architect Dave Snow and his family for the use of their bathroom facilities and their patience with an errant shovel handle. John Warder and his staff were very obliging with the loan of tools and storage space in the National Park Service garage. Gwen Herst kindly sat down with me and answered a number of questions about the bottle glass.

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NEWSPAPER

Daily Alaskan (Skagway, Alaska) 1898-1902

APPENDIX A:

INVENTORY OF FOOD REMAINS IN OPERATION 17

Appendix A: Bone Inventory, Operation 17

unit	animal	element	age	sex	artifact #	comments
CABIN DEPOSITS						
N10E10						
	artiodactyl					
		occipital condyle, MS, Left	-	-	2388	-
	Bos tarus					
		R atlas, partial	A	-	2267	saw cut
		R ilium	-	-	2264	saw cut
		R ilium	-	-	2265	saw cut
		R ilium	-	-	2266	saw cut
	cf bos					
		L unciform-carpal	A	M	2262	-
	cf Sus scrofa					
		R femur epiphysis	SA	-	2263	-
TOTAL CABIN DEPOSITS					7	
LATE MOORE DEPOSITS						
N10E5						
	LM-cow sized					
		epiphises, spinal column, axial	SA	-	1365	-
		epiphises, spinal column, axial	SA	-	1366	-
	unknown		-	-	1367	-
	unknown		-	-	1368	-
N15E0						
	Mammal					
		flat bone fragment	-	-	389	-
N15E10						
	medium-large mammal					
		lumbar vertebra	-	-	758	saw cut
N15W5						
	Large mammal					
		rib, prox, MS	-	-	126	saw cut
N20E10						
	LM-cow sized					
		epiphises, spinal column, axial	SA	-	1824a	saw cut
		epiphises, spinal column, axial	SA	-	1824b	-
N5W5						
	LM-cow sized	rib	-	-	3286	saw cut
TOTAL LATE MOORE DEPOSITS					10	

Appendix A: Bone Inventory, Operation 17

unit	animal	element	age	sex	artifact #	comments
EARLY KIRMSES DEPOSITS						
N15W5						
	cf Bos	L. patella	-	-	124	saw cut
	large mammal	long bone, MS	-	-	125	saw cut
N20E10						
	peach seed	fragment	-	-	1853	-
		fragment	-	-	1854	-
		fragment	-	-	1855	-
		fragment	-	-	1856	-
		fragment	-	-	1857	-
		fragment	-	-	1858	-
	Bos tarus	illium, ms, R	-	-	1851	saw cut
	large mammal	scapula? pelvis?	-	-	1852	saw cut
TOTAL EARLY KIRMSES DEPOSITS					10	
MOORE HOUSE BUILDERS TRENCH						
N5W5						
	LM, cf bos	thoracic vertebra (?)	-	-	3397	none
	cf Bos	R distal humerus, ms	-	-	3396	saw cut
TOTAL BUILDERS TRENCH					2	
CESS POOL FILL						
N15E0						
	LM, cf bos	left, prox. femur	-	-	327	saw cut
N15E5						
	large mammal	rib, proximal	-	-	2655	saw cut
N10E5						
	cf Bos taurus	pelvis-ischium, R, MS	-	-	1161	saw cut
TOTAL CESS POOL FILL					3	

Appendix A: Bone Inventory, Operation 17

unit	animal	element	age	sex	artifact #	comments
RECENT						
N10E0						
	cf Bos	rib, MS	-	-	814	saw cut
	Ovis aries	metacarpal, R	A	-	815	-
N10E10						
	Gallus gallus	L femus MS	-	-	-	tooth marks
N10E5						
	large mammal	long bone	-	-	1345	saw cut
	M Mammal	long bone	-	-	1346	-
	unknown	fragment	-	-	1347	calcined
N15E0						
	M-L mammal	long bone, MS	-	-	272	-
	cf Sus scrofa	metapodial, ms	SA	-	273	-
N15E10						
	M-L mammal	vertebra	-	-	701	saw cut
	Ovis aries	scapula, L, proximal	-	-	700	-
	large mammal	unknown	-	-	699	saw cut, burned
N15E5						
	cf Bos	ilium, articular surface	SA	-	2516	v cut, carnivore chev
N15W5						
	cf Bos	thoracic vertebra, MS. axial	-	-	39	saw cut
N20E10						
	Sus scrofa	R maxillary, M1, M2, P3, P2	SA	-	1803	in situ # 5
		R temporal/parietal	SA	-	1804	in situ # 5
		R squamosal, zygomatic process	SA	-	1805	in situ # 5
		R frontal, supraorbital,foramen & post orbital	SA	-	1806	in situ # 5
		R. Jugal/ zygomatic arch	SA	-	1807	in situ # 5
		occipatal	SA	-	1808	in situ # 5
		deciduous tooth, P1 or P2	SA	-	1809	in situ # 5
		unident. fragments	SA	-	1810	in situ # 5
		unident. fragments	SA	-	1811	in situ # 5
		unident. fragments	SA	-	1812	in situ # 5
		unident. fragments	SA	-	1813	in situ # 5
	unknown	fragment	-	-	1538	calcined
	M-L mammal	vertibra, cervical, MS, Axial	SA	-	1535	saw cut
	M-L mammal	lumbar vertibra, spinal process, MS, Axial	-	-	1536	saw cut
N20W5						
	coconut shell		-	-	1988	-
	coconut shell		-	-	1989	-
	coconut shell		-	-	1990	-
	coconut shell		-	-	1991	-
	coconut shell		-	-	1992	-
	coconut shell		-	-	1537	-
TOTAL RECENT DEPOSITS					33	

APPENDIX B:

NUMBERED ARTIFACT INVENTORY

OPERATION 26

MOORE CABIN ATTIC

APPENDIX B: INVENTORY OF ARTIFACTS FROM THE MOORE CABIN ATTIC

ART.#	PROV.	TYPE	MATERIAL	DESCRIPTION	GROUP	CLASS
1	S5 E6	shingle	wood	-	STRUCTURAL	Materials
2	S5 E6	shingle	wood	-	STRUCTURAL	Materials
3	S5 E6	shingle	wood	-	STRUCTURAL	Materials
4	S5 E6	shingle	wood	-	STRUCTURAL	Materials
5	S5 E6	shingle	wood	-	STRUCTURAL	Materials
6	S5 E6	shingle	wood	-	STRUCTURAL	Materials
7	S5 E6	shingle	wood	-	STRUCTURAL	Materials
8	S5 E6	shingle	wood	-	STRUCTURAL	Materials
9	S5 E6	shingle	wood	-	STRUCTURAL	Materials
10	S5 E6	shingle	wood	-	STRUCTURAL	Materials
11	S5 E6	shingle	wood	-	STRUCTURAL	Materials
12	S5 E6	chinking	denim/canvas	twill, blue	STRUCTURAL	Materials
13	S5 E6	shingle	wood	-	STRUCTURAL	Materials
14	S5 E6	harness	leather	large triangular shape, 1 hole	ACTIVITIES	Transportation
15	S5 E6	shingle	wood	-	STRUCTURAL	Materials
16	S5 E6	shingle	wood	-	STRUCTURAL	Materials
17a	S5 E6	dog pack	leather/canvas	sewn and rivetted	ACTIVITIES	Transportation
17b	S5 E6	dog pack	leather/canvas	sewn and rivetted	ACTIVITIES	Transportation
18a	S5 E6	dog pack	leather/canvas	sewn and rivetted	ACTIVITIES	Transportation
18b	S5 E6	dog pack	leather/canvas	sewn and rivetted	ACTIVITIES	Transportation
19	S5 E6	shingle	wood	-	STRUCTURAL	Materials
20	S5 E6	chinking	moss	-	STRUCTURAL	Materials
21	S5 E6	chinking	moss	-	STRUCTURAL	Materials
22	S5 E6	board	wood	sawed/split	STRUCTURAL	Materials
23	S5 E6	shingle	wood	-	STRUCTURAL	Materials
24	S5 E6	shingle	wood	-	STRUCTURAL	Materials
25	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
26	S5 E6	shingle	wood	-	STRUCTURAL	Materials
27	S5 E6	shingle	wood	-	STRUCTURAL	Materials
28	S5 E6	chinking	moss	-	STRUCTURAL	Materials
29	S5 E6	chinking	wool	twill, black/ red/ brown	STRUCTURAL	Materials
30	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
31	S5 E6	shingle	wood	-	STRUCTURAL	Materials
32	S5 E6	shingle	wood	-	STRUCTURAL	Materials
33	S5 E6	chinking	moss	-	STRUCTURAL	Materials
34	S5 E6	chinking	wool	twill, black/ red/ brown	STRUCTURAL	Materials
35	S5 E6	chinking	moss	-	STRUCTURAL	Materials
36	S5 E6	chinking	wool	twill, dark brown	STRUCTURAL	Materials
37	S5 E6	chinking	wool	twill, dark brown	STRUCTURAL	Materials
38	S5 E6	other	feathers	cluster of 15, wing/tail type	UNCLASSIFIABLE	Natural
39	S5 E6	chinking	cotton denim	twill, blue	STRUCTURAL	Materials
40	S5 E6	chinking	cotton flannelette	twill, blue and white	STRUCTURAL	Materials
41	S5 E6	chinking	cotton denim	twill, blue	STRUCTURAL	Materials
42	S5 E6	board	wood	sawed/split	STRUCTURAL	Materials
43	S5 E6	shingle	wood	-	STRUCTURAL	Materials
44a	S5 E6	chinking	wool	plain, dark brown	STRUCTURAL	Materials
44b	S5 E6	chinking	wool	twill, dark brown	STRUCTURAL	Materials
44c	S5 E6	chinking	wool	twill, dark brown	STRUCTURAL	Materials
44d	S5 E6	chinking	cotton flannell	twill, blue and white	STRUCTURAL	Materials
45	S5 E6	board	wood	sawed/split	STRUCTURAL	Materials
46	S5 E6	shingle	wood	-	STRUCTURAL	Materials

APPENDIX B: INVENTORY OF ARTIFACTS FROM THE MOORE CABIN ATTIC

ART.#	PROV.	TYPE	MATERIAL	DESCRIPTION	GROUP	CLASS
47	S5 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
48	S5 E13	chinking	cotton flannel	plain, reddish brown	STRUCTURAL	Materials
49a	S5 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
49b	S5 E13	shingle	wood	-	STRUCTURAL	Materials
50a	S5 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
50b	S5 E13	shingle	wood	-	STRUCTURAL	Materials
51a	S5 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
51b	S5 E13	shingle	wood	-	STRUCTURAL	Materials
52	S5 E13	shingle	wood	-	STRUCTURAL	Materials
53	S5 E13	chinking	wool	plain, black, friable	STRUCTURAL	Materials
54	S5 E13	nail	ferrous	spike, 10.5"	STRUCTURAL	Nails
55	S5 E13	chinking	wool	twill, dark brown	STRUCTURAL	Materials
56	S5 E13	nail	ferrous	wire, 20d	STRUCTURAL	Nails
57	S5 E13	Bone	bone	vertebrae	DOMESTIC	Food Remains
58	S5 E13	shingle	wood	-	STRUCTURAL	Materials
59	S5 E13	shingle	wood	-	STRUCTURAL	Materials
60	S5 E13	shingle	wood	-	STRUCTURAL	Materials
61	S5 E13	nail	ferrous	wire, 20d	STRUCTURAL	Nails
62	S5 E13	chinking	cotton denim	twill, blue	STRUCTURAL	Materials
63a	S5 E13	chinking	cotton	plain, black and white print	STRUCTURAL	Materials
63b	S5 E13	chinking	wool	twill, pale yellow	STRUCTURAL	Materials
64	S10 E13	shingle	wood	-	STRUCTURAL	Materials
65	S10 E13	shingle	wood	-	STRUCTURAL	Materials
66	S10 E13	wash basin	ferrous	enamelled bright colors	DOMESTIC	Housekeeping
67	S10 E13	shingle	wood	-	STRUCTURAL	Materials
68	S10 E13	box lid	wood	decorated with paper	ACTIVITIES	furniture
69a	S10 E13	shingle	wood	-	STRUCTURAL	Materials
69b	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
69c	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
69d	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
70	S10 E13	shingle	wood	-	STRUCTURAL	Materials
71	S10 E13	shingle	wood	-	STRUCTURAL	Materials
72	S10 E13	shingle	wood	-	STRUCTURAL	Materials
73	S10 E13	shingle	wood	-	STRUCTURAL	Materials
74	S10 E13	shingle	wood	-	STRUCTURAL	Materials
75	S10 E13	shingle	wood	-	STRUCTURAL	Materials
76	S10 E13	shingle	wood	-	STRUCTURAL	Materials
77	S10 E13	shingle	wood	-	STRUCTURAL	Materials
78	S10 E13	shingle	wood	-	STRUCTURAL	Materials
79	S10 E13	harness	leather/ferrous	2 straps with ring	ACTIVITIES	Transportation
80a	S10 E13	shingle	wood	-	STRUCTURAL	Materials
80b	S10 E13	shingle	wood	-	STRUCTURAL	Materials
81	S10 E13	shingle	wood	-	STRUCTURAL	Materials
82	S10 E13	shingle	wood	-	STRUCTURAL	Materials
83	S10 E13	nail	galvanised	wire, 8d	STRUCTURAL	Nails
84	S10 E13	nail	ferrous	wire, 5d	STRUCTURAL	Nails
85	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
86	S10 E13	cuff link	cuprous	gold gilt	PERSONAL	Fastener
87	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
88	S10 E13	sticks	wood	5-1/2" x 1/4" , pointed	ACTIVITIES	Children
89	S10 E13	sticks	wood	5-1/2" x 1/4" , pointed	ACTIVITIES	Children
90	S10 E13	spike	ferrous	8.3" long	STRUCTURAL	Hardware

APPENDIX B: INVENTORY OF ARTIFACTS FROM THE MOORE CABIN ATTIC

ART.#	PROV.	TYPE	MATERIAL	DESCRIPTION	GROUP	CLASS
91	S10 E13	peach pit	-	-	DOMESTIC	Food Remains
92	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
93	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
94	S10 E13	sticks	wood	5-1/2" x 1/4" , pointed	ACTIVITIES	Children
95	S10 E13	sticks	wood	5-1/2" x 1/4" , pointed	ACTIVITIES	Children
96	S10 E13	sticks	wood	5-1/2" x 1/4" , pointed	ACTIVITIES	Children
97	S10 E13	sticks	wood	5-1/2" x 1/4" , pointed	ACTIVITIES	Children
98	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
99	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
100	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
101	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
102	S10 E13	nail	ferrous	wire, 10d	STRUCTURAL	Nails
103	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
104	S10 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
105	S10 E13	other	wood	knot from a shingle	UNCLASSIFIABLE	Natural
106	S10 E6	board	wood	10" piece of 2"x4"	STRUCTURAL	Materials
107	S10 E6	shingle	wood	-	STRUCTURAL	Materials
108	S10 E6	shingle	wood	-	STRUCTURAL	Materials
109	S10 E6	shingle	wood	-	STRUCTURAL	Materials
110	S10 E6	shingle	wood	-	STRUCTURAL	Materials
111	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
112	S10 E6	shingle	wood	-	STRUCTURAL	Materials
113	S10 E6	shingle	wood	-	STRUCTURAL	Materials
114	S10 E6	shingle	wood	-	STRUCTURAL	Materials
115	S10 E6	chinking	yarn	white, ravelled cotton yarn	STRUCTURAL	Materials
116	S10 E6	nail	ferrous	cut, 8d	STRUCTURAL	Nails
117	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
118	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
119	S10 E6	nail	ferrous	wire, 8d	STRUCTURAL	Nails
120	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
121	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
122	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
123	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
124	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
125	S10 E6	nail	ferrous	cut	STRUCTURAL	Nails
126	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
127	S10 E6	nail	ferrous	cut, 8d	STRUCTURAL	Nails
128	S10 E6	shingle	wood	-	STRUCTURAL	Materials
129	S10 E6	shingle	wood	-	STRUCTURAL	Materials
130	S10 E6	shingle	wood	-	STRUCTURAL	Materials
131	S10 E6	nail	ferrous	cut, 6d	STRUCTURAL	Nails
132	S10 E6	shingle	wood	-	STRUCTURAL	Materials
133	S10 E6	shingle	wood	-	STRUCTURAL	Materials
134	S10 E6	shingle	wood	-	STRUCTURAL	Materials
135	S10 E6	shingle	wood	-	STRUCTURAL	Materials
136	S10 E6	shingle	wood	-	STRUCTURAL	Materials
137	S10 E6	shingle	wood	-	STRUCTURAL	Materials
138	S10 E6	nail	ferrous	cut, 8d	STRUCTURAL	Nails
139	S10 E6	chinking	moss	-	STRUCTURAL	Materials
140	S10 E6	shingle	wood	-	STRUCTURAL	Materials
141	S10 E6	shingle	wood	-	STRUCTURAL	Materials
142	S10 E6	shingle	wood	-	STRUCTURAL	Materials

APPENDIX B: INVENTORY OF ARTIFACTS FROM THE MOORE CABIN ATTIC

ART.#	PROV.	TYPE	MATERIAL	DESCRIPTION	GROUP	CLASS
143	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
144	S10 E6	shingle	wood	-	STRUCTURAL	Materials
145	S10 E6	shingle	wood	-	STRUCTURAL	Materials
146	S10 E6	shingle	wood	-	STRUCTURAL	Materials
147	S10 E6	shingle	wood	-	STRUCTURAL	Materials
148	S10 E6	shingle	wood	-	STRUCTURAL	Materials
149	S10 E6	shingle	wood	-	STRUCTURAL	Materials
150	S10 E6	shingle	wood	-	STRUCTURAL	Materials
151	S10 E6	shingle	wood	-	STRUCTURAL	Materials
152	S10 E6	shingle	wood	-	STRUCTURAL	Materials
153	S10 E6	shingle	wood	-	STRUCTURAL	Materials
154	S10 E6	shingle	wood	-	STRUCTURAL	Materials
155	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
156	S10 E6	bar	ferrous	11-1/2" long, .425" diameter	STRUCTURAL	Hardware
157	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
158	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
159	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
160	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
161	S10 E6	shingle	wood	-	STRUCTURAL	Materials
162	S10 E6	shingle	wood	-	STRUCTURAL	Materials
164	S10 E6	nail	aluminum	wire, 8d	STRUCTURAL	Nails
165	S10 E6	shingle	wood	-	STRUCTURAL	Materials
166	S10 E6	chinking	wool	twill, black	STRUCTURAL	Materials
167	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
168	S10 E6	shingle	wood	-	STRUCTURAL	Materials
169	S10 E6	chinking	moss	-	STRUCTURAL	Materials
170	S10 E6	shingle	wood	-	STRUCTURAL	Materials
171	S10 E6	shingle	wood	-	STRUCTURAL	Materials
172	S10 E6	shingle	wood	-	STRUCTURAL	Materials
173	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
174	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
175	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
176	S10 E6	chinking	moss	-	STRUCTURAL	Materials
177	S10 E6	chinking	moss	-	STRUCTURAL	Materials
178	S10 E6	shingle	wood	-	STRUCTURAL	Materials
179	S10 E6	shingle	wood	-	STRUCTURAL	Materials
180	S10 E6	nail	ferrous	cut	STRUCTURAL	Nails
181	S10 E6	nail	ferrous	wire, 8d	STRUCTURAL	Nails
182	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
183	S10 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
184	S10 E6	bar	ferrous	6 ft. long	ACTIVITIES	Machinery?
185	S16 E13	shingle	wood	-	STRUCTURAL	Materials
186	S16 E13	shingle	wood	-	STRUCTURAL	Materials
187	S16 E13	shingle	wood	-	STRUCTURAL	Materials
188	S16 E13	shingle	wood	-	STRUCTURAL	Materials
189	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
190	S16 E13	shingle	wood	-	STRUCTURAL	Materials
191	S16E13	chinking	grass	wad: 7-1/2"x 6-1/2"x1-1/4'	STRUCTURAL	Materials
192	S16E13	chinking	grass	wadded: 3-1/2"x3-1/2"x3/4	STRUCTURAL	Materials
193	S16 E13	shingle	wood	-	STRUCTURAL	Materials
194	S16 E13	shingle	wood	-	STRUCTURAL	Materials
195	S16 E13	shingle	wood	-	STRUCTURAL	Materials

APPENDIX B: INVENTORY OF ARTIFACTS FROM THE MOORE CABIN ATTIC

ART.#	PROV.	TYPE	MATERIAL	DESCRIPTION	GROUP	CLASS
196	S16 E13	chinking	burlap	wadded: 5-1/2" x 3"	STRUCTURAL	Materials
197	S13 E10	Bone	bone	Midsized mammal rib, proximal	DOMESTIC	Food Remains
198	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
199a	S16 E13	shingle	wood	-	STRUCTURAL	Materials
199b	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
200	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
201	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
202	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
203	S16 E13	shingle	wood	-	STRUCTURAL	Materials
204	S16 E13	shingle	wood	-	STRUCTURAL	Materials
205	S16 E13	shingle	wood	-	STRUCTURAL	Materials
206	S16 E13	shingle	wood	-	STRUCTURAL	Materials
207	S16 E13	shingle	wood	-	STRUCTURAL	Materials
208	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
209	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
210	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
211	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
212	S16E13	chinking	wool/muslin	plain, black	STRUCTURAL	Materials
213	S16 E13	shingle	wood	-	STRUCTURAL	Materials
214	S16 E13	shingle	wood	-	STRUCTURAL	Materials
215	S16 E13	nail	ferrous	wire, 10d	STRUCTURAL	Nails
216	S16 E13	shingle	wood	-	STRUCTURAL	Materials
217	S16E13	chinking	wool/cotton	knitted, white	STRUCTURAL	Materials
218	S16E13	chinking	wool	plain, dark brown	STRUCTURAL	Materials
219	S16 E13	shingle	wood	-	STRUCTURAL	Materials
220	S16 E13	shingle	wood	-	STRUCTURAL	Materials
221	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
222	S16 E13	shingle	wood	-	STRUCTURAL	Materials
223a	S16E13	chinking	cotton	twill, white	STRUCTURAL	Materials
223b	S16E13	chinking	cotton	plain, white	STRUCTURAL	Materials
224	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
225	S16 E13	shingle	wood	-	STRUCTURAL	Materials
226	S16 E13	shingle	wood	-	STRUCTURAL	Materials
227	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
228	S16 E13	nail	ferrous	wire, 8d	STRUCTURAL	Nails
229	S16 E13	nail	ferrous	wire, 8d	STRUCTURAL	Nails
230a	S16E13	chinking	wool	plain, black	STRUCTURAL	Materials
230b	S16E13	chinking	cotton	plain, white	STRUCTURAL	Materials
231	S16 E13	nail	ferrous	this is a fragment of # 224	STRUCTURAL	Nails
232	S16E13	chinking	wool	plain, black	STRUCTURAL	Materials
233	S16E13	chinking	newspaper	-	STRUCTURAL	Materials
234	S16 E13	shingle	wood	-	STRUCTURAL	Materials
235	S16 E13	shingle	wood	-	STRUCTURAL	Materials
236	S16E13	chinking	wool (?)	twill, white	STRUCTURAL	Materials
237	S16E13	chinking	wool	twill, yellow	STRUCTURAL	Materials
238	S16 E13	shingle	wood	-	STRUCTURAL	Materials
239	S16 E13	shingle	wood	-	STRUCTURAL	Materials
240	S16E13	chinking	wool	twill, white	STRUCTURAL	Materials
241	S16 E13	shingle	wood	-	STRUCTURAL	Materials
242	S16 E13	shingle	wood	-	STRUCTURAL	Materials
243	S16 E13	shingle	wood	-	STRUCTURAL	Materials
244	S16 E13	shingle	wood	-	STRUCTURAL	Materials

ART.#	PROV.	TYPE	MATERIAL	DESCRIPTION	GROUP	CLASS
245	S16 E13	shingle	wood	-	STRUCTURAL	Materials
246	S16 E13	nail	ferrous	?	STRUCTURAL	Materials
247	S16 E13	shingle	wood	-	STRUCTURAL	Materials
248	S16 E13	shingle	wood	-	STRUCTURAL	Materials
249	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Materials
250	S16 E13	nail	ferrous	wire, 3d	STRUCTURAL	Materials
251	S16 E13	shingle	wood	-	STRUCTURAL	Materials
252	S16 E13	shingle	wood	-	STRUCTURAL	Materials
253	S16 E13	shingle	wood	-	STRUCTURAL	Materials
254	S16 E13	shingle	wood	-	STRUCTURAL	Materials
255	S16 E13	shingle	wood	-	STRUCTURAL	Materials
256	S16 E13	shingle	wood	-	STRUCTURAL	Materials
257	S16 E13	shingle	wood	-	STRUCTURAL	Materials
258	S16 E13	shingle	wood	-	STRUCTURAL	Materials
259	S16 E13	shingle	wood	-	STRUCTURAL	Materials
260	S16 E13	shingle	wood	-	STRUCTURAL	Materials
261	S16 E13	nail	ferrous	wire, 8d	STRUCTURAL	Materials
262	S16 E13	chinking	grass	wadded: 5" x 3" x 1"	STRUCTURAL	Materials
263	S16 E6	shingle	wood	-	STRUCTURAL	Materials
264	S16 E6	shingle	wood	-	STRUCTURAL	Materials
265	S16 E6	shingle	wood	-	STRUCTURAL	Materials
266	S16 E6	shingle	wood	-	STRUCTURAL	Materials
267	S16 E6	shingle	wood	-	STRUCTURAL	Materials
268	S16 E6	shingle	wood	-	STRUCTURAL	Materials
269	S16 E6	shingle	wood	-	STRUCTURAL	Materials
270	S16 E6	shingle	wood	-	STRUCTURAL	Materials
271	S16 E6	nail	ferrous	cut, 8d	STRUCTURAL	Nails
272	S16 E6	shingle	wood	-	STRUCTURAL	Materials
273	S16 E6	shingle	wood	-	STRUCTURAL	Materials
274	S16 E6	nail	ferrous	wire,8d	STRUCTURAL	Materials
275	S16 E6	pole	wood	-	STRUCTURAL	Materials
276	S16 E6	pole	wood	-	STRUCTURAL	Materials
277	S16 E6	shingle	wood	-	STRUCTURAL	Materials
278	S16 E6	shingle	wood	-	STRUCTURAL	Materials
279	S16 E6	nail	ferrous	cut, 8d	STRUCTURAL	Materials
280	S16 E6	shingle	wood	-	STRUCTURAL	Materials
281	S16 E6	shingle	wood	-	STRUCTURAL	Materials
282	S16 E6	chinking	leather	scrap leather, large fragment	STRUCTURAL	Materials
283	S16 E6	shingle	wood	-	STRUCTURAL	Materials
284	S16 E6	shingle	wood	-	STRUCTURAL	Materials
285	S16 E6	shingle	wood	-	STRUCTURAL	Materials
286	S16 E6	shingle	wood	-	STRUCTURAL	Materials
287	S16 E6	shingle	wood	-	STRUCTURAL	Materials
288	S16 E6	shingle	wood	-	STRUCTURAL	Materials
289	S16 E6	shingle	wood	-	STRUCTURAL	Materials
290	S16 E6	chinking	newspaper	1892 date	STRUCTURAL	Materials
291	S16 E6	chinking	Wool	twill, yellow	STRUCTURAL	Materials
292	S16 E6	shingle	wood	-	STRUCTURAL	Materials
293	S16 E6	nail	ferrous	cut, 8d	STRUCTURAL	Materials
294	S16 E6	chinking	wool	plain, brown	STRUCTURAL	Materials
295	S16 E6	shingle	wood	-	STRUCTURAL	Materials
296	S16 E6	nail	ferrous	cut, 4d	STRUCTURAL	Materials

APPENDIX B: INVENTORY OF ARTIFACTS FROM THE MOORE CABIN ATTIC

ART.#	PROV.	TYPE	MATERIAL	DESCRIPTION	GROUP	CLASS
297	S16 E6	shingle	wood	-	STRUCTURAL	Materials
298	S16 E6	Other	lichens	attached to wood	UNCLASSIFIABLE	natural
299	S16 E6	shingle	wood	-	STRUCTURAL	Materials
300	S16 E6	nail	ferrous	cut, 4d	STRUCTURAL	Materials
301	S16 E6	shingle	wood	-	STRUCTURAL	Materials
302	S16 E6	shingle	wood	-	STRUCTURAL	Materials
303	S16 E6	chinking	wool	twill, white	STRUCTURAL	Materials
304	S16 E6	shingle	wood	-	STRUCTURAL	Materials
305	S16 E6	shingle	wood	-	STRUCTURAL	Materials
306	S16 E6	shingle	wood	-	STRUCTURAL	Materials
307	S16 E6	shingle	wood	-	STRUCTURAL	Materials
308	S16 E6	shingle	wood	-	STRUCTURAL	Materials
309	S16 E6	chinking	moss	-	STRUCTURAL	Materials
310	S16 E6	shingle	wood	-	STRUCTURAL	Materials
311	S16 E6	shingle	wood	-	STRUCTURAL	Materials
312	S16 E6	shingle	wood	-	STRUCTURAL	Materials
313	S16 E6	shingle	wood	-	STRUCTURAL	Materials
314	S16 E6	shingle	wood	-	STRUCTURAL	Materials
315	S16 E6	shingle	wood	-	STRUCTURAL	Materials
316	S16 E6	shingle	wood	-	STRUCTURAL	Materials
317	S16 E6	shingle	wood	-	STRUCTURAL	Materials
318	S16 E6	shingle	wood	-	STRUCTURAL	Materials
319	S16 E6	shingle	wood	-	STRUCTURAL	Materials
320	S16 E6	shingle	wood	-	STRUCTURAL	Materials
321	S16 E6	shingle	wood	-	STRUCTURAL	Materials
322	S16 E6	shingle	wood	-	STRUCTURAL	Materials
323	S16 E6	chinking	moss	-	STRUCTURAL	Materials
324	S16 E6	shingle	wood	-	STRUCTURAL	Materials
325	S16 E6	shingle	wood	-	STRUCTURAL	Materials
326	S16 E6	label	paper	Arbuckle coffee	DOMESTIC	Food Storage
327	S16 E6	chinking	grass	-	STRUCTURAL	Materials
328	S16 E6	shingle	wood	-	STRUCTURAL	Materials
329	S16 E6	shingle	wood	-	STRUCTURAL	Materials
330	S16 E6	shingle	wood	-	STRUCTURAL	Materials
331	S16 E6	box lid	wood	Arbuckle coffee, bulk	ACTIVITIES	Storage
332	S16 E6	shingle	wood	-	STRUCTURAL	Materials
333	S16 E6	shingle	wood	-	STRUCTURAL	Materials
334	S16 E6	nail	ferrous	wire, 12d	STRUCTURAL	Materials
335	S16 E6	nail	ferrous	cut, 4d	STRUCTURAL	Materials
336	S16 E6	nail	ferrous	cut, 4d	STRUCTURAL	Materials
337	S16 E6	?	?	?	?	?
338	S16 E6	?	?	?	?	?
339	S16 E6	nail	ferrous	cut, 4d	STRUCTURAL	Materials

APPENDIX B: INVENTORY OF ARTIFACTS FROM THE MOORE CABIN ATTIC

UNNUMBERED ARTIFACTS: Found in the screens.

ART.#	PROV.	TYPE	MATERIAL	DESCRIPTION	GROUP	CLASS
A	S5E13	chinking	wool	broken twill, brown	STRUCTURAL	Materials
B	S5E13	chinking	wool	twill, white	STRUCTURAL	Materials
C	S5E13	chinking	cotton	plain, white	STRUCTURAL	Materials
S	S16 E13	bone	bone	small vertebrae cushion (?)	DOMESTIC	Food Remains
S	S16 E13	seed	seed	plum(?) pit	DOMESTIC	Food Remains
na	S5 E6	nail	ferrous	cut, 2d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 2d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 2d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 5d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	cut, 8d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	wire, 3d	STRUCTURAL	Nails
na	S5 E6	nail	ferrous	wire, 3d	STRUCTURAL	Nails
na	S5 E13	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E13	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E13	nail	ferrous	cut, 4d	STRUCTURAL	Nails
na	S5 E13	nail	ferrous	wire, 2d	STRUCTURAL	Nails
na	S5 E13	nail	ferrous	wire, 8d	STRUCTURAL	Nails
na	S10 E6	shingle	wood	-	STRUCTURAL	Materials
na	S10 E6	shingle	wood	-	STRUCTURAL	Materials
na	S10 E6	shingle	wood	-	STRUCTURAL	Materials
na	S10 E13	nail	ferrous	cut, 3d	STRUCTURAL	Nails
na	S16 E13	shingle	wood	-	STRUCTURAL	Materials
na	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails
na	S16 E13	nail	ferrous	cut, 8d	STRUCTURAL	Nails

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