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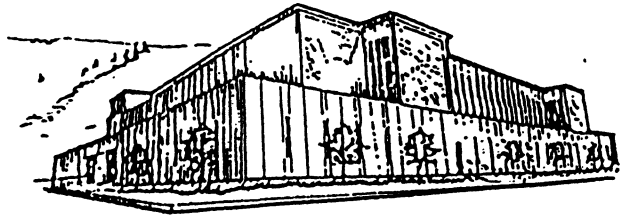
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SITE ABANDONMENT BEHAVIOR FOR THE MINING TOWN OF
GARNET, MONTANA

by

Jennifer Kathleen Spencer

B.A. University of Minnesota, 1991

Presented in partial fulfillment of the requirements

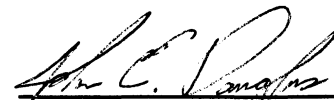
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The University of Montana

1994

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Spencer, Jennifer K., M.A., July 1994

Anthropology

Site Abandonment Behavior for the Mining Town of Garnet, Montana (154 pp.)

Director: John E. Douglas



Mining settlements provide an excellent opportunity to further explore hypotheses on site abandonment behavior. A common settlement pattern entailed a gold strike, boom, population plateau, decline and eventual abandonment. Garnet, Montana represents a typical placer mining camp in the American west. Initial population was around one hundred in the mid 1890's, but by 1898 there were well over a thousand people living in and around Garnet. This growth turned this mining camp into a town. A series of booms and busts, coinciding with local and national events, took its toll on the town. By 1947, the town had declined and was considered a ghost town.

Using three hypotheses on abandonment behavior and the examination of structures as predictors of anticipated occupation and abandonment, Garnet's site abandonment behavior was evaluated. To evaluate Garnet's behavior, written records, oral interviews, and historical and archaeological record were examined. Garnet's unique history of becoming a recreational ghost town introduced strong reclamation processes upon the town.

The presence and frequency of certain material culture correspond with variables of abandonment. The five main variables (rate of abandonment, anticipated return or not, distance to next site, season of departure and means of transportation) predict a hypothesized archaeological record. Relatively little *de facto* refuse and curated items indicate planned abandonment. The spatial distribution of refuse can signify anticipated return. The haste in building construction implies not only urgency for shelter, but also the conscious selection of certain building choices in regards to duration and use life.

Examination of abandonment principles at Garnet allows new insights that can be implemented at other historical sites. Using structures as indicators of occupation duration, rates of abandonment and anticipated return provides is a unique way to document site abandonment behavior. The conclusions from this thesis elucidate the need for detailed documentation of archaeological sites in the analysis of human discard behavior and site formation processes.

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CHAPTER ONE

INTRODUCTION

"A culture is viewed as a behavioral system of self-regulating and interrelated sub-systems which procures and process matter, energy, and information" (Schiffer 1972:157).

The focus of my thesis deals with cultural deposition and the effect certain reclamation process may have on the interpretation of the archaeological record. My intention is to explore hypotheses on abandonment at a Western mining town. Garnet, Montana has been selected for my research area. The selection of a historical mining site allows previous research (Stevenson 1982) on Western mining towns to be used as a guide.

My investigation of Garnet deals with the town in its present condition and to explore the variables at play in the interpretation of the town's abandonment. Because the town had a long duration, 1895-1947, I am unable to focus on a particular abandonment event, but rather the general abandonment processes. My evaluation of Garnet's abandonment behavior subsequently refines general archaeological hypotheses on site abandonment. The study of abandonment is part of a larger scheme of interpretation within archaeology called formation processes. It is useful to begin with a discussion of these formation processes.

CULTURAL FORMATION PROCESSES

Schiffer (1987:5) says that "although we would wish it, the past - manifest in artifacts - does not come to us unchanged". Therefore, as Joyce and Johannesson (1993:138) say "formation processes provide the inferential bridge between the static patterns of the archaeological record and the dynamic patterns of ongoing behavior." Before artifacts enter the archaeological record, they participate in behavioral systems called systemic context. This includes the historical record, which consists of artifacts still being used or kept, within an ongoing society. A classic example of the historical record that provides insight to past behavior within our own society is photographs (Schiffer 1987).

The two basic types of formation processes, which identify the changes, that occur when the archaeological record forms, are cultural processes and natural processes. Natural formation processes focus upon the agents of the environment and how those agents affect sites. Cultural formation processes consider human activities upon artifacts and sites.

Understanding formation processes has created two views of archaeological investigation: the entropy view and the transformation view. The entropy view "implies that our potential knowledge of the past is directly related to the state of preservation which is conditioned by the time elapsed since cultural deposition" (Schiffer 1987:8). The roots of this conception are linked to Robert Ascher (1961, 1968). Robert Ascher is considered a pioneer in identifying the factors that influence the archaeological record, formation

processes, and realizing their importance for any inferences toward the past.

The transformation view, on the other hand, claims that archaeologists cannot directly extrapolate past behavior and organization. This view also suggests that one can clarify any distortions "by using appropriate analytical and inferential tools" (Schiffer 1987:10) or laws developed to predict observed patterns. No matter which approach an investigator follows, both approaches recognize that both cultural processes and natural processes interact with sites and the archaeological record. Within this thesis, behaviors in the past are inferred from the material culture present at Garnet.

Ascher (1968:44) believed that people working with nature "act as agents of disorganization." This is especially true when examining the archaeological record. Ascher felt that the time elapsed since the site's last occupation directly relates to the anticipated volume of material remains produced by the excavation. Regardless of a site's duration, the longer it is abandoned, the less information from material culture archaeologists can recover. Yet even before items are within the archaeological record, several mechanisms may be acting within the societal sphere.

Michael Schiffer deserves special recognition for elaborating on the transforming activities affecting the archaeological record (Deal 1985; Wheeler 1992). Schiffer realized that the processes that affect the archaeological record can transform it "spatially, quantitatively, formally, and relationally" (1976:11). Thus, the archaeological record is a:

distorted reflection of a past behavioral system. However, because the cultural and noncultural processes responsible for these distortions are regular, there are systematic (but seldom direct) relationships between archaeological remains and past cultural systems" (Schiffer 1976:12).

Within each class or type of formation, there are numerous subcategories that might prejudice one's interpretation of the archaeological record. There are "four principle types of cultural formation process -- reuse, cultural deposition, reclamation, and disturbance "(Schiffer 1988:471-472) that mark changes within and between systemic context and archaeological context. I am particularly interested in cultural deposition as seen by abandonment behavior.

There are two major activities that may influence the composition or frequency of artifacts before deposition into the archaeological record. The first, *lateral cycling*, is the reuse process of giving or selling items to other individuals rather than curating or depositing those items. It may involve the transformation from one type of use to another type. The second, *draw down*, suggests a conscious effort of people not to replace an item whose use life is over or almost completed. Because items are not replaced, the frequency of items in the archaeological record is lower than that of the normal systemic frequency (Schiffer 1987).

Besides pre-depositional activities, there are also post-depositional activities that may influence the composition of the archaeological record. There are three activities or processes that transform the archaeological context back

into the systemic context. The first reclamation process is *scavenging*. Participants of this process are residents still living within the settlement or are from the immediate area. Intensity of scavenging directly relates to the abandoned material's quantity and quality (Stevenson 1982). The second process effecting systemic inventories is *collecting and looting*. These activities reflect the disturbance and permanent removal of items from an abandoned site by nonresidents. The third is salvage. Salvage reclaims artifacts, facilities, and structures from an earlier occupation into a present population (Schiffer 1987).

These pre- and post- depositional activities can be linked to site abandonment. According to Deal (1985), the first two- - lateral cycling and draw down- - are pre-abandonment activities while the latter three- - scavenging, collecting, looting, and salvage- - are prone to be post-abandonment activities (Figure 1). Scavenging, collecting and looting intensity varies with respect to migration patterns, population and site size (Murray 1980; Schiffer 1972).

Humans impact the environment in and around the sites at which they reside, visit and leave. As a product of human behavior, culturally deposited material, or refuse, illustrates changes that occurred within occupations. The four avenues of cultural deposition into the archaeological context are discard, abandonment, disposal of the dead, and loss (Schiffer 1976, 1987). The focus of this thesis concentrates on the abandonment avenue into the archaeological record. From the different types of refuse patterns, site abandonment behavior may be inferred.

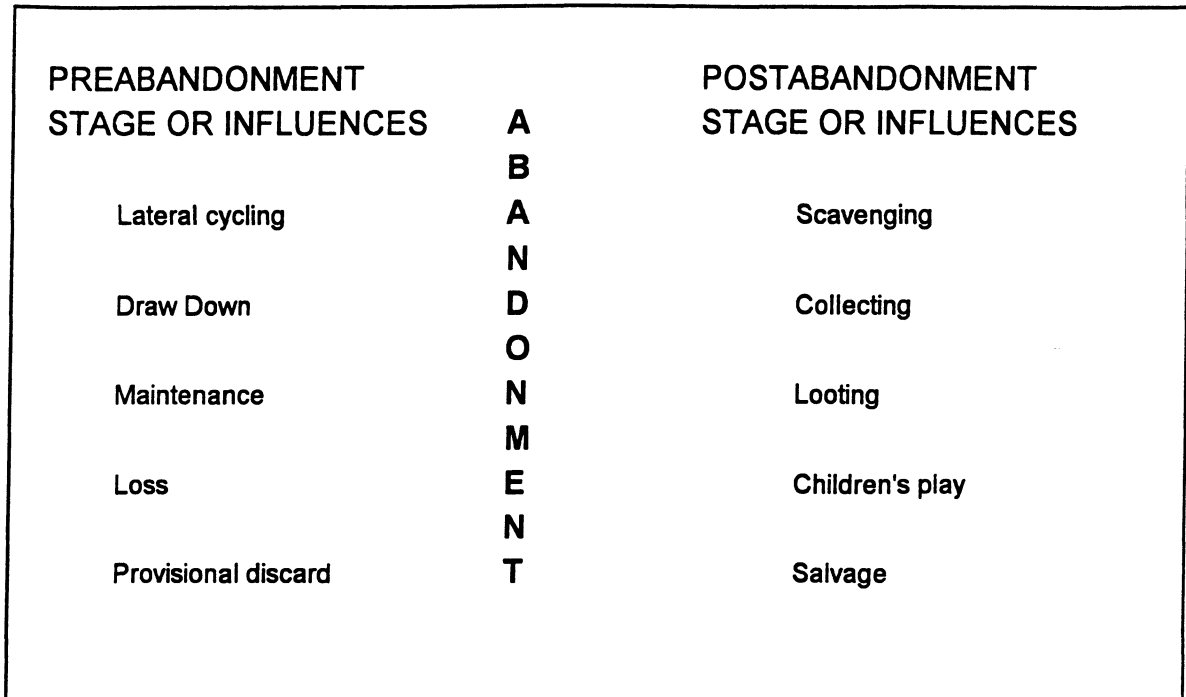


FIGURE 1: A diagram of various depositional and reclamation processes which influence assemblage change between preabandonment and postabandonment of a site or structure (Deal 1983:251).

Discard patterns during a site's use and abandonment have been the subject of some interesting research (Cameron 1991; Deal 1985; Green 1961; Joyce and Johanssen 1993; Lange and Rydberg 1972; Murray 1980; Schiffer 1972, 1976, 1983, 1987, 1988; Stevenson 1982, 1985; Wilk and Schiffer 1979). The examination of these processes commences with the identification of several types of refuse, namely, primary, secondary, abandonment, and *de facto* (Figure 2). Primary refuse is located at the area of use while secondary refuse involves a transfer away from the locality of use. Both are part of daily discard patterns (Schiffer 1972, 1976, 1987) that generally tend to reflect ongoing habitation and do not directly relate to abandonment. Yet there are some archaeologists (Joyce and Johanssen 1993; Lightfoot 1993; Schiffer 1987, 1988:98), who see abandonment refuse as a special type of primary and secondary refuse related to the anticipated departure of an area or settlement. As for abandonment and *de facto* refuse, both types of disposal occur with site abandonment. Abandonment refuse refers to individual households or settlement's reduction of waste maintenance and the gradual accumulation of refuse in activity areas or residential structures (Hayden and Cannon 1983; Schiffer 1983, 1987; Stevenson 1982). According to Schiffer (1987:89), "*de facto* refuse deposition consists of cultural materials that although still useable (or reusable) are left behind when an activity area is abandoned".

An elementary awareness of formational processes is necessary to comprehend the correlation between the historical documentation of Garnet and

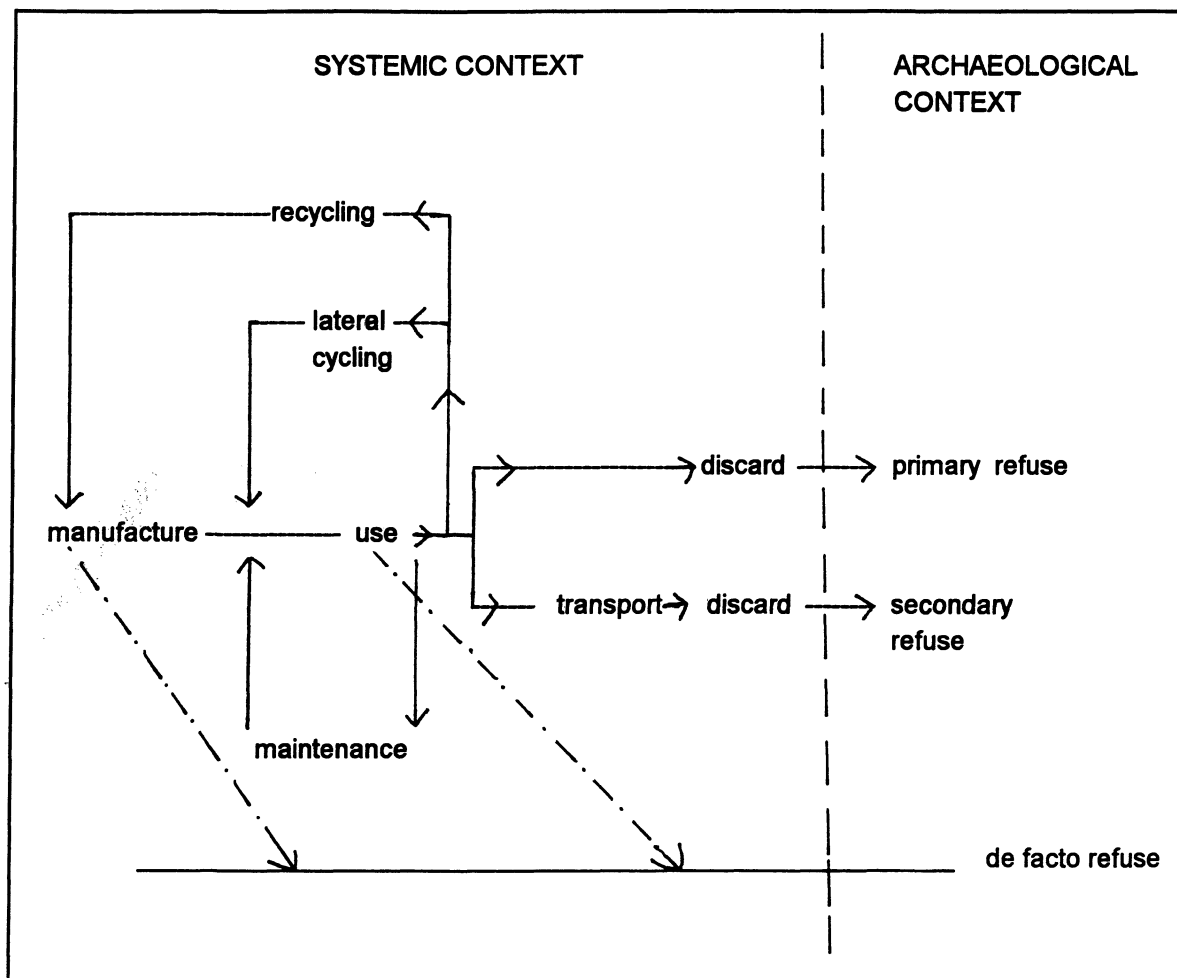


FIGURE 2: A flow chart for viewing the life cycle of an artifact and the differences between primary, secondary, and de facto refuse (Schiffer 1972: 158, 162).

the archaeological record. Additional comprehension is needed to evaluate abandonment behavior and its affect on site formation and the archaeological record.

ABANDONMENT FORMATION PROCESSES

Usually the very mention of the word abandonment conjures up images of haunted houses or ghost towns. The Random House dictionary defines "Abandon" as "to leave completely and finally; forsake utterly, to give up, to discontinue" (Random House 1988). Most archaeologists use Schiffer's definition of abandonment. He describes abandonment as "the process whereby a place - an activity area, structure, or entire settlement - is transformed to archaeological context" (Schiffer 1987:89). This definition refers to the material culture entering the archaeological record during a final abandonment and not the temporary abandonment of structures. Other definitions of 'abandonment' are specific to regions, mention the absence or presence of structures for habitation, or the presence of certain archaeological materials within or around possible structures (Fish and Fish 1993; Graham 1993).

No matter where abandonment occurs, according to Brooks (1990:2), this process must not be seen as an isolated or stagnant occurrence, but rather a series of events linked "through a structure of behavioral dynamics". He is not alone. Schiffer (1976) and Tomka and Stevenson (1993) also agree that abandonment is a process, not just a singular event within a site's occupational

demise.

Many other archaeologists (Brooks 1989, 1990, 1993; Cameron 1991; Deal 1985; Joyce and Johannessen 1993; Lightfoot 1993; Schiffer 1985, 1987; Schlanger and Wilshusen 1993) have worked to further comprehend human discard behavior and its ability to affect the archaeological record. Mark Stevenson's 1982 article has inspired hypotheses applicable to abandonment processes at historic mining sites. Stevenson (1982) and other archaeologists' works on abandonment of sites and artifacts are discussed in greater length in Chapter Five.

SKETCH OF STUDY AREA

After the gold rushes in California, Colorado, and Nevada, miners traveled north looking for new regions to prospect for gold. In search of the "mother lode," miners usually worked hard, traveled light and rarely continued working unprofitable mining claims when news of new strikes was heard. Yet even with this tendency to be mobile, miners usually left physical evidence of their presence. Montana was no exception.

In 1863, miners abandoned the territorial capital of Bannack, Montana. They left to search for gold in the Alder gulch area near Virginia City and Nevada City. During the same period, the early 1860's, gold was discovered in the Garnet mountains (Figure 3). Because of transportation and technological limitations, these buried deposits were not removed. A drop in silver prices,

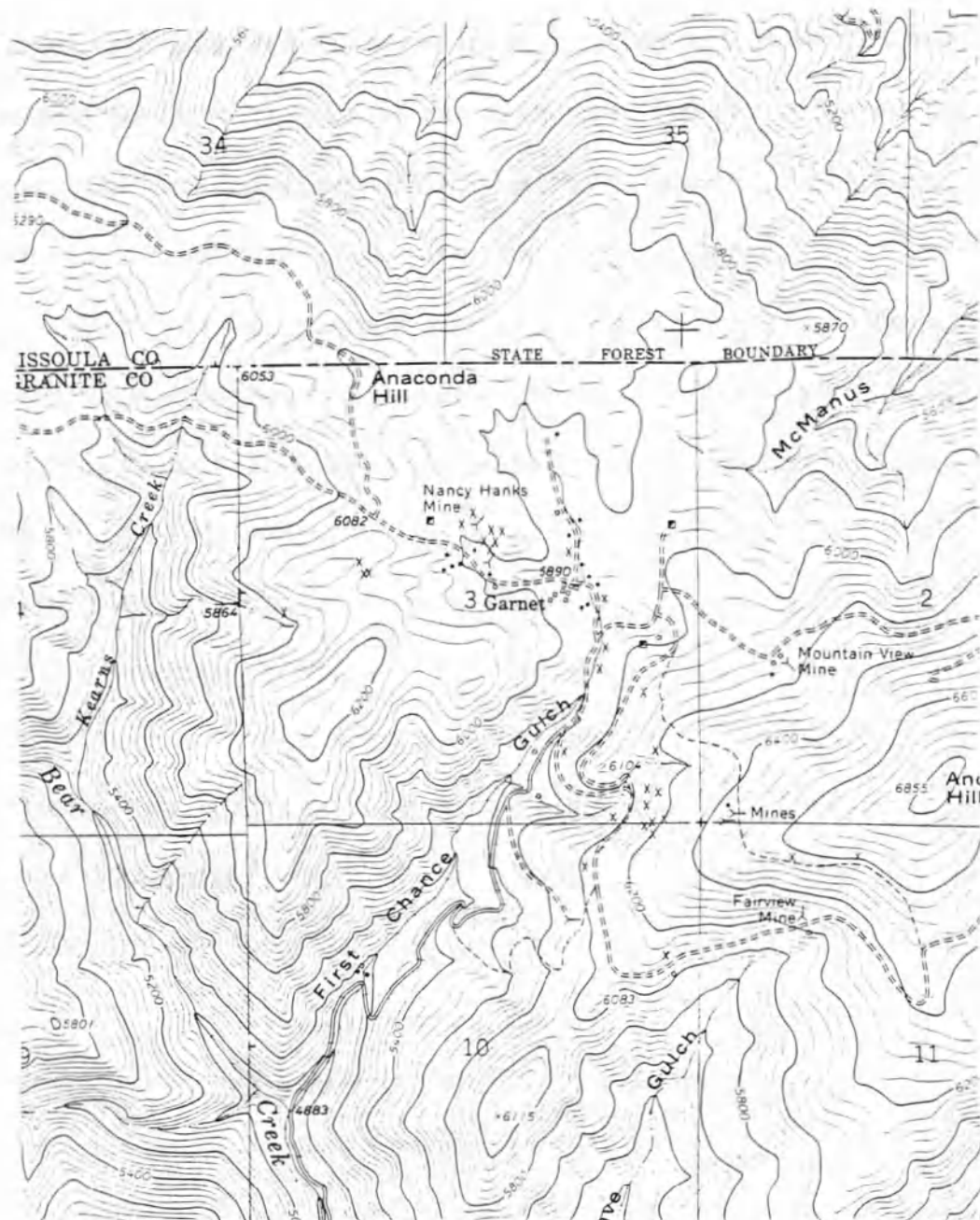


Figure 3: USGS 7.5 minute series topographical map of Elevation Mountain, Montana (1965).

during the 1890's, renewed interest in the gold deposits located within the Garnet mountains. In 1896 the mining camp of Garnet (then Mitchell) was established. As with many other mining camps on the western frontier, the camp was constructed haphazardly and not expected to last long. However, the camp grew into an established town by the 1900's (Figures 4-7).

Local and national events created boom and bust cycles on the settlement and population of Garnet. Examples of such events are the 1912 fire which destroyed much of downtown Garnet, the Great Depression, and World War II (Figure 8). The town ceased to function as a settlement in 1947 with the death of the last permanent resident, Frank Davey. At his death, several buildings were still standing in the town and there were various artifacts scattered around the settlement, creating a unique ghost town. Today, most of the town is administered and owned by the Bureau of Land Management (BLM). A few structures are owned and used privately. The present philosophy of the BLM on Garnet is to leave the town in a "state of arrested decay" (Figures 9, 10).

It is this state of 'arrested decay' that brought me to select Garnet as my area of research. Because of the long duration between final abandonment (1947) and BLM's initial management, It is not possible to detect all abandonment variables affecting Garnet through all of its boom and bust cycles. I will focus my investigation on the final abandonment and the material culture that is present in Garnet as of 1993-1994. Included within this thesis is the examination of the residents of Garnet's perception on anticipated occupation



Figure 4: Circa 1898 view of Garnet.



Figure 5: Circa 1900 view of Garnet's business district.

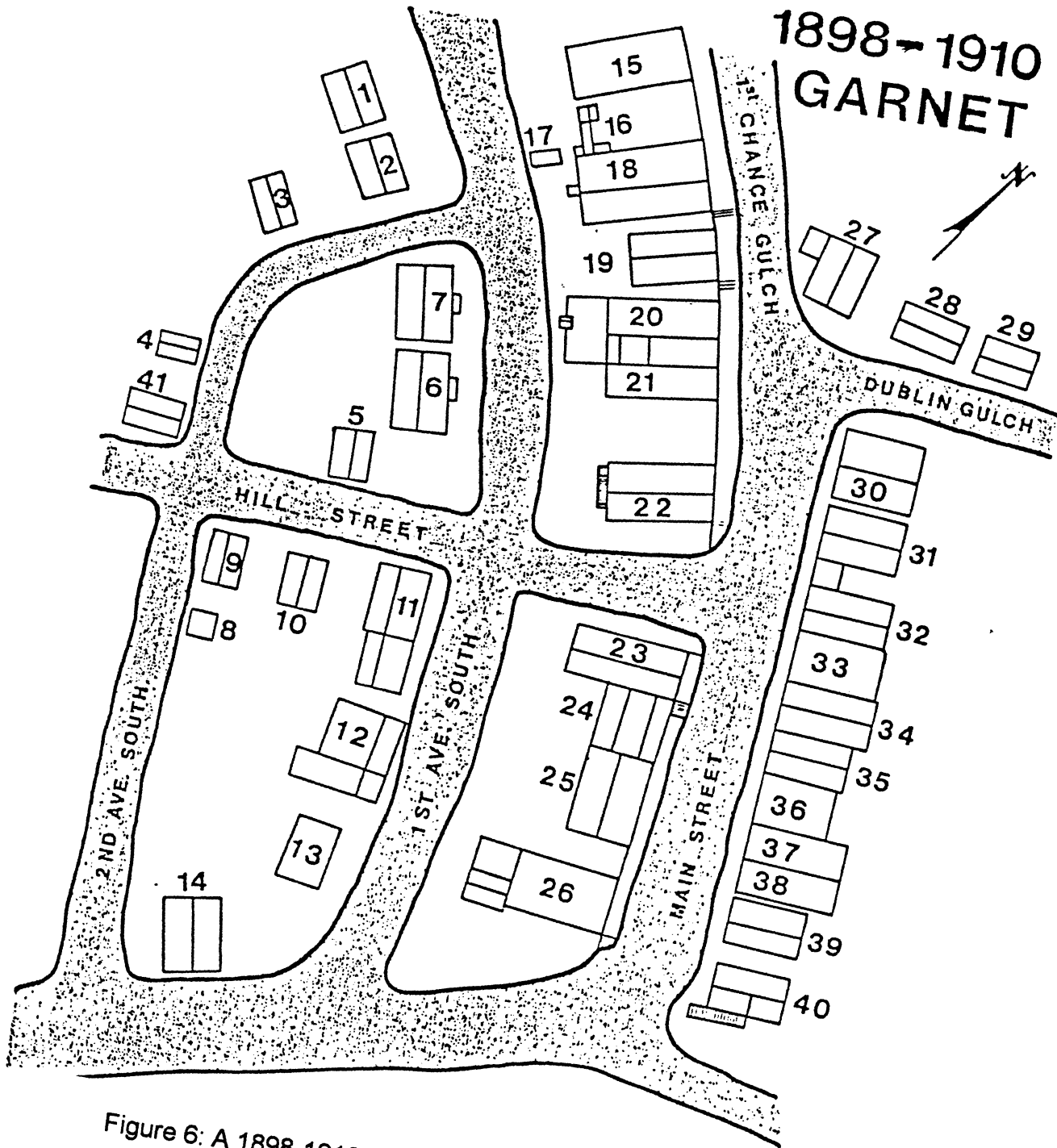


Figure 6: A 1898-1910 sketch map of the town of Garnet (BLM 1982:3).

1---	Billy Liberty's Blacksmith	22---	Kelly's Saloon
2---	Billy Liberty's House	23---	McDonald's Hotel
3---	Cabin	24---	No Name
4---	Cabin	25---	Garnet Hotel
5---	Ed Herrin's House	26---	Lyle and Fitzgerald Saloon
6---	Charlie Davis's Barn	27---	Davis Saloon
7---	Davey's Barn	28---	House/Stable
8---	Well	29---	Hannifen House
9---	Cabin	30---	Hanks Barn
10---	Honeymoon Cabin	31---	Charlie Lewis's Barn
11---	Carpenter Shop & Stage Stop	32---	Adams and Shipler Grocery
12---	Neal McDonald's House	33---	Link's General Store
13---	Dugout	34---	Nettles Saloon and Hotel
15---	Union Hall	35---	Store
16---	Icehouse	36---	Meat Market
17---	Hotel Outhouse	37---	Barber Shop
18---	J.K. Wells Hotel	38---	Hotel and Drugstore
19---	Link's Clothing Store	39---	Assay Office
20---	Davey's General Store	40---	Adams House
21---	Drugstore Annex		

Figure 7: Key to the sketch map (Figure 8) on the previous page (BLM 1982:4).



Figure 8: A view of Garnet taken in 1932 (Hammond 1983).



Figure 9: View of Garnet in 1971 (Hammond 1983). Notice the presence of supports on the building seen in the middle of the photograph.



Figure 10: A 1993 view of Garnet, Montana.

length.

As is established in Chapter Two and Three, mining settlements typically boomed, busted, and if fortunate boomed again before eventual decline. The fact that Garnet had a fairly typical existence within Montana's mining history allows the examination of abandonment principles at Garnet to be implemented at other historical sites. The process of identifying abandonment behavior at Garnet is illustrated by the comprehension of predepositional activities, refuse disposal patterns, and postulates on artifact and abandonment variables (Chapter Six).

METHODS AND MATERIALS USED

A wide body of material illustrating abandonment processes at Garnet was used in this study. The perspective of history comes from several books and company records, while the personal side is obtained from individuals associated with Garnet. The bulk of my analysis comes from photographs.

LITERATURE

Historical documents come in a multitude of forms. The information obtained from them also varies in reliability and integrity. Congressional or government documents, newspapers, journals, books, and biographical essays are all sources of information especially important in reconstructing or interpreting past historical events and behaviors. This is especially true for

western mining towns.

In my preliminary research of historical mining, two groups of sources were obtained. The first group consists of general historical overviews of mining. I have found several books that provide an account of the mining frontier and history of the American western movement (Billington 1949, 1956; Fisher and Holmes 1990; Greever 1963; Hardesty 1988; Heath 1985; Hogan 1990; Kemp 1960; Leeson 1885; Lingenfelter 1974; Mc Garth 1984; Malone 1983; Paul 1963; Ovitt 1952; Smith 1977; Spence 1966; Wolle 1953, 1963; Young 1970). These sources explain how camps and towns were organized, settled and abandoned (Alanen 1979; DeHaas 1976; Hardesty 1981, 1991; Hogan 1990; Malone 1981; Murraray 1972; Rohe 1984, 1986; Rohrbough 1986; Wallace 1987). By examining possible general causes of abandonment, more information may be obtained on the rate of abandonment and anticipated return for local regions like Garnet (Hardesty and Hattori 1983).

The other group consists of a general history of mining in the west, the Garnet mountains, and Garnet. There has been much public interest in Garnet and this is reflected in several newspaper articles on the tourist qualities the town possess or what buildings have been stabilized. In addition to the town's newspaper, there are a few books and monographs on Garnet. Helen Hammond (1983, 1987), with the help of former residents of Garnet, wrote two books that paint a colorful portrait of life in the town. Reports by Historical Research Association (HRA 1982) and Daley and Mohler's (1973) tell of Garnet's history

with a more detached voice.

ORAL HISTORIES

Oral histories in many instances bridge gaps within historical documents. The purpose of oral interviews from people associated with Garnet is to correlate the pictorial images with the remaining structures and material culture located in and around the town. Because of the insufficient written documentation on Garnet, past residents provide the only non-archaeological bridge into the town's past.

Yet caution must be applied to the information from these informants. There is a tendency for individuals to tell what they want us to hear or what they think the interviewers want to hear rather than what actually occurred. To aid in the interviewing processes, a preliminary directed questionnaire was sent to fifteen individuals who had some contact with Garnet. Of those fifteen, a few were interviewed further in open ended discussion format to add detail to their answers.

In addition to those interviews, Garnet Preservation Association members, volunteers who worked at Garnet, and BLM employees associated with Garnet were also asked about Garnet and the conditions within the town. Attempts were made to relocate previous recordings by the BLM of former residents, now deceased.

FIELD AND ARCHIVAL METHODS

Because the BLM had been actively responsible for Garnet since 1969, there has been several surveys of the district. Each has produced results beneficial for my investigation, freeing me from a surface survey. In fact, my research tactics were limited to document searches and field documentation of material culture by photographs. Earlier photographs displayed the condition of the town and the type(s) of abandonment that occurred at Garnet. Besides illustrating the progressive changes that have occurred over time, photos also show evidence of material culture that was used in Garnet and possibly left either through abandonment or as refuse.

CHAPTER TWO

MINING HISTORY OF THE AMERICAN WEST

"Is the west a distinctive subregion of American culture, equivalent, for example, to the south, or is it merely a frontier, simplified version of Eastern American culture?" (Schuyler 1991:7)

Part of the American dream entails striving to become one of the many rags to riches stories. Yet unfortunately, in the 1840's the opportunities for immigrants, and other citizens, were not ample. There were only a few things that could cause a man to leave his family, job, and home behind to risk uncertain promise, frustration and possible death. One of them was Gold and the rumors of unlimited and easily accessible supplies located within California. Those rumors created the famous 1849 rush to California and the American Western Frontier.

CALIFORNIA

The first discovery of gold occurred 35 miles north of Los Angeles, but the deposits were so meager that no publicity was given (Webb 1961). The first story that came out of the west is John Augustus Sutter's mill. On the south fork of the American River, John Sutter hired John Marshall to construct his saw mill. Five months later on January 24, 1848 Marshall detected gold (Billington 1956; Lingenfelter 1974; Murray 1972; Paul 1963; Spence 1966; Webb 1961). News

of Sutter's discovery could not be kept secret. A March 1848 newspaper account of Sutter's treasure ignited strong interest, better known as gold fever (Billington 1956).

Population of existing camps within California seemed to double as new camps were established weekly (Malone 1981; Webb 1961). After the initial fever swept through San Francisco, the city grew from "3000 in early 1849 to 20,000 by years end" (Meyer 1992:5). The population of California, between the years 1848-1852, expanded from 14,000 to 223,000 (Rohrbough 1986).

Lured out to California by the simple technology of placer mining, miners found that the rewards of placer mining and usually dissipated quickly, or even worse, never existed (Billington 1949; Fischer and Holmes 1990; Rohrbough 1986). As deposits continued down or became less obtainable, prospectors used new methods to acquire ore. Sluices and rockers facilitated the separation of gold from the soil. Surplus water was used with these devices, if feasible. As many places started to play out and sluicing no longer was efficient, new technologies were needed to maintain production levels. By the mid 1850's, production methods switched from placer to hard rock mining. These new mining techniques required mills and smelters to process the raw ore. For the typical prospector who was without significant initial investment principle, equipped only with a pickaxe and pan, he or she either stayed as a hired miner or chased gold either further upstream, in the next valley, or across the mountains northeast toward Nevada, Colorado, Idaho, and Montana (Rohrbough 1986).

NEVADA

As California placer deposits started to play out, miners searched for new frontiers or "*los dorados*" either "inward toward midcontinent" (Malone 1981:5) or further north (HRA 1982). Although miners who had reached Nevada prior to 1859 extracted much of the acquirable placer gold, they continued to search for new *los dorados* or waited for heavier machinery to extract gold located in quartz veins (Billington 1949; Paul 1988). While waiting for heavier equipment to arrive in the fields, some miners tried their hand at mining silver along the Carson River basin in Nevada.

News of the strike at Washoe lode, later called the Comstock lode, along the Carson River created a rush "transforming the site from a series of placer camps into a city in the desert" (Rohrbough 1986:13).

The district (*Comstock*) produced around \$100,000 per year until the late 1850's when most of the placer gavels were exhausted and the few settlements that had come into existence were in serious decline. The situation changed drastically after a rich body of silver ore was located in 1859. (Meyer 1992:5)

As with California, at times these rushes would empty the towns such as Virginia City (Billington 1949), but the overall increased population within the territory helped establish Nevada Territory (out of western Utah Territory) in 1861 (Billington 1949).

With the close of the Civil war in 1865, Virginia City was boasting of a population of 9,000 people, but by 1875 was well over 30,000 (Webb 1961).

The stimulus for such a great influx of people into the region occurred when four miners sunk a shaft into the Comstock lode. The men extracted ore valued at over \$200 million. Not all districts were successful as Virginia City. Many died quick deaths, freeing men to try their luck elsewhere.

COLORADO

As men and women from California migrated east to the Washoes of Nevada, wagon trains headed west in 1859 toward Pike's Peak (Colorado) (Webb 1961). Initially the deposits did not require great investment in equipment, requiring men to invest less wealth access to the precious ore (HRA 1982). When the *Rocky Mountain News* in May 1859 printed a story on John Gregory, who was obtaining \$2.00 per pan from his claim on Clear Creek, it created the usual rush. Within a month, 5,000 people had turned Gregory's mining camp into a town named Central City, Colorado (Billington 1949). The extreme haste of individuals to reside in or near Central City and commence mining activities typified the early stages of a mining camp. The result was haphazardly log constructed buildings and crowded appearance (Smith 1967).

Even with the success of Central City, the majority of placers were shallow and not nearly as successful as initial prospectors expected and could not hold miners for long (HRA 1982; GPA; Paul 1988; Smith 1992). For the prospectors who stayed, silver became the important metal to extract until those deposits started to diminish. Many miners who left Colorado headed north to the

present states of Idaho and Montana (Smith 1992).

IDAHO

The 1860 discovery of gold in Idaho is credited to Captain E.D. Pierce (Billington 1949; Paul 1988). The Orofino district, established in 1861 along the Clearwater River, accommodated a population ranging in the several thousands. Another big strike the same year ignited a rush along the Salmon River the following summer of 1862. It brought the total to over 20,000 miners who worked in Idaho (Billington 1949; Meyer 1992).

In their haste to reach Idaho, prospectors took any way possible over the mountains. Many miners ended up abandoning wagons and material goods, packing whatever they could handle to the Salmon River or Clearwater River. In 1883, a mini-rush to the Coeur d'Alene mountains ensued, but this rush was more hope than actual ore. Very quickly, the prospector was left wandering in search of new strikes. Miners left behind evidence of their past mining activity: rubble piles, abandoned camps, trash dumps, and excavated gullies.

MONTANA

Legend has it that a French trapper, Francois Finlay, was the first to discover gold in Montana along Gold Creek (originally Benetsee Creek) in the early 1850's. Finlay, along with others, are mentioned in finding gold, but due to lack of documented evidence he does not receive credit. The first fully recorded

gold strike was by James and Granville Stuart's party. The men detected gold in 1858, along Gold Creek, Montana (Figure 11), twenty miles from the Garnet mountains, in what was then the eastern section of Idaho Territory (Billington 1949; Davis 1963; Graves 1991; HRA 1982; Leeson 1885; Meyer 1992; Paul 1988; Rowe 1933; Smith 1992; Spence 1978; Timmons 1986; Trexler 1918; Wright and Wright 1972).

Although the Stuarts's party is accredited with initial discovery and first systematic mining within Montana, the first strike of any significance was achieved by John White's party along Grasshopper Creek, Montana on June 1862. White's party was heading to Idaho's Salmon River placers, until word from returning miners told them that all the 'choice' spots were taken. They decided to head toward Gold Creek, Montana, but ended up at Grasshopper Creek (Billington 1949; Paul 1988; Smith 1992; Spence 1978; Toppings 1992; Webb 1961; Wolle 1953). In the summer of 1862, White's party had hit the often dreamed about "mother lode." As historian Duane Smith (1992:23) calls it, "the mysterious mountain telegraph" was on-line once again spreading news of the strike quickly. Miners from regions in Montana, Colorado, Idaho, and California rushed into what would be Montana's first boom town, Bannack (Malone 1981; Smith 1992; Toppings 1992; Webb 1961).

As of September 1862, the population of Bannack was fifty inhabitants. Within a month, the camp population grew to well over 400 residents (Billington 1949; HRA 1982; Rohe 1984; Webb 1961). The growth continued in the

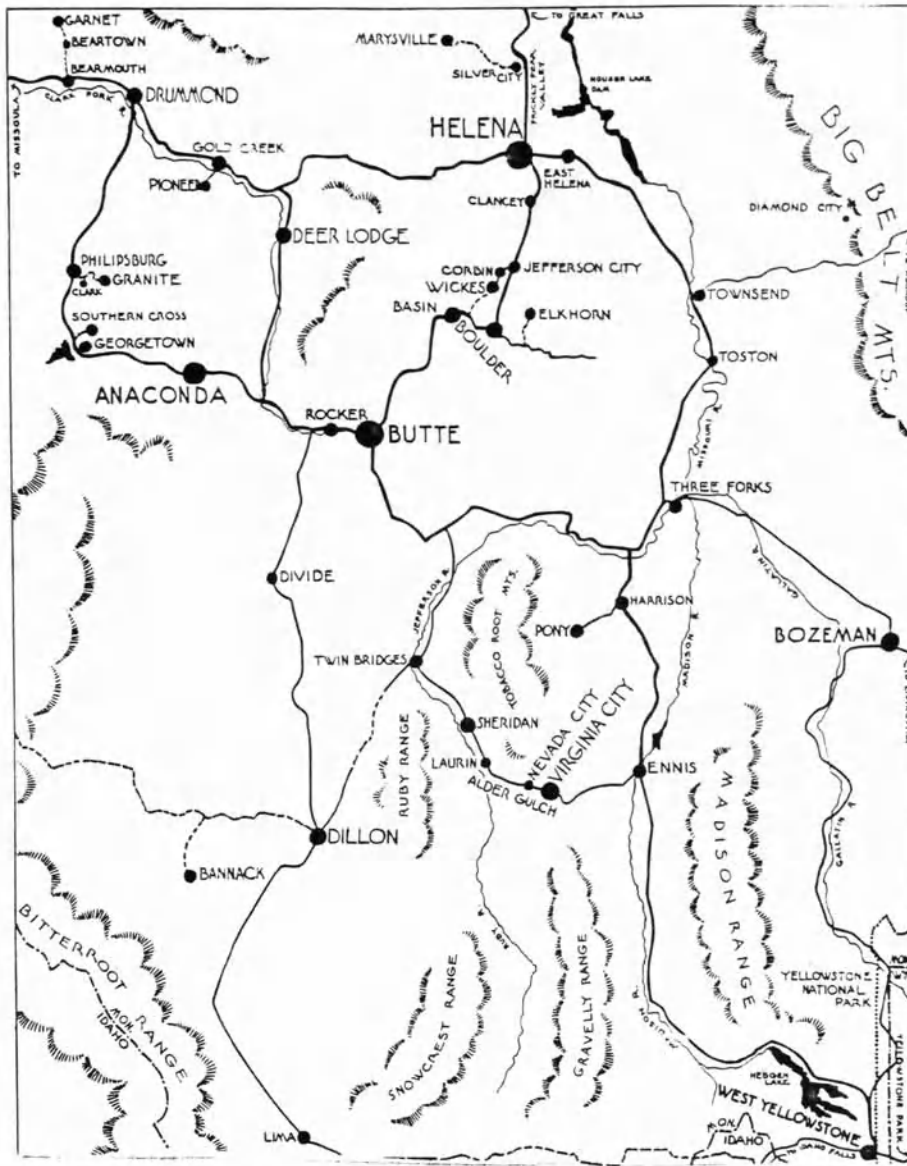


Figure 11 A map of southwestern Montana (Wolle 1953).

following year. Spring population estimates are around a 1,000 individuals and the summer peak estimate is nearly 5,000 (Rohe 1984).

A visitor from Central City, Colorado to Bannack in late winter was shocked to see that this camp was called a town (Graves 1991). He saw no permanent buildings, only log cabins (Smith 1992) indicating that "those people who came to 'the diggings' were boomers, people who would hurry off to the latest strike with no intention of settling, but only to strike it rich" (Graves 1991:12). This unknown visitor believed that Bannack would not be a permanent town like his Central City. He was right. As news of other findings occurred, people left for those other strikes and bonanzas (Malone 1981; Spence 1978).

While the White party had been the first to make a strike of any substance, Henry Edgar and William Fairweather are credited with the richest placer discovery. Edgar and Fairweather, camping along a tributary of the Gallatin River, panned for gold. As they returned from Bannack with supplies, hundreds of prospectors followed them back to Alder Gulch (Billington 1959; National Park Service 1994; Smith 1992; Webb 1961). The town of Virginia (originally Varnia) City was established on the same day as Edgar and Fairweather returned to the gulch on June 6, 1863. The miners who followed Edgar and Fairweather back lived in caves, tents, wagons, or under the stars (Smith 1992).

Boasting a population over 4,000 after twelve months and 10,000 after eighteen months, Virginia City began to resemble a town (Billington 1949; HRA

1982; Malone 1981). Virginia City took over as the Territorial capital from Bannack, but as with Bannack, the title was not enough to keep Virginia City populated. The town's location inhibited it from greater access or becoming a supply center like the next territorial capital, Helena.

The ore from Alder Gulch could not last forever and by 1870 started to play out. This gave miners the signal to start looking for new fields within Montana, like Silver Bow Creek or the Garnet Mountains, or outside Montana at such locations as the Yukon or Alaska (Graves 1991; Malone 1981).

CHAPTER THREE

MINING TOWN CHARACTERISTICS

"Even though archaeological sites may differ in content through time and space, the processes responsible for their initial formation should remain generally the same" (Stevenson 1982:261).

A large part of the mining history within the west is the mining camp. The mining camps may be viewed as many things: as a lodging community, a golden lined utopia, a trade center, a grave yard, or a part of American migration behavior. Historians Smith (1967), Spence (1978), and West (1979) saw that the camps had established patterns, but attributed it to previous knowledge and technology from California camps. It was those California camps that set the parameters for succeeding camps and towns in the American West. This experience was evident within a poem passed down the line: "a good silver mine is above timber-line, ten times out of nine" (Spence 1978:28).

An essential question is, was each mining camp unique unto itself or was its development part of an underlying pattern within the west? The mining frontier consisted of a series of sporadic thrusts and retreats of clusters of individuals "from both east and west into the cordilleran middle." (Paul 1988: 25; Murray 1972). Camps and towns arose overnight as the mining frontier opened. The first groups, exploratory miners, lived in small clusters/camps until an

organized financier or mining companies came into the settlement.

R.H. Morse described mining camps in simple terms which will be referred to through this section as an underlying definition. Morse's definition of a camp, as quote in Hardesty (1988), is:

a place where deposits have been located, miners colonize the island, which is surrounded by what is to them a social and cultural wilderness (Hardesty 88:1).

Morse's image that ore deposits represent "islands" of economic utility is fundamental to the notion of "islands of urbanization" (Smith 1992). Ore deposits are "available only in geographically circumscribed area and can be obtained at least cost, only at these specific locations" (Langehorne 1976:77). Thus, the desired locality of camps and towns would be within close proximity of the ore, if not right on top of the deposit. Since most gold deposits are located within mountains or semi-mountainous terrain, one finds the majority of mining camps in such settings. The general landscape characteristics of mountainous terrain settlements not only isolated individuals from main arteries of transportation/trade, but also the climatic and topographic relief made access to camps difficult (Rohe 1984; Smith 1967). With similar environmental settings, one would expect the major differences in the various camps to be found in details of building construction, camp planning, and longevity between camps (Hardesty 1991).

For the majority of cases, placer camps were particularly unpredictable.

With a migratory population often in the thousands and depths of gold deposits unknown, a placer camp could last a few months or a few years, but rarely over an extended period of time (Rohe 1984; Smith 1992; Spence 1978). For "thousands of communities that grew up around the new mineral discoveries" (Webb 61:10-11) it was almost a cycle. The cycle included a rush to a drainage, growth, the unfortunate or latecomers leaving for the prosperity of other gulches, stabilization or a plateau in population, and then decline (Paul 1988; Rodman 1985; Rohe 1984; Smith 1967, 1992; Spence 1966). As Rohe (1984:111) states:

During the first months of their existence mining settlements experienced a great explosion of population. The flush period typically proved short, never more than six years, usually no more than half of that, and not uncommonly, only a season. If more stable forms of mining followed or other industries became important, population eventually leveled off. If not, population continued to decline until none remained. Bannack, Montana provides a fairly typical example.

For a few fortunate towns there were other opportunities for stabilization, rather than reliance on profitable mines. Known as trade or supply centers, these communities had greater status and opportunity for permanence because of locality on trade routes, planning of initial residents, commercial investors, and business diversity. Typical trade centers were planned and staked out and did not rely on the usual sporadic growth to direct building construction (Paul 1988; Reys 1975). Regardless if a mining community was prosperous, the initial camp planning "began with its commercial area closely built up along a street specially laid out for its development" (Rohe 1984:108).

Unplanned long habitation and anticipated quick departure were factors seen in the general appearance of mining sites: overlapping properties and unusual, if any streets. Camps and towns initial habitation structures were simple: lean-tos, tipis, wickiups, rudely constructed wood cabins, and tents. Tents offered owners with limited capital, the opportunity to move and settle with great ease. The canvas construction allowed miners the flexibility not to pay the often inflated rates for lumber which usually occurred with rushes into new camps (Graves 1991; West 1979). The isolation of these camps often increased the cost of building materials, mining equipment, and food staples. Upon knowledge that the camps would not generally last longer than a few weeks, crudely constructed cabins were often erected. Considerations toward winter weather usually meant either stuffing cracks in cabins with newspapers, cardboard, or mud or heading south to other claims. Log structures were easily supplied from neighboring woods. Energy expenditures for logging, not to mention the time factor, seemed greater than most men wanted to spend away from the mines (Smith 1992).

After log structures, the next "sure sign of progress" (Smith 92:25-26) was the construction of frame buildings, false fronts, and sometimes stone buildings. As time progressed, the log constructed business building was replaced with one and a half or two story wood frame buildings. False front on businesses were initially designed to cover log structures and distinguish commercial buildings from residential. Yet little distinguished the various business activities except

the painted lettering on the false fronts (Heath 1989). While many business buildings made use of the false fronts, residential builders consistently stayed away from it.

According to Heath (1989:201),

the wooden commercial front, then reflects the first attempt at stability on the Western frontier. . . . If the town flourished, the humble, wooden structures would soon be superseded by buildings of grander scale and more precious materials; if the mining venture failed, the abandoned buildings remained like a banner of defeat.

The construction and elaborate decoration of these false fronts gave the appearance of a prosperous business. The use of large windows to display goods within the store is just one example. The merchant's "goal was to appear legitimate by approximating, in sawn lumber and plate glass, the kinds of buildings being built of cast iron or brick in more established cities" (Heath 1989:206).

Rohe (1984:104) believes that in fact vernacular architecture in the western states originated from "elements of prevalent eastern styles which served as residential structures." Yet not all stylistic elements can be accounted for by eastern standards. Preferences are seen in adaptive features, such as those related to the heavy snow fall in the high altitude mountainous regions. "Snow loads required increased roof pitches and braces," (Rohe 1984:104) and caused the reduction of overall roof size. Smaller roofs were also a reflection of the need to reduce heating costs. Besides changes in roof pitches, basements

were not constructed due to their difficulty in construction in the mountainous soil and time requirement. Another reason stemmed from the fact that cellars or berms functioned adequately.

No matter what the type of mining community is present in the west, all are a segment of the archaeological record. Archaeological excavation at historic mining sites not only supplements any existing documentation, but gives further interpretation of the site. Archaeologists must be aware of the total dynamics involved for mining communities. With the advancement of new technology and better access to mines, reoccupation of the abandoned or nearly abandoned camp sometimes occurred. The reoccupation sometimes disturbed previous materials and created layers of accumulations. With this introduction to key features of a typical mining town, I will now focus on the mining town of Garnet, Montana.

CHAPTER FOUR

GARNET, MONTANA

"Buildings of log and frame construction were erected in haste, without foundations and with little thought to design or performance. Garnet was built to take advantage of the opportunity and not to last" (Bureau of Land Management 1982:1).

In 1859, Captain John Mullan commenced construction of the military trail from Fort Benton, Montana to Walla Walla, Washington (Billington 1949). It is rumored that his men may have prospected for gold along Bear creek, Montana as they constructed the trail. Yet it was not until 1865, news of gold along the Bear creek was heard throughout Montana (Cushman 1964). Miners followed the Bear creek back into the Garnet mountains. Several camps were established. Beartown, located further up the Bear creek, has been considered Montana's last great placer discovery and placer camp.

Because the rich placer deposits, location within the gulch, and proximity to the Mullan road, Beartown had opportunities to become more than just a mining camp. The town evolved into a supply center for the over 5,000 miners who lived throughout the Garnets. The steep elevation and the narrow gulches did not allow easy or frequent passage to other camps further up in the mountains (Bureau of Land Management 1982; Daley and Moher 1973; Hammond 1983; HRA 1982; Wolle 1953).

The town followed the typical plan for a western mining settlement.

The September 6, 1931 edition of the *Great Falls Tribute* published Mary J.

Pardee's observations and extracts from her own journals on Beartown:

Bear gulch is narrow, steep-sided, gravel-bedded and widens in only a couple of places to as much as a few hundred feet. The 'bowl' wherein Beartown lay is no more than a quarter of a mile long and 450 feet wide. But for canyon like openings at either end, it is hemmed in by ragged mountains. Into this small area Beartown life seethed for fifteen years. For the most part, buildings were one-story, one-room and of logs, although Ball's Hotel and Pelletier's Saloon attained two-story height. Roofing was either of sod or shakes; flooring was of dirt or rough lumber. A typical cabin of early Beartown was a one room shack, about 10 by 12 feet, often smaller, built of roughly matched logs, loosely chinked and roofed with shakes. This was a cabin of a bachelor. The very few who lived there with their families had nicely constructed cabins of several rooms and more carefully furnished. In all of them, cooking was usually done over large, open fireplaces. Stoves were too hard to pack in (Daley and Moher 1973:10-11).

After four seasons of work, the Bear no longer produced yellow particles the size of wheat, prompting men to leave and search elsewhere. By 1870 the population dwindled to less than 600 inhabitants.

Even before the population decline, not all who initially came to Beartown stayed there. Many were lured away with promises of rich strikes elsewhere while others followed the drainage further up into the Garnet mountains. Col. G. W. Morse and his party went into the mountains during the mid-1860's. Jack Reynolds, prospecting at the headwaters of the Elk Creek, found gold and staked a claim in the Garnet range. His claim and word of its potential worth created Reynolds City on June 9, 1865. The prospects looked so promising that

within six weeks there were over 130 homes in the town. Some of the other camps established within the Garnet mountains are Elk Creek, Springtown, Top O'Deep, Yreka, and Garnet.

Once simple placer mining became less profitable, miners turned to hard rock mining as a way to extract ore. The community of Garnet lies at the junction of First Chance and Williams Gulch. In 1867, the first mine established near these gulches was the Lead King, followed by the Shamrock mine and Tiger mines. Sam Ritchie claimed the most famous mine, the Nancy Hanks, in 1874. The Nancy Hanks did not reach high volumes of production until 1895 (Hammond 1983; Toppings 1992). Part of the delay in full production of the Nancy Hanks and other mines was due to the transportational limitations and needed hard rock mining techniques. The lack of suitable roads to the Garnets and the inability to transport ore efficiently leads to a decline, but not total abandonment of the mountains.

Completion of the Northern Pacific Railroad (1883) along the Mullan Road brought transportation and a new lifeline to Bearmouth and the Garnet Range. But the Northern Pacific Railroad was not sufficient by itself to spur mining activities. The 1893 repeal of the Sherman Silver Act plummeted already declining silver prices and created a desire to return to gold and the Garnet mountains.

Dr. Mitchell, accompanied with his colleague and mining partner, Dr. Mussingbrod, built a stamp mill on the "china" or "Chinese" grade, near the

mouth of the Red Cloud Creek. Initially the Mitchell-Mussingbrod mill was for processing the ore obtained at the Doctors' claim. Later other claims in and around Garnet sent their ore there. Soon after Mitchell finished construction on the mill (1896), the Nancy Hanks mine hit a rich vein, causing a boom to the area and the community of Mitchell. By fall 1896, the camp of Mitchell, located further up the gulch, had become a town with ten commercial buildings and a number of private residences (Hammond 1983; Meyer 1992). By the time the town warranted any interest from outside newspapers, the name had been changed to Garnet after the death of Dr. Mitchell (HRA 1982; Smith 1992) for reasons unknown.

The Bear Mountain News (January 27, 1898) publisher, Boos, could not resist the opportunity to comment on Garnet's lack of regard for construction, town planning and the general questionable durability of the structures. His suggestions to the residents were ignored. Boos's observations suggest a typical frontier boom town. Helen Hammond in her interviews of local residents paints a similar portrait of the town that Boos did.

The buildings were constructed quickly and generally without foundations. Most were small and built of logs with low ceilings and few windows, so they were fairly easy to heat. Some roofs were constructed with two layers of board with sod laid between for insulation. The ceiling, if any, often were just of cloth stretched form wall to wall. Chimney were built of clay, since bricks had to be hauled up the steep road from the railroad station at Bearmouth. Unfortunately, after a few years the clay cracked and fire occurred" (Hammond 1983:18).

The structural features of home within Garnet indicates a (probable) lack of

energy investment towards construction, not to mention the expense of material transported up the mountain (BLM 1982; Lawerance 1981). Large windows were not only expensive and difficult to ship, but also allowed greater amounts of heat to be transferred during the winters (Cushman 1964). Many residential cabins only have one or two small windows, unlike commercial buildings which have a higher frequency of larger windows.

The construction choices of Garnet residents, according to historian Toppings, stem from the fact that they were:

hampered by the hellish tight bends on the road called the "chinee (sic) grade" which came up from Beartown. Garnet residents found it uneconomical to import highgrade building materials. Instead they fashioned their town from those items that the mountains themselves provide: logs chinked with mud from the creek, rough-hewn lumber in very limited quantities and clay for fireplaces. The fireplaces turned out to a big mistake. In time, the clay cracked from the heat of the big fires that Montana winters required and the buildings burst into flames (Toppings 1992:56).

In a similar article, historian Cushman (1970:10) feels that "Garnet was a town built in haste. It was not a town built to stand. Permanence was not an overriding factor in any of its construction." The cycle of discovery, boom, plateau, decline, and abandonment had become so routine that many miners expected it. It was also common knowledge that it was wiser to spend one's time developing one's claim rather than wasting energy in constructing a house that one only slept in (BLM 1982; Ellingson 1970; Lawarence 1981).

Another possible factor affecting for construction at Garnet was that very

few individuals actually owned the land beneath his/her home (Hammond 1983; HRA 1982). This may have affected investments in structures. However, because records prior to 1917 are listed by surname and legal location, title searches are incomplete (HRA 1982:65) and it is difficult to quantify landownership. Helen Hammond (1983:18) explains that:

Tax records frequently noted the presence of buildings on individual claims, but seldom was the name of the structure was given, its location, its size, or its use. No townsite map is on record in the Granite County Courthouse. Neither Sanborn Company or insurance maps are available. Rarely, were the builders required to purchase the land because Garnet was built on mining claims. Instead a fee was paid for the use of the land, and the owners paid the taxes on the claims. When a building was vacated, it became the property of the claim owner.

As an example of shifting ownership, local legend has it that a bachelor built the Honeymoon cabin on Frank Davey's claim, but upon the miner's departure, Davey acquired the cabin. Davey rented it out to newlyweds, thus the name Honeymoon cabin (GPA nd).

When the town's population peaked in 1900, there were over a 1,000 inhabitants and 20 mines in operation. Garnet had the flavor of a typical mining town with its thirteen saloons, gambling halls, and a brothel. Less typical of a mining town was the presence of a strong miner's union, families and a school. As the quartz mining returns started to decline and costs of transportation rose at Garnet, it coincided with the news of great gold discoveries in the Klondike (BLM 1982). These two events siphoned off the populace and marked Garnet's first decline. By the year 1905, the population of Garnet was well under two

hundred residents, with only ten miners working at the Nancy Hanks. Efforts were made to maintain the population with attempts to acquire a telegraph line into Garnet or a railroad spur up from Bearmouth. Neither were successful (*Garnet Mining News* 10/6/1898; Hammond 1983; HRA 1982).

Garnet's second decline began in 1912. With an almost 80% decline in the town's 1900 population, a 1912 fire destroyed much of Garnet's commercial district, and shattered any remaining hope for revival. Many of the discouraged residents did not have the insurance to rebuild and left the town (personal communication, Fitzgerald 1993; Meyer 1992). This event was followed by World War I. The war syphoned off many resident from the Garnet mountains and mines and into towns and higher paying factory jobs. In fact, almost all the mines, except the Dewy, closed by 1916. One of the town's longest inhabitant, Frank Davey, stayed to run his store for the few remaining residents. Fortunately, his store, Kelly's Saloon, Ole's Saloon, and the Well's Hotel survived the 1912 fire.

Garnet seemed to be more of a town whose inhabitants had left on vacation rather than an abandoned or ghost town. Cabins appeared fully furnished, waiting for the inhabitants to return (GPA nd).

Eventually, some residents did return occasionally, particularly in the summer (GPA nd). The unemployment of the depression and President Roosevelt's 1934 action to double the price of gold to \$35.00 per ounce brought new life back into forgotten gold mines. It stimulated hundreds of unemployed

people to move back into the Garnet mountains and Garnet. By 1936, there were 250 people residing within the town. The resurgence of Garnet included the construction of a few new buildings; a new school, some residences, two saloons, a new mill by the Mountain View Mine owned by Pete Shipler and Samuel E. Adams were built (HRA 1982; personal communication, Morin 1994), but not many homes. Many people, like the school teacher and her husband, moved into an abandoned cabin (Hammond 1983; HRA 1982).

The renewal did not last long and soon Garnet experienced its third decline. America's involvement in the second world war had a dramatic effect on the town. The military's demand for dynamite, the "cessation of mining for nonstrategic minerals" (Kingsbury 1988:4), and the lure of higher paying factory jobs initiated the final decline. Yet, as most historians agree (Hammond 1983; Meyer 1992; Toppings 1992), it was the death of Frank Davey (1947) that transformed Garnet from a living town into a ghost town. Upon Mr. Davey's death, an auction (November 1947) was held to sell off his possessions (Hammond 1983; Kingsbury 1988).

For a period of about twenty years after the auction and until the Bureau of Land Management (BLM) took over the town (1969), its fate, along with the town's cultural heritage, was in the hands of vandals, bottle collectors and the elements (BLM 1982; Lawrence 1981). Materials such as the Wells Hotel's wooden staircase, stained glass windows, and wallpaper scraps were lost. The BLM selected Garnet as one of the ghost towns within Montana that it wanted to

preserve for stabilization as a part of the state's mining history (Lawrence 1981). The State Historical Preservation Office and the President's Advisory Preservation Council entered into an agreement with the BLM that states the BLM:

"shall stabilize, protect, maintain, repair, preserve, rehabilitate, restore, and reconstruct buildings, structures and sites and construct and maintain visitor use facilities" (BLM Programmatic agreement 1990).

In accomplishing this, the Bureau of Land Management has stabilized, restored, maintained, or repaired a majority of the buildings located in and around Garnet (Figures 12, 13). The town has become a popular tourist attraction for people around the world, as the guest register attests. In 1978, the townsite was nominated and declared a national historic site (McLean and McLean 1980). The history of Garnet with its three periods of decline allows for a unique case study to be done on the principles of abandonment.

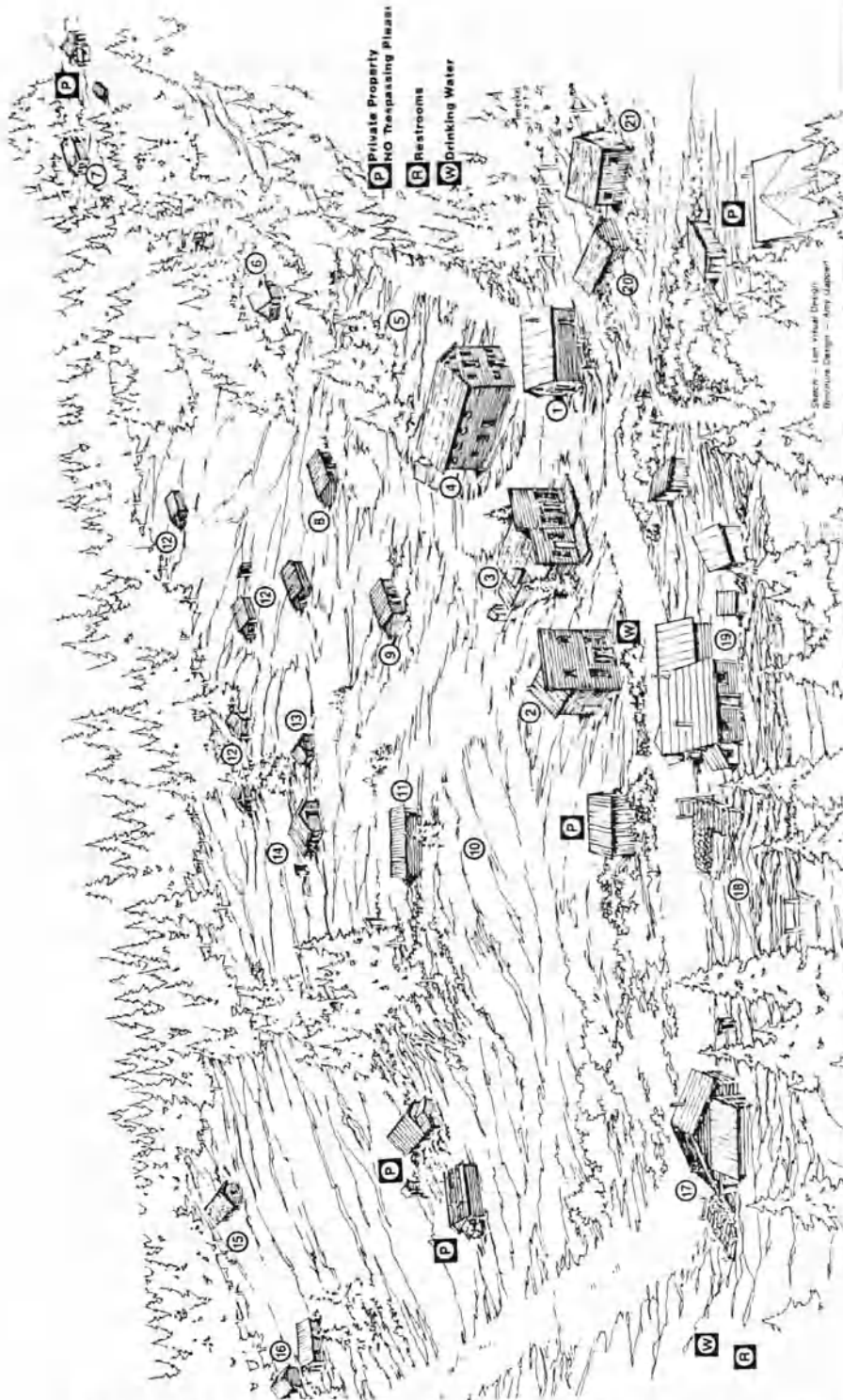


Figure 12: A sketch map of the town of Garnet as seen in 1994 (Garnet Preservation Association nd). The key to this map are seen in Figure 13.

1	Dahl Saloon built in 1938 and operated until the mid 1940's
2	Kelly's Saloon built before 1898 and owned by B. Moore. Sold to Kelly.
3	Frank Davey's store built about 1898. Auction held here in 1948.
4	Wells Hotel built in 1897. The hotel closed in the 1930's.
5	Site of the Miner's Union Hall built in 1898. It collapsed due to snow.
6	A jail built in 1897, but rarely used by the residents.
7	Built in 1938, this building served as the second Garnet school.
8	Billy Liberty's Blacksmith shop. Built sometime between 1896 and 1900.
9	The livery stable built between 1896 and 1900.
10	Samuel Adams' carpenter's shop built between 1896 and 1900.
11	The Honeymoon cabin built between 1896 and 1900.
12	Homes to various miners throughout the years.
13	Originally a miner's cabin, later in the 1930's the post office.
14	Adams home built between 1896 and 1900. They lived there until 1927.
15	Will's cabin built in the 1930's. Ms. Godkin-Palermo's father lived there.
16	Rented residence of Fitzgerald family until 1911.
17	Bill Hebner cabin built in 1949. It presently serves as the guard cabin.
18	Site of the H.M. Stringham's General Grocery store built in 1887. Stringham stopped business in the 1930's and in 1971 the building was destroyed by arsonists.
19	Ole Dalh's home built in 1938 and lived in until the 1960's.
20	Originally a cabin built between 1896-1900, later became a storage facility.
21	Hanifen house built in the early 1900's. Mrs. Clearly lived there in 1926.

Figure 13: Key for the map (Figure 12) on the previous page.

CHAPTER FIVE

ABANDONMENT PROCESSES

"Archaeological inference is the process of assessing and synthesizing diverse lines of evidence to produce well-founded statements about past (eg. chronology, diet, social organization, climate)" (Schiffer 1988:477).

Interest in abandonment processes, as a part of settlement pattern studies and formation processes of the archaeological record, started in the early seventies. Following in Ascher's (1961, 1968) footsteps were various other archaeologists who were concerned with the effect certain cultural or natural processes had upon a site (Baker 1975, 1978; Binford 1978, 1979, 1980; Bocek 1986; Bonnichson 1973, Brooks 1989, 1990, 1993; Cameron 1991, 1993; Deal 1985; Fehon and Scholtz 1978; Fish and Fish 1993; Graham 1993; Green 1961; Hammond and Hammond 1981; Hayden and Cannon 1983, Holl 1987; Horne 1993; Joyce and Johannessen 1993; Kent 1992, 1993; Lange and Rydberg 1972; Lightfoot 1993; Lillios 1993; Montgomery 1993; Murray 1980; Nissen 1968; Reid 1985; Rothchild et al. 1993; Savelle 1984; Schiffer 1972, 1976, 1983, 1987, 1988; Schlanger and Wilshusen 1993; Siegel and Roe 1986; Staski 1990; Stevenson 1982, 1985, 1989; Stone 1993; Tomka 1989, 1993; Wheeler 1992; Wilshusen 1986; Yellen 1977) .

Michael Schiffer (1972, 1976, 1987), suggests that five main variables of

abandonment explain most of the variation in refuse seen within the archaeological record: rate (slow and planned vs. rapid and unplanned), anticipated return, means of available transport, distance to next settlement, and season of abandonment. Many other archaeologists have been interested in one or more of the variables of abandonment (Bonnichson 1973; Cameron 1991; Lange and Rydberg 1972; Longacre and Ayers 1968; Robbins 1973; Stevenson 1982).

Yet Mark Stevenson (1982, 1985) is considered the first to do a systematic study on abandonment. Using two abandoned mining camps, Mush Creek and Bullion Creek in the Yukon, Stevenson compared their archaeological assemblages in order to examine the effects of two major variables of site abandonment behavior. He examined the manner the site was abandoned (planned versus unplanned) and the expectation of the inhabitants to return to the site (Stevenson 1982). The three other variables, as listed by Schiffer, were not investigated, because they are held constant in the comparison. Both Bullion Creek and Mush Creek experienced rushes during the same season and had equally similar transportation methods available.

Stevenson stresses that abandonment behavior observed in historic settings create hypotheses that should be tested against the archaeological record. From his research, I have selected three hypotheses related to what my preliminary investigation revealed at Garnet; that is slow and planned abandonment. Below are the three hypotheses I selected.

1. "Planned abandonment without anticipated return is hypothesized to yield comparatively little *de facto* refuse and few normally curated items" (Stevenson 1982:259). "Relatively few normally curated items will be found on sites undergoing planned emigration as most or value (functional, personal, monetary, aesthetic, or otherwise) would probably be taken during abandonment " (Stevenson 1982:242).
2. It is hypothesized that relatively "few artifacts and features will be found in processes of manufacture, use or maintenance on sites under normal or planned conditions . . . conversely, sites abandoned under more extreme or unplanned conditions are expected to produce significantly greater amounts of *de facto* refuse" (Stevenson 1982:241).
3. "Holding other variables constant, it is hypothesized that significantly more refuse and perhaps more concentrated arrangements of refuse would accumulate within enclosed living area on sites undergoing planned emigration where return is not anticipated. Conversely, where return is planned considerably less refuse would be discarded within enclosed living areas" (Stevenson 1982:260).

Stevenson is not the only archaeologist to have done research on abandonment principles. To further understand Stevenson's hypotheses, other ideas and concepts derived from additional abandonment processes research need to be examined. With that information, one can incorporate Stevenson's work on historic mining sites into a larger framework of archaeological discard pattern studies.

No two sites have the same cultural formation processes acting upon them. Generalizations about abandonment most often are associated with individual features and structures abandonment rather than entire regions. Variation between sites, as seen in the archaeological record, may originate from the distribution (types and quantities) of *de facto* refuse, the kinds of

curated behavior that occur, and patterns of refuse disposal for a site's inhabitants and differences in their structures (Binford 1973, 1979, 1983; Brooks 1993; Lightfoot 1993; Schiffer 1972, 1987; Stevenson 1982).

Another source of variation is the temporal component of abandonment as it affects the archaeological record (Brooks 1990; Cameron 1991; Tomka 1993). The temporal component may be broken into three categories: temporary (episodic), long term (seasonal) or permanent abandonment. Further exploration on this component is needed. This thesis focuses on the permanent abandonment of residential structures at Garnet. A unique perspective on this temporal component is the fact that structures at Garnet was not abandoned at the same time, but rather changing rates of abandonment over decades.

There are many causes for abandonment varying due to circumstances pertaining to each locality. Researchers concerned with abandonment behavior are not interested in all the causes, but rather attempt to reconstruct certain processes or behavior of the inhabitants through the examination of the material culture left in the archaeological record. Archaeologists should aim to use "systematic procedures to identify, categorize, and classify variation in abandonment processes" (Brooks 1990:3). This examination may take place on several levels: regional, local, or localities within a site (Cameron 1993).

Even though abandonment may be investigated on a regional level, archaeologists must be aware of the connection between smaller localities within a region. As Schlanger and Wilshusen state:

all abandonments are part of a general process of adjustment between local populations, local conditions, and regional conditions. When abandonments occur, however, they occur as local events: houses are abandoned as regions are depopulated (1993:85).

Rarely has a region been so uniform that a catastrophic event, like war, flood, or drought, would cause its total abandonment. Regions usually do not depopulated due to one reason, but rather due to multiple reasons. Lillios (1993:110), in her work on Copper Age settlements in lowland Portugal, sees that the archaeological or paleoenvironmental data does not support a single factor as cause for regional abandonment.

Because this thesis focuses on site abandonment, frameworks based on a regional scale are reviewed only briefly. Binford's (1973, 1977, 1978, 1979) research with gatherers and hunters is the basis of many models of regional abandonment (Cameron 1993). Binford views site furniture and artifact curation as key concepts to understanding abandonment within a regional setting.

Another possible framework for studying regional abandonment is the mechanism at work in center-periphery relations. Access to raw material or land, along with other avenues, provides a means for investigating possible territorial, economic, or ideological struggles (Lillios 1993).

As for local abandonment, most investigative framework deals with refuse patterns in the interpretation of abandonment behavior (Ascher 1968; Lange and Rydberg 1972; Reid 1985; Schiffer 1987; Stevenson 1982). However, according

to Cameron (1993:5), since abandonment processes can be continuous within a settlement, the abandonment of individual structures or activity areas may have a "direct effect on the entry of these features and the artifacts they contain" as those items enter the archaeological record. Thus, it follows, "that the operation of abandonment process and their effect upon artifact assemblages and architectural features does not end with the termination of continuous occupation of a site" (Tomka and Stevenson 1993:192). When occupied sites are in proximity to abandoned sites, scavenging and reuse seems to occur in greater frequency as artifacts or "features are constantly rebuilt, reused, and reoccupied" (Tomka and Stevenson 1993:192) by local populations.

The documentation of settlement and site abandonment behavior stems from the presence of material culture. It is the material patterns for which inferences on abandonment behavior are made. Individual artifact attributes such as size (DeBoer 1983), weight, replacement and economical costs (Ebert 1979), artifact function, and curate probabilities relate to Schiffer's (1972, 1976, 1987) main abandonment variables. Robert Brooks (1989, 1993) has addresses some of these attributes in relation to the rate of abandonment. By examining certain characteristics or refuse, Brooks (1989, 1993) attempted to imply the behavioral characteristics of planned or unplanned abandonment. He identified three assemblage attributes from refuse located within and around structures. Before addressing his attributes, it must be noted that these attributes can be accurately measured only when post abandonment activities are nonexistent or

held to a minimum.

The first attribute, *size effect*, correlates the presence of large artifacts with unplanned abandonment. The justification is that the energy required to transport or curate a large item was so great it was not selected (Baker 1978). Second is *refit sequence*. The higher percentage of refit sequences and the greater degree of reconstruction of an item indicates the likeliest of unplanned abandonment. If planned abandonment would occur, activities such as daily maintenance (sweeping), curating, or scavenging would reduce the number of refit sequences. Third, *spatial distribution* tends to assist in identifying planned versus unplanned abandonment. The distribution of items during planned abandonment seems to have the proclivity toward edges of structures or support post columns while unplanned abandonment exhibits a more uniform distribution of artifacts.

At mining sites, abandoned artifacts include household items such as broken plates and cups, utensils, food containers, bed springs, refrigerators, and stove parts as well as nonhousehold items such as nails, wagons, sleds, automobiles, tools, mining equipment. Rothchild et al. (1993:129) devised eleven major classes for abandoned artifacts. The classes are subsistence food containers or items, alcohol or soda containers (indulgence), medicinal, personal effects, items related to food preparation, serving or storing, household furniture (equipment), recreational items, tools, hardware or construction materials, transportation related items and unidentifiable items.

By establishing patterns of artifact class quantities and documenting the presence of those classes, comparisons can be made. The importance of these artifacts categories aid in the comparison between individual structures or loci. With an overview of material in and around structure, a comparison made be made between sites. The application of these classes to Garnet artifacts was not possible due to incomplete inventories and records of artifacts and post abandonment changes. What is available at Garnet are several structures that have photographic documentation of change, not artifacts within those structures (see Figures 15-18, 98, 99).

The major emphasizes in the identification of abandonment processes has been on material remains located within the structure, not the structure itself. Although Stevenson (1982) mentions the conditions of buildings located within the camps of Bullion Creek and Mush Creek, he does not detail other abandonment activities acting upon those buildings. Additional research by Cameron (1991), Joyce and Johanssen (1993), Rothchild et al. (1993), Schiffer (1987), and Schlanger and Wilshusen (1993) focus upon the actual residential/activity structure.

The construction of a building tells a lot about the anticipated occupation span of the inhabitants and the expectation of return. A building's use-life is "defined as the period from initial construction to final abandonment" (Cameron 1991:157). During a building's use-life, various natural and cultural processes modify the structure and cause changes from its initial appearance.

Anticipated occupational span of a settlement assists in interpreting abandonment behaviors of structures. "The longer builders plan to use a structure, the more effort they will expend in construction and the longer the structure should last" (Cameron 1991:158). This implies that the "longer anticipated occupation should result in less frequent structure abandonment because use-life has been increased through improved quality of construction" (Cameron 1991:158). Thus, the inverse is that low energy expenditures on buildings will produce structures with shorter occupations. Weighing costs of construction versus costs of maintenance often influence the form of structures (McGuire and Schiffer 1983). Structures from western mining sites also demonstrate consideration by builders for construction costs, maintenance, and occupation duration. One visible aspect of this anticipated occupation is bark stripped logs. Bark is removed from logs to retard insect infestation and increase use-life (Cameron 1991). Another adaptation for longer use-life is seen with wood shingles or stick roofs versus sod (Cameron 1991).

Structures are defined as abandoned "if they were no longer water tight, that is, they lacked window glass or doors, or their roofs had holes" (Rothchild et al. 1993:129). Obviously this definition does not consider episodic or seasonal abandonment (Brooks 1993), nor structures whose construction does not require glass or a door. Seasonal abandonment at mining camps tends to leave buildings abandoned with windows, door, and other features still intact. A difference in structure abandonment is seen by the activities surrounding a

building's abandonment and the occupants expected return.

Within a settlement, an abandonment is usually tied to the construction or presence of a new residence indicating a gradual planned move (Brooks 1993; Cameron 1991). A gradual departure allowed structures to be reused for future inhabitants, storage facilities, or scavenged for firewood or building materials. On the other hand, if the settlement is left with occupants expecting to return, maintenance of the structure will occur before departure, and certain items within the structure will be left (Joyce and Johannesson cited in Cameron 1991; Stevenson 1982). The "presence or absence of curtains, canned or other food on shelves or tables, clothing, and bed linens attests to more or less recent use" (Rothchild et al. 1993:126) indicates possible intermittent abandonment. Intermittent abandonment is the abandonment of settlements and in particular structures with the inhabitants expected return after an absence.

Another indicator of possible return, besides the maintenance of buildings, is placing boards over windows and doors. The presence of this action is more a symbol to other groups that the building is not abandoned and the occupants expect to return. Structures with collapsed or missing roofs, partial walls, broken or missing doors, and the overall lack of general maintenance represent final abandonment with no anticipated return (Rothchild et al. 1993).

By illustrating ideas and research on abandonment behavior and processes from the last ten years, a foundation has been laid for further analysis on this topic. My goal is to take Mark Stevenson's hypotheses previously listed

in this chapter along with other ideas to reconstruct the abandonment behavior, at the town of Garnet, Montana. Inferences toward other historical mining communities site abandonment behavior may be guided by the analysis at Garnet.

CHAPTER SIX

ABANDONMENT OF GARNET

"Towns without people are though to have taken on static form because nothing novel is added, but observations of such towns over even short periods show that changes continue in the absence of people" (Ascher 1968:44).

As presented in the previous chapter, my goal is to evaluate the abandonment behavior for the town of Garnet. To accomplish this, I will first investigate Stevenson's hypotheses as they apply to Garnet. Second, I will comment on the conditions of structures as a method to identify abandonment variables: rate of departure, the anticipated return, and anticipated occupational duration as factors influencing abandonment behavior. For these two discussions, I include an examination of the conditions for misinterpretations, errors, and inconclusive interpretations inherent in this study. My focus is on final abandonment for individual residents of Garnet, not necessarily the abandonment during a particular time. To understand what material I base my investigation on, let me reiterate part of Garnet's history.

The history of Garnet, as detailed in Chapter Four, shows that it was founded by a group of people familiar with mining settlement patterns. Such established patterns demonstrated that the majority of placer camps boomed, busted, and, if fortunate, boomed again before eventual decline. The

expectations of residents for the duration of Garnet fit within this pattern.

Although residents realized Garnet would not last forever, many hoped that it would survive and prosper.

After the auction of Davey's remaining material in his store, the town was left open and accessible to unrestricted reclamation processes. As mentioned earlier, the BLM assumed control and management of the town in 1969. It is this management, along with continuing reclamation processes (i.e. collecting, pothunting, scavenging, and salvage) that has conditioned the archaeological record of 1948 in comparison with that of 1993. By reclamation's definition, these acts have disturbed the archaeological remains and brought items back into the systemic context. Aiding in this transition over the past twenty years were "cleaning" sessions and stabilizing efforts by the Green Thumbers, Youth Conservation Civilian Corps, and citizens interested in the town's preservation.

In the initial years of Garnet's management, the town underwent several sessions of "cleanups" or mass trash removals. During the summer of 1969 John Ellingson and John Couch volunteered for the BLM to record structures and clean up the town. Fifty truckloads of rubbish were removed (Figure 14) that summer at Garnet (Ellingson 1970; Lawrance 1981). The same year, plans were initialized to stabilize several buildings. Efforts to salvage (reclaim, stabilize, restore) structures altered the appearance of the town (Figures 15-18).

This initial stabilizing of Garnet has continued until the present. However, stabilization has not halted formation processes acting upon the town. In my

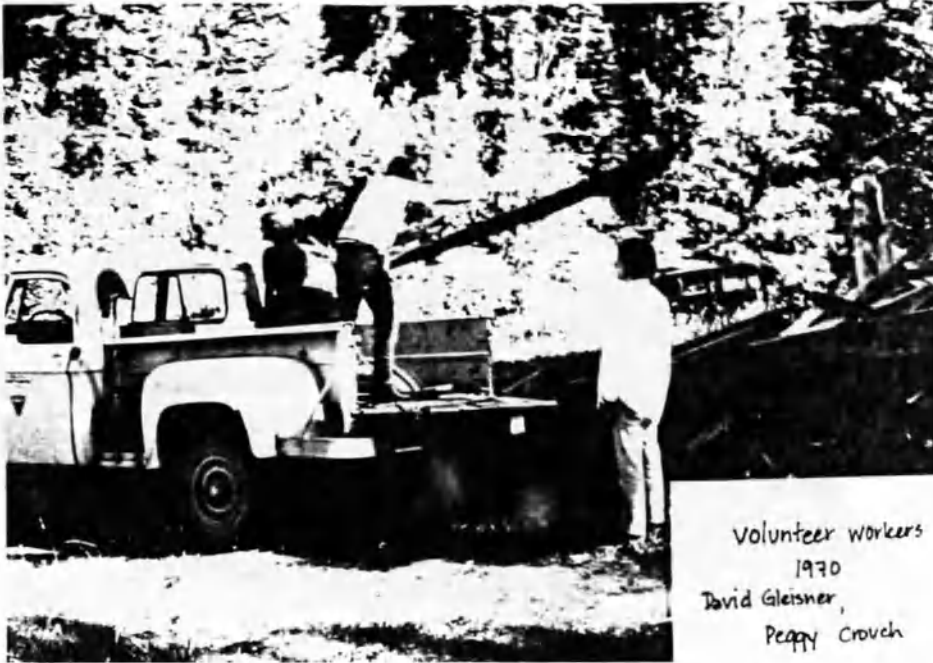


Figure 14: Picture of volunteers removing debris during one of the many clean-ups of Garnet.

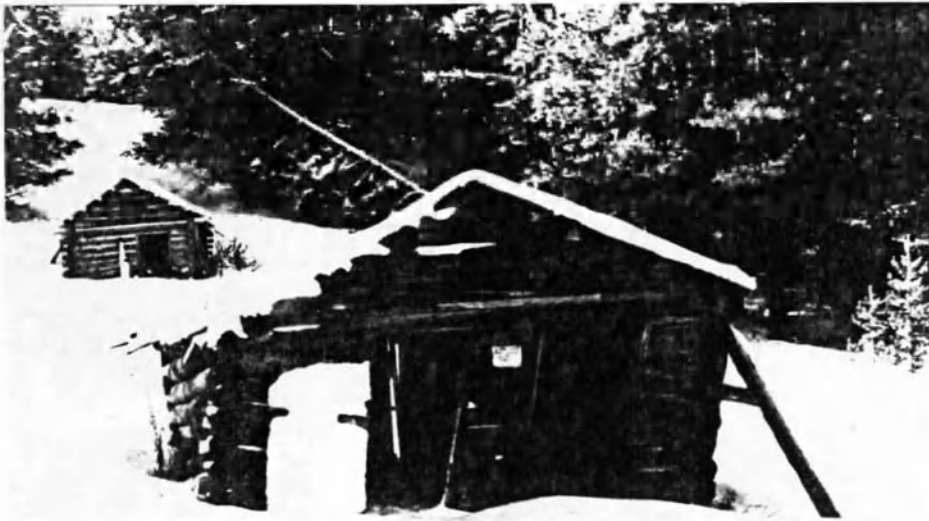


Figure 15: A 1981 photograph of a miner's cabin. Notice the twisting and slumping of the left back corner



Figure 16: A 1993 photograph of the same miner's cabin as shown in Figure 15. Notice the stabilization that has been done.



Figure 17: A 1980 photograph of the Adams family house. Notice the deterioration of the roof and the sagging walls.



Figure 18: A 1994 photograph of the Adams family house. Notice the repair of the roof and that the walls are upright, not sagging in the middle, as seen in Figure 17



bottle diggers

Figure 19: A photograph illustrating "bottle diggers" Courtesy of the Bureau of Land Management.

observations of activities affecting structures and artifacts in town (Figure 19), I have seen significant alterations in the historical record at Garnet that could create different interpretations. In the beginning of August 1993, the Davey's store front window sill and tables were full of artifacts to display the store's goods (Figure 20-22). By the end of August, all the artifacts had been removed from the store and put into storage (personal communication, Guide 1993). The purpose was to repair parts of the floor (Figure 23, 24). As of June 1994, the building is still without many of the artifacts I saw in August 1993. It may be a while before any displays are reestablished (Figure 25), if they are reestablished at all. A volunteer guide for the BLM informed me that a high powered hose system would be used to sanitize the floors and walls of the various buildings in Garnet. Any displays or storage of artifacts would have to be moved during this procedure (personal communication, Guide 1994).

Besides the BLM transporting artifacts around Garnet, individuals have also been changing the appearance of artifact concentrations. A photography class at Garnet in June 1994 created many displays. I witnessed a woman "create" an artistic display of artifacts in the Davey's Store (Figure 26, 27). Another woman, in an attempt to get a better shot, dropped some artifacts as she rearranged the displays in the livery stable.

TESTING STEVENSON'S ABANDONMENT HYPOTHESIS

Stevenson's first hypothesis focuses on the frequencies of curated and

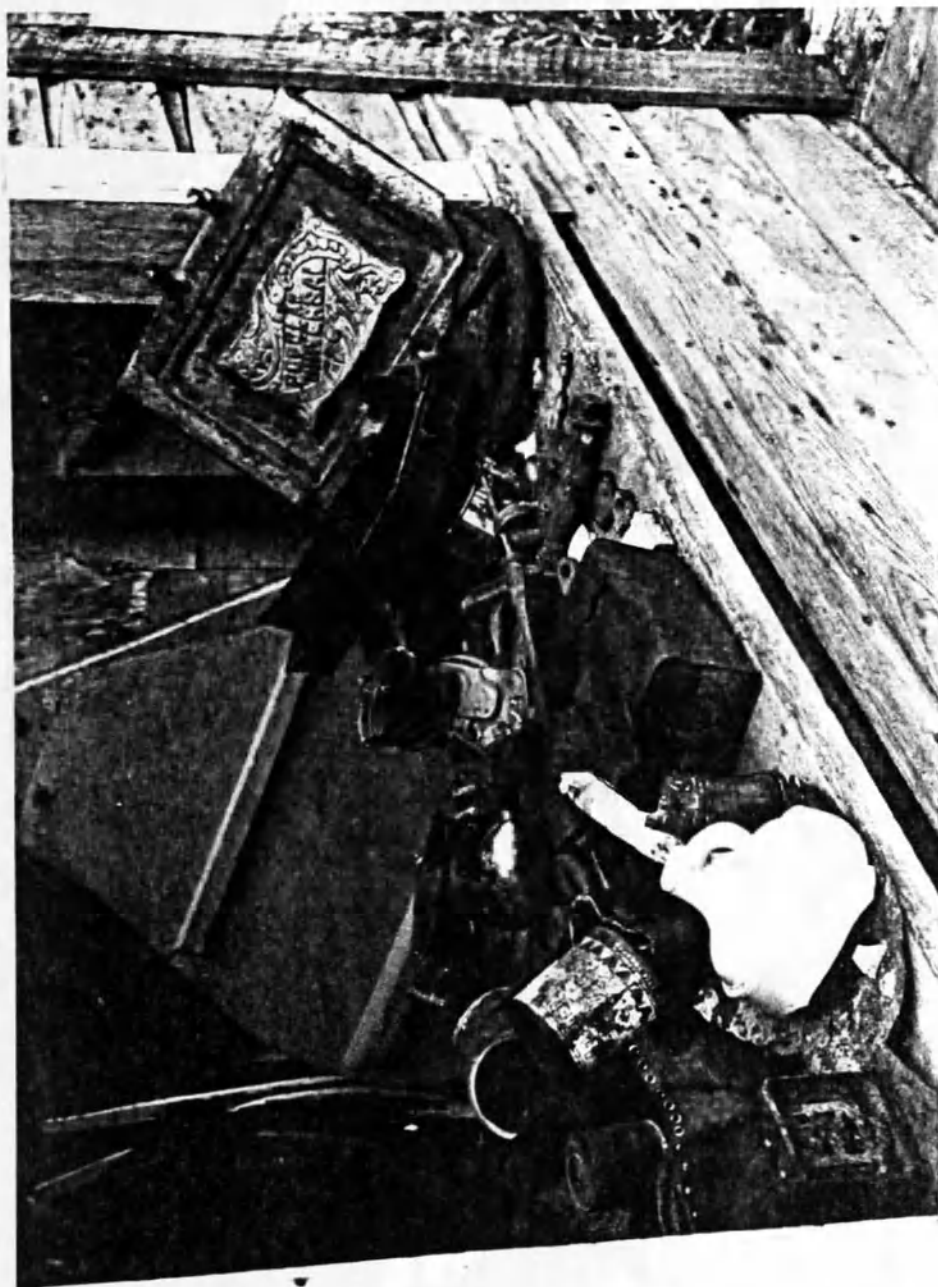


Figure 20: A photograph taken of the window display at the Davey's in August 1993. The photo shows lots of artifacts. Notice the shoes, horns, and stove pieces.

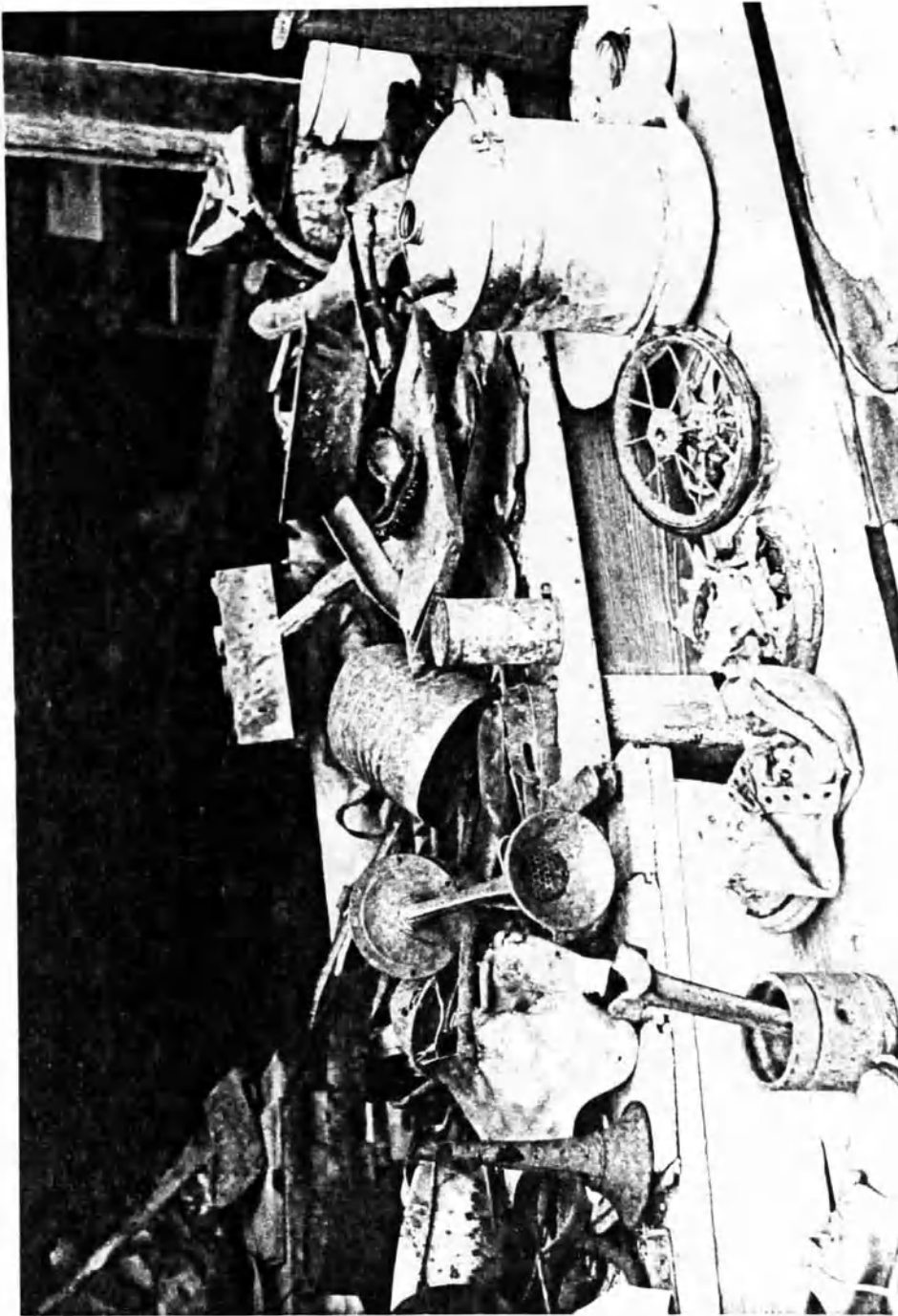


Figure 21 A photograph taken of the window display at the Davey's in August 1993. The photo shows an abundant amount of de facto refuse. Notice the shoes, buckets, pans, and tools.

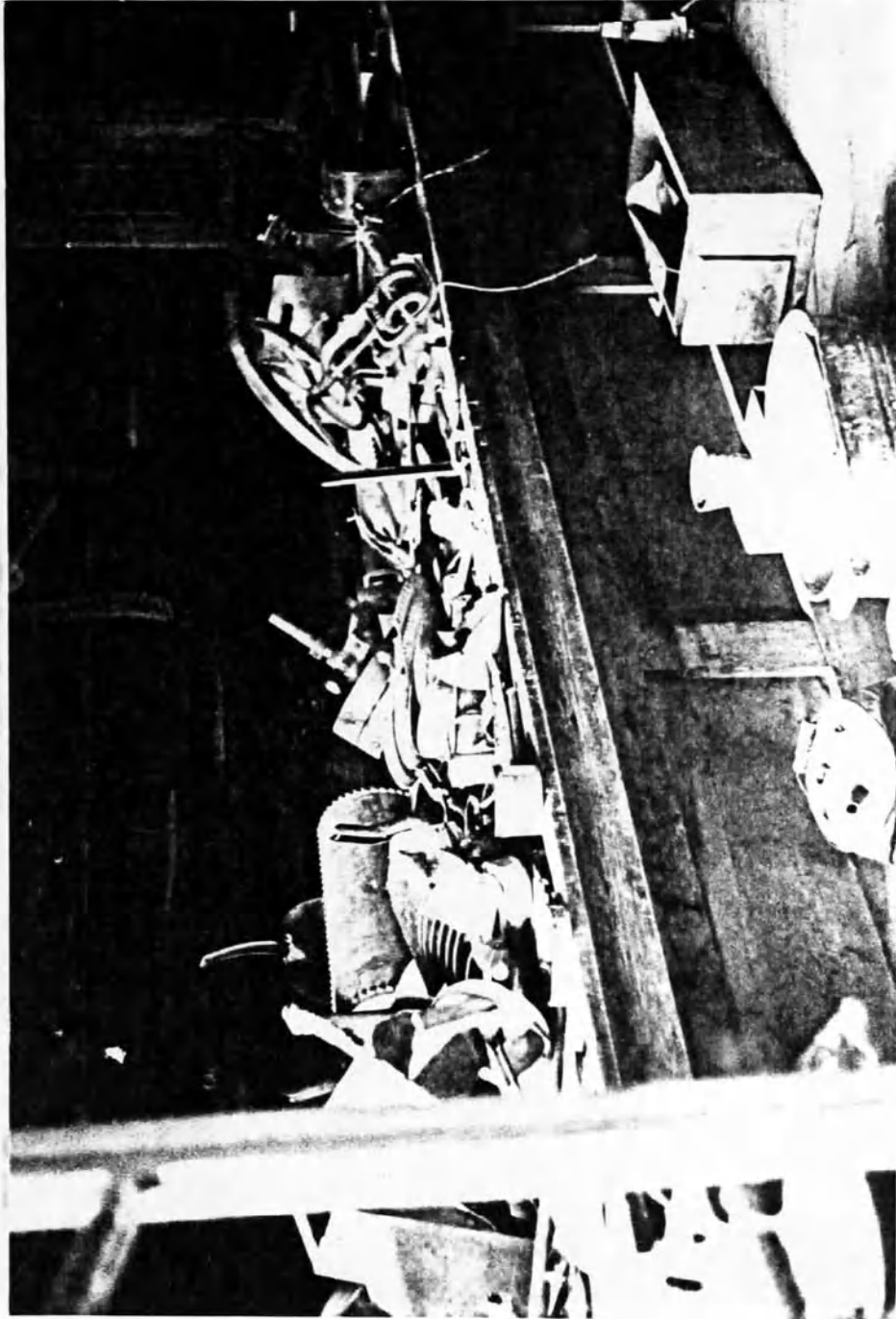


Figure 22: A photograph taken of the window display at the Davey's in August 1993. The photo shows an abundant amount of de facto refuse. Notice the buckets, pans, and tools along east wall.

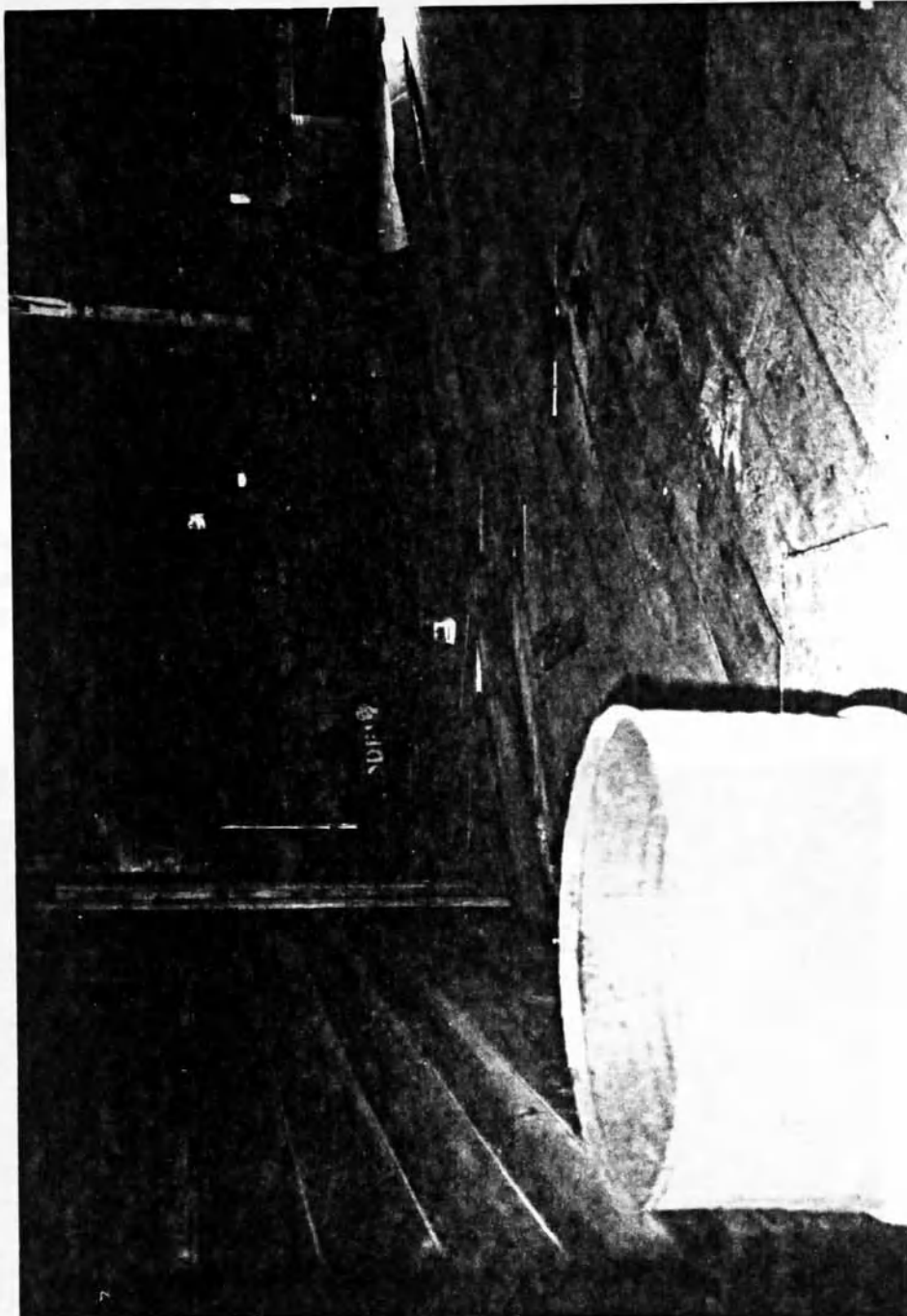


Figure 23: A photograph taken of the inside of Davey's Store in August 1993. Notice that in preparation for repair of the floor, all the artifacts present in Figures 20-22 are no longer present.



Figure 24: A photograph taken in August 1993 of a man supplying lumber to repair the floor of the Davey's Store. Again, all the artifacts present in Figure 20-22 are no longer displayed in the windows.



Figure 25: A photograph of the Hantavirus precaution on all the buildings at Garnet in June 1994.



Figure 26: A photograph of a woman taking pictures of items within the Davey's Store in June 1994.



Figure 27: A photograph of the display she created from artifacts in the southeast corner of the store.

de facto items in the archaeological record. Stevenson (1982:242) distinguishes curated items as objects with a "functional, personal, monetary, aesthetic" or other important value which are usually transported with the inhabitant. The only problem with determining these values, is that the values the residents of Garnet associated with artifacts may not always be the same as my interpretation. Yet according to Schiffer (1987:90), "curate behavior (Binford 1973, 1976, 1979) designates the process of removing and transporting still usable or repairable items from the abandoned activity area for continued use elsewhere". Curating occurs for more "utilitarian items in anticipation of immediate needs in the next" settlement (Stevenson 1982:244).

As for *de facto* refuse, there is likely to be "comparatively little" (Stevenson 1982:259) if the site underwent planned abandonment. Individuals anticipating abandonment have time to plan, organize, and select or "curate" artifacts for departure. Those who experience rapid and unexpected abandonment leave a higher percentage of valuable items behind. Thus it follows that any *de facto* refuse found at Garnet would either be cached in a few locations (anticipated return) or left in use locations (no anticipated return) (Cameron and Tomka 1993; Stevenson 1982). In both rapid and gradual abandonment, energy expenditures, artifact variables (size, weight, replacement cost, remnant use life) as well as distance to the next site and season of abandonment "condition curate probabilities and thus influences *de facto* refuse deposition" (Schiffer 1987:92).

My initial survey of Garnet revealed few items with high curate probabilities and moderate amounts of *de facto* refuse. After continued walks around the edges of the townsite and later at the Mountain View mill (Figure 28, 29) and the Mussingbrod mill (Figure 30, 31), I found a low frequency of *de facto* refuse. I begin by presenting the pattern at the mills and then return to the town site (see Figure 12).

As stated above, artifact attributes like size, weight, and replacement cost influence *de facto* refuse deposition (Schiffer 1987). Large activity specific items and difficult to transport artifacts tend to be abandoned in their original activity loci (Baker 1975; Schiffer 1987). At Garnet this is accurate prediction at the Mussingbrod mill and Mountain View mill. For both of these industrial sites, Baker's (1975) and Schiffer's (1987) assertion that very specialized tools may be left at the activity loci, especially if large or low replacement costs, is true (Figure 32-34). Due to the size and weight of the heavy ore processing equipment, these objects were not removed, despite assumed monetary value. Items such as handmade benches, wooden flumes, wood stoves, wooden ore boxes, and handmade tools were not removed, probably due to the low replacement cost (Figures 35-41). Other items that are broken, but specialized to this loci, are also left (Figure 42-44). Even artifacts not specific to processing ore are located at the mills, but based on their small size, they may reflect loss (Figure 45). With regards to the size effect attribute of artifacts, the presence of such large items may imply unplanned abandonment. Yet the visible higher frequency of smaller



Figure 28: A photograph of the east side of the Mountain View mill.



Figure 29: A photograph of the Mountain View mill facing northeast.



Figure 30: A photograph of the Mussingbrod-Mitchell mill in the early 1900's. (BLM).



Figure 31: A photograph taken in August 1973 of the Mussingbrod-Mitchell mill.



Figure 32: A metal container used for processing ore at the Mussingbrod mill.



Figure 33: A rectangular shaped metal container with attached pipe at the Mussingbrod mill.

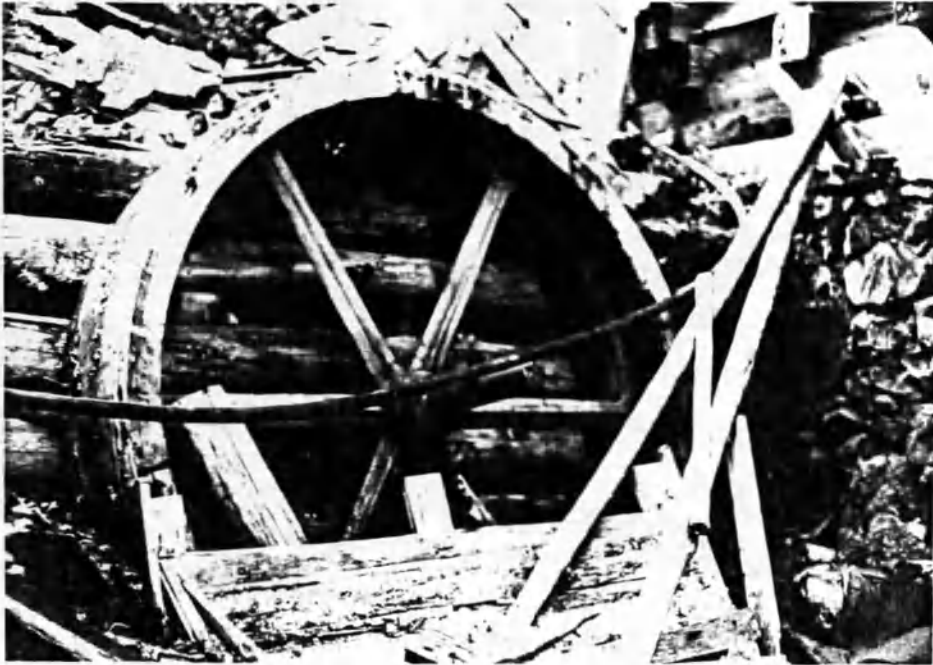


Figure 34: A wooden wheel with a metal rim. It is located just north of the Mussingbrod mill and close to the location of the flume heading down the drainage toward Bearmouth.



Figure 35: A segment of a flume heading toward the Mussingbrod mill.



Figure 36: A photograph inside of the Mussingbrod mill. Notice the wooden bench in good condition, the metal tub, and the homemade woodstove. The stove appears to have tipped over from its place of use.



Figure 37: A wooden ore box near the Mountain View mill.



Figure 38: A barrel with a dented top left inside the Mountain View mill.



Figure 39: A metal funnel in a wooden case north of the Mussingbrod mill.



Figure 40: A gear from the Mountain View mill.



Figure 41: A handmade version of a metal container (Figure 32) used to process ore at the Mountain View mill. It represents low replacement cost.



Figure 42: A broken amalgamation pan in the Mountian View mill.

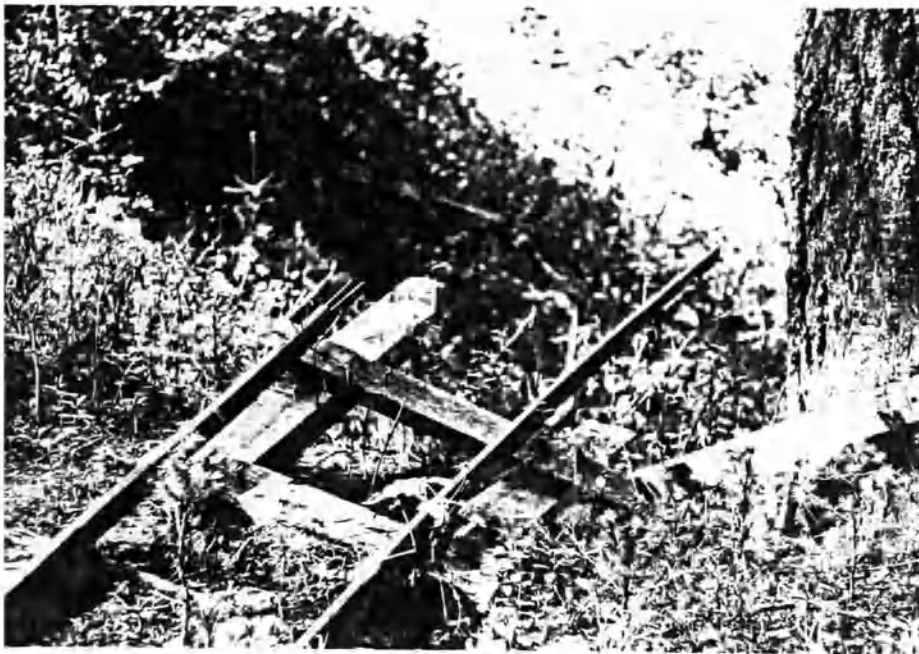


Figure 43: A segment of railroad track used to extract ore near the Mountian View mill.

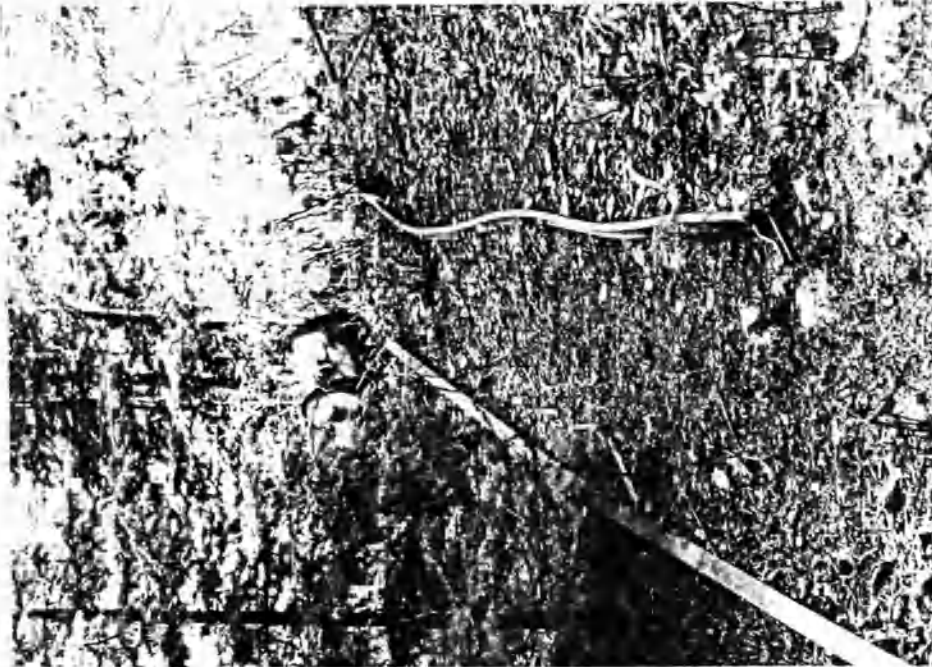


Figure 44: Another segment of track near the Mountain view mill (the photo is sideways).



Figure 45: A vise-grip tool left near the Mountian View mill. The tool is still functional, but may have been lost due to size.

items versus larger artifacts implies planned abandonment.

From oral interviews (personal communication Conway 1994; personal communication, Fitzgearld 1993, 1994; personal communication, Mayer 1994; personal communication, Morin 1994; personal communication, Olson 1994; personal communication, Steffan 1994; personal communication, Therriault 1994), little additional information was gained on the status of the mills before and after final abandonment. Since the mines were closing (personal communication, Fitzgerald 1994; personal communication, Morin 1994; personal communication, Olson 1994; personal communication, Therriault 1994), less material was being sent to the mills. The gradual decline in the need to process ore gave the owners time and ability to draw down goods and remove portable items. From the lack of great amounts of *de facto* refuse located either mill, it implies planned abandonment for the mills and the town.

As one travels from the mills to the town, several dilapidated structures are seen. The walls are leaning as the roofs have collapsed within the cabins (Figures 46-49). Quick examination of these cabins reveals very little refuse within the actual structure. Possible secondary or abandonment refuse (Figure 50) may also be seen near the structure. Although regarded as part of Garnet, my focus is on the actual town. Within the town, I will consider address the Davey's store and the Wells Hotel followed by several of other structures. As mentioned on earlier, the Davey's store had a full display of artifacts as of August 1993. The presence of such an abundance of *de facto* refuse and items



Figure 46: A building near the Mussingbrod mill. Notice that the structure has completely collapsed upon itself and prevents any visual investigation of the floor



Figure 47: Remains of a cabin located on the periphery of the town, just west of the Magone house.



Figure 48: A photograph of the alleged location of the brothel. The roof has collapsed in upon itself.



Figure 49: A cabin located down the hill from the Mountain View mill. Notice the deterioration or rotting of the logs in the structure.



Figure 50: A fragment of a wagon. This artifact was located right next to the cabin seen in Figure 49. The remaining wood is undergoing serious deterioration.



Figure 51 The Wells Hotel.

with high curate probabilities suggests unplanned or rapid departure. Figures 20-22 document the presence of shoes, cups, toys, horns, furniture, tools, and various other discarded material. Yet the auction of 1947 sold much of the items left in the store and the Wells Hotel except a few beds, tables, and chairs (personal communication, Fitzgerald 1994). As for the safe and benches, those objects were collected or looted later (personal communication, Fitzgerald 1994). Many items found in the store came from a store room adjacent to the store and were put on display (personal communication, Catey 1994). No one seemed to know where these items originated from (personal communication, Catey 1994; personal communication, Fitzgerald 1993). With this information about artifacts in the stores, a different portrait is painted for the abandonment of the town and this store.

Just west of the Davey's store is the Well's Hotel (Figure 51). Upon entering the dining room, one sees tables, chairs, silverware, shelves and displays (Figures 52-54). Further back in the kitchen is a stove, hood, and various food preparation and serving artifacts (Figure 55). On the second floor, the east side rooms had beds, chairs, dressers, and a few other items. The west side rooms are full of material items (Figures 56-58). Since the windows were boarded close, access to the rooms were prohibited by a gate, and the hotel is closed because of Hanta Virus precautions, I was not able to examine those items.

The presence of such apparent *de facto* refuse in the Wells hotel gives



Figure 52: A photograph of the dining room in the Wells Hotel. Notice the tables, chairs, and shelves.



Figure 53: Another view of the dining room in the Wells Hotel.

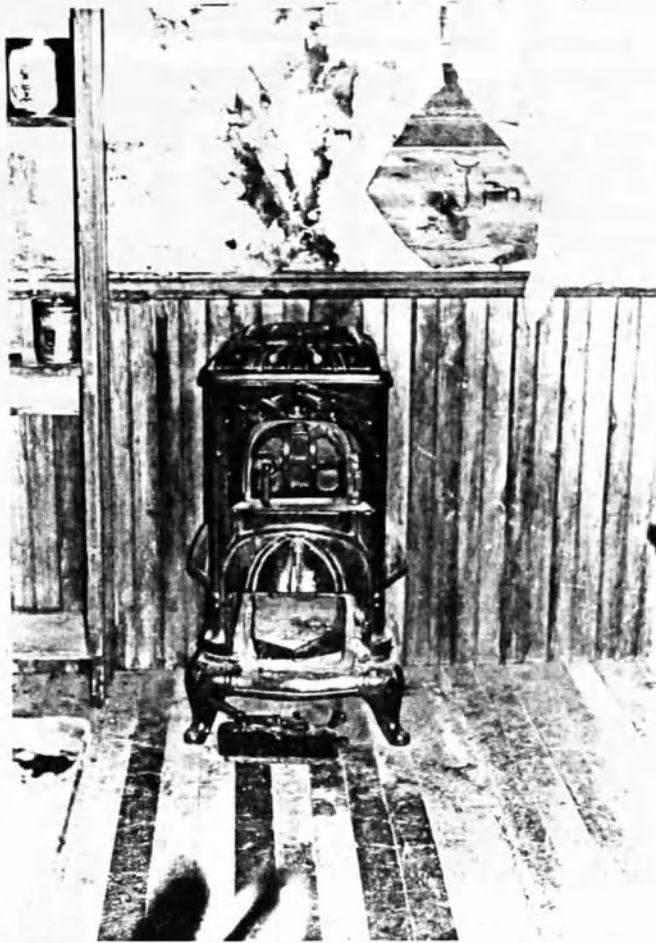


Figure 54: A photograph of the stove in the dining room of the Wells Hotel.

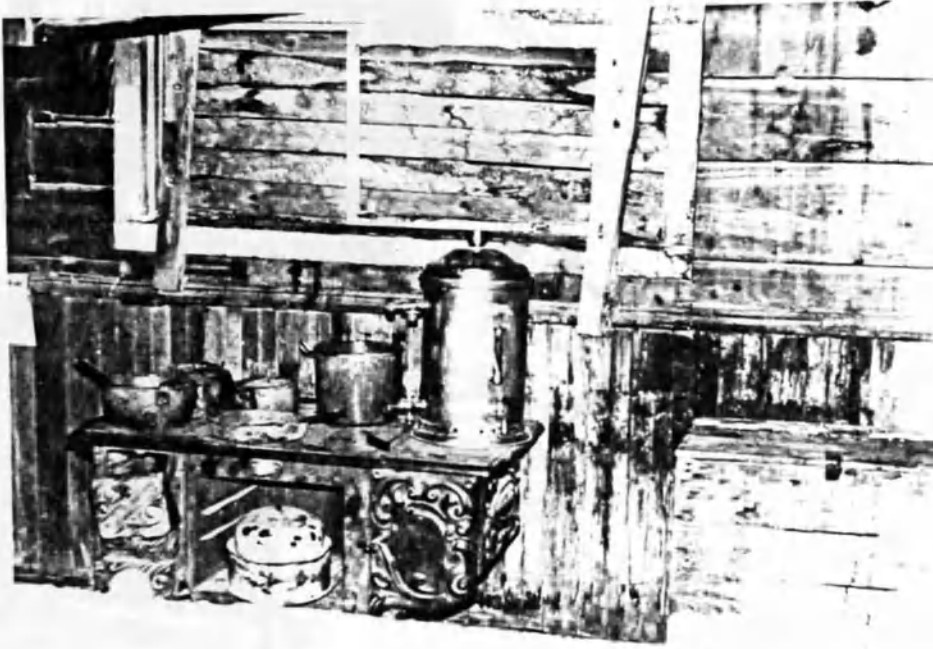


Figure 55: A photograph of the stove, hood, various cooking vessels and a serving container in the kitchen of the Wells Hotel.

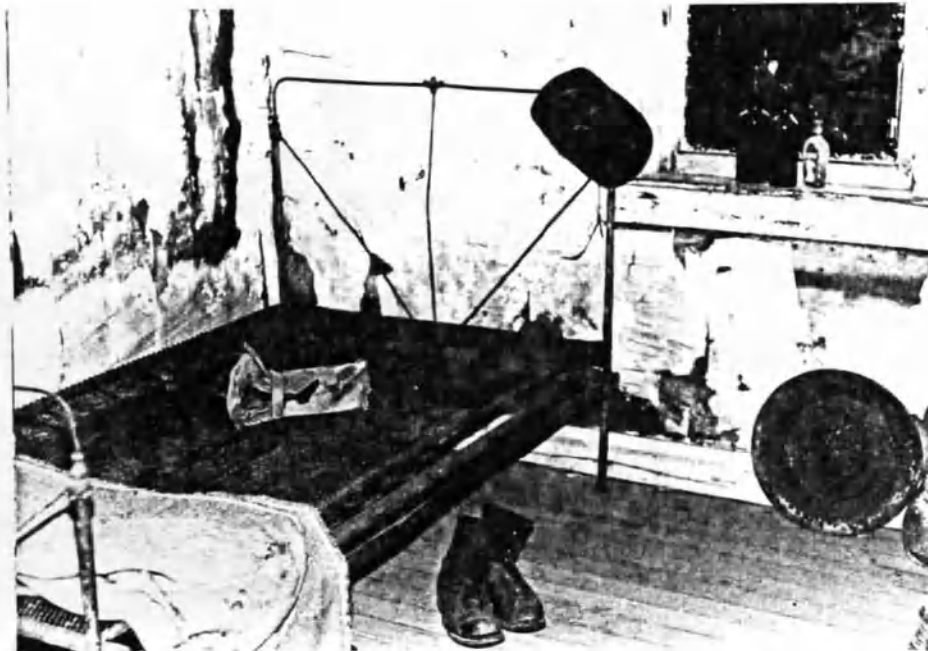


Figure 56: A photograph of one of the bedrooms on the second floor in the Wells Hotel. Notice the display of a miner's clothing and bed roll.



Figure 57: A photograph of a wash basin in one of the rooms on the second floor in the Wells Hotel. Notice the dresser that the basin sits on and the rocking chair next to it.

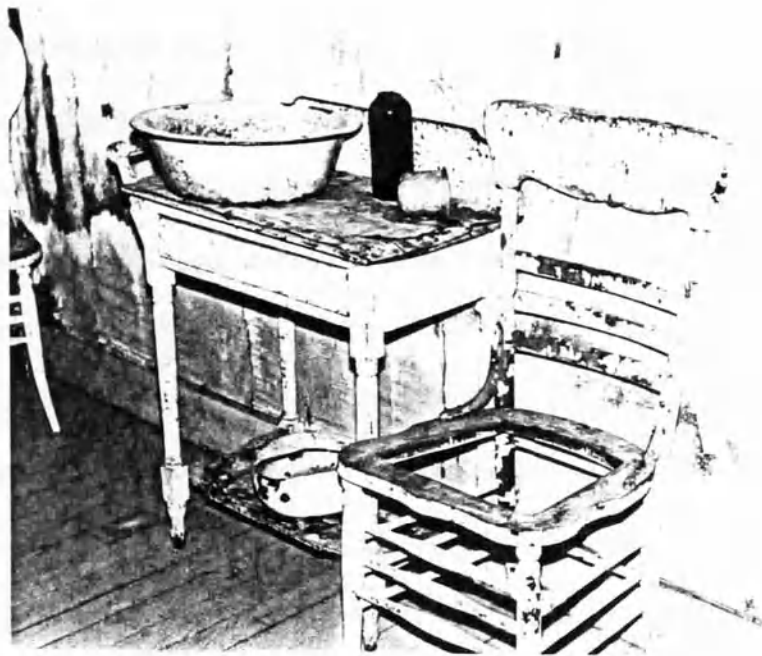


Figure 58: Another view of a wash basin, dresser and chair in one of the second floor bedrooms.

the impression of unplanned or rapid abandonment. Using Brooks (1989, 1993) spatial distribution hypothesis, it can be suggested that unplanned abandonment occurred due to uniform distribution of artifacts in the dining room, kitchen, and bedrooms. The size and replacement costs might have conditioned the choice of residents to leave behind these items. Both interpretations (Brooks and Stevenson) are not correct. Andrew Scott Catey (personal communication, 1994), a volunteer for the BLM in the summer of 1988, remembers no displays on the second floor. In fact, the only displays he saw was the one in the Davey's store windows. The range and kitchen items were sold at the 1947 auction (BLM 1990; personal communication, Fitzgerald 1994). It was not until 1992 that the Well's Hotel had these displays. Robin Freese (personal communication, 1993) of the BLM set up and arranged the Well's displays. She is also responsible for the displays in the livery stable and various cabins. The furniture as well as other items came from a storage area holding material from Garnet, Marysville and other Montana towns, or it was donated (Figure 59). Freese (personal communication, 1993) said that none of the artifacts were catalogued or recorded as to its origins. With this information, it no longer becomes reliable to take artifacts located within the town of Garnet at face value.

An excellent example of this problem is the display in the livery stable (Figure 60). All the items are from the turn of the century, yet no one knew if any of these items were from Garnet (personal communication, Freese 1993). The historical display of livery tools without actual documentation implies the use of

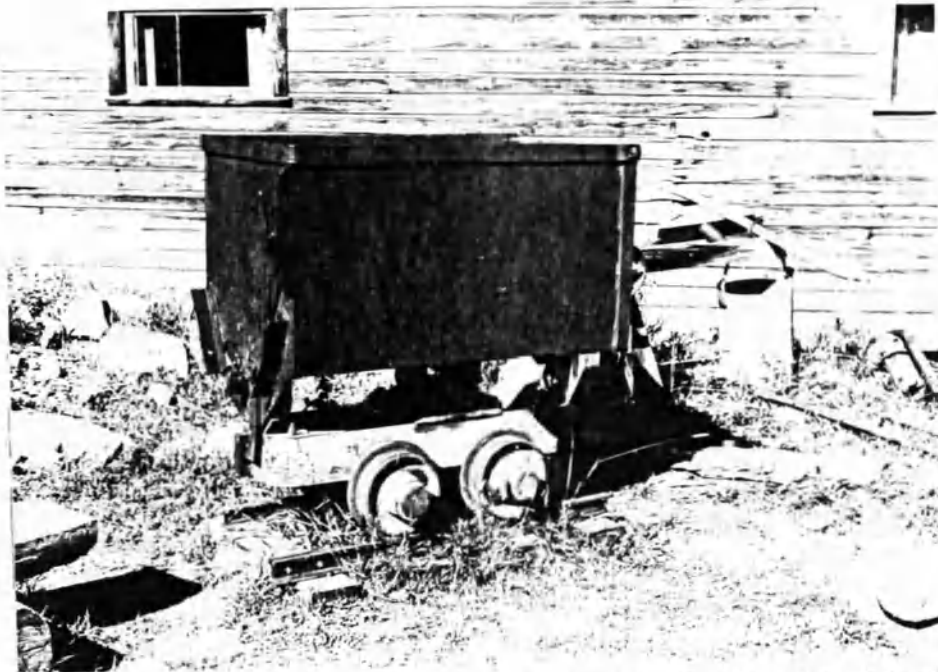


Figure 59: A photograph of an ore cart donated by Dominic Job of Missoula (personal communication, Fitzgerald 1993). It is located outside of Ole's Saloon.



Figure 60: A photograph of the livery stable.

these tools at this stable and *de facto* refuse (Figures 61, 62). Test excavation outside revealed implements associated with horses and a livery stable (personal communication, Foor 1994). However, a test excavation within the structure reveals no organic material or other evidence to support the idea this structure was actually a livery stable.

The individual residences at Garnet only show objects with utilitarian functions such as beds and stoves (Figures 63-66). The implication is that these structures were left slowly or gradually. Although Freese put a bed and stove in every miner's cabin, residents verified this assertion that people planned their departure of Garnet (personal communication, Fitzgerald 1994; personal communication, Freese 1993; personal communication, Morin 1994; personal communication, Olson 1994; personal communication, Therriault 1994).

With such reorganization of material in Garnet, it can be questioned whether there are any examples of authentic *de facto* refuse. There are at least a few. I have found three interesting examples.

Just south of the Samuel Adams family home (Figure 67) is one of the best examples of *de facto* refuse in Garnet. It is an abandoned wagon. Over the years a tree has grown within the frame and reached maturity. The fact that the tree is present suggests that no attempt was made to scavenge or collect the wagon (Figure 68).

The second example is on the other side of town, just west of Billy Liberty's blacksmith shop. Perhaps to be fixed later, the wagon wheel rim was



Figure 61: A photograph of artifacts in the livery. Notice the saddle, horseshoes, and flat bottom shovels.



Figure 62: A photograph of artifacts in the livery. Notice the horse bridles, saddle spurs, and harnesses. Behind the wall is a plow of undeterminable age.

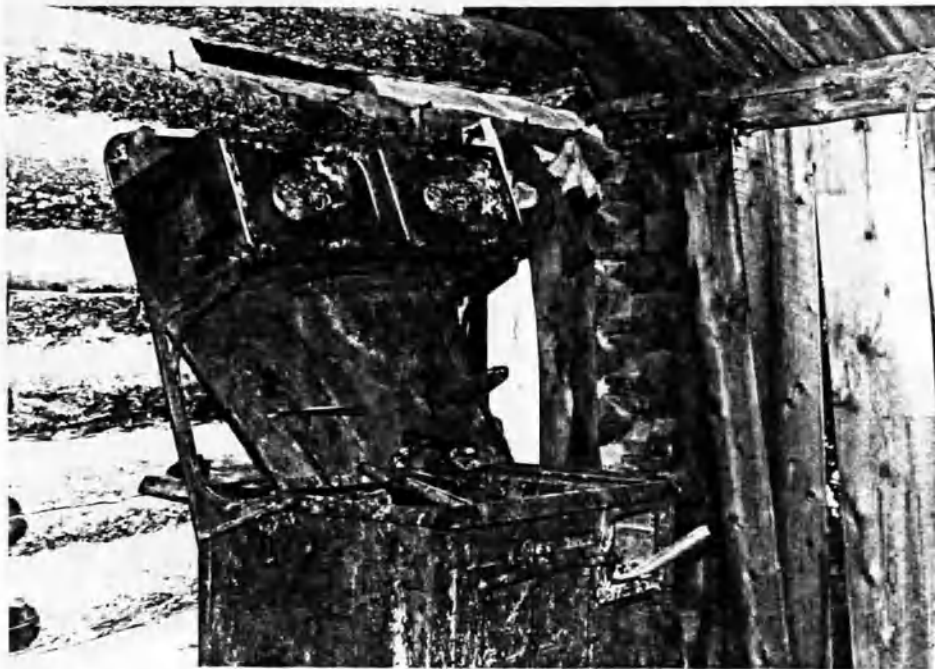


Figure 63: A photograph of a stove in one of the cabins. Notice the clothes hanging on a pegs next to the stove.

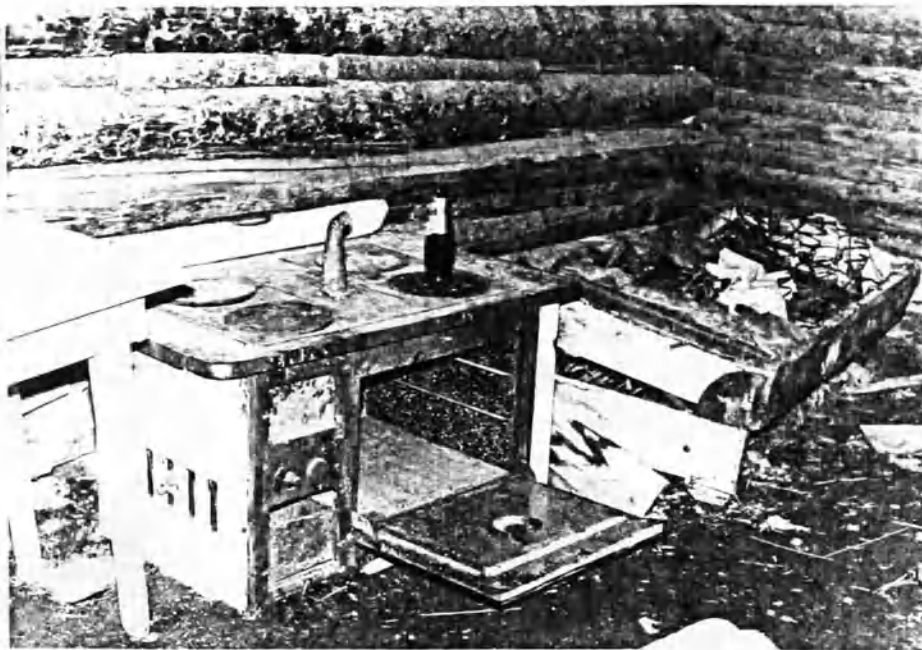


Figure 64: A photograph of a cabin with various utilitarian items present. Notice the stove, couch, table, and a beer bottle.

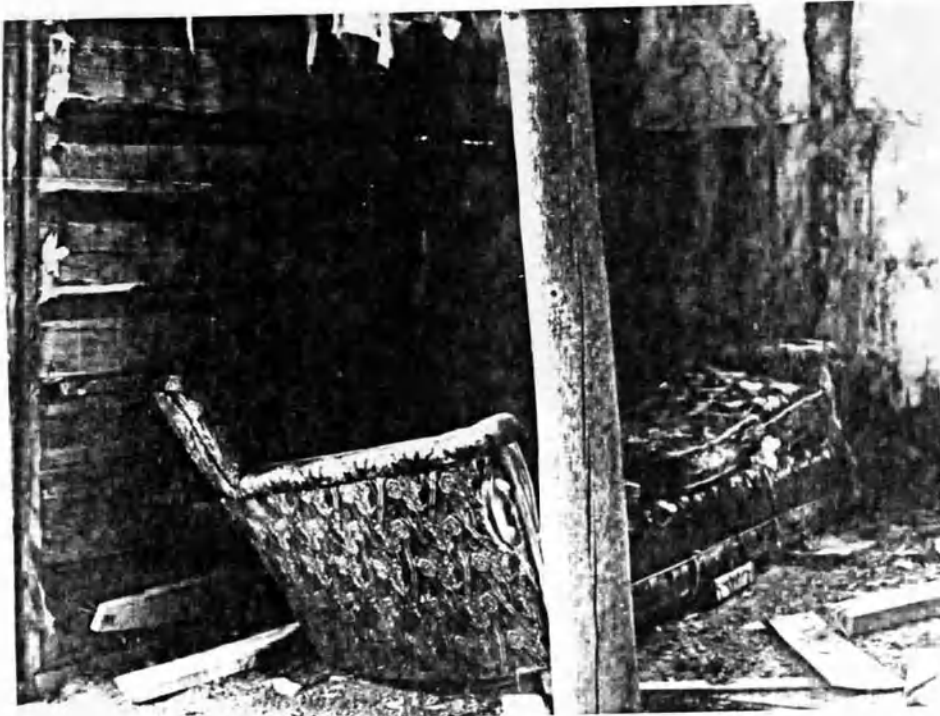


Figure 65: A photograph of a couch in one of the cabins.



Figure 66: A photograph of a stove in one of the cabins.



Figure 67: A photograph facing south toward the dump. The Adams house is in the right side of the picture.

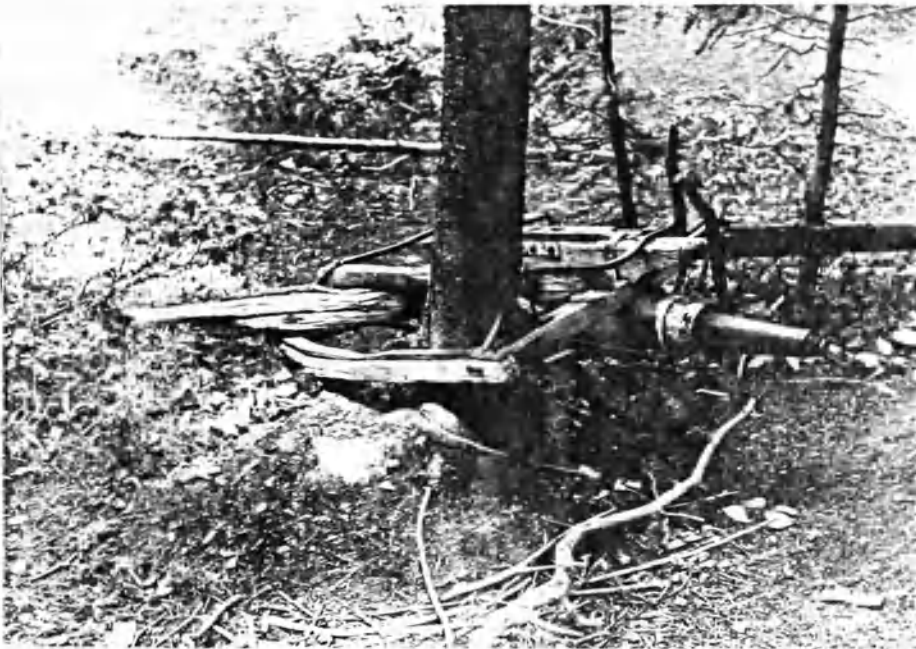


Figure 68: A photograph of a wagon which has been abandoned and a tree has grown within the frame.

The third example can only be taken from photographs. In the early 1980's, the forge within Liberty's shop was intact (Figures 70-72). During some restoration of this building, the forge was dismantled and not replaced (Figures 73, 74). Fortunately, it still lies near where it originally functioned. The implication of its removal changes the forge from *de facto* refuse (South 1979:217) to secondary refuse from the stabilization and salvage.

Although not necessarily left in the exact area of use, there are a few other items that are worth mentioning. The first was left due to loss (Figure 75). In the In the stabilization of the Honeymoon cabin, a plastic elbow joint was left for anticipated use. It may have been left unscavenged due to its assumed low economical value. Another item is a scattering of cut logs behind the Honeymoon cabin (Figure 76). The appearance of immense weathering suggests a long time since the activity occurred. The presence of the pile implies a lack of interest to collect, store, and draw down the wood. A stove, placed west of the Wells Hotel, was not taken from Garnet due to its low replacement cost (Figure 77). The stove was hand manufactured rather than industrially fabricated. Manufacture of another stove would require only a few items. The last two worth mentioning were discovered in a dump near town. Both items, thought still functional, were transported to a refuse loci for discard (Figure 78, 79). The Jergen's bottle, discarded after the contents were depleted, represents no collecting or looting upon this area.

Stevenson's second hypothesis considers the amount material culture in



Figure 69: A photograph of a wagon wheel rim that has a tree growing around it.



Figure 70: A view inside Liberty's blacksmith shop and the forge.



Figure 71 Another view from inside Liberty's shop.



Figure 72: A photograph of Billy Liberty's blacksmith shop prior to restoration (BLM photograph). Notice the metal pipe end extending above the roof.



Figure 73: A view of Liberty's blacksmith shop after stabilization and removal of the shed and forge.

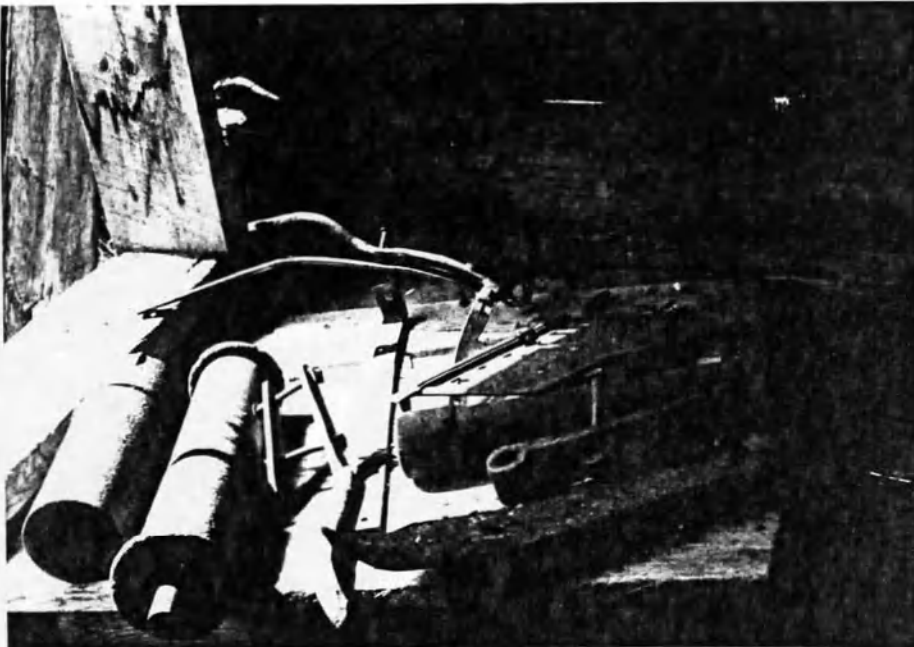


Figure 74: Inside Liberty's shop viewing out. Notice the workman's table and tools in the place where the forge once occupied.



Figure 75: A plastic elbow joint for pipe. This type of pipe was used to create a drain field around the Honeymoon cabin.



Figure 76: A scatter of logs that had been cut into segments for probably use in a wood stove.



Figure 77: A hand fabricated wood stove. Since cost was low, as compared to a commercial stove, the item was left behind.



Figure 78: A coffee pot.



Figure 79: A Jergens lotion bottle.



Figure 80: A view of the Howe house. The glass panes are still present along with screen on the windows.

the state of manufacture, use or repair. Individuals with the knowledge of abandonment are less likely to expend great amounts of energy to repair or manufacture artifacts, unless return is expected (Cameron 1991). Time is more efficiently spent on preparing for departure and evaluating items to take. Those without knowledge of departure are less likely to abort repair processes. They would leave greater amounts of functional items behind, especially if return is anticipated.

On sites with longer occupations, more accumulation will occur of material for future or potential reuse. Artifacts requiring great expenditure of energy to repair will be seen in increased frequencies from sites abandoned rapidly. These locations would be provisional discard localities (Deal 1983) or activity areas. Similarly, the draw down process does not have time to be initialized when settlements are left quickly (Schiffer 1987). As for structures, original construction and maintenance should not be viewed as the same. As stated in Chapter Five, differences in building construction suggest perceptions on future abandonment (Brooks 1993; Cameron 1993; McGuire and Schiffer 1983; Rothchild et al 1993; Stevenson 1982).

In my initial survey of Garnet, I found few or no items in the process of use, manufacture, or maintenance. The absence of such artifacts suggests a gradual and planned abandonment. Interviews of former residents state that while they lived in Garnet many broken items were throw away rather than repaired (personal communication, Fitzgerald 1993, 1994). Unfortunately, none

of the people I spoke with could remember if they did or did not replace broken or worn out items as they abandoned Garnet. It should be noted that the several clean up sessions could have a serious impact on the testing of this hypothesis. Any activity area that might have reflected use probably was cleaned up. These sessions would also influence the percentage of refit sequences. Although not designated to indicate the activities of use or maintenance, this sequence is prejudiced by those same cleaning sessions at Garnet.

Stevenson's third hypothesis concerns the amount of refuse and, in particular, the concentration of refuse within structures, activity areas, or near structures. The disposal of refuse coincides with its value and hinderance. With no plans to return, energy does not need to be expended on placing refuse in sanctioned trash dumps (see Kent 1991). Instead, refuse disposal creates different waste streams. It is placed in corners of a room, out a window, or dumped in a hole behind the building (personal communication, Fitzgerald 1994). With plans to return, the refuse is less likely placed within living areas or structures that could attract fauna disturbances or inhibit reoccupation.

Because of the efforts to beautify and remove all the clutter in and around Garnet, not to mention stabilization efforts on some buildings and vegetation overgrowth, it is difficult to see refuse patterns within the town. There are a few buildings that could be used to test this hypothesis on refuse concentration. I have selected one.

Although privately owned, the Hawe house has no boards on the windows to obstruct a view inside (see Figure 80). There is an abundance of refuse on the floors. Some items that are visible are a woman's shoe, sink, two coats, bed mattresses, bricks, two pairs of pants, benches, metal bed frames, refrigerator, and washer. Some of the artifacts are covered up by loose boards, newspaper, and cardboard distributed by environmental processes acting upon the structure. Olson (personal communication, 1994) said his relatives, the Hawes, left everything behind in anticipation of return. The Hawes did return for a while. Olson said that the years of neglect and vandalism have taken its toll on the building. He has never gotten back up there to clean it (personal communication, Olson 1994).

The present display of a great amount of refuse within this structure, as compared to other structures, suggests planned abandonment without return. Spatial distribution of refuse is uniform throughout the whole building suggesting unplanned abandonment (Brooks 1989, 1993). It is only by personal communication that it is known that the occupants of this cabin intended to return followed by abandonment with no anticipation of return. The natural formation processes illustrate their influence upon interpreting spatial patterns as an indicator of anticipated return.

Returning to the Mussingbrod mill and Mountain View mill, refuse amounts and concentrations are more visible. Neither mill has undergone salvage processes or acts of cleaning. As structures with specific activities

located there, the refuse should reflect that specialization. The presence of refuse in the mills appears random (Figures 81-84), but tends to concentrate along structure walls or concrete features (Figures 85-87). The closer to the wall, the larger the size of the refuse. Since individuals did not live within the mill, the concentration or amount of refuse would not interfere with habitation routines or the eventual reuse of the structure. The refuse at the mills implies planned departure with the possibility of return. The fact that both mills have been susceptible to environmental processes (Figures 88, 89) introduces other influences on the reoccupation of the mills.

ANTICIPATED ABANDONMENT IDENTIFICATION BY STRUCTURES

As shown in the previous chapter, structures have also been used to assist in the identification of abandonment variables. The three that I am interested in are anticipated return, rate of departure, and anticipated occupational duration. If individuals did not intend to stay long, the structure he or she built would reflect that anticipated abandonment. No one building will be used to identify these three aspects in abandonment, but rather the general pattern at Garnet as seen at several buildings. It should be noted that the sample size of structures at Garnet is small and reflects several occupational episode from 1895 to World War II.

First to be addressed is the idea of anticipated occupational duration. Generally the more energy expended on the construction of a building, the



Figure 81: A pile of refuse adjacent to the Mountain View mill. The debris appears to be random with some down slope assortment of items occurring.



Figure 82: A view into the Mussingbrod mill. The photograph show piles of debris and refuse scattered on the floor



Figure 83: A photograph of the Mountain View mill. Notice the concentration of material is along the walls. Size of refuse also decreases the closer to the center of the room.



Figure 84: The view looking in the other direction at the Mountain View mill.

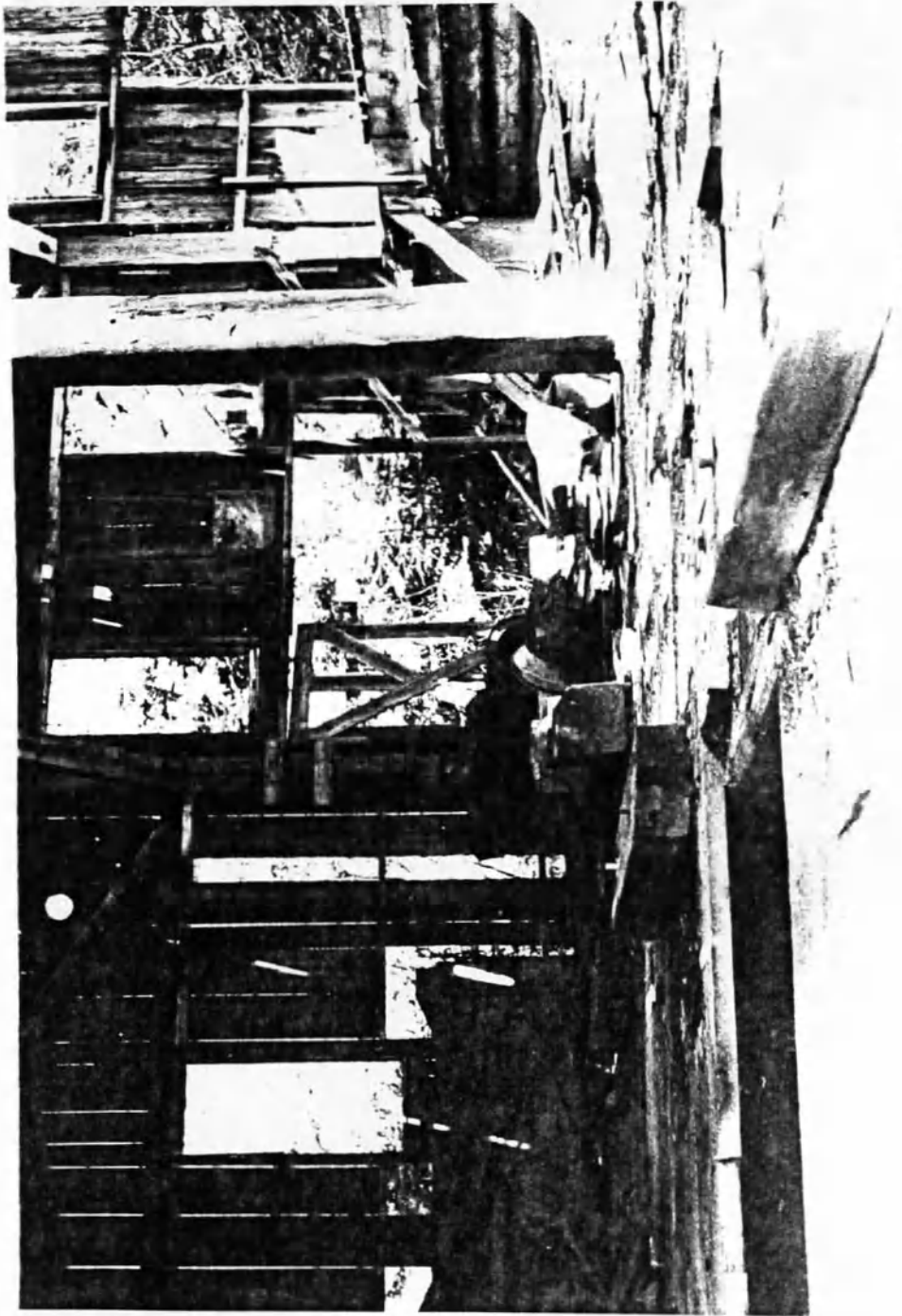


Figure 85: An interior view at the Mussingbrod mill. Notice the concentration of refuse seems to be along the edges. The size also seems to be greater closer to the wall.



Figure 86: A photograph documenting the concentration of refuse along an outer wall of the Mussingbrod mill.



Figure 87: Another photograph of refuse concentrated along an outer wall at the Mussingbrod mill (the photo is sideways).



Figure 88: A photograph documenting the results of continued years of environmental processes at work. This section of the Mussingbrod mill has collapsed upon itself preventing any documenting of refuse concentrations.



Figure 89: A photograph of a section of roof that has collapsed at the Mussingbrod mill (the photo is sideways).

longer the duration the building is used. Usually the abandonment of a structure relates to the presence of a new structure or intentions to build a new structure. If a structure is built to last, the impetus to leave must be fairly strong.

Generally higher building costs reflect a higher quality of building and a longer use life. Building costs refer to energy expenditure and raw materials. There was no need to invest great principle in a cabin one did not expect to stay in long. This is evident by the presence of few and small sized windows on log structures or the lack of decorative detail (Figure 90, 91). A possible consideration for the lack of windows beside the desire to prevent excess heat loss is the actual cost for the glass. In Bannack, Montana, 1862, "a sheet of glass measuring eight by ten inches cost \$2.50, nails cost \$1.40 a pound, and whip sawn lumber cost \$400.00 per thousand eighteen-foot lengths" (Heath 1989: 204). Incomplete records were found on the cost for materials at Garnet.

Yet an aspect in construction selection that is not readily distinguishable is longer the duration the building is used. Usually the abandonment of a structure relates to the presence of a new structure or intentions to build a new structure. If a structure is built to last, the impetus to leave must be fairly strong. individual motivation factors and building preferences. Improvements on these structures could be made when finances permitted, motivation occurred, or duration was expected to continued longer than anticipated. There is no documentation to support or deny this assertion that all buildings with small windows, no foundations, or low pitched roofs imply short occupation duration.



Figure 90: The photograph of the cabin shows a rather large window, but does not show it is the only window in this structure. Also note that this structure has barked logs, no foundation, and a dirt floor



Figure 91 This cabin has only two small windows. There is no foundation which is seen by the tilting of the structure.

An obvious feature of anticipated occupation duration in building construction is bark on logs. Log buildings with bark still on the logs tends not to last as long as barkless or sawed lumber. The majority of homes at Garnet have barked logs (Figures 92-94). This may be a reflection of individual styles or anticipated duration. The implication is that these homes were built fast and with low construction costs. Supporting this is the presence of several logs with a flower shape at the end of the log (Figures 95, 96). The design, created by resin, suggests "that the builder did not let his logs dry out properly" (Miller 1974: 26).

Another indication seen in construction is the presence of sod roofs. Sod roofs do not last as long as wood shingles or planks (Figure 97), because of the easier insect infestation and moisture retention (Cameron 1991). "Items were often hung from pegs on the wall to safe guard them from water damage from the sod roof" (Heath 1989:202) Frank Fitzgerald (personal communication, 1994) mentioned many cabins had sod roofs, but the sod was sandwiched between the sawed planks. Hammond (1983:8) also mentions this combination roof type. Fitzgerald (personal communication, 1994) could not remember which cabins had this combination. Unfortunately, photographs taken of Garnet do not reveal in close detail the type of roofs. The wood planks indicate an attempt to extend the duration of the sod roofs or increases their pitch for winter use. The Bureau of Land Management's stabilization of buildings using wood shingles and or planks is done with the intention of duration and longer use



Figure 92: An example of a log structure made with barked logs.



Figure 93: Another example of a log structure made with barked logs.

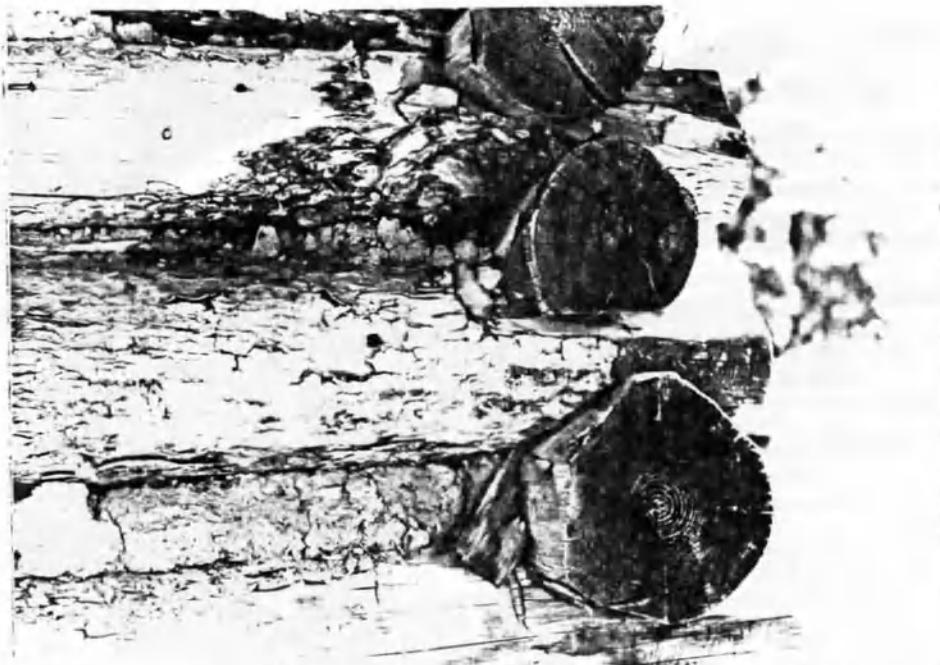


Figure 94: An example of a structure made with barked logs. Notice the ends of these logs.

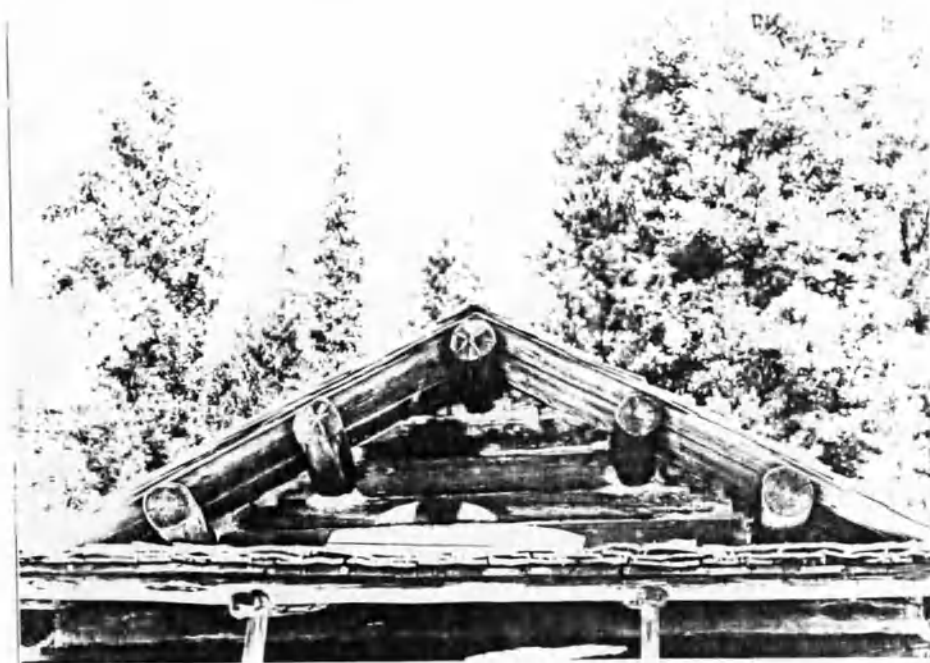


Figure 95: An example of the flower design that logs were not properly dried prior to use in construction.



Figure 96: An example of both barked logs and resin flower designs.



Figure 97: An example of a plank style roof. Notice the tar paper beneath the planks.

life for the structures (Figures 98, 99).

Related to anticipated occupation, as seen in building construction, is the presence and location of formal storage and refuse deposit loci (Kent 1992). If inhabitants plan for long occupation, formal refuse loci and storage facilities will be established at the onset of habitation. On the other hand, inhabitants who anticipate short occupation will scatter refuse throughout the settlement. Also anticipated occupation will influence the amount of material one brings with them to a site (Kent 1992:641) and thus affect quantity as well. In the town of Garnet, there are a few large concentrations of refuse. The largest concentration is just over the hill from the Adams family home (see Figure 67). Former residents speak of a dump on the edge of town, but no mention to its exact location.

The establishment of the trash dump, south of the Adams home, implies a longer anticipated occupation. Yet the presence of smaller refuse concentrations and the fact that individuals dumped behind individual residences (personal communication, Fitzgerald 1994; personal communication, Olson 1994) indicates probable short anticipated occupations. Another explanation may be related to refuse hinderance and value or residents motivation to transport refuse to other loci within the settlement. As for material brought with people to Garnet, Mary Jane Adams Morin (personal communication, 1994) said bachelors brought only their personal belongings with them to this mining community. By transporting minimal amounts of item likely for discard, there would be a lower frequency and diversity to the items that were discarded.



Figure 98: An undated photograph of the Honeymoon cabin. Notice the absence of roof planks, but the presence of tar paper

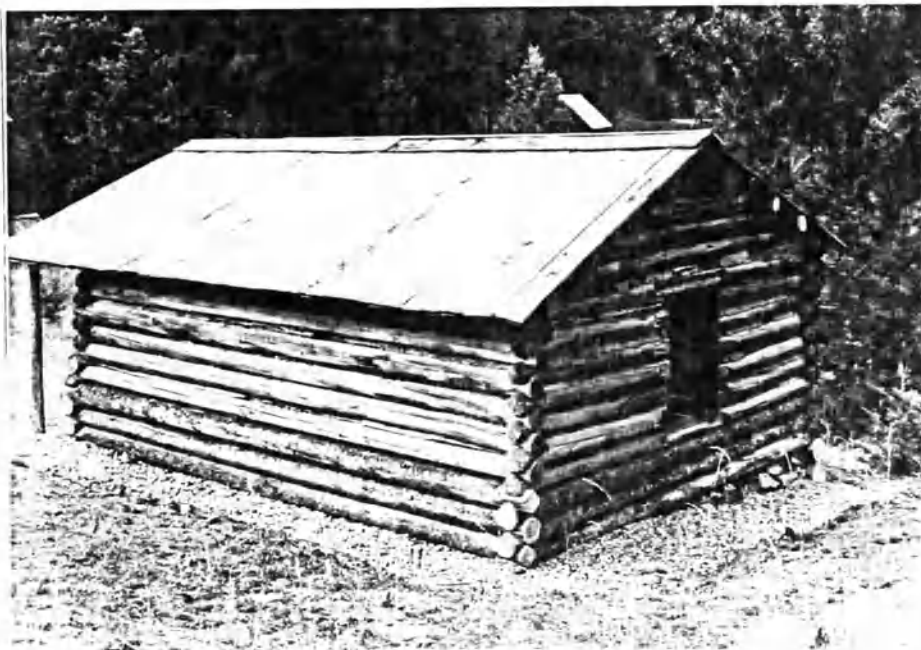


Figure 99: The Honeymoon cabin after restoration in September 1993. The roof has planks and the gravel around the base is for a drain field.

were discarded. The application of formal refuse loci at Garnet is not without its misinterpretation. Again the several cleaning sessions at Garnet would seriously impact any interpretations from smaller, more scatter loci of refuse.

The second aspect to identify abandonment in structures is the speed of abandonment. This identification is difficult. An comparatively easy way to detect rate is through buildings in the process of construction or maintenance. The elapse of time between Garnet's final abandonment and the early 1970's biased any evidence of construction. No mention was made in the historical record or the oral interviews pertaining to any construction that was halted or not completed due to departure. It is my conclusion that this aspect of building construction is not visible at Garnet.

The abandonment of Garnet, as stated by the residents was gradual and planned, not rapid. According to Schiffer,

In a settlement with a rapidly dwindling population, availability of building material will probably excel the demand, leaving many abandoned structures intact. For example, rapid boom-bust cycles in metal markets created many ghost towns in the western United States that contained unsalvaged structures. Settlements that have intact structures could have undergone a very rapid growth and perhaps an equally rapid decline (Schiffer 1987:109).

Schiffer's assertion is fairly accurate at Garnet. Garnet grew quickly, yet declined slowly. In the 1930's, reoccupation of Garnet included the reuse and salvage of abandoned structures for inhabitation. There was no need to build all new buildings for reoccupation when there were still functional buildings present. Today, Garnet has several intact buildings, thanks to the salvage acts (Figures

100, 101) of the BLM (personal communication, Fitzgerald 1993, 1994; personal communication, Godkin-Palermo 1994; personal communication, Morin 1994). Environmental processes at work on structures facilitated the collapse of several buildings due to heavy snow falls (Figure 102, 103). Arson destroyed at least another three buildings (HRA 1982).

The third aspect of abandonment, shown at residences and business locations, is anticipated return. Identification is only visible by residents' actions or lack of actions. The presence or absence of a building, along with the construction materials assist in the identification of anticipated return. If a structure is abandoned and return is anticipated, there must be signs to inhibit use by others. The Howe house had a padlock on the door (Figure 104) and boards on a side entrance to prevent intruders. These actions symbolized return, not necessarily actual reoccupation. Another building, presently privately owned, has the windows boarded up and door lock for the inhabitants eventual return (Figure 105).

If a structure is abandoned and the inhabitants are not expected to return to the structure, it becomes available for others to use. As for anticipation of return, only one of my informants expected to return and did return to live at Garnet (personal communication, Mayer 1994). The others had no expectation to return. Mayer (personal communication, 1994), who returned to Garnet after a four year absence, did not say if her home was boarded up, locked or left open between occupations. One individual witnessed the effects of reclamation on the



Figure 100: A view of restoration in action at Garnet. The backhoe was used to remove excess dirt surrounding the cabin and facilitate the installment of a drainage field.



Figure 101: Another view of restoration and stabilization in action. None of the dirt that the backhoe has removed was screened for material culture (personal observation, 1993).



Figure 102: Example of the amount of snow fall at Garnet. This photograph is of the Dalhberg house in 1981.



Figure 103: Although ten years earlier, there is a considerable amount of snow on the Dalhberg house. The continued stress of such heavy snow falls year after year cause some buildings to collapse.

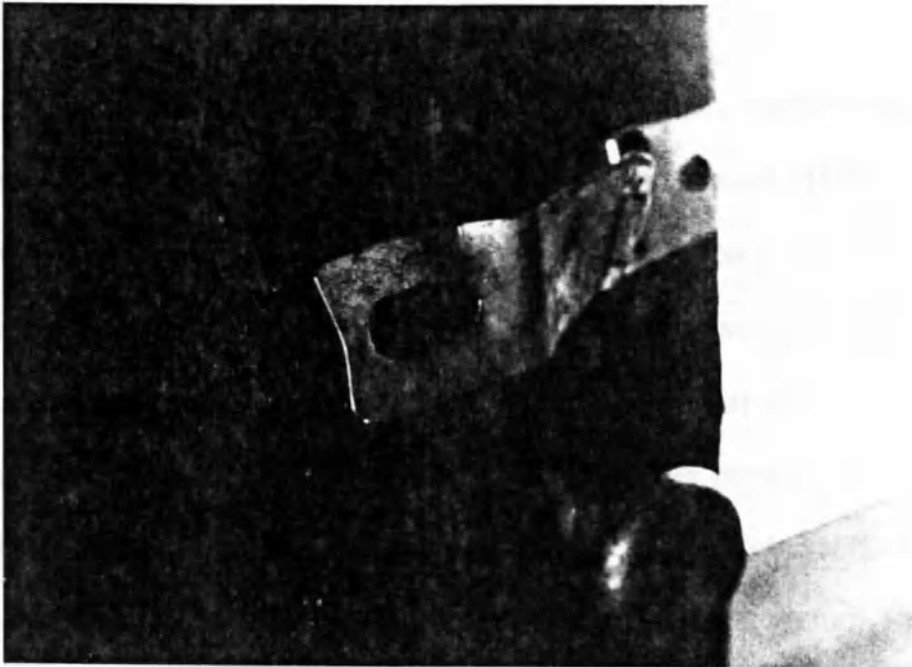


Figure 104: The hinge lock that is on the Hawe house. Notice that it has been broken in an attempt to enter this structure without the key to the padlock (not shown).



Figure 105: A privately owned house which exhibits sign of return. The door is locked and the windows are boarded up to deny access to this structure.

home she occupied. Conway (personal communication, 1994) moved to Garnet in the 1930's. The house that she and her husband moved into had the basic furniture and was fairly sound. After she left, she returned in the 1950's to witness the house she lived in being torwn down for firewood (personal communication, Conway 1994). There would be no return to this residence. Several cabins within Garnet today are being used as storage facilities (Figures 106, 107), indicating no anticipation of return, but the act of salvage for present use. Collapsed buildings signify final abandonment and no return.

Using structures as a method of identification for abandonment is a difficult task. The results are not decisive for the analysis at Garnet. The longer the time between final abandonment and the initial salvage or documentation, the greater influence formation processes will have on a site. This is especially accurate on a building. As seen with Garnet, the present standing structures represent different occupational periods, anticipated lengths, construction costs, expectations on return, and salvage efforts. Maintenance with the intent to extend use life on these structures (see Figures 16, 18, 100, 101) did not occur until the property was in the BLM's administration (personal communication, Fitzgerald 1994; personal communication, Godkin-Palermo 1994). BLM's actions reflect Garnet's final abandonment and their efforts to "salvage" the town as a historic landmark. Conclusions on this and the rest of my analysis on Garnet's site abandonment behavior will be discussed in the following chapter.



Figure 106: A photograph of the shed just south of the Hannifen house. Originally this was a cabin, but the structure's abandonment left it available for others reuse or salvage.

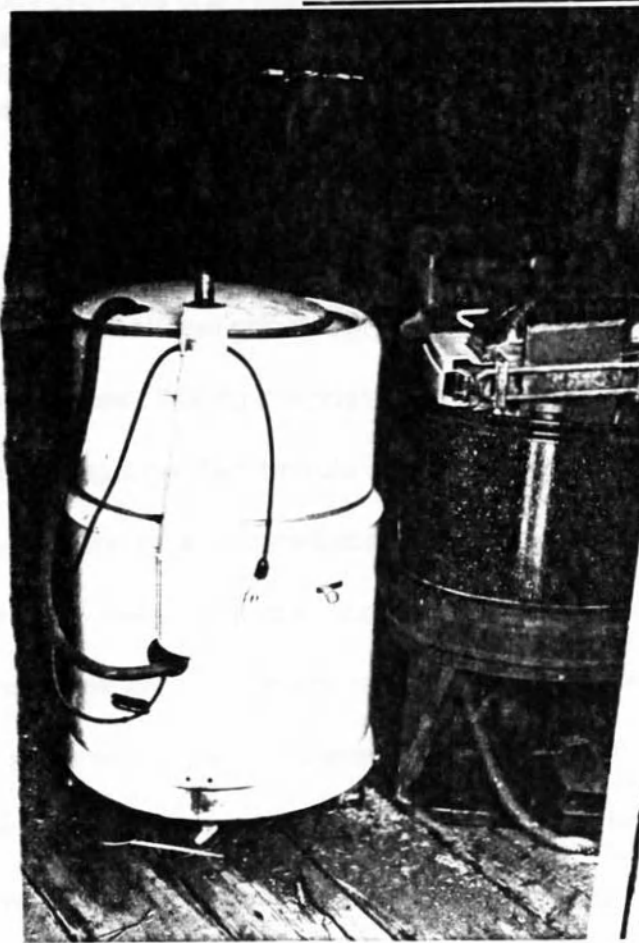


Figure 107: Another example of BLM storing artifacts for future use.

CHAPTER SEVEN

CONCLUSION

"Archaeology provides one reality. Ethnography provides a separate reality. History provides yet another one. Each perspective is valid as the next one. There is of course still another reality, namely the one that which actually occurred in the past" (Adams 1978:52).

Garnet's history as a placer mining camp, a mining town, and a Bureau of Land management's recreational ghost town provides an interesting case to test abandonment hypotheses. Taking the postulates from Mark Stevenson's 1982 article, I have further documented the role of site abandonment behavior. In addition, the investigation of anticipated abandonment as seen in structures contributes information toward site abandonment behavior for this mining town.

The original application of Stevenson's hypotheses to mining camps held distance to next settlement, means of transport, and season of abandonment variables constant. At Garnet, the distance to the next settlement for most residents was over fifty miles (personal communication, Fitzgerald 1994; personal communication, Mayer 1994; personal communication, Morin 1994; personal communication, Olson 1994; personal communication, Steffan 1994). All residents had access to freight wagons down the mountain and tended to leave in the fall before it snowed. Holding these three abandonment variables as constant for the town, the "hypothesized archaeological scenarios" (Stevenson 1982:262) for Garnet should be similar to Stevenson's hypotheses

for Mush Creek. They were.

Through the various abandonments or "busts" of Garnet, an accumulation of material culture occurred. Patterns of discard behavior were established for the town and outlying areas. At the time of the various abandonment, choices were made by inhabitants as reflected in the archaeological record as abandonment processes. Within the town, during any one abandonment sequence, several homes were left sparsely furnished (personal communication, Conway 1994; personal communication, Fitzgerald 1994; personal communication, Mayer 1994) while other structures were empty (personal communication, Godkin-Palermo 1994; personal communication, Fitzgerald 1994). The 1947 auction sold much of the *de facto* refuse from the town. It reduced the concentration of material present in the town. The implication of such a mass removal of artifacts permitted items not necessarily collected or looted to be removed without restrictions or fear of a reprimand.

After the final abandonment of Garnet, the various attempts to remove debris scatter around the townsite in the 1970's altered refuse concentrations. Within household units, individuals removed refuse to dumps along the edge of town or collected out of town. As seen at Mussingbrod mill or Mountain View mill, the collapsed segments of the structure have "protected" or increased the refuse concentrations in and around these industrial sites.

Fortunately, previous residents are still alive to interview about discard patterns at Garnet. Volunteers and BLM employees have provided key insight to

artifact distributions in the town. All these individuals bridged many gaps between the visible historical and archaeological record. A key example was the livery. The display of objects alluded to a rapid abandonment and no anticipated return. Robin Freese (personal communication, 1993) stated the objects were placed in the livery. Test excavation within the structure questions the placement of those items in this structure.

The complexity of postabandonment activities and attempts to reclaim the entire town has had substantial influence on the data available to interpret Garnet's abandonment behavior. This unique feature of Garnet may have significant relevance in the interpretation of material culture patterning. In comparison with some sites Stevenson (1982) investigated, neither Mush Creek nor Bullion Creek (at the time of that article) were being salvaged for recreational purposes. Yet following Stevenson's hypotheses, a planned abandonment with no return should produce little *de facto* refuse. This is true at Garnet.

Using structures to indicate abandonment processes is not new (Cameron and Tomka 1993). The application of anticipated return and rate of abandonment was presented in Chapter Six. Structures in the process of construction or maintenance reflect quick abandonment. Yet, if maintenance is completed or symbols applied on buildings (boarded windows or locked doors) return is expected. The overlap of inhabitation and scavenging reduced the potential to accurately identify these conditions of abandonment for all

structures.

As stated by the oral interviews (personal communication, Conway 1994; personal communication, Fitzgerald 1994; personal communication, Mayer 1994; personal communication, Morin 1994; personal communication, Steffan 1994), many homes were left open upon abandonment. The reason for this may have stemmed from the idea of potential reuse by other prospectors at Garnet. Vandalism and the years of environmental processes at work on structures has created an abundance of building materials, ie. lumber, around Garnet (see Figure 9) in the early 1970's. The cleaning sessions removed any evidence of construction, maintenance, or semi-erect buildings.

Using buildings as indicators for anticipated occupation duration as a variable of abandonment is a fairly new concept. As demonstrated, prospector's expectation during the later half of the 1800's was that settlements rarely lasted beyond a few years. With the anticipation that a camp would not last long, the need to invest substantial energy or money was not necessary. This is possibly seen at Garnet. Several homes reflect a low investment in their construction. The presence of barked logs, flower designs at the log ends, no foundation, small and few windows, lack of ornamental features and sod roofs alludes to anticipated short occupation. Yet as mentioned previously, it is not possible to document if these building attributes stem from low motivation or financial limitations.

The Bureau of Land Management's decision to select and preserve

Garnet as a segment from Montana's mining history greatly affected the town's archaeological record. The goal of the BLM was to reestablish the town by stabilization and restoring as many structures as possible. An element of their management was to extend the use life of buildings. Although important to preserve this segment of Montana's history, this preservation has altered the archaeological record. Much valuable information pertaining to the final abandonment of Garnet was lost.

It is my hope that this thesis demonstrates the need for detailed recording of sites. Even such seemingly mundane items like refuse on structure floors will further advance studies on abandonment behavior and human discard patterns.

As Stevenson (1982:261) states:

Even though archaeological sites may differ in content through time and space, the processes responsible for their *initial* formation should remain generally the same. While the exact nature of these processes may vary with level of technology, cultural conditioning, material availability, etc., cultural materials still predominantly are transferred from the systemic to the archaeological context by processes of discard and abandonment, regardless of what is being transferred and why.

Thus, regardless if the site is prehistoric or historic, the types and frequencies of archaeological remains should be similar. Although the conditions of abandonment, site contents or artifact concentration, may be similar between sites, the cause may be different. Future investigation needs to focus on the combination of cause and the effect. This can be seen at Garnet with the dwindling ore production and subsequent revival in the 1930's. With a greater foundation on the principles on abandonment, inquiries toward discard patterns

for socioeconomic status and gender may be addressed. It is important the any further examination of sites note distinctive discard patterns for individual sites as a basis for comparison on site formation processes.

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