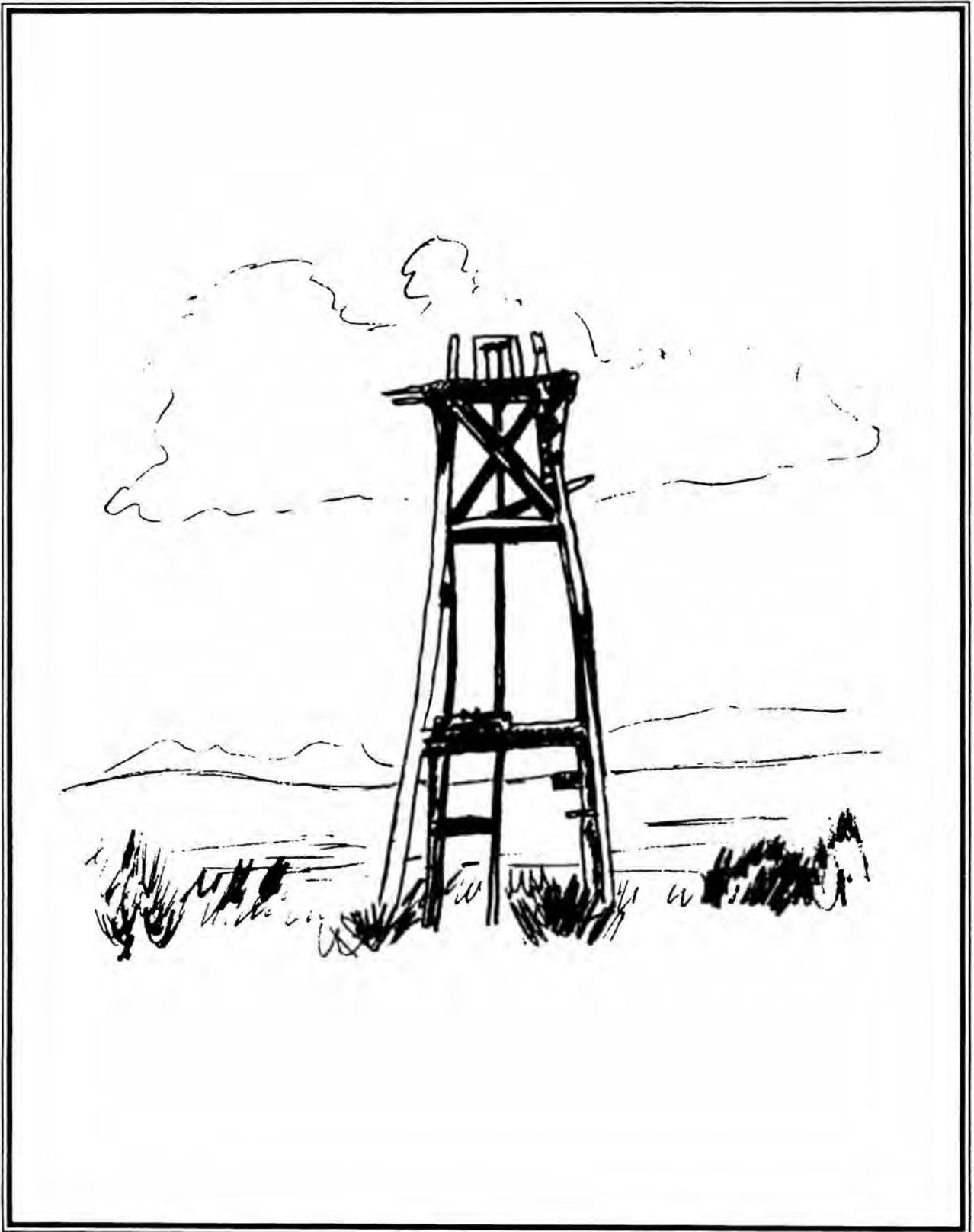


# NEVADA ARCHAEOLOGIST

VOLUME 17 1999



NEVADA ARCHAEOLOGICAL ASSOCIATION

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Cover Art: "Holly Headframe"

## EDITOR'S INTRODUCTION

Volume 17 of the *Nevada Archaeologist* contains papers resulting from the mitigation of impacts to historic sites in the Eureka Mining District of central Nevada. This mitigation project was in response to a proposal by Homestake Mining Company to develop a gold mine northwest of the town of Eureka. Several historic sites would be destroyed during the process of mining and the building of ancillary facilities to process the ore.

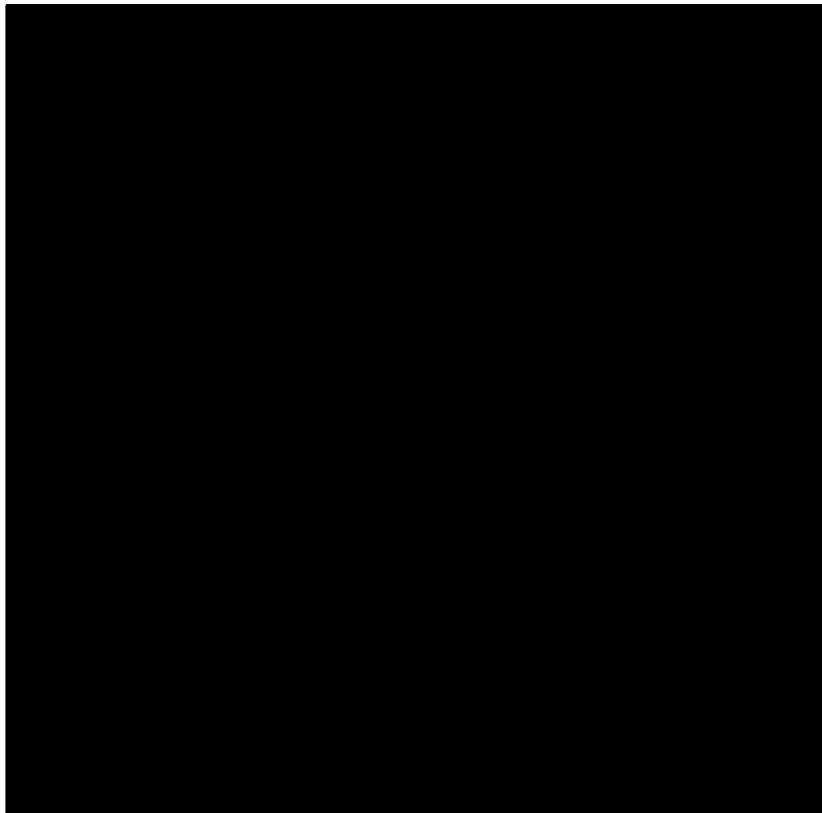
Kautz Environmental Consultants, Inc., of Reno, Nevada, was hired to do the archaeological mitigation. Field work was done during the summer of 1996. The final report on the archaeological mitigation was accepted by BLM in August of 1997.

Thirteen sites were subjected to archaeological data recovery (one was prehistoric and is not discussed in these papers). The relative locations of ten of these sites is shown on the schematic map below.

The sites studied ranged from complex industrial sites such as the Holly Shaft to Chinese hog ranching and relatively ephemeral Carbonari or charcoal burner sites. Combining the archaeological data with oral histories and archival sources yielded a much more complete picture of activities in the Eureka Mining District in both the 19<sup>th</sup> and early 20<sup>th</sup> centuries than was available prior to this project.

The authors of the papers in this volume are all employees of Kautz Environmental Consultants, Inc. of Reno, Nevada.

Roberta L. McGonagle, Ph.D.  
Cultural Heritage Specialist  
Bureau of Land Management  
Battle Mountain, Nevada



## HEADFRAMES AND HOGMEAT: EUREKA, NEVADA'S ETHNIC CHINESE COMMUNITY

Peter B. Mires

### ABSTRACT

The sizable ethnic Chinese population of Eureka, Nevada during the boom years of 1870 to 1890 can be described as both industrious and circumspect. Typical of many Chinese enclaves in the late nineteenth century American West, these Chinese contributed significantly to the tertiary (goods and services) sector of the economy, as shown by the Hogpen Canyon site on the outskirts of Eureka. Regardless of this contribution, however, the Chinese were stigmatized by society at large. However, adaptive mechanisms allowed Eureka's Chinese population to participate in the economic life of the community with minimal public visibility and a tenuous societal symbiosis was achieved through their fundamental use of space and such concepts as social distance, carrying capacity and organic solidarity (*sensu* Émile Durkheim) serve to illustrate their success.

### INTRODUCTION

The purpose of this paper is threefold. First, it describes a heretofore unknown ethnic Chinese archaeological site on the outskirts of Eureka, Nevada. Second, the interpretation of this site places considerable emphasis on local and regional context, or spheres of meaning. One important relationship is the connection between the satellite community in Hogpen Canyon and Eureka's urban Chinatown. In addition, some of the adaptive mechanisms that allowed this stigmatized population to coexist with the dominant society – both in Eureka and beyond – are addressed. Third, Eureka's Chinese community resembles attributes to be found in ethnic neighborhoods of modern American cities.

### EUREKA: THE ANATOMY OF A BOOMTOWN

The boom town of Eureka, located in central Nevada approximately 240 miles east of Reno, was the site of frenzied mining activity in the late nineteenth century and provides an interesting context in which to examine questions of ethnic contributions to Western mining. Eureka, like the state as a whole, was a melange of ethnic groups drawn to the place for one purpose, the opportunity to accumulate wealth. As the historian Wilbur Shepperson (1970:121) has noted in his work on Nevada's immigrants, "Foreigners did

most of the work in Eureka. There were the German engineers and metallurgists, the Welsh smelter and furnace builders, the Slavic miners, the French service personnel, and the Italian charcoal burners." The Chinese, it seems, were working behind the scenes in occupations other than mining (Carter 1975; Chan 1982).

Euroamerican settlement of Eureka began in 1864 with the initial discoveries of silver deposits. It took five years, however, before the appropriate smelting technology successfully dealt with the high lead content of this ore. Before long the burgeoning town had two industrial zones that flanked it like bookends; these were the Richmond and Eureka smelters, whose slag piles remain as dark sentries posted at either end of this wonderfully preserved historic mining town. By the end of 1871, surrounding hillsides bristled with headframes, smelters produced silver at an astonishing rate, and fortune-seekers from far and wide came to Eureka. As a result of this prosperity, Eureka became the state's second largest city by mid-decade.

The mining boom ended almost as quickly as it began. By 1885, most of the high-grade ore had been extracted, and by 1891, the Richmond and Eureka smelters ceased operation. Although mining has continued sporadically up to the present, the boom years of Eureka's silver production are clearly bracketed between 1870 and 1890. One consequence of this population explosion, followed by decades of

quiescence, is the rich archaeological heritage that remains in Eureka and its hinterland. That of Eureka's ethnic Chinese community seems to resemble the characteristics attributed to its members – subtle and different.

### THE HOGPEN CANYON CHINESE COMMUNITY

The Hogpen Canyon Chinese community site, situated on a gentle east-facing slope near the canyon bottom, was discovered by archaeologist Frank Johnson in 1994, and subsequently excavated by Kautz Environmental Consultants, Inc. in 1996 (Mires 1997b). Although the toponym for this canyon alludes to its use in historic animal husbandry and archival research compiled by Alvin McLane (1988:60) more than a decade ago suggested that ethnic Chinese were involved, the actual site had not been positively identified until Johnson's survey of the area for the Homestake Mining Company.

The site consists of 21 separate features within an area in excess of 14,000 m<sup>2</sup>. Seven of the features were identified as residential dugouts, and seven others as distinct artifact concentrations. Collectively, these features present the detritus of a residential community engaged in a variety of activities, including butchering. Archaeological excavation removed a total of 8.2 m<sup>3</sup> of feature fill. Most of this volume came from dugout deposits, and consisted of post-occupational sediments, which in some cases were as much as 70 cm in depth. A total of 3,727 historic artifacts was recovered as a result.

The assemblage of culturally diagnostic artifacts from the Hogpen Canyon site included opium paraphernalia, five *wen* coins, a meat cleaver, and a variety of porcelain and buffware ceramic vessels and utensils. The most abundant class of artifact indicative of Chinese occupation consisted of hundreds of flattened tin cans, which were presumably collected and creatively recycled as building siding. The associated faunal remains, analyzed by Dwight Simons (see Mires 1997b, and elsewhere in this volume), also displayed attributes that could be described as ethnic signatures. Although many of these items are difficult, if not impossible, to date with any precision, the assemblage

as a whole is consistent with a Eureka boom period occupation.

The seven dugout features from the Hogpen Canyon site were particularly interesting. Although they varied in size, their general shape and method of construction were relatively consistent. They were roughly rectangular, with a level floor and the long axis perpendicular to the hillslope. The abundance of square nails and flattened tin cans with nail holes perforating the margins were interpreted as rusted residuum of the dugouts' above-ground architecture.

Another interesting aspect of the Hogpen Canyon site is the possibility that geomancy, or *feng shui*, was used in determining the community's location on the landscape. The site is situated at the confluence of two canyons containing ephemeral drainages. This may have been considered an auspicious location because of the Chinese belief in a fundamental binary opposition in nature (Knapp 1986; Mueller 1987; Pennick 1979). In other words, places can be either good or bad. For example, a drainage confluence concentrates energy, and, as a result, is considered a salubrious and fortuitous habitation site. Tributaries, according to this principle, dissipate energy, and should be avoided. At any rate, it appears that Hogpen Canyon's constricting topography was valued for its function as a natural corral, and the placement of the actual habitation site may or may not have been ideologically motivated.

### EUREKA'S CHINATOWN

The Hogpen Canyon site, like all archaeological sites, did not exist in isolation. It was doubtless part of the larger Chinese community of Eureka. Eureka's Chinatown was confined primarily to a single block between the Sentinel Building and the Colonade Hotel and consisted of high density housing analogous to the modern urban ghetto; an 1871 *Eureka Sentinel* article referred to this crowded assemblage of clapboard as a fire hazard. Eureka's Chinatown was a mixed commercial and residential land use; several businesses, such as that owned by the Chinese physician Dr. Lynn, operated within its confines. Statewide statistics for Chinese occupations during the boom years indicate that three quarters of Eureka's estimated 500 Chinese residents worked as cooks,

launderers, and day laborers (Carter 1975). As elsewhere in the West, Eureka's Chinese population was discouraged from working in the mining industry except as gleaners on otherwise unwanted claims.

Germane to the animal husbandry concerns of the Chinese of Hogpen Canyon, the 1880 census reveals that Eureka's Chinese community contained three hog dealers, 18 butchers, and an estimated 200 cooks and domestic servants. Although history is mute with respect to Hogpen Canyon, a symbiotic social and economic relationship doubtless existed between this satellite community and Eureka's Chinatown. Reciprocal arrangements between rural hog rancher and urban butcher and cook are clearly implied.

### ADAPTIVE MECHANISMS

From a still wider contextual perspective, whether rural hog rancher or urban cook, Eureka's ethnic Chinese population had to contend with an atmosphere of racism imposed by the dominant society. Eureka's Chinese population had good reason to remain as low profile and circumspect as possible. They were aware of the growing national anti-Chinese sentiment which culminated in the Chinese Exclusion Act of 1882. Most of this racial prejudice and discrimination resulted from real or perceived labor competition (Mires 1994). By 1879, Eureka's were organizing the Workingman's Club and the Anti-Chinese Club, and the Eureka papers regularly carried articles which denigrated the Chinese in all manner of ways (*Eureka Daily Sentinel* 1878, 1879a, 1879b, 1879c; *Territorial Enterprise* 1876a, 1876b). Articles with titles such as "A Suspicious Chicken Theft," "Murder of a Celestial," "Celestial Wickedness," and "Trouble in Chinatown" were regular fare for subscribers and readers of the *Eureka Sentinel* and the *Eureka Republican* (*Eureka Daily Sentinel* 1871, 1872, 1876a, 1876b, 1876c, 1876d, 1878; *Eureka Republican* 1877). Eureka's Chinese cooks were accused of poisoning patrons and its Chinese physicians of selling liquor to the Indians; its Chinese laundries were considered unsanitary. An examination of Eureka business advertisements shows that the slogan "Only White Labor Employed" was considered a significant marketing strategy. In retrospect, Euroamerican Eureka's were probably not exceptionally rabid; they were merely aping sentiments that had attained

national popularity in the 1870s and 1880s (Barth 1964; Brown and Pannell 1985; Choy et al. 1994; Chung 1987; Hoexter 1976).

Nevertheless, Eureka's Chinese population seems to have endured by following adaptive strategies designed to minimize public visibility. The degree of their circumspection is said to have extended to their use of tunnels under Eureka's central business district for a variety of purposes, such as opium smoking or simply getting from downtown to Chinatown – a distance of one block. Before this network of tunnels and underground bunkers was closed permanently a few years ago, those bold enough to explore these catacombs found an abundance of Chinese material culture. It is also possible that Eureka's Chinese population may have practiced some form of population control by sending excess members of its community to rural locations such as Hogpen Canyon.

### CONCLUSIONS

The ethnic Chinese community that resided in and around Eureka during its boom years achieved a societal symbiosis, albeit tenuous, with the dominant Euroamerican mining culture by supplying goods and services. In this sense, they filled a labor niche conforming to the French sociologist Émile Durkheim's (1933) concept of "Organic solidarity." Their adaptive success can be attributed, in part, to a network comprised of both rural and urban communities.

Also, it may be worthwhile to suggest that Eureka's Chinatown, which includes the satellite community of Hogpen Canyon, displays important spatial attributes *vis-à-vis* urban geography (Mires 1997a). Urban sociologists and geographers who have studied patterns of land use in cities have identified certain clearly demarcated zones based on social and economic factors. The most popular model is the concentric zone model, which resembles a target and is centered on the central business district, or CBD. This model is also sometimes referred to as "rings of rising affluence." Consistently the zone adjacent the downtown, referred to as the zone of transition, is characterized by high density, low-income housing with some commercial establishments. These are frequently ethnic neighborhoods, or ghettos, and

function as both refuge and place of opportunity for disenfranchised and stigmatized populations. Thus Eureka's Chinatown shares spatial and functional attributes with other Chinatowns, or, for that matter, ethnic neighborhood in modern American cities (Anderson 1987; Barth 1964; BeDunnah 1966; Magnaghi 1981; Mazzetti 1976; Ward 1971, 1982).

A three-tiered context for the Hogpen Canyon site is proposed. First, the site itself is an interesting arrangement of residential features and associated material culture, and its location within the local topography may have cultural significance. Second, a social and economic network existed between the Hogpen Canyon site and Eureka's Chinatown. Third, Eureka's Chinese community displayed some adaptive mechanisms in terms of both behavior and use of space that conform to modern models of urban sociology.

Finally, the Hogpen Canyon Chinese site contains tangible, and perhaps symbolic, evidence of a vital component of Nevada's collective heritage. Because the written record is demonstrably one-sided in its portrayal of Eureka's Chinese community, the importance of this site as a source of information and understanding is accordingly magnified. Hopefully, the research outlined in this brief paper offers an explanatory context for the reputedly inscrutable Asian on the historic mining frontier.

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## PROXEMICS OF THE HOLLY MINING COMMUNITY

Allen Morganti

### ABSTRACT

Archaeological inventory of the Holly Shaft Mine Complex identified 114 individual features within an area exceeding 170,000 square meters. A challenge of the Ruby Hill Project was to sort detritus of industrial and residential activity according to function and temporal affiliation. Although the palimpsest nature of the site hampered field investigations, feature sampling, unit excavations, and interviews with a Holly resident succeeded in identifying use of space at the site.

### INTRODUCTION & SITE BACKGROUND

The archaeological study of spatial relations, proxemics, can be discussed in terms of artifacts relating to other artifacts, artifacts relating to features, features relating to other features, and features relating to the site or community as a whole. This paper is focused on the relationship between various features found within the Holly Shaft Mine Complex, specifically, those comprising residential components versus industrial components, a separation that is a direct result of nineteenth century industrialization. For some time archaeologists have constructed models of urban development which define residential zones, business districts, and transportation corridors based on land use and social stratification (Mires et al., 1997). The Holly Mining Community is an opportune environment in which to apply these concepts.

The Holly Mine is located approximately two miles northeast of Eureka. The complex includes 114 mapped features located in approximately 170,000 m<sup>2</sup> (Figure 1). Among the features are those resulting from industrial activities and refuse, domestic activities and refuse, non-specific and mixed use refuse, infrastructure, and a single, non-significant prehistoric lithic concentration. The bulk of mining features consists of one primary shaft, ten exploratory or secondary shafts, and 15 prospect pits. The site contains materials ranging from the 1870s to as late as the early 1940s. Primary operation of the Holly Mine began around 1908, and ended sometime in the 1930s. Because the main occupation of the site post-dates the Eureka Mining Boom, the infrastructure of the Eureka Mining District was largely in place and

transportation, communication, and electricity were all readily available.

The Holly was originally known as the Idaho, a combination of five claims to the Idaho Ledge, filed in 1869 (Mires et al. 1997). The name was changed to the Holly Mine in 1877 by W.H. Gray. The true origin of the Holly name is somewhat ambiguous. One suggestion is that it was named for the nearby Holly Ranch (McLane, 1988). However, a notice in the *Eureka Republican*, on a disputed interest in the Holly Mine, states that a Nathaniel Diamond was attempting to sell interest in the Holly, reputedly without authorization, as the claim was issued in the name of E.P. Tucker, and undersigned M.N. Holly. The Eureka County Locator Index indicates that Mr. Holly's claim to the property is accurate (Mires et al., 1997:86). Hence his name appears to have been lent to the mine.

Little is known about early years at the Holly. However, early production is reported as \$41,000.00, primarily lead, along with gold and silver. In 1907 it was bought by the Nevada Development and Mining Company. The property was renovated, seven extensions added in 1908 and production begun in 1915. In 1917 it was bought by a San Francisco firm and renamed the Eureka Holly Mining Company. The Holly became a self-sufficient operation, and by 1921 had its own ore processing facilities. Recorded production of the mine between 1915 and 1927 was \$1,156,783.00 in lead, silver, gold, and copper. During this time, an attempt was made to launch the Holly Extension Mine, believed to have been a failed venture, as no production yields were ever recorded

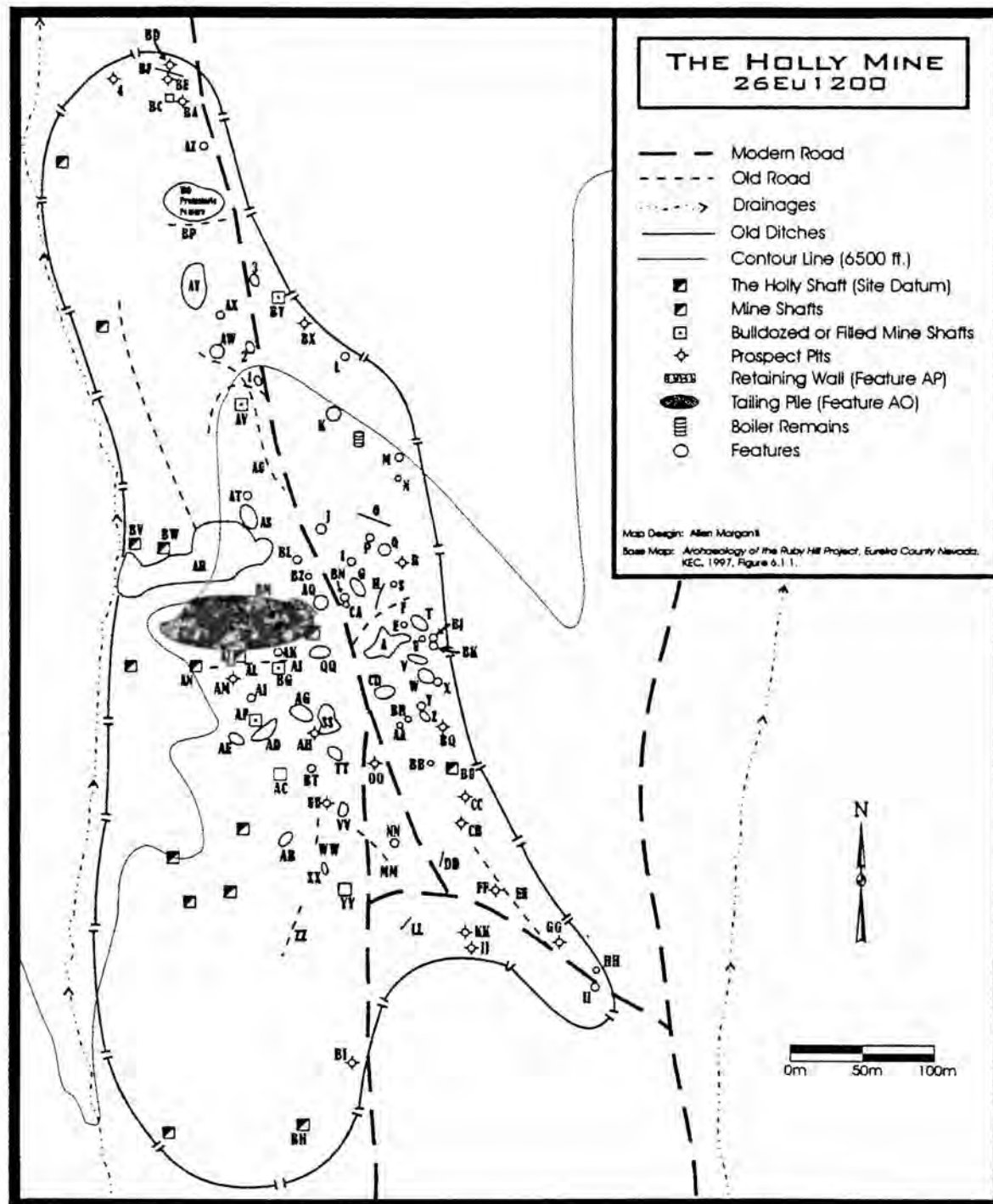


Figure 1. The Holly Mine, 26Eu1200, With Locations of Features.

Though the site is relatively small in size, it exhibited social elements of larger mining communities. Evidence suggesting paternal control of mine agents over workers and use of limited space is present at the Holly Mine (Mires, et al. 1997).

## FEATURE IDENTIFICATION

In order to examine site proxemics of the Holly, the complex configuration of features was analyzed for time and function through unit excavation, feature sampling, detailed laboratory analysis, and an interview with a former Holly resident, Mr. Donald Morrison. A total of 45 excavation units were placed in 21 features; these included three privy pits and a number of structure pads.

Classification of trash scatters was accomplished by using "Hula Hoop" inventories. A Hula Hoop, a circular plastic tube measuring 89 cm (35" ) in diameter, total area, 6,221 square cm, was tossed randomly into a trash scatter and all artifacts within the hoop inventoried down to ground surface. This provided an adequate sample to classify most moderate sized trash scatters (Mires et. al, 1997).

Because of the disturbed nature of the site, Mr. Morrison's oral history was invaluable in determining function of many features. Mr. Morrison lived at the Holly for approximately a decade in the 1920s and 1930s. His father was the hoist engineer and he spent a good portion of his childhood living at the site. The interview was conducted by Dr. Peter Mires, and included a visit to the site to elicit responses.

## FUNCTIONAL DISTRIBUTION OF FEATURES

Features were grouped into eight functional categories for purposes of analysis (Figure 2). The first category is prehistoric activity, not relevant to this paper, but serving as a marker for the prehistoric component. The second and third categories, industrial activity and domestic activity, separate the main occupational areas of the site. Features classified as belonging to the industrial category are associated with mining operations. Best examples of these are the headframe and main shaft (Feature PP), hoist house (Feature QQ), mill works (Feature AR), prospect pits, and various secondary and exploratory shafts (Features AN, BV,

BW, BU, and BH). Domestic features are those considered to be residential living spaces and include the bunk house (Feature CD), hoist engineer's house (Feature SS), various tent pads (Features XX, AC, VV, etc.), foreman's shack (Feature W), barn (Feature A), and privies (Features BK and U).

Trash scatters are divided into four types, industrial, domestic, non-specific, and mixed. Industrial and domestic scatters were delineated according to which functional grouping the predominant refuse in a scatter belonged. Non-specific scatters contained refuse identified as neither industrial nor domestic (for example, a rubble pile composed of milled lumber and nails). Mixed scatters were those containing approximately equal amounts of refuse resulting from both industrial and domestic behavior.

The final category, infrastructure, consists of all features that were part of the network supporting both the mining and residential community. This category contains features such as roads, ditches, and retaining walls.

In addition to functional groupings, features also were classified by age (Figure 2). Datable features, those with temporally diagnostic artifacts, can be assigned to chronological periods. The earliest, termed the "Exploratory Period," dates from 1870 to 1900; features of this period are primarily prospect pits and temporary tent flats. The second period, the "Main Occupation," lasts from 1908 to the mid-1930s; features assigned to this time include larger mining structures and the more permanent housing. A third period, "the Post Boom," dates from the mid-1930's to just after World War II; many of its industrial and domestic features mirror those from the Main Occupation, but are products of a greatly reduced work force.

Prospecting pits, particularly in the eastern portion of the site, intermix with domestic refuse, which both precede and post-date the main occupation. While the pits themselves are largely undatable, tent flats in association possess artifacts dating to the late nineteenth century. Because a large portion of time was spent prospecting, early prospecting parties had less need for separating work and leisure activities.

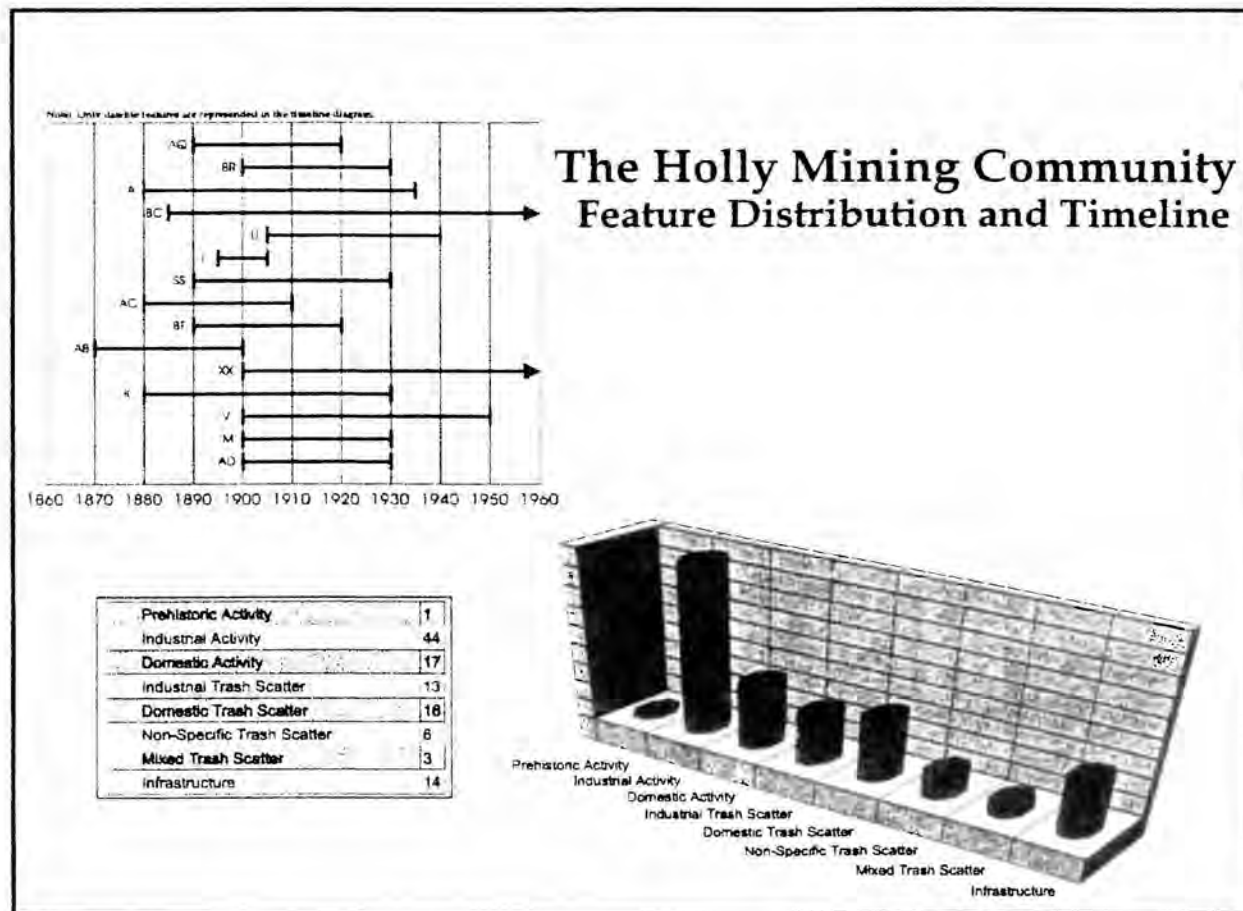


Figure 2. Holly Mine Feature Types and Timelines.

Bulldozed or mechanically excavated pits, indicate re-entry into the area after abandonment. These later explorations often exhibit a disregard for previous living areas; for example, Feature BK, located just east of the main road, towards the northern part of the residential area. This feature is a structural foundation lying adjacent to what may be a prospecting trench. Our informant, Mr. Morrison, indicated that the space was vacant during his stay at the Holly. Feature I, situated near the same location, dates to the turn of the century. As with any mining community, the Holly was an ever changing environment.

### INDUSTRIAL AREAS

(Figure 3)

Within the main industrial area of the site, function largely dictated placement of structures. The powder magazine and the blacksmith shop, for example, are conveniently located next to the headframe, along with the enormous tailing pile extending to the west. The mill works, built with a tiered construction to facilitate gravity-fed stamping technology, are located adjacent to the main shaft to minimize ore transport. (Mires et al. 1997)

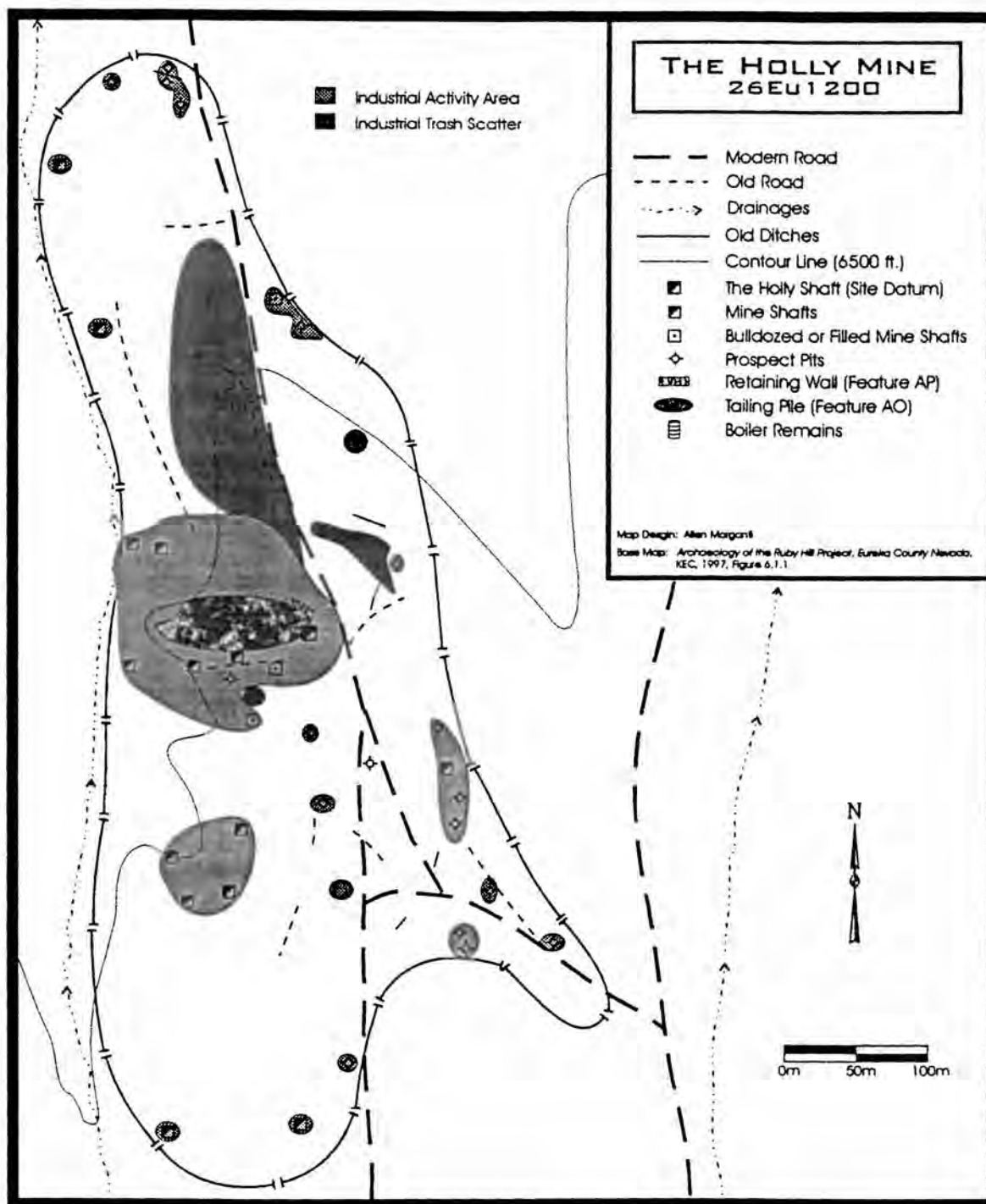


Figure 3. Industrial Areas at the Holly Mine.

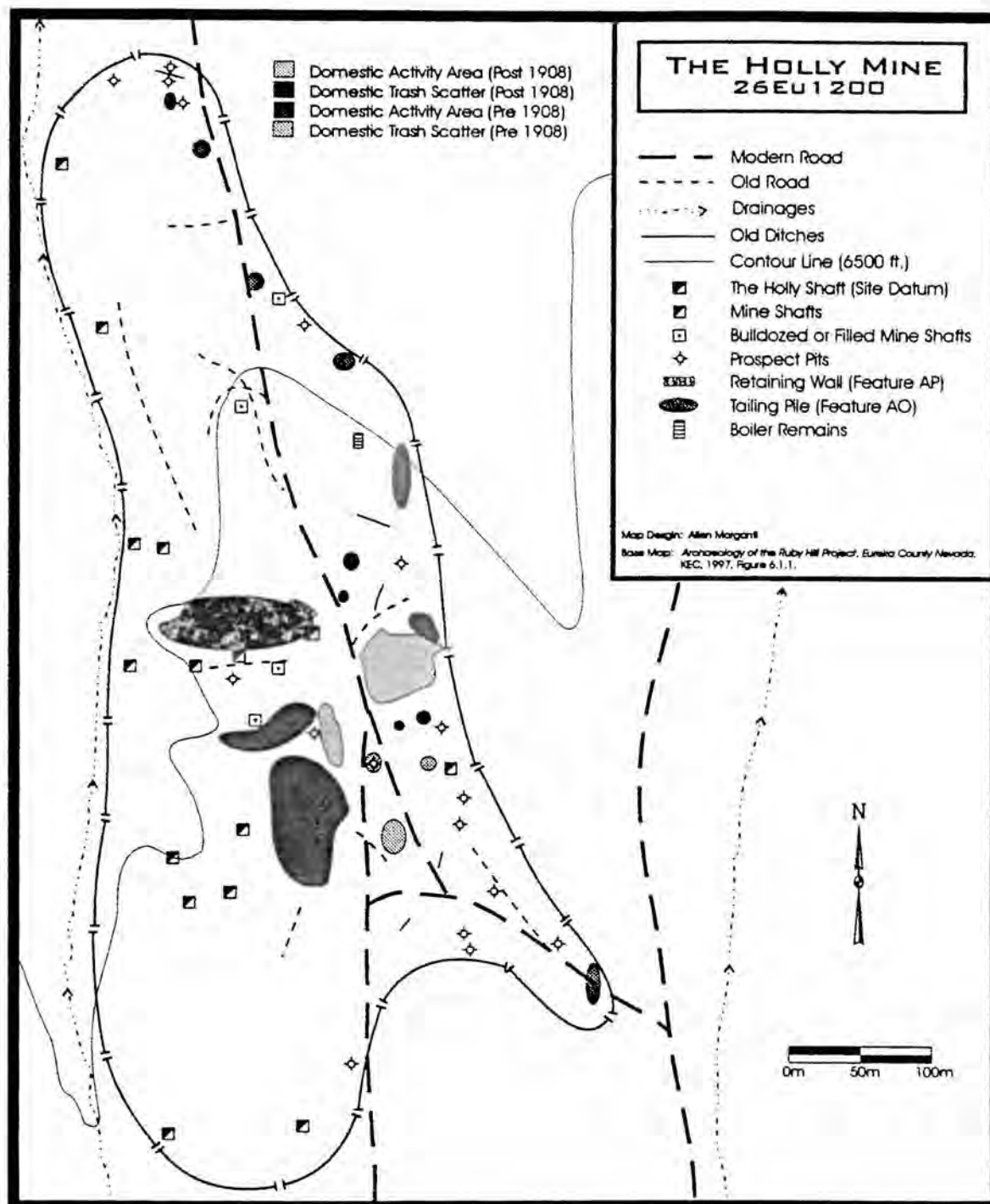


Figure 4. Domestic Features at the Holly Mine.



Industrial refuse was primarily dumped north of the shaft. A secondary industrial deposition occurs north of the residential area on the east side of the road and may be related to the assaying station which is near that location.

## DOMESTIC AREAS

(Figure 4)

Domestic areas are primarily located east and south of the main industrial area, yet are still centrally located within the mining complex. Based on artifact analysis, the southern residential area dates from the Exploratory Period, ca. 1870-1900. Most features in this area are small temporary tent flats with associated artifacts. However, the northernmost structure in this group, Feature SS, contains artifacts dating to the main occupation period. Feature SS has been identified as the boyhood home of our informant, Mr. Morrison. Feature TT is located directly south of Feature SS, and is the only standing structure besides the headframe. Originally recorded as a carbide shack, Mr. Morrison said that his father used it as a garage.

Most housing during the Main Occupation was located east of the main industrial hub. The bunkhouse, cook's quarters, and foreman's shack are situated in this area. Mr. Morrison said there was a row of four structures running north to south; they included a barn (Feature A), an office, a mess, and a bunkhouse (Feature CD).

Not surprisingly, the largest can dumps are associated with the bunkhouse and mess. Cans were deposited behind these structures near the privies. However, other structures have associated trash dumps and several are piles of discarded building material. These dumps indicate an inclination to create a semi-clean living area, even if people didn't travel far to dispose of refuse.

The presence of women and children is represented in the dump deposits. Evidence of children is especially prevalent in deposits associated with the Main Occupation. This suggests that during its peak period of productivity and occupancy the mine was in a state of stability and progress and functioned as a small community. Based on location and volume of toys and feminine products, more than one woman resided near the bunkhouse. Once again our informant confirmed

what was present in the archaeological record; apparently the cook and her daughter lived in that area.

Status differentiation was maintained to some degree as well. Mr. Morrison's family lived separate from the other workers, and he indicated that his family frowned upon any social interaction with the people living on the east side of the road, considered to be a lower social class. His father was able to display his status by supporting his entire family on site. Domestic trash deposits from the west side of the road do indicate a higher level of wealth, containing finer table wares more suitable for family meals as opposed to thick plain whiteware in trash deposits on the east side of the road.

## CONCLUSION

Through archaeological research and oral history a window has been opened to life in mining town of the western frontier. Though the Holly Mine is a relatively small complex, it contains some of the social markers, such as separation of work/home life and the division of social classes, exhibited by larger settlements. The main industrial and living areas are centrally located on the site, but a division exists between them. This demonstrates the trend of nineteenth and twentieth century industrialization to separate domestic and industrial activities, as well as indicating that even in small communities social stratification existed.

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## RICHES OF RUBY HILL: AN EXAMINATION OF A MINING DISTRICT'S MATERIAL CULTURE

Monique E. Kimball

### ABSTRACT

Archaeological investigations at Ruby Hill recovered more than twenty-five thousand historic artifacts. Most were associated with mining sites, such as the Holly and Williamsburg mines. The richness of this material and its implications for social interpretations both complements and contributes to archival and oral history information. As a result, we have a more balanced and complete view of life on the Nevada mining frontier.

During the three phases of the Ruby Hill Project from 1994-1996, over 25,000 historic artifacts were recovered through excavation and surface collection. Most of these came from the Holly Shaft site (26Eu1200), with a large number also from Hogpen Canyon sites (primarily the Chinese site--26Eu2392), as well as from the Williamsburg (25Eu2364) and Bullwhacker (23Eu1197) mines (Table 1). Using a classification system based on function, artifacts were categorized as *Kitchen*, *Furnishings*, *Architecture*, *Clothing*, *Personal*, *Activity*, and *Unknown*. *Architecture* dominated the identifiable artifact groups, followed by *Kitchen*, *Activity*, *Personal*, *Furnishings*, and *Clothing*. Because of the variety of artifacts from each of the sites, this paper is focused mainly on *Clothing* and *Personal* items, although one artifact each from the *Kitchen* and *Activity* groups also is included. Items in the *Clothing* group discussed in this paper are from the Clothes, Accessories, and Sewing and Mending classes. Classes represented in the *Personal* group are Health and Hygiene, Toys, Indulgences, Jewelry, Music, and Games and Gaming.

Artifacts are discussed under three sections based on gender and age, e.g., Male-Related, Female-Related, and Child-Related. Within these sections, artifacts are categorized by group and class at each site, beginning with the Holly. Where information was available, artifact discussion includes dates, uses, and manufacturers.

Before examining the artifacts it is important to discuss questions that directed analyses. Surveys of the Ruby Hill area produced several research issues, including transportation and communication, mining and milling

technologies, and age and gender. In particular, efforts were directed toward determining presence of age and gender specific data in both archival records and archaeological remains. In addition, the question was posed: Would the satellite communities of Ruby Hill and Hogpen Canyon be reflective of a social structure similar to that found in the larger community of Eureka?

Presence of children is evident at several sites, especially the Holly. According to Mr. Donald Morrison, his family including himself, his father, who worked as a hoist engineer, his mother, two brothers, and four sisters, lived at the Holly from the mid-1920s to the mid-1930s. Although no ages were provided, the company cook and her daughter also lived at the Holly during this time. Another family apparently lived at the Williamsburg, suggested by children's toys and remains of a well-built structure. Other sites, especially those in Hogpen Canyon, did not contain as many artifacts, suggesting that these sites were more temporary in nature. In all instances, it appears that miners and others brought their families, or at least their children, with them to their place of employment.

Gender is not as easily discernible. It is difficult to determine female-related artifacts because many items usually associated with women have been used by men. Corset stays and garter clasps have generally been associated with women; however, men also wore these items. Food related artifacts (cookware, dishware, preparation utensils) were used by men as well as women. Additionally, men may have kept feminine items as reminders of loved ones.

Table 1. Artifact Distribution by Function Group and Site

SITE		FUNCTION GROUP							
		Kitchen	Furnishings	Architecture	Clothing	Personal	Activity	Unknown	Total
26Eu1200 (Holly)		1762	195	3754	127	260	1093	4280	11471
26Eu1197 (Bullwhacker)		169	37	68	31	31	119	134	589
Hogpen Canyon	26Eu2380	50	0	0	7	8	2	0	67
	26Eu2383	42	2	43	4	19	12	19	141
	26Eu2389	134	1	21	114	740	23	242	1275
	26Eu2392	585	14	1524	112	181	132	1179	3727
	26Eu2395	47	0	23	13	24	2	3	112
	26Eu2377	17	0	0	3	0	0	1	21
26Eu2364 (Williamsburg)		216	246	340	8	31	34	22	897
Total Artifacts		3022	495	5773	419	1294	1417	5880	18300

How does data generated by these studies correlate with what we know about social structure within late 19th and early 20th Century mining communities? First, we must establish what is meant by "community." Although settlements at the Holly Mine, Williamsburg Mine and Hogpen Canyon would not be considered communities in the explicit sense of the term, they can be viewed as "People with common interests living in a particular area" (Mires 1997:341). Consequently, their social structures are expected to be reflective of the larger community with its dictates of acceptable behavior and expectations. This appears at the Holly with the delineation of socially acceptable playmates for Mr. Morrison and his siblings. Other people living at the site at the same time the Morrisons did included the mine foreman, Mr. Jepson, and laborers who lived in the bunkhouse across the road from the Morrison house, as well as the cook and her daughter. Mr. Morrison indicated that he spent little time on the east side of the road because his family deemed its occupants socially unacceptable.

Indicators of the Morrison family's place in this microcosm are present in the artifacts which include toys, decorated ceramics, and elaborate furnishings. Class standing is indicated by presence of these and other items (liquor and patent medicine bottles)

because they fit into an accepted world view of behavior for people with specific social and economic backgrounds.

One household at the Williamsburg also fits into a higher socio-economic group than that of others residing there because of the presence of toys, decorated ceramics, luxury items, and liquor and patent medicine bottles (Mires 1997:347-357). For people living in Hogpen Canyon, the paucity of artifacts and temporary nature of the encampments of all but the Chinese site suggests a working class socio-economic background. The Chinese were not a part of this socio-economic framework, a situation generally not addressed in the literature of frontier mining communities.

An important point to be made regarding the following discussion of artifacts involves time frames. The items from the Chinese site in Hogpen Canyon date from ca. 1871 to the 1880s. Many of the Holly artifacts, however, date from the 1910s to the 1930s. In this study, time is presented only as a means of showing period of manufacture and subsequent use.

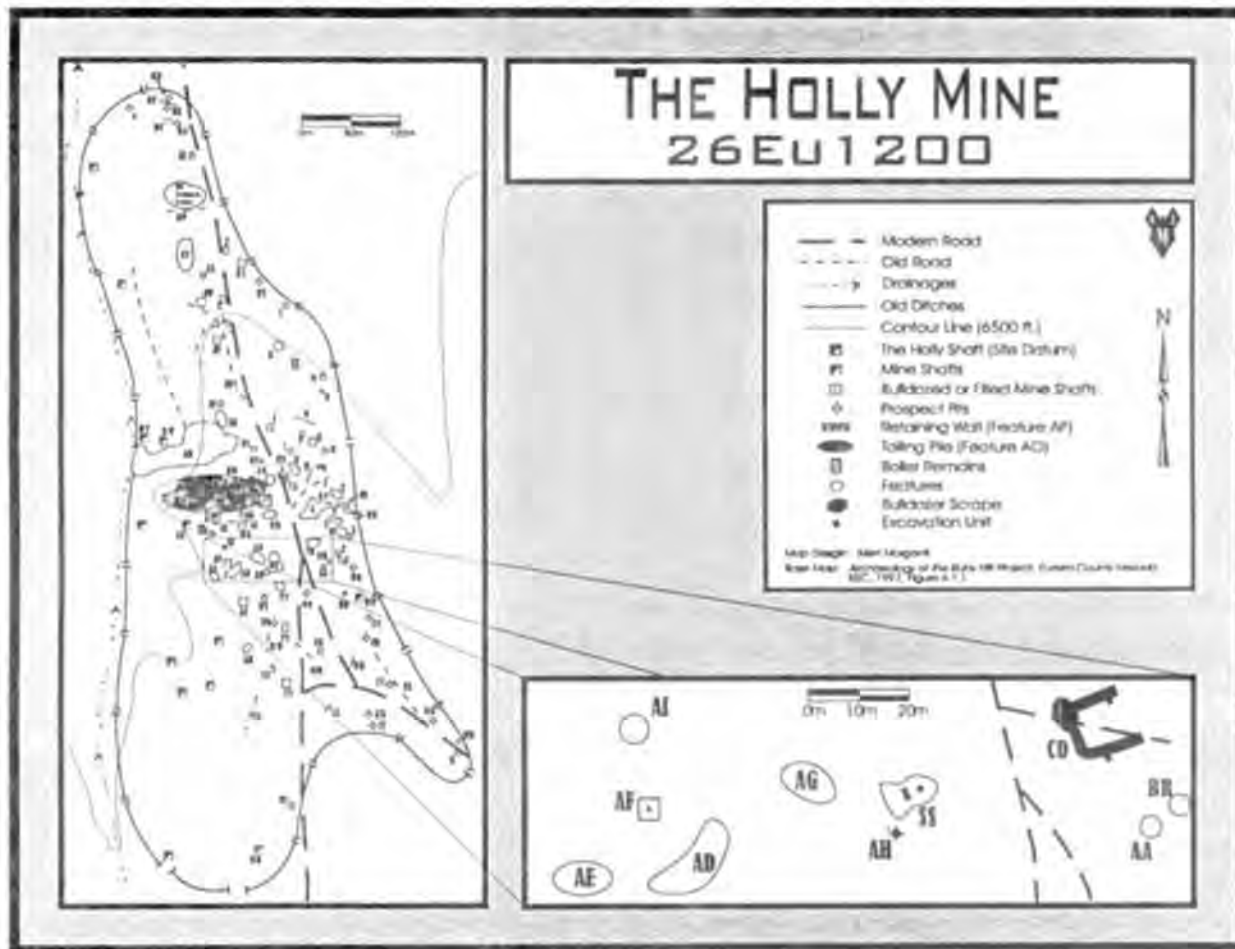


Figure 1. Map of the Holly Shaft Site.

#### Male-Related Artifacts

In the interview with Mr. Morrison, it was learned that the family residence was located southwest of the Holly headframe (Feature SS, Figure 1). Associated features (AD, AE, and AG) include trash scatters and a privy. Excavation of the privy produced several items, including a revolver (*Activity* group, Firearms and Ammunition class) with a bullet still in a chamber. The revolver is badly decomposed and tentatively has been identified as a .44 caliber. According to Mr. Morrison, his mother threw the revolver into the privy to prevent any possible misadventure after finding the children playing with it.

*Personal* group artifacts recovered from the Holly include items from the Indulgences, Games and

Gaming, Health and Hygiene, and Music classes. Two tobacco tins represent the Indulgences class. The first is a telescoping upright pocket tobacco tin, which probably contained Lucky Strike Half and Half tobacco. This tin was patented in 1930, and in use until metals (Rock 1989:152). The second tobacco tin is a flat pocket tobacco tin that contained Old English pipe tobacco (Figure 2). These types of cans were used between 1892 and the 1920s (Rock 1989:148). Both products were sold by the American Tobacco Co.

Other Ruby Hill artifacts classified as Indulgences are three pipes, including one carved from wood (Figure 3a) from the Holly. A clay pipe, embossed on the bowl with the letters "TD," came from the Cyanide Mine (26Eu1198). Its manufacturer is unknown, but the pipe style is similar to one made from 1820 to 1860 (Noël

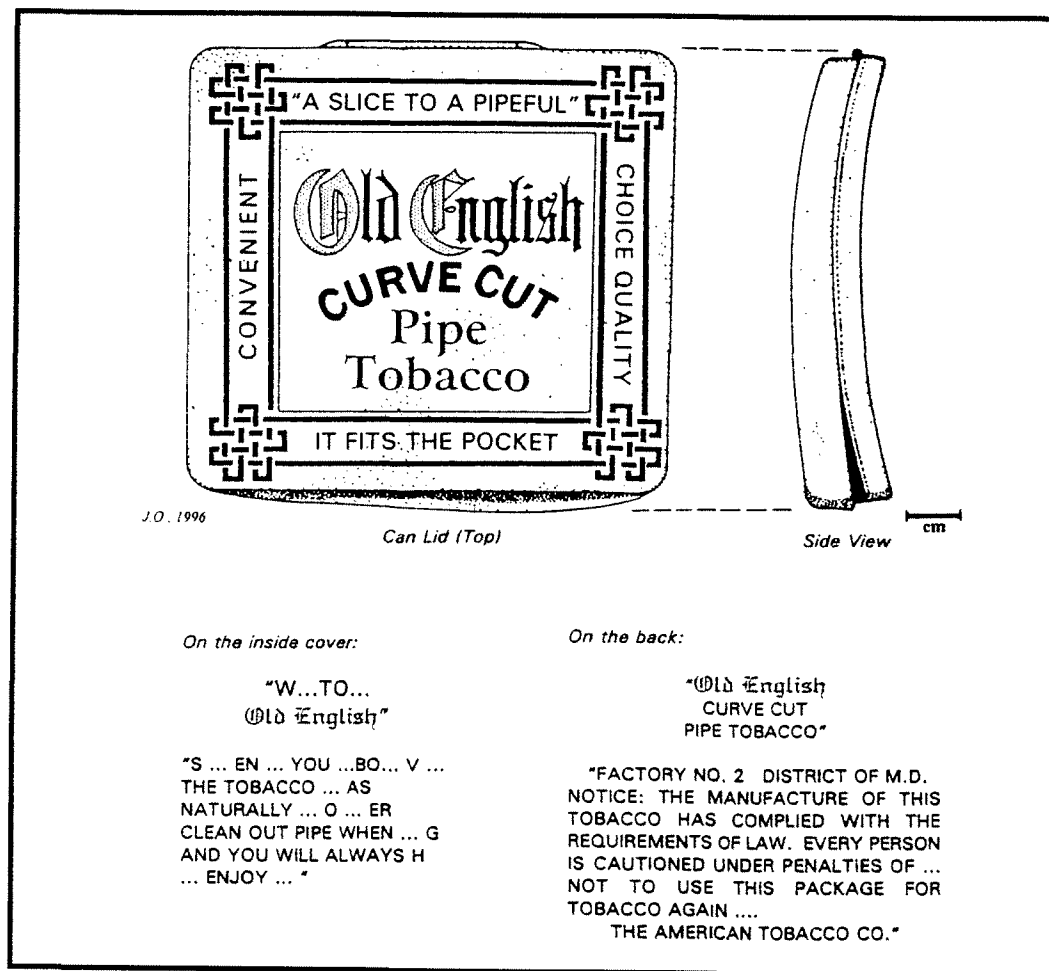


Figure 2. Flat Pocket Tobacco Tin - Two Views and Interior Information.

Hume 1980:303). The third pipe comes from the Chinese site in Hogpen Canyon. It is made of an early synthetic, possibly hard rubber, and metal. An ornate design of a repeating relief pattern is on the metal (Figure 3).

Poker chips represent the Games and Gaming class. Two shown here (Figure 4) are made from composition material. The one on the left is blue with an etched design of a stag's head placed on either side. The other is tan and cream colored and has plastic decals on both sides decorated with a fleur-de-lys.

Two J.B. Williams Co. containers (Figure 5), which represent the Health and Hygiene class, came from the Morrison residence. The item on the left is a shaving stick holder; embossed on the base are three patent dates from 1911 to 1918 (Mires 1997:154). The bottle

on the right is not like the one depicted in Fike (1987:82-83, 186), but it most likely contained brilliantine, a hair product sold by J.B. Williams Co. Another Health and Hygiene item used by a man was a razor handle. This was found in Feature BR, a burned refuse deposit located across the road from the Morrison residence. Its proximity to Feature AA, the bunkhouse, suggests an association.

The sole musical instrument recovered by the Ruby Hill project was part of a harmonica found at the Williamsburg Mine. It is part of an M. Hohner Echo model harmonica made in Germany (Figure 6). The harmonica won awards at Stuttgart in 1881, and at a centennial exposition in Philadelphia. There is no information regarding "G.R. Bronze," which is embossed along the edge of the fragment (Hull-Walski and Ayres 1989:150).

Among the *Clothing* artifacts are buttons, rivets, suspender clasps, garter clasps, a collar stud, and a belt buckle. Those definitively male-oriented include metal buttons, rivets, a garter clasp, and the belt buckle. One of the metal buttons, the rivets, the collar stud, a garter clasp, and the belt buckle came from the Holly. The metal button, embossed with CROWN OVERALL, came from a pair of work pants made between 1900 and 1908 (Hughes and Lester 1993:685). The rivets, pocket reinforcers patented in 1873 by Strauss and Jacob Davis of Reno, came from denim work pants

made by Levi Strauss & Co. (Figure 7.a). The garter clasp (Figure 7.b) was made for the Paris Garter Company, possibly by the A. Stein & Company (U.S. Patent Office 1914:202(2)503), and used in a half hose supporter for men (Sears, Roebuck & Co. 1902:970). The belt buckle has a patent date of 1855 (Mires 1997:153). This type of buckle appears to have been placed on the back of pants for tightening the waist rather than on a leather or cloth belt (Miller n.d.:4-5, 17).

Two other metal buttons came from the Ruby Hill area. The first is a brass military button embossed with an eagle on front and a back mark of "SCOVILLS & CO · EXTRA". It is possibly a General Service design used from 1854 to 1902 (Hughes and Lester 1993:715-16). The second button is a decorated rivet type trousers button. Two suspender clasps came from the Ruby Hill area as well. One of the clasps has a unique Art Nouveau design comprised of two long-tailed birds on a fountain with the initials "CG" on the front; "CH. GUYOT" is embossed on the back.

Other *Clothing* artifacts consist of buttons of diverse materials and various types of garters. The buttons were used on clothing for men, women, or children. The garters cannot be categorized as gender specific without additional research of manufacturers' names and designs. Two of the garters are similar in shape; one is illustrated in Figure 7.c. The other had MADE IN U.S.A., VELVET GRIP, and PAT. / 9 1 14 incised on it; it was patented in 1914 by Robert Gorton (U.S. Patent Office 1914:206(1)254). (Figure 7.d) The shape of both is more indicative of women's garters, but may have been used by men. Two other garter clasps were shaped differently; these are probably hook clasps to which clasps similar to the above were attached.

Of the many buttons recovered from the Holly, only one is of special interest -- a wooden four-hole sew-through type. Its size suggests various types of clothing including men's trousers, jacket, or vest, or ladies' jacket or skirt. Another interesting button from elsewhere in the project area is a brown rubber button with a single hole, flat back, and slightly domed front. Legible letters on the dome side read: "... R · CO/GOOD...1861 [or 1851]", possibly for "Novelty Rubber Co. Goodyear (or Goodyear's) PT (Patent) 1851" (Hughes and Lester 1993:48, 53; Osborne 1993:154)

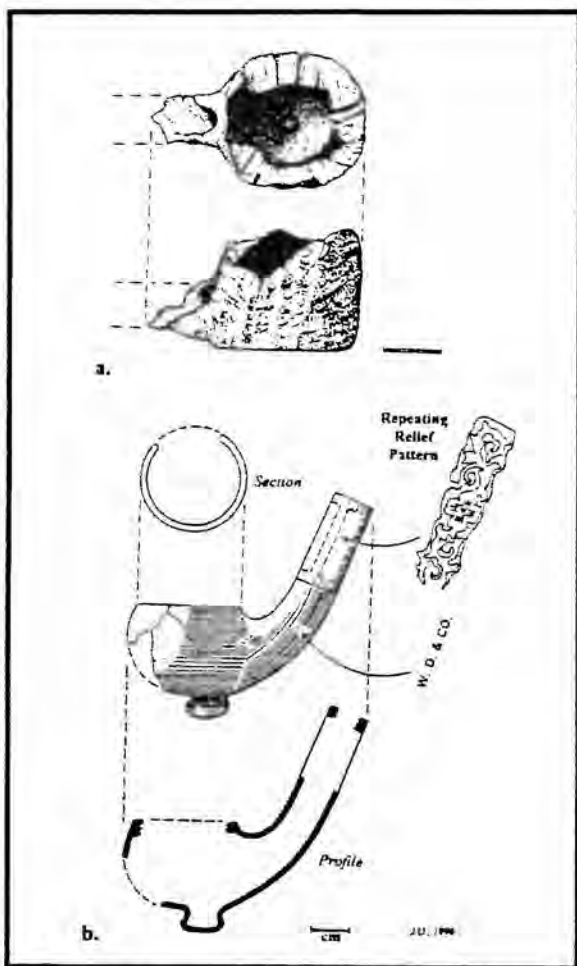


Figure 3. Smoking Pipes; a. Pipe Bowl (Wood); b. Metal and Plastic Pipe Details.

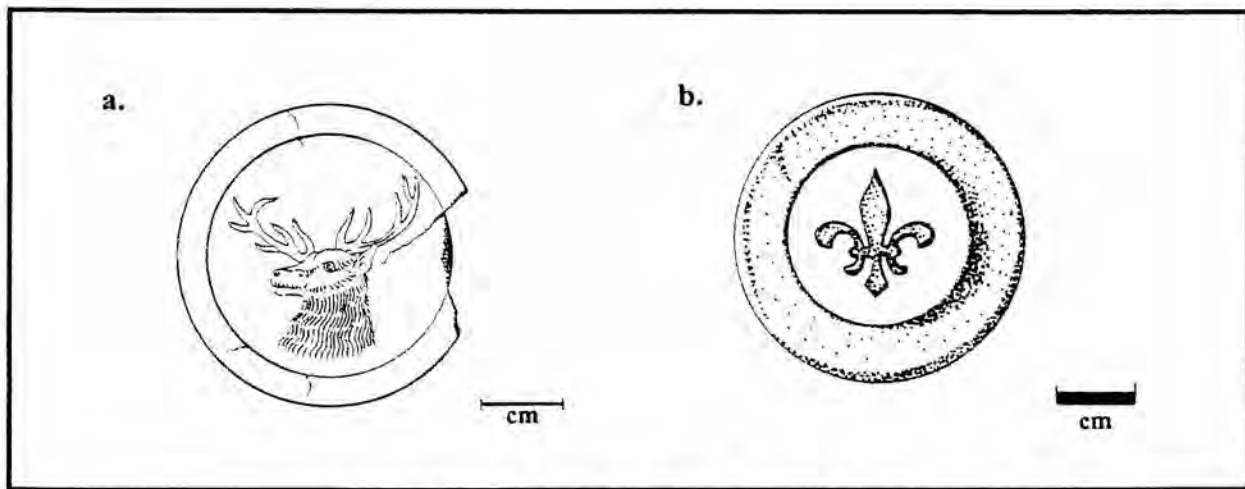


Figure 4. Poker Chips: a. Blue; b. Tan and Cream.

Beads and a stickpin, classified as Jewelry in the *Personal* group, are other artifacts that cannot be placed specifically by gender. Three of the glass beads and the stickpin came from the Holly. The stickpin has a textured design of raised leaves and branches with lines in the background (Figure 7.e.). Stickpins were worn by both men and women. The beads may have been used on clothing, or in a necklace or bracelet.

The first, from the Morrison residence, is a red hexagonal bicone (Figure 7.f) that may have come from a bracelet. A green cylindrical shaped bead came from one of the refuse features associated with the Morrison residence. The third bead is a blue teardrop (Figure 7.g) found at the mine bunkhouse across the road from the Holly headframe.

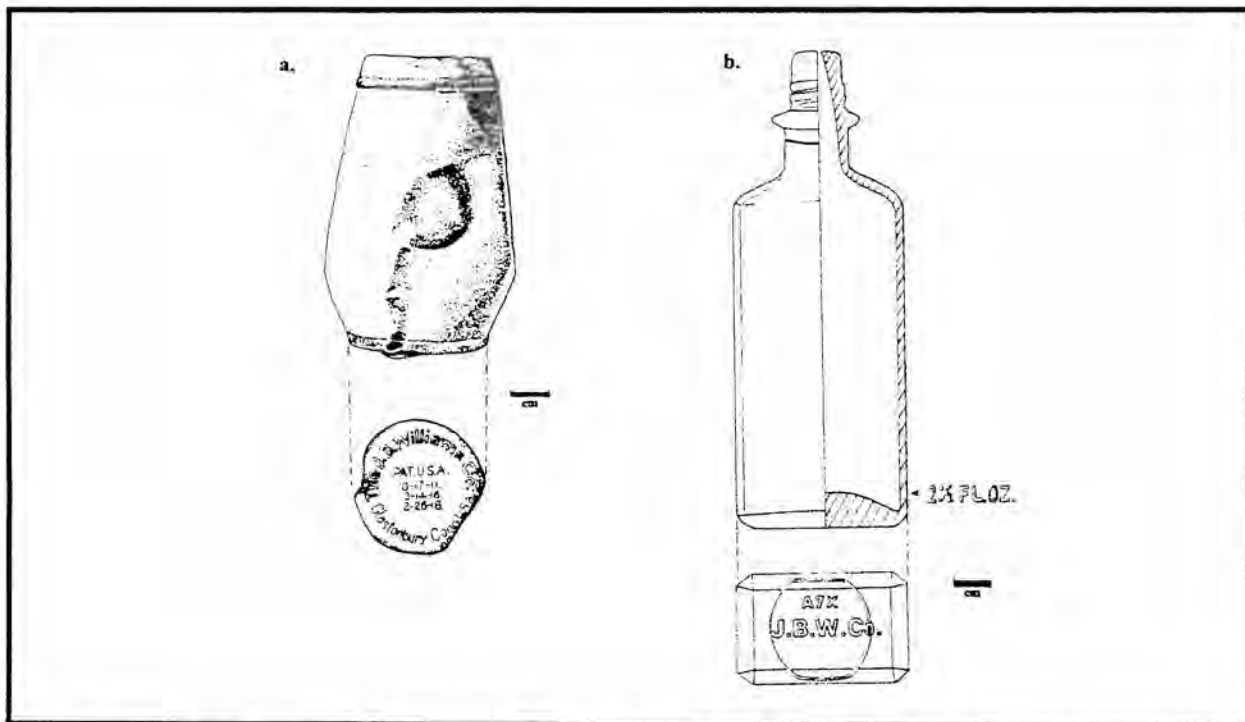


Figure 5. J. B. Williams Containers: a. Shaving Stick Tin; b. Hair Product - Possibly Brilliantine.



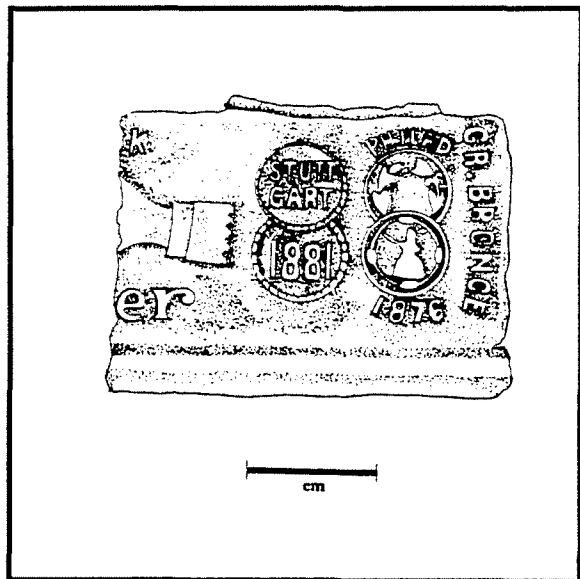


Figure 6. Harmonica Housing/Casing Fragment with Partial Mark.

Most of the beads were recovered from sites in Hogpen Canyon. One site (26EU2389) had 663 seed beads of turquoise, white, teal, and green. These seed beads are possible African trade beads made of either Venetian or Czechoslovakian glass. They may be associated with Native Americans, although the Chinese were known to use glass beads "in necklaces, pins and fringed headbands" (Noah 1987:397).

Lest it be thought no one wore corsets in Eureka and Ruby Hill, Figure 8 illustrates three closure stays found in Hogpen Canyon sites (26EU2383 and 26EU2389) and at the Williamsburg (26EU2364). Each has a manufacturer's mark, but no information has been found on these companies as yet. Corset stays also were found at the Holly. Most associate corset stays with women; however, an 1899 English advertisement (Kunzle 1982:104) (Figure 9) tells a different story. Although the gentlemen appear to be concerned with their appearance and the desire for a "wasp waist," it is possible that miners wore corsets for back support, much as the elasticized supports worn today by both men and women.

Other interesting buttons are from sites in Hogpen Canyon. Those from the Chinese site include a grey mother-of-pearl whistle button, a Chinese plain brass button worn on regular clothing by both men and women (Noah 1987:400), and a fabric covered button with a shank. A whistle button is a two-piece button with two holes in the bottom and one on the top

designed to protect the thread (C. Lynn Rogers, personal communication 1996). Another button is made of violet-colored composition material; it is a four-hole sew-through type worn on a shirt, vest, skirt, or jacket.

### Female-Related Artifacts

Artifacts most likely associated with women, including those previously noted, are few. From the Morrison residence, is part of a Washburn Co. Turbine eggbeater, made between 1912 and ca. 1927 (Thornton 1994:135-370). This is a Preparation item in the *Kitchen* group. From the same feature is a perfume bottle, representing Health and Hygiene, with contents by "BABBITT" (Figure 10). A decorated brass and ferrous purse clasp and frame, from the *Personal* group, was found elsewhere at the Holly (Figure 11). A second perfume bottle, from one of the Hogpen Canyon sites (25EU2389), has no embossment but is unique because of faceted shoulders. A final female-related item is a pair of fabric scissors for a right-handed individual from the Ruby Hill area.

### Child-Related Artifacts

Children's toys were found in various parts of the project. With the Morrison family living at the Holly, more items were recovered there. They provide an idea of the variety of playthings available to children during the first half of this century. Most of the identification of these toys was done by Jane Eva Baxter, whose primary source of comparative date is the collections at the Margaret Woodbury Strong Museum in Rochester, New York.

Toys collected from artifact scatters located near the Morrison residence include a wheel, part of a motion toy, a ceramic tea set, ceramic doll sherds, a watercolor tin, a possible Tinker Toy piece, and a cast iron tractor (Figure 12.a.). The wheel could be from a number of vehicles, including a wagon or a cannon. The motion toy is a two-part tab sealed toy sailor, similar to pull toys, and probably dates from the 1920s to the 1950s.

Among the tea set sherds are pieces of porcelain and white improved earthenware cups, plates, and saucers. One tea cup has a relief mold snowman design with painted black highlights. A cup and saucer have a distinctive colored glaze that is called tan lustre.



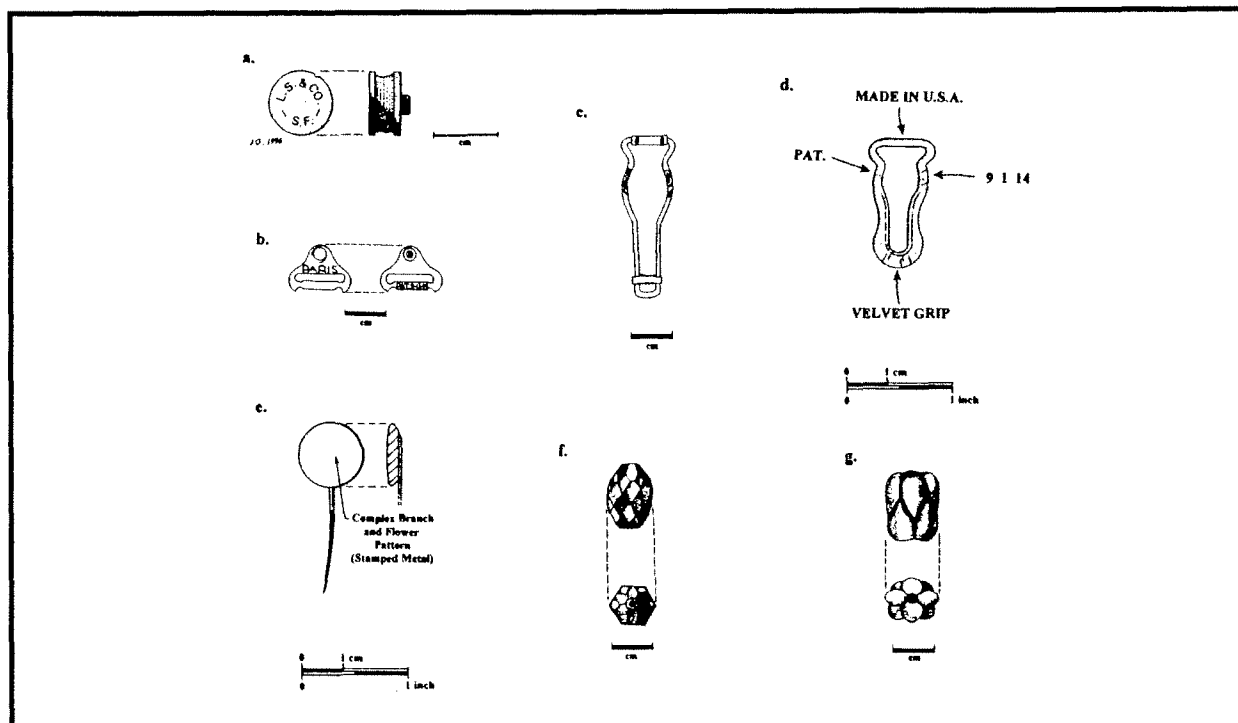


Figure 7. Clothing Related Items: a. Pocket Reinforcing Rivet; b. Men's Stocking Support Clasp; c. Garter Clasp; d. Garter Clasp with Mark; e. Stickpin; f. Red Glass Bead; g. Blue Glass Bead.

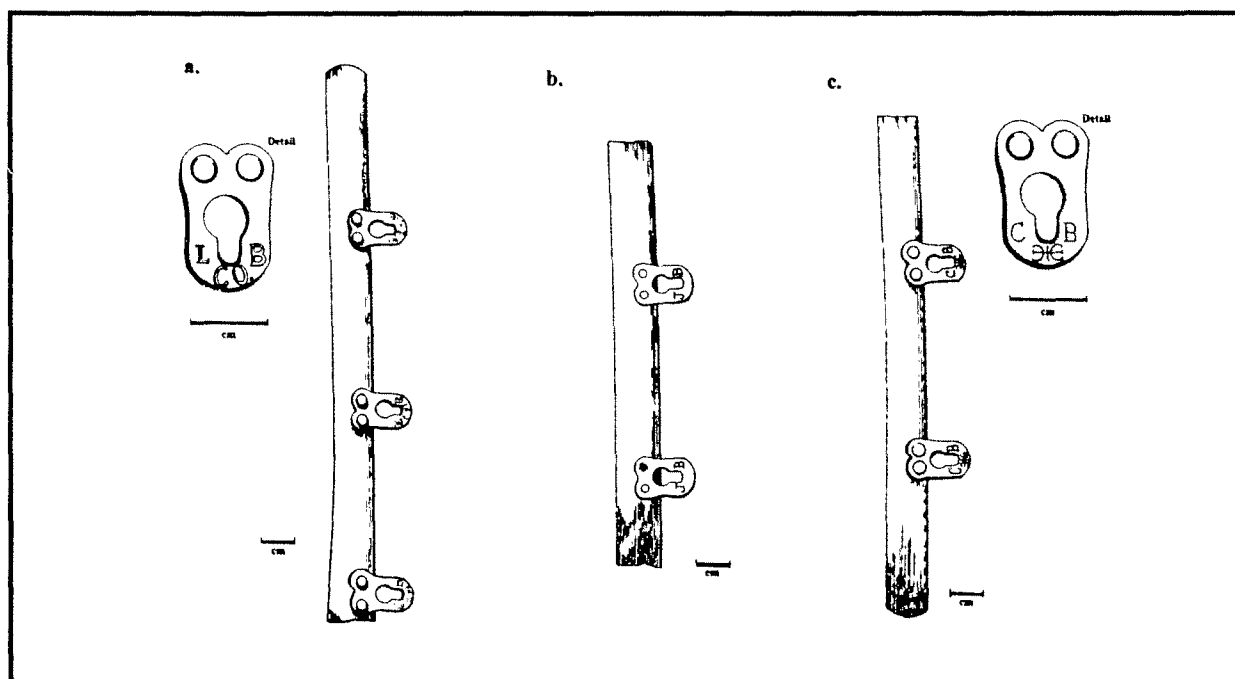


Figure 8. Corset Closure Stays with Marks.

October 21, 1899

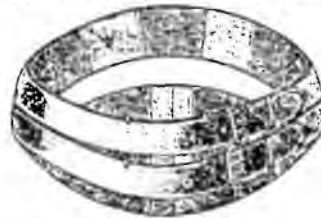
SOCIETY.

1945

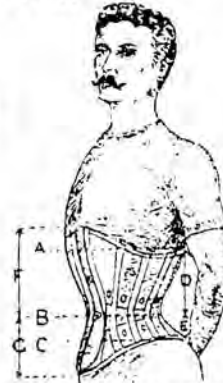
**MADAME DOWDING,**  
8 & 10, CHARING CROSS ROAD (Opposite the National Gallery, Trafalgar Square),  
Ladies' Tailor, Corsetiere, and Court Dressmaker.



No. 1.—THE MARLBORO.



No. 2.—THE MILNER



No. 3.—THE KITCHENER

A 36in.  
B 24in.  
C 36in.  
D 9in.  
E 4in.  
F 10in.  
G 5in.



No. 5.—THE HUNTING BELT.



No. 4.—THE CARLTON



No. 6.—THE SLEEPING BELT.



No. 7.—THE QUEEN OF CORSETS.

In the Improved Rejane shape.  
From 21" to 7 Guineas. Silk Laces to match from 30/-



No. 9.—THE BULLER.



No. 8.—THE IMPROVED REJANE CORSET

Price from 38s. to 75 guineas.

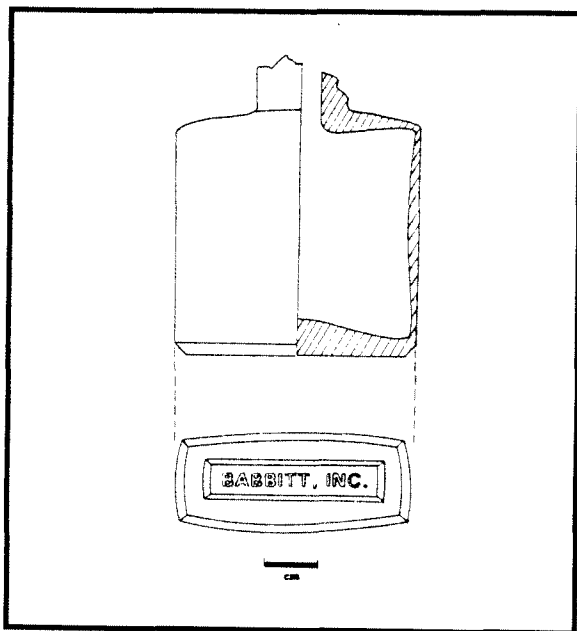
Made to order in Silk Coulture, from 2 guineas.  
The Improved Rejane Corset, designed by Madame Dowding, is declared by several of the West End doctors to be the most perfect of any "anatomical" Corset yet invented, and supplies a long felt requirement to those habitually inclined to "amplification." This new Corset has been tried with marvellous results by ladies inclined to obesity.

The New Belt.—For day and evening wear, made to measurement from the "Kitchener."  
No. 1.—The Marlboro'. White Kid, 30/-; Tan Leather, 35/-; a White Silk Coulture with Kid Straps, from 38/-.  
No. 2.—The Milner. White Leather and Elastic, 25/-; White Placel. Elastic with White Kid Straps, from 21/-.  
No. 3.—The Kitchener. Most suitable for Hunting and Cultivating the figure, with Elastic Gores and ventilated Eyelets, from 20/-.  
No. 4.—The Carlton. A great favourite with military gentlemen. Silk Coulture, from 30/-; Black and Coloured Satens, from 50/-.  
No. 5.—The Hunting Belt. Tan Leather, 30/-; Coulture, with Leather Bands, from 30/-.  
No. 6.—The Sleeping Belt. White Placel with Elastic Gores and perforated Eyelets. The first Belt for Cultivating the figure.  
No. 9.—The Buller. A most comfortable shape for day or evening wear, made in all materials, from 35/- to 6 guineas. Most popular Belt for gentlemen inclined to obesity.

All these Belts are absolutely Hygienic, and can only be procured from Madame Dowding, the Sole Inventor and Designer.  
No orders can be executed under any other name. The demand for these Corsets is daily increasing, and is, indeed, a most satisfactory one to the inventor.  
Madame Dowding begs to thank the numerous West End Tailors for their kind recommendations. All Communications STRICTLY PRIVATE in Belt Dept.

PLATE 40

Figure 9. 1899 Corset Advertisement (Kunzle 1982: 104, Plate 40).



**Figure 10. Possible Perfume Bottle with Unknown Mark.**

During the 1920s, toys such as these were made in Japan and Europe (Whitmyer and Whitmyer 1993; White 1994:5-9). Not all luster glazed tea sets are plain, some have hand painted designs on them. One of the doll pieces found at the Holly is an intact, single piece, porcelain doll's arm; it was attached at the shoulder by a ferrous pin. A bisque doll part is incised above the buttocks with "GERM..." (Figure 12.b.). German bisque dolls were popular from the 1870s to the 1930s (Goodfellow 1993). The possible Tinker Toy piece appears to be a wooden wheel.

Other toys found at the Holly include ceramics, metal house fronts, a rubber wheel, a washboard, and other metal items. The ceramics consist of sherds from an undecorated porcelain tea cup; a porcelain saucer, possibly glazed with the tan luster; and a white improved earthenware alphabet plate. The alphabet plate sherd has an interior design motif with three people, one of whom is wearing a doublet and neck ruff, possibly from a story or rhyme of the Elizabethan period. Around the edge, in gild, are the letters of the alphabet. These plates were made in England, Germany, and the United States for over two hundred years. Each had a scene from stories such as Robinson Crusoe or Aesop's Fables, sports, animals, important or inspiring people such as George Washington or Queen

Victoria, as well as letters (Lindsay and Lindsay 1998). Unfortunately, none of the sources consulted include this particular design motif. The metal house fronts have window and door cutouts and may have been used for a railroad or town set. Ms. Baxter was unable to find any corresponding literature on these toys. Research of railroad accessories depicted more complete buildings of a different design (Bing Brothers 1906), although the roofs may have been separate pieces. A metal ladder may go with the house fronts. A second pull toy recovered from the Holly is part of a pull duck toy, made from ca. 1920 to 1950. The rubber wheel has been identified as being from a "Radio-flyer" type wagon, although a 1929 Sears, Roebuck Catalogue (pp. 472-473) shows other wheeled toys such as tricycles with similar rubber wheels. For those who feel that little girls should have gender appropriate toys to assist in training for future roles as housewives, there is a toy washboard from one of the refuse scatters. Other metal toys from the Holly include an interchangeable insert for a top; a wind-up mechanism; and smaller house front pieces with windows, doors, roof, and back of the structure embossed.

Toys were also collected at the Williamsburg Mine. Among these are a stamped tin spoon (Figure 13), undecorated porcelain sherds from cups and saucers, a non-ferrous strainer, and part of a bisque doll's head. Two of the doll fragments have features similar to those hand painted on dolls made by Armand Marseille of Germany between the 1890s and the 1930s (Goodfellow 1993:76). It is very likely that this doll was made during this period in Germany. Another toy from the Williamsburg is a hand made glass marble. It is in two pieces and is transparent with a solid core of white, blue, red, green, and pink, and an exterior swirl of yellow. This type of marble is known as a German swirl or spiral cane cut glass marble and was made from the 1840s to the early 1930s. During this period marbles made of glass, ceramics, and stone were purchased through Montgomery Ward or Sears, Roebuck & Company catalogues (Baumann 1991:47, 59-60, 64-68; Webb 1994:66).

Toys found in Hogpen Canyon (26EU2395) include white improved earthenware teapot and sugar bowl sherds and doll's leg (Figure 14). Although there is no known manufacturer of the doll's leg, it is similar to plain glazed china headed dolls with painted shoes made between the 1840s and 1870s (Goodfellow 1993:46).

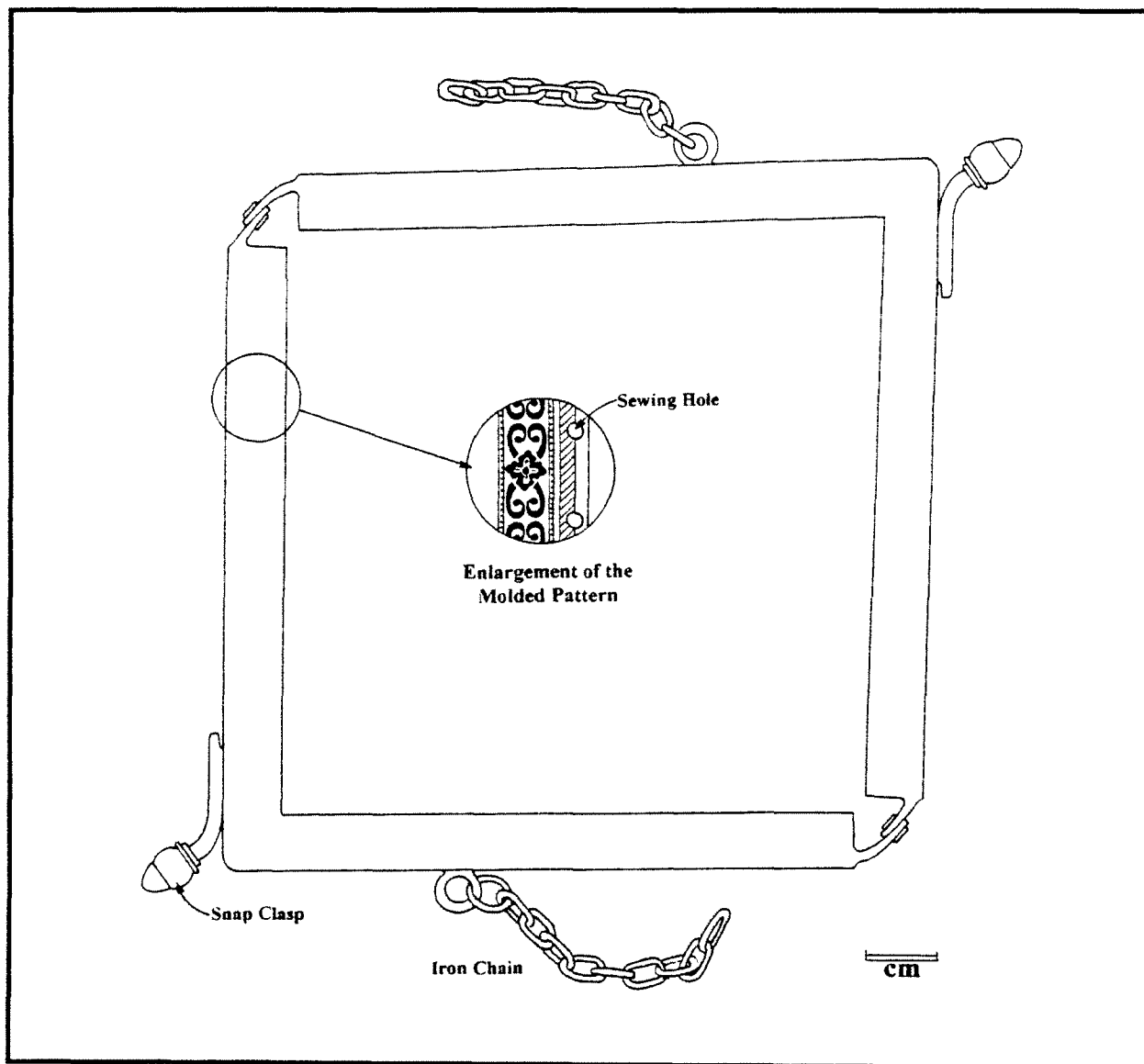


Figure 11. Purse Frame (Plated Metal) - Drawn Open.

A second marble comes from the Ruby Hill area. It appears to be a solid core type and is transparent with a "gently twisting central core of different colors of glass" (Webb 1994:30). These colors are white, blue, red, turquoise, and possibly green. The marble's size suggests that it was a shooter.

The final illustration (Figure 15) is a modified opium tin and a stamped horse from another Hogpen Canyon

site (26EU2395). Based on the house parts found at the Holly it was thought that the modified tin was a hand-made house. However, if folded in half, it could have been a bracket or brace, where the "windows" provided a hole for a bolt, and the "door" fit over wood or metal. The horse may be associated with a military outfit, such as a cavalry unit, and may have been worn on a hat.

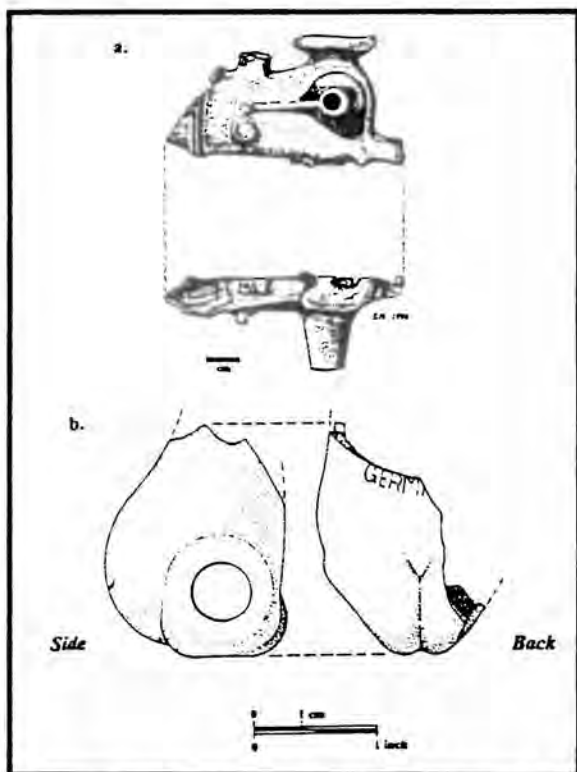


Figure 12. Toys from the Holly: a. Cast Iron Toy Fragment - Possible Tractor; b. Ceramic Doll's Body Fragment with Partial Maker's Mark.

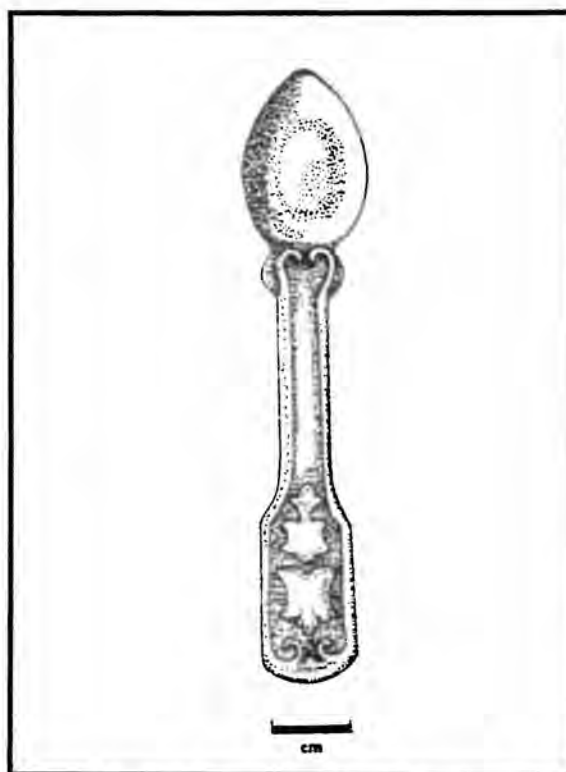


Figure 13. Toy Teaspoon from the Williamsburg.

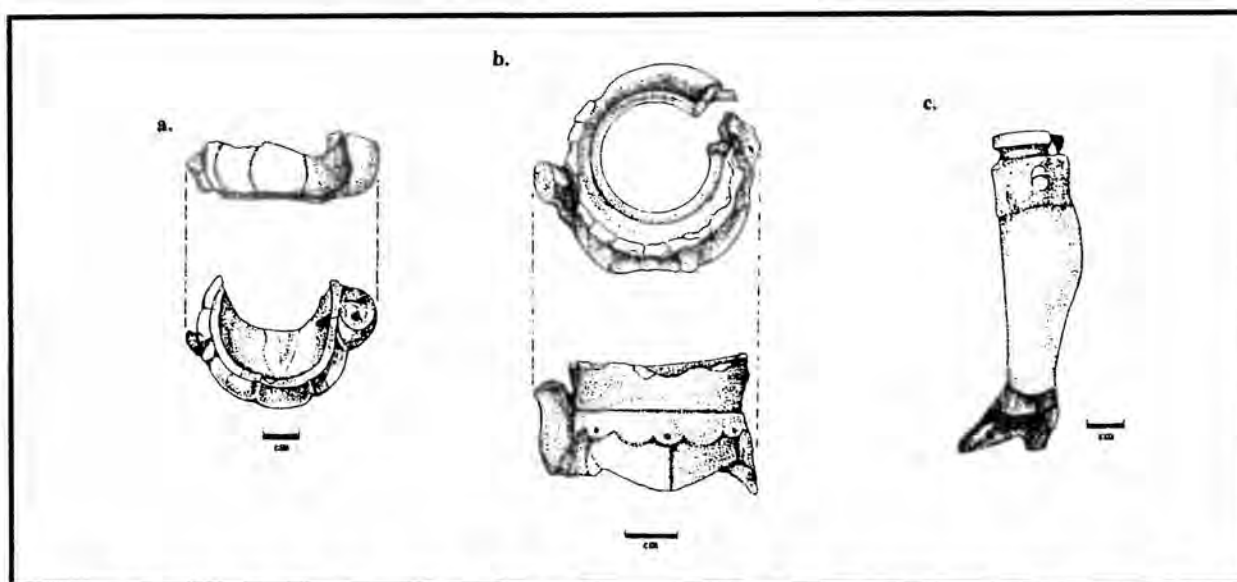


Figure 14. Ceramic Toys From Site 26Eu2395: a. Teapot Base; b. Sugar Bowl Rim and Handle; c. Doll's Leg.

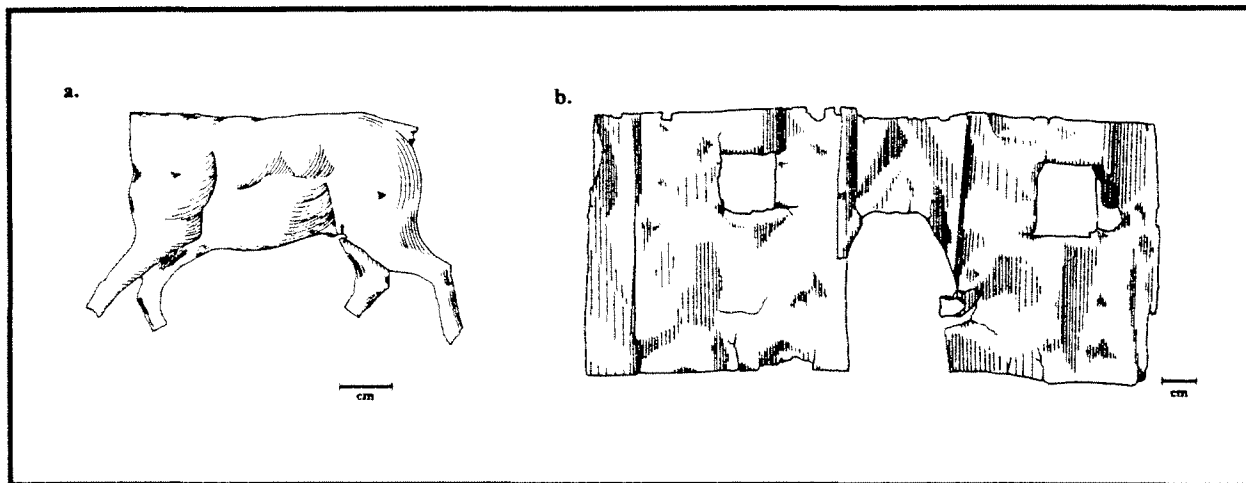


Figure 15. Metal Items from Site 25Eu2395: a. Stamped Horse;  
b. Opium Tin Body Modified into Toy House or Brace.

### Summary and Conclusions

Although artifacts discussed and illustrated here are a small part of the assemblage recovered by the Ruby Hill Project, they provide part of the story regarding people who resided at three of the mines and ancillary areas. We are fortunate to have had the reminiscences of Mr. Morrison who lived at the Holly mine during his childhood. As for the other sites, archival material occasionally provides insights, but more often than not it is the artifact record that furnishes additional clues to the people who lived and worked there. By identifying artifacts by function, manufacture and period of use, we find out how these people participated in trade networks, their status within their community and possibly more about their personal lives, as well as when all this occurred. What we can surmise is that these people lived no differently from those who resided in Eureka or anywhere else. Both men and women had concerns for their appearance and selected clothing articles based on their own tastes and the styles of the day. Toys were considered an important part of a child's life; many are present at the Holly and Williamsburg. The plethora of ceramic tea set remains appears to indicate a larger number of female children (Mr. Morrison had four sisters). It may be that toys specifically manufactured for boys were made of metal and sturdier materials that broke less easily than

porcelain, thus the smaller numbers of boys' toys found in the refuse features.

Although gender remains difficult to identify, when an assemblage is large enough there are indicators denoting the presence of women. Determining age groups present can be difficult as well unless there are toys and other children's items. It is important to remember that a single toy may be a keepsake item rather than denoting presence of a child.

Social status was not as readily apparent, but the variety of toys and a perfume bottle associated with the Morrison residence are indicators that Mr. Morrison earned a good living allowing him to provide luxury items for his family. Also, the issue of family versus single miner is indicated by the number of items associated with the Morrison family in relation to those from the bunkhouse area. The limited number of personal artifacts recovered from bunkhouse suggests that these men brought little with them. It is possible that they had families living in Eureka, but the distance from town to the mine (about 5 miles) may have prohibited travel between the two areas on a daily basis. Thus they stayed at the mine during the work week, returning home on weekends. This lifestyle may indicate their positions in the mine as well as social status.

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**BULLION AND BEEFSTEAK, MINERS AND MUTTON, HEADFRAMES  
AND HOG MEAT, A CHICKEN IN EVERY POT  
AND FISH ON FRIDAYS TOO!:  
THE ZOOARCHAEOLOGY OF RUBY HILL, EUREKA COUNTY,  
NEVADA**

Dwight D. Simons

**ABSTRACT**

Several Ruby Hill sites have faunal assemblages providing data highlighting production, butchering, preparation, and consumption of meat in late nineteenth-early twentieth century commercial and residential contexts in a central Nevada mining community. Among these sites are the Holly Shaft (26Eu1200), the Bullwhacker Mine (26Eu1197), the Williamsburg Mine (26Eu2364) and Hogpen Canyon (26Eu2392). Of particular interest are faunal remains from the Hogpen Canyon site. These comprise two distinct archaeofaunas: one of which appears to have been produced by American Chinese; and the other by a Euroamerican restaurant or butcher shop.

Remains of fish, birds, and mammals occur at seven Ruby Hill sites (Mires 1997). However, only four of these sites are analysed here, the Holly Shaft (26Eu1200), the Bullwhacker Mine (26Eu1197), Hogpen Canyon (26Eu2392) and the Williamsburg Mine (26Eu2364) (**Table 1**). Very small samples of identified vertebrate remains characterize the Bullwhacker Mine (N=16) and Williamsburg Mine (N=9), while significantly larger samples are found at the Holly Shaft (N=218), and Hogpen Canyon (N=1,820). Faunal remains from the latter site are assigned to two distinct archaeofaunas. These include the Features, apparently representing an American Chinese occupation; and the Bone Dump, which probably is a secondary trash deposit coming from a Euroamerican restaurant. Data from butchering patterns and taxon representation analyses conducted upon both archaeofaunas are interpreted in light of models concerning American Chinese butchering, preparation, and consumption of meat, and western mining frontier foodways.

**BULLWHACKER, WILLIAMSBURG  
AND HOLLY ARCHAEOFAUNAS**

The small archaeofaunas from the Bullwhacker and Williamsburg, and the larger one from the Holly Shaft, are dominated by pig, cattle, and sheep remains. At the Holly, domestic poultry (chicken, turkey) and cat remains also occur. The former probably are food

items; the latter most likely are the remains of a pet or stray dying of natural causes. The Holly also has jack rabbit and deer bones, indicating hunting contributed to the diet.

Bones of wild rabbits and deer are present at several historic period *carbonari* (charcoal burner) sites in central Nevada (Dansie 1994; Schmitt 1985; Schmitt and Zeier 1993). At the Reclaimed Wash site, 26Eu1427, 139 jack rabbit and cottontail bones were systematically butchered with a sharp cutting tool, creating a highly distinctive faunal assemblage (Dansie 1994:7-28, 7-31, 7-35 to 7-37). Occurrence of butchered rabbit bones at this and other *carbonari* sites in the Eureka area, and at the Holly Shaft, may comprise a culinary ethnic signature. A variety of cookbook accounts (cf. Bugialli 1982, 1989:174; Carnacina 1968:515-521; Hazan 1980:271-272; Howe 1972; Maresca and Darrow 1988:101; Root 1968:38) attest to the popularity of rabbit in traditional Italian cuisine. Rabbits and hares are widely and routinely prepared and served, and a number of "classic" rabbit dishes currently characterize the hunting season in Italy.

Sheep and cattle contribute over 90% of bones at the Bullwhacker and Holly Shaft. At the Williamsburg, two thirds of the mammal remains are cattle; among the rest, sheep outnumber pigs two to one. With respect to meat contributions (**Table 2**), pork is all but

absent at the Bullwhacker (>1%), provides a fairly small contribution at the Holly (16%), and is

relatively abundant at the Williamsburg (27%). Mutton makes up 10-12% of the meat represented at the three sites. Beef dominates at all (63-88%).

Table 1. Faunal Remains from Selected Ruby Hill Sites

Vertebrate Taxa	Holly Shaft	Bullwhacker Mine	Hogpen Canyon, Features	Hogpen Canyon, Bone Dump	Williamsburg Mine
<b>FISH</b>					
Cutthroat Trout			4	4	
Tahoe Sucker			2		
Atlantic Cod			1	14	
Cabezon				1	
Rockfish			2	1	
Chub Mackerel				3	
Flounder				1	
<b>TOTAL FISH</b>			<b>9</b>	<b>24</b>	
<b>BIRDS</b>					
Great Blue Heron			1		
Goose			1		
Duck			2	4	
Teal				2	
Chicken	54		12	130	
Turkey	1		3	16	
Pigeon				1	
Mourning Dove			1		
<b>TOTAL BIRDS</b>	<b>55</b>		<b>20</b>	<b>153</b>	
<b>MAMMALS</b>					
Jack Rabbit	5		17	2	
Ground Squirrel			5		
Cricetid Rats/Mice	7			2	
Dog/Coyote			2		
Cat	37		6		
Large Artiodactyl	13		28	46	
Medium Artiodactyl	5		31	234	
Pig	8	1	61	64	1
Black-Tailed Deer	2				
Cow	39	7	184	561	6
Sheep	47	8	42	329	2
<b>TOTAL MAMMALS</b>	<b>163</b>	<b>16</b>	<b>376</b>	<b>1,238</b>	<b>9</b>
<b>GRAND TOTALS</b>	<b>218</b>	<b>16</b>	<b>405</b>	<b>1,415</b>	<b>9</b>

**Table 2. Domestic Mammal Meat Contributions at Ruby Hill Sites**

Site	MtWt - Pork	MtWt - Mutton	MtWt - Beef	Totals
Holly Shaft	14.2	9.7	64.3	88.2
Bullwhacker Mine	0.3	8.3	61.7	70.3
Williamsburg Mine	9.5	3.4	22.4	35.3
Hogpen Canyon, Features	9.6	9.3	96.9	115.8
Hogpen Canyon, Bone Dump	23.6	44.9	206.3	274.8
<b>Totals</b>	<b>57.2</b>	<b>75.6</b>	<b>451.6</b>	<b>584.4</b>

MtWt = Meat Weight in kilograms.; Meat Weights Computed Following Lyman (1979:541, Table 3; and 543, Table 6).

Analysis of butchering patterns and body part representations (**Figure 1**) suggests that at the Holly Shaft, beef consumption was focused upon rib, loin, and sirloin steaks; chuck roasts and stews also were eaten. Preferred lamb-mutton cuts included rib and loin chops/roasts; shoulder chops/roasts, foreshanks, and leg roasts also were prepared. Pork jowls, ribs, hams, and feet were part of the diet as well. At the Bullwhacker (**Figure 2**), beef steaks and roasts were preferred fare. Lamb-mutton steaks, chops, and roasts occasionally were consumed; while pork (pickled or plain pig's feet?), was a rare comestible. Beef cuts, in the form of short ribs, stew meat, and high quality steaks (one T-bone cut is over one inch thick!), dominates at the Williamsburg (**Figure 3**). Pork ribs also were eaten, along with lamb-mutton chops and roasts.

At all sites, butchering mainly was done with hand saws in standard late nineteenth century Euroamerican fashion (cf. Gust 1983; Schulz 1982; Schulz and Gust 1983a, 1983b). Cleavers and knives also were used. Flesh either may have been cut up on-site, or purchased from local butchers. Meat consumption at these sites follows a "residential pattern", with its archaeological representation primarily composed of the remains of individual meals. Selection of particular cuts have been the product of meat availability (Schmitt and Zeier 1993); social status (Gust 1983; Schulz 1982; Schulz and Gust 1983a, 1983b); and/or individual preference/affordability at particular times (Conlin 1986).

## THE HOGPEN CANYON ARCHAEOFAUNAS

In contrast to the Holly Shaft, Bullwhacker, and Williamsburg archaeofaunas, vertebrate remains comprising the two archaeofaunas represented at Hogpen Canyon most likely result from a "commercial pattern" of meat consumption. Viewed as a whole, the Hogpen Canyon archaeofauna is a diverse, abundant assemblage of fish, bird, and mammal taxa. Both freshwater and marine fishes are represented, including taxa subjected to intense commercial exploitation during the late nineteenth century (cf. La Rivers 1962; Schulz 1980, 1984, 1990, 1992; Sigler and Sigler 1987; Townley 1980). Poultry remains are dominated by domestic fowl, especially chickens. Small numbers of waterfowl and upland game bird remains indicate hunting of wild fowl was relatively unimportant. This contrasts with late nineteenth century sites in lowland central California, especially in Sacramento, where poultry consumption emphasized use of products resulting from both market hunting of wild birds and harvesting domestic fowl (Simons 1980, 1982, 1984, 1990). Mammal remains from Hogpen Canyon include those of probable pets/strays (dog, cat), commensal rodents (squirrels, cricetid mice), wild game (jack rabbits), and domestic animals raised and butchered for meat (pigs, cattle, sheep).

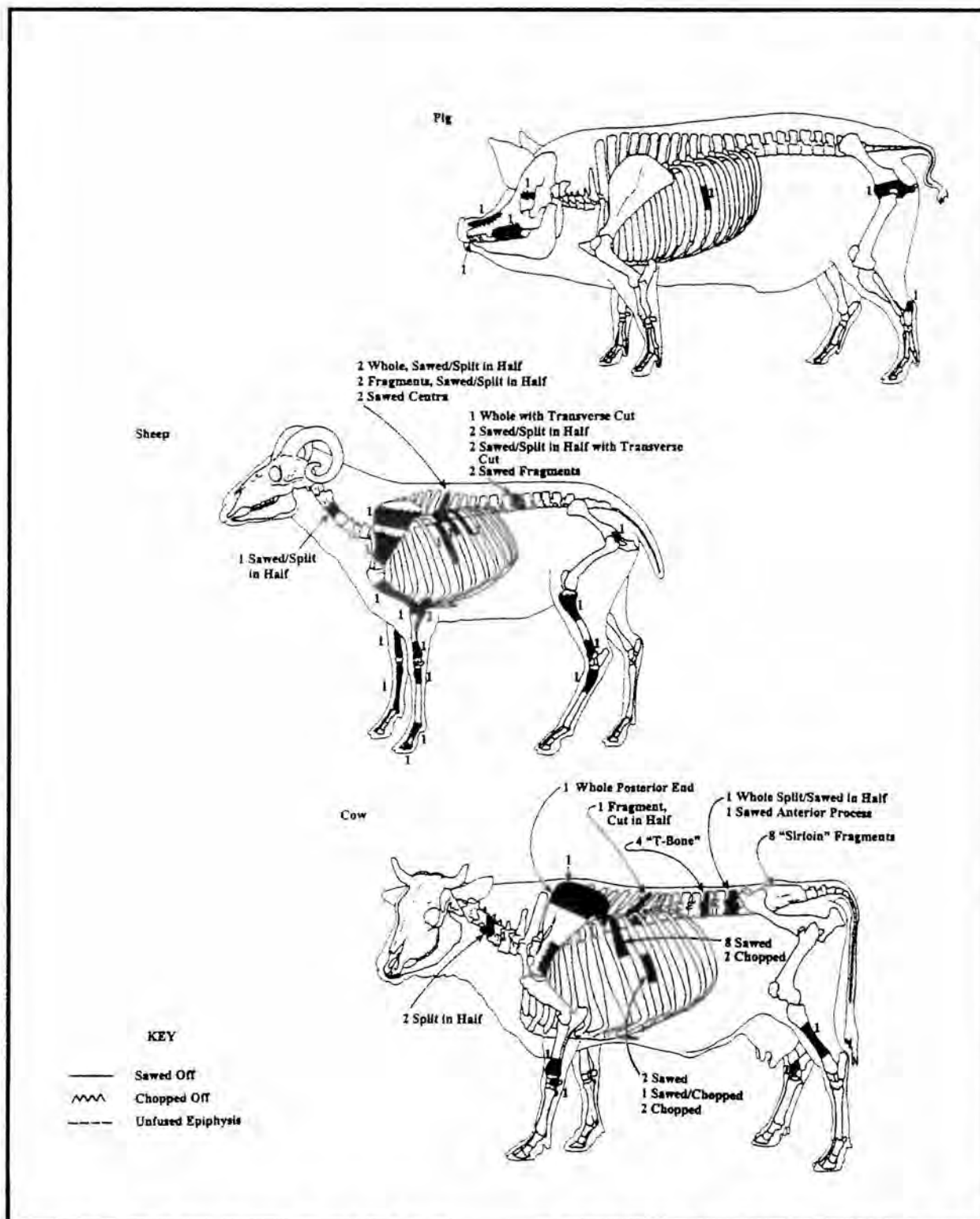


Figure 1. Pork, Lamb-Mutton, and Beef Cuts Represented in the Holly Shaft (26Eu1200) Archaeofauna.

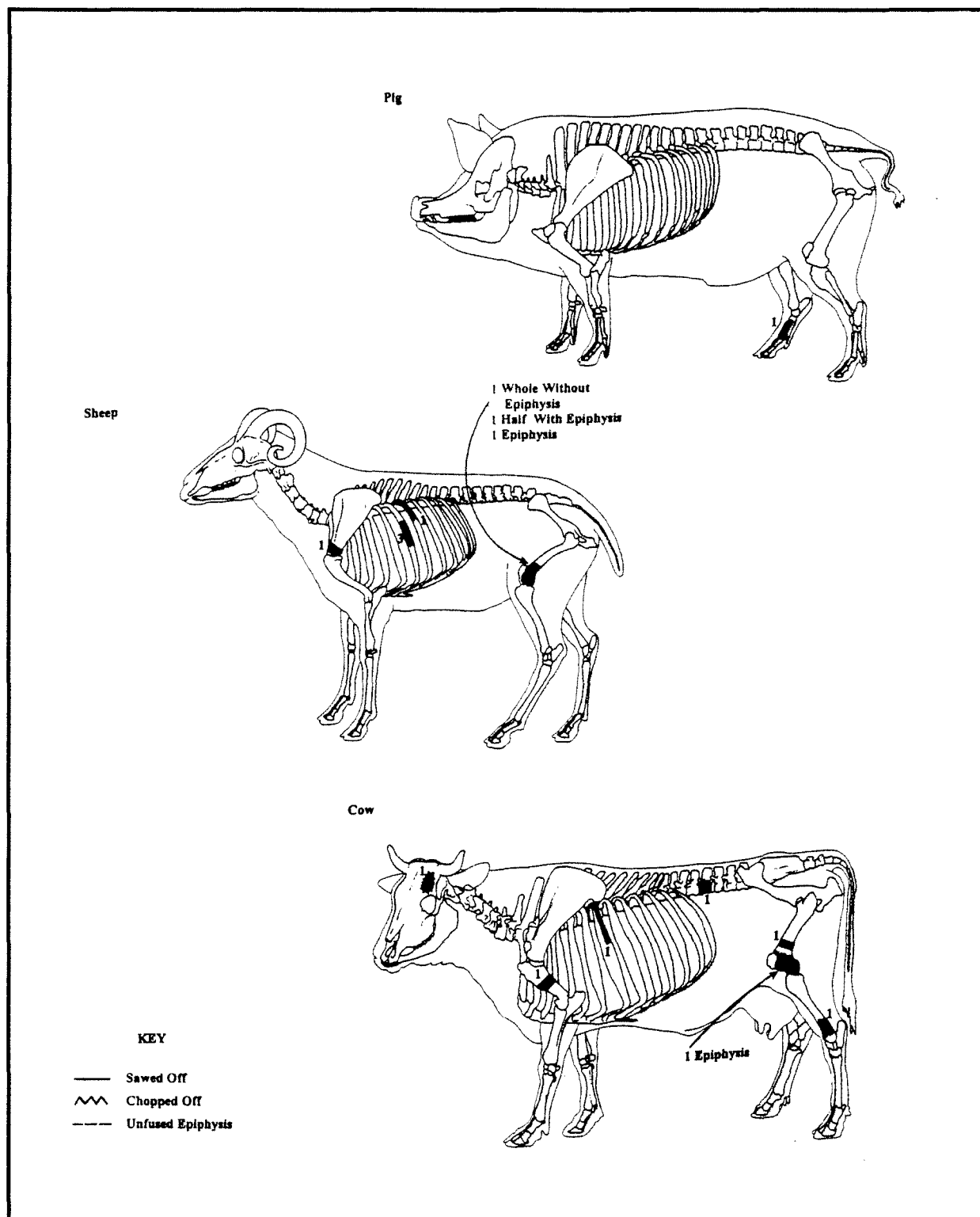


Figure 2. Pork, Lamb-Mutton, and Beef Cuts Represented in the Bullwhacker Mine (26Eu1197) Archaeofauna.

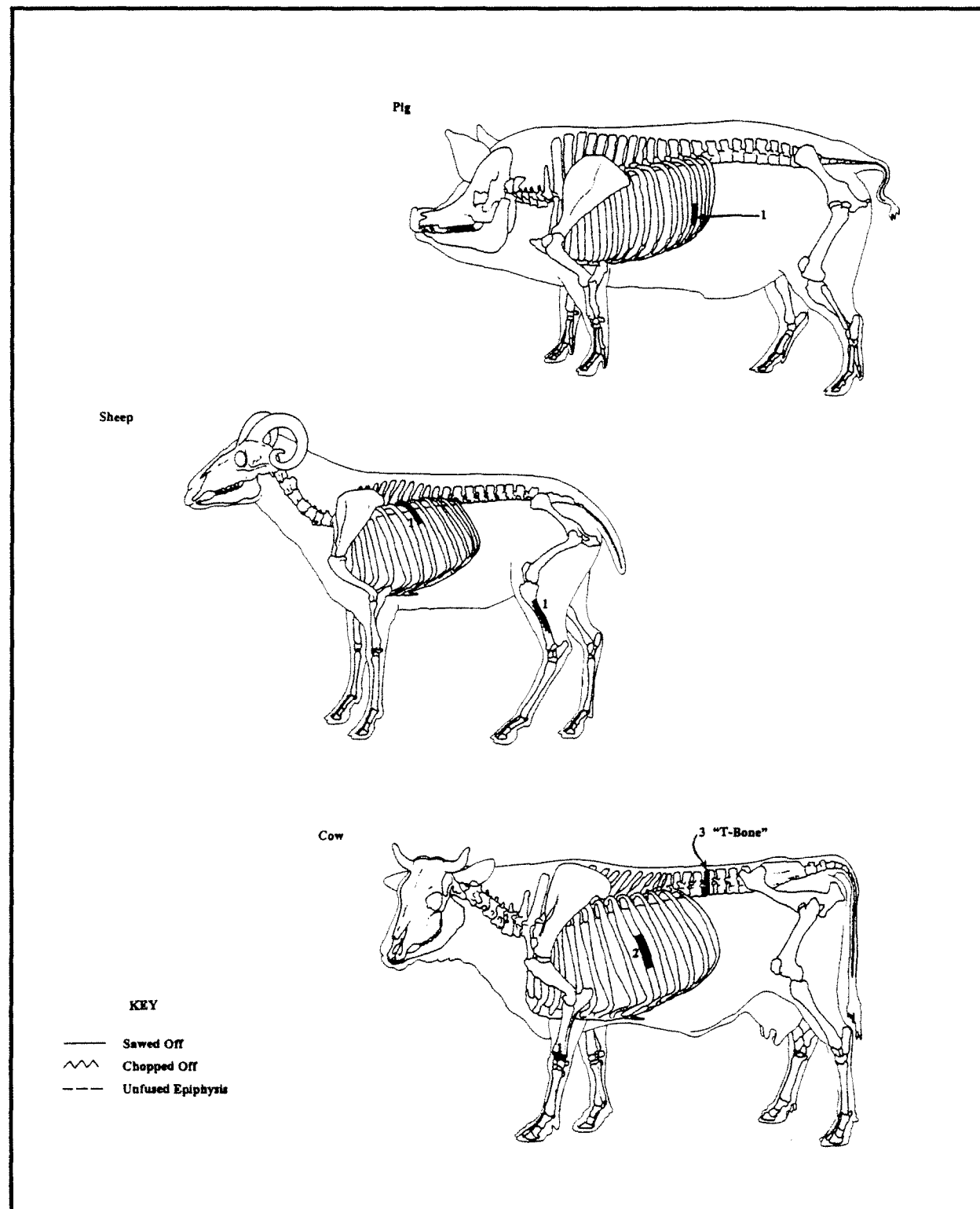


Figure 3. Pork, Lamb-Mutton, and Beef Cuts Represented in the Williamsburg Mine (26Eu2364) Archaeofauna.

### The Hogpen Canyon Site Features Archaeofauna

The archaeofauna from the Hogpen Canyon Features displays an intriguing constellation of attributes. Some correspond with those characterizing historic period American Chinese archaeofaunas from the Far West (Gust 1993, Langenwalter 1987):

- Following Singer (1985:Table 1; 1987:88, Table 1), a weighted mean affordability value of .02 for fish taxa and remains, indicating a state of relative poverty.
- Fish remains from the Features are entirely heads/gill covers, shoulder girdles, and fins/tails. These low quality cuts probably were used to prepare fish stews, chowders, soups, or sauces.
- An almost complete lack of fishes used for salt or canned fish, also noted at other Chinese sites (Gust 1993:185).
- Sucker and rockfish, not preferred by Euroamericans (Schulz 1980, 1984, 1990, 1992; also see Collins 1987a, 1987b; Roeder 1996).
- Small avifauna is dominated by chicken remains (N=12), with waterfowl (heron, ducks, teal, and geese) being the second most abundant group (N=4) of birds, suggesting Chinese culinary traits (Greenwood 1996:129, 132-133; Gust 1993:182-184; Simons 1984).
- Presence of a greater proportion of pig bones (N=61, 21%) than occurs at most other Ruby Hill sites, possibly indicative of a Chinese culinary signature (Gust 1993:185-191; also see Anderson 1988; Greenwood 1996:127, 129, 132-133; Langenwalter 1987:75-80; Longenecker and Stapp 1993:98-102).
- An abundance of beef short ribs (**Figure 4**), with short ribs - usually pork, however - being highly popular in traditional Cantonese cuisine.

However, other characteristics of the archaeofauna do not resemble historic period American Chinese archaeofaunas from the American West. These include:

- Non-occurrence of marine fishes imported from South China, such as yellow croaker and puffer, which are present at other Chinese sites (Collins 1987a, 1987b; Roeder 1996; Schulz 1984).
- Non-occurrence of reptile remains (i.e., turtles, snakes, lizards) associated with traditional Chinese cuisine and medicine, which occur at other Chinese sites (Dansie 1979; Greenwood 1996:127-129; Langenwalter 1987:63-70).
- Lack of distinctive poultry butchering patterns observed at other American Chinese sites (Simons 1984).
- Lack of butchering marks on dog and cat remains, which frequently occurs at American Chinese sites (Dansie 1979; Greenwood 1996:127-129, Gust 1993:182, Langenwalter 1987:73-74, 86-87).
- Presence of large numbers of cow bones (N=184; 64%), and a moderate representation of sheep remains (N=42; 15%); with beef, lamb-mutton, and pork respectively contributing 84%, 8%, and 8% of the calculated amounts of domestic mammal meats occurring at the Features (**Table 2**).
- Butchering of pigs, sheep, and cattle in a Euroamerican pattern (**Figure 4**), with no clear indications of ethnically-derived secondary or tertiary butchering (Gust 1993; Longenecker and Stapp 1993; Schulz 1979; 1982; Schulz and Gust 1983a, 1983b).
- Presence of an admixture of high and low ranked secondary and tertiary beef cuts (**Figure 4**) (Gust 1983; Schulz 1979, 1982; Schulz and Gust 1983a, 1983b), revealing no clear-cut patterns of consumption status.

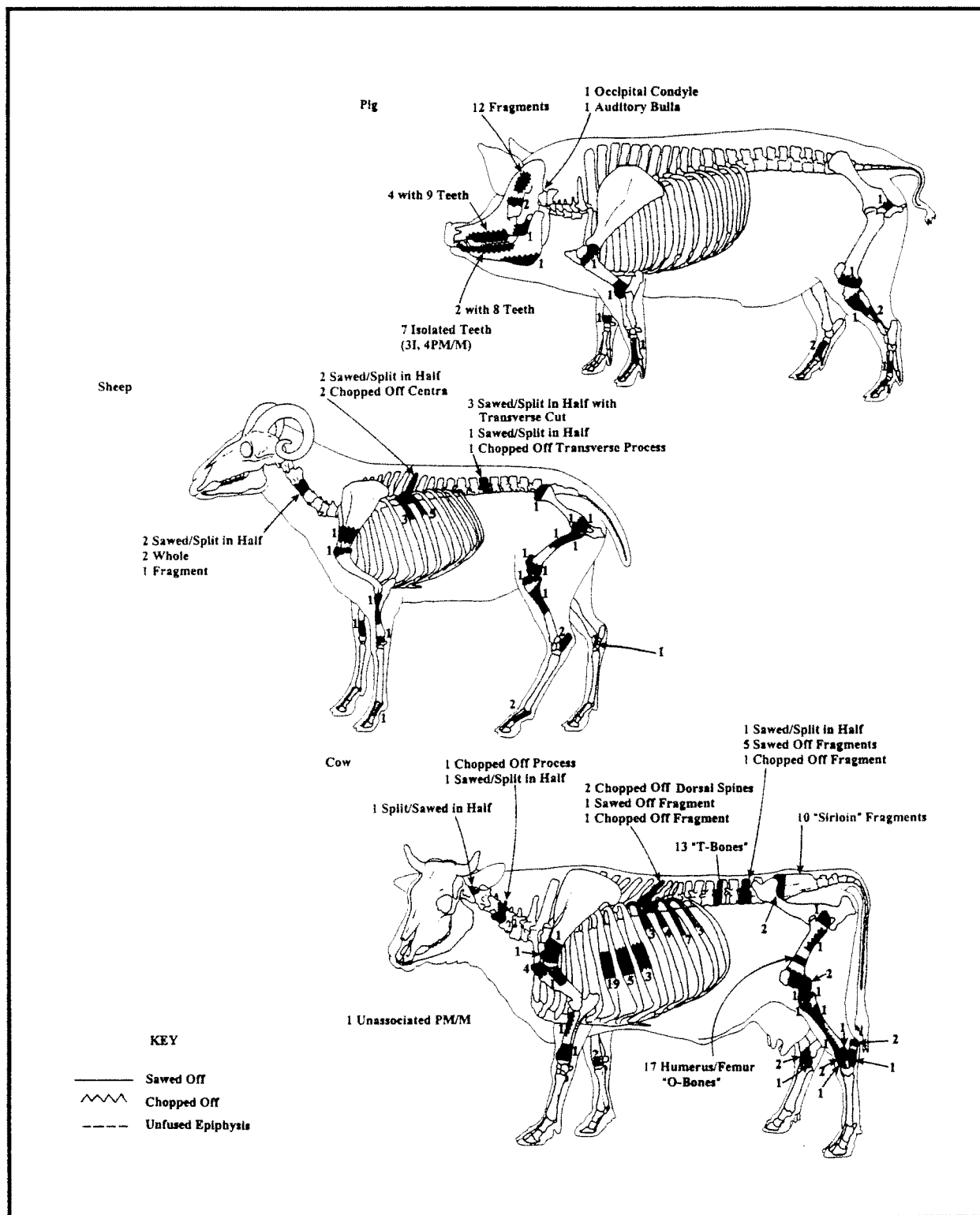


Figure 4. Pork, Lamb-Mutton, and Beef Cuts Represented in the Hogpen Canyon Features (26Eu2392) Archaeofaunas.



The archaeofauna thus displays an intriguing combination of Chinese and Euroamerican culinary signatures. These may represent "household" cooking practices of American Chinese, highly conditioned by meat consumption patterns typifying isolated Western mining camps and towns (Schmitt and Zeier 1993:21-22, 34-35). This would explain the mixture of high and low preference Euroamerican beef cuts, and the high amount of beef and relative abundance of lamb-mutton, probably resulting from consumption of whatever meats and cuts were available at particular times from mining camp butchers. Alternatively, it may be the product of American Chinese cooks commercially preparing Euroamerican and Chinese dishes for a mixed mining camp clientele. This Western mining foodways pattern is one still extant in many rural Western communities (Conlin 1986), with the *Eureka Cafe* being a current local example.

### The Hogpen Canyon Bone Dump Archaeofauna

The Bone Dump archaeofauna from Hogpen Canyon probably is an intrusive, secondary trash deposit originating from an Euroamerican restaurant. Its varied freshwater and marine fish assemblage appears to be composed of fresh fish (cabezon, flounder, rockfish, trout), often cut into steaks; canned (mackerel); and salt fish (cod). These probably were roasted, poached, grilled, fried, or made into more complex dishes. The fish assemblage has a weighted mean affordability value index of .09, lying on the cusp between lower and middle class status (Singer 1985:Table 1; 1987:88, Table 1).

Chicken and turkey bones comprise the majority of poultry remains (N=146; 95%). The remainder (N=7; 5%) include waterfowl (duck, teal), and upland game birds (pigeon). Given the lack of suitable waterfowl habitat in the Eureka area, opportunities for commercial or sport hunting would have been highly limited or virtually non-existent. Simons (1980, 1984) concludes representation of major body parts of chickens and wild ducks found at the Golden Eagle Hotel and Cronin's Oyster Saloon in Sacramento, California, indicates these establishments served "French/Franco-American" poultry dishes. The high representation of breast-upper wing bones of chickens at these sites is not surprising, given the importance of chicken breasts-upper wings in French/Franco-American cuisine (cf. Escoffier 1957; Montagne 1977; Ranhofer 1920). In the Hogpen

Canyon Bone Dump archaeofauna, 57% of the chicken bones are breast-upper wing elements (N=50), compared to 23% for the thigh-drumstick (N=20), and 20% for the outer wing-lower leg (N=18). Percentage ratios of bones from these three body portions in a whole, unprepared chicken carcass respectively are 40, 20, and 40 per cent. This suggests a "Gallic" mode for poultry dishes consumed in late nineteenth century Eureka.

Cattle bones dominate the large mammal assemblage from the Bone Dump (N=561; 59%). Sheep remains also are abundant (N=329; 34%). Pig elements are uncommon (N=64; 7%), however. This relative order of abundance also characterizes meat weight amounts for beef (75%), lamb-mutton (16%), and pork (9%) at the Bone Dump (Table 2).

Hand saws, knives, and cleavers were used to butcher Bone Dump pigs, sheep, and cattle, which appear to have been butchered in standard Euroamerican fashion (cf. Gust 1983, 1993; Schulz 1979, 1982; Schulz and Gust 1983a, 1983b). Most of the cattle bones are vertebral column elements (N=225; 40%) or specific meat cuts (N=223; 40%). Among the latter are prime rib, rib steak, short ribs, chuck cuts, and T-bone/Porterhouse, sirloin, and round steaks. In contrast, limb elements are relatively scarce (N=35; 6%).

With respect to socioeconomic status (Gust 1983; Schulz 1979, 1982:252-254; Schulz and Gust 1983a, 1983b), at the Bone Dump, the three highest-ranked late nineteenth century beef cuts, short loin, rib, and sirloin, are represented by 218 bones, 61% of all beef cut specimens. Chuck cut elements (N=56; 16%) also are common. All other types of beef cuts (round, rump, short rib, brisket, neck, foreshank, and hindshank) contribute 8% or less apiece. A clear preference for high-ranked beef cuts, especially in the form of individual steaks, thus characterizes the Hogpen Canyon Bone Dump cattle remains.

Bone Dump lamb-mutton cuts include abundant rib chops and associated short rack elements (N=122; 42%). Leg roast remains (N=70; 24%) also are common. Lesser numbers of chuck (N=39; 13%), loin (N=37; 13%), and foreshank (N=25; 9%) portions/cuts occur. These may have been used for soups, stews, and speciality dishes.

Cranial elements (N=36; 56%), mainly teeth, comprise

over half of the Bone Dump pig bones. Feet (N=17; 27%) remains are common. Only 11 elements (17%) come from the ham, picnic, and ribs. This suggests pork mainly was served in the form of speciality dishes made from the head and feet.

Overall composition of the Bone Dump archaeofauna strongly suggests it is a faunal assemblage coming from an Euroamerican restaurant emphasizing preparation of high and mid-priced individual beef cuts. Lamb-mutton is relatively abundant, and mainly appears to have been served as individual chops, or as leg roast portions, an observation also conforming to a restaurant origin. Less-preferred pork, mutton, and beef cuts may have been used to prepare soups, stews, speciality dishes, and sauces. These either could have been served in the restaurant, or possibly as a promotional "free lunch" at the bar. Poultry dishes were prepared mainly from chicken as items of French/Franco-American influenced cuisine. Salt and canned fish also may have been prepared in this manner, along with roasted, poached, grilled, or fried fresh fish.

It is tempting to speculate that some (or all) of the animal bone present in the Features and Bone Dump at the Hogpen Canyon site may be human food scraps, slops; collected by Chinese pig farmers to feed to their omnivorous charges. This practice would have been highly advantageous to people who may not have had the means to easily buy or grow feed in a region where hog feed would have been difficult, at best, to obtain. Animal bones from the Hogpen Canyon site generally are intact, and do not display signs of animal gnawing, or passage through the digestive tract, however, observations obviating this inference.

## CONCLUSIONS

The archaeofaunas from the Holly Shaft, and Bullwhacker and Williamsburg Mines display attributes consistent with a "residential pattern" of meat consumption, represented in the archaeological record by the remains of individual meals. "Commercial" expressions of late nineteenth century Euroamerican foodways in the Eureka area are exhibited by the faunal assemblages from the Features and Bone Dump at the Hogpen Canyon site. These agree in many respects with Western mining foodways described by Conlin (1986). One sees a probable emphasis upon eating at commercial establishments,

such as restaurants or boarding houses; apparent preference for high-quality, "fancy," "foreign," and/or spicy foods, including Chinese and Franco-American, dishes; and suggestion of a variety of commercial venues for consuming prepared food, among which were restaurants and saloons. These extra-residential culinary opportunities probably were highly influenced by vagaries of individual preferences and choices, rather than being direct reflections of factors such as ethnicity, social status, and the like. Put another way, late nineteenth century people living in the Eureka area probably welcomed variety in their diet, and were willing to pay for foods derived from whatever portions of the culinary spectrum that were offered to them.

## ACKNOWLEDGMENTS

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