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Nobi Ni-tse'tse'ede (house on the Cold One): Northern Great Basin Archaic Hunter-gatherer Household Archaeology, Harney County, Oregon

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by

Emily Jane Epstein

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ABSTRACT

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by

EMILY JANE EPSTEIN

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Under the Supervision of Professor Jean Hudson

Excavation results from four sites on Tse'tse'ede (The Cold One), which is also commonly known as Steens Mountain, produced archaeological evidence for a prehistoric subsistence and settlement system on the western flank of Tse'tse'ede. Material culture recovered in association with one house, domestic surfaces, and from a high elevation hunting locale provides evidence for human use of the mountain spanning the Archaic. Analysis suggests human occupation of the range intensified post Cal 3000 BP.

The archaeological results were compared against an ethnographically derived model for household and community food security, the basis of settlement and subsistence systems. The model failed to predict the house type revealed during the dissertation fieldwork on Tse'tse'ede. The model did predict the distribution and features at the investigated Tse'tse'ede sites, such as walls and the storage locations of personal items. Subsequent analysis revealed walls and locations associated with specific activities. Taxonomic identifications of recovered faunal specimens indicate a close fit with the predicted use of animal resources. Charcoal and burned botanicals recovered from the subject sites must be subjected to macrobotanical analysis to confirm predictions about floral resources.

Few Northern Great Basin Late Archaic sites with evidence for house structures match the model expectations. The archaeological record includes a diverse array of house types, manufactured in unexpected places, such as in upland environments, and many vary from one to another, and exhibit a general pattern for a decrease in house diameter over time.

Given the documented investment in house structure and the distribution of other similar sites, a population of at least one hundred or more individuals likely inhabited the Little Blitzen River Valley prior to U.S. Military campaigns in the area. Exotic artifacts suggest households were connected to larger regional social and economic networks reaching into Northern California and southwest Oregon.

FOR THOSE WHO CALLED TSE'TSE'EDE HOME,
THE ORIGINAL OCCUPATION

&

for my parents,
Guy and Marsha Mueller

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CHAPTER 1. INTRODUCTION

How do groups organize themselves to secure economic resources given changing climate? This study addresses one facet of that formidable research question. How do households create food security for their members? Or, what social and economic strategies do they use? In this dissertation I address this question as it relates to northern Great Basin foragers during the Archaic. I develop and evaluate a model for household and community food security with respect to cultural deposits recovered from four archaeological sites located on Tse'tse'ede, also known as Steens Mountain, in southeastern Oregon (Figure 1.1). These four sites are Mortar Riddle (35HA2627), Roaring Triangulation (35HA285), Big Mound (35HA2626), and High Ring (BLM#0502063004Si).

Household archaeology is the structure for this study within a broader ecological theoretical framework. Cultural ecologists view culture as how people adapt to the environment (Aikens and Couture 1986; Steward 1938). Household archaeology concerns human groups that share a dwelling and social and economic pursuits (Wilk 1982:617-639). Household economic pursuits require members to engage with their landscape, the resources therein, and the larger community of which the household is a part. The shared dwelling thus becomes a useful analytical unit for archaeological studies. In this dissertation I consider household evidence on two spatial scales, the details of particular households, and the location of those households on the landscape. This allows me to focus on the evidence for household subsistence strategies, both economic and social, and on larger patterns of landscape use across times of known climatic change.

Also key to my approach is the use of an ethnographically-derived model to provide some specific expectations that link behaviors to their material remains. It is important to stress that I do this in a model-testing fashion. Are the archaeologically visible patterns parallel to those predicted by the model, or do they diverge? In either case, what are the implications for the particular subsistence and settlement decisions made in the past? Are these echoed in other climatically

contemporaneous archaeological sites, suggesting a broader cultural pattern, or do they diverge, suggesting additional variables are at play?

I use Isabell T. Kelly's (1932) *Ethnography of the Surprise Valley Paiut*e to derive expectations for archaeologically visible evidence of household subsistence strategies within a social ecological framework. Kelly's ethnography is especially relevant for this purpose for many reasons. Surprise Valley, like Tse'tse'ede', is located within the northern Great Basin and both regions share certain ecological parameters. Surprise Valley, like Tse'tse'ede', falls within the ethnographic range of the cultural traditions of the Northern Paiute. Kelly spent the summer of 1930 interviewing seven individuals belonging to the Surprise Valley Northern Paiute group. The 'informants' Kelly interviewed lived in Fort Bidwell and possessed a living memory extending back to 1850. During the late nineteenth century the Northern Paiute had negotiated tremendous cultural and ecological upheaval; the arrival of Euro-American settlers and their livestock, U.S. military campaigns, and the introduction of the reservation system. Nevertheless, by tapping into memories of older traditions as well as current practices, Kelly's efforts resulted in a compendium of information concerning tangible and intangible economic, material, social, cultural, and shamanistic activities. My resulting model is a suite of archaeologically visible signatures for landscape, resource, and life space.

In testing the parallels and divergences between this model and the archaeological evidence, I use the four Tse'tse'ede' sites listed above and published data on residential sites elsewhere in the northern Great Basin. The comparative archaeological aspect allows for a wider view of landscape use across changing climatic conditions as well as a wider comparison of certain aspects of residential sites.

Fig 1.1 The dissertation Study Area and the Great Basin Hydrographic Boundary

Climatic conditions changed over the course of the Middle to Late Archaic periods, a time extending from 7,000 years BP to the historic era in the northern Great Baisn. Hot and dry conditions affected the region 7,000 to 5,000 years BP, after which wetter conditions caused marshes to flourish until 2,000 years BP. Then, broad oscillations in climate affected the region up to the historic era. Northern Great Basin archaeology suggests people implemented a number of technological and subsistence changes during this time. Atlatl points gave way to arrow points. A broad-spectrum diet was modified to include more intensive use of marsh resources and small seeds and roots. Long-distance travel or trade for chipped stone material gave way to use of closer sources.

Prior research has focused on extensive pedestrian surveys (Aikens et al 1983) to assess the micro-climate on the Tse'tse'ede mountain and prehistoric landscape use within the associated Catlow and Alvord drainage systems. More recent efforts focused on the faunal remains (Mueller 2007) and lithic remains (Epstein 2007) at one site, Mortar Riddle. The current study presents work carried out at four sites and focuses on intra-site spatial analysis at two of those sites, Mortar Riddle and Roaring Triangulation. This study also adds to the existing landscape models a focus on changing social dynamics at the household scale. Household floors that are dated and associated with periods of specific moisture and temperature levels make this possible. Faunal remains and the intra-site spatial analysis of in situ recovered artifacts as well as the density of screen-recovered, flaked stone debitage provide vital lines of evidence.

Many sites on Tse'tse'ede include projectile point styles typologically associated with the Late Holocene and these provide a general view of how the mountain landscape was utilized through time. For example, Oetting (1992; see also Musil and Oetting 1993) documented the presence of residential sites on river terraces during times associated with Northern Side-notched, Humboldt, Gatecliff, Elko, and Rosegate point styles. Also relying on survey data, Beck (1984) and Jones (1984) suggested that the uplands saw greater use after 6000 BP, that during the

wetter times of 3000-2500 BP sites were larger but fewer, and during the subsequent drier times sites were smaller but more abundant, inferring increased residential mobility during periods of greater aridity. Thus far, however, Mortar Riddle and Roaring Triangulation are the only sites for which we have subsurface excavation and the more detailed understanding that can provide. The Mortar Riddle and Roaring Triangulation sites thus present a unique opportunity to explore how household food security may vary at specific points in the Late Holocene climate record. Both sites contain archaeological deposits dated to distinctive Late Holocene and, thus, specific climatic periods. Both sites were occupied during a drier period and one site, Roaring Triangulation, was also occupied during a period of increased moisture.

The outline for the dissertation is as follows:

Chapter 2 presents the theoretical framework for the study. I review the cultural ecological foundation of Great Basin archaeological studies of settlement and subsistence, along with the household archaeological approach to understanding human adaptation, and the use of analogy in model building and testing.

Chapter 3 provides archaeological and environmental background. I first present a broad overview of Great Basin archaeology, chronology and climatic change. I then present a more detailed review of the archaeological context and environmental background for the study sites.

Chapter 4 provides excavation details for my four archaeological study sites. This includes photographs of the enivonmental locations, site maps, soil profiles, chronologically diagnostic projectile point types, radiocarbon and obsidian hydration dates, and summary descriptions of excavation methods and resulting artifact inventories.

Chapter 5 provides background on the ethnographic source for my model, the Surprise Valley region of the northern Great Basin and the Gidu'tika Paiute who occupied it. I detail the environmental and cultural parallels with the Tse'tse'ede' region, the strengths of Kelly's ethnography, and the potential impacts of historic changes on the material record I seek to model. I

detail in table form particular documented associations between behaviors relevant to subsistence at both household and landscape scales and patterning in the types and spatial distributions of particular material remains.

Chapter 6 reviews the analytic methods I use in my approach to the archaeological evidence for household and landscape subsistence strategies. These include archaeological manifestations of the household, spatial analysis of the evidence for household activities, and patterns in the nature and distribution of faunal remains relevant to strategies of subsistence and mobility across the landscape.

Chapter 7 presents the detailed results of the analysis of my two archaeological subjects sites with identifiable household spaces, Mortar Riddle and Roaring Triangulation, and the three temporal and climatic periods they represent. One sample documents household strategies at Mortar Riddle during a more arid Late Archaic time period. A second sample documents household strategies at Roaring Triangulation during an earlier arid climatic regime. The third sample documents use of Roaring Triangulation during a wetter climatic regime. In each case I review the evidence for household space and its use, the evidence for subsistence activities related to chipped stone and ground stone, and the faunal evidence for subsistence strategies.

Chapter 8 I returns to my starting questions and discuss: 1) convergence and divergence between my ethnographic model and the archaeological evidence from Tse'tse'ede; 2) convergence and divergence between the four excavated sites on Tse'tse'ede and other archaeological sites on the mountain and in the region; and 3) the evidence for climatic variation in subsistence strategies at the level of the household and the landscape. In the process I evaluate the potential of future work that incorporates household archaeology in to regional models of subsistence and settlement strategies.

Note: Steens Mountain is a single fault block mountain that has been known by many names. The name in widest and current use is Steens, for U.S. Soldier Enoch Stein. Stein killed a

group of Paiute north of Harney Lake, Oregon in vengeance for the death of U.S. Captain Andrew Smith (MacArthur 2003:912-913). Before the mountain was known as "Steens," John Work, a Hudson Bay fur trapper, dubbed it "Snow Mountain" in 1845 (MacArthur 2003:912-913). Prior to both Euro-American names, Northern Paiute speakers knew the mountain as *Tse'tse'ede,* which translates to "the Cold One." In an effort to honor the original occupants, whose lives are the focus of this dissertation, I refer to the mountain by its Northern Paiute name, Tse'tse'ede.

CHAPTER 2. FRAMING THE HOUSE: THEORY

In this chapter I present the intellectual structure of this dissertation. I focus on three aspects of my theoretical framework: cultural ecology and its roots in Julian Steward's ethnographic research among Great Basin and Shoshone groups; household archaeology as a particular approach to understanding human adaptive strategies; and the use of ethnographic analogy in model building and testing. In the process, I explain the relationship between household archaeology and traditional subsistence and settlement studies.

Cultural Ecology

Cultural ecology, in its modern form, is a foundational concept for this dissertation. Julian Steward defined cultural-ecology:

> "The modes of behavior by which human beings *adapt* themselves to their environment. Any adaptation necessarily involves an interaction of two elements: The *natural environment* and the particular *cultural devices*, invented and borrowed, by which the environment is exploited" (Steward 1938:2; emphasis added).

Where,

> "*Adaptation* of certain behavior patterns to the general ecology requires consideration of the density and distribution of the population, of the roles of the sexes, the family and communal groups in hunting, fishing, and seed gathering, of the territory covered and the time required for different economic pursuits, and of the size, composition, distribution, and degree of permanency of villages" (Steward 1938:2; emphasis added)

Julian Steward's definition of cultural ecology and ecological adaptation developed, in part, because of his ethnographic fieldwork ca. 1935-1936 among 25 Paiute and Shoshone groups living within the central and eastern Great Basin (1934). His interest in the Great Basin environment and indigenous groups living there, however, developed much earlier. At sixteen he moved from Washington D.C. to attend Deep Springs College Preparatory School near Bishop, California (Kerns 2003:31).

Now an elite two-year college Deep Springs requires students' physical labor to keep the school's cattle ranch in operation, just as it did when Steward attended in 1918 (Kearns 2003:249). The work brought Steward in contact with Northern Paiute employed by the school as ranch hands or laundresses, including Captain and Mary Harry who lived on the grounds (Kearns 2010:69). The Harry's house was a variation of the willow and grass thatched structures known for the area; they built and maintained their house with materials the ranch intended for disposal (2003:41,42; 2010:69). Steward developed a fondness for the Harry's as he learned how they negotiated an augmented version of their pre-contact social and economic customs (Kearns 2003:23, 41). Concurrent with his time at Deep Springs, Steward's mother received a job transfer to work as a clerk on the Klamath Reservation in southwestern Oregon (Kearns 2003: 33). Steward completed his studies at Deep Springs with an understanding of contemporary indigenous life in two contexts.

Steward went on to earn a Bachelor's of Science in Zoology at Cornell where he also completed coursework in geology before he returned to California to pursue graduate studies under the direction of Kroeber at Berkeley. He earned a Ph.D. in 1929 following the acceptance of his dissertation, *The Ceremonial Buffoon of the American Indian, a Study of Ritualized Clowning and Role Reversals*. From there, Steward collected ethnographic data among the Great Basin Shoshone in connection with Kroeber's Cultural Element Distribution (CED) survey, which contributed to his important 1938 Bureau of American Ethnology publication, *Basin-Plateau Aboriginal Sociopolitical*

Groups. The arc of his education and early work experiences exemplifies the depth of his interest in human cultural ecology.

Steward identified *important features of the natural environment* including the "topography, climate, distribution and nature of plant and animal species, and, as the area is very arid, occurrence of water" (1938:2; emphasis added). These environmental features afford options and constraints to cultural groups; consequently, "any system may vary only within limits, otherwise the people will obviously not survive," (1938:261). Ecological aspects of human cultural change focused Steward's research. He also differentiated studies in biological evolution from his own social science research, which "cannot be conceptualized in biological terms" (1955:35), and he explicitly incorporated a variety of social solutions to adaptive challenges, including group size and mobility.

Steward's concept of Cultural Ecology has had an enduring influence on North American archaeology in general and Great Basin archaeology in particular. Other theories about the intersection of culture and ecology have diverged from this original framework. Notably, a more biologically-based evolutionary focus lead some archaeologists to behavioral ecology, while other archaeologists have kept more of Steward's original attempt to integrate a mix of social decisions into a view of adaptation.

Behavioral ecologists suggested selectionist models possess superior explanatory power regarding human adaptation, where the archaeological record reflects efforts to maximize evolutionary fitness (Broughton and O'Connell 1999). Some (Kelly 1995; Simms 1987) employed optimal foraging models to evaluate the evolutionary fitness of different behaviors by quantifying caloric rates of return from ethnographically hunted and collected resources. For example, Zeannah (2004) explored residential site locations within a central place foraging framework given the sexual division of labor of hunted versus gathered foods for the Toedokado of the Carson Sink and

Stillwater Marsh area of northwestern Nevada. Zeannah concluded that women's foraging goals likely dictated central place site location, as males supplied hunted resources with a greater degree of variability.

Jochim (1981, 1991) challenged notions that human behavior is ever optimal or maximal. Binford (1991:127) went further and critiqued selectionist approaches as amounting to "an optimizing teleology," where the essential goal of human behavior and explanation for archaeological variability is maximizing one's reproductive success. Bamforth (2002) questioned the empirical visibility of fitness results based on conceptual models of foraging return rates. In concordance with Steward, Jochim characterized cultural ecology as combining the natural and cultural environments of human life (1990:75). Changes in social organization may yield variations in the archaeological record that do not reflect decisions related to maximizing evolutionary fitness.

Cultural ecology frames this study, which is an investigation into how households organize to maintain subsistence security given experience and knowledge of local environmental parameters. I now turn to a further consideration of some of those social strategies and their relevance to understanding subsistence and settlement patterns, the roles of households and household archaeology.

Steward's stated considerations for group ecological adaptation are related to subsistence pursuits, mobility, and settlement patterns. He suggested that understanding the underlying social organization begins by analyzing "the smallest cohesive group –'the family cluster,' 'task group,' or 'primary subsistence bands' and then tracing the interaction of these groups in expanding spheres" (Steward 1970:113-114). Lewis Binford later provided a conceptual framework for understanding hunter-gatherer mobility with respect to subsistence resource distribution and storage.

Lewis Binford's (1980) *Willow Smoke and Dogs' Tails* synthesized advancements in hunter-gatherer settlement and subsistence system research, drawing heavily from his work with the

Nunamiut (1978a). Groups range from being more sedentary to more mobile in relation to their resource procurement and use patterns. More sedentary groups are likely to practice a collector strategy where resources –hunted, fished, or harvested- are collected at satellite locations for immediate use or stored at or near a residential site for future use. More mobile foragers move their residential bases in order to "map-onto" resources they will consume. As a corollary, Binford suggests more sedentary groups will engage in subsistence related logistical forays away from the residential location. Logistical forays involve a segment of the residential group to engage in subsistence activities some distance from the main group's residential location thus requiring one or more overnights in a logistical campsite (Binford 1978b). The model has made an enduring impact on how archaeologists view hunter-gatherer mobility, including those studying Late Holocene archaeology in the Great Basin and neighboring regions.

For example, Robert L. Kelly (2001) investigated group mobility and subsistence using survey and excavation data collected from the Carson Desert and Stillwater Mountain region. Residential sites produced subsistence evidence indicative of marsh exploitation, including abundant bulrush seeds, cattail seeds, as well as the osseous remains of migratory fowl and fish. Residential site locations associated with wetland habitats allowed Kelly to argue that group mobility decreased in Late Holocene as a result of groups choosing to map on to areas with access to more reliable marsh resources. Zeanah's (2004) work, mentioned above, could also be viewed in the context of Binford's (1980) approach, where groups map-on to reliable resource patches where females extract gathered resources.

Implicit in Binford's model is the functionality of the household group, a point Polly Weissner (1982) raised in reaction to Binford's (1980) model. Weissner argued that group organization related to social and economic needs were both important, as "internal site structure, profiles of exchange, stylistic variation in artifacts, contents of burials, etc. are the products of

intragroup and intergroup interaction" and risk reduction (1982:172). She contrasts Binford's description of Nunamiut butchering practices with those she and others (Yellen 1977) observed among Ju/'hoansi groups in the Kalahari. According to Binford (1980), the presence and distribution of fauna within a Nunamiut camp is a function of meat utility, transport costs, future needs, and storage capabilities. In contrast, Weissner (1982) observed the Ju/'hoansi butcher and distribute meat to camp members following cultural rules for sharing meat. Yellen (1977) reported similar observations. For example, hunters share out certain portions of a large ungulates, but trapped mammals are reserved by the hunter for consumption among members of his household (Yellen 1977). After three rounds of distribution following a successful hunt, a hunter ended up giving away the most meat. Thus, faunal distribution patterns reflecting social rules and sharing patterns compound over time within and among households and may be tracked archaeologically.

A recent study by Carly Whelan and her colleagues (2016) identify regional social and economic factors that may have required household level risk-reduction strategy and negotiation to accommodate what may have been competing needs of childcare and resource procurement. Numerous sites within the ethnographic territory of the Me-wuk of the central Sierra Nevadas reflect a shift from small seed to acorn exploitation around cal 1100 – 150 BP. The number of sites dating to this period is greater than previous periods suggesting a positive correlation in the human population and, thus, competition for available resources. It was also during this period that the bow and arrow enter the archaeological record. Whelan et al (2016) suggest the annual variability of small seed abundance within constricted group territories and more efficient hunting technology made foraging activities more dangerous. Since acorns are easier to handle than small seeds, gathering acorns in quantities sufficient for household members needs requires less foraging time and, therefore, less time away from one's children or a reduction in the time children are exposed to potentially violent encounters. In sum, the shift represents a risk-reduction strategy.

Cultural ecology provides an appropriate theoretical framework for my dissertation, which focuses on the technological and social aspects of securing subsistence resources within the parameters of the broader environment. Key social elements I consider include group size, composition, and mobility, or what Steward (1938:2) stated as considerations for understanding group ecological adaptation. My approach in this dissertation is to join consideration for the inter- and intra-site contexts of human behavior. The household analytical unit facilitates investigation of mobility patterns across the landscape and is the social context in which specific activities are revealed in the intra-site distribution of artifacts.

Household Archaeology

In their seminal article entitled Household Archaeology*,* Wilk and Rathje (1982) argue that the focus of household theory is to understand how households articulate with economic and ecological processes. Households are social and economic units, where function is related to membership size and form. Large households may pool their labor in a single geographic setting to produce and distribute various resources among the household members. Small households, conversely, may be highly mobile and may need to negotiate labor schedules to make use of limited and dispersed resources, pooling labor for specific tasks, such as for cooperative hunting (Wilk and Rathje 1982:332). Before and after the publication of *Household Archaeology,* anthropologists and archaeologists have wrestled with definitions of household and house.

Some archaeologists have considered the socio-cultural research on household groups and applied those ideas to their own research. In an assessment of Neolithic houses, Chang characterized the household as a kinship group with shared economic and social goals (1956). Yanagisako (1979) cautions against universal definitions of household, as the meanings of household vary cross-culturally. Hendon reminds archaeologists that households and house structures should not be viewed as indicative of “untested and stable” relationships among kinship

groups (1996:48). Craft specialists, especially female craft specialists, that are part of a household group require the group to reallocate time and energy that may alter household power relationships. Gillespie (2007) argues that archaeologists tend to equate household groups with the physical structure without considering heuristic utility of house societies, where house may be indicative of immaterial concepts like name, title, or social status (Levi-Strauss 1982:194). House centric perspectives stress the relationships between the house structure and the social group and, thus, overcome the flattening aspect of typologies and chronologies that dominate archaeology.

Archaeologists have outlined visible expectations for house structures. In his study of Neolithic houses, Chang (1958:298-234) suggests that a structural household may be identified archaeologically by a single hearth. Flannery and Winter (1976) argued that there are universal household activities and that they have material correlates; for example, food procurement, preparation and storage may be represented by traps, hearths, burnt bone, and ceramic containers. Binford (1987:449-512) argues for a "generic pattern distinctive to residential sites," which is "dominated by domestic space/sheltered sleeping and 'kitchen' areas, as well as alternative, inclement weather work space within the shelter." Smith (2003) suggests that identification of houses that are associated with marginal environments, such as Mid-Holocene residential sites in Wyoming, may be identified by the extent and depth of floor shape.

Archaeological approaches to household analysis include those focused on large, multi-family houses. For example, Pacific Northwest coast subjects (Hoffman 1999; Huelsbeck 1989; Lepofsky 2009; Samuels 1989) where large plank house villages dominated the shoreline and inhabited by sedentary groups with internal social ranking. The first example concerns investigations (Huelsbeck 1989; Samuels 1989) into household hierarchy at the Ozette Site in Washington. Samuels (1989) investigated hierarchical distinctions among three houses according to the distribution of cook hearths, ceremonial hearths, ceremonial artifacts, post and stake molds,

and fauna (shell, mammal, and fish remains). One house exhibited the highest frequency for ceremonial objects, more evidence for housekeeping, lowest abundance of shell fish, the largest ceremonial hearth features, and location in the first row along the beach, all clear indications of a high-status house. Huelsbeck (1989) considered intersite hierarchy drawing on faunal evidence and found that the highest rank household in Samuels's (1989) study also produced more whale, salmon, and halibut remains, which are high ranked resources, than the other lower status households where shellfish dominated the house assemblage and moderate depth fish not requiring specialized access rights were also represented.

Another example concerns the Agayadan Village (ca. 1000 AD) on Unmiak Island, off the Alaskan Coast. Hoffman (1999) argues that single houses within the Agayadan Village (1000 A.D.) represents a hybrid of Levi-Strauss's 'House Society' and individual control of some space. Within single houses communal hearths represent corporate economic activities with respect to cooking and heating while segregated pit storage features may represent family/individual control. Hierarchical distinctions among different households are reflected in faunal assemblages, as in the Huelsbeck (1989) study, with higher ranked species dominating the assemblages of higher ranked houses. In a diachronic study of houses in the Fraser River Valley of British Columbia, Lepofsky et al. (2009) noticed an increase in internal storage within increasingly larger house structures and settlement sizes ca. BC 4200 – 1800s AD. The evidence suggests an increase in co-resident group and population size with the diversity of internally distributed artifacts indicative of settlement and house-level specialization. Plank houses of the Pacific Northwest are uniquely suited to investigations of inequitable distribution of resources, given their large size and internal partitioning. In contrast, archaeological research on Great Basin households tend to build from models of single family, either nuclear or extended, households.

In this dissertation, a *household* is a social group, quite often a family, which residentially occupies a single house structure or a living space and shares common economic and social activities. A *house* is identified archaeologically by a living surface lens that is compacted in nature and includes a hearth and/or evidence of a superstructure. The living surface lens may or may not include a circular outline of postholes or rocks and may or may not have been excavated below the contemporary ground surface. *Residential communities* may contain one or more households, using one or more house structures, and include refuse middens. Residential sites exist within a broader social system of landscape use in which people create a variety of site types associated with particular activities (Binford 1983). Residential sites may be delineated from non-residential or special purpose sites, such as antelope corrals, flake and ground stone quarries, hunting blinds, or pit-fall traps.

Ethnographic Analogy

Archaeological use of ethnograpic analogy can be viewed as "the application of the comparative method to human culture and material remains" (Currie 2016:93). Archaeological interpretations of prehistoric sites usually rely on analogical inference in some form. There is, however, considerable debate about what forms analogy are most appropriate, how to evaluate the appropriateness, and where the limits of analogy come into play.

For example, when archaeologists interpret a flaked stone artifact as a projectile point they may rely on the raw material and the form of the object to arrive at an analogy for artifact function. They might narrow their assessment from projectile point to arrow point based on the size of the object and a consideration of the physics of weight and balance during the flight of other, known arrow points. They might measure the element composition of the raw material and infer the location of the lithic quarry that was the original source of the material, based on chemical comparisons with various quarries. In each step similarities between the archaeological artifact and other items for which that particular attribute is known are used to build the interpretation.

Analogies can also stretch into the more social aspects of archaeological interpretation. For example, the inference that the presence of arrow points denotes the presence of a hunter and, a step further, that that hunter is likely to have been an able-bodied male.

Two research methods are devoted to developing and testing the fit of archaeological inferences: ethnoarchaeology and experimental archaeology. Ethnoarchaeology, explicitly combines archaeological questions with ethnographic methods. Thus ethnoarchaeological studies involve active ethnographic study of groups to ascertain the links between observed behaviors and their material remains (e.g. Binford 1978, 1980; Lane 2014; Hudson 1993; Yellen 1979). Another path to the investigation of relationships between human behavior and material correlates is experimental archaeology. Experimental archaeology involves attempts to replicate some aspect of material culture remains under controlled conditions (e.g., Outram 2008).

A third method, ethnographic analogy, is very widely used by archaeologists, sometimes explicitly and sometimes almost unwittingly. Alison Wylie (1985) introduced terms germane to the discussions of ethnographic analogy and I use them in subsequent chapters of my dissertation. The *subject* is the archaeological case in question, while the ethnographic analog is the *source* (1985). Wylie argues that relational analogies require one to consider the strength of formal relationships between the subject and source. Such relationships may include ancestral connections between the subject and source, as with the direct historical approach, or common environmental conditions and resources, or similar technologies and economies. When multiple commonalities pertain, the analogy is strengthened. Wylie also cautions that the analogy should not be extended beyond its scope. Thus if similarities between the source and subject claimed in the conclusions do not outweigh those used to establish the relevance of the chosen analogy, the analogy can be used with greater confidence (1988:146).

Uncritically assuming one particular set of ethnographically documented behaviors are those responsible for prehistoric archaeological assemblages, regardless of the strength of relational connections, can be problematic in that it narrows the interpretive options. The use of multiple ethnographic sources widens the view and improves the capacity for discerning which details fit or do not fit the subject (Wylie 1985:106). Equally critical is an attempt to understand the causal factors at work in producing the specific material attributes of the source, as with Binford's approach to smudge pits (1967).

Stahl (1993), in her review, differentiates between "illustrative analogy" in which the source, however carefully chosen, serves primarily to add a narrative to connect the material remains to an imagined fuller picture of cultural life, and the use of analogy as a "comparative model" whose fit is assessed with attention to both similarities and dissimilarities. Stahl (1993:253) recommends subject-side comparisons, as they require archaeologists to address positive and negative points of comparison. Also at issue is the ability to recognize behaviors in the past that may have no modern analogs (Binford 1967; Wobst 1978). Archaeological interpretation based solely on an illustrative approach "precludes the use of analogy to show differences between the past and present" (Kuznar and Jeske 2006:38) whereas the comparative approach "allows archaeologists to distinguish points of divergence and instances in which expectations are not met, as well as convergence between the ethnographic and archaeological record" (ibid:39).

In this dissertation I attempt a very explicit use of analogy, with an emphasis on the comparative approach. I choose an ethnographic source that meets many of Wylie's criteria for a strong analogy and document where I see those strengths, while at the same time tracking the types of potential historical biases that Stahl cautions against. I follow Binford in using ethnographic details, including causal relationships as best understood, to develop a model. I outline the specific archaeological expectations for behaviors described ethnographically. I also consider other

archaeological subjects in the region and compare them against the archaeological subjects of my study. To allow for the exploration of alternative explanatory hypotheses, I present an evaluation of the points of divergence between the subject and source as well as points of convergence and divergence among multiple subject-side analogs.

Summary

In this chapter I reviewed my theoretical framework and explained how a household approach to archaeological research can be integrated with the modeling of regional settlement and subsistence strategies. I reviewed the development of Great Basin settlement and subsistence models from the ethnographic approach to cultural ecology introduced by Steward. I discussed the use of analogy and its critiques. In the next chapter, I review the two archaeological sites I explored for this dissertation, Mortar Riddle and Roaring Triangulation.

CHAPTER 3. ARCHAEOLOGICAL AND ENVIRONMENTAL BACKGROUND

In this chapter I present the archaeological and environmental background relevant to my research questions. I begin with a general overview of Great Basin environment and archaeology, and then narrow my review to the northwestern Great Basin, a subregion of the Great Basin that is relevant to both my ethnographic sources and my archaeological subjects. Given my research focus on household archaeology, I detail archaeological sites in this region with known evidence for houses. Lastly, I look more closely at my archaeological study area on Tse'tse'ede and describe both the environmental context and the archaeological record for that area.

The Great Basin

The Great Basin is an immense region of environmental extremes. It is named after its unique hydrographic situation, where rivers and streams are characterized as internally draining because they never reach the sea (Figure 1.1). It incorporates parts of Oregon, California, Nevada, Colorado, and Idaho. In the northern regions of the Great Basin the general characteristics are recognized as a high desert, where summer temperatures are very hot and rain is infrequent. Seasonal snowpack melt provides most of the water. Topographically the area is characterized by a series of north-south trending mountain ranges alternating with basins. In the spring, the snowmelt fills playas, such as the Great Salt Lake, and replenishes those with standing water like Malheur and Pyramid Lakes. As the spring and summer heat intensifies, water evaporates from playas leaving alkali sediments below.

The mountains add elevational variations in temperature and moisture and associated plants. The extreme topographic variation in the Great Basin is responsible for the patchy nature of faunal and floral resources. Sagebrush flats provide habitat to pronghorn antelope, sage grouse, and jackrabbits. Waterfowl flock to basin lakes while bighorn sheep inhabit rocky outcrops and mule deer graze in upland wet meadows and aspen forests. Of course, the environmental realities,

particularly from the perspective of humans seeking reliable resources and viable strategies of mobility and social groupings of family and community are not this simple. Details of topography create distinctive variations in resource distributions within both the broader sub-regions of the Great Basin and within elevational zones.

There have also been changes over time. For example, following the last glacial period pluvial lakes formed and temporal variations in lake levels are evident in the wave-marked landscapes hundreds of feet above the current lake levels (Grayson 2011). The pluvial lakes gradually reduced during this cooler climatic period. The extent of ancient lakes is also evidenced by the eolian deposits in the expansive playas and dune fields, as one can see in the Black Rock Desert, Catlow Valley, and the Bonneville basin. This combination of chronological variation, especially in terms of the availability of water, and microhabitat variation within larger ecological zones, is important to understanding how humans used this landscape.

It was in this Great Basin environment, as a student at Deep Springs College not far from the Owens Valley, that Julian Steward formulated his questions about the connections between the landscape and human groups (Kerns 2009) and where he would later conduct his ethnographic fieldwork. Stewards (1938) Basin-Plateau Aboriginal Sociopolitical Groups resulted from his Bureau of American Ethnology funded field work among the Shoshone and Paiute inhabiting central and eastern Nevada, southeastern California, southern Idaho, and northwest Utah (Figure 3.1). Steward described the groups he documented as requiring frequent moves to secure the geographically dispersed resources of the central Great Basin. As an exception, he cited the Owens Valley pattern (Steward 1937), where sedentary political groups focused on piñon nuts procured from constricted territories (Steward 1938b). Steward (1938) hypothesized the Great Basin archaeological record might include data that represent the deep antiquity of the hunting and gathering pattern he documented ethnographically.

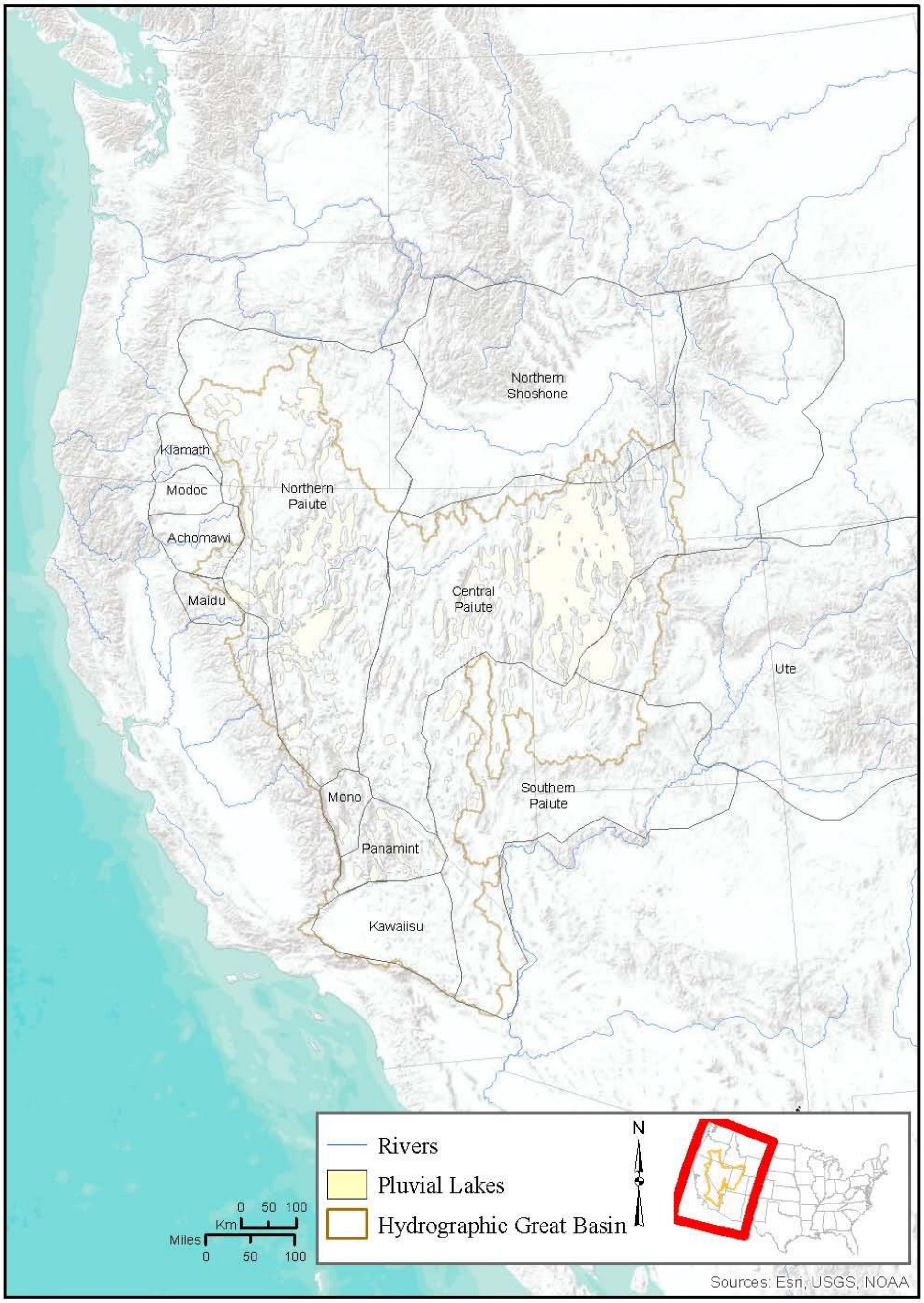

Figure 3.1 Ethnographic Regions within the Great Basin within the western U.S.A.

A review of Great Basin cultural chronology and research regions provides structure to the subsequent presentation of Great Basin subsistence and settlement models (Table 3.1). The cultural chronology I employ is an amalgamation of those applied to disparate basin and range systems (e.g., Hildebrandt et al. 2016; Jenkins et. al 2006:8) within the broader Great Basin region. These cultural

periods generally parallel major environmental changes over time and so I include description of them in the cultural chronology.

Table 3.1 Great Basin Cultural Chronology

Cultural Period:		**Years BP*:**	**Climate:**
Historic Period		Begins AD 1820	Oscillating temperature and precipitation conditions
Archaic	Late	3000 – 130	
	Middle	6000 – 3000	Warm and dry/increased evaporation
	Early	9000 – 6000	
	Initial	12000 – 9000	Cool and moist/decreased evaporation
Paleoarchaic		14500 - 12000	

Note: Dates given in years before present where present is cal. 1950 A.D. except for Historic Period where date is given as AD 1820. Climate description based on Antevs's (1948, 1955) three-phase neothermal climate sequence, which is discussed in further detail below.

Great Basin prehistory is broken up into three general phases: The Paleo-archaic, the Archaic, and the Historic period. The Paleoarchaic period spans cal 14,500 – 12,000 Cal. BP and marks the beginning of the Great Basin archaeological record, general cessation of Pleistocene glaciation and, thus, maximum pluvial lake levels (Grayson 2011). Simple flaked stone tools, fiber thread, and bone artifacts are represented. The Paisley Five-mile Point Caves in south-central Oregon is currently the oldest site in the Great Basin and the location where cultural material was recovered in stratigraphic association with Pleistocene fauna (Gilbert et al. 2008; Jenkins 2007; Rasmussen et al. 2009).

Most of the archaeological record falls within the Archaic, which is further divided into four periods: The Initial Archaic, Early Archaic, Middle Archaic, and the Late Archaic. During the Initial Archaic, 12,000 – 9,000 BP, the climate was generally cool and pluvial lake margins still afforded a rich resource base. The archaeological record included undecorated twined basketry, sagebrush bark sandals, ground stone tools, Western Stemmed and Clovis projectile points, and Crescents at sites (Jenkins et al. 2012). Fort Rock, Buffalo Flat, and Danger Cave are all examples of Initial Archaic sites, which I discuss in further detail below.

The Early Archaic period, 9000 – 6000 BP, included a marked increase in temperature and dry conditions or increase in evaporation, especially following Mount Mazama's eruption that

occurred around 5677 B.C. +- 150 years resulting in the formation of Crater Lake (Zdanowicz et al. 1999). Dart points continue to be represented in the archaeological record including, Cascade, Northern Side-notched, Humboldt, and Elko Side-notched projectile points along with multiple warp and spiral weft sandals and decorated twined basketry. Sites are generally found along the margins of the Great Basin and contain a lower frequency and diversity of artifacts, thought to represent temporary hunting and foraging camps.

Moister conditions return during the Middle Archaic, 6000 – 3000 BP, during which time site frequency, size, and diversity increases. Substantial houses with large storage pits are located near lakes that provide abundant resources. Evidence for piñon seed exploitation enters the record and evidence for long distance trade includes the distribution of shell and stone beads across the Great Basin (Bennyhoff and Hughes 1987). Examples of sites dating to this period and discussed in further detail below include the Bergen Site, Gatecliff Shelter, Hogup Cave, and Lovelock Rockshelter.

The Late Archaic period, 3000 – 130 BP (AD 1820) included numerous climatic oscillations causing water and resource availability to be less predictable. Residential sites are still located near marsh and lakeshore settings, but also in upland contexts where piñon and geophytic roots were available. Inter-regional trade continues. Small seed exploitation becomes an increasingly important resource. Bow and arrow technology enters the archaeological record in addition to multi-structure village sites and some sites exhibit defensive configurations. Boulder Village, White Mountain Sites, Alta Toquima are examples of Late Archaic residential sites.

The climate regimes mentioned above were initially outlined by Ernst Antevs (1948, 1955), who completed the palynological analysis of Great Basin lake varves. His (1948) three-phase model for Holocene climate revealed the dynamic nature of climate history, including the period during which humans were thought to inhabit the Great Basin (Table 3.2).While his climate periods are not a perfect match for the archaeological periods, the overlap is very strong. Following the

development of radiocarbon dating, archaeologists pursued research within known temporal and climatic contexts, both of which were integral to subsequent debates concerning Great Basin human settlement and subsistence in the Great Basin.

Table 3.2 Antevs Neothermal Climatic Sequence (1948, 1955)

Climatic Phase	**Years BP**	**Climatic Conditions (Temperature and Precipitation)**
Medithermal	4500 – 0	Generally warm, though conditions oscillate
Altithermal	7000 – 4501	Hot with reduced moisture or elevated evaporation.
Anathermal	10150 – 7001	Cooler with elevated moisture or reduced evaporation.

Great Basin settlement and subsistence models

In this section I provide an historical review of how Great Basin settlement and subsistence models evolved and changed over time, beginning with early work by Jennings and Aikens, and noting some of the key archaeological sites that helped to frame these models. Early archaeological reports often included interpretative results made in comparison to Steward's (1938) assessment of subsistence and settlement.

Jennings (1957) excavated Danger Cave, located west of the Great Salt Lake, in Utah where he recovered a record of human life extending to 9,000 BP (1938) (Figure 3.2). Recovered artifacts include copious ground and flaked stone artifacts as well as plant and faunal remains representing species observable in the region at the time Jennings excavated the site. Jennings (1957) characterized the deposits as representing a *Desert Culture,* or Desert Archaic, settlement and subsistence pattern as described by Steward (1938) in *Basin-Plateau Aboriginal Socio-political Groups* where highly mobile foragers subsisted on readily available plants and animals, moving when such resources waned. In Jenning's view, the Desert Archaic spanned the last 10,000 years during which time the climate and material culture remained the same.

At the northern limits of the Great Salt Lake, C. Melvin Aikens recovered an 8000 year record of human occupation. Aikens (1967) indicates that deposits dated between 6400 BC and AD 400 compared favorably with what Jennings reported at Danger Cave and subsequently termed *Desert Culture*. Subsistence evidence included small seeds, ground stone artifacts, small and large

game, such as pronghorn antelope, deer, bison, rabbits and hares, dart points, cordage and a diverse basketry assemblage (Aikens 1967:189).

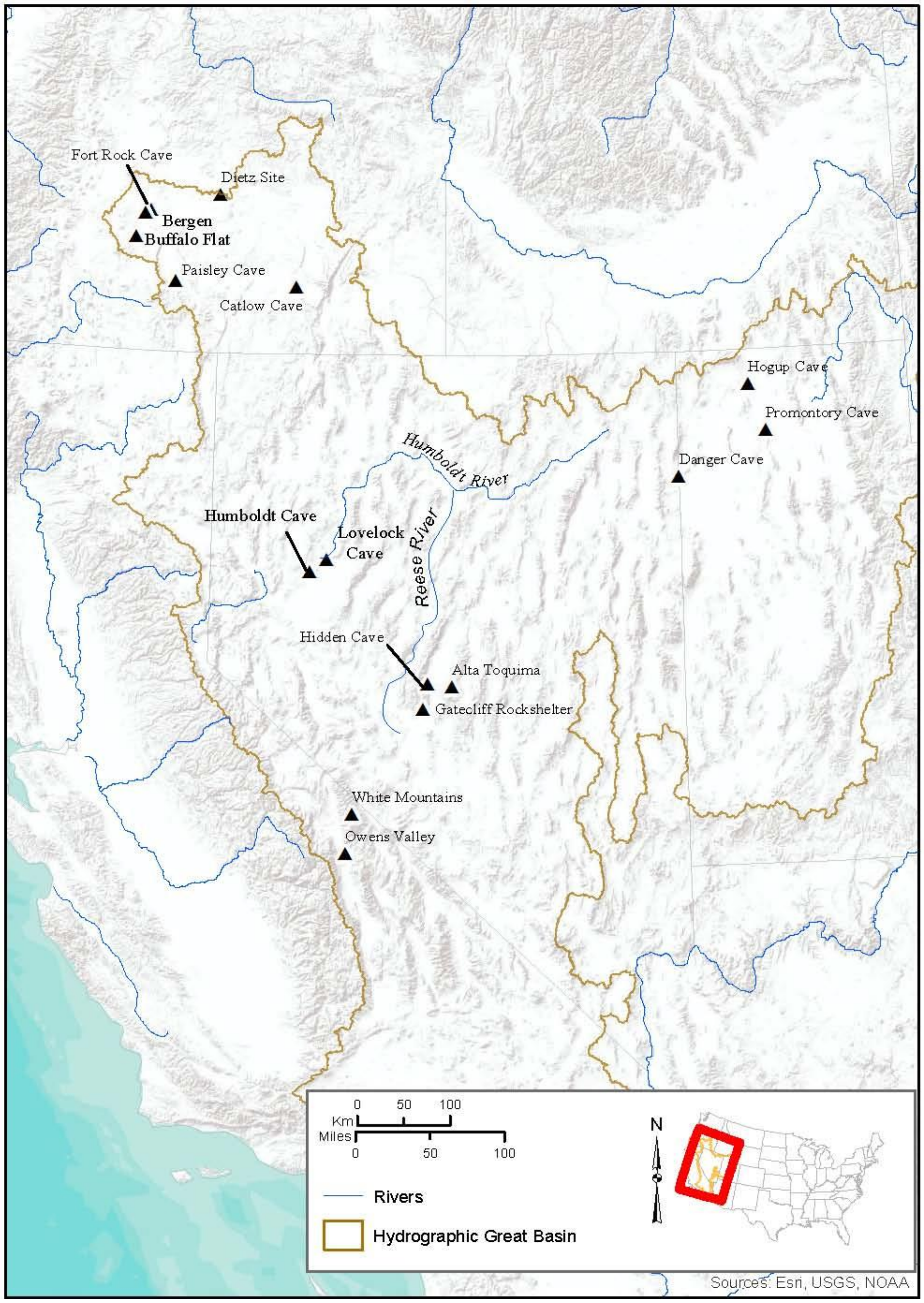

Figure 3.2 Great Basin Sites mentioned in text

The character of Hogup Cave deposits changed at 1250 B.C. when arrow points joined the assemblage (Aikens 1967:191). Later, Freemont and Promontory Cave ceramics are associated with a peak in occupational intensity in deposits dated between 400 and 1350 A.D. Such ceramics were used by groups that practiced maize-bean-squash horticulture. Increased numbers of pronghorn, but also bison, are represented in the site's zooarchaeological assemblage, along with *Olivella* spp. shell beads from the Pacific Coast and figurines manufactured from plant fiber. Basketry artifact diversity is less even than that compared to earlier periods of human occupation at Hogup (Aikens 1967: 192). During the last 500 years of human occupation, material culture compared favorably to that identified in deposits dated to 6400 B.C. to A.D. 400, but with the addition of Shoshoni ware pottery as well as Rose Spring, East gate, and Desert Side-notched projectile points. In sum, Hogup Cave demonstrated vastly different subsistence strategies associated with different residential use strategies dated to different periods.

On the far western edge of the Great Basin in present day Nevada, archaeologists revealed a different record of human settlement and subsistence. Eleven tule duck decoys along with subsistence evidence of fish and waterfowl remains were recovered from deposits at Lovelock Cave (Loud and Harrington 1929; Butler 1996; Touhy and Napton 1986). Two decoys were later subjected to accelerator mass spectrometry dating, where one decoy dated to 2,080 + 300 BP and the second dated to 2,250 +230 BP (Tuohy and Napton 1986:814). Likewise, Humboldt Cave, also located within the Pluvial Lake Lahontan basin, produced similar data as well as bighorn sheep horn artifacts, basket-lined cache pits, and waterfowl bones, skins, and feathers (Heizer 1955; Heizer and Kreiger 1956). The Lovelock and Humbolt Cave deposits provided proof that groups' subsistence strategies also included those targeting lacustrine and marsh environments. Heizer and Napton (1970) characterized some of these groups as practicing a "limnosedentary" strategy, wherein groups that were more sedentary than mobile mapped on to highly productive marsh and wetland resources. As a result of excavations at Hidden Cave, David Hurst Thomas (1985)

suggested that lacustrine and marsh locations provided important resources along with a number of different locations visited throughout the year; consequently, Thomas (1985) characterized a limno-mobile strategy for the Hidden Cave inhabitants.

Along the Reese River in the central Great Basin of Nevada, David Hurst Thomas conducted research to test the links between the ethnographic period and the prehistory of the Great Basin. Thomas (1973) modeled Shoshonean settlement and subsistence following Steward (1938) and tested the model against results of randomly sampled pedestrian survey locations. Thomas found his model correctly predicted 75% of artifact assemblages recovered from sites occupied between 2500 B.C. through 1850 A.D.. The model did not predict the importance of sites within the piñon-juniper zone and the riverine environments, both of which offered resources in quantities that made them attractive at different times of the year. From this, Thomas presented a "dual central-based wandering model" (1973:173). In this model, groups used the piñon-juniper zone as winter village sites and while summer sites were located along permanent water sources in the sagebrush-grass zone where groups could gather roots and seeds. In this sense, the Reese River groups practiced more of a mix of residentially mobile "forager" and residentially fixed "collector" strategies.

Gatecliff Rockshelter was identified near the end of the Reese River and approximately 50 miles east of the Stillwater Mountains (Thomas 1983). Evidence for human use began 5500 years ago and included metates, palettes, hand stones, 400 small incised stones exhibiting elaborate motifs, shell beads, stone beads, turquoise artifacts, basket and cordage fragments, bone beads, awls, and tubes, incised clay objects, wooden artifacts, ceramic sherds, and some incised clay objects. White, red, yellow, and orange pigments were used in the production of pictographs inside the rock shelter.

The chronological sequence suggests that during the Middle Holocene the Gatecliff Shelter most likely functioned as a logistical field camp visited for short stays (Thomas 1983:527).

Following 2250 B.C., when the climate ameliorated to a winter-wet pattern, groups continued to use use the shelter as a logistical camp, though evidence indicates use of the site as a residential base beginning in 1500 B.C., as basketry, hide clothing, scrapers, ground stone, and the small and expensive items, such as shell and bone beads and ornaments, entered the record (Thomas 1983:28). Following A.D. 1300, Gatecliff Shelter resumed its function as a short-term logistical camp for male hunting groups (Thomas 1983:29). This explains Thomas's (2014:34) later designation of Gatecliff as a "man cave."

In the Owens Valley of far eastern California, still within the Great Basin, another complicated picture of group settlement and subsistence emerged. Along the Owens River, Paiute groups were more politically organized into "proto-bands" (Steward 1970) around drainages contributing to the larger Owens River system. These proto-bands inhabited permanent villages where they encouraged the growth of native plants by ditch irrigation undertaken "upon considerable scale" (Steward 1930:15). Historical documentation for the region dates to 1856 in A. W. Von Schmidt's observations of indigenous groups that lived within deep mountain ravines at 6,000' (1,829 m) and all along tributaries that ultimately fed into the Owens River at roughly 4000' (1219 m) where they maintained dams, canals, and irrigated ditches to enhance the growth of geophytic roots and grasses (Lawton et al. 1976:25-26).

Bettinger (1975, 1989) along with David Hurst Thomas (1976) conducted excavation in the Owens Valley and identified shifts in the settlement and subsistence system. A synopsis of Bettinger's chronology for the region follows: Population increases and/or increased moisture levels between 1200 B.C. and A.D. 600 required lowland occupation sites shift from riverine to desert scrub locations in proximity to the lowland plant and animal resources. Between A.D. 600 and 1000, upland piñon camps joined the record where households gathered pinenuts in the fall and remained there throughout the winter then leaving to collect other resources in different habitats in the spring. The last shift occurred A.D. 1000 when upland and desert scrub camps fall

into disuse as hunting stations, as evidenced by the marked decrease in large mammals apparent in the faunal record, and that seems to coincide with the emergence of irrigation systems for grass and root crops in more constricted territories and the inclusion of Owens Valley Brown Ware ceramics in sedentary villages (1989). The Owens Valley record clearly exhibits a markedly different settlement and subsistence record than other regions within the Great Basin over time, one that Bettinger compared to the Surprise Valley region that will be covered in Chapter Four.

In a volume entitled *Affluent Foragers, Pacific Coasts East and West,* David Hurst Thomas (1982) contributed a chapter in which he demonstrated a diverse range of settlement and subsistence complexity among Great Basin groups. Thomas argued that differential population growth among the ethnographically known Kawich Shoshone, Reese River Shoshone, and the Owens Valley Paiute resulted in variable sociocultural differentiation. Steward (1938) studied the Kawich Shoshone, a highly mobile foraging group from central Nevada consisting of household or family level groups that ranged over 150 km in a given year. Political organization was limited to roles presiding over communal hunts when many groups aggregated for rabbit or antelope drives. In the Reese River area, as described above, groups practiced a seasonal mix of mobile forager and sedentary collector strategies; in the winter, groups occupied villages inhabiting the pinon-juniper zone near the perennial riverine water source. Political organization was limited to antelope drive shamans, rabbit drive boss, and a pinion leader arbitrated collection activities. A single leader managed a sedentary village's territory in which they maintained exclusive rights to collected pine nuts and irrigated meadows to support grass and root crops. Thomas argued that the increased population growth in certain sectors of the Great Basin, such as in the Owens Valley, fostered the development more complex political organization. The Kawich Shoshone were thus at the opposite end of the political organization continuum from the people of Owens Valley, with Reese River Valley groups somewhere in between.

High elevation sites added to the debate concerning Late Holocene subsistence and settlement models. Such sites were identified between 9800' (3000 m) and 13120' (4000 m) at Alta Toquima on Mount Jefferson in western Nevada (Thomas 1981) and on the White Mountains in eastern California (Bettinger 1991). Steward (1938:58) had also known of these villages, but they did not figure into the settlement and subsistence systems he learned about from consulting with various Great Basin indigenous groups during his ethnographic field work.

Prior to 1400 years BP, both high elevation areas had been used logistically for hunting forays, representing by hunting blinds consisting of rock walls or small enclosures constructed within lava fields where projectile points littered the surface (Thomas 2004). After 1400 years BP, ground stone artifacts were found in association with house-pit and house rings, suggesting that multi-generational and multi-gendered households made use of the high elevation locations where roots and seeds were available over the course of the summer (Thomas 1981).

As for the White Mountain high elevation villages, Bettinger (1991) suggests the Late Archaic intensification was due to an increase in population density and efficient harvesting and storage of pinon nuts in productive years or a relative decline in lower elevation prey populations that required upslope movement to secure necessary resources. Grayson (1991) identified relatively similar faunal diversity profiles for village and previllage sites, except for smaller numbers of bighorn sheep associated with village period use. Grayson notes the presence of marmots (*Marmota flaviventris*), a high fat fur-bearing rodent, and Limber pine nuts, a high carbohydrate and high fat resource, would offset the effects of poor pinon harvests. Thomas (2014:33) suggests the high elevation locales had been used as "man caves" for millennia, but during the Late Holocene whole families climbed to higher elevations likely as a result of drought that carried a greater effect on lower elevation resources. The paleoclimatic record for the last two millennia in the Western Great Basin (Mensing et al.'s 2008) provides a refined context to evaluate the high elevation sites. Thomas (2014:37) suggests it would be helpful to "develop the centennial-

scaled chronologies necessary to synchronize the archaeological record with the rapidly growing and increasingly high-precision paleo environmental records available."

The forgoing description of the Great Basin archaeological record documents the development of an increasingly nuanced interpretation of regional settlement and subsistence systems where both regional and chronological variations in climate are incorporated into models. A general pattern emerges where water is the most limiting resource. Periods of greater reliability of water afforded groups the opportunity to travel and convey different materials across great distances and that networking in addition to the improved productivity of important subsistence resources may well have fostered an overall increase in the human population. Evidence of this exists in large houses and logistical forays up into high elevation locales during summer months during the Middle Archaic. Oscillating climatic conditions during the Late Archaic made water and subsistence resources less predictable, with impacts on patterns of mobility that appear to have varied between regions.

In the northern Great Basin there is some evidence for the use of village hubs during the Late Archaic, but in variable locations, some lake-focused and others upland-focused. In the next section I look in greater detail at the archaeological record for the northern Great Basin subregion. This subregion, which includes southeastern Oregon, northwestern Nevada, and the northeastern margins of California, is where both my ethnographic source group and my archaeological subject sites are located, and thus provides important context for my analysis.

The Northwestern Great Basin

In this section, I focus on residential sites in general, and structural evidence for houses in particular, as they inform the broader discussion of Northern Great Basin settlement and subsistence (Figure 3.3). I begin by considering some of the earlier sites I did not cover in the previous section, and then go on to a detailed review of residential sites with house structures. I

start the discussion of early sites with the Paisley 5-mile Point Caves site as a way of re-situating this new section firmly in the northern Great Basin.

Luther S. Cressman had initiated excavations at Paisley Caves in the early twentieth century. There he recovered Pleistocene camel, bison, horse, and waterfowl bones encircling a living floor that he interpreted as subsistence refuse (Cressman et al. 1942:93, 1966:41, 1986:121). Recent work at Paisley Caves produced flaked stone and bone tools, finely made threads of perishable materials, along with the faunal remains of camel, horse, bison, mountain sheep, fish, and waterfowl bones associated with a human coprolite that yielded a mean date of 14,500 BP (Jenkins 2007; Gilbert et al. 2008). The new Paisley Cave data seem to vindicate Cressman's original arguments and provide evidence that humans were present in North America before 11,000 years ago.

At Fort Rock Cave, Cressman recovered sagebrush bark sandles that were later radiocarbon dated older than 9,000 BP. Fish and water fowl bones recovered in association with the ancient footwear provided evidence indicative of moist conditions. During excavations in 1967, two Western Stemmed projectile points, a mano, a scraper, and a few stone flakes were recovered with charcoal that eventually produced a calibrated radiocarbon date of 15,800 years ago on top of Pleistocene Lake gravels (Aikens et al. 2011:63).

Buffalo Flat, in the Fort Rock Basin of south-central Oregon, for example, is the oldest known site with evidence for a rabbit drive. A very large net, approximately 1 m tall and nearly a kilometer in length was recovered from the site along with the remains of hundreds of jack-rabbits (*Lepus Californicus*). Charcoal recovered from a hearth at the site produced a radiocarbon indicating use of the site is in excess of 9000 years old.

Judith Willig showed that Clovis and Western Stemmed points are clearly separated in space and time, each associated with specific water levels at the open air Dietz Site, which is situated next to the Alkali Basin, in south-central Oregon (1988). Clovis is associated with lower water levels and an extensive marsh habitat, while Western Stemmed projectiles are associated

with higher water levels but reduced marsh resources. From this data, Willig hypothesized that groups using Western Stemmed points were able to adapt to marsh habitats, were less tethered to lake resources, and able to exploit a broad spectrum of resources in the area, including small mammals. Incidentally, Willig (1982) also produced a Master's paper describing archaeological examples of Great Basin house structures.

Luther Cressman (1940, 1942) recovered basketry and perishable materials, some used in house construction, respectively from Roaring Springs and Catlow Caves in Oregon. At Catlow Cave, Cressman et al. (1942) identified human and animal bones associated with Pleistocene lakebed gravels though he was never able to carbon date the material. At both caves the rich and diverse artifacts manufactured from perishable fibers underscored the importance of aquatic resources, some from Catlow Cave which Aikens described as "unrelievedly nonutilitarian" (1982:147).

In summary, these early sites provide evidence of human occupation in this part of the Great Basin and hints at patterns of landscape use. These include the use of wetland resources, caves as shelters, varied fauna, and a mix of chipped stone, ground stone, and plant-fiber artifacts.

Moving forward in time to the Middle and Late Archaic, I will focus on residential sites. Evidence of house structures is ample in the northwestern Great Basin and I now describe that evidence according to specific time periods (Figure 3.3, Table 3.3, Table 3.4). Sites included in the following summary are those residential sites with published datasets that include floor plan view maps or robust descriptions from which a reader may ascertain behaviors carried out in and around a given house. I begin by describing northern Great Basin Sites associated with the Middle Archaic between Cal 6000 – 3000 BP before I describe those associated with the Late Archaic Boulder Village Period Cal 3000 BP – Contact. I begin the summarization in the Fort Rock basin with the Bergen Site, subject of a household archaeology study carried out by Margaret Helzer (2001).

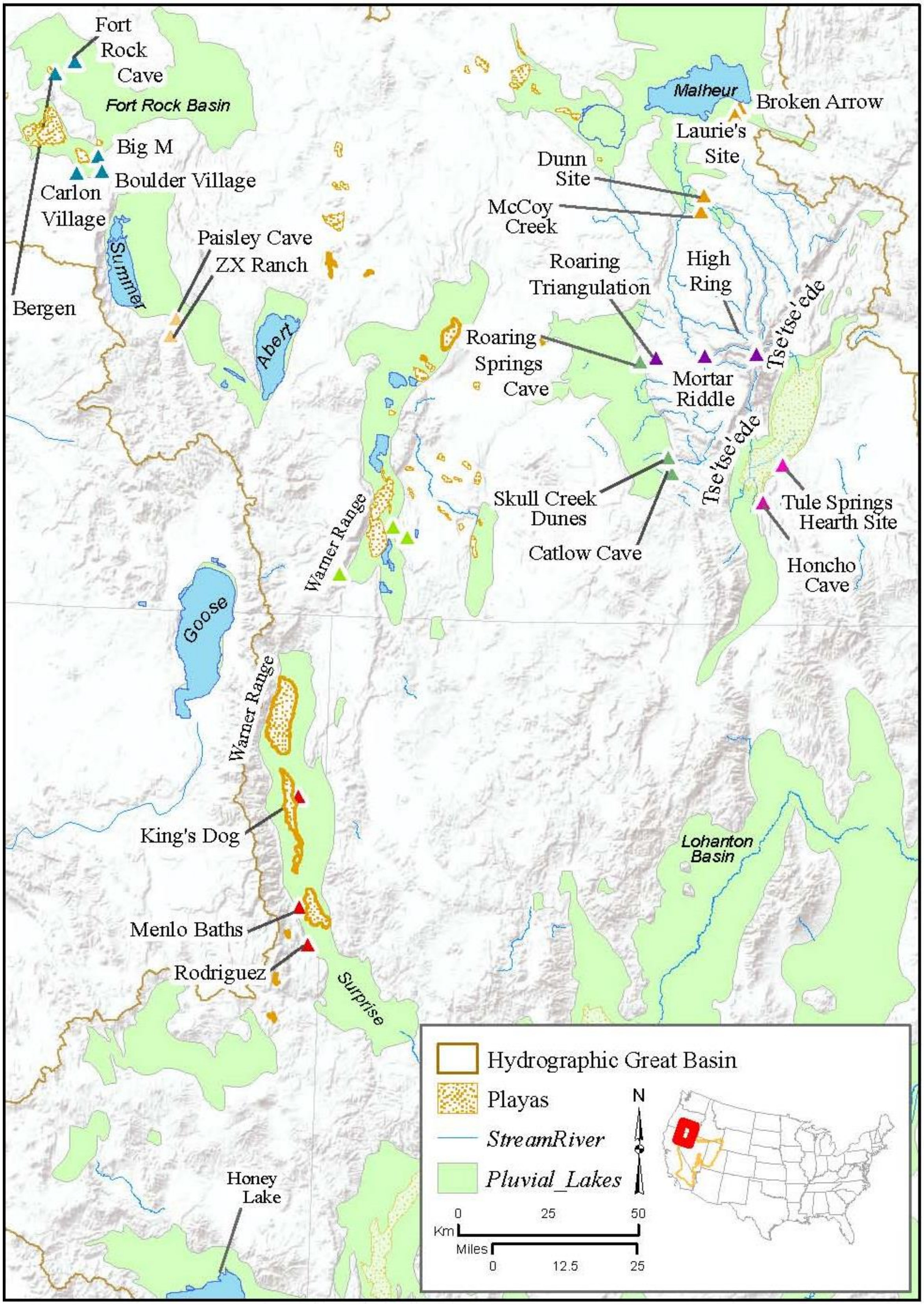

Figure 3.3 Northern Great Basin Sites mentioned in text

Table 3.3 Northern Great Basin Sites with evidence for houses according to cultural and climatic periods

Cultural Phase[1]	Cal BP	Moisture levels and climatic conditions inferred from pollen record[2]	Sites With Houses Discussed in Text
Late Archaic, Boulder Village (3000 years BP to Contact)	300 – 150	*Dry* Juniper woodlands and grasses expand	Peninsula Lake
	900 – 300	*Very Dry* Drought at 700 and 500 BP; lowest water table	McCoy Creek
	1400 – 900	*Moist* Grasslands expand	
	2000 – 1400	*Dry* Sagebrush steppe expands	Boulder Village Laurie's Site, House pit #1 & #2
Middle Archaic Bergen Period (6000 – 3000 years BP)	4000 – 2000	*Very Moist* 'Neo Pluvial' Juniper woodlands and grasses; highest water table during Late Holocene, ca. 3700 BP	Carlon Village Broken Arrow
	5400 – 4000		Rodriguez Dunn Site ZX Ranch & Lake Abert Sites ~4000 – 2000 BP Kings Dog, 4500 – 3000 BP Big M Bergen Kings Dog, 6000 – 4500 BP

Note: 1) Cultural phases are those defined by Aikens et al. (2011). 2) Climatic sequence by Wigand 1987:427

The Bergen Site (35LK3175)

The Bergen Site is situated on a lunette dune near Beasley Lake in southcentral Oregon (Figure 3.3). Three houses were identified at the site. One was a pithouse, excavated nearly 50 cm (1.5') into the underlying sediment, defined by a separate stratum and covering an area roughly 6.1 m (20') by 2.18 m (17') (Table 3.3, Table3.4). The other two houses were smaller and did not appear to be excavated into underlying sediments. For the largest house, known as the Main House, the floor foundation itself was characterized as a culturally sterile and yellow blond lens with a centrally located hearth and no posthole evidence. Cultural material recovered from the Main House floor included projectile points, other flaked stone tools, ground stone, 52 beads, and bone above the floor (Helzer 2001:58). A cache pit within the house floor contained basalt stone pipe fragment, an atlatl weight, a bone spoon, two complete manos, a complete pestle, a Humboldt

Concave-base projectile point, and utilized flakes (Aikens et. al 2011:84). Radiocarbon dated marine shell beads and charcoal from hearth features indicate the site was occupied between 5930 - 3660 BP (Helzer 2001:75). Time sensitive projectile points, predominantly Northern Side Notched and Elko, are in accordance with the Middle Archaic dates.

Table 3.4 Northern Great Basin houses summarized in Chapter 3

Site	**Age (BP) or PPT type**	**House Type**	**Structural evidence**	**Diameter (m)**	**Pit depth *Floor lens width (m)**	**Foundation shape or description**	**Hearth Location and description**
Peninsula Site	380 - 240 BP	Pole and thatch	Gable Roof; Butress Poles	2.1 - 8.7	0.2	Rock rings	Inside
ZX Ranch, House #1	Rosegate			6.7	0.3	Depression with surrounding berm	Central
McCoy Creek	1270 - 990 BP	Pole and thatch	Perimeter post mold	3.4 - 3.6	0.19	Saucer	Central, Rock-lined
Boulder Village	1500-100 BP	Rock ring	Juniper & Brush Perimeter	2.9 - 4.2	0 - 2	Boulder & Stone Sides From Pit Ex.	N/A
Laurie's Site, House #2	1580 +/- BP	House pit			0.25*	Compacted sediments	
Laurie's Site, House #1	1890 +/- 40 BP	House pit or brush wickiup	Perimeter post mold		0.41*		Central
Carlon Village	1800 BP	Rock ring	Perimeter post molds; central post supports	4.5 - 7.6	60 - 100	Steep sided, compacted	Central
Broken Arrow	2000 - 1800 BP	Wickiup		3.0 +	.10*	Clay lined floor	Central
Rodriquez	2620 +/- 80 BP	Pole and thatch	posthole patterns	3 - 4.5		Saucer (l)	Central
Dunn Site	3200	Semi-subterranean	Perimeter post mold	6.0	0.36	Saucer	Central
King's Dog	4500 - 3000	Pole and thatch	Perimeter post mold	5.0 - 5.5		Saucer	Central
Big M	4900 - 4530	Pole and thatch	Perimeter post mold	6.09	0.3	Bowl	
Bergen Site	5930 - 3660	Pole and thatch	One post mold in 9C	4.0	N/A	Saucer	Central
King's Dog	6000 - 4500	Semi-subterranean earth lodge	Juniper Beam post molds, east side doorway ramp	8.0	0.5	Steep-sided	Central

Note: Information in table derived from works referenced in this chapter.

Helzer's spatial analysis focused on the archaeological visibility of the Main House floor cultural material as revealed via macrobotanical and microfaunal evidence, which allowed her to identify the location of sleeping mats and a doorway. Seeds and charcoal, she found, were a better indicator of house floor location than bone, as the patterned concentration of seeds was highest next to the central hearth, followed by waning distributions within the house floor, and near absence outside the house floor margins (Helzer 2001:171). Dietary analyses indicate that goosefoot (*Chenopodium* spp.), *waada* (*Suaeda* spp.), and saltbrush (*Artiplex* spp.) were the most commonly identified seeds within the Bergen site archaeobotanical assemblage. Identified charcoal indicates sagebrush (*Artemesia* spp.), mountain mahogany (*Cercocarpus* spp.), rabbit brush (*Chrysothamnus* spp.), juniper (*Juniperus* spp.), bitterbrush (*Purshia* spp.), willow (*Salix* spp.), and greasewood (*Sacrobatus* spp.) were used for fuel. The presence of bulrush (*Scirpus* spp.), which can be used for food or building materials, indicates a marshy environment, corroborated by the abundance of juvenile tui chub pharyngeals identified with the microfaunal remains.

Identified faunal remains varied between the houses. Waterfowl and lagomorphs dominated the identified assemblage recovered from the Main House, while fish, then waterfowl, and to a lesser extent rabbit, comprised the bulk of the identified fauna within the 2000 House, one of the smaller houses excavated at the Bergen Site. Thus, seasonal differences in usage between the two houses were not identified. A separate butchering area contained remains primarily representing large mammals, but also waterfowl and jackrabbits. Bergen was probably a fall occupation, as suggested by the identification of small seeds, large mammals, waterfowl, and juvenile tui chub remains.

Aikens et al. (2011) use Bergen as a temporal phase name to define a pattern of settlement and subsistence between Cal. BP 6000 – 3000 in which semi-sedentary households were aggregated in villages to intensively use lower elevation marshland resources during the fall and winter months. From these villages they dispersed to gather plant resources during the summer.

Cached food was also judged important to sustain households during the winter, though food remains were not identified in the Bergen Site cache. Another site in the Fort Rock Basin that exhibits similar patterns is the DJ Ranch Site (35LKI2758).

The Big M site (35LK2737)

Big M is another Middle Archaic Village with evidence of a semi-subterranean house (Jenkins 1994)(Figure 3.3). Radiocarbon dated charcoal recovered from overlapping house floor lenses produced dates 4910 – 3530 BP. Postholes were observed surrounding the 6.09 m (20') house (Table 3.3, Table 3.4). Ground stone is prevalent at the site, consisting of manos, metates, hoppermortars, pestles, and stone bowl mortars. Results of eight analyzed sediment samples indicate the cultural use of juniper (*Juniperus* spp.), saltbrush (*Artiplex* spp.), conifer (Coniferae), and grass (Poaceae). Eggshell found within flotation samples is indicative of springtime activity. Fish dominates the faunal assemblage and fish bone gorges were recovered from the site, clearly indicating the importance of fish for Big M occupants' subsistence, which was augmented by deer and small mammals (Greenspan 1993). Bone spatulas were also recovered from the site, as well as *Olivella* spp. beads, which Aikens (1993:32) attributes to "cultural affinities or exchange relationships with the Klamath country to the south and west."

The Dunn Site (35HA1261)

The Dunn Site is located between at the base of Tse'tse'ede between Diamond Swamp and McCoy Creek in the Donner und Blitzen River Valley (Musil 1995) (Figure 3.3). A semi-subterranean house floor about five meters in diameter was excavated. Charcoal from the floor produced a date of 3255 BP corresponding well to the Elko style points recovered at the site (Musil 1995:41)(Table 3.3, Table 3.4). The moister Middle Archaic conditions would have enhanced the reliability of marshland resources allowing for what Musil hypothesizes was a "fairly permanent sedentary settlement strategy" (1995). The identification of a large metate within the house pit along with the identified archaeobotanical remains suggests that Dunn Site occupants engaged in plant processing activities.

Stenholm (1995:239-244) analyzed floated sediment samples from the central hearth, floor, and a storage pit, finding sagebrush (Artemesia *spp*.), juniper (*Juniperus* spp.), willow (*Salix* spp.), and poplar (*Populus* spp.) as well as goosefoot (*Chenopodium* spp) seeds. These species would have been useful for a combination of fuel, house construction, and subsistence (Toepel, Minor, and Greenspan 1985). Mammals, birds, fish, and reptiles are represented within the zooarchaeological assemblage, but large game dominated the subsistence remains while incised bone beads and shells were also recovered from the semi-subterannean house floor (Greenspan 1995).

<u>King's Dog, Menlo Baths, and Rodriguez sites</u>

King's Dog, Menlo Baths, and Rodriguez Sites are located in the Surprise Valley in far northeastern California (Figure 3.3, Table 3.3, Table 3.4). James F. O'Connell (1975) completed his dissertation *The Archaeology and Cultural Ecology of the Surprise Valley, Northeastern California,* under the direction of Robert J. Heizer and Robert J. Rodden at the University of California in Berkeley. O'Connell (1975) excavated the three aforementioned sites in his research of Holocene life following the last glacial maximum in the Surprise Valley. O'Connell organized seasonal resource expectations according to the cultural taxonomy outlined in Kelly (1932:81-104), which he grouped into upland and lowland catchments (Table 3.5). He modeled variation in seasonal resources based on climate reconstruction data (Adam 1967; Antevs 1956; Curry 1971; Davis and Elston 1972; Grayson 1972).

O'Connell infers change in social organization based on excavated house structures at three open air sites in the Surprise Valley. Two sites, King's Dog and Menlo Baths produced evidence for "earth lodges" associated with Northern Side-notched projectile points. O'Connell (1975: Figure 8.) included the profile and plan drawings for the excavated structure along with an idealized recreation of the structure. The excavated structure at the King's Dog site measured eight meters (25.6') in diameter and the steep-sided walls measured 50 cm. Six large postholes were identified around a centrally-located hearth feature and the deflated eastern wall of the King's Dog

Table 3.5 Seasonal availability of Surprise Valley Resources (after O'Connell 1975:38, Figure 13).

	Fall	Winter	Spring	Summer
LOWLAND SITE CATCHEMENTS				
Seeds				
Roots				
Ungulates				
Jackrabbits, cottontails				
Hibernating rodents				
Waterfowl				
UPLAND SITE CATCHEMENTS				
Seeds				
Roots				
Ungulates				
Jackrabbits, cottontails				
Hibernating rodents				

earth lodge, he interpreted as evidence for a doorway ramp. O'Connell cites Spier in the figure caption for his idealized reconstruction, as he interpreted the excavated structure as converging with Spier's (1930:198-203, Figure 18) description for Klamath style semi-subterranean earth lodges.

An additional source-side analog includes the Honey Lake Paiute (Riddell 1960). This Northern Paiute group lived to the south of Surprise Valley near Honey Lake, California (Figure 3.3). Riddell's informants indicate that winter houses may or may not be excavated to 0.3 meters (1') below the surface, though the diameter ranged between 3.0 and 4.5 meters (10 – 15') (Riddell 1960:41). The structure consisted of vertical willow or juniper poles that were joined to a circular willow hoop that formed the smoke hole (Riddell 1960:41). Riddell (1960:41) indicated the conical form was then covered with tule matting and then shingled with tules before the excavated earth was piled around the base of the house exterior.

Wickiups and windscreen structures replace the earth lodge at 4500 BP in the King's Dog deposit (O'Connell 1975). The plan drawing of the largest wickiup excavated at King's Dog indicates the structure was 5.5 meters (18') in diameter (O'Connell 1975: Figure 9). No other structural evidence was observed in later deposits at Menlo Baths. Wickiups and windscreen structures were the only structural evidence recovered from the Rodriguez Site, the earliest evidence dating to 4500

BP. Based on the evidence recovered from King's Dog, O'Connell suggests groups abandoned use of communal, semi-subterranean style lodges in lieu of single family, tule mat covered houses (O'Connell 1975:28). From 4500 BP into the era of Euro-American incursion O'Connell did not observe major changes in material culture.

O'Connell's research was not designed to address interior household layout. Instead he used the archaeology to address questions about changing landscape use over the course of changing climatic conditions. O'Connell hypothesizes the housing change at 4500 BP may be attributable to climatically driven biomass reduction, which in turn required smaller and mobile households to negotiate ephemeral resources.

Since both an earth lodge and wickiups were recovered from the King's Dog site, changes in cultural material and faunal assemblage warrant a closer look (Table 3.6). Other artifacts and subsistence indicators associated with the recovered earth lodge include a greater reliance on projectile points and knives as compared to scrapers and drills, manos and metates outnumbered mortars and pestles. Recovered fauna indicate even use of ungulates, carnivores, and cottontails, along with the presence of bone and antler tools in addition to the highest numbers for ornaments of bone, stone, and shell. Jackrabbits outranked all other taxa with respect to the represented minimum number of individuals (MNI) (Table 3.5).

In later periods associated with wickiup use and Elko and Rose Spring projectile points, knives and scrapers are represented more evenly. While ungulate MNI frequency drops precipitously overall, bighorn sheep are still represented while lagomorphs, rodents, and waterfowl, become increasingly important. Bone and antler tools along with ornaments are associated with wickiups at King's Dog. In the latest period, projectile point frequencies spike, along with manos, metates, and jackrabbits. Conversely, bone, stone, and shell ornaments are represented at their lowest frequencies. O'Connell interpreted the later period sites as also indicative of summer habitations given the greater reliance on taxa associated with spring and summer procurement

(Table 3.3), some of which were represented by juvenile specimens. O'Connell's (1975) work is the last published accounting of archaeological investigations in the Surprise Valley area.

Table 3.6 Frequency of cultural material artifacts and faunal MNI associated with different house types. (After O'Connell: Table 3 and Figure 10)

	Radiocarbon years B.P.			
	6500-4500	**4500-3000**	**3000-1500**	**1500-500**
House Type	Earth Lodge	Wickiup		
Diameter	8 m (25.6')	5.5 m (18')		
Projectile points	212	119	113	**330**
Knives	123	55	6	28
Scrapers	12	29	7	32
Drills	3	5	0	7
Manos	37	48	26	**94**
Metates	41	40	39	**137**
Mortars	6	12	7	5
Pestles	6	4	2	11
Bone/Antler Tools	15	6	3	**3**
Bone/Stone/Shell Ornaments	7	7	6	**2**
Bighorn	5	6	2	6
Antelope	3	0	0	0
Deer	2	0	1	0
Bison	5	2	0	0
Jackrabbit	15	16	8	**30**
Cottontail	3	7	1	8
Rodent	0	5	1	3
Carnivore	5	6	2	6
Waterfowl	0	3	3	8

Lake Abert

Lake Abert sites recorded by Oetting and Pettigrew (1985, 1987) during surveys totaled to 70 and were characterized by house pit depressions or rock rings (Figure 3.3, Table 3.3, Table 3.4). Proposed highway work required testing 13 house pit depressions and two rock rings. Test pits were placed within the house depressions or rings and, as Oetting describes, "were not designed to explore or define the structure and function of the features" (1990:102-3). Nevertheless, Oetting presented a cultural chronology in which village sites initially appeared between 4,000 and 2,000 years ago, marked by Elko series/Gatecliff Split Stem points, and became much more common thereafter and associated with Elko Series and Rosegate Series points (1989:110).

The ZX Ranch Site

The ZX Ranch included a record of houses that appear to be contemporaneous with those identified along Lake Abert shorelines (Figure 3.3, Table 3.3, Table 3.4). In 1939, Luther S. Cressman took a distinctt approach in testing houses at the ZX Ranch Site, which is located along the upper Chewaucan Marsh. Oetting (1990) presented an analysis of the ZX Ranch Site collection and Cressman's associated field notes in an effort to place his own work into the greater context of the region. Cressman used trenches to explore a total of three house pit depressions. This testing strategy allowed Cressman to identify the house floors in exposed wall profiles and capture the presence of centrally located hearths.

The diameter of a depression designated House #1 measured 6.7 meters (22') and had a berm of sediment around the perimeter which expanded the maximum diameter of the feature to 9.5 meters (31.2'). Cressman and his colleagues recovered a bone awl, an antler flaking tool, and one perforated stone disc *in situ* from House #1. Matrix screened through ½" mesh yielded ten projectile points, three bifaces, and four manos. A single chert biface was recovered from House #2. Of the ten projectile points recovered from fill screened through ½" mesh, seven were Rosegate series, one Gatecliff Split-stem, and one Humboldt Concave. The ZX Ranch fit the settlement pattern Oetting and Pettigrew identified along Lake Abert; village and non-village sites younger than 2,000 years are located near currently perennial water sources, suggesting groups took advantage of nearby wetland resources, allowing for the development of an increasingly sedentary lifestyle.

Broken Arrow (35HA3075) and Laurie's Site (35HA3074)

O'Grady's (2006) dissertation fieldwork included excavation of two Late Holocene sites with evidence for house floor features on the southeastern edge of Malheur Lake (Tabel 3.3, Figure 3.3, Figure 3.4). O'Grady (2006:495) states Broken Arrow (35HA3075) and Laurie's Site (35HA3074) "represent central places that served as residential bases for foraging populations."

Laurie's Site

House Pit 1 O'Grady identified House Pit 1 block between 51 – 92 cm below datum within a 1 x 4 meter excavation. O'Grady (2006:332) cautiously describes House Pit 1 at Laurie's site as "what is believed to be a brush wickiup, including the probable entrance, a portion of the floor, a hearth identified as Feature 2, and post holes relating to the superstructure. The Feature 1 artifact cluster was found on the occupation surface, and clusters of bone tools were concentrated in protected areas of the house floor."

The Feature 2 hearth, which ranged between 79 – 92 cm below datum, was associated with the House Pit 1 floor (O'Grady 2006:317, 325). The hearth contained 66 pieces of debitage and 250 bone specimens. Less than one horizontal meter to the southeast, in Unit 2, Quad A between 51 and 65 cm in depth, an artifact cluster (Feature 1) was also associated with the House pit 1 floor. Feature 1 consisted of two obsidian cores, one biface fragment, one complete mano, several fragmented hand stones, and a metate fragment. O'Grady suggests the marked elevational variation in the house floor stratigraphic boundary may be attributed to an entrance he hypothesizes was once located along the east wall of the northern most 1 x 1 m quad (2006:356). Between the elevations of Feature 1 and Feature 2, a willow fragment recovered from Level 7 (70 - 80 cm below datum) produced a radiocarbon date of 1890 +/- 40 BP (2006:325). O'Grady associates both features with a single occupation.

House pit 2 O'Grady identified House pit 2 following excavations in a 1 x 2 m excavation block. A Rose Spring projectile point was recovered in association with the Feature 1 hearth (60 – 70 cm below datum). Compacted sediments between 85 and 110 cm below datum contained cultural material indicative of the earliest occupation. Ground stone, shell beads, Rose Spring and Elko (Corner-notched) points, a reworked Northern Side-notched point, and a stone ball were all recovered from the 25 cm thick occupational lens. Charcoal recovered from this lens produced an AMS date of 1580 +/-BP (O'Grady 2006:317).

At Laurie's Site muskrat and fishbone were more frequently identified and charcoal species included rabbitbrush (*Chrysothamnus* spp.), greasewood (*Sacrobatus* spp.), saltbrush (*Artiplex* spp.), sagebrush (*Artemesia* spp.), juniper (*Juniperus* spp.), and mountain mahogany (*Cercocarpus* spp.). Mountain mahogany charcoal from Laurie's Site indicates that occupants' Late Archaic foraging behaviors included visits to higher elevations to secure upland resources.

Broken Arrow

At the Broken Arrow Site, O'Grady identified what he describes as a wickiup with a 3 meter diameter. The wickiup house floor consists of a 3.5 m long by 0.6 to 0.9 m wide clay floor surface (Feature 2). A charcoal sample recovered from a centrally located hearth (Feature 1) produced an AMS date of 2030-1810 +/- 40 BP (O'Grady 2006:384). Feature 2 was neatly identified between 80 and 90 cm below datum. Concentration of bone tools, abraders, cores, and Stage 2 bifaces on the western side of the house constituted patterned spatial distribution. While twenty-six beads were recovered, consisting of bird and mammal bone, stone, clam, *Olivella*, limpet, and dentalium, only one was recovered from the southern portion of the wickiup floor, a single Spire-lopped *Olivella* sp..

Faunal remains indicate Broken Arrow residents focused on small mammals and birds. Identified charcoal includes willow (*Salix* spp.), pine (*Pinus* spp.), juniper (*Juniperus* spp.), bulrush (*Scirpus* spp.), cattails (*Typha* spp.), chenopod-amaranths (cheno-ams), greasewood (*Sacrobatus* spp.), and rabbit brush (*Chrysothamnus* spp.), while identified seed species include *waada* (*Sueda* spp.). Pine charcoal from Broken Arrow is evidence that occupants travelled to upland settings.

<u>The McCoy Creek site (35HA1263)</u>

The McCoy Creek Site neighbors the Dunn Site (35HA1261) between Diamond Swamp and McCoy Creek in the Donner und Blitzen River Valley (Figure 3.3). Overlapping clay-lined house-floors provide evidence for Late Archaic residential occupations at the base of the Steens Mountain. House floor lenses included a central rock-lined hearth from which a radio-carbondated charcoal sample produced dates with a temporal range spanning 1,480 to 990 BP (Musil 1995:97). The house floor exhibited a diameter between 3.4 and 3.6 meters (Table 3.3, Table 3.4).

A later date of 480 BP was secured from a radiocarbon dated burnt willow post, one of several observed in a circular distribution and surrounding a central hearth (Musil 1995:97). This later structure, which is thought to resemble a wickiup, dates to times when drought conditions are believed to have required occupants to practice a more mobile strategy for economic security.

Rosegate series projectile points were associated with the McCoy Creek house occupations, but also recovered were Desert Triangular and Desert Side-notched points. Faunal remains indicated human use of aquatic and terrestrial resources and 95 modified bone items were recovered from the excavations. Aquatic species were associated with the clay lined house lenses, dating to a period of greater effective moisture, while the later wickiup house floor indicated the importance of terrestrial species, especially large game (Musil 1995:164). The identified botanical material from hearth and storage pit features indicated occupants used a variety of seeds (goosefoot, bunchgrass, knotweed, and juniper), focusing on grass seeds during the period of greater effective moisture (Musil 1995:162-3). The diverse botanical remains provided evidence for fuel (sagebrush), structural material (willow, poplar, mockorange, and bunch grass), and cordage (dogbane) (Musil 1995:163).

Fancy trade items, including a dentalium shell bead, were recovered from the clay-lined house lens. Ground stone, including hopper mortars, was found within and outside house features. Musil suggests that the archaeology reflected in drier Late Archaic deposits fits the ethnographic model specified for the Harney Valley Paiute (Whiting 1954) and the complete archaeological record at McCoy Creek represents a local adaptive transition to changing climate.

Carlon Village (35LK2736)

Eight very large, boulder-rimmed, semi-subterranean houses produced evidence for Late Archaic occupation in the Fort Rock Basin at the Carlon Village Site (Wingard 2001) (Figure 3.3, Table 3.3, Table 3.4). House diameters ranged from 4.5 – 7.6 meters and the excavated depth ranged between 60 – 100 cm (about 2’ to 3.2’). Radiocarbon dates indicate two marked periods of

occupation, one around 1800 years BP and the other more recently around 600 years BP, corresponding to moist and then drought conditions, respectively (Wingard 2001:54).

Macrobotanical analysis suggests identified floral remains had uses as food, fuel, firewood, twine, tools, basketry, clothing, medicines, and house construction material. Wetland floral species dominate the macrobotanical assemblage, most frequently represented by goosefoot (*Chenopodium* spp.) and grass (Poaceae) seeds, but roots (*Lomatium* spp.) indicate the use of upland food resources as well. Identified charcoal includes sagebrush (*Artemisia* spp.), juniper (*Juniperus* spp.), mountain mahogany (*Cercocarpus* spp.), and pine (*Pinus* spp.). Wingard interprets charred pine not as fuel, but as construction material; today the nearest pine grows 2.5 km from the site (2001:142).

The house construction compares favorably with ethnographic descriptions for Penutian speaking groups of the Klamath, Modoc, and Columbia Basin. While mammals dominate the faunal assemblage by taxonomic class, roughly equal amounts of bird, fish, and mammals were identified at taxonomic levels more specific than class, further emphasizing the importance of wetland resources. Recovered shell beads include gastropods and bivalves from Pacific marine habitats, while glass and copper beads also suggest trade activities in the historic era. Partial and complete bone tools and decorative items total 128. Wingard suggests this is indicative of an economic situation "rich enough to allow time for such crafting activities" (2001:142). Wingard considers the Carlon Village occupation to represent families of significant wealth and status, a site that was a local economic center fitting into a larger pattern of Great Basin Late Archaic village sites with residential architecture.

<u>The Late Archaic Boulder Village Site (35LK2846)</u>

The Late Archaic Boulder Village Site (35LK2846) straddled the Fort Rock and Summer Lake Basin at 5300' (Figure 3.3, Table 3.3, Table 3.4). The site consists of nearly 100 rock rings within a large boulder field, created by people moving boulders into desired positions (Aikens 1994; Byram 1994). Some of the house rings are very large, measuring five meters across with floors at surface level, and some extending to nearly 2 meters in depth. Some rings likely

functioned as cache pits with diameters barely reaching one meter (Aikens 1994; Byram 1994). Many of these rings share walls suggesting multiple room houses. Ground stone hopper mortars, metates, pestles, and manos were found stored between house walls. Jenkins and Brashear (1994) interpret the site as a spring time root gathering location. People brought lowland resources with them to the upland village as is evident by the recovery of burnt fish and charred chenopodium, *waada*, and saltbrush. Wingard suggests the presence of upland resources at Carlon village and the presence of lowland resources at Boulder Village represents central place foraging, probably from Carlon (Wingard 2001:142). While projectile points are "common", dietary faunal remains are not, which may reflect a greater concern for security against other groups (Aikens et al. 2011:111). Military buttons and glass beads identified in some of the rings suggest very recent usage.

<u>The Peninsula Site (35LK2579)</u>

The Peninsula Site on Hart Lake is a Late Archaic village in Warner Valley (Eiselt 1997; Moore 1995; Young 1993:11-22)(Figure 3.3, Table 3.3, Table 3.4). The site sits on a peninsula extending into the eastern shore of Hart Lake, in proximity to the Honey Creek drainage system, at roughly 1372 m (4500') elevation. One of the numerous house depressions identified at the site was excavated, revealing the perishable remains of house construction materials, including support beams, catlow twine style tule mating, and daub (Eiselt 1997:136). Interestingly, daub was found along the periphery of the house outline, suggesting sediment was packed on top of tule roof mats only a short distance up from the surface. Radiocarbon dated charcoal samples indicate the house was occupied cal. 380-240 BP, which corresponds well with the predominantly Rosegate and Cottonwood Triangular series projectile points recovered from the site (Eiselt 1997:160).

A large diversity of ground stone artifacts accompanied the flaked stone assemblage, including hand stones, metates, bedrock mortars, a stone ball, and a horned muller. Macrobotanical analysis of the house's hearth contents and structural elements provided evidence suggesting the use of marsh resources for food, fuel, and house construction. Tui chub (*Gila bicolor*) accounted for about 70% (4442 of 6334 NISP) of the identified zooarchaeological assemblage. Eislet (1997)

identified numerous fish remains associated with site features. Young characterizes the situation of the Hart Lake Peninsula Site on the landscape as "optimal," due to readily available terrestrial, marsh, and riparian resources (2000:97).

Other sites excavated in the Harney Basin produced subsistence information but lacked other data necessary inclusion in the above summary. Those sites include Headquarters (35HA403), Blitzen Marsh (35HA9), and the 35HA1038 site. House floor lenses were revealed in trench profiles at Headquarters site. Blitzen Marsh and the 35HA1038 site reports include descriptions of discrete buried surfaces attributed to pit-houses on top of which archaeologists observed artifacts and bones, yet published reports do not include plan view maps (Fagan 1973, 1974; Goddard 1974).

The northern Great Basin clearly exhibits variation with respect to housing material and form. Consider, for example, the giant boulders encircling Carlon Village houses, the upland house rings at Boulder Village, or the expansive King's Dog earth lodge. Several environmental variables may play a role in this variation, including shifts in climate and resource distribution and their impact on viable household size and residential mobility. Social variables also deserve consideration, including local housing traditions and the influx of neighboring groups or a borrowing of their housing styles. I return to these issues in my final chapter.

Tse'tse'ede

The Tse'tse'ede archaeological record extant prior to the inclusion of sites considered in this dissertation includes ample pedestrian survey data as well as some subsurface excavation of sites along the basin margins (Figure 3.4). As with the previous sections I organize this summary of archaeology according to site, though I also include pedestrian survey data. I begin by summarizing the organization of one very large interdisciplinary effort, the Steens Mountain Prehistory Project (SMPP), as it includes much of the research presented below.

The SMPP was a multi-institution and multi-year project co-led by Professor C. Melvin Aikens of the University of Oregon, Dr. Donald K. Grayson of the University of Washington, and Dr. Peter J. Mehringer of Washington State University. Aikens et al. (1982) tied paleo-climatic evidence (Wigand 1985; Wigand 1987:427-458) to the results of pedestrian survey (Beck 1984; Jones 1984) and archaeological excavations around the base of Steens Mountain (Wilde 1985). Participants encountered a voluminous archaeological record. The northern unit of the study, the Donner und Blitzen River drainage, was dropped due to time constraints. Nevertheless, the SMPP established an understanding for the pre-contact human use of the mountain as related to environmental changes.

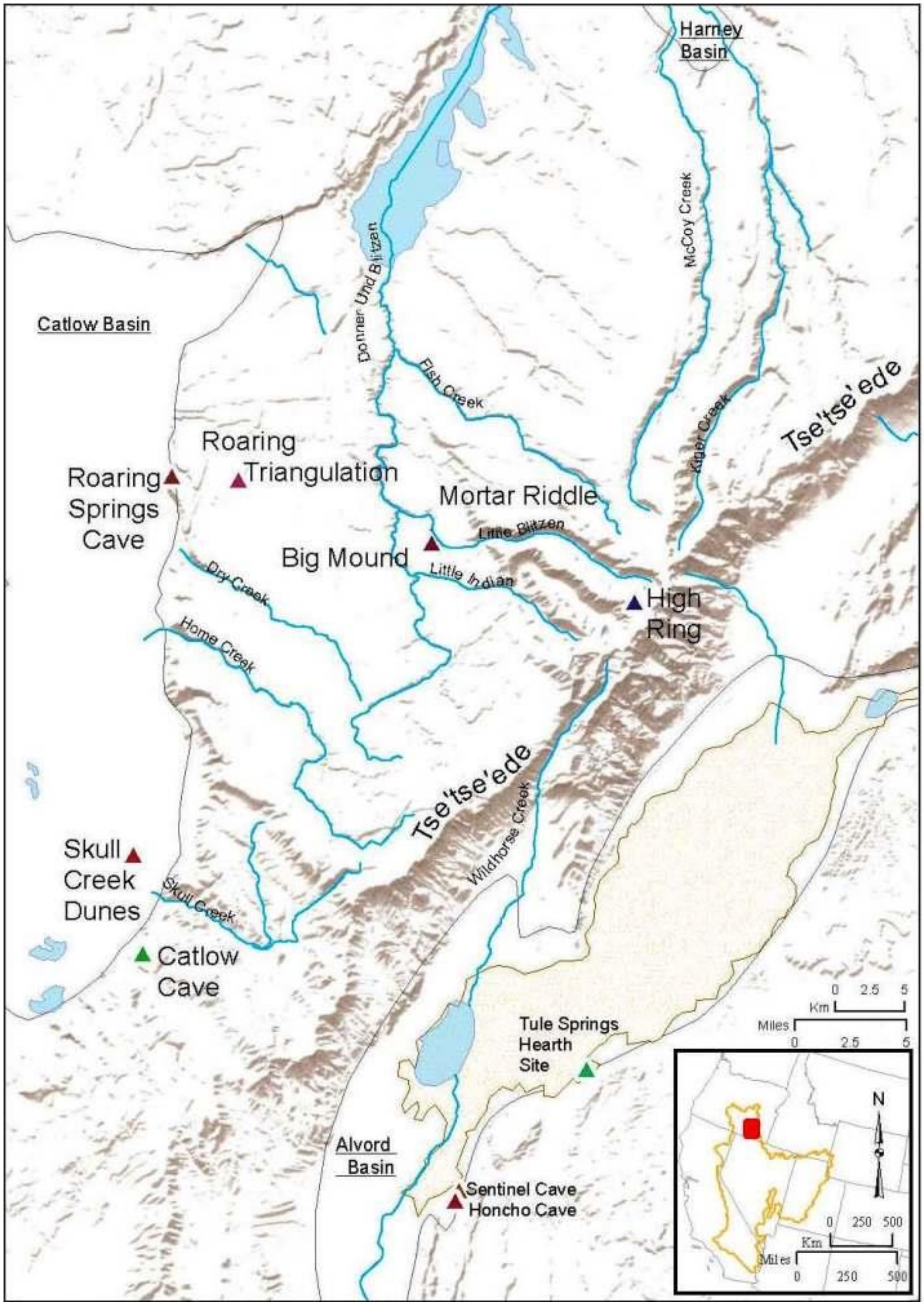

Figure 3.4 Tse'tse'ede archaeological sites

Peter Wigand (1984), then a student of Dr. Mehringer, participated in the project, focusing his efforts on understanding the paleoclimatic record for the region. He conducted a palynological Study on Tse'tse'ede lake bottom sediment cores, augured from Fish Lake and Diamond Pond, to compile the paleoclimatic record for the region. The results of his work placed the archaeological record of human behavior revealed at sites on Tse'tse'ede and within the greater northern Great Basin region into a chronologically dynamic environmental context. This study uses that sequence, which is featured in Table 3.2.

Roaring Springs and Catlow Cave

James Wilde (1985), also part of the SMPP, planned to excavate both Roaring Springs and Catlow Caves with the goal of clarifying the relative sequence originally outlined by Cressman (1940) and obtaining temporally diagnostic artifacts in association with material suitable for radiocarbon dating. I described Cressman's work at the site in the Great Basin section of this chapter as it was one of the initial cave site excavations contributing to broader Great Basin archaeological record. Wilde's date estimations are based on the typological indexing of projectile points to strata with secured radiocarbon dates. Northern Side-notched and Elko 2 projectile point styles recovered from the earliest horizons of Catlow Cave and Roaring Springs indicate human occupation at these sites began at least 7,000 years ago (Wilde 1985:349,353). Evidence for intensive human activity began around 2800 BP, declined to 'moderate levels' by 800 years BP, and to 'low' levels of intensity by 400 year BP (Wigand 1985: 353).

Connolly (2013) recently published new radiocarbon dates for coiled basketry recovered from a number of northern Great Basin sites, including Catlow and Roaring Springs caves. Four of the seven samples recovered from Catlow Cave produced radiocarbon dates that cluster between cal 2000 – 1700 BP. The remaining three basketry samples produced the following dates: cal 1260 – 1190 BP, cal 930 BP, and cal 530 BP (Connolly 2013:376). The two coiled basketry samples recovered from Roaring Springs Cave date to cal 2710 – 2490 BP and cal 1260 BP. Connolly's basketry dates thus fall within Wigand's chronology.

Skull Creek Dunes

While driving southbound on Highway 205 today, one can recognize the Skull Creek Dunes Site as marked by a narrow, but perennial stream, intersecting a dramatic dune field. Cultural deposits continuously erode from deflated windward slopes and, as the dunes appear to move wave-like over time, other contexts are buried and reburied. As part of the SMPP, Mehringer and Wigand (1985; 1996) exposed and described the complicated stratigraphy including Pluvial lake deposits, sands, Mazama Tephra, three soils, and charcoal lenses indicative of human activity. Following the desiccation of Pluvial Lake Catlow, lake bed sediments were sorted by eolian action. Dunes are now concentrated in the southwestern region of the Catlow Valley. The Holocene sequence, however, indicates that following Mazama's eruption established dunes weathered during the higher moisture climatic periods and terminated with soil formation between 1800 and 1000 BP. Dune formation resumed as is indicated by two periods of sand accumulation following 1000 BP.

At the site's Locality 1, Wilde identified a hearth feature below Mazama Tephra, which is associated with a date roughly 6880 years ago. Projectile point types associated with the hearth below the Mazama Tephra included Humboldt Basal Notched, Elko Series (Elko Side-notched, Elko Corner-notched, and Elko Eared), and Windust. Ground stone and hammer stone artifacts are also associated with this ancient hearth feature.

At that same locality, a primary hearth feature with dates averaging to 3245 that was identified in 15 cm thick living floor that included three other hearth features in the same 15 cm lens (1985:237-238). The floor lens included Gatecliff Split-stem projectile points, bifaces, flakes, 'camp rocks,' more limited ground stone tools, and the bones of large mammals and lagomorphs. About half of the cultural material and the entirety of the primary hearth (Feature 1) was observed within a dark sediment lens about 3 meters in length and almost 2 meters in width. Later hearth features dated to 1800 years BP and were associated with Rose Spring projectile points and limited ground stone artifacts.

The archaeological record at Locality 1 indicates a shift in human activity over time from residential occupation to short term use of the site as a logistical camp site. Between the shift in human use, a noticeable gap in activity is marked by Mazama Tephra which preceded a general drying trend. Indian rice grass, a resource that people likely processed with groundstone, grows abundantly within the site's sandy along the edge of Skull Creek. Importantly, Wilde notes that aside from the intensity of use changing, the overall relationship among cultural materials within identified cultural components did not vary, suggesting long term continuity in human use of the area (1985:275-276).

Excavations in this area continue under the direction of Burns BLM District Archaeologist, Scott Thomas. He recently excavated a domestic floor lens at the site (personal communication), hearth charcoal was radiocarbon dated to 1800 years BP.

<u>Honcho Cave, Sentinel Cave, and Tule Springs Hearth Sites</u>

Wilde also excavated test pits at Honcho Cave, Sentinel Cave, and the Tule Springs Hearth Site, which are all located along the eastern margins of Tse'tse'ede, associated with the ancient pluvial Lake Alvord shoreline. Both caves exhibited evidence, though scant, for ancient human occupation. At Sentinel Cave, tertiary reduction flakes recovered below Mazama Tephra were associated with charcoal radiocarbon dated to 9000 years BP. Samples from four charcoal lens were subjected to radiocarbon dating and produced ages ranging from 8310 +/- 150 BP to 2410 +/- 65 BP (Wilde 1985:177-184). No projectile points were recovered from Sentinel Cave.

At Honcho Cave, charcoal samples recovered from a hearth feature produced radiocarbon dates ranging between 5840 +/- 100 BP and 3425 +/- 85 BP (Wilde 185:188). The upper most stratum included "matted vegetal matter" and a uniform distribution of artifacts (Wilde 1985:188). Three Elko series projectile points were recovered in association with the later date (Wilde 1985:189.

Pedestrian Surveys

Charlotte Beck (1984) and George Jones (1984), Donald K. Grayson's students and SMPP contributors, completed pedestrian survey to ascertain the relationships between flaked stone tool types, site size, site frequency, and distribution across the landscape. Their survey focused on the mountain's Catlow and Alvord drainages. Beck (1984) reported a transition from fewer and larger-sized sites between 3,000 to 2,500 BP, to smaller and more numerous sites during the last 1600 years BP. Jones' (1984) effort focused on the spatial distribution of sites in relation to resources and inferred an increase in residential mobility during the later period. Their data was presented as coded tables in their dissertations and the raw data now exists on computer punch cards (created ca. 1980), curated by the University of Oregon Museum of Natural and Cultural History.

Oetting (1992) conducted pedestrian survey in riparian margins of the Little Blitzen, Big Indian, and Little Indian canyons in addition to Indian Creek and corridors along the Donner und Blitzen River near its outlet into the valley basin. Oetting and his team identified 16 prehistoric sites consisting of dense surface scatters of flaked stone and ground stone tools generally located on terraces above the current floodplain (1992:66). Projectile points collected total 14 and span the Archaic period as they include one possible Western Stemmed point, one Humboldt Concave, five Elko series, seven Rosegate series, and one Cottonwood Triangular projectile point.

Musil and Oetting (1993) inventoried 48 prehistoric sites within the Riddle Brother's Ranch National Historic District, one of which is a subject site for my study and which I describe in detail in the next chapter. Prehistoric site distribution within the District fit the trend Oetting (1992) described for the 1991 riparian corridor surveys. Musil and Oetting recorded and collected over 100 projectile points, the vast majority of which are Elko series projectiles. Musil and Oetting (1993) also collected stemmed points, Humboldts, Northern Side-notched, and Rosegate series projectile points in more limited numbers.

Geomorphology, Climate, and Hydrography of Tse'tse'ede

I now review some of the important environmental variables for my study area in the northern Great Basin. Of special concern for understanding how prehistoric households used the landscape are patterns of climatic change, water availability, and elevational distributions of plant and animal resources.

The archaeological subjects of this dissertation are located on Tse'tse'ede' in southeastern Oregon (Figure 3.4, 3.5), the northern-most volcanic fault block mountain in the Great Basin (Baldwin 1981:127). The eastern side of the mountain is a one-mile high escarpment towering over the Alvord Valley and the western side is a relatively gentle rise from the Catlow Valley floor (1,371 m or 4500'). Wisconsonian glaciers eroded enormous u-shaped valleys on the mountain in which rivers flow today (Evans and Geisler 2000). As those glaciers melted, pluvial lakes formed in basins surrounding the mountain. Pluvial Lake Catlow produced repetitious waves that notched the basalt shoreline evident today below the Catlow rim on the western terminus of the Tse'tse'ede (Grayson 1993:88). Tse'tse'ede was ice-free by the beginning of the Holocene and perennial streams flow down glacially carved river canyons today (Aikens 1982:55; Mehringer 1985:173).

Sediment cores augered from two lakebeds produced pollen records indicative of Holocene climate history. Core locations at Diamond Pond and Fish Lake are respectively 41 km (25 miles) and 5 km (3.1 miles) from the study area. Fluctuations in the relative abundance of sagebrush versus grass pollen detail conditions affecting the dissertation subject sites (Table 3.1, Table 3.2) (Mehringer 1987; Wigand 1987: 427-458). Low precipitation and high temperatures/increased evaporation prevailed during the Middle Holocene, from about 7,000 to 4,000 years ago, allowing sagebrush to grow at higher elevations than it does now. High moisture accompanied by lower temperatures/decreased evaporation favored the expansion of grasses and juniper stands from about 4,000 to 2,000 years ago, a period known as the *Neopluvial*. For the next 600 years, a period of decreased moisture and higher temperatures/increased evaporation again allowed sagebrush

growth at higher elevations. Three periods follow, roughly 500 years each, where conditions were respectively moist, dry, and moist (Table 3.2).

Geomorphology and air circulation combine to affect the climate in a manner that is similar to other north-south trending Great Basin mountain ranges. Westerly northern hemispheric air currents pass over the Tse'tse'ede uplift producing a rain shadow over the easterly adjacent Alvord Desert. The modern average annual precipitation of regions immediately surrounding the mountain is less than 38.1 cm (15"), while the higher elevations of the mountain may receive upwards of 178 cm (70") (Loy et al. 2001). Today, temperatures range from the upper 30s Celsius (90s Fahrenheit) to well below freezing in the winter (Loy 2001).

Snow pack from the summit (2947.4 meters or 9670') feeds various watercourses that eventually converge to form primary rivers flowing into three major basins to the north, west and east (Figure 3.3). The Donner und Blitzen River system directs moisture into the Harney Basin system, the northern most internally draining basin in the Great Basin and the largest in Oregon (Oetting 1992:110-129). Wildhorse Lake, a glacial cirque lake, located near the mountain's summit feeds the the Wildhorse Creek drainage that feeds Alvord Lake at the eastern base of Tse'tse'ede. Home Creek, Skull Creek, and Roaring Springs drainages flow into the Catlow Valley basin. Water flowing from springs and drainages sustains plants and animals, the resources on which human life depends now as in the past.

Flora and Fauna of Tse'tse'ede

Fauna inhabit various floristic communities on Tse'tse'ede' (Table 3.7, 3.8; Figure 3.5), generally divided according to elevational range. The Donner und Blitzen River system crosscuts all zones and the upland desert riparian ecosystem includes the drainages and attendant flora and fauna (Ohmart and Anderson 1982:433). I describe those floristic communities, or zones, and the faunal species inhabiting them below. Species listed are those I expect households could have used during precontact times. I consider the faunal taxa found within those floristic zones as animals we might expect to find within subject site's zooarchaeological assemblages.

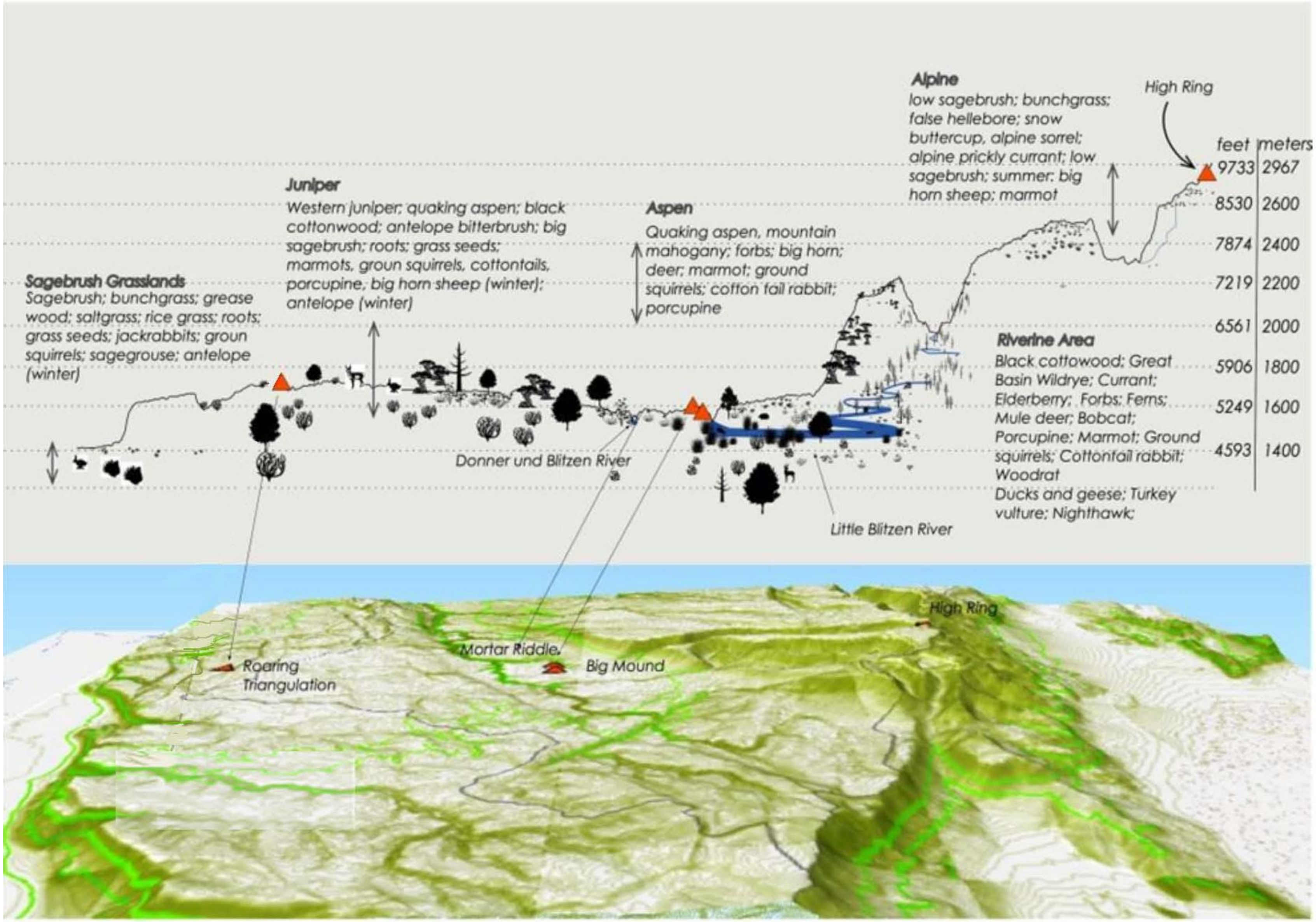

Figure 3.5 Floral and Faunal Resources available on Tse'tse'ede

Table 3.7 Tse’tse’ede Flora

	Vegetative Zone	**Scrubland**	**Sagebrush**	**Juniper**	**Aspen**	**Alpine Tundra**	
	Elevation (meters)	< 1249	1250 - 1649	1650 - 1999	2000 - 2399	2400 - 3048	
	Elevation (feet)	< 4263'	4265 - 5410'	5413' - 6562'	6564' - 7907'	> 7874'	
Scientific Name	**Common Name**		Scrubland				Bloom period
Lewisia rediviva	Bitterroot						May - June
Eriogonum spp.	Buckwheat						Late Spring - October
Elymus cinereus	Great Basin Wild Rye						June-August
Achnatherum hymenoides	Indian Rice Grass						April - July
Lomatium spp. *(L.cous, L.canbyi, L.ravenii, L. gormanii, L. Hendersonii, L. nudicale)*	Biscuit root						April - May
Allium spp.	Wild onion						April - June
Periderdia oregana	Yampa						July and August
Fritillaria pudica	Yellow bells						March - April
Calochortus macrocarpus	Mariposa Lily						July - August
Zigadenus venenosus	Death camas						May - July
Camassia quamash	Blue camas						May - August
Wyethia helianthoides	Mules ears						May - June
Balsamorhiza sagittata, B. hookeri	Arrowleaf balsamroot						April - May
Samnbucus melanocarpa	Elderberry						May - July
Prunus emarginata	Bitter cherry						April - May

Aquatic
Lithosol
Dry soil
Moist, deeper soil
Sand
Tolerates multiple sediment contexts

(Table 3.7, Continued)

Scientific Name	Vegetative Zone	Scrubland	Sagebrush	Juniper	Aspen	Alpine Tundra	Bloom period
	Elevation (meters)	< 1249	1250 - 1649	1650 - 1999	2000 - 2399	2400 - 3048	
	Elevation (feet)	< 4263'	4265 - 5410'	5413' - 6562'	6564' - 7907'	> 7874'	
Scientific Name	**Common Name**		Scrubland				Bloom period
Prunus virginiana	Chokecherry						April - May
Ribes aureum	Currant						May - July
Typha latifolia	Cattail						May - June
Scirpus acutus	Tule						May - August
Salix spp.	Willow						May
Sagittaria latifolia	Wapato						July - November
Suaeda depressa	Wada (inkweed)						May
Artemisia tridentata	Sagebrush						August - Septemeber

Aquatic
Lithosol
Dry soil
Moist, deeper soil
Sand
Tolerates multiple sediment contexts

Table 3.8 Extant fauna inhabiting Tse'tse'ede (After Malheur National Wildlife Refuge Fauna List, Burns BLM Steens Mountain Range Management Plan)

		Vegetative Zone	**Blitzen River Valley**	**Sagebrush**	**Juniper**	**Aspen**	**Alpine Tundra**
		Elevation (meters)	< 1249	1250 - 1649	1650 - 1999	2000 - 2399	2400 - 3048
		Elevation (feet)	< 4263'	4265 - 5410'	5413' - 6562'	6564' - 7907'	> 7874'
	Scientific Name	**Common Name**		Scrubland			
Actinopterygii	*Catostomus columbianus*	Bridgelip sucker					
	Catostomus macrocheilus	Largescale sucker					
	Gila bicolor	Tui Chub					
	Gila alvordensis	Alvord Chub					
	Gila bicolor ssp.	Catlow tui chub					
	Gila boraxobius	Borax Lake Chub					
	Acrocheilus alutaceus	Chiselmouth					
	Rhinichthys cataractae	Long-nosed dace					
	Ptychocheilus oregonensis	Columbia River dace or northern pikeminnow					
	Rhinichthys osculus	Speckled dace					
	Richardsonium columbianus	Redside shiner					
	Cottus bairdi	Mottled sculpin					
	Cottus bendirei ssp.	Malheur mottled sculpin					
	Oncorhynchus mykiss	Rainbow trout (generic)					
	Oncorhynchus mykiss ssp.	Great Basin redband trout					
	Prosopium williamsoni	Mountain whitefish					
	Oncorhynchus clark henshawi	Lohanton cutthroat trout					
Amphibians	*Burfo boreas*	Western toad					
	Rana luteiventris	Columbia spotted frog					
	Spea intermontana	Great Basin spade-foot toad					
	Ambystoma tigrinum	Tiger salamander					
	Ambystoma macrodactylum	Long-toed salamander					

Aquatic	
Scrub	
Scrub/wetland	
Wetland	
terrestrial or non-aquatic birds	

Table. 3.8, Cont.

		Vegetative Zone	Blitzen River Valley	Sagebrush	Juniper	Aspen	Alpine Tundra
		Elevation (meters)	< 1249	1250 - 1649	1650 - 1999	2000 - 2399	2400 - 3048
		Elevation (feet)	< 4263'	4265 - 5410'	5413' - 6562'	6564' - 7907'	> 7874'
	Scientific Name	**Common Name**		Scrubland			
Aves	*Aix sponsa*	Wood duck					
Aves	*Anas* spp.	American widgeon, Cinnamon teal, Gadwall, Mallard, Northern Pintail, Northern Shoveler,					
Aves	*Anser albifrons*	Greater White-fronted Goose					
Aves	*Aythya* spp.	Cavasback, Greater scaup, Lesser scaup, Redhead, and Ring-necked duck					
Aves	*Branta canadensis*	Canada Goose					
Aves	*Chen* spp.	Snow & Ross's Goose					
Aves	*Cygnus* spp.	Trumpeter swan & mute swan & tundra swan					
Aves	*Lophodytes cucullatus*	Hooded merganser					
Aves	*Melanita fusca*	White-winged scoter					
Aves	*Mergus merganser*	Common merganser					
Aves	*Oxyura jamaicensis*	Ruddy duck					
Aves	*Bucephala* spp.	Bufflehead, Barrow's goldeneye, and Common goldeneye					
Aves	*Selasphorus platycercus*	broad-tailed hummingbird					
Aves	Cathartes aura	Turkey vulture					

Aquatic	
Scrub	
Scrub/wetland	
Wetland	
terrestrial or non-aquatic birds	

(Table 3.8, continued)

		Vegetative Zone	Blitzen River Valley	Sagebrush	Juniper	Aspen	Alpine Tundra
		Elevation (meters)	< 1249	1250 - 1649	1650 - 1999	2000 - 2399	2400 - 3048
		Elevation (feet)	< 4263'	4265 - 5410'	5413' - 6562'	6564' - 7907'	> 7874'
Aves	*Charadrius alexandrius*	Western snowy plover	Scrub/wetland	Scrub/wetland	Scrub/wetland		
Aves	*Larus pipixcan*	Franklin's gull	Wetland	Wetland	Wetland		
Aves	*Childonias niger*	Black tern	Wetland	Wetland	Wetland		
Aves	*Sterna forsteri*	Forster's tern	Scrub	Scrub			
Aves	*Numenius americanus*	Long-billed curlew	Wetland	Wetland			
Aves	*Ixobrychus exilis*	least bitten	Wetland	Wetland	Wetland		
Aves	*Plegadis chihi*	White-faced ibis	Wetland	Wetland			
Aves	*Coccyzus americanus*	Yellow-billed cuckoo			Terrestrial	Terrestrial	
Aves	*Accipiter striatus*	Sharp-shinned hawk			Terrestrial	Terrestrial	
Aves	*Buteo lagopus*	Rough-legged hawk	Scrub/wetland	Scrub/wetland			
Aves	*Circus cyaneus*	Northern harrier	Scrub/wetland	Scrub/wetland			
Aves	*Accipiter gentilis*	Northern Goshawk	Wetland	Wetland	Wetland	Wetland	
Aves	*Accipiter cooperii*	Coopers hawk	Scrub/wetland	Scrub/wetland	Scrub/wetland	Scrub/wetland	
Aves	*Aquila chrysaetos*	Golden Eagle	Scrub/wetland	Scrub/wetland	Scrub/wetland	Scrub/wetland	
Aves	*Buteo jamaicensis*	Red-tailed hawk	Scrub/wetland	Scrub/wetland	Scrub/wetland	Scrub/wetland	
Aves	*buteo regalis*	ferruginous hawk	Scrub/wetland	Scrub/wetland	Scrub/wetland	Scrub/wetland	
Aves	*Haliaeetus leucocephalus*	Northern Bald Eagle	Scrub/wetland	Scrub/wetland	Scrub/wetland	Scrub/wetland	
Aves	*Buteo swainsoni*	Swainson's hawk	Scrub/wetland	Scrub/wetland	Scrub/wetland	Scrub/wetland	
Aves	*Falco peregrinus ssp.*	Peregrine falcon	Scrub/wetland	Scrub/wetland	Scrub/wetland	Scrub/wetland	
Aves	*Falco sparverius*	American kestrel	Scrub/wetland	Scrub/wetland	Scrub/wetland	Scrub/wetland	
Aves	*Falco mexicanus*	Prairie Falcon	Scrub	Scrub	Scrub	Scrub	Terrestrial
Aves	*Calipepla californicus*	California quail		Wetland	Wetland		
Aves	*Centrocercus urophasianus*	Sage grouse	Scrub	Scrub	Scrub		
Aves	*Gavia immer*	Common loon	Wetland	Wetland			

Aquatic	(light blue)
Scrub	(light peach)
Scrub/wetland	(orange)
Wetland	(light green)
terrestrial or non-aquatic birds	(light yellow)

(Table 3.8, continued)

	Vegetative Zone	Blitzen River Valley	Sagebrush	Juniper	Aspen	Alpine Tundra
	Elevation (meters)	< 1249	1250 - 1649	1650 - 1999	2000 - 2399	2400 - 3048
	Elevation (feet)	< 4263'	4265 - 5410'	5413' - 6562'	6564' - 7907'	> 7874'
Lanius ludovicianus	Sandhill crane (greater)	Wetland	Wetland	Wetland		
Fulca americana	American coot	Wetland	Wetland	Wetland		
Dolichonyx oryzivorus	Bobolink	Wetland	Wetland	Wetland		
Eremophila alpestris	Horned lark				terrestrial or non-aquatic birds	terrestrial or non-aquatic birds
Gymnorhinus cyancephalus	Pinyon jay	Scrub	Scrub	Scrub	Scrub	
Corax corax	American raven	Scrub/wetland	Scrub/wetland	Scrub/wetland	Scrub/wetland	terrestrial or non-aquatic birds
Amphispiza belli	Sage sparrow	Scrub	Scrub			
Amphispiza bilineata	Black-throated sparrow	Scrub/wetland	Scrub/wetland	Scrub/wetland	Scrub/wetland	
Zonotrichia leucophrys	White-crowned sparrow				terrestrial or non-aquatic birds	terrestrial or non-aquatic birds
Leucosticte atrata	Black rosy finch			terrestrial or non-aquatic birds	terrestrial or non-aquatic birds	terrestrial or non-aquatic birds
Riparia riparia	Bank swallow	Wetland	Wetland			
Lanius ludovicianus	Loggerhead shrike	Scrub/wetland	Scrub/wetland	Scrub/wetland		
Contopus cooperi	Olive-sided flycatcher	Wetland	Wetland			
Empidonax trillii adastus	Willow flycatcher	Wetland	Wetland			
Ardea herodias	Great Blue Heron	Wetland	Wetland			
Botaurus lentiginosus	American bittern	Wetland	Wetland			
Butorides virescens	Green heron	Wetland	Wetland			
Camerodius albus or Ardea Alba	Great egret	Wetland	Wetland			
Egretta thula	Snowy egret	Wetland	Wetland			
Ixobrychus exilis	Least bittern	Wetland	Wetland			
Nycticorax nycticorax	Black-crowned night heron	Wetland	Wetland			
Pelecanus erythorhynchos	American white pelican	Wetland	Wetland			
Aechmophorus occidentalis	Western grebe and Clark's grebe	Wetland	Wetland			
Podilymbus podiceps	Pied-billed grebe	Wetland	Wetland			
Podiceps spp.	Horned grebe and Eared grebe	Wetland	Wetland	Wetland		
Otus flammeolus	Flammulated owl			Scrub/wetland	Scrub/wetland	

Aquatic	(light blue)
Scrub	(light orange)
Scrub/wetland	(orange)
Wetland	(green)
terrestrial or non-aquatic birds	(light yellow)

(Table 3.8, continued)

		Vegetative Zone	**Blitzen River Valley**	**Sagebrush**	**Juniper**	**Aspen**	**Alpine Tundra**
		Elevation (meters)	< 1249	1250 - 1649	1650 - 1999	2000 - 2399	2400 - 3048
		Elevation (feet)	< 4263'	4265 - 5410'	5413' - 6562'	6564' - 7907'	> 7874'
Aves	*Asio otus*	Long-eared owl					
	Athene cunicularia	Western burrowing owl					
	Phalacrocorax auritus	Double-crested cormorant					
Mammals	*Antilocapra americana*	Pronghorn antelope					
	Bison spp.	Bison*					
	Ovis Candensis	California bighorn sheep					
	Cervus elaphus	Rocky mountain elk					
	Odocoileus hemionus hemionus	Mule deer					
	Canis familiaris	Dog					
	Canis latrans	Coyote					
	Canis lupus	Wolf					
	Vulpes spp.	Kit and Red Fox					
	Lynx sp.	Bobcat and Lynx					
	Puma concolor	Mountain lion					
	Spilogale gracilis	Western spotted Skunk					
	Mephitis mephitis	Striped Skunk					
	Lontra canadensis	River Otter					
	Mustela frenata	Long-tailed weasel					
	Neovision vision	American mink					
	Gulo gulo	California wolverine					
	Procyon lotor	Raccoon					
	Taxidea taxus	Badger					
	Ursus americanus	Black bear					
	Ursus horbilis	Grizzly bear*					
	Antrozous pallidus	Pallid bat					

Aquatic	
Scrub	
Scrub/wetland	
Wetland	
terrestrial or non-aquatic birds	

(Table 387, continued)

		Vegetative Zone	Blitzen River Valley	Sagebrush	Juniper	Aspen	Alpine Tundra
		Elevation (meters)	< 1249	1250 - 1649	1650 - 1999	2000 - 2399	2400 - 3048
		Elevation (feet)	< 4263'	4265 - 5410'	5413' - 6562'	6564' - 7907'	> 7874'
	Euderma maculatum	Spotted bat					
	Myotis ciliolabrum	Western small-footed myotis (bat)					
Mammals	*Myotis thysandoes*	Fringed myotis (bat)					
	Myotis septentrionalis	Long-eared Myotis					
	Myotis volans	Long-legged myotis (bat)					
	Myotis yumanensis	Yuma myotis (bat)					
	Corynorhinus townsendii	Townsend's big-eared bat					
	Lasionycteris noctivagans	Silver-haired bat					
	Myotis leibii	Small-footed bat					
	Myotis occultus	Little brown bat					
	Eptesicus spp.	Big brown bat					
	Lasiurus cincereus	Hoary bat					
	Parastrellus spp.	Western Pipistrelle					
	Sorex spp.	Merriam's Shrew, Preble's shrew, Vagrant and Water Shrew					
	Lepus townsendii	Snowshoe hare or White-tailed jackrabbit					
	Lepus californicus	Black-tailed jackrabbit					

Aquatic	
Scrub	
Scrub/wetland	
Wetland	
terrestrial or non-aquatic birds	

(Table 3.8, continued)

		Vegetative Zone	**Blitzen River Valley**	**Sagebrush**	**Juniper**	**Aspen**	**Alpine Tundra**
		Elevation (meters)	< 1249	1250 - 1649	1650 - 1999	2000 - 2399	2400 - 3048
		Elevation (feet)	< 4263'	4265 - 5410'	5413' - 6562'	6564' - 7907'	> 7874'
Mammals	*Brachylagus idahoensis*	Pygmy rabbit					
	Sylvilagus nuttallii	Mountain cottontail					
	Ochotona spp.	Pika					
	Aplodontia rufa ssp.	Mountain beaver					
	Castor canadensis	Beaver					
	Lemmiscus spp.	Sagebrush vole					
	Ondontra zibethicus	Muskrat					
	Reithrodontonys spp.	Western Harvest Mouse					
	Onychomys spp.	Northern Grasshopper Mouse					
	Microtus spp.	Long-tailed or Mountain vole					
	Peromyscus spp.	Deer Mouse or Canyon Mouse					
	Zapus princeps	Western jumping mouse					
	Erethizon dorsatus	North American Porcupine					
	Thomomys spp.	Townsend's Pocket gopher and Northern Pocket Gopher					
	Dipodomys spp.	Ord's Kangaroo Rat and Great Basin Kangaroo rat					
	Microdipodops megacephalus	Dark Kangaroo Mouse					
	Microtus townsendii	Townsend's vole					
	Callospermophilus spp.	Golden manteled ground squirrels					
	Tamias minimus	Least chipmunk					
	Neotoma spp	Bushy-tailed and Desert woodrat					

Aquatic	
Scrub	
Scrub/wetland	
Wetland	
terrestrial or non-aquatic birds	

(Table 3.8, continued)

		Vegetative Zone	Blitzen River Valley	Sagebrush	Juniper	Aspen	Alpine Tundra
		Elevation (meters)	< 1249	1250 - 1649	1650 - 1999	2000 - 2399	2400 - 3048
		Elevation (feet)	< 4263'	4265 - 5410'	5413' - 6562'	6564' - 7907'	> 7874'
	Marmota flaviventris	Yellow-bellied marmot					
	Spermophilius spp.	Belding's and Townsend's Groundsquirrels					
	Ammospermophilus leucurus	White-tailed antelope ground squirrel					
Reptiles	*Thamnophis sirtalis*	Common garter					
	Thamnophis elegans	Western terrestrial garter					
	Coluber constrictor	Racer					
	Coluber taeniatus	Striped whipsnake					
	Hypsiglena chlorophaea	Night snake					
	Pituophis catenifer	Gopher snake					
	Sonora semiannulata	Western ground snake					
	Lampropeltis spp.	Kingsnake					
	Crotophytus bicinctores	Great Basin black-collared lizard					
	Gambelia wislizenii	Long-nosed leopard lizard					
	Phrynosoma platyrhinos	Desert horned lizard					
	Sceloporus occidentalis	Western fence lizard					
	Sceloporus graciosus	Northern sagebrush lizard					
	Phrynosoma douglasii	Short-horned lizard					
	Plestiodon skiltonianus	Western skink					
	Crotalus oreganus	Western rattlesnake					

Legend	
Aquatic	
Scrub	
Scrub/wetland	
Wetland	
terrestrial or non-aquatic birds	

<u>Shadescale & Marsh Zone <1300 m (4265')</u>

Two unique habitats exist below 1300 m (4265'): shadescale and marsh. Shadescale and saltbrush (*Artiplex* spp.), greasewood (*Sarcobatus vermiculatus*), spiny hopsage (*Grayia spinosa*), and saltgrass (*Distichlis spicata*) grow in the alkaline scrub areas surrounding desiccated playas in open

country at elevations less than 1300 m (4625'). Deeper soils support basin big sagebrush (*Artemesia tridentata* spp. *tridentata*), Great Basin wild rye (*Leymus cinereus*) and various rabbit brushes (*Ericameria* spp.).

Birds inhabiting the sagebrush flats and alkali margins include the sagegrouse (C*entrocercus urophasianus*), western snowy plover (*Charadrius alexandrius*), sparrows, corvids, hawks, and falcons. Reptiles include snakes and lizards and, remarkably, the Great Basin spade-foot toad (*Spea intermontana*) will also inhabit open sagebrush country. Large ungulates include pronghorn antelope and bison, the latter thought to be introduced to the region from eastern groups during the last 600 years (Grayson 2006). Furbearers include foxes (*Vulpes* spp.), felids, badger (*Taxidea taxus*) and the black-tailed jackrabbit (*Lepus californicus*). Dog (*Canis familiaris*), coyote (*Canis latrans*), and wolf (*Canis lupus*) all inhabit the region up to 1300 m (4265') along with numerous mice and other rodents.

Aquatic species, such as hardstem bulrush (*Scirpus actus*) and broadleaf cattail (*Typha latifolia*) grow abundantly in the marshy areas at the base of Tse'tse'ede and north to Malheur and Harney Lake. More than 25 species of ducks and geese, members of the Anantidae family, are found in marshy and lakeside environments. The American coot (*Fulca americana*), members of the grebe family (Podicipediae), and the long-billed curlew (Numenius americanus) also inhabit the marsh area along with wading birds including herons, egrets, and bitterns.

Fishes include Catastomids such as the bridgelip and largescale suckers (*Catostomus* spp.). Cottids include the mottled and Malheur sculpins, both *Cottus* species. Cyprinids are plentiful and include members of the genus *Gila,* including tui chub *(Gila bicolor),* as well as the chiselmouth (*Acrocheilus alutaceus*), mountain whitefish (P*ropsopium williamsoni*), northern pikeminnow (*Ptychocheilus oregonensis*), the reside shiner (R*ichardsonium columbianus*), and *Rhinichthys* species, including the speckled dace and the long-nosed dace. Finally, salmonids inhabiting the Donner und Blitzen drainage include Great Basin redband trout (*Onchorhynchus mykiss spp.),* and

generic rainbow trout (O*nchorhynchus mykiss*). These fish exist in rivers and streams throughout the Donner und Blitzen drainage, salmonids swimming up rivers to elevations in excess of 1800 m (5906'). Starred species listed in Table 3.1 are found in adjacent drainages and lakes, but are included nevertheless as species people potentially used and/or transported back to their *Tse'tse'ede* occupations. Such species include Alvord, borax, and Catlow chub species (*Gila* spp.) and Lahontanon cutthroat trout (*Oncorhynchus clark henshawi*). Amphibians found in the Donner und Blitzen drainage including the Columbia spotted frog (*Rana* spp.), the western toad B*ufo boreas*), the Great Basin spade-foot toad (*Spea intermontana*), and salamanders (*Ambystoma* spp.). All of the same reptiles that live in lower elevations are able to survive in the sagebrush zone.

Mule deer O*odocoileus hemionus*) periodically wander downslope consuming grasses and forbs in riparian areas, eventually seeking cover among taller willows and grasses growing in proximity to marsh areas. Carnivores inhabiting the marshy regions include skunks, river otter (*Lontra canadensis*), American mink (*Neovision vision*), long-tailed weasel (*Mustela frenata*) and raccoon (*Procyon lotor*). Rodents include beaver (*Castor canadensis*), muskrat (*Ondontra zibethicus*), mice, groundsquirrels, and bats.

Sagebrush Zone 1300 – 1649 m (4265 – 5412')

Dominant plant species of the sagebrush zone (1300 – 1649 m/4265 – 5410') include species of the genus *Artemesia,* including mountain big sagebrush as well as low sagebrush (*A. arbuscula*) and Wyoming big sagebrush (A*. tridentata* ssp. *wyomingensis*), which grows along the western slope. Rabbit brushes (*Ericameria* spp.), Great Basin wild rye (*Leymus cinereus*), and blue bunch wheat grass (*Pseudoroegneria spicata*) grow in this habitat. Geophytic plants growing in this zone include lupines (*Lupinus* spp.), yampas (*Perideridia* spp.), arrowleaf balsamroot (B*alsamrhizoa* spp.) and biscuitroot (*Lomatium* spp.). Many of the same animals inhabiting sagebrush flats below 1300 m also occupy such habitats above 1300 m. Animals seen at this elevation and generally not below include the big horn sheep (*Ovis canadensis*) and yellow-bellied marmot (*Marmota flaviventris*). In riparian areas above 1300 m (4265') one does find mountain alder (*Alnus incana*),

water birch (*Betula occidentalis*), currants (*Ribes* spp.), black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), cherries (*Prunus* spp.), red osier dogwood (*Cornus sericea*), and willows (*Salix* spp.) that also grow at even higher elevations.

Juniper Zone 1650 – 1999 m (5413' – 6561')

Western juniper (*juniperus* occidentalis) dominates the juniper zone that exists between 1650 and 2000 meters (5413' – 6562'). Along western slopes one also finds mountain mahogany (*Cercocarpus montanus*) the only true and native hardwood found within a hundred of miles *Tse'tse'ede.* Sagebrush species grow within the juniper zone along with Idaho fescue F*festuca idahoensis*) and needlegrasses (*Achnatherum* spp.) in shallower and drier soils. Geophytic plants inhabiting the sagebrush zone also grow in the xeric lithosol habitats within the juniper zone. In the rimrock, one finds bitterbrush (*Purshia tridentata*) and wax currant (*Ribes cereum*). Great Basin wild rye (*Leymus cinereus*) and Great Basin big sagebrush (*Artemesia tridentata* spp. *tridentata*) flourish in slightly deeper soils in rocky locations and adjacent to wetlands.

Near springs and seeps, one can find camas (C*amassia quamash*), dogbane (*Apocynum* spp.), mule's ears (*Wyethia* spp.), alder, willow, cherries, and dogwood. Quaking aspen (*Populus tremuloides*) grows in well-watered north-facing habitats and the upper limits of the western juniper zone. Only the salmonids swim upstream into the Little Blitzen, Big Indian, and Little Indian rivers. Rocky mountain elk (*Cervus elaphus*) prefer the juniper zone habitat and wooded areas at higher elevations. Bird species inhabiting the juniper zone include the sharp-shined hawk (*Accipiter striatus*), yellow-billed cuckoo (*Coccyzus americanus*), the black rosy finch (*Leucosticte atrata*), the flammulated owl (*Otus flammeolus*), and the long-eared owl (*Asio otus*). The western toad, Columbia spotted frog, and the tiger salamander inhabit aquatic environments above 1650 m, while the reptile species abundance declines substantially; colubrids include the garter snakes (*Thamnopjis* spp.), racer, kingsnake, and rattle snake while the lizards include the western skink and fence lizard. Lagomorphs inhabiting the juniper zone and not habitats in lower elevations include the white-tailed jackrabbit or snowshoe hare (L*epus townsendii*), the pika (*Ochotona* spp.), and pygmy

rabbit (*Brachylagus idahoensis*). Carnivores include the wolverine (*Gulo gulo*) (Ray and Carraway 1973), black bear (*Ursus americanus*), and grizzly bear (*Ursus horbilis*). Rodents include the North American porcupine (*Erethizon dorsatus*) and the least chipmunk (*Tamias minimus*).

Aspen Zone 2000 – 2399 (6562' – 7906')

The aspen zone is dominated by the quaking aspen P*populus tremuloides*), which ranges from 2000 to 2400 meters (6562' to 7907). Snowberry (*Symphoricarpos rotundifolius*) and gooseberries (*Ribes* spp.) are found together in aspen groves. false hellebore (*veratrum californicum*) and willows grow in seeps and near springs and riparian areas. Two isolated and small stands of white fir (*Abides concolor* var. *lowiana*) grow on the west and north side of the mountain, respectively, in areas surrounding Big and Little Fir Creeks and in the McCoy creek drainage surrounding Moon Hill (Mansfield 1995:4, 2000:51). Bird species inhabiting the juniper zone also inhabit the aspen zone, which is also the case for mammals. Redband trout (*Oncorhynchus mykiss* ssp.) may be found in the lower elevations of this habitat zone.

Alpine Tundra Zone >2400 m (> 7874')

Flowering plants, sedges, and grasses dominate the alpine tundra zone, which exists above 2400 m (7874'). American bistort (*Polygonum bistortoides*), cinquefoils (*Potentilla* spp.), monkey flowers (*Mimulus* spp.), speedwells (*Veronica* spp.), buttercups (*Ranunculus* spp.), elephantheads (Pedicularis spp.) sedges (Carex spp.), rushes (*Juncus* spp.), and bentgrasses (*Agrostis* spp.) are common in alpine wet and mesic meadows. Cutleaf daisy and sulfurflower (*Erigeron* spp.) in addition to milkvetch (*Astragauls* spp.) and Steens paintbrush (*Castilleja pilosa* var. *steenensis*) inhabit xeric locations.

Birds inhabiting the high elevation alpine tundra are constrained to the horned lark (*Eremophila alpestris*), raven (*Corax corax*), white-crowned sparrow (*Zonotrichia leucophrys*), prairie falcon (*Falco mexicanus*), and the black rosy finch (*Leucosticte atrata*). Mammalian inhabitants of Tse'tse'ede's highest elevations include artidoctyls, carnivores, lagomorphs, and rodents. Bighorn sheep (*Ovis canadensis*) deftly scramble along steep, rocky inclines, while

pronghorn (*Antilocapra americana*) take refuge in the cool openness of the high elevation during the summer.

Carnivores include fox (*Vulpes* spp.), felids such as lynx and bobcat (*Lynx* sp.), and badger (*Taxidea taxus*). Lagomorphs include the pika (*Ochotona* sp.), and the snowshoe hare (*Lepus townsendii*). Rodents include the pocket gophers (T*homomys* spp.), mice (*Peromyscus* spp.), and squirrels, the largest of which is the yellow-bellied marmot (*Marmota flaviventris*).

<u>Life Cycle Summary for Large Mammals and Fur-bearing Species</u>

Large game species endemic to the immediate region include big horn sheep (*Ovis canadensis*), pronghorn antelope (*Antilocapra americana*), and muledeer (*Odocoileus hemionus*). Rocky mountain elk (*Cervus elaphus canadensis*) have been introduced to eastern Oregon following Euro-american colonization of the west (Couch 1935). Bighorn sheep, like pronghorn, are browsers feeding on forbs and woody plants. Both are ruminants with multi-chambered stomachs and require microbes to ferment food for digestion. Big horn sheep remain in herds year round. Males compete for access to females during the pre-rut season in which they engage in the characteristic head butting behavior. During the rut, rams mate with receptive ewes in estrus. The following spring ewes give birth to a single calf or, rarely, two. Big horn sheep are skilled climbers, appearing to cling to the steep edges of rocky slopes. There sheep consume forbs growing in xeric soil conditions. Lambs are susceptible to predation by bobcats, coyotes, lynx, and golden eagles, while bear and mountain lion target mature sheep. Bighorn sheep descend to lower elevations during the winter months and return to higher elevations as browse emerges in the spring.

Pronghorn antelope aggregate in large herds at lower elevations in open country during the winter. Does give birth in the spring, typically to a single offspring, and join females that may aggregate and negotiate dominance hierarchies. Like bighorn sheep, pronghorn antelope will move to higher elevation when browse becomes available in the spring, though they tend to stay away

from the very steep and rocky terrain typically favored by bighorn. Pronghorn are susceptible to similar predatory species.

The species described above are those endemic to the region in which the subject archaeological sites exist. The faunal species are those one would expect to find represented in zooarchaeological samples recovered from the sites.

Thus the Tse'tse'ede landscape provides a diverse suite of resources that vary over the course of the year including a variety of seed grasses, edible roots and berries, construction materials and firewood, several large mammals including pronghorn antelope, mule deer, and bighorn sheep, and a mix of other fauna including fish and birds and small mammals like rabbits and marmots.

Summary

I began this chapter with a general review of Great Basin archaeology, its time periods, and its patterns of climatic change. I reviewed the history of the evolution of various subsistence and settlement models for the Great Basin, including early attention to foraging adaptations to aridity (Jenning's Desert Culture model), and subsequent attention to regional and chronological variations, including attention to the use of wetlands associated with low elevation lakes, upland piñon groves, and seasonal high elevation sites. I detailed some of the researchers and archaeological sites that were key to this evolution. Having outlined some of the known regional variations, I then narrowed my focus to the northern Great Basin and to residential sites in that subregion to provide a broader context for my own discussion of household archaeology on Tse'tse'ede'. I then reviewed previous archaeological research on Tse'tse'ede. Finally, I provided environmental background for Tse'tse'ede, including topography and hydrology, and the elevational zonation of available plant and animal resources and their seasonal patterns.

CHAPTER 4. ARCHAEOLOGICAL SUBJECT SITES OF TSE'TSE'EDE

In this chapter I provide excavation details for my four subject sites: Mortar Riddle (35HA2627), Roaring Triangulation (35HA385), Big Mound (35HA2626), and High Ring (BLM Site #0502063004Si). These four sites provide a small but interesting sample of the Tse'tse'ede' landscape. Figure 4.1 illustrates their locations in terms of general topography, including their elevation and their proximity to one another. The sites differ in the degree of archaeological investigation they have received. All have been surveyed and surface collected. Two, Mortar Riddle and Roaring Triangulation, have been excavated with combinations of test units and larger excavation blocks. The other two, Big Mound and High Ring, have had more limited excavation in the form of test units.

MORTAR RIDDLE (35HA2627)

The Mortar Riddle site is located within the southwestern ¼ of the northeastern ¼ of the southeastern ¼ of Section 31 in Township 33 South, Range 32 and ¾ East (Figure 4.2). The site is located at 1,561 m (5,120′) elevation on a southeast-facing moraine caused by the Wisconsonian glaciation (Evans and Geisler 2001: Plate). Bedrock outcrops are evident 100 meters to the southwest and 70 meters upslope from the site datum. Between these points colluvial and aeolian sediments accumulated, which the U.S. Department of Agriculture characterizes the site's soil as a "Ninemile gravelly loam, hummocky, 0 to 8 percent slopes" (2012).

Mortar Riddle site occupants had prime access to a wide variety of floral and faunal resources (Figures 4.3, 4.4). The most accessible obsidian source, Beatty's Butte is 35 km to the southwest in Catlow Valley. Fresh water, the limiting resource within the broader high desert environment, runs perennially in the Little Blitzen River only 100 m to the northeast, some 20 meters below the lower bedrock outcrop.

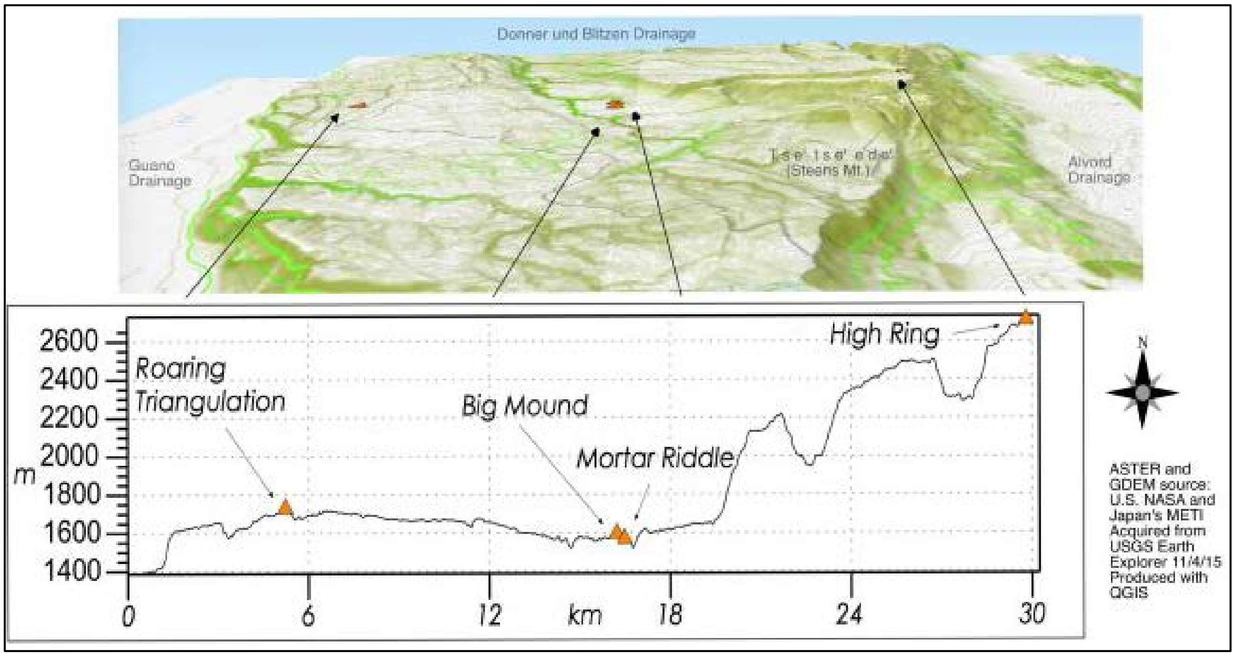

Figure 4.1 Subject sites and their location on Tse'tse'ede

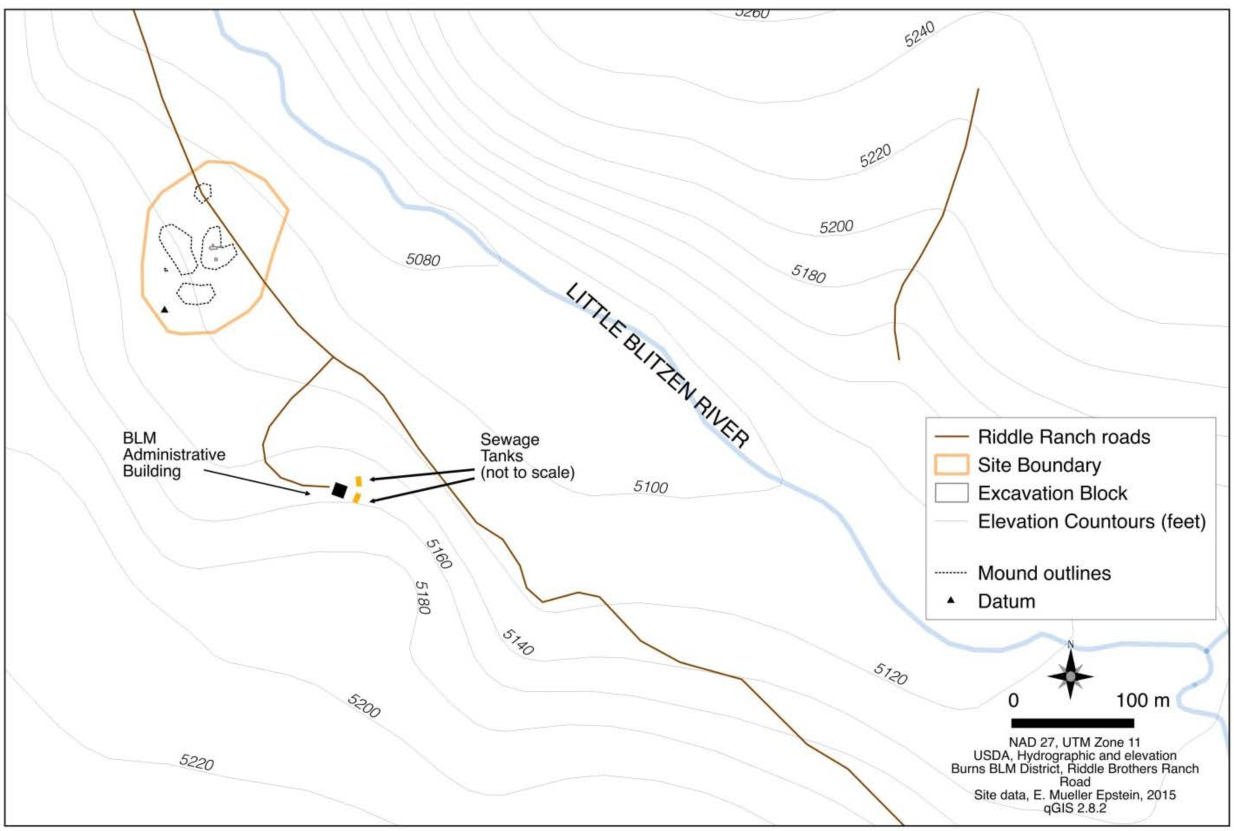

Figure 4.2 Mortar Riddle Site Location near the Little Blitzen River


Figure 4.3, Site image, view north


Figure 4.4 Site image, view southeast

Musil and Oetting (1993) identified the site as one of 48 pre-Contact sites located within the Riddle Brother's Ranch Historic District. The site's surface area is in excess of 10,000 m^2 and includes 5 mounded earth features on top of which lie a dense scatter of flaked and ground stone tools, including 76 projectile points, 94 ground stone stone mortars, two *Olivella* spp. shell beads, and one historic clothing fastener (Figure 4.5). Colluvium trapped in site furniture and accumulated to form the mounded earth features. Projectile points collected from the surface are typologically associated with the Middle and Late Archaic periods, the last 6,000 years BP. Mortars identified on the site's surface are of particular interest for their ubiquity on the landscape. Hopper mortars are mortars that people placed bottom-less conical baskets directly on top of shallow-basined use surfaces. BLM archaeologists recorded a maximum density of 54 flakes per square meter consisting of the following lithic raw materials: obsidian (n=44 or 81.5%), basalt (n=9 or 16.6%), and cryptocrystalline silicate (CCS) (n=1 or 1.9%). The single CCS flake is a small (<3 cm diameter) interior flake. Obsidian and basalt flakes are, in rank order, small interior and small exterior flakes.

<u>Excavation Strategies</u>

Fieldwork occurred during the summers between 2003 and 2007 (Mueller and Thomas 2004; Mueller 2005, 2007). Mueller and Thomas (2004) excavated six 50x50 cm^2 test units in 2003, establishing the presence of subsurface deposits in the mounded earth features (Figure 4.6). Test Unit #1 was placed as a control on the base of the mounded earth feature's perimeter. We excavated 10 cm arbitrary levels with trowels. All test units yielded evidence for buried cultural deposits except for control Test Unit 1, as we encountered glacial till 20 cm below the surface.

Subsequent investigations focused on two excavation blocks (Figure 4.7). All excavation Units are based on a 2 x 2 meter pattern in which the four contiguous 1x1 m quadrants are known as A, B, C, and D as indicated Figure 3.9. Units 2 through 9 constitute the site's North Block while Unit 1 is identified as the site's South Block. Excavation Units 1, 2 (Quads A and C), 3, and 4 (Quads B) were established in 2004. Excavation in those Units proceeded in 10 cm arbitrary levels, except for the first level that was 30 cm deep. During subsequent field seasons all excavation proceeded in

10 cm arbitrary levels, including the trench extension off the east side of the North Block established in 2005. Every effort was made to recover artifacts *in situ*, though some were recovered from matrix screened through 1/8” mesh. In all years we collected 10 cm^3 controlled volume sediment samples from every level except the first.

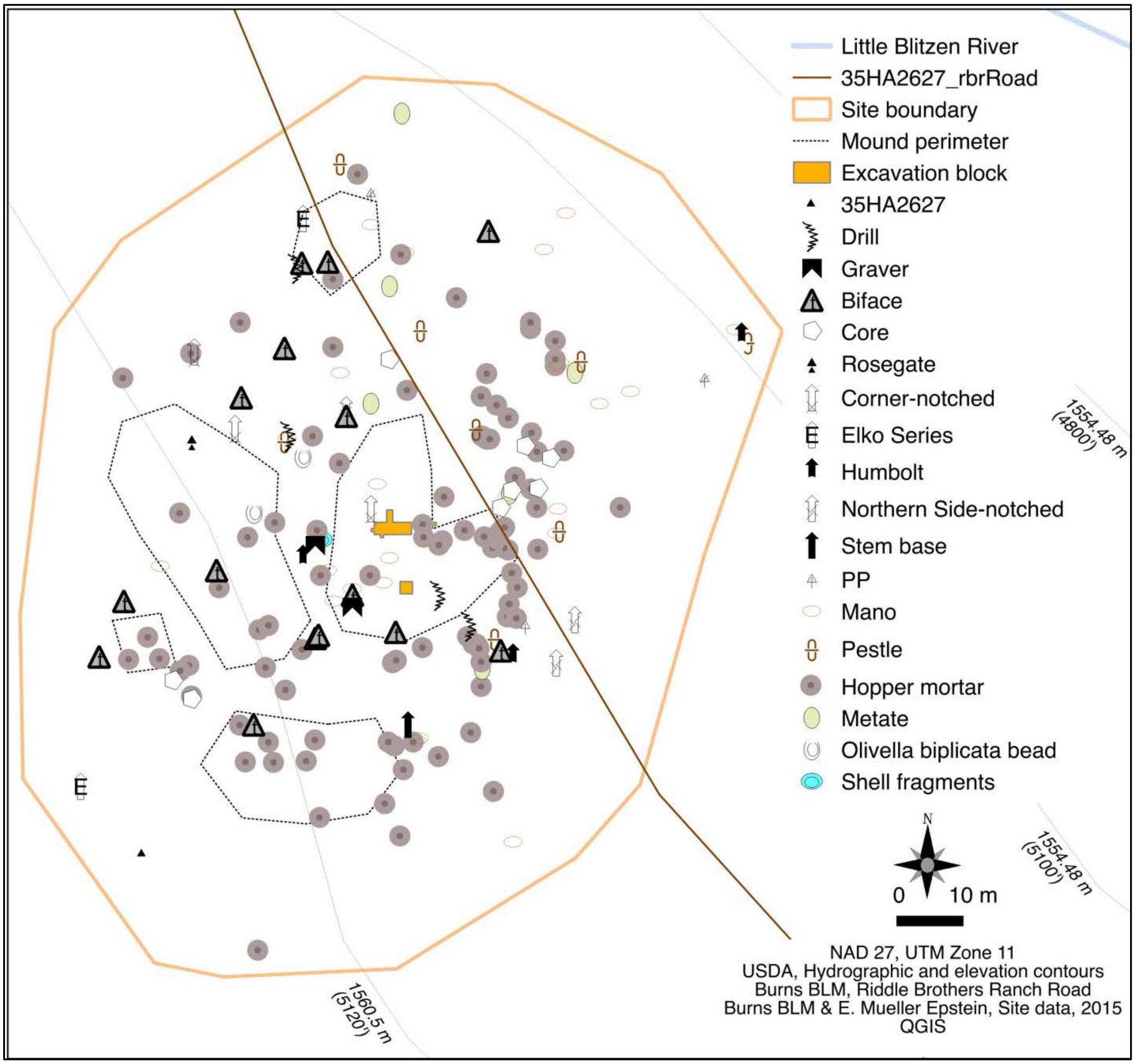

Figure 4.5 Mortar Riddle Site surface archaeology

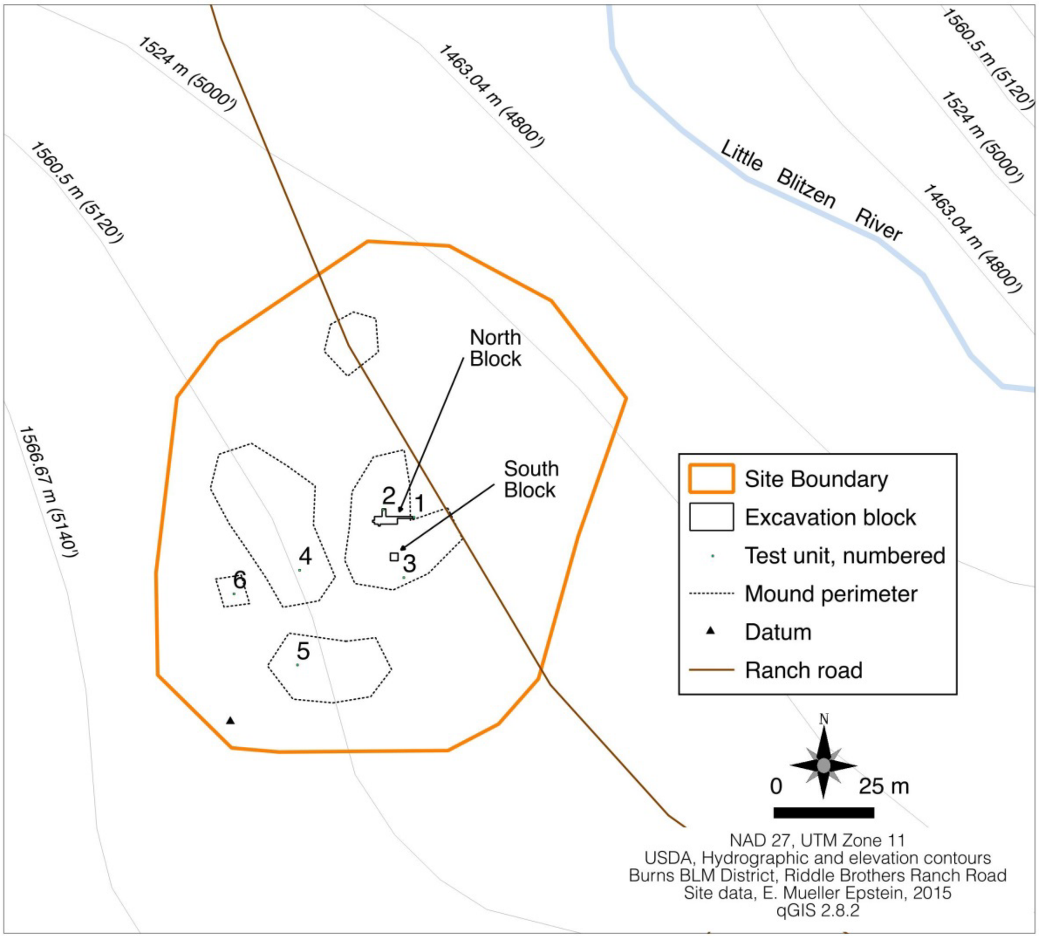

Figure 4.6 Mortar Riddle test units spatial relationship to excavation block and datum.

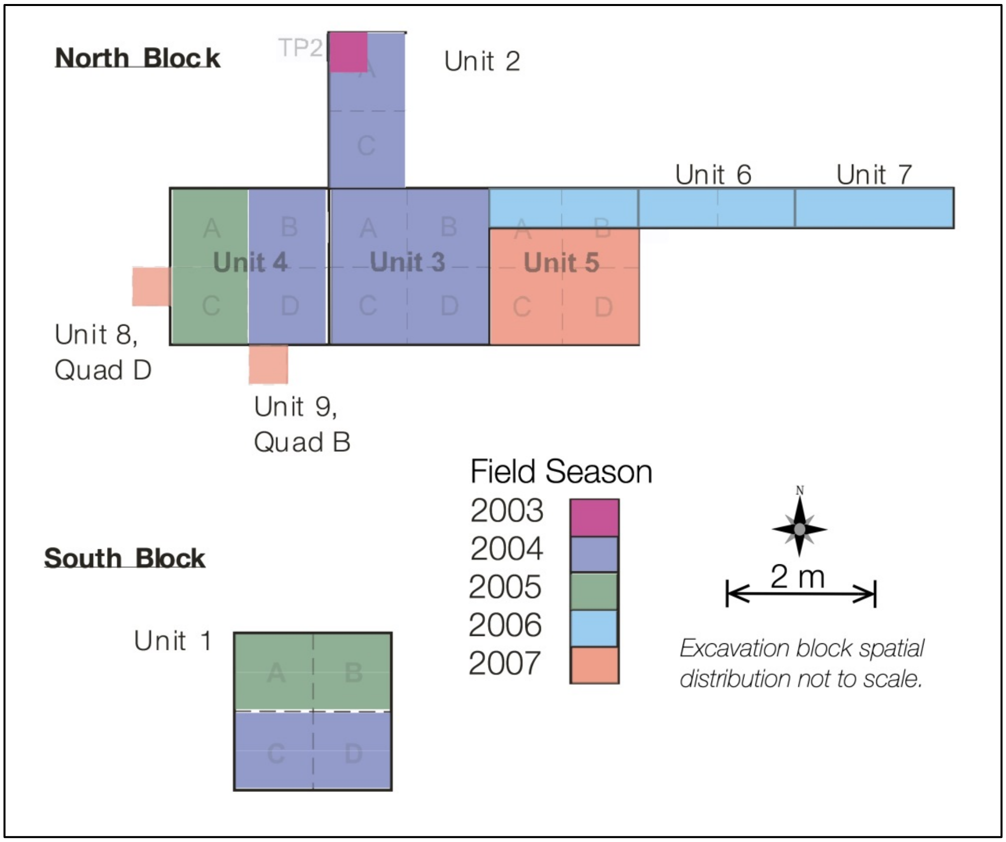

Figure 4.7 Chronology of excavations at the Mortar Riddle Site's North and South Excavation Blocks

Cultural Matrix and Block Profiles

In excess of 20m³ of matrix was removed from the site over the course of five field seasons, about 3.5% of the 561 m³ of the site's total estimated subsurface cultural deposit. Matrix in all locations consists, generally, of three strata encountered during excavations and observed in stratigraphic profiles (Figures 4.8). Variations occur as a result of cultural features, which I describe in the following section.

STRATUM ONE

Stratum One consists of silty sediments of a 10 YR 3/3 "dark brown" color. Small pea-sized gravels, less than or equal to 5 mm in diameter, were found throughout the matrix along with sagebrush, Great Basin wild rye, and occasional Mariposa lily roots. More acidic ph readings were returned from Stratum One excavation levels.

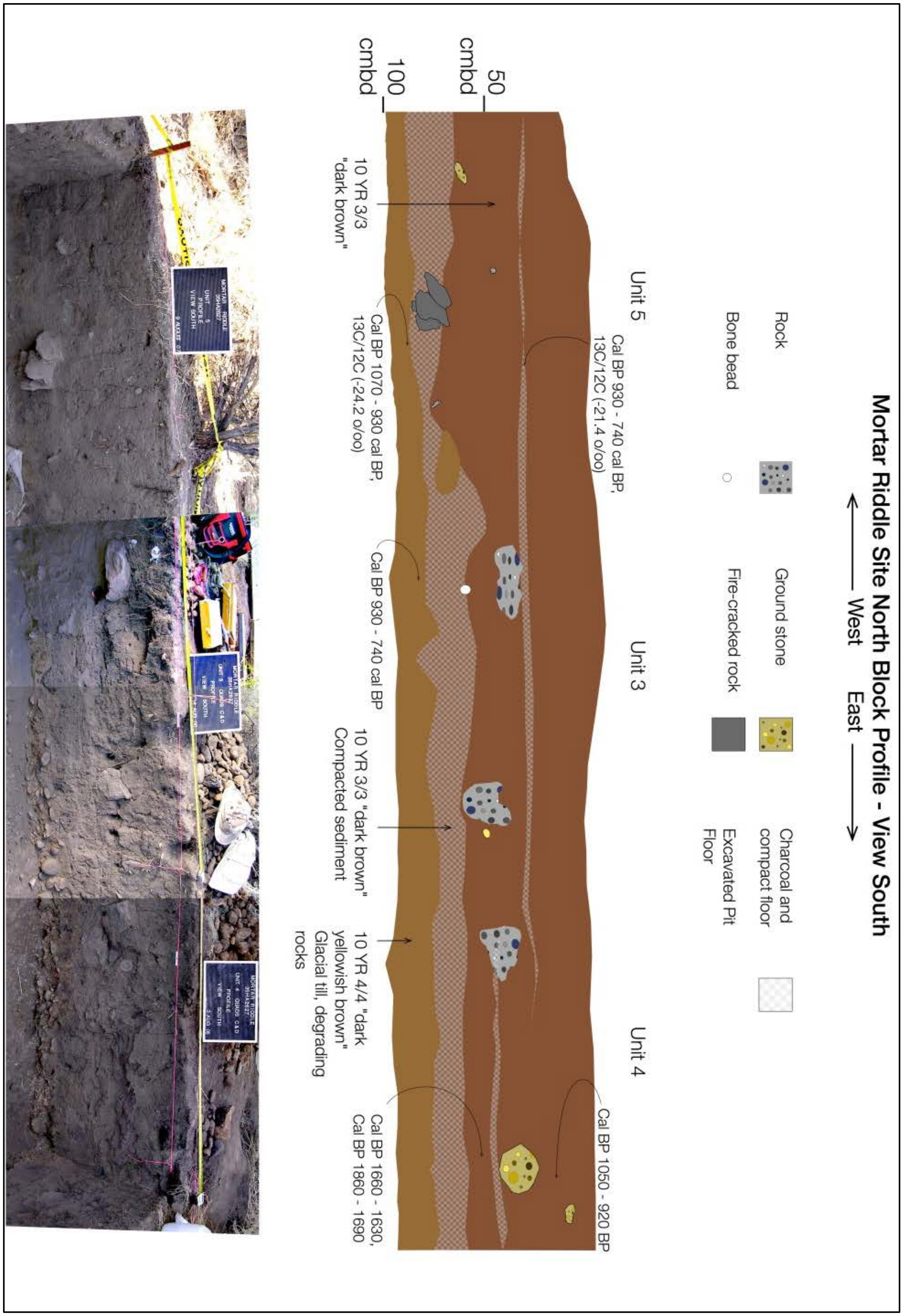

Figure 4.8 North Block profile

STRATUM TWO

Stratum Two matrix also consists of silty sediments of a 10 YR 3/3 “dark brown” color and pea-sized angular gravels. Distinctive to Stratum Two is the observation of decomposing organics and larger tabular basalt cobbles, with diameters ranging from 10 to 40 cm. The tabular basalt cobbles appear to represent the degradation of cultural lithic artifacts and features, which will be discussed in greater detail below.

STRATUM THREE

Most (90%) of the Stratum Three matrix consists of rounded cobbles ranging in diameter between 10 – 40 cm between which exists a silty-clay 10 YR 4/4 “dark yellowish brown” in color. Excavations ceased when crew encountered glacial till. During the 2004 season, glacial till was apparent in Unit 3, Quad A at 110 cm below datum and at lower elevations in the northeastern corner of the quad (Figure 4.9), following the general terrain evident between the exposed bedrock upslope and the river.

That same year, BLM excavated trenches for the administrative building’s sewage tanks (Figure 4.2). Trenches were located about 10 meters downslope and southeast of the structure. The exposed profiles revealed the same glacial till, though at roughly 50 to 70 cm below the surface. Relevant here is that the presence of glacial till matrix deposition on the leeward side of the slope is a result of aeolian and also alluvial activity.

Three lenses of compacted sediments flecked with charcoal were encountered in the North Block. These occurred at three different elevations. The first lens appears between 20 and 30 cm below datum (cmbd) and is about 5 cm thick (Figure 4.8). Another 5 cm thick lens was encountered between 50 to 60 cmbd. The final compacted lens exists between 65 and 70 cmbd.

<u>Radiocarbon Dates</u>

Radiocarbon dated charcoal samples total 13 and range from 1890 – 100 cal B.P. or 100 – 1420 A.D. (Table 4.1). Margaret Helzer identified the plants represented by the charcoal specimens

that we later submitted for radiocarbon dating via accelerator mass spectrometry (AMS), save those indicated otherwise. The 13C/12C ratio for each date was used to ensure the accuracy of the radiocarbon date.

Relative Dating

Ethan Epstein (2007) used obsidian hydration rind thickness data to establish relative dates for the site. Hydration rinds are thin lenses of atmospheric hydrogen that develop on obsidian surfaces following flake removal that increase over time. Rinds are measured in units of microns. Older point styles, if they haven't been reworked following original manufacture, are also expected

Figure 4.9 Glacial till evidence in Unit 3 Quad A at 110 cmbd. Note low spot, dipping to northeast

to produce larger rind measurements (Friedman and Smith 1960). Temperature and humidity variably affect hydration rind development and the method is best applied to artifacts manufactured from raw material of the same geochemical source (Michaels 1969). Liritzis and Laskaris (2011) report attempts to use the method for absolute dating purposes remain problematic. Archaeologists (Lyons et al. 2001; S. Thomas 1981) used hydration rind measurements to establish the relative chronology at Northern Great Basin sites.

Of the 736 projectile points recovered from the Mortar Riddle Site, 662 (or 90%) are manufactured from obsidian. Hydration rind measurements for typologically diagnostic projectile points recovered from Mortar Riddle deposits and manufactured from obsidian geochemically sourced to Beatty's Butte total 124 (Tables 4.2). Craig Skinner of Northwest Obsidian Lab completed the geochemical sourcing and measured hydration rinds. The 124 projectile points were recovered during the 2003 – 2005 field seasons. Ethan Epstein inferred pre-contact pit excavation in both the North and South Excavation Blocks (Figure 4.8), based on a combined assessment of stratigraphy, carbon dates, and the obsidian hydration rind measurements (2007:58-70). Thus follows (Table 4.4) the final dating for the North and South Excavation Blocks as applied to this study, which is based on midpoint values.

Table 4.1 Mortar Riddle Site radiocarbon dates

BETA cat# (MR Cat#)	Identified Charcoal	o/oo	RCYBP (1)		C14date 2 sigma (1) (2)		Ca. A.D. (1)		Provenience		
									Unit	Quad	cmbd
187687* (03-TP5-4-1)	Willow		620	540	650	530	1300	1420	TP 5		50 - 60
216747* (05-426-2)	Pine, cottonwood	-26	960	880	930	740	1020	1210	Unit 3	A	83
216748* (05-523-5)	sagebrush	-23.2	1040	960	860	800	1080	1080	Unit 1	A	105
239165 (07-183-2)	Unidentified	-21.4	900	820	930	740	1210	1020	Unit 5	A	30
216748* (05-523-5)	Sagebrush	-23/2	1040	960	970	890	980	1060	Unit 1	A	105
216746* (05-326-4)	Willow, Alder	-26.7	1090	1110	1050	920	900	1030	Unit 4	C	11.5
239166 (07-357-9)	Unidentified	-24.2	1130	1050	1070	930	1020	880	Unit 5	C	88
216750* (05-434-4)	Bitterbrush	-25.3	1190	1110	1170	960	780	990	Unit 1	B	110
187686* (03-TP3-3-1)	Willow		1300	1220	1280	1070	670	880	TP 3		20 - 30
194871* (03-TP2-9-1)	Willow		1450	1370	1360	1270	580	680	TP 2		80 - 90
187685* (03-TP4-7-1)	Willow		1460	1380	1380	1280	570	670	TP 4		60 - 70
216749* (05-551-8)	Sagebrush, alder, juniper, willow	-24.9	1860	1780	1660	1630	290	320	Unit 4	C	55
216749* (05-551-8)	Sagebrush, alder, juniper, willow	-24.9	1860	1780	1860	1690	100	260	Unit 4	C	55

*Charred plant identification by Margaret Helzer prior to AMS dating.

Table 4.2 North Block Radiocarbon (AMS) dates and Obsidian Hydration measurements

CMBD	Unit 5	Unit 3					Unit 4				Unit 2		
		Rosegate	Elko	Humboldt	Willow leaf	Side-notched	RG	Elko	NSN	Other	Rosegate	Elko	Humbold
0-10							2.4-2.6	2.6					
10-20							1.5	1.8-2.1	3.9*	**1050 - 920 Cal BP**			
20-30 (0-30)	**930 - 740 Cal BP**	(1.5-2.2)	(2.4-3.2)	(3.2)			1.5 (2.0-2.3)	3.5 (4.8)	(1.5)				
30-40		1.6	2.8				1.5 - 1.6	2.1			1.2		
40-50 (0-50)		2.3-2.5 (1.6-3.1)	2.8 (1.6- 3.1)	3.2	2.1	(2.4)	1.5				1.5	1.9	3.7
50-60		1.4-1.8	1.8-2.2	3.6			1.8 - 2.1	1.9 **1630 - 1660 1860 -1690 Cal BP**					
60-70		2.1											
70-80													
80-90	**1070 – 930 cal BP**	**930 – 740 cal BP**											

Table 4.3 Site dating used in this study

CMBD	South Block CYBP (Unit 1)	CMBD	North Block CYBP			
			Unit 5	Unit 3	Unit 4	Unit 2
≤ 30		≤ 30	835* and younger, Very dry			
<50		<50			985 and younger,	
≥50		≥50			1315 – 985, Moist	1710 and older, Dry
<90		<90	1000 and younger, Moist	820* and younger, Very Dry		
>90		>90		1075-880 Moist, then dry		

Given the site dating outlined by Epstein (2007) and the North Block's compacted sediment lenses, further analysis of the North Block focuses on the material recovered between 20 and 50 cmbd. Carbon samples encountered between 20 – 50 cmbd in the sites North Block produced AMS results dating to 835 CYBP and younger. Thus, the subject North Block deposit is associated with continuous occupation during the warmest post-Middle Archaic environment, 900 through 300 years BP (Wigand 1985: 427). I present the cultural material evidence and its spatial distribution in the results chapter.

ROARING TRIANGULATION (35HA385)

The Roaring Triangulation Site (35HA385) is located within the southeastern ¼ of the northwestern ¼ of the northwestern ¼ of Section 2 in Township 33 South, Range 32 East (Figure

4.10). The site is located at 1745 meters (5724') in elevation on prominent sediment covered out-crop, an extension of the north-south trending fault scarp, part of the South Branch Brothers Fault Zone (Evans and Geisler 2000). Exposed bedrock is evident in deflated locations on the knoll's summit. Gravelly clay and very cobbly clay loam provide roughly 26" of matrix on slopes west of the ridge whereas silty clay loam and clay cover bedrock on the steeper margins of the site, east of the ridge crest (USGS Soil report 2016).

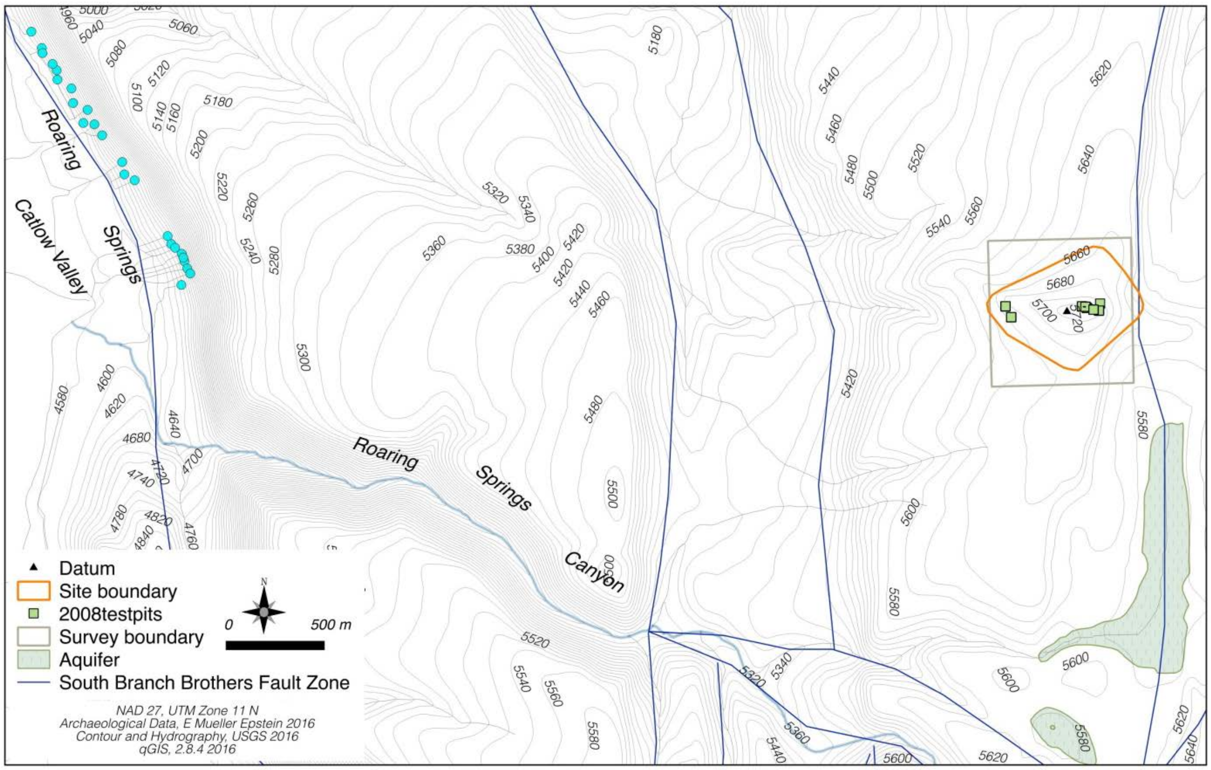

Figure 4.10 Roaring Triangulation Site location with respect to the 2008 survey area and surrounding natural resources.

Roaring Springs is a location of natural springs where Tse'tse'ede' meets the Catlow Valley. It is near the cave site known by the same name. The natural springs are 4.6 km west of 35HA385. A stream flows through the Roaring Springs Canyon 1.6 km south of the site, originating from a playa that ephemerally collects water that in turn recharges the subsurface aquifer. This aquifer is adjacent to the southern margins of 35HA385. Great Basin wild plants signal the presence of seeps on the otherwise rocky south face of the knoll. From the site's datum, one has unobstructed views

in nearly 360 degrees (Figure 4.11). Pronghorn antelope and bighorn migrate along the well-watered canyon to and from the Catlow Valley flats.

The Roaring Triangulation site was first recorded by the U.S. Bureau of Land Management in 1992. Archaeologists documented the presence of a large lithic scatter, including flakes, debitage, projectile points, other flaked stone tools, bedrock mortars, hopper mortars, and curvilinear petroglyps (BLM Site #0502060336SI record). During a site visit in 2005, archaeologists recorded and collected 14 diagnostic flaked stone tools. The triangulation datum (Figure 4.14) bears a '1935' stamp and the BLM site record notes the location has been the focus of long term collection, likely predating the U.S. Coast and Geodetic Survey activities, given the presence of a ca. 1920s can dump within the site boundaries. A BLM employee who grew up in Harney County noted many of the hopper mortars have been removed from the site since his first visit. Evidence suggests at least one individual attempted to remove a mortar from an exposed bedrock at some point in the past, but eventually gave up (Figure 4.13). In 2009, a collector sauntered along from the southwest up to our work site on the knoll and was surprised when I greeted her.

In 2008 we established a 750 m^2 (139 acres) pedestrian survey area to confirm the site's boundaries (Fig. 4.10). Survey transects at 15 meter intervals proceeded east to west. We reduced spacing to 5 meters in the area of greatest cultural material density, on top of the knoll. Based on those results, we recorded the presence of 61 projectile points and 30 other tools (Table 4.4, Table 4.5).

Figure 4.11 Top: The east-southeast face of the Roaring Triangulation Site knoll. Middle: View East to Tse'tse'ede's higher elevations from highest elevation on site. Bottom: View southwest from the Roaring Triangulation Site. Beatty's Butte, the closest obsidian source, is prominent in the background, beyond Catlow Rim.

Figure 4.12 Top: Large bedrock exhibiting petroglyphs and mortars along the top. Scale bar on right side of frame. The white arrow in the left side of the image indicates the position of the arrow in the middle two images. Middle Left: view West. Northern most portion of the bedrock mortar in top image. Middle Right: View southwest same subject as in the middle left image. Bottom: the ‘snake’ petroglyph.

Figure 4.13 Bedrock mortar exhibiting modification due to removal attempt by saw. Hart Mountain visible in the background along horizon and is 73.64 km (46 miles) southwest of the site.

Figure 4.14 U.S. Coast & Geodetic Survey Roaring Springs triangulation datum.

Table 4.4 Projectile Points recorded and collected during survey

Point Type	**Quantity**	**%**
Corner-notched (nonspecific)	1	2
Gatecliff	1	2
Side-notched (nonspecific)	1	2
Humboldt (concave base)	3	2
Pinto	3	5
Pin Stem	3	5
Rosegate (Rosespring and Eastgate)	3	5
Northern Side-notched	6	10
Stem	13	21
Elko	14	23
Cannot be determined	13	21
TOTAL	61	100

Table 4.5 Flaked stone tools that are not projectile points.

Tool Type	Quantity	%
Chopper/Graver	1	3
Crescent	1	3
Graver/Scraper	1	3
Unifacial fragment	1	3
Utilized Flake	1	3
Drill	2	7
Biface and Bifacial Fragments	8	27
Scraper	15	50
TOTAL	**30**	**100**

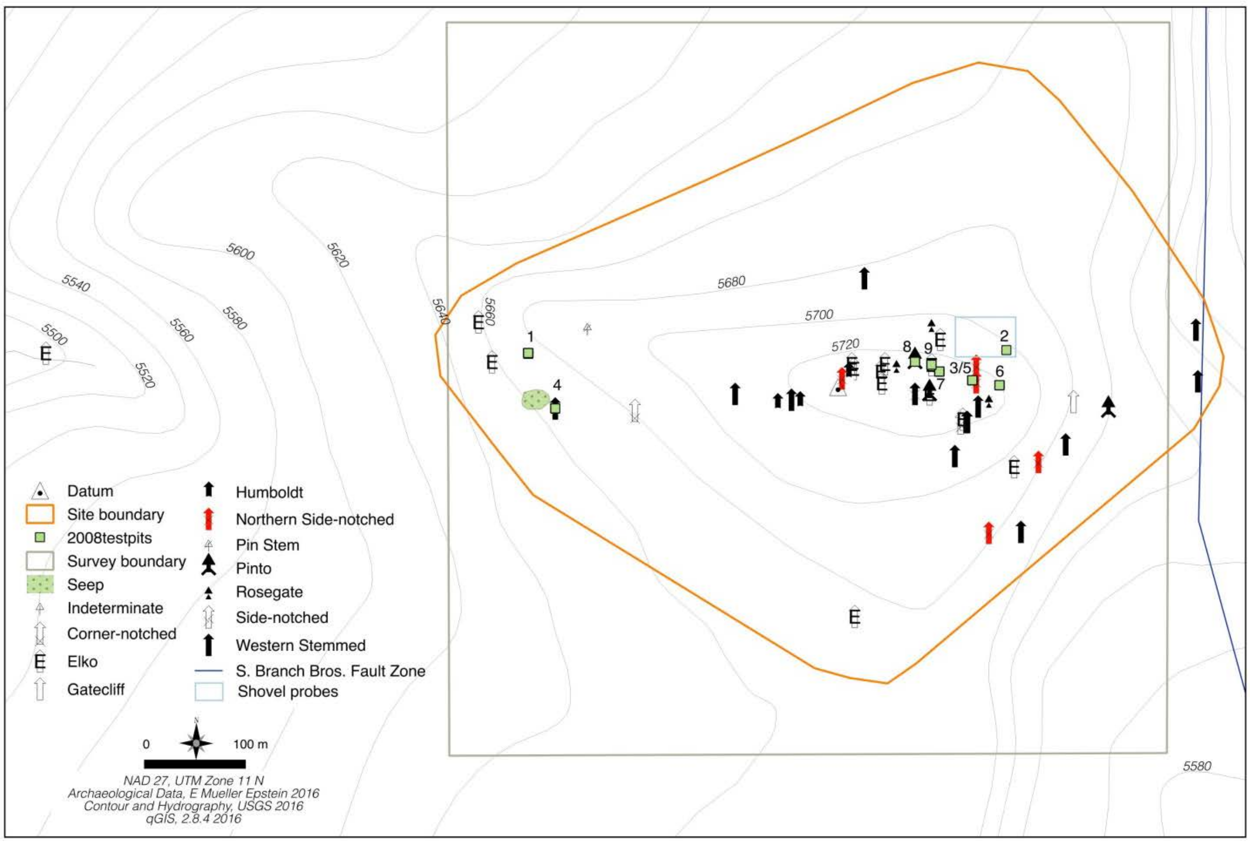

Figure 4.15 Roaring Triangulation Site surface archaeology and seep location.

Mapped artifacts are clustered on top of the knoll as well as downslope and to the south of the knoll, as well as near a seep in the southwest portion of the site (Figure 4.15). In the southwestern survey area, 13 tools were recorded and collected as a cluster within meters of a then active seep, which consisted of eight projectile points, one biface, two scrapers, and one ground

stone pestle. One may infer hunting and food processing behaviors based on the presence and distribution of those artifacts. The artifact cluster south of the knoll's crest consisted of 11 artifacts, including one projectile point of indeterminate style, five bifaces, four scrapers, and one obsidian crescent representing cutting activities. The artifacts clustered on the knoll type include those used for hunting (projectile points), cutting (scrapers and biface), as well as puncturing (drill).

Typologically identified projectile points collected during the pedestrian survey effort total 40 (66%) and are assigned to date ranges (Table 4.6). Non-specific Corner-notched, non-specific Side-notched, pin stem, and Humboldt point types are not considered temporally sensitive as a result of the wide use-date ranges found to be typical in the northern Great Basin. Measurement, methods, and schema (Jeske 2004) follow Epstein (2007).

Table 4.6 Surface collected projectile points and their associated date ranges.

Point Type	**Frequency**	**Date Range BP**
Rosegate (Rosespring & Eastgate)	3	1500-600
Elko	14	3500-1250
Gatecliff/Pinto	1	5000-3250
Pinto	3	5000-3250
Northern Side-notched	6	6500-4500
Western Stem	13	10,000-8000
TOTAL	**40**	

The distribution of later point styles, including Rosegate and Elko styles, cluster on top of the Roaring Triangulation Site outcrop (Figure 4.15). Earlier point styles tend to be associated with the south side of the knoll; Northern Side-notched points were collected from the summit and along the southern ridge slopes. Stem points –excluding pin-stem styles- were dispersed regularly across the site. We collected a fine-grained volcanic crescent from the southern bench and adjacent what is now the playa overlying the Roaring Springs aquifer.

Excavation Strategies

Based on the results of the pedestrian survey, survey crew excavated seven of the eight 50 x 50 cm test units. Test Units 1, 3/5, 4, 6, 7, 8, and 9 placed at areas of greatest surface artifact density

and in proximity to archaeological features. In addition, we tested the depth of deposits via thirty-one shovel along the site's northern and eastern alluvial fan (Figure 4.15). Test Units on top of the knoll encountered the deepest cultural deposits. Test Unit 9 reached degrading bedrock at roughly 84 centimeters, the full extent to which the excavator could extend his arm (Mueller Epstein and Epstein 2009).

Investigations continued during the summers of 2009 and 2010 (Figure 4.16). In 2009, a 50 cm by 12.5 meter long trench excavated on top of the knoll incorporated Test Unit 9 at the eastern end. In 2010 a 2 x 2 meter excavation block was expanded at the eastern portion of the trench while a smaller, block was expanded at the western end. At the eastern 2 x 2 meter block, the excavation was subdivided into 1 x 1 meter quadrants (A, B, C, and D) and further into 50 x 50 cm sub-quadrants with directional references (Northwest, Northeast, Southwest, and Southeast). Excavation within proceeded in 10 cm arbitrary levels, measured below datum.

Every effort was made to recover artifacts *in situ,* though some were recovered from matrix screened through 1/8" mesh. We collected controlled volume sediment samples from each excavated unit-quad-subquad level with measuring 5 x 5 x 10 cm. Cultural strata and site dating determined the levels selected for study in this dissertation, which I describe below.

Cultural Matrix and Block Profiles

We excavated in excess of 6.5 m^2 from the site over the course of three field seasons. The excavated volume is a minute fraction of the site's potential subsurface deposit. The East Block is characterized by three strata.

Stratum One

Stratum One consists of fine, silty loam that is very dark greyish brown (Munsell 10 YR 4/2) in color. Stratum One extends from the surface, includes the initial root zone, and extends to about 35 cmbd throughout the eastern excavation block. The stratum includes angular basalt cobbles

greater than or equal to 10 cm in diameter along with the presence of flaked stone debitage and charcoal.

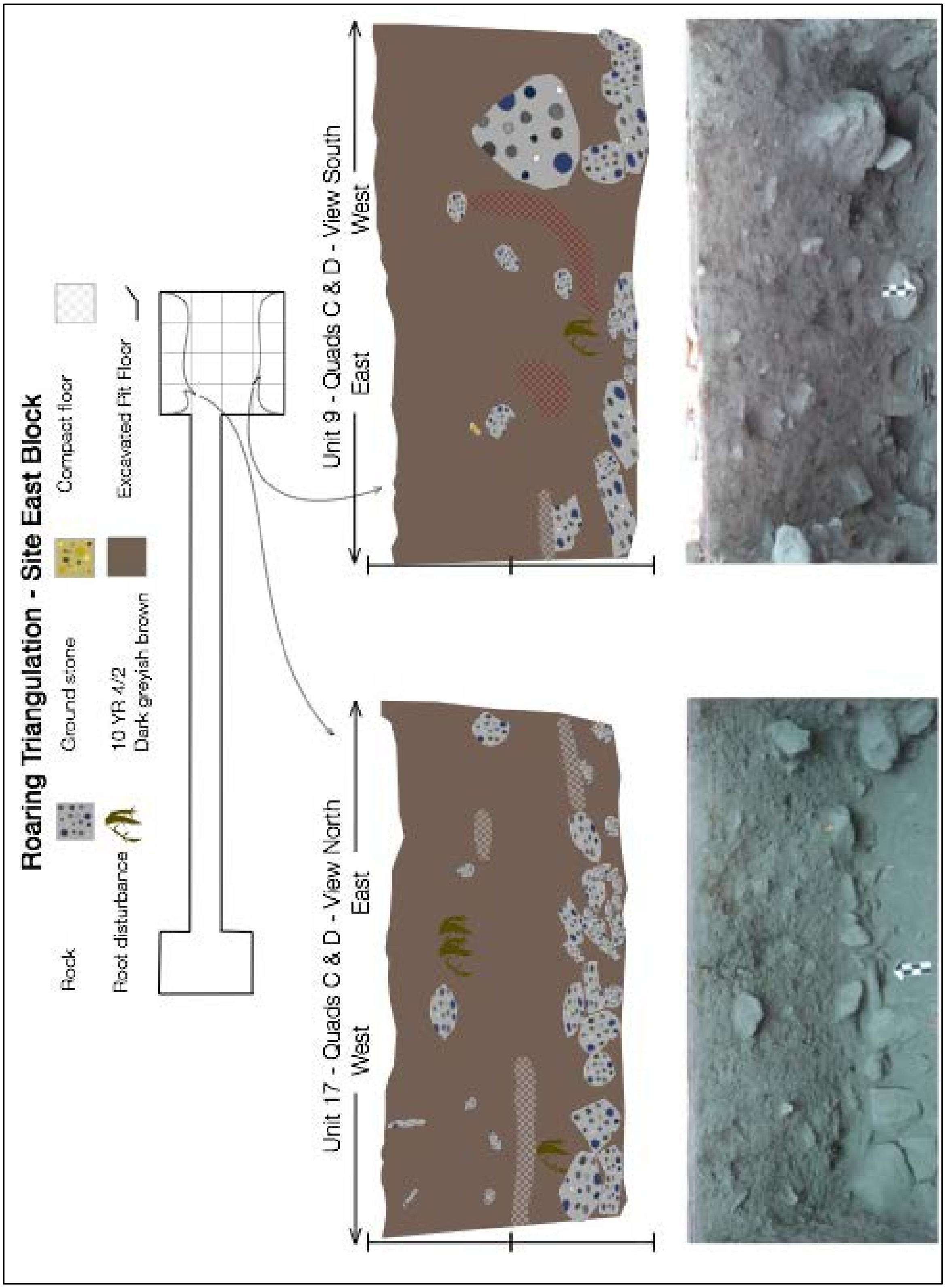

Figure 4.16 Roaring Triangulation Site, East Block Profiles, West and East walls

Stratum Two

Stratum Two consists clayey-silt that is also very dark greyish brown (Munsell 10 YR 4/2) in color. The frequency of charcoal flecking increases along with the presence of diffusely distributed compacted sediments between 50 and 80 cm below datum. Compacted sediments exhibiting bisque are largest between 65 and 80 cm below datum.

Stratum Three

Stratum Three consists primarily of angular basalt cobbles, weathering from underlying bedrock. Stratum Three is encountered between 80 and 90 cm below datum and extends to bedrock, which we encountered at roughly 110 cm below datum.

<u>Radiocarbon dates</u>

Radiocarbon dated charcoal samples total four and range from 980 – 2040 cal B.P. or 90 B.C. – 80 A.D (Table 4.7). Charcoal was dated via acceleratory mass spectrometry (AMS) by Beta-Analytic. 13c/12c ratio assessment included to assure accuracy of AMS radiocarbon dates.

Table 4.7 Roaring Triangulation Site AMS dates.

BETA - #	**MR Cat #**	**o/oo**	**RCYBP (1)**		**C14 date 2 sigma (1) (2)**		**Ca. A.D. (1)**		**Provenience**		
									Unit	**Quad**	**CMBD**
284805	10-1474	-21.7	1320	1240	1290	1140	680	810	9	C(ne)	38
284806	10-1710	-20.1	1220	1140	1230	1210	720	740	9	A(se)	51
					1180	980	770	970			
284807	10-1958	-20.3	1690	1610	1470	1420	480	530	9	A(ne)	74
					1500	1490	450	460			
					1620	1500	330	450			
					1680	1670	260	280			
284808	10-2113	-19.4	2040	1960	2040	1870	90 B.C.	80 A.D.	9	A(se)	105

<u>Relative Dating</u>

The relative dating approach used for the Roaring Triangulation Site follows methods I described for the Mortar Riddle Site in the previous section. Of the 274 flaked stone tools recovered from the Roaring Triangulation Site deposits, 211 (or 77%) are manufactured from obsidian. We submitted obsidian projectile points recovered from the trench and block excavations, to Northwest Obsidian Laboratories for geochemical source determination and hydration rind measurements. Hydration rind measurements for typologically diagnostic projectile points total 29

and represent 66% of the 44 geochemically sourced to Beatty's Butte geochemically sourced projectile points (Table 4.8). Thus follows the final dating for the East Excavation Block pertinent to this dissertation (Table 4.9).

Table 4.8 Roaring Triangulation Site East Excavation Block radiocarbon (AMS) dates and Obsidian Hydration measurements.

BETA - #	**MR Cat #**	**o/oo**	**RCYBP (1)**		**C14 date 2 sigma (1) (2)**		**Ca. A.D. (1)**		**Provenience**		
									Unit	**Quad**	**CMBD**
284805	10-1474	-21.7	1320	1240	1290	1140	680	810	9	C(ne)	38
284806	10-1710	-20.1	1220	1140	1230	1210	720	740	9	A(se)	51
					1180	980	770	970			
284807	10-1958	-20.3	1690	1610	1470	1420	480	530	9	A(ne)	74
					1500	1490	450	460			
					1620	1500	330	450			
					1680	1670	260	280			
284808	10-2113	-19.4	2040	1960	2040	1870	90 B.C.	80 A.D.	9	A(se)	105

Table 4.9 Roaring Triangulation Site dating used in this study.

CMBD	**Cal years BP**	**Climatic association***
< 30	1215 and younger	Moist (1400 – 900)
>30	1215 and older	Moist (1400 – 900)
<70	1445 and younger	Moist (1400 – 900)
>70	1675 and older	Dry (2000 – 1400)
<105	1955 and younger	Dry (2000 – 1400)
>105	1955 and older	Dry (2000 – 1400)

Note: Climatic association based on Wigand (1985).

For the purposes of this study, further analysis of the Roaring Triangulation Site will focus on human behavior dating to two climatically distinct periods. The sediment profile and radiocarbon dates, along with the relative sequence of hydration data, suggests the deposit possesses an overall internal consistency. Cultural material recovered from 30 – 50 cm below datum is associated with a period of greater effective moisture (Table 4.7, 4.9). Cultural material recovered from 70 – 90 cmbd is associated with a period of reduced effective moisture components dating to a period of increased effective moisture (Cal 2000 – 1400 BP).

BIG MOUND (35HA2626)

The Big Mound Site (35HA2626) is located within Section 31 in Township 33 South, Range 32 ¾ East. The site is situated at an elevation of 1,597m (5,240'), roughly 500 meters south of the Mortar Riddle site (Figure 1). Both sites are part of a larger complex of sites along the south bank of the Little Blitzen River (Mueller Epstein and Epstein 2008). Big Mound is located on the highest point of the ridge separating the Little Blitzen from Indian Creek. Musil and Oetting (1993) identified 35HA2626 site in 1992 as part of the inventory of prehistoric sites within the then newly designated Riddle Brothers' Ranch National Historic. Big Mound's field designation was #27 before it was given the BLM Site #0502061179Si and then the Smithsonian trinomial 35HA2626. A total of five knolls were identified in 2011 (Figure 2). Epstein dubbed the site 'Big Mound' after its most visible characteristic, a large mound that is roughly one meter tall and 2048 m2 in area (Figure 3).

The surface archaeology was characterized as a dense scatter of flaked stone, ground stone, and bone associated with a deep soil deposit. Musil and Oetting (1993:24) observed over 2,000 flakes on the site's surface (95% obsidian, 5% CCS, 5%basalt) with a maximum density of about 100 or more flakes per 1 m2. All of the CCS flakes were interior and 10% of the obsidian and 25% of the basalt flakes exhibited cortex. Musil and Oetting (1993:25) observed and recorded the UTM locations for 10 mano fragments, five hopper mortars, and one metate fragment. Musil and Oetting noted "twenty obsidian biface fragments, six obsidian point fragments, an obsidian point preform, and numerous unifaces and used flakes" on the site's surface (1993:25). Musil and Oetting collected the following obsidian artifacts during their inventory: 14 Northern Side-notched projectile points, 11 Elko Series points or fragments, two Humboldt Concave Base fragments, one drill, one point tip, one biface fragment, and two reworked points. The collected projectile points suggest the site is of Early to Middle Archaic antiquity.

Subsurface testing was done in 2011 (Epstein 2012) and consisted of eight 50x50 test units in five locations (Figure 2) on the largest mound. Unit placement was designed to maximize horizontal exposure. Unit 1 was excavated at the center of the mound (E 355746/ N 4721770) and

consisted of four contiguous 50 x 50 cm test pits; Unit 2 was excavated on the southern margin of the mound (E 355244/ N 4724758) and consisted on one 50 x 50 cm test pit; Unit 3 was excavated northeast of the other Units (E 355731/ N 4724783) and consisted of one 50 x 50 cm test pit; Unit 4 was excavated just south of Unit 3 (E 355736/ N 4724773) and consisted of one 50 x 50 cm test pit; and, finally, Unit 5 (E 355745/ N 4724765) was excavated north of Unit 2 and south of Unit 1. Given field conditions, each test pit had its own datum. The field crew excavated in 10 cm arbitrary levels with trowels and/or bamboo skewers. Every effort was made to recover artifacts *in situ*, but most were collected from matrix screened through 1/8" (.3175cm).

Field crew excavated matrix totaled 0.85 m3 over the course of the two-day excavation. A total of 2,648 artifacts were collected and consist of flaked and ground stone artifacts as well as faunal remains. Controlled volume sediment samples were collected from every level beyond the first and total nine. Flaked stone artifacts recovered from excavated test units include ten projectile points in addition to two drills and two bifaces. Recovered ground stone artifacts total two (Table 1, Figure 5). Fifty-six pieces of daub, or fired sediment, weighing 7.46 g were identified, some showing impressions of botanical material (Table 5, Figure 9); these may reflect the use of the clay-rich local soil to secure a thatched structure. Five charcoal samples were recovered from four proveniences. Recovered faunal remains total 1,261 and weigh 160.39 g (Table 2, Table 3); their analysis is detailed below to allow easy comparison to faunal data from Mortar Riddle and Roaring Triangulation.

HIGH RING (BLM Site #0502063004Si)

High Ring, or BLM Site #0502063004Si, is located within the northern ½ of the southeastern ¼ of Section 14 in Township 33 South, Range 33 East. The site is situated at an elevation of 2,743 m (9000') atop Tse'tse'ede, at the Little Blitzen River headwaters (Figure 1, 2). The site was previously identified in August 2003 during a broader survey of prehistoric archaeology (#05020500976P). At that time five diagnostic projectile points were collected from

the site, two Northern Side-notched points, two Elko Corner-notched points, and one Humboldt point. In August 2011, prior to subsurface testing, 20 more typologically diagnostic projectile points, five other flaked stone tools, and two osteological specimens were identified and collected (Figures 3-4; Tables 1 and 2) in association with a hearth inside a rock ring. One tooth enamel fragment compared favorably with that of a bighorn sheep (*Ovis canadensis*) incisor while the other osteological specimen appeared to be a highly weathered diaphyseal fragment from a large mammal long bone. Biscuit root grew in abundance in and around the rock ring (Figure 5). Within a 1 x 1 meter lithic plot adjacent to the rock ring 87 flakes were observed (Table 2); small interior obsidian flakes totaled 79, one small obsidian exterior flake was observed, small interior basalt flakes totaled five, and large exterior basalt flakes totaled two. While testing the site, five more typologically diagnostic projectile points, three other flaked stone tools, and one bullet/slug were collected from the surface (Figure 4; Tables 1 and 2)

Based on the location of the collected artifacts, three 50 x 50 cm test units were placed in two locations (Figure 6): Unit 1 Quad A (SE) and Unit 1 Quad B (SW) were centered on the central hearth feature within the larger rock ring and Unit 2 Quad A (NE) was placed at the site's datum, located on a berm of deeper sediments. The field crew excavated in 10 cm arbitrary levels with trowels and/or bamboo skewers. Sediment excavated totaled .04 m3. Frequency data for recovered cultural material appears in Table 3. No typologically diagnostic projectile points were recovered from the test pit excavations, but two flaked stone tools were identified during the analysis of collected flaked stone debitage (Table 4), including one obsidian utilized flake from the first level of Unit 1 Quad A (SE) and one very small obsidian Stage IV biface fragment from the second level of Unit 1 Quad B (SW). Debitage recovered from the test pits totaled 234 flakes, dominated by tertiary flakes (n = 233).

The frequency of finished projectile points and small interior debitage and flakes suggests that High Ring appears to represent a hunting locality where flaked stone tool rejuvenation occurred. The presence of a modern bullet slug indicates the site has been a good hunting location for some time; fragments of aluminum foil were encountered in the upper 20cm of Unit #1, suggesting a contemporary hearth feature may intrude into the site's prehistoric cultural component. No scrapers were identified during in 2003 or 2011 suggesting that game processing occurred elsewhere or the evidence of such behavior remains undetected. Current evidence suggests that High Ring is a logistical, non-residential, or short duration camping site.

It is worth noting that the 2003 survey identified five other prehistoric sites within less than a mile to the north, east, and south of High Ring. To the north, cleared rock rings and stacked rock features were prominent features recorded at two sites (#0502063005Si and #0502063008Si). To the east, petroglyphs were recorded at #0502063002Si and five diagnostic projectile points (one Elko Corner-notched, two Stemmed points, one Gatecliff, and one unidentified Side-notched projectile point) were collected from #0502063001Si. To the south, at #0502063003, three nether stone (hopper mortar) fragments were observed and six diagnostic projectile points (four Elko Eared and two Rose Springs) were collected. In combination with the High Ring site these suggest a pattern of brief visits to high elevation locations. While the presence of rock rings suggest the anchoring of shelters, subsurface testing has been too limited to assess the potential for identifying floors. The artefactual record to date reflects hunting, chipped stone retooling, and some plant processing, perhaps of biscuit root.

SUMMARY

In this chapter, I summarized the archaeological investigations at four subject sites and the methods used to excavate and record them. Two of these sites, Mortar Riddle and Roaring Triangulation, provide dated strata that can be linked to specific climatic regimes. These are identified in Table 4.10. These three components are the focus of the household analysis presented

in Chapter 7. The other two sites, Big Mound and High Ring, contribute to the final review of evidence for landscape use over time, discussed in Chapter 8. First, however, I need to present the ethnographic model derived from the Surprise Valley Paiute, and I need to review the methods of spatial and faunal analysis that are critical to my household analysis of subsistence strategies.

Table 4.10 Dissertation dataset and climatic association

Cal . years BP	Relative Moisture	Roaring Triangulation	Mortar Riddle
900 - 300	Dry, points of drought		30 – 50 cmbd (985, 835 cal BP and younger)
1400 - 900	Moist	30 – 50 cm bd (1215 – 1150 cal BP)	
2000 - 1400	Dry	70 – 90 cm bd (1955 – 1560 cal. BP)	

5. THE SURPRISE VALLEY MODEL

In this chapter I present a model for the nature and integration of household and community, as this relates to subsistence strategies and to archaeological visibility, based on the *Gidu'tikadü* Northern Paiute group as described by Kelly (1932) in her volume, *Ethnography of the Surprise Valley Paiute*. First, I describe the background information relevant to Isabel T. Kelly's ethnographic fieldwork and why I chose to test a model derived from that work versus other sources. I then present the model and archaeological expectations for the seasonal round of subsistence activities. Whenever possible I include information that conveys some of the *Gidu'tikadü* meanings and values associated with households, communities, and seasons. Key to my model-building is an understanding of how households satisfy their need for food security against the backdrop of natural and social resources that vary across time and across the landscape, and how we might see their choices reflected in the archaeological record.

Isabel T. Kelly and the *Gidu'tikadü*

The *Gidu'tikadü* , which translates to the Groundhog-eaters, references the Surprise Valley Paiute. Isabel T. Kelly's (1932) *Ethnography of the Surprise Valley Paiute,* I argue, is the single most appropriate source from which to derive a model for archaeologically visible signatures of household and community food security relevant for Tse'tse'ede. The archaeological subject and the ethnographic source (Kelly 1932), share similar physiography and hydrography, as well as plant and animal resources. Both the archaeological subject and the ethnographic source are located within the northern Great Basin. The *Gidu'tikadü* home territory ran the length of the Warner Mountain range and included the Warner Valley in south central Oregon and the Surprise Valley of extreme northeastern California (Figure 5.1). As indicated in Chapter 4, some flaked stone tools

recovered from the Mortar Riddle Site (35HA2627) were manufactured from raw material geochemically sourced to Buck Mountain, which is part of the Warner Range to the west of Surprise Valley, suggesting a travel or trade connection. Of critical importance to this dissertation is Kelly's (1932) attention to material culture (Table 5.1).

Kelly worked with 17 Northern Paiute during her 1930 fieldwork; four served as bilingual (English and Northern Paiute) interpreters and the other 13 were informants who spoke Northern Paiute. Of her informants, seven were *Gidü'tikadü*, four were from Beatty, Oregon, and two were from Nevada (Table 5.1) (1932:67-69). I used five years as the estimated age at which informants likely experienced their earliest living memories. As a group, informants thus had their earliest living memories between the dates of 1855 and 1885.

Table 5.1 Kelly's informants

Name	**Affiliation**	**Home during Ethnographic fieldwork**	**Original home location**	**Age**	**Earliest living memory***	**Interpreter**
Minnie Anderson*	Gidü´tikadü	Fort Bidwell	Cow Head Lake	77.5		Nellie
Tom Anderson*	Nevada Band(?)	Fort Bidwell	Nevada Band (?)	67.5	1863	Nellie
Piudy	Gidü´tikadü	Surprise Valley	Adel	75	1860	Nora
Daisy (Limpie) Brown	Gidü´tikadü	Fort Bidwell	Plush	60	1875	Nora
Billy Steve	Nevada Band	Cedarville	Pyramid Lake, then Summit Lake	70	1865	Nellie
Nellie Townsend	Gidü´tikadü	Fort Bidwell		37.5	1893	Interpreter
Nora Henderson		Alturas		37.5	1893	Interpreter
Nannie Ochiho	Gidü´tikadü	Fort Bidwell	Fort Bidwell	55	1880	Susie
Susie Archie	Gidü´tikadü	Fort Bidwell and Beatty		37.5	1904	Interpreter
Joshua Brown	Gidü´tikadü	Surprise Valley	Surprise Valley	62.5	1867	None used
Charlie Washo*	Gidü´tikadü		Surprise Valley	67.5	1863	None used
Big Archie	Gidü´tikadü	Surprise Valley	Surprise Valley	55	1880	None used
Dr. Sam Wata		Beatty	Silver & Summer Lakes	80	1855	David Choctoot
David Chocktoot	Gidü´tikadü	Fort Bidwell and Beatty				Interpreter
Lizzie Godowa		Beatty	Silver & Summer Lakes	60	1875	Susie
Mettie Petty		Beatty	Silver & Summer Lakes	60	1875	Susie
Nina Naneo		Beatty	Silver & Summer Lakes	50	1885	Susie

Note: 1) Mean age for those individuals Kelly reports an age range (otherwise I list the whole number age provided by Kelly (1932:69). 2) Earliest living memory calculated as an informant's year of birth plus five years, the sum of which is subtracted from 1930, the year Kelly collected her data.

Kelly did not identify the names of informants appearing in photographic plates. Photographs of some informants are available via the U.S. National Archive; images exist for Charlie Washo, Tom and Minnie Anderson, and the Godowa family (Figure 5.2). The images appear as part of *The Annual Report of Extension Workers, Sacramento and Mission Agencies in California and Eastern Navajo in New Mexico, from Dec. 1, 1931 to November 30, 1932*.

Kelly (1932) describes houses, other structures, building materials, subsistence resources, and the social organization required for resource acquisition. She included photographic documentation of various structures to complement the descriptive portion of her report in a series of 32 plates following the bibliography. Kelly's attention to material culture is unique given her predeces

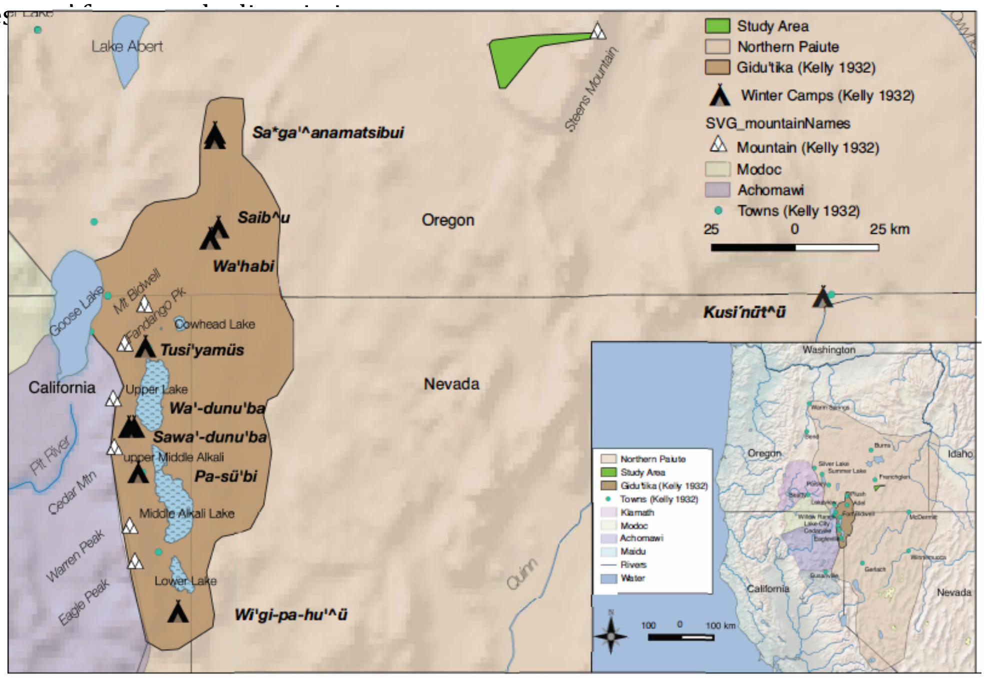

Figure 5.1 Surprise Valley Paiute Winter Village Locations

Isabel T. Kelly's Professional Training

The earliest years of anthropology in the west include Isabel T. Kelly's graduate school training. Columbia University graduates Alfred L. Kroeber and Robert Lowie carried on the Boasian salvage ethnography orientation as faculty in the new and busy Anthropology Department at the University of California in Berkeley. Their students, such as Isabel Kelly (1932) and Julian Steward (1938), amassed voluminous linguistic and cultural element datasets during the early twentieth

a. Charlie Washo, ca. 1932 (U.S. ArchivesIdentifier 296335)

b. Tom and Minnie Anderson, ca. 1936 (U.S. Archives Identifier 296245)

c. Left to Right: U.S. BIA official, Minnie Anderson, and Tom Anderson, ca. 1932 (U.S. Archives Identifier 296313)

d., Old home of the Gadawa Family, ca. 1932 (U.S. Archives Identifier 296335)

e., New home of the Gadawa Family, ca. 1932 (U.S. Archives Identifier 296335)

Figure 5.2 Northern Paiute Kelly lists as informants (Kelly 932:69)

century salvage ethnology efforts and, later, salvage archaeology efforts (Heizer 1942).

Kelly intended to study archaeology in graduate school and with Kroeber's tepid support she attended and completed archaeological field training at Pecos Pueblo in 1929 under the direction of Alfred V. Kidder (Fowler and Van Kemper 2008:142). She returned to Berkeley in the fall to complete geography coursework under the direction of Carl Sauer. The following summer Kelly completed her ethnographic fieldwork in Surprise Valley (1932). Previous fieldwork in the area was cursory (deAngulo and Freeland 1929) or focused on groups farther afield (Dixon 1905; 1908; Kroeber 1917; Lowie 1909).

Hired by Kroeber, Jaime de Angulo's brief fieldwork at Fort Bidwell focused on identifying similarities and differences between the Northern Paiute and Achomawi as a means of exploring cultural diffusion from the Plains into California (de Angulo and Freeland 1929). DeAngulo's true fascination was for life among the Achomawi with whom he spent a great deal of time. He documented his experiences in *Indians in Overalls* (de Angulo 1950), which popularized his controversial field methods.

Kelly became the twelfth individual to graduate with her doctorate in Anthropology from the University of California at Berkeley in 1932 under the direction of her committee members, Kroeber, Lowie, and Sauer. Fowler and Van Kemper describe her *Fundamentals in Great Basin Culture,* as an exploration of "hunter-gatherer lifeways, including territoriality, subsistence, material culture, social organization and religion, against the backdrop of a semiarid environment" (2008:144). Kelly's work is a study in cultural ecology, six years before Julian Steward defined the term (1938:2).

The Surprise Valley Model

Houses

House structures vary according to season and the associated economic strategy. When the weather is cold and households primarily subsist on hunted prey and cached resources, they live in

lodges covered with grass-thatch or tule-mats (Figure 5.2). When warmer weather returns and gathered resources begin to grow again, households sleep beneath ramada-like shelters, manufactured from juniper boughs and trunks, or use circular windbreaks (Figure 5.5)

Kelly's description includes the following details: Surprise Valley Paiute lived in a sai′-nobi, tule-mat covered lodge, or a waha′-nobi, a grass-covered lodge, during the colder months (Kelly 1932:104-5) (Figure 5.4, Table 5.2). Tule-mat covered frames appear conical when complete and grass covered covered lodges appear more dome-shaped. Men and women built houses together by first erecting a willow frame outlining a circular floor plan. One then lashed prepared tule mats or thatched grass to the frame with sagebrush cordage. The unexcavated base of the house measured roughly 3.66 m (12') in diameter. A stick doorframe was used to support door materials –blankets, skin, or tule mats. Families placed hearths centrally inside the lodge, sometimes in excavated depressions. Families regulated air circulation inside the lodge by manipulating the tule mat over the smoke hole. The smoke hole could be covered entirely to keep rain and snow from dampening the fire.

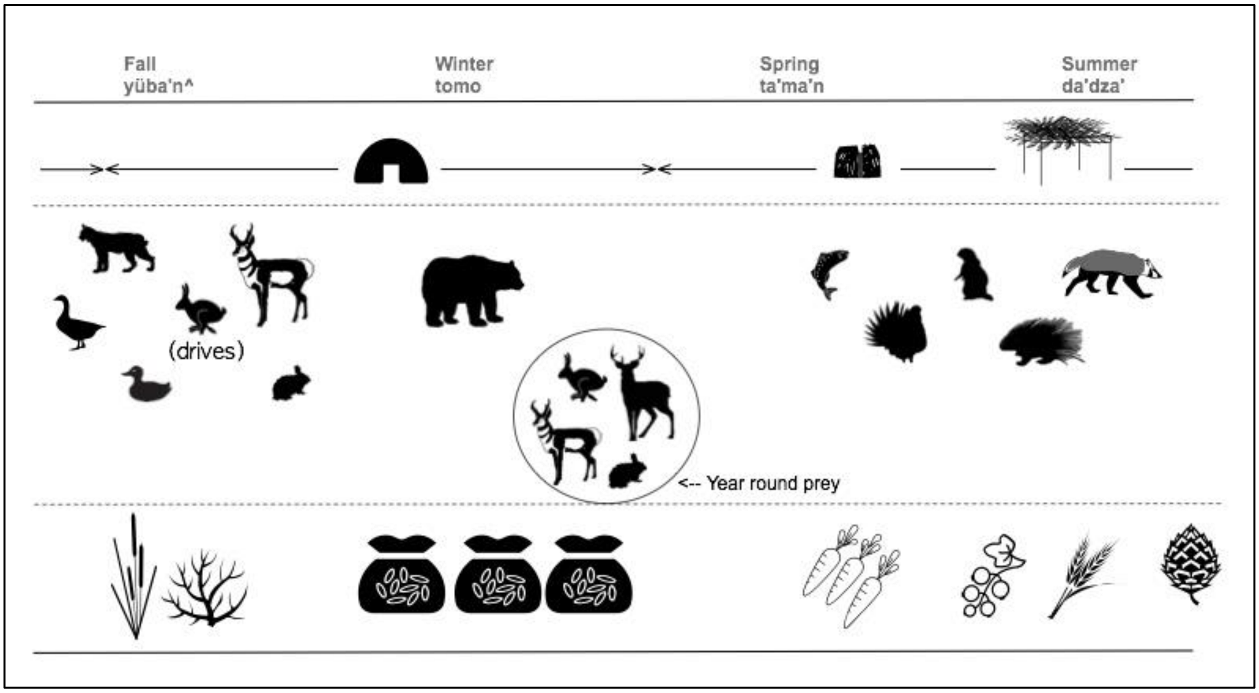

Figure 5.3 Simplified schematic for the Surprise Valley Model. Note that detailed views of expected housing structures appear in subsequent figures in this chapter.

Thus, archaeological evidence for a winter house includes an evenly placed distribution of willow posts in a circular pattern. The post pattern will exhibit a break in the eastern side for a doorway, which is placed away from the prevailing westerly winds. The diameter of a large winter house should produce a circular post pattern about 3.66 m (12') in diameter. The hearth from a winter house is archaeologically visible as a concentration of charcoal near the center of the floor, possibly within a small depression.

Outside and along a house wall one may identify ground stone mortars or metatés (Kelly 1932:103). Given the nature of winter weather, it seems plausible that some degree of seed storage and processing with mortar or metate occurred inside a winter lodge, and thus that groundstone artifacts would be found inside the house as well. This is also suggested by perception of groundstone tools as personal items (Table 5.3).

Kelly notes that artifacts kept within a house include personal items one does not want to lose (1932:182). Examples of such household artifacts include the following items, presented roughly according to artifact class and use category (Table 5.4, Table 5.5, Table 5.6). Perishable artifacts include: basketry; a bow; a bullroarer; cordage; a fire drill; medicines; musical instruments; nets; clothing and sandals made from sagebrush fiber; snowshoes; and tule or grass sleeping mats. Items of animal origin include: fur blankets, robes, a quiver, a knife sheath, sinew, skin clothing, moccasins, and hide balls used in games. Artifacts manufactured from bone and shell include: awls of varying sizes for use in basketry, sewing, and tattooing; bone or shell beads; scored bones for bead manufacture; clothing fasteners; deer hoof rattles (belonging to shaman); fish harpoon tips; and game bones. Flaked stone artifacts include: arrows; darts; drills; knives; and other cutting tools. Ground stone artifacts include: manos and pestles, mortars and metates, and soft stone carving material that was acquired via trade.

Table 5.2 Winter House Characteristics

	Tule-covered house	Grass-covered house
Synonyms	Tule-covered lodge, Winter house	Grass-covered lodge, Winter house or lodge
Northern Paiute Name	Saí-nobi	Waha´-nobi
Above ground (wall) morphology	Conical (104, 105)	Domed (104, 105)
Floor plan morphology	Circular (104)	
Floor plan dimensions	3.66 m (12') diameter (104)	
Excavated or unexcavated floor	Unexcavated floor (104)	
Gendered production	Men frame and women apply matting (104)	
Frame materials	Willows were evenly spaced on the perimeter of the floor, perpendicular to the ground, followed by lashing a series of transverse willows folded in at the top (104, Plate 18b)	
Frame cover	Tule mats lashed to willow frame (104, 105). Mats overlapped one another like shingles (105). A bone awl or greasewood needle was used to pierce and thread cordage through tule stalks to produce a mat (104). (Other items: canvas and sacking material (105, Plate 18b)).	Grass mats lashed to willow frame (104, 105). Mats overlapped one another like shingles (105). People bound grass with cordage and then lashed the thatch to the willow frame. (Other items: canvas and sacking material (105, Plate 18b)).
Doorway aspect	Faced away from the prevailing wind (105)	
Door materials	Grass or tule mat or deer skin or an old blanket placed on a stick framework that gave the door body/shape (105)	
Hearth location	Centrally located, possibly within depressions, not enclosed by stones (105)	
Smoke hole present?	Smoke hole present (105)	
Number of people accommodated	Eight or nine (104)	
Number within community	Five to six (78)	
Location on landscape	Near freshwater and resources (77-78)	
Mobility:	One to two winter houses used by household per year (105)	
Noted example:	Kelly notes Chief Ochiho's tule-covered lodge in Kober (1930:248, Plate 19a), which is conical in shape	Kelly references the photograph of "domed, brush covered lodge near cedarville" dated to 1910 (University Museum files, 13-797), that was shown to her by Dr. E.W. Gifford (1932:104).
Other groups mentioned:	Kelly (1932:104) references the Klamath summer house includes a willow ridge pole and the floor plan is oval or square in shape Barret (1910:Plate 11).	

Note: page numbers referencing the source text in Kelly's (1932) ethnography are listed parenthetically.

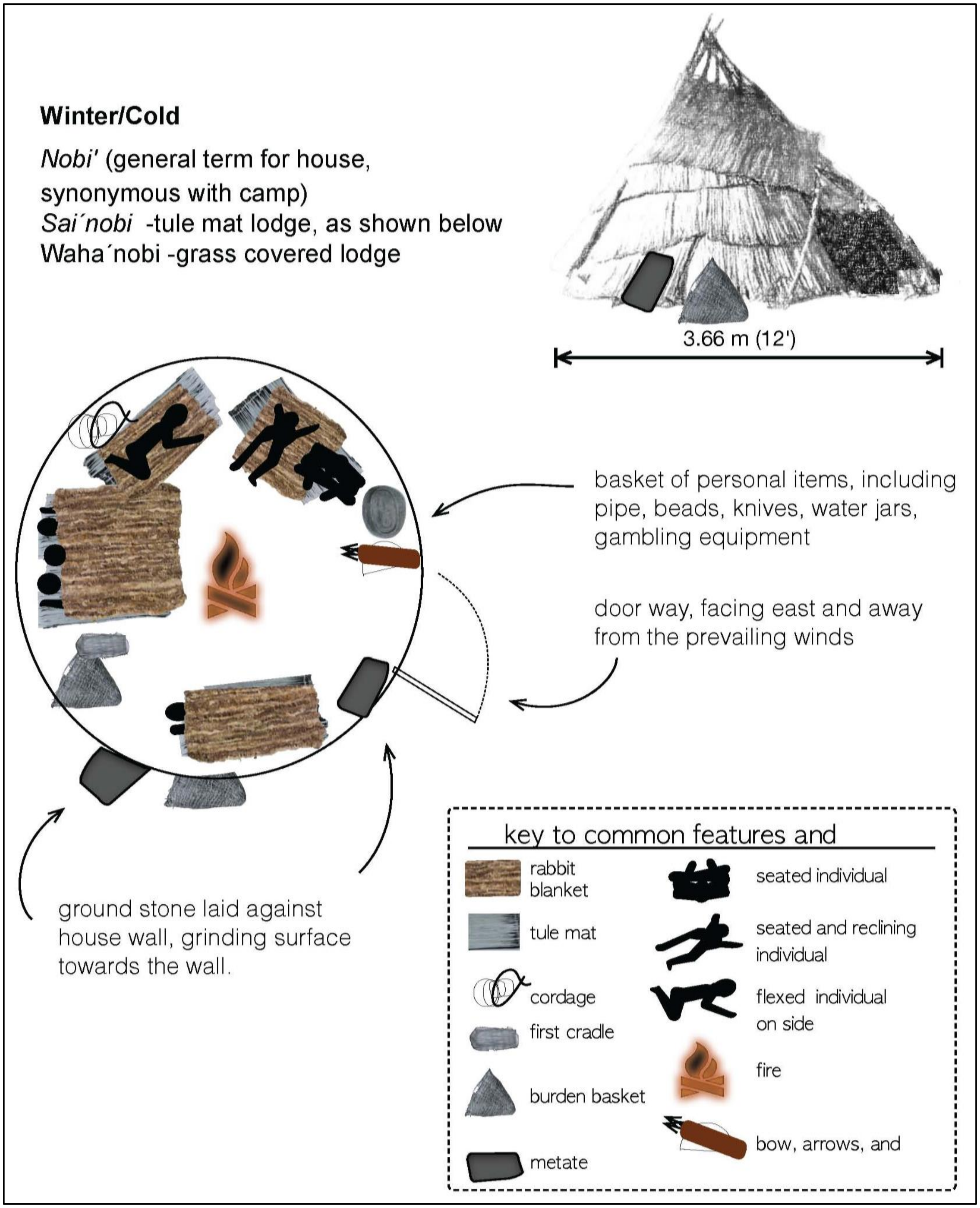

Figure 5.4 Winter House Illustration Based on Description in Kelly (1932)

Table 5.3 Food Processing Equipment, Characteristics of Use and Storage

Items	**Use:**	**Used by:**	**Production method or materials:**	**Gendered Production:**	**Storage location:**	**Kelly (1932) page number:**	**Other notes:**
Metate	Food processing	Females	Pecked and smoothed	Men found suitable rocks and pecked them, while women smoothed them. 138	Face-downward and leaned against wall of house, also cached	120, 139	on journeys a small sized metate carried in burden basket; only one side was used
Mano	Food processing				Face-downward and leaned against wall of house, also cached	120, 139	
Mortar	Not used; "we have no hard seeds" (139)					137; 139	Bahi'zoho was animal, but looked like an indian" has mortars ascribed to him. "These stone Things come from the stories. When animals were people they made them."
Pestle	Used with metate to process foods	Females	Through use		Cached where they found them so they would be there when they needed them	137, 139	Found near water, "because Numuzo'ho (cannibal; literally people grinder) was driven into the lake." "These stone Things come from the stories. When animals were people they made them."

Table 5.4 Basketry, Use and Storage Characteristics

Artifact	Used by:	Produced by:	Artifact storage:	Page in Kelly (1932)
Open-twined tule sack	Transporting, storing roots	Women		97
Conical twined burden basket	Utility container	Women		148
Closed-twine conical basket or conical hide container (kwa'nü) for seeds	Transporting, storing seeds	Women		148
A pitched willow jar or sometimes a skin bag for water (148)	Water-storage	Women		148
Tule or sagebrush bark bags	Food storage	Women	Cache localities	137

Table 5.5 Hunting and Fishing Artifacts, Characteristics of Use and Storage

Artifact	**Used by:**	**Materials required:**	**Produce d by:**	**Artifact storage:**	**Page in Kelly (1932)**	**Other notes:**
Double pointed fish harpoon (hu'u)					96	
Quiver for bow and arrow storage	Males	Otter, lynx, coyote, or deer skin. Shaped after taking out of cold water	Male	Inside house	145	Hung inside the house
Arrow smoother		Stone			139, 150	
Bow (of juniper)	Males		Males	Inside house	142	Every man made his own bow; Or acquired an oak bow from Achomawi
Bow string (of two-ply sinew)	Males		Males	Inside house	143	
Arrow shaft (of rose or currant)	Males		Males	Inside house	143	Every man knew his arrow; was important because it affected the division of the spoils
Arrow point (taka')	Males		Males	Inside house	143	Red (atsa'-taka') (red obsidian valued the most because durable; valued the same as buckskin); black obsidian broke too easily, and not much mentioned about white taka
Deer antler flaker (billet) for stone tool manufacture	Males		Males		143, 145	Figures into tales that do not translate

Table 5.6 Other Household Items

Items	Use:	Gendered Use:	Storage location:	Kelly (1932) page number:	Other notes:
Knife sheath (knife) worn on belt	Knife for cutting, belt sheath for keeping knife close at hand		Inside house	141	
Knife (wi'hi), name applied to anything for cutting	Skinning and butchering		In a sack at the waist with a fire drill or within (wi'hi-mago"o, knife container attached to the belt); Both stored inside the house when not in use	141	They would use those found archaeologically, if they weren't broken
Scraper	Working hides	Females		141	
Softening stone (hoe-shaped obsidian tool)	Tanning hides	Females		138	(Paiutes did not make them)
Metapodial scrappers	De-furring hide	Females		146	
Bone Awl	Piercing shell beads, house construction, perforating pipebowls		Inside house	104, 115, 118, 140, 182	
Fire drill	Create fire		In a sack at the waist with a knife; Both stored inside the house when not in use	141	
Grass mats	Sleeping	Females	Inside house	105	
Sagebrush blankets	Sleeping	Females	Inside house	105	
Womens basketry hats	clothing	Female	Inside the house	151	Traded with Achomawi. They acquired finely made basketry hats from groups far to the west (Miwok?)
Beads (tzom-bi)			Inside house	117, 152, 172 - 173, 203,	Beads offered as payment for gamblind debts, for successful weather control requests, strings of heads used to count points in bone game.
Rabbit bone splinter	Tattoos			116	
Deer hoof rattle (witsa'biya)	Shaman's personal use			146	
Flute (of elder stem or, sometimes, willow)	Recreational music			146	
Pipe	smoking			140	Stone with bone mouth piece

Thus, archaeological evidence for a winter house also includes a wide range of artifacts used by and valued by individuals, including clothing, ornaments, hunting tools, plant processing tools, and items used in games and in rituals.

During the warmer and drier seasons, people retreated from wind and sun, respectively, within *dü'a-nobi* (unroofed brush enclosures) or under *haba'* (shades) (Figure 5.5, Table 5.7). Trees were also used as shades and people sometimes slept beneath open skies on warmer evenings. Families placed hearths centrally within brush enclosures.

In terms of archaeological visibility, the *dü´a-nobi* (roofless enclosure) and *haba´* (shade) structures are most likely seen as postmolds. The roofless enclosure will appear as a circle of thin posts with little spacing between; a central hearth feature may be visible as a scatter of charcoal and ash. The shade structure may be identified by more substantial postmolds, placed in a rectangular pattern. Interior artifacts include many of the same types of personal items identified within a winter house, although variety and absolute numbers of items might be less, given expectations of weekly residential movement and the lack of need for cold weather gear such as snowshoes, fur blankets and robes, or heavy skin clothing.

The *Gidu'tikad*ü home also carries meaning in relation to mortuary ritual and shamanistic treatment. There is a sense of going home after death, to the Abode of the Dead, "a good country" (Kelly 1932: 198). Surviving family members burn the decedent's house or move the frame, ending its physical existence. Personal belongings and household items are also burned, lest the dead return looking for those objects (Kelly 1932: 166, 168). There is also a sense of that home is where one belongs when healthy. A shaman in a trance will try to restore a gravely ill patient's *soñü´pü* (breathe or soul) by sending it home. Dr. Sam and Dr. Louie, for example, directly commanded Charlie Washo's *soñü´pü*, "You had better go home" (Kelly 1932:192). Thus, archaeological evidence that a house has been burned may signify mortuary ritual. This may include the burning of the personal belongings and household items within it.

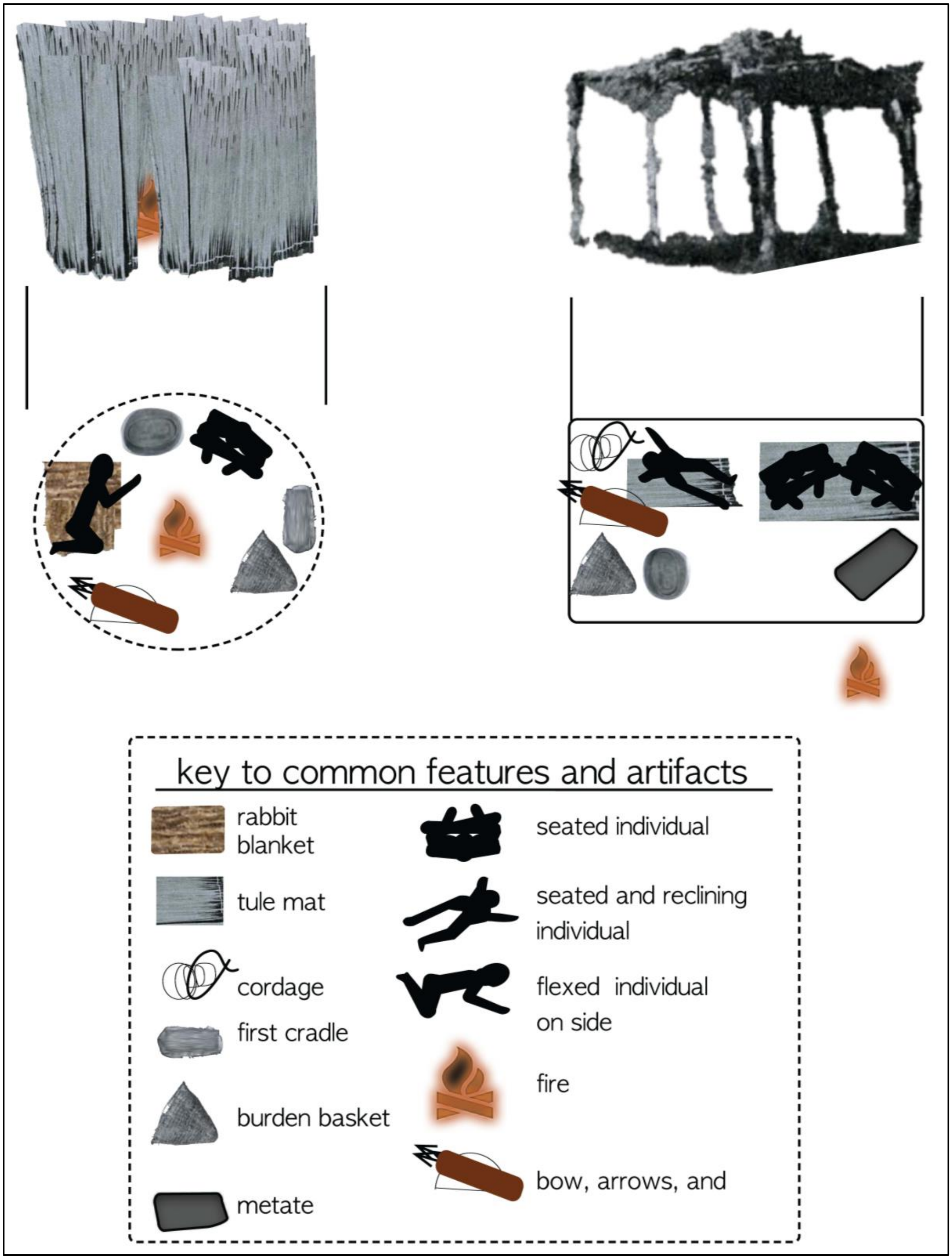

Figure 5.5 Surprise Valley Paiute Model for Summer Houses

Table 5.7 Characteristics of Summer-houses expected in the Surprise Valley Model

	Circular Enclosure	**Shade**
Synonyms	Brush enclosure	
Northern Paiute name:	dü'a-nobi (105)	haba' (105)
Above ground morphology	unroofed brush enclosure (106)	Appears rectangular roof supported by heavy branches (105)
Floorplan shape	Circular (106)	Rectangular (105, 106).
Floorplan dimensions	fair-sized' (106)	Relative size suggests minimal size of 10' x 5'; Kelly notes the shade is now used to shelter vehicles or to be used as porches (105)
Excavated or unexcavated floorplan	Not indicated	Not indicated
Who builds what?	Not indicated	Not indicated
Frame materials	Young willows stuck into the ground. Willows bent over and successively overlapped for a finished top line (106)	Juniper branches inferred from Plate 18c
Frame cover	See above	Sagebrush (105, 106; see also Plate 18c).
Doorway aspect	Not indicated	Not applicable; structure lacked walls
Door materials	Willows bent over and turned away from the entry point (106)	Not applicable
Hearth location	Central (106)	None
Smoke hole or no smoke hole	Not applicable; roofless structure	None indicated.
Number of people accommodated	Not indicated	Multiple
Number within community	Two to three (78)	Two to three (78)
Location within community		
Use frequency	Households moved to new locations weekly (105)	Households moved to new locations weekly (105)
Noted example:		Plate 18c

Households

If a house is a structure, the household is the group of people who reside in it. Often this is a family that consists of a couple and their children. Informant responses suggest *Gidu'tikad*[ü] families ranged between five to six individuals. Joshua Brown, of Surprise Valley, "thought that a family averaged between six and eight children, but most of them died in infancy" (Kelly 1932:167). The size of a family may also be understood through reference to other cultural materials. The larger balsa boat, a craft used when hunting waterfowl on the water, can accommodate an "entire family" (Kelly 1932:150). Drinking water storage, indispensable when travelling any distance from a

dependable water source, included two water-tight basketry jars for a family of four; "a small one for the children and a larger one for the adults" (Kelly 1932:125).

Household composition generally varies as couples and children age, as well as due to other factors, such as post-marital residence rules and bride service practices. For the *Gidu'tikadü* matrilocal residence begins after marriage and continues until a new couple acquires "things of their own" and while a "man hunts for his father-in-law" (Kelly 1932:166). Afterwards a couple may maintain patrilocal residence if the male is an only child, though couples often move their family to an "independent residence" following the birth of one or two children (Kelly 1932: 166). Successful hunters may have two or three wives at one time, living "in the same house, or at least in the same camp" (Kelly 1932:165). Orphaned children may move to a relative's house. Minnie Anderson of Cow Head Lake/Fort Bidwell reported that mothers "did not have more than three or four children" (Kelly 1932:167). Minnie Anderson, of Fort Bidwell, said, "somebody always took care of them [orphans]," which was true for Anderson; two aunts cared for her following the death of her parents (Kelly 1932:169). Nellie Townsend, interpreter from Fort Bidwell, cared for an orphaned niece or nephew, until a childless cousin "requested the child" (Kelly 1932:169). Dwelling size and camp size varies according to season and household membership.

The Gidu'tikadü home factors into mortuary ritual and shamanistic treatment. After one dies he or she travels the Nümü-po (People's Trail), identified as the Milky Way, to the Abode of the Dead (Kelly 1932: 198). Surviving family members burn the decedent's house or move the frame, personal belongings and household items he or she may have used are also burned, lest she return looking for those objects (Kelly 1932: 166, 168). Thus the dead are told, "Go off. Goodbye (native ?). You have a good country there [abode of the dead]" (Kelly 1932:198). Apparently those individuals that do not travel the People's Trail following death in habit a liminal state as ghosts, which is

dangerous to living Gidu'tikadü. For instance, Joshua Brown reported, "I knew a man who was drunk. The tsa´a bü (ghost) of his mother touched him on the leg. It swelled and the next day he was dead. Some might have cured him by sucking," according to Joshua Brown (Kelly 1932:199). A shaman in a trance will try to restore a gravely ill patient's soñü´pü (breathe or soul). Dr. Sam and Dr. Louie, for example, directly commanded Charlie Washo's soñü´pü, "You had better go home"(Kelly 1932:192). Thus, Gidu´tikad ü recognize normative and taboo activities related to death and the afterlife within the context of the physical dwelling structure.

Communities

The *nobi* (house, camp) may refer to a single house or an aggregation of houses (Kelly 1932:188). A family of five to six individuals easily fit within a winter house. Larger winter houses were tall enough to allow grown adults to stand up inside and accommodated eight or nine people (Kelly 1932:104). Winter camps had "five or six houses," suggesting total population for a winter camp consisting entirely of large lodges may range between 40 to 54 individuals (Kelly 1932:104). A summer camp may consist of only two or three houses, so potentially 24 to 27 individual may be counted at a summer campsite (Kelly 1932:79). Piudy of Adel indicated many camps "join in" and cooperate for *kua'* (communal hunts) during the fall, requiring temporary residence near the *kua'* (Kelly 1932:85). Antelope drives, discussed in further detail below, require the greatest aggregation people. Joshua Brown noted "the boss [head man or antelope charmer] called everyone; 15 or 20 camps, maybe 100 men" (Kelly 1932:83). Thus, camps of aggregated houses form communities and community size varies seasonally.

Regardless of season, communities are located near reliable water and food resources. Precipitation, especially in the form of snowfall at lower elevations, is a poor source of reliable water for households absent catchment basins. Winter and spring communities, therefore, located near perennial springs and streams with access to prey habitats and in proximity to cached food and equipment. Kelly succinctly summarizes the cold season scenario, "this considerable range of

activities implies residence from which the valley lakes and flats, as well as hill country, were accessible" (1932:77). Recorded *Gidu´tikad*ü winter village locations (Figure 4.1) are located in elevations ranging from 1341.12m (4400') to 1524m (5000'), near perennial springs or streams, and with quick access to southeastern facing hillsides, where spring shoots first appear after the snow melts.

Households and communities relocated much more frequently during the summer and fall, primarily to collect various plants. Plant resource availability varied along with water; vernal pools fed by melting snowpack in late spring could be dry by late summer, along with their dependent flora. Households negotiated resource variability by carrying water and moving their temporary residences to new collection sites as needed. Valued plants grew at elevations ranging from 1275m (4183') to 2340m (7677').

Shared structures and features

Structures used by members of many different households within a community included the *topi-nava gia* (sweat lodge) and the *huni´-no´bi* (word used for both the menstrual hut and the birthing house) (Figure 5.6). Special features that could serve the subsistence needs of more than one household included pit roasting features and food caches (Figure 5.5; Table 5.6, 5.7).

The *topi'-nava'gia* (willow-framed sweat lodge) is four feet in diameter and tall enough to allow one to sit upright inside, though more than one individual may use the sweat lodge (1932:203, Plate 19c). Stones heated near-by are delivered into the sweat lodge and water applied to release the steam (1932:203). People used the sweat bath "whenever they wanted" (Kelly 1932: 204). However specific reasons for using the sweat lodge also exist and include: to pray to the sun, to pray, when mourning a death, for health reasons, and to socialize (Kelly 1932:67, 167, 192, 193,

198, 203, 204). A shaman might accompany a patient to the sweat lodge with his doctoring equipment to ensure recovery, as was the case described by Charlie Washo:

"In the morning I was better. I could eat. When I was stronger I went to the sweat-house. The doctors slashed my hand and foot and let out the blood. They smoked; had eagle feathers to help them. I held the feathers" (Kelly 1932: 192).

Archaeological expectations for the *topi-nava gia* (sweat lodge) include evidence for the willow poll frame in the form of a pattern of postmolds defining a circle with a diameter of roughly 1.22m (4') and an adjacent feature of piled stones representing the hot stones onto which participants poured water to create steam. Botanical remains, if recovered, might include remains of the tule mat or grass mat panels lashed to the willow frame, a basketry water jug, or sagebrush branches used to wisp cool water on participants for relief. As people sweat for a variety of reasons (Table 6.4) a variety of artifacts might be recovered in association with the *topi-nava gia.* For example, when Charlie Washo entered the sweat lodge with a shaman, the shaman used a flaked stone knife and eagle features during his treatment session (Kelly 1932:192). The spatial relationship of the *topi-nava gia* (sweat lodge) to other structures within the community is unknown. The structurally similar frames of a sweat lodge and a winter house are different only in expected diameter. The frequency and variety of artifacts expected in association with the sweat lodge are different from those expected in a winter house and serve as a means of delineating between the two in archaeological contexts.

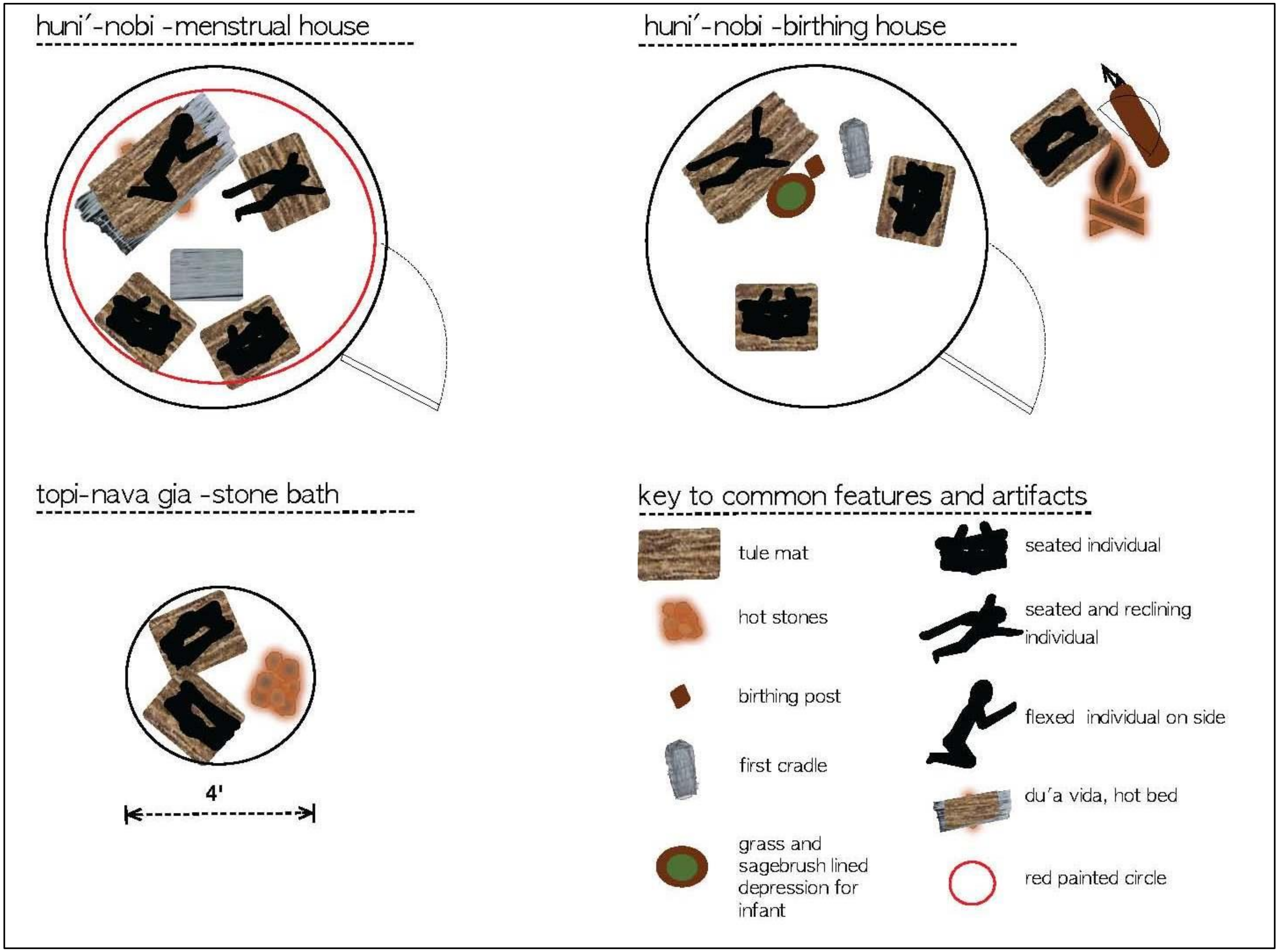

Figure 5.6 Other communal structures

Table 5.8 Sweat Lodge and Rock Walls.
Note: page numbers referencing Kelly's (1932) volume are noted parenthetically.

	Sweat House (202)	**Rock Walls (188)**
Synonyms	Sweat lodge	na'a´kwi-nobi
SVP	topi´-nava´gia (topi´, tüpi´, stone'; nava´gia, bathe). Joshua Brown also noted pu´˙sat and mi´rht[ü]	na'a´kwi, shooting; nobi, house, camp).
Above ground morphology	Dome (202)	No indicated
Floorplan shape	circular (202)	Not indicated
Floorplan dimensions	4' (202)	Not indicated
Excavated or unexcavated floorplan	Not indicated	Not indicated
Who builds what?	Not indicated	Not indicated
Frame materials	Willow branches, like winter houses, but transverse willows encircled the vertical willow posts (202)	stones moved and erected (188)
Frame cover	Rye grass, sage brush, willows, deer skin, blankets. (Other items: canvas, saking material, and clothing) (202)	stones moved and erected (188)
Doorway aspect	None discernable (202)	Not indicated
Door materials	Not applicable	Not indicated
Hearth location(s)	None	Not indicated
Smoke hole or no smoke hole	No smoke hole	Not indicated
Definitive Features	Water thrown on hot stones piled in corner releases steam	Not indicated
Definitive Artifacts		Not indicated
Number of people accomodated	1 - 4; Hot stones piled to one side so two people could sit inside lodge. "Perhaps three or four women would go [sweat] together." (203)	of sufficient height to allow a seated person to shoot over the top (188)
Number within community	Not indicated	
Location within community	Not directly indicated though mention of men jumping into cold water following sweat bath suggests lodge's location in proximity to surface water source (203)	
Frequency and reasons for use:	"Whenever they wanted" (204) Reasons for sweatbath: Pray to sun (67, 204), mourning (167), for health reasons (192, 193, 198), to pray (203), socialize (203)	for protection against the enemy (188)
Noted example:	19b	

Table 5.9 Characteristics of Surprise Valley Paiute Birthing and Menstrual Huts

	Birthing House* (158-161)	**Menstrual Hut***
Synonyms	huni´-no´bi	huni´-no´bi
SVP	huni´(menstrual blood); -no´bi (house)	huni´(menstrual blood); -no´bi (house)
Above ground morphology	Not indicated	Not indicated
Floorplan shape	Not indicated	Not indicated
Floorplan dimensions	Not indicated	Not indicated
Excavated or unexcavated floorplan	Not indicated	Not indicated
Who builds what?	Women	Not indicated
Frame materials	Not specifically indicated; "Birthing took place in a special house (huni´-no´bi) of tules or grass" (158)	Not specifically indicated; "Upon attainment of maturity, a girl retired to a small lodge of rye grass or sagebrush, built twenty or so yards north of the main dwelling" (162)
Frame cover	See above	See above
Doorway aspect	Not indicated	Not indicated
Door materials	Not indicated	Not indicated
Hearth location(s)	Not indicated, though expectant father "waited outside, keeping the fire burning" (160)	Not indicated
Smoke hole or no smoke hole	Not indicated	Not indicated
Definitive Features	Dü´avida or nadü´nai (hot bed): A large hole with hot stones or coals covered by juniper bough stacks and a blanket on top (159). Post errected inside house to which laboring mother clung (158). A hole excavated inside the birthing house was lined with grass and shredded sagebrush, prepared to receive the infant (158).	A Dü´avida or nadü´nai (hot bed) used by women experiencing severe menstrual pain (158: Footnote 199).
Definitive Artifacts	Obsidian knife, Scratching stick (158), weasel skin (159), saki´hu˙püü (first cradle), rabbit skin and sagebrush baby blankets (161)	Related to girls' adolescence ceremony (162-163): circlets of cut and braided hair, sagebrush belt, scratching stick (162). Related to general observance (163-164): Scratching stick (163) red paint (163)
Number of people accomodated	Not indicated	"several menstruating women may occupy a hut jointly" (163).
Number within community	Not indicated	Not indicated
Location within community	North of house	North of house
Frequency and reasons for use:	by laboring mother (158)	by adolescent girl for her menstrual ceremony (162); by women observing menstrual rituals (163)
Noted example:		

*Same physical location, except the menstrual hut used for the adolescent girls' ceremony may be separate

Huni'-no'bi (*huni´,* menstrual blood; *no´bi*, house) is the menstrual hut but also the structure in which women gave birth (Kelly 1932:158, 163). Informants report women build the structures and that they are located north of houses. The euphemism, "hu´˙na patsa´" (she killed a badger), explained a woman's absence and seclusion within the menstrual hut (Kelly 1932:163). A group of women may use the hut simultaneously. Meat was avoided so as not to negatively impact future hunts (Kelly 1932:164). To avoid lice and ensure continued hair growth, women did not touch their hair directly but instead used a scratching stick (1932:164). Men and male shamans avoided contact with menstruating women as contact resulted in illness, death, or compromised a shaman's power (Kelly 1932:164). After a shaman neutralized the risks of contact with a menstruating women, by smearing red paint on menstruating womens' wrists or by "making a circle of red paint on the floor of the house and singing," the woman was free to leave the hut and no longer a threat to men in her community (1932:164).

Archaeological expectations for *Huni'-no'bi* include evidence inside the structure of one or more special features. One of these is a *dü´avida or nadü´nai* (hot bed), used by laboring mothers and women observing menstrual customs; this would be represented by a pit filled with stones and charcoal and with macrobotanical evidence for juniper. Another is a single pole which a laboring mother held on to for support; this would be represented by an isolated postmold of sufficient size inside the structure. Another is an associated shallow pit excavated into the floor and filled with grass and sagebrush bark, prepared to receive neonates (Kelly 1932:158). Visible artifact signatures might include an obsidian knife used to cut the umbilical cord, a bone scratching stick used by menstruating girls and women and new mothers, and an absence of vertebrate food remains. Red paint might be detectable archaeologically with careful soil testing. Other artifacts associated with adolescent rites or birth that might not preserve as well include circlets of braided hair, a sagebrush belt, a weasel skin, rabbit blanket, and a first cradle made of tule. While frame material and diameter of the hut is not indicated, one may hypothesize the structure is as large or

larger than *topi-nava gia* (sweat lodge), given that several women could use the structure at the same time. A hearth feature might be identified outside the circular floor plan, indicating the fire a father stoked while awaiting the birth of his son or daughter.

Dü'avida also refers to pit or earth ovens used to cook meats as well as a variety of root species (1932:91-93, 99, 102-103). Pit ovens were used in association with communal antelope and jackrabbit hunts. Mule deer and bear was also shared among households and cooked in an earth oven. Single households might also use earth ovens for smaller animals that could be dispatched via trap, snare, or a lone hunter's arrow, such as badger, marmot, muskrat, porcupine, skunk, and woodrat. Unfortunately, Kelly does not provide measurements for pit ovens or food caches.

Food caches were sometimes buried in pits. For example, choke cherry cakes, chenopodia seeds, dried meat (lacking bone), and lard cakes might be buried in a skin bag or a basketry container. Archaeological expectations for earth ovens include pits with evidence of burning and animal bone. Archaeological expectations for food caches include pits with evidence of remnants of hide or basketry containers and macrobotanical remains in the form of seeds.

In summary, the details provided in Kelly's Surprise Valley ethnography allow us to build archaeological expectations for the contrasts between winter (circular lodges) and summer houses (rectangular ramadas or curved windbreaks), and between winter communities (5 or 6 houses) and summer communities (2 or 3 shelters) and fall or winter communal drive communities (15 to 20 camps). They also provide us with expectations for interior features of winter lodges, for specialized structures like sweat lodges and menstrual and birthing huts, and for specialized features that might occur outside houses or away from a residential area, like roasting pits and food caches and their associated faunal and floral remains.

Resources, Seasons, and Time

Gidu'tikadü terms for lunar months convey a sense of the timing of seasonal changes and important resources (Table 5.7). These include botanical and faunal resources we may expect to identify archaeologically. In Tables 5.8 , 5.9, 5.10, 5.11, and 5.12, I use Kelly's references to link specific plants and animals to their seasons, where on the landscape they could be found, and details about how they were obtained or used.

In general, hunting supplemented a plant-based diet during the warmer times of the year, while cached seeds, roots, and berries supplemented game during the colder seasons. The "considerable range of activities implies residence from which the valley lakes and flats, as well as the hill country, were accessible." (Kelly 1932:77). Resource importance is reflected in place names, for example, which describe a location's resources or a prominent landscape feature (Kelly 1932:73).

The following discussion of resources references is organized according to the *Gidu´tikadü* calendar. I make an effort to include related information when available to provide a sense of the range of activities that people were engaged in during each season, and how this connected to their social life and world view.

Yüban'nü (fall) is the beginning of the *Gidu'tikadü* annual cycle, marked by a change in the taste of deer and antelope meat associated with the annual rut (Kelly 1932:152). The remaining seasons are known as *tomo* (winter), *ta'ma'n˙* (spring), and *da˙dza'* (summer) (Kelly 1932:152). Joshua Brown of Surprise Valley reported that *Düna'-kwaiya'bin?,* when pronghorn shed [horn sheaths?], marks the end of the *Gidu'tikadü* annual cycle (Kelly 1932:153). Time is further divided into lunar months (Table 5.7), or *muha*, which begin with the new moon (Kelly 1932:152). Susie Archie indicated the *muha* order as well as their corresponding Gregorian calendar month names (1932:152). All named *muha* are associated with changes *Gidu'tikadü* observed as important progressions to the next growing season.

Table 5.10 Gidu’tikadü names for seasons and meanings for month names (adapted from Kelly 1932:152-153)

Season	**Lunar Month Name**	**Meaning**
tomo (Winter)	Na˙'-müha (November)	Wild deer and antelope
	Paba'-müha (December)	Big full moon
	Tamü'ni-ta˙ba (January)	Sun returning. Moon turning Earth around to Sun
ta'man'˙ (Spring)	Po'˙atanakwaitipasaküt (February)	Getting warm, snow melting
	Tokwü'tü-müha (March)	Plants germinate
	Puhi'-mayü-müha (April)	Grass is sprouting; puhi', green
da˙dza' (Summer)		
yüban’nü (Fall)		

Table 5.11 Plant Resources used by Surprise Valley Paiute (Kelly 1932)

Scientific name:	Given Northern Paiute Name	Common Name	Gathering Season:	Principle Part Used	Purpose:	Landscape:	Kelly page#
Family Adoxaceae							
Sambucus nigra or S. mexicana	hubu'	Elderberries	Summer	Fruit	na´bitsimü, mouth piece, for pipe, according to Minnie Anderson, though Daisy said it	Upland	100, 141
Family Alliaceae							
Lomatium canbyi	Ha'pi'	Biscuit Root	Spring	Roots	Food		101
Family Apiaceae							
Lomatium macrocarpum	hunibui	Biscuit Root	Spring	Roots	Consumed fresh or dried	Hillsides, lithosol	101
Lomatium canbyi	tsana-tsuga/hapi	Biscuit Root	Spring	Roots			103
Lomatium cous	tsu'ga	Biscuit Root	Spring	Roots			103
Lomatium gormanii	tsu'ga	Biscuit Root	Spring	Roots			
Lomatium leptocarpum	tunu'yu	Desert parsely	Spring	Roots			101
Perideridia bolanderi, Perideridia oregana	ya'pa' (101) also known and zügü´(98; like epos)	Wild carrot, epos	Spring	Roots		zügü´ in the mountains	101
Family Apocynaceae							
Apocynum cannabium	wiha´b[l]	Indian hemp	All	Branches	Cordage, stronger than sagebrush	"along mountain streams"	135
Family Asparagaceae							
Camassia quamash	pa'si'go'	Camas	Spring	Roots	"The roots were gathered in large quantities and dumped into an earth oven with a few handfuls of rye grass separating the piles of different individuals	wet valleys	102
Family Asteraceae							
Artemisia tridentata	sawa	Sagebrush	All	Bark	Birthing equipment, Blankets, Clothing, Containers, Cordage, Firewood, Housing , Neonate's bed, Slow match, Sweating		106-108, 135, 137, 148, 159, 202-203
Achillea millefolium	wada[a]-	Yarrow	All	Leaves			196
terebinthacea, B serrata	bikwa'ida	balsamroot	Spring	Roots	Food, medicine		103
Cirsium occidentale	iza''bui or iza'kwasi'	coyote's eyes or tails (Cobwebby thistle)	Spring	Roots or stalks	Food	Upland	103
Unknown	Ko'tciü'	another sunflower	Spring	Roots	"roots eaten raw, or if plentiful, were roasted in the earth oven."		103
Nothocalais troximoides (A Gray) Greene, Scorzonella sp.	kwanü'pic	another sunflower	Spring	Roots	"roots eaten raw, or if plentiful, were roasted in the earth oven."		103
Wyethia sp.	a'gü´	Wyethia/ Mule's Ears	Summer	Seeds, stems	Food	Goose Lake Valley'	98
Helianthus bolanderi	pa[hü]	Sunflower	Summer	Seeds	Edible	Southern shores of Cowhead lake & near Beatty, Oregon	98
Ericameria nauseosa (Chrysothamnus naseosus)	sigu´p[l]	Rabbit brush	Summer	Sap	chewing gum (104), cold remedy (197)		104, 197
Crepis occidentalis	tübu'hi	hawk's beard	Summer	leaves	Edible, consumed leaves raw. Stem and root not used.		103
Family Brassicaceae							
Descurainia sophia	atsa´	Tansy-mustard	Summer	Seeds	Food, "mixed with snow, making a 'sort of ice cream'" (98)	Southern shores of Cowhead lake & near Beatty, Oregon	98

(Table 5.11, Cont.)

Scientific name:	Given Northern Paiute Name	Common Name	Gathering Season:	Principle Part Used	Purpose:	Landscape:	Kelly page#
Family Chenopodiceae							
Artiplex canescens		Salt brush, Shadscale, greasewood	Fall	Seeds	Fishing (96), Needle for tule mat production (104), small game hunting arrow (144)	alkali soils	96, 104, 144
Chenopodium nevadense	üyü´p	Goosefoot	Summer	Seeds	Edible	Southern shores of Cowhead lake & near	98
Suaeda intermedia	wa´´da	Seepweed	Summer	Seeds	Edible	Southern shores of Cowhead lake & near	98
Chenopodium album L.	wa¨ta´	Pigweed	Summer	Seeds	Edible	Southern shores of Cowhead lake & near	98
Family Cupressaceae							
Juniperus occidentalis	wa'pui	Juniper	Summer	Fruit			100
Schoenoplectus acutus, Scirpus validus	saibu	Tule	All	Stalks	Bags, balsa boats, food, hunting blind, sleeping mats, house mats, storage containers	Marshes	94, 96, 103, 104-106, 109, 137, 150, 158, 168
Family Elaegnaceae							
Sheperdia sp.	wi'yüpui	Buckberry	Summer	Fruit			100
Family Ericaceae							
Arctostaphylos nevadensis	puhi´-pa'mo´	Pine-mat manzanita	All	Leaves	Medicine to treat colds, deafness, earache, stomachache. Smoked.	Mt Bidwell	181, 191, 196, 198
Vaccinium membranaceum		Huckleberry	Summer	Fruit			100
FamilyFabaceae							
Trifolium macrocephalum		Clover, big-headed	Summer	Nectar			99
Family Grossulariaceae							
Ribes cereum	atsa´pui	Currant,	Summer	Fruit	Food, consumed fresh and		100
Ribes aureum	boko´pc	Currant,	Summer	Fruit	Food, consumed fresh and		100
Ribes velutinum	mogu'tsiabu	Gooseberry	Summer	Fruit	Edible, eaten fresh and uncooked		100
Family Lamiaceae							
Mentha arvensis	Not given	Mint, wild or	All	Leaves	Tea		103
Family Liliaceae							
Allium bisceptrum	badi's	Alium	Spring	Roots	Food		102
Allium acuminatum	güka'	Alium	Spring	Leaves,	Food		102
Calochortus macrocarpus	kogi	Mariposa Sego lily	Spring	Roots	Skinned and consumed fresh, never plentiful enough to be dried	Upland	102
Allium pleianthum; A. tolmiei, A. madidum	mu'a'	Onion	Spring	Roots	Food		102
Allium platycaule	pani'zi	Onion	Spring	Roots	Food		102
Brodiaea hyacinthina	Wini'da	White	Spring	Roots			102
Fritillaria pudica		Yellow bell	Spring	Roots			102
Family Loasaceae							
Mentzelia laevicaulis	gu˙ha´	Blazing Star/Stickleaf	Summer	Seeds	Edible	Southern shores of Cowhead lake & near	98
Family Pinaceae							
Pinus sabiniana	tü'ba	Gray pine	Fall	Nuts	Food	Upland	99
Family Poaceae							

(Table 5.11, cont.)

Scientific name:	Given Northern Paiute Name	Common Name	Gathering Season:	Principle Part Used	Purpose:	Landscape:	Kelly page#
Family Portulacaeae							
Lewisia rediviva	kanü'te	Bitterroot	spring	Roots	"Pulled and boiled, 'like	Upland	102
Family Roasaceae							
Cercocarpus ledifolius	tupi	Mountain mahogany	All	Wood	Tools	Uplands	101
Prunus virginiana	do´˙-icabui	Chokecherry	Summer	Fruit, stem	Fresh and stored food. Berries and stems also used for beverage and tea	Upland	99
Crataegus douglasii Lindl.	kwinü´pc	Blackberry / Black haw	summer	Fruit	Berry no longer consumed		100
Amelanchier venulosa	ti'gabui	Service berry	Summer	Fruit	Eaten fresh or dried, boiled or uncooked. Kept overnight or they would upset one's stomache. Edible, mashed and mixed with ground a'gü´seeds		100
Rosa sp. Rosa pisocarpa	tsiabi	Wild rose	Summer	haws	Haws for tea (111), yellow spots removed from stems for paint (116) and stalks for na´bitsimü, mouth piece, for pipe (141)	Near water	103
Prunus subcordata	tuyu	Plum, Pacific wild	Summer	Fruit	Food		99
Family Salicaceae							
Salix sp.	tisabi?	Willow	Summer / Fall	Branches	Basketry, ooking vessels, housing, animal snares, traps, used to smoke hides,		99
Populus tremuloides	kaiba singabi	Aspen		Bark			99
Family Scrophulariaceae							
Pentstemon sp.	na˙mogu˙d	Beardtongue	Summer	Leaves	Medicine for sores, used as a poultice		196
Family Solanceae							
Nicotiana attenuata	pa'mo´	(Coyote) tobacco	All	Leaves	Smoked. Stored.	Scattered	181
Family Typaceae							
Typha latifolia L.	toib^{ü}	Cat-tail	All	Seeds, root	Edible	Southern shores of Cowhead lake & near Beatty, Oregon	99
Family Valerianceae							
Valeriana edulis	kuyi, also known as guyü	"indian limburger' Tobacco root	Spring	Roots			103
"Unidentified seed"	magu´g^{u}	"Unidentified seed"	Summer	Seeds	Unidentified, edible seeds		98

Table 5.12 Animal Resources Used by the Surprise Valley Paiute at any time of year and into the Fall and Winter

SVP Paiute Name	Scientific name:	Common Name	Season:	Use:	Collection or kill method:	Preparation:	Storage:	Other mention -OR- Kelly (1932) Page Number
dü˙na´	*Antilocapra americana*	Antelope	All year	Meat	(82) stalked more often in Warner Valley than in Surprise, (83) small group of hunters, (83-86) cooperative drives during the winter	stone boiled in willow basket, cooked in carcass, or roasted in düávuda (pitoven) or on coals (91) pitoven for antelope heads following drive (92)	dried, smoked, pounded with tallow and stored in tule bags and buried beneath rocks and earth (93, 94)	(80) antelope possible alternative to deer for adolescent boy's ritual hunt, (81) deer and antelope two chief larger game animals
dühü´tc	*Odocoileus hemionous*	Mule Deer	All year	Meat, hide (91); guts (asi´) also consumed (94)	(81) pitfalls, (82) firing, (82) shot with arrows, Joshua Brown	stone boiled in willow basket, cooked in carcass, or roasted in düávuda (pitoven) or on coals (91); asi´dried, boiled, and eaten. Deer fat from hind quarters dried and eaten raw with any kind of uncooked dried meat (94)	dried, smoked, pounded with tallow and stored in tule bags and buried beneath rocks and earth (93, 94)	(79) adolescent boy's ritual hunt, (81) deer and antelope two chief larger game animals
dabu´ᵘ	*Sylvilagus nuttali*	Cottontail	All year	Meat and Pelt (136), scapula may be used as spoon (98), pelts retained from drives for wi´˙gia (blankets) made by men and women (79)	noose snare (88)	roasted (91) in düávuda (pitoven) skinned and cleaned first (93)		(80) rabbits not afraid of hunters; can't smell them (151) rabbit skin blankets traded to Achomawi for bow and arrow (183) blankets given to family of murder victim from murder's family, 76, 79, 88, 94, 136, 141 (weather control)
kamü´	*Lepus californicus*	Jackrabbit	All year	Meat and Pelt (136) pelts retained from drives for wi´˙gia (blankets) -25 to 50/blanket- made by men and women (79), scapula may be used as spoon (98)	drives fall through January (77, 78, 88), with wa´na (nets) (88).	dried (94), roasted (91) in düávuda (pitoven) skinned and cleaned first (93)	dried, smoked, pounded with tallow and stored in tule bags and buried beneath rocks and earth (93, 94)	(80) rabbits not afraid of hunters; can't smell them (151) rabbit skin blankets traded to Achomawi for bow and arrow (183) blankets given to family of murder victim from murder's family
wasa´ *	*Grus canadensis*	cranes	Fall	Meat, Eggs				90, 94
pü´hü	*Anas sp.*	ducks	Fall	Meat	bow and arrow; communal hunt (77) decoys used, ducks shot from behind blind (90) balsa (sai-saki´) boat also used (150)			76, 77, 90, 150
nagü´tᵃ		geese	Fall	Meat, Eggs	bow and arrow; communal hunt (77) Noose snare or nets (89) women grabbed those on shore and dispatched with stick (90) balsa (sai-saki´) boat also used (150).			76, 77, 94
sa´iyü	*Fulica americana*	mud hen	Fall	Meat, Eggs	sticks. "chief" led communal hunt (90) men and women grabbed those on shore and dispatched with stick (90)	dried and boiled (94)		77, 94
wahi´tᵘ	*Cygnus sp.*	swans	Fall	Meat	bow and arrow; communal hunt (77)			76, 77
	Felis concolor	Mountain	Fall, winter	Pelt, meat				76,77
padü´nᵘ	*Lynx rufus*	Bobcat	Fall, winter	Pelt, meat				77
duhu´ᵘ	*Lynx sp.*	Wildcat	Fall, winter	Pelt, meat	(87) Small boys shot animal when treed (92)roasted on coals			76, 77, 87

Table 5.13 Surprise Valley Paiute Spring Animal Resources (Kelly 1932)

SVP Paiute Name	Scientific name:	Common Name	Season:	Use:	Collection or kill method:	Preparation:	Storage:	Other mention -OR- Kelly (1932) Page Number
ha'wa´gu, tütsi´[pakwi´]	*Catostomidae*	Sucker	Spring	Meat	bow and arrow (96)	cooked in ashes, boiled, dried, but not smoked (97) dried fish boiled or roasted, but not pounded (97)		small streams in warner near adel (95, 151) when numerous shot with greesewood arrows (96)
pakwi´	*Multiple possibilities: Gila spp.*	Small fish, poss. Tui Chub (95)		Meat		cooked in ashes, boiled, dried, but not smoked (97) dried fish boiled or roasted, but not pounded (97)		95
a'gai	*N/A*	Fish (generic), trout, or salmon		Meat	trade (salmon) (95), bow and arrow used sometimes to shoot fish in small streams near adel (96)	cooked in ashes, boiled, dried, but not smoked (97) dried fish boiled or roasted, but not pounded (97)		Piudy calls it trout (95), Susie archie calls it a minnow (95)
a'gai	*Oncorhynchus spp.*	Trout		Meat	hu˙ü (fish harpoon of willow, detachable forked stick to which bone points were fastened with sinew) thrust into fish. Angler hid behind blind (96)	cooked in ashes, boiled, dried, but not smoked (97) dried fish boiled or roasted, but not pounded (97)		used in buck creek (96)
No data	*Rhinichthys spp.*	Dace		No data	No data	cooked in ashes, boiled, dried, but not smoked (97) dried fish boiled or roasted, but not pounded (97)		No data
a'gai noho		Fish eggs		Eggs		cooked in ashes, boiled, dried, but not smoked (97) dried fish boiled or roasted, but not pounded (97)		95
sigu´[pakwi´]		Fish larger than a chub		Meat		cooked in ashes, boiled, dried, but not smoked (97) dried fish boiled or roasted, but not pounded (97)		found in small streams running through open country, near beatty, burns, and across from adel (95)
hu˙dsi´	*Centrocerus urophasianus*	Sage hen		Meat	Traps for small game, such as sage hens, might be set by women or even girls (79) Noose snare, nets, or bow and arrow (89)	field dressed and roasted on coals (93) dired and boiled (94)		(153) mentioned in running at the new moon ceremony
kahü´[ü]	*Tympanuchus sp.*	Grouse		Food	Bow and arrow (89)	Roasted on coals (93)		76, 89, 93
pako´g[e]	*Tympanuchus sp.*	Prairie chicken		Meat	bow and arrow (89)	roasted (93)		89

Table 5.14 Surprise Valley Paiute Summer Animal Resources and those lacking seasonality information Kelly

SVP Paiute Name	**Scientific name:**	**Common Name**	**Season:**	**Use:**	**Collection or kill method:**	**Preparation:**	**Storage:**	**Other mention -OR- Kelly (1932) Page Number**
zagwü´d[ü]	*Erethizon dorsatum*	Porcupine	Summer	Meat	(87) hunted in junipers in summer, torches used to attract amimal (poor vision)	(93) intestines removed, cooked in earth oven		
gidü´	*Marmota spp.*	Groundhog		Meat	(87) hunted with dog, stick used to pull it out from hole, cracked jaw to dispatch	(92) hair singed off, intestines discarded, cooked in earth oven; salty and comparable to bacon in flavor		
tiki'wa OR ka'wa'	*Neotoma cinerea*	Desert Woodrat		Meat	(89) found under valley bottom junipers	(93) cooked in earth oven		
kügwü´	*Spermophilus spp.*	Ground - squirrels		Meat	(87) hunted with dog into hole and stuck with stick and twisted out	(93)cleaned, singed, and cooked in earth oven		87
sipi´c[i]	*Spermophilus spp.*	Smaller ground - squirrels		Meat	(87) trapped; 25 traps set for a day by 'anyone' men, women, children			
biü˙´gü	*Lepidoptera (butterflys and moths)*			Food (93)	Gathered	Parched on coals (93)		"worms" or larvae of some sort, probably catepillars? (black with yellow stripes, 4" long)(91, 93)
ni˙su´	*Orthoptera*	Mormon		Food	Gathered	Pit-roasted and dried (93)		76, 89
hu˙´adada'[a]	Unknown	Grasshoppers		Food	Not indicated	Not indicated		Paiute name is onomatopeia (91)
mu˙su´hi-a'gai	*Ictalarus punctatus*	Catfish	Season not indicated	Meat	Known from the Achomawi country near Alturas (95)	cooked in ashes, boiled, dried, but not smoked (97) dried fish boiled or roasted, but not pounded (97)	dried fish packed in open-twine or sagebrush-bark sack	(mu˙su´hi, whisker) doda´na (95)
pa´dühüte	*Cervus elaphus*	Elk		Meat	(83) small group of hunters			(83), pa, water; dühü´tc, deer
patsu´gu	*Ondantra zibithecus*	Otter - muskrat?		Meat		(93) skinned and cooked in earth oven		
koip[ü]	*Ovis canadensis*	Mountain Sheep		(93, 94) Meat. (107) awl (witiü) of horn used			dried, smoked, pounded with tallow	107
pata´kai'[l]	*Prycon lotor*	Raccoon		Meat	(87) found near creek, shot with bow	(92)roasted on coals		Taken opportunistically
hu´˙na	*Taxidea taxus*	Badger		Meat, pelt	(87) not hunted, but opportunistic take	(92) earth oven		Taken opportunistically
pako´dop[a]	*Emberizidae*	blackbird		Eggs (94)	Not indicated	Cooked beneath ashes or boiled (94)		
pa˙tsi´donº		meadow lark		Eggs (94)	Not indicated	Cooked beneath ashes or boiled (94)		(200) presence and particular call precedes rain; (200) arrival of migrating meadowlarks from south fortel abundance of a'gü´when they arrive with bright yellow spots

Table 5.15 Taxa Surprise Valley Paiute Used for Non-consumptive Purposes and those Not Used.

SVP Paiute Name	**Scientific name:**	**Common Name**	**Use:**	**Collection or kill method:**	**Preparation:**	**Storage:**	**Other mention -OR- Kelly (1932) Page Number**
kwiña´´[a]	*Accipitridae*	Eagles	Not consumed (91) Feathers used in clothing (108), doctor's equipment (191, 192, 193), a source of shamanistic power (190)	Not indicated	Not indicated		eagle constellation (154) involved in the origin of the sweat lodge (204).
kwida´kagai[i]	*Pica pica*	Magpies	Not consumed (91)	N/A	N/A		(kwida´,excrement; kagai' from kai, kai, kai, the bird's call)
puhi´-kwida´mugus	Squamata, *Plestiodon skiltonianus skiltonianus or* Sceloporus occidentalis longipes	Green, blue-lizard	Medicine (196)	Not indicated	"Dried, powdered and put in deep cuts" (196)		
izipama´kaza'a	Squamata, *Phrynosoma platyrhinos platyrhinos*	Horned Lizard	Hand game charm (169)	Not indicated			(169) game charm dangerous; could be good or bad
Not given	*Oreotyx pictus*	Quail	N/A	N/A	N/A		Recently introduced; "Informants could not remember mountain quail from the old days" (89)
pagu´ts[u]	*Bos bison*	Buffalo	Not mentioned in the ethnographic record				

Fall

Fall began with the deer and antelope rut. This was a time to hunt and gather for winter needs as well as the needs of the fall. Household groups in disparate locations began their return to winter village sites, replenishing cache locations with collected resources for winter use. Kelly is not explicit about the distances separating households from their cache sites. Food to be cached was placed into large hide bags, surrounded by sagebrush, and sealed. The bag was then placed into a large, grass lined hole and backfilled. A large boulder was placed on top of the hole to prevent scavengers from stealing the food.

Chenopodium seeds were ripe for collection near lake margins at the same time waterfowl were migrating south. Obtaining seeds, ducks, and geese placed people in proximity to raw materials for winter housing, like willow and tule reeds, and to basketry materials, which they collected for immediate and future use at the winter village. *Pu´hü-kanu* (duck-catch), between Middle and Lower Alkali Lakes, was one such waterfowl hunting location (Kelly 1932:74).

Hunters lured waterfowl using tule-stuffed duck-skin decoys and shot birds from behind tule hunting blinds (1932:92). People used balsa boats constructed from tule bundles when driving *sa´iyü* (*Fulica americana,* mudhen) toward nets on shore or when approaching *wahi´t*[ü] (*Cygnus sp.,* swans) (1932:150). A large boat could carry five people and their catch (1932:150). All *Gidu´tikad*[ü] knew how to set snare traps and did so along lakeshores where fowl enter and leave open water (1932:88).

Communal jackrabbit drives occurred during the fall, when fur was thicker and more suitable for blankets and capes (1932:137). A drive involved the efforts of multiple camps, a hunting boss, and a net owner to supply netting sometimes in excess of 100 meters. One group of individuals held the meter-high net, one edge in hand and the other on the ground, while a second group ran and drove rabbits towards the netting. All group members –including little girls-participated in dispatching the animals (1932:88). Jackrabbits caught during drive were divided evenly except in cases of unusual success when the headman received more than others. Male hunters wove their own nets and served as headmen for the drive (1932:88). Circle dancing is an evening activity associated with the rabbit drive (1932:178). Smaller communal rabbit hunts may involve only males, with women remaining at home (1932:88).

Rabbit skin blankets and robes were essential for winter survival, though other fur-bearing animals were also in peak condition for use in winter garments. *Pa'hwa ´* (*Ursus* spp*,* bear)*, duhu*[u] (Wildcat, *Lynx spp.*), and *patsu´gu* (otter, *Ondantra zibithecus*) were taken by hunters with bow and arrow during the late fall when they were fat and their fur was fuller (1932:76, 77). Individual hunters targeted wildcat and otter, but bear hunting required a group effort for efficacy and safety. Some hunters could charm bears, making the animal "so tame that it would come right up to him," according to Dr. Sam, and thus easily dispatched by the attending hunting party (Kelly 1932:86).

Hunters pursued *dühü´tc* (*Odocoileus hemionus,* mule deer), *dü˙na´* (*Antelocapra americana,* pronghorn), and lagomorphs at any time of year. Communal pronghorn drives occurred in the fall or winter, when they naturally congregate in large herds. Since pronghorn are skittish and alert other large game to the presence of danger, hunters wore the *dü˙na´na´* (antelope disguise) to facilitate a successful hunt (1932:82). The disguise involved a headdress featuring the animal's small horns and ears, a tanned hide placed in a relatively correct anatomical position, and long branches allowing a hunter to support his arms while imitating the animals quadrapedal movement. "Small horns" may be a reference to the post-rut season when antelope shed their horn sheaths exposing a new, smaller sheath. A single hunter will keep the hide and share out meat with those in his camp (1932:81). Alternatively, a small group may drive an animal they spot towards a hunter lying in wait with bow drawn. Small group sharing rules indicate the hide goes to the hunter whose arrow killed the animal, the head and back sinews go to the boss, and the meat is divided evenly among the hunters (1932:81). Kelly reports that none of her informants had ever seen a big horn sheep (1932:81). She goes on to indicate, without referencing a particular informant, that bighorn were found "beyond Plush as well as this side of Gerlach, Nevada," that hunters "occasionally wore an antelope disguise" when hunting sheep, and the meat was dried to be cached (1932: 81, 92).

Archaeological expectations of fall activities thus include various locations across the landscape, including lake margins, open flat lands suitable for communal drives of rabbit or antelope, and caching locations along routes to winter camps. Fall is a time to cache resources against the needs of winter; material evidence of these activities might include cache pits lined with the remains of hide or basketry and containing traces of stored seeds. Caching activities might also be represented by finding the remains of lake and other lower elevation resources, such as waterfowl, at higher elevation winter camps. Fall is also a time for large temporary aggregations for communal hunts of rabbit and antelope; material remains might include traces of large

aggregations of temporary shelters and earth ovens large enough to handle multiple rabbits and antelope with associated faunal remains of those taxa.

Winter

The collecting season long over, communities aggregated at the eastern base of the Warner Range in Surprise or Warner Valley (Figure 5.1). During the winter, a significant portion of *Gidu´tikadü* diet included meat from non-hibernating fauna as well as hibernating bears, as well as the dried plant foods each households had stored. The hunting of hibernating bears involved four to five men. The hunting party placed a large tree stump into the den entrance. Once awake, the bear tries to vacate the den, but is confused and blocked by the tree barricade at which point the hunting party shoots and kills the bear. Bear hide was of such importance the hide was transported back to camp before the meat (1932:86).

Winter was a time for making and maintaining a variety of items needed in daily life. Women sewed garments with bone and bighorn mountain sheep horn needles, (Kelly 1932:107). Fur bearing animals were used for mittens, sleeves, moccasins, caps, and childrens' clothing (1932:108, 110,113). Basketry repairs were made as necessary, making use of cached basketry materials. Men restored and manufactured new arrows during winter as well as at other times of the year. They also made their quivers, in which they stored fire drills and sometimes sheathed knives, as well as arrows. Knives were also worn about their waist on a buckskin belt.

Gidu´tikadü made *tzomi´bi* (beads) from the bones of hunted and trapped animals, such as "swan-wing bones, fawn hoofs, deer-toe bones, and rabbit foot bones." Such beads may be strung on a necklace in a pattern alternating with juniper berries (Kelly 1932:117). Game pieces may likewise be fashioned during the winter.

Games are a prominent feature of the *Gidu´tikadü* social milieu and many may be played inside during the winter. Kelly notes that *Naiü´kwi* (hand game) "is played the year round and is

regarded as the gambling game par excellence" (1932:173). Two people or teams taking turns concealing blank and marked cylinders or guessing the hand in which cylinders are concealed. Both teams start with five counting sticks, which must be given to the opposing team when they win the round. The first team that wins all 10 counters wins the game. Cylinders were made of willow, circlets of Warm Springs beads, deer horn, or bones (Kelly 1932:172-173). Dr. Sam reports the Beaver-tooth dice game to be of Pit River origin, where one of eight teeth is marked with dots and one guess which tooth had the dots (dot side not visible) (Kelly 1932:177). One cylinder recovered from the Beatty gambling grounds is featured in Kelly's volume (1932:172, Plate 32a). The presence of a gambling ground in Beatty suggests individuals may travel to engage in gaming activities with family or acquaintances separated by rather large distances. Regardless, Kelly reports, "gaming bones were kept at home" (1932:169).

Winter was a social time. One had neighbors to visit, as five to six households could constitute a winter community. Inside a winter house as many as nine people slept on grass mats with sagebrush blankets and feet towards the fire (Kelly1932: 104, 105). Furred rabbit and bear skin blankets offered additional warmth as bedding or clothing. Winter households stoked fires in the centrally located hearths (Kelly 1992: 105). The smoke hole could be adjusted, or closed during storms, by moving the grass or tule mats at the top of the willow pole frame. Game hides could be layered on top of exterior mating and used as an additional protection from bitter winds and precipitation.

Relocation during the winter occurred only when a household needed to access more remote food caches or to participate in antelope drives, suggesting those cache sites were in close proximity to houses within a winter village (Kelly 1932:78). Communal antelope drives required the efforts of 15 to 20 camps, about 100 individuals, men and women (Kelly 1932:83). These events likely occurred in the sagebrush habitats surrounding playas with natural escarpments providing a natural lead into the open sagebrush wings of the circular corral. Some of these corrals were "two

miles around" by Dr. Sam's account (1932:83). Dr. Sam also noted many large game animals were driven along rims in a similar manner; the animals follow the natural barrier. Antelope drives required an antelope "charmer," whose skillset included the ability to lure a group of pronghorn into a sagebrush coral after which the animals were dispatched en masse by scores of hunters (Kelly 1932:83-86). Everyone shared in eating the first two pronghorn killed. Piled on sagebrush in the middle of the camp circle, most of the buckhorns go to the headman. Antelope heads are then roasted in pit oven and each participant receives one head to eat while hides are divided evenly. Antelope horn disguises may be used during this ritual hunt. Dances could occur at any time of year, but those associated with *kua´* (communal hunts) were especially important as disparate Northern Paiute speaking groups participated. As Kelly notes, "young people who were attracted to one another danced together all evening without changing partners. Some couples withdrew, at which time marriage was consummated" (1932:178). Thus, communal drives included rituals associated with the continuance of cultural traditions as well as securing immediate resource needs.

Speaking on the significance of named months Joshua Brown of Fort Bidwell declared, "The real months they count are winter and spring; they don't care about counting summer" (Kelly 1932:152). If Joshua Brown's comment is interpreted somewhat literally, as a countdown to warmer and drier weather, Joshua Brown's comment resonates with *Gidu´tikadü* perspectives on weather control, which emphasize making winter as short as possible. Adults tell boys to "run towards the full moon to make winter short" (153). Ochiho recalled a variant of that ritual, "They told the children to watch for the new moon. When it came they had two little girls and boys run a race. That was so the food would grow well" (Kelly 1932:153). "Killing snowshoes," as reported by Nellie Townsend of Fort Bidwell, is the ritual destruction of showshoes by boiling or frying to change the precipitation from snow to rain (105, 202). *Tadagaii* was a woman who could melt snow

by waving burning sagebrush to the south while crying out, "Come on, rain; come on, rain!" (Kelly 1932:201). Using the bark from a tree hit by lighting may be used in a similar fashion, according to Charlie Washo (Kelly 1932:203). Minnie Anderson described a shaman who danced and sang until she became sweaty and then talked and waved to the west, which caused the rain to come and melt the snow (Kelly 1932:202). Other customs produced winter weather. Boiling cottontail rabbit is said to bring snow as is eating roasted porcupine followed by mashing its bones (Kelly 1932:201). Playing *hu´pi-tatsa´ñ* (stick game) "is said to make the winter longer; there is no game to shorten it" (Kelly1932: 174). However, Piudy was born during summer and possessed the power to melt snow or reverse the power of those trying to bring snow, which he accomplished by blowing over boiling water while whirling a bullroarer and then saying "Come, rain and wind" (Kelly 1932:202). People offered beads and belts to those able to melt snow (Kelly 1932:203).

Archaeological expectations of winter activities include more time spent inside a more substantial dwelling, resulting in a wide range of activities and their artifactual debris, including items associated with social past-times such as gaming. Increased reliance on cached plant foods implies ready access to groundstone to process those foods. Increased reliance on hunted game implies associated manufacture and maintenance of hunting gear, including flaked stone weapons. With a larger community comes an expectation that large game may be shared between households, resulting in roasting pits outside the dwellings and/or partial rather than whole body representation inside of large animals, such as deer or bighorn or pronghorn, associated with any particular dwelling. Small bodied animals, such as rabbit, might be more completely represented at the household level.

Spring

Before the snow melted in the early spring and before families moved to root grounds, the Gidü´tika caught *a'gai* (trout, or salmon acquired via trade) in small streams with a hu˙ü (willow harpoon with detachable bone points)(Kelly 1932:95, 151). Fish *Gidu´tikad*[ü] ate are reported, but

Kelly experienced difficulty linking the Paiute name to the correct species; *pakwi´* is "possibly a chub" (*Gila* spp.), *ha'wa´gu* or *tütsi*[pakwi´] is identified as "a sucker" (Catostomidae), and *mu˙su´hi-a'gai*, a catfish (*Ictalurus* spp.) observed near Alturus (1932:95). The first shoots in spring provided *Gidu´tikad*[ü] the first fresh plant food of the year.

When conditions allowed for travel, households dispersed from their aggregated winter communities and started the collecting season, with its patterns of greater mobility and smaller communities. *Hu˙dsi´*(*Centrocerus urophasianus,* sage hen) were shot near root grounds, caught in traps or snares (Kelly 1932:89). Hunters also shot *kahü'*[ü] (grouse) and *pako´g*[o] (prairie chicken), both of the taxonomic genus *Tympanuchus*. Meanwhile, women made basketry repairs with bone awls in preparation for the upcoming root harvest.

The warmer season collection cycle began with the root crops. Northern Paiute used mountain mahogany digging sticks to loosen soil and collect the roots of *tsu'ga* (*Lomatium* spp., biscuit root), *tu˙nu´˙yu* (*Allium* spp., wild onions), and *epos* or *ya'pa* (*Perideridia* spp., carrots) growing in rocky well-drained sediments of talus slopes or near rock escarpments (Kelly 1932:101). Groups also harvested *pa'si'go'* (*Camassia quamash,* camas), *ko˙g´i* (*Calochortus macrocarpus,* mariposa/sego lilly), and *kuyi* (*Valeriana edulis,* 'Indian limburger') in moist upland meadows (Kelly 1932:102). *Ya'pa, pa'si'go',* and *kuyi* were cooked in large *dü'avida* (earth ovens) over night. Some were consumed immediately after roasting while others were dried, pounded, and transferred to winter cache sites, as the preparation for the next Winter began again in the Spring. If time was of the essence, whole cooked roots may be stored and delaying processing until winter.

Gidu' (*Marmota flaviventris*, marmots), *zagwu´ud*[ü] (*Erethizon dorsatum*, porcupine), and *kügwü´*(*Spermophilus* spp., ground squirrels) were hunted and trapped beginning in late spring. Meat from trapped animals was consumed by the trapper and his or her household, but not shared

out to other households. Porcupine was hunted at night; hunters lured the animal, which has poor vision, from trees with torches. Porcupine meat was consumed and the animal's quills used in tattooing and were dyed for other artistic endeavors (Kelly 1932:107, 115). Rodent species were targeted, sometimes with dogs, well into the summer months.

Archaeological expectations of evidence for spring activities include fish remains, and increased bird remains, especially those of gallinaceous birds like sage hen and migratory waterfowl like ducks and geese. Zooarchaeological expectations might also include more evidence of trapped game. As spring plants became more reliable mobility would increase, and camps would be smaller and more scattered, with fewer households per camp, and a more restricted abundance and diversity of artifacts per camp.

Summer

Dry season shelters were minimal and accommodated households on the move. A roofless enclosure provided a windbreak for a fire and as well as visual privacy while a shade offered relief from the intense sun (Kelly 1932:104-5). The focal point of a camp was still a hearth for centralizing cooking, eating and social activities.

Fruits ripened during summer (Kelly 1932:99-100). *Do´˙-icabui* (*Prunus virginianus,* chokecherries) and *wi´yüpui* (*Shepherdia argentea,* buckberries) were collected and stored. Women collected *tuyu* (*Prunus subcordata*, wild plums) in open twined baskets. Fruits collected for immediate consumption included *atsapui* and *bokopc* (*Ribes* spp., currant species), *hubu´* (*Sambucus mexcicana*, elderberries), and *mogu´tsiabui* (*Ribes* spp., gooseberry). Lightly ground chokecherries were molded into cakes and allowed to dry in the shade before being placed in storage. *Gidü´tikad*[ü] also collected *biü˙´gü* (butterfly or moth larvae), *hu˙ádada'*[a] (grasshoppers), and later in the summer, families collected *ni˙su´*(Mormon crickets) (Kelly 1932:76, 90, 91, 93).

As some transferred collected plant foods to cache locations near winter camps locations, others made longer treks to procure raw materials or engage in trade. *Gidu´tikad*[ü] traded red paint,

arrowheads, buckskins, rabbit fur blanket, and moccasins for oak bows and women's basketry hats from the Achomawi (Kelly 1932:96,151). The Achomawi were separated from the *Gidu´tikad*^{ü} by the Warner range, thus sharing a large eastern border with the *Gidu´tikad*^{ü} (Figure 5.1). The Warm Springs Northern Paiute were located along the Deschutes River, more than 100 km to the north. *Gidu´tikad*^{ü} also traded red paint, *epos or ya'pa* (wild carrot), hu´˙nibui, and hapi^{i} (biscuit root species) to the Achomawi in exchange for *kuyu´i* (a kind of sucker) and *a'gai* (salmon). *Gidu´tikad*^{ü} traded sacks of camas, buckskin, and horses to the Warm Springs (Northern Paiute) in exchange for *kwinü´ga*^{a} (white disc beads) or *goabi* (marine shell; *Haliotis walallensis or Haliotis kamtschatkana,* abalone) (Kelly 1932:117,152).

The warmer seasons allowed *Gidü´tikad*^{ü} to enjoy and gamble on games played outside, including *watsi´mu* (football), *wuto´koi* (single-goal ball), *natzi*^{saka} (double ball shinny), or *nüko´no* (hoop and pole) as well as numerous target games (Kelly 1932:172). As in winter, people played *naiü´ kwi* (hand game) and did so with other groups in different places, such as the gambling grounds outside Beatty, Oregon (Kelly 1932: 172).

Hunters would continue their efforts to take antelope, deer, or sheep at any time of the year. In late summer, a small hunting group might use *kupi´t*^{ü}*,* encircling a group of deer with fire on a hillside (1932:82). Individual hunters always shared meat with their summer camp. Sometimes a hunting party worked together, driving game with fire or audible commotion towards bow-drawn hunters ready to dispatch the animals. Hide preparation continued back at a summer campsite. Hides stretched from the pole of a summer shade house were soaked before women scraped the animal's hair off with a large mammal's rib. Later, the hide was smoked with willow, darkening both sides in the process.

Seeds became the focus towards the end of summer. In dry hillsides, groups collected and processed *a'gü´*(*Wyethia* sp., Mule's ear), *atsa'* (*Descurainia sophia,* tansy mustard), and *gu˙ha´*(*Mentzelia laevicaulis,* blazing star) seeds in quantities sufficient for storage. Following collection, *gu˙ha´* (*Mentzelia laevicaulis,* blazing star) seeds were parched, winnowed, and ground into meal and stored. During the winter boiling water was mixed with the ground *gu˙ha´* meal prior to produce a hot cereal. Other seeds collected during late summer and processed for winter storage include *üyü´p* (*Chenopodium nevadense,* goosefoot), *wa˙'ta* (*Chenopodium album* L., pigweed), *wa´˙da* (*Suaeda intermedia*, seepweed)(Kelly 1932:98). *Wa´˙da* seeds were mixed with chokecherries to form a hot cereal (Kelly 1932:99). Pine nuts from the were an unreliable subsistence source in the Surprise Valley as limited piñon stands grew near Mount Bidwell (Kelly 1932:99). Western white pine (*Pinus* monticola) grow in a constricted region on the northern slope of *Tse'tse'ede* though they are a fraction of the size of the gray pine (*Pinus sabiniana*) that grow within the Surprise Valley. With a sufficient harvest cones were roasted in the earth oven for an hour or so after which the nuts are shelled on a metate, then winnowed, and dried. The nuts are finely ground and may be stored or consumed as a hot cereal prepared in a similar manner as blazing star seeds.

Other plant products were used for beverages. Collected *wa´˙pui* (*Juniperus occidentalis,* juniper berries) were hand broken and added to boiling water; the beverage was consumed after skimming juniper pitch from the top. *Tsia´b^{i}* (*Rosa pisocarpa, w*ild rose) stalks as well as mint leaves (*Mentha* sp.) were used for teas (Kelly 1932:103). *Tsia´b^{i}* hips were also pounded with tallow and stored for the winter.

Collection efforts continued well into late summer. *Gidu´tikad^{ü}* recognized the onset of fall when mule deer and antelope began their rut (1932:152). Households then again reorganized their activities around returning to winter village sites and preparing for the colder seasons ahead.

Archaeological expectations for evidence of summer activities include more work and play carried on external to the shelter, and an associated lower abundance and diversity of remains of all kinds within the house. An exception to this would be potentially high concentrations of particular plant remains per location. Maintenance tools and debris might also see greater relative abundance of artifacts associated with transporting food items to caching locations, thus those linked to basketry, such as awls and flakes. Investment in preparing hides for the winter might result in a greater relevant abundance of scrapers and perforators.

Summary

In this chapter I outlined a model for household and community food security based on the *Gidu’tikadü*, the Great Basin group detailed in Isabel T. Kelly’s (1932) ethnography. I presented archaeological expectations for the size, shape, and materials of houses and other structures according to the season of the year, and the archaeological expectations for the kinds of features and artifacts associated with the interior of houses and with shared community spaces. I presented archaeological expectations for key food resources according to season of the year and particular subsistence activities. These included a range of faunal species associated with individual hunting, communal drives, trapping, fishing, and fowling, and a range of plant species gathered during particular seasons.

As is custom, communities consume meals together with the assumption that inclement weather and household spatial limitations may respectively preclude eating around an outdoor fire or within available houses. Snacking behaviors are assumed behaviors to occur inside and outside houses, with or without other individuals. The expected zooarchaeological results of this custom dictate that zooarchaeological material may be found in spatial association with single households as well as in areas used by an entire community. However, it is not assumed that individuals

consumed their meals entirely in a single location. In other words, individuals may have stood up and walked away from the shared meal location, as she or he continued to consume animal food.

The zooarchaeological record is further complicated by meat sharing practices. A lone hunter who kills a single large game animal, such as a mule deer, is obliged to share cuts of meat with other households in addition to sharing meat with his own household. Given the aforementioned understanding of meal locations, specimens representing large game animals are expected in communal and household assemblages. Specimens representing large game mammals recovered from household contexts with represent a portion of that animal, such as a hind leg, and not a complete individual. Trapped mammals, however, are more likely associated with single households where recovered specimens represent a complete individual. Such species are small enough to be further processed to render lard, a process that includes pulverizing bones. For other projects, bones provide material used for bead production.

Species indicative of a cold season occupation that are associated with a single household include ducks, geese, swan, cottontail, bobcat, or wildcat. Animals hunted by small groups during the fall through late winter include jackrabbit, mudhen, deer, bear, and pronghorn. Deer, bear, and pronghorn are divided according to established rules noted in the previous section. The zooarchaeological pattern resulting from processing and consuming communally acquired faunal resources follows the same general patterns for large game while jackrabbit and mudhen belong to the individual that dispatched the animal. Thus, specimens representing large game animals may be identified within a community midden, hearth, or in association with household hearth or midden in which small game specie refuse dominates.

Animals snared, trapped, or taken by lone hunters and consumed by a single household include prairie chickens, sage hen, marmot, porcupine, ground squirrels, woodrats, and badgers. Communal drives do not occur during the height of collecting season, so large game taken by individual hunters is shared among the smaller sized collecting season communities. Thus,

specimens representing large game animals may be identified within a community midden, hearth, or in association with a household hearth or midden in which the refuse of small game species dominates.

The social and subsistence connections among households link families within communities and between communities as groups aggregate and disperse during the year. While I have focused on behaviors that leave material remains, and are thus possible to identify archaeologically, I have tried to bring in other, less tangible aspects of life when possible. In the next chapter I review the methods I used to collect my archaeological household subsistence data and the analytic methods I used to test the relevance of this ethnographic model for Tse'tse'ede .

CHAPTER 6. METHODS

In this chapter I present the archaeological methods I use to test the model for household and community food security, which include the identification of occupation floors or domestic living surfaces, analysis of the nature and spatial distribution of artifacts and features across those surfaces, and detailed analysis of their associated faunal remains. While this dissertation provides an evaluation of the Surprise Valley Model it also represents an interpretation of the archaeology of Tse'tse'ede independent of that model. Field methods of excavation and recovery were described in Chapter 4. Here I detail spatial and faunal analytic methods.

Spatial Analysis

Spatial analyses include the mapping of in situ distributions of artifacts and features, as well as the density distributions of screen recovered flaked stone and faunal remains. I used an open source Geographic Information System (GIS) software package called QGIS Desktop 2.14.0 with GRASS 7.0.3. This allowed me to query the spatial distribution of any of the recorded variables for my key artifact types, ground stone, flaked stone, and faunal remains, as well as the locations of other materials, such as wooden posts, daub, fire-cracked rock, ash, charcoal, and compacted sediments. The variables recorded for ground stone, flaked stone, and faunal remains are detailed in the appendices. They include raw material type, obsidian geochemical sourcing signatures, attributes of size and shape, functional types, chronologically diagnostic types, and taxonomic identifications and modifications, among others. These were integrated as multiple lines of evidence to build interpretations of intra-site use of space, site function, and relative mobility.

I began spatial analysis with an assessment of the evidence for a house floor, creating a GIS layer for all associated excavated materials. This was followed by production of a series of maps and simple visual assessment of the presence or absence of features and artifacts, comparing these

against the modeled expectations outlined in Chapter 6. Items present described and their locations detailed, including metric distances and associations among items, in Chapter 8. Binford's concept of a drop zone of 1.2m was applied to evaluate spatial relationships between items with potential functional or use associations; Binford keys this metric to human anatomy, specifically the arm's reach of a seated person. Special attention was given to hearths, ground stone, flaked stone, and faunal remains. The faunal analyses were conducted by myself, and received additional finer-grained analysis, with consideration of taxonomic identity, diversity, abundance, meat utility of represented body parts, seasonality indicators, and taphonomic modifications. My spatial analyses of the ground stone and flaked stone build upon specialist work by Ethan A. Epstein (2007, 2010) on the flaked stone projectile points, other flaked stone tools, and ground stone. Edward Broughton photographed the ground stone artifacts and collected ground stone data.

Identifying Great Basin Houses

The identification of house floors and wall materials is imperative to establishing the household analytical unit at any site in the northern Great Basin. Cressman recognized early on that excavations must be careful to minimally capture the radius of any house when evidence is observable on the surface (Oetting 1990). Thus, the house rings trenched strategically from the center to the perimeter wall at ZX Ranch captured the behavioral context of the household in a way that would not have occurred with a centered 2x2 meter. Hearths, fire cracked rock, and finished artifacts have been used to identify house floors in the eastern Great Basin at the Bustos Wickiup Site (Simms 1989). Simms argued that the interior hearth and high artifact diversity was indicative of a winter house. Eiselt (1997:136) found that a distribution of daub followed the perimeter of a house at the Peninsula Site in Warner Valley, suggesting that the tule-mats constituting the house's roof material were partially covered with earth around the base. Willig (1982) used the presence of

burned house posts, the location of a hearth, and the incredible preservation of wild rye thatch bundles to identify both the house perimeter and wall materials, and inferred a winter occupation of the house located inside Dirty Shame Rockshelter.

I restricted my identifications of house floors to those cases where our excavations intersected at least one hearth area or ash deposit with an associated compact lens and/or surface for which at least one perimeter edge was defined, in keeping with Cressman's strategy as published by Oetting (1990). I included evaluation of the presence of burned house posts and daub, following Willig (1982) and Eiselt (1997), respectively, and associations of hearths, fire-cracked rock, and finished artifacts, following Simms (1989).

Zooarchaeological Analysis

Zooarchaeological measures for taxonomic richness, body part representation, specimen condition, and their spatial distribution are all lines of evidence used to provide information about site function, relative mobility, and intra-site use of space (Binford 1982; Hudson 1989; Kelly 1995; Yellen 1977). Taxonomic richness is expected to be higher at longer term occupations as a whole and, as a corollary, species richness should be lower and shorter term occupations where zooarchaeological data is recovered (Kelly 1995). At the Jackrabbit Roasting Site, a single hearth and the remains of only few jackrabbits were identified, providing clear evidence for a camp site used by a mobile group that stopped for the night.

Intra-site feature assessments at longer term occupations will also vary. NISP values for a cache pit may be high, but species richness may be lower. Musil (1995), for example, determined a small pit within the house floor at the Dunn Site containing an abundance of unburned tui chub fish bones to represent a cache pit. Special tools may also be cached, such as ground stone mortars and metates identified within the walls of houses at the Boulder Village Site (Jenkins and Brashear

1994). Other sites in the region have produced evidence for manos and pestles, likely some woman's favored tools, cached inside houses (O'Grady 2006). Other times a cached tools exhibit a diversity of items, such as ground stone, flaked stone, and bone tools (Musil 1995). Caching may be contrasted with ready-use storage. For example, a recovered hopper mortar was identified inside a house and against a slopping wall to keep its surface level and ready for use at the McCoy Creek Site.

The spatial distribution of faunal specimens also serves as a line of evidence relative to occupants' use of intra-site space, revealing different human behaviors. Hudson observed communally hunted duiker were butchered and shared out among all households following a hunt and elements of a single individual could be tracked to different houses (Hudson 1991). As a corollary, smaller animals typically trapped or snared are not usually shared out and the specimens for a single individual may be identified in association with one household in a camp (Kelly 1999; Yellen 1977).

Thermally altered specimens aggregated in association with a rock-lined hearth, for example, can be used to infer a cooking location. A butchery area separated from the Bergen Site houses was identified by the aggregation of large game specimens associated with utilized flakes, scrapers, and blades (O'Grady 2004). The organization of midden features may be used to infer mobility (Yellen 1977). San in longer term occupations eventually created a secondary ring midden outside the ring of households. The distinctive organization of space at the Bergen Site is also indicative of a longer term occupation. Midden features, on the other hand, have a relatively high taxonomic richness and include burned and unburned specimens with evidence for carnivore gnaw marks. Likewise, ground stone fragments may be repurposed as cooking stones or tossed to a midden at the end of their use lives.

Having reviewed key analytic approaches relevant to research questions about household activities, and nature and duration of occupation, as they relate to interpreting household subsistence strategies and mobility strategies, I now turn to a detailing of my laboratory zooarchaeological methods. These include taxonomic identification, comparatives consulted, use of standardized mammal size categories, quantification, and cultural and taphonomic modification. The intent is to allow replicable analysis.

Zooarchaeological Methods

Pieces of bone or shell recovered from the Mortar Riddle and Roaring Triangulation Site subject samples total 25,467 and weigh 3243.19 grams. The samples are fragmentary, though the preservation is good. No human remains were observed. Primary data collected for recovered zooarchaeological specimens includes a specimen's provenience as well as the represented taxon or size class, count, and weight to the nearest one hundredth of a gram. A specimen is any piece of bone or shell, following Grayson (1984:16). Specimens may be fragmented or represent complete elements, such as a humerus, phalanx, or mandible. When determinations were possible, collected data includes the element, side and portion thereof; the age of the represented taxon; and any antemortem, perimortem, and postmortem modifications indicative of human cultural behavior and/or natural taphonomic processes. All specimens were collected either in situ or from 1/8" mesh following the methods outlined in Chapter 4.

<u>Primary Data</u>

First, taxonomic identification required comparison of zooarchaeological specimens with skeletal elements of collections. Various institutions made comparative skeletal specimens available for this research, including the University of Washington Burke Museum of Natural and Cultural History, the University of Oregon Museum of Natural and Cultural History, the University of Wisconsin –Milwaukee Archaeological Research Lab. I attempted to identify zooarchaeological

specimens to the level of taxonomic genus or species whenever possible. Genus or species level identifications were rare and required recognizable osteological landmarks to match the zooarchaeological specimen with a comparative skeletal element.

Mammal specimens unidentified beyond the level of taxonomic class were assigned to a relative size category (Table 7.1). Use of size-category data is an important aspect to the analysis of highly fragmented assemblages, which are common in the Great Basin. Specimens identified to a taxonomic class and size may be grouped with those specimens identified to more specific taxonomic levels for the analytical purposes of assessing small versus large mammal use, for instance. Specimens assigned to taxonomic class and size category can facilitate meaningful use of zooarchaeological data that would otherwise be ignored if species level identifications were required.

Table 6.1 Mammal size categories (after Dansie (1979) and Thomas (1969)).

Size Category	Example species	Weight (kg)	Weight (lbs.)
VI	Bos Taurus (cattle), Cervus elaphus (elk), Eqqus calabus (horse), Ursus americanus (bear)	>150	> 330
V	Antilocapra americana (pronghorn antelope), Canis lupus (wolf), Felis concolor (cougar), Odocoileus hemionus (mule deer), Ovis canadensis (bighorn sheep)	25 – 149.9	55 – 329.9
IV	Canis latrans (coyote), Castor Canadensis (Beaver) Erethizon dorsatum (porcupine),	9– 24.9	20 – 54.9
III	*Lynx rufus* (bobcat), Marmota flaviventris (yellow-bellied marmot), Sylvilagus nuttali (mountain cottontail), and *Taxidea taxus* (badger)	5 – 8.9	11 – 19.9
II	*Neotoma cincera* (bush-tailed woodrat), *Spermophilus townsendii* (ground squirrel)	0.1 – 4.9	0.22 – 10.9
I	Ammospermophilus lecurus (antelope ground squirrel), *Dipodomys californicus* (Kangaroo rat)	≤ 0.09	≤ 0.19
X	Mammal of indeterminate size		

Age determinations were based on assessments of dental eruption (Cowan1940:505-580; Lubinski 2001:218-230; Quimby 1957; Robinette 1957: 134-153) and epiphyseal fusion (Walker 1987:7-12). Osteological specimens were assigned to one of three generalized age categories –

juvenile, subadult, or adult. Age determinations for some taxa yielded information regarding the season of death, which I discuss below in further detail.

Specimens were also examined for evidence of thermal alteration (Brain 1981, Buikstra 1989, and Shipman 1984), cut marks (Binford 1981; Brain 1981; Walker 1977:605-616), perimortem fractures and cutmarks (Binford 1981; Brain 1981), post-mortem gnaw marks (Binford 1981) and evidence for chemical and mechanical weathering (White and Folkens).

Lastly, specimens recovered from a unique provenience represent a single taxon and sharing all other variables described above were grouped, tallied, and weighed. Specimen weight was assessed with an Ohaus Scout-Pro Scale to the nearest hundredth of a gram.

Quantification

The number of identified specimens (NISP) is a tally for the number of specimens per taxon. NISP is a quantitative data point from which relative abundance of taxa and the rank order of taxa may be assessed. Since bone weight is tied to overall body size, specimen weight provides a measure for the relative contribution to diet (Uerpman 1973). Some species distort this trend, such as shellfish. NISP and specimen weight are thus complimentary measurements for assessing subsistence practices. Shellfish should not be a problem in the study assemblages as the representation of invertebrates at Mortar Riddle and Roaring Triangulation sites is very small.

The Minimum Number of Individuals (MNI) provides a minimal indication for how many animals are represented by osteoloical specimens at a given location. MNI can be calculated in various ways: in this dissertation it is calculated by counting the most abundant element per taxon, with consideration for an individual's age and size (Lyman 1994:104-105; Reitz and Wing 1999:195).

Secondary Data

Taxonomic diversity will be evaluated with concern for richness (Reitz and Wing 1999:102) and evenness. Taxonomic richness requires a measure of abundance per taxa (Pielou 1975). Taxonomic evenness measures the quantitative variation among represented taxa, which can help address questions of resource specialization (Grayson 1984).

NISP, taxonomic abundance, rank order, MNI, specimen weight, and diversity measurements assess species composition and can be generated for the site as a whole or for other analytic categories, such as units of space (such as a house floor or midden), time (summer species versus fall species, earlier versus later occupational horizons), or social organization (species targeted by individuals versus those targeted by groups).

Dog, marmots, deer, pronghorn antelope, big horn sheep, and elk mature with predictable changes in their dentition and long bones (Cowan 1940:505-580; Lubinski 2001:218-230; Munson 1984; Quimby 1957; Reitz 1999; Robinette 1957:134-153; Walker 1987:7-12). Questions concerning the seasonality of subsistence behaviors and residential site use can be addressed by assessing the age of specimens representing seasonally breeding species. Archaeologists will use the relative abundance of different fauna as one line of evidence to infer season of occupation in addition what other artifact classes suggest. For example, the dominance of water fowl over other taxa in and charred seeds identified within the macrobotanical samples is indicative of a fall occupation.

Body part completeness considers the recovered and missing elements of represented taxa to understand butchery, carcass transport decisions, and potential post-consumption use (e.g. bone tool production). Hunters are expected to bring back to residential camps portions of a carcass with the most useable meat when transporting the entire carcass is not possible.

The relative completeness of specific body parts or elements, for that matter, also provides an indication for the scale of processing; roasting a limb and consuming meat from the bone and dispensing with the bone versus secondary subsistence use by breaking bones to render fat from the marrow. The Surprise Valley Model suggests we should expect to find all portions of large game fauna represented at residential sites and possibly distributed among different houses according to specific distribution and sharing rules.

Body part completeness, described above, can be used to evaluate species composition per meaningful spatial analytic units, such as butchery locations, houses, middens, or community hearths. According to the model for Surprise Valley Paiute subsistence behaviors, we should expect a single successful hunter of a deer to distribute portions of that animal among different houses within a residential camp. Likewise, following a successful group hunt of a single deer, rules also specify the spatial distribution of the carcass.

Taphonomic Considerations

Ethnographic model indicate Surprise Valley Paiute targeted burrowing rodents, such as marmot and ground squirrels, for subsistence purposes. However, marmots and ground squirrels may burrow into extant cultural deposits. Krotovina were observed in cultural deposits at both sites requiring that specimens, especially burrowing rodents, will be examined for evidence of intrusive introduction into site deposits. Complete skeletons or individual specimens lacking any clear evidence for cultural modification may represent intrusive fauna. In this study specimens identified as representing burrowing fauna will be considered the remains of cultural behavior when they exhibit cut marks (Brain 1981) or evidence of thermal alteration.

In summary, in this chapter I outlined the archaeological methods used to identify Great Basin houses and my GIS approach to analyzing spatial distributions of different material types and

attributes. I reviewed analytic expectations for measures of relative mobility and I described methods by which archaeologists infer the intra-site use of space. Lastly, I detailed the laboratory methods used to identify the zooarchaeological remains and the analytic approaches to their interpretation.

CHAPTER 7. RESULTS

In this chapter I detail the archaeological findings from the two subject sites, Mortar Riddle and Roaring Triangulation, as they relate to my ethnographic model. Both sites are located on Tse'tse'ede in Harney County, Oregon. The Mortar Riddle sample dates to a climatic period of increasing aridity. The two Roaring Triangulation samples span changing climatic regimes; the earlier sample dates to a drier period while the later sample dates to a period of increasing moisture.

The fundamental questions raised in this dissertation are: Do the archaeological sites provide evidence for household strategies to achieve food security? Do these subsistence strategies differ in ways that correspond to climate change?

I focus on the presence and absence of certain types of material remains and their spatial associations. For each site I evaluate the evidence for a dwelling and the types of activities represented by features, in situ artifacts, and those recovered from matrix screened through 1/8" mesh. Because I test a model for food security behaviors in a household context, artifacts of special interest included flaked stone tools, ground stone tools, and faunal remains. These items provide the means for obtaining and processing food, as well as evidence of the food itself. I also include ornaments and game pieces as these less utilitarian items were integrated into the social life of the site residents and my ethnographic model suggests that their presence or absence may shed light on season and duration of occupation as well as connections to wider exchange networks.

MORTAR RIDDLE (35HA2627)

The first question to address is whether there is archaeological evidence of a dwelling or a living surface. By this I mean an *archaeological lens providing the material signatures of a hearth and the structural remains of a shelter*.

Excavations in the North Block did yield the archaeological signatures of a dwelling: a hearth, a compacted sediment lens, purposefully placed rocks following the arc of the exposed lens, a series of charred posts following the same arc, and several daub fragments, such as might be associated with wattle and daub walls. The spatial distribution and association of these are illustrated in Figures 7.1 through 7.6.

A compacted sediment lens (Figure 7.2) evident in the site's North Block matches the horizontal extent of the compacted sediment lens illustrated in profile (Figure 4.8). The rock formations appear to arc and the charred posts and fragments of daub suggest that the rocks may have served to anchor house frame supports in place. The horizontal extent and shape of the packed floor suggests we may have excavated about half the interior of the original house as well as an exterior extension of compacted earth on the eastern side in what may have been the entrance area (Figure 7.5). Given the curvature of the house wall, the structure's original size was likely between 3.3 to 4.65 meters in diameter. This falls within the Surprise Valley ethnographic model, as outlined in Chapter 5.

The hearth was rock-lined; a sizeable charcoal sample (Figure 7.6) recovered from the hearth feature produced a 2-sigma radiocarbon AMS date of 850-900 BP or 900 – 820 RCYBP (BETA #239166). The date is important as it links the hearth and the associated dwelling to a specific climatic reality, characterized as an increasingly warmer and drier period followed by drought at 700 and 500 years BP (Mehringer 1987; Wigand 1987: 427-458). Sediment cores revealed Diamond Marsh and Fish Lake were at their lowest levels during this time (Wigand 1987). Having established the presence of a dwelling at Mortar Riddle, the next set of questions concerns the types of associated subsistence activities represented by artifacts and faunal remains. What hunting and gathering activities are evidenced by material remains found in situ on the floor or in associated screen residues? How do their spatial distribution inform our understanding of the use of this household space?

Figure 7.1 Hearth. Left: planview to south. Right: Overview to southeast

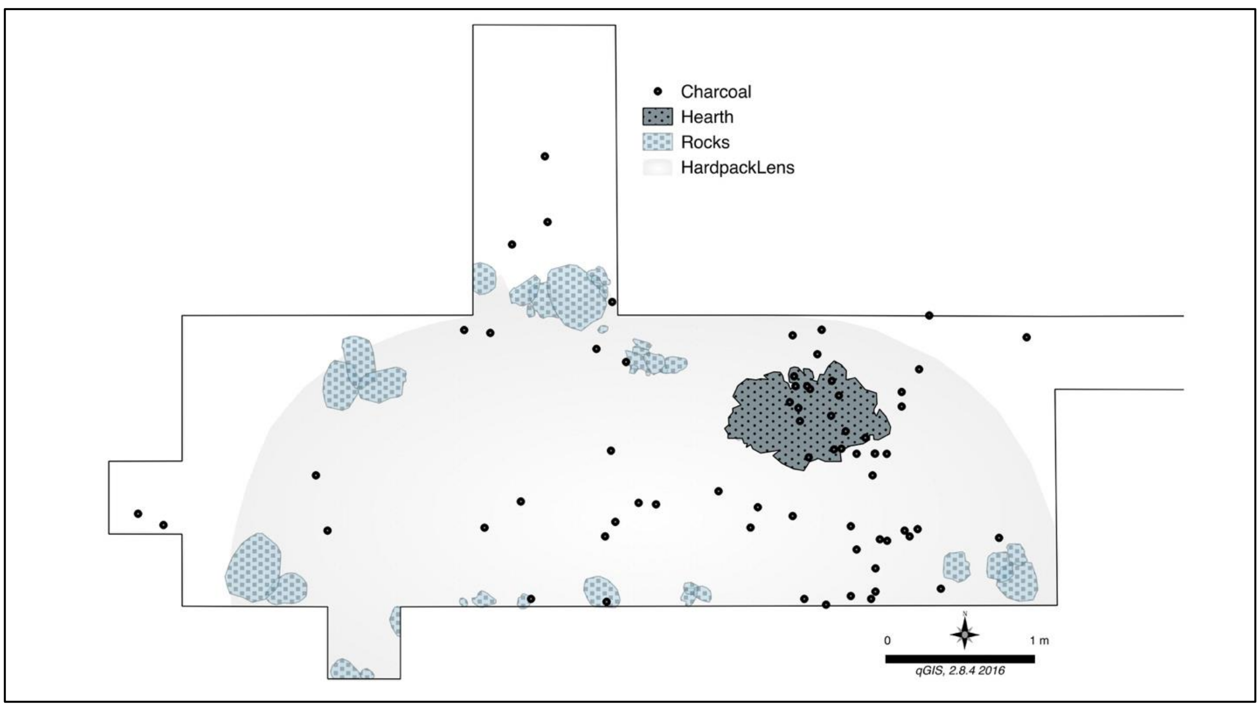

Figure 7.2 Mortar Riddle North Block Compacted living surface, hearth, and charcoal recovered in situ.

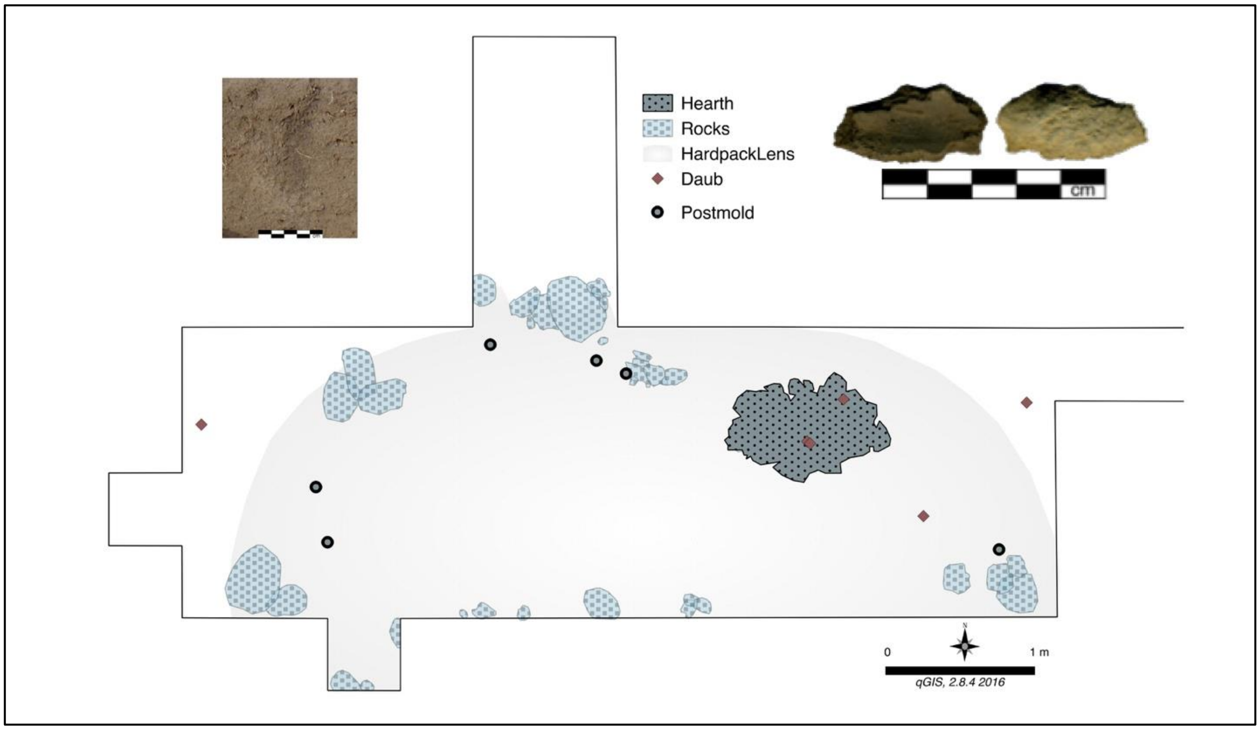

Figure 7.3 Charred post and in situ recovery of daub

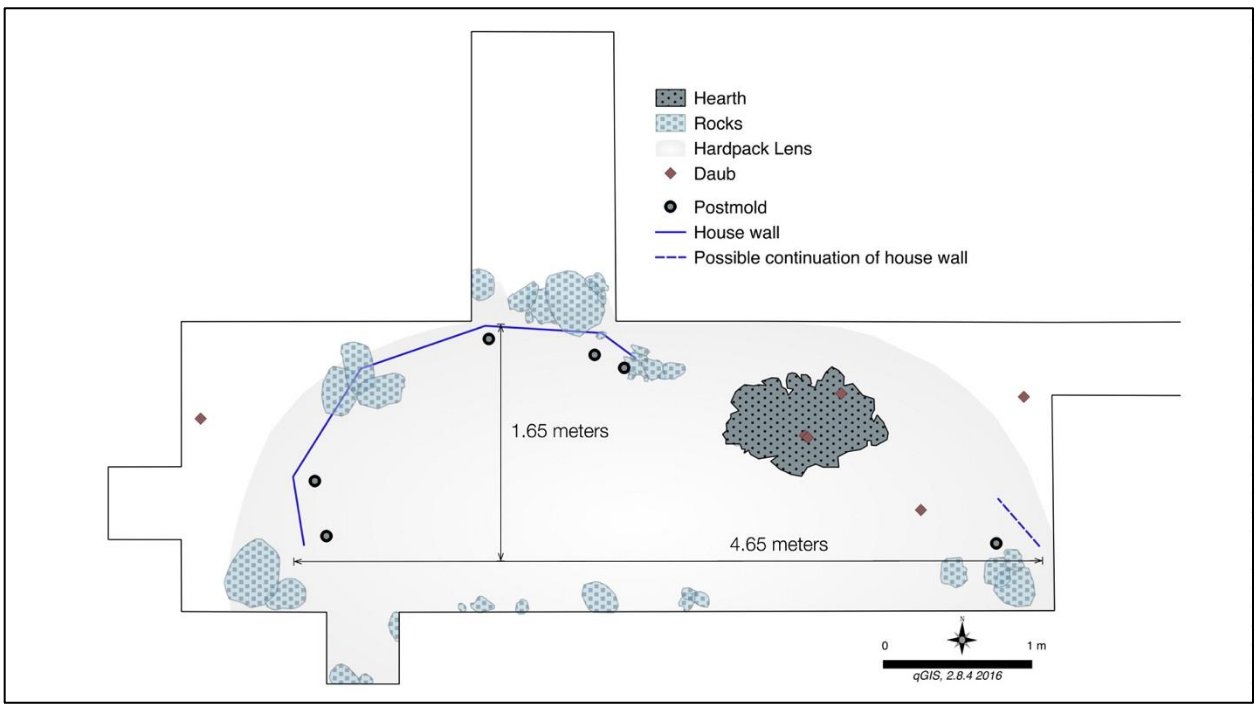

Figure 7.4 House floor outline, diameter and radius labeled

Figure 7.5 Top: AMS dated charcoal sample. Bottom: Red dot indicates dated charcoal recovery location

Ground Stone

Ground stone is one of the defining characteristics of the aptly named Mortar Riddle site. Recovered ground stone artifacts include hopper mortars, pestles, manos, abraders, and polishers (Table 7.1). The Surprise Valley ethnographic model links ground stone hopper mortars, metates, pestles, and manos with the processing of plants collected throughout the growing season, including spring roots, summer berries, and small seeds harvested in late summer. A variety of edible seed-bearing plants grow within and around the Mortar Riddle site, including Oregon sunshine (*Eriophyllum lanatum*), tansy-mustard (*Descurainia sophia*), blazing star (*Mentzelia laevicaulis*), chenopods such as salt brush (*Artiplex canescens*), goosefoot (*Chenopodium nevadense*),

and seepweed (*Sueda calceoliformis* formally *S. depressa),* and grasses such as Great Basin wild rye (*Leymus cinereus*), squirrelltail (*Elymus elymoides*), and Idaho fescue (*Festuca idahoensis*).

Other ground stone tools, such as abraders (e.g., *düda´-soñoyin*) and arrow shaft straightners (*pa'a´bi*) were used to produce other tools associated with a variety of activities. For example, the ethnographic descriptions indicate people softened hides with the *düda´-soñoyin* (*düda´*, rub; *soñoyin*, soften) or straightened arrow shafts with the *pa'a´bi* (Kelly 1932:140).

Table 7.1 Ground stone artifacts recovered from the North Block occupational lens, 20 – 30 cm below datum

Type	Morpho-functional types	Count	Percentage (%) of total
Nether stone	Hopper mortar	2	6.5%
	Unidentified nether stone fragment	1	3.2%
Hand stone	Unidentified hand stone fragments	12	38.7%
Unidentified ground stone	Ground stone Unidentified	8	25.8%
	Thermally altered ground stone	8	25.8%
	TOTALS	**31**	

There are a total of nine hopper mortars associated with the structure. Distributed to west, south, and east of the hearth, the hopper mortars were found in a variety of positions, both working side up and tipped upside down or sideways. A single hopper mortar was recovered working side up and embedded in the center of the floor (Figure 7.6). Two hopper mortars were recovered on their sides. Another six hopper mortars were recovered with their use-wear surfaces facing the ground. Several hypotheses can be considered to explain this wealth of hopper mortars inside a single dwelling.

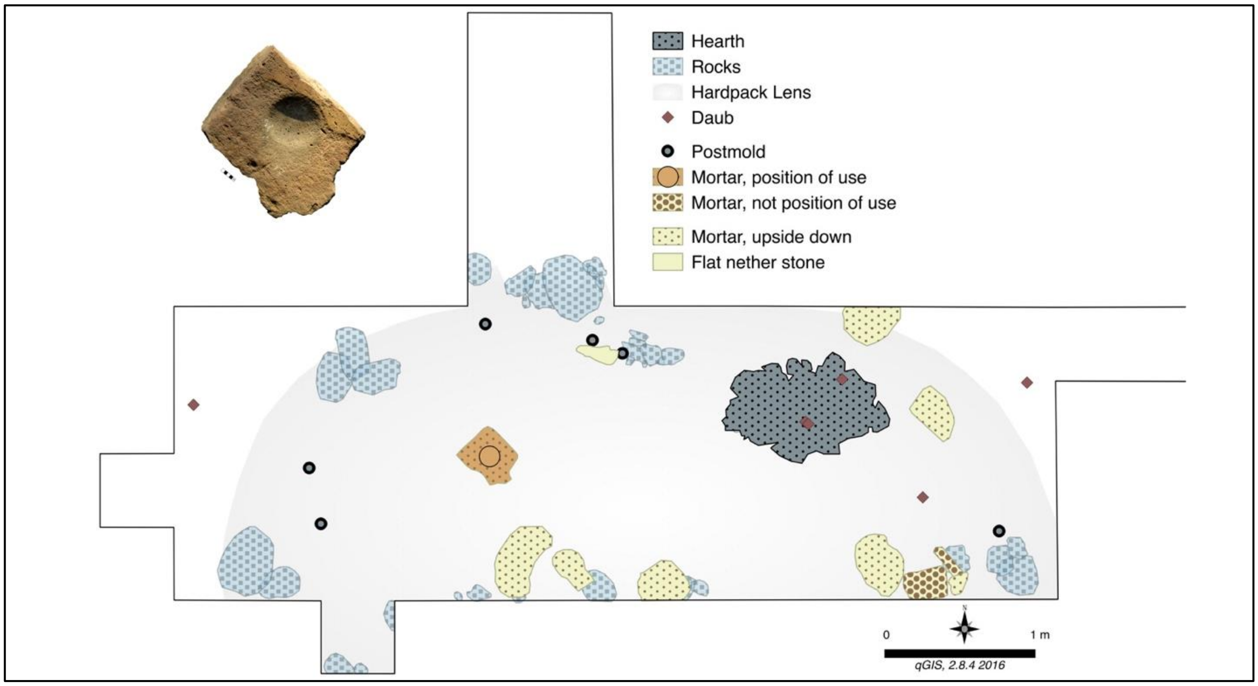

Figure 7.6 Mortar Riddle North Block Planview, Distribution of In situ recovered Ground Stone

One hypothesis comes from the ethnographic model that indicates people stored mortars against the house wall with the working-surface pointed towards the wall or towards the ground. An expansion of this hypothesis is that, when not in use, ground stone artifacts were repurposed to serve with other less modified stones as part of the arc of rocks supporting the house walls. Another is that while usually only one mortar was needed at a time by house residents, it was deemed useful to have backups in easy reach within the house and closer to the hearth so that multiple individuals could process food simultaneously. It is perhaps relevant that the single mortar embedded in the floor, working side up, was the largest of the nine, and that its placement is a bit west of center, and a little over a meter from the hearth. In profile, the west of center mortar and the hearth are clearly embedded within the compacted floor lens (Figure 7.7). The pestles are located within a drop zone of 1.2 meters from the centrally located hopper mortar (Figure 7.8, Figure 7.9). Binford's concept of a "drop zone" is based on human anatomy, representing the reach of a seated person, where small debris may drop during activities and where partnered hand tools, such as pestles, can be readily picked up for use. If one were to sit within arm's reach of the two

manos and the two handstones on the east end of the excavation block, one would also sit near the hearth.

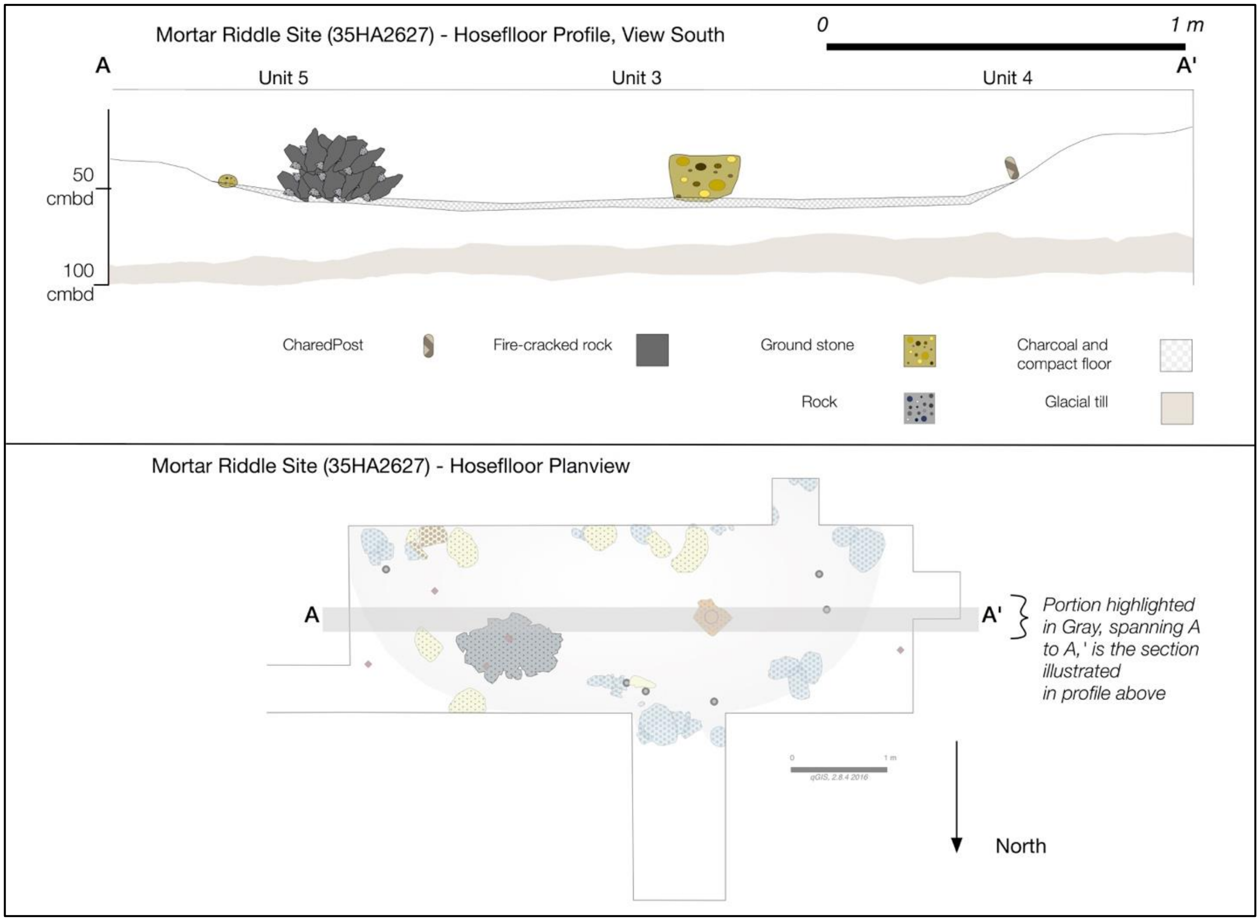

Figure 7.7 Housefloor lens in profile (top) and highlighted portion in planview indicating origin of profile depicted (bottom). Note: the planview figure (bottom) is rotated 180° from previous planviews to make situate origin of profile (above).

Figure 7.8 Ground Stone Mano Recovered In Situ (Top). Petles Recovered Insitu (Bottom)

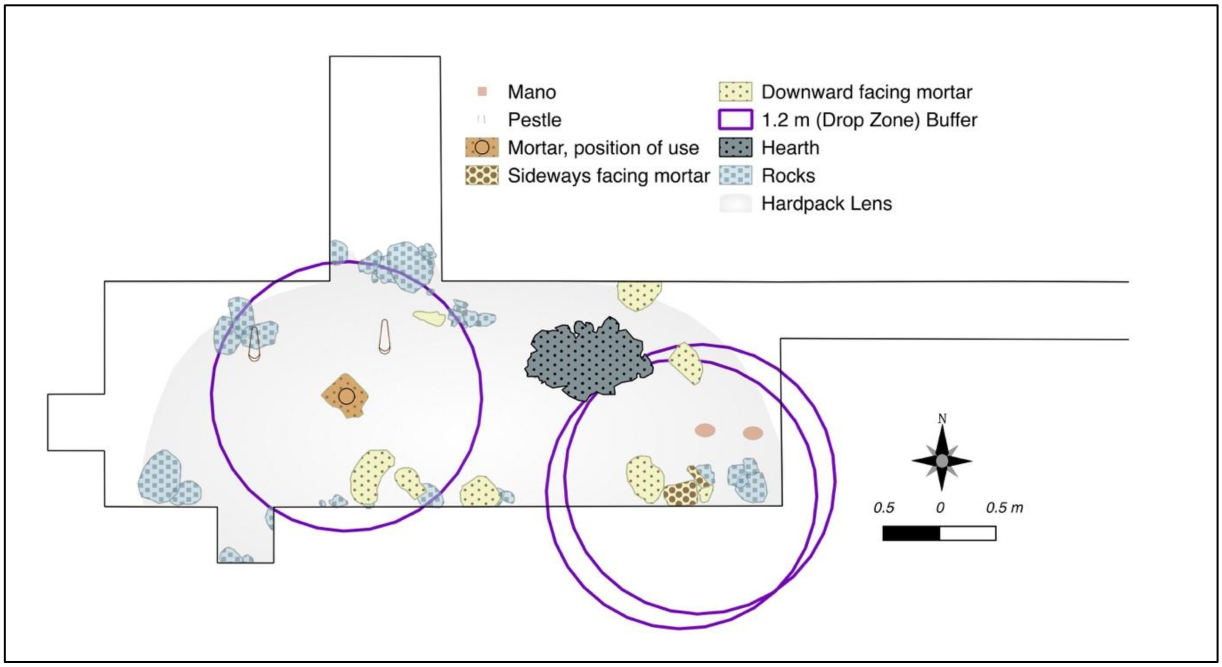

Figure 7.9 Ground stone in situ in Mortar Riddle House Floor

In summary, the distribution of ground stone artifacts, particularly the two clusters of mortars and pestles, one more central to the house and one closer to the hearth, provide evidence for plant food processing by members of this household. The The ecological location of the Mortar Riddle site at 5120' (1506.6 meter) in the Little Blitzen River Valley, where residents could easily gather roots, fruits, and seeds, in combination with the unusually high number of hopper mortars identified on the surface of the site (Mueller Epstein 2008) suggest plant processing was a key subsistence activity. The subsistence evidence associated with a single structure allows us to focus on the household social context. For residents of this home, as for the site as a whole, plant processing appears to have been of central importance.

Flaked Stone

Projectile points are required equipment for securing a variety of important animal foods. Both arrow and dart points were identified; Rosegate and Elko series points account for more than 60% of the typologically identified projectiles in the sample (Table 7.1; Figure 7.10). Rosegate series arrow point styles are associated with date ranges 1500 – 600 years BP and the antiquity of

the Elko style ranges between 3000 – 1250 years BP (Justice 2000:55). The Elko type is an atlatl dart (Justice 2002:55). The represented point types and the radiocarbon dated hearth feature, in combination, suggests the occupation slightly predates known bow and arrow technology in the northern Great Basin. People must have known of the area before that time as suggested by the presence of older point types and other analyses (Epstein 2007; Mueller 2007). Curated and reworked dart points include three Humboldt types, one Pinto, one Cascade/Willowleaf, and one Gatecliff.

Table 7.2 Projectile Point Styles Recovered In Situ

Projectile points	Obsidian*	CCS	Basalt	nnot determi	TOTAL	Percentage
Rosegate/Roses	13	2		9	24	44.4%
Can not determi	8			3	11	20.4%
Elko	8			1	9	16.7%
Stem	1	1		1	3	5.6%
Humboldt	2		1		3	5.6%
Cascade/Willov	1				1	1.9%
Gatecliff	1				1	1.9%
Pin Stem	1				1	1.9%
Pinto			1		1	1.9%
Desert Side-notched					0	0.0%
Cottonwood Triangular					0	0.0%
AL (% of total)	35 (64.8%)	3 (6%)	2 (6%)	14 (24%)	54	

Note: * more obsidian points were recovered than submitted for geochemical source identification.

Figure 7.10 Representative examples of projectile point types (Catlog numbers appear parenthetically below tool image). Top row, left to right: Elko Corner-notched, Humboldt fragment, Rosegate Corner-notched, Rosegate Corner Notched. Bottom row consists entirely of Rosegate Corner-notched series points.

Eighteen obsidian projectile points recovered from the sample and identified as Rosegate, Elko, or Pinto recovered were subjected to geochemical sourcing by Craig Skinner and Northwest

Obsidian Laboratory. Results in Table 7.3 indicate a majority (n=12, 66.6%) of them, regardless of type, were manufactured from Beatty's Butte obsidian, which is located 30 miles or 48.28 km from Mortar Riddle (Figure 7.11). The other sources represented cover an area of roughly 15,500 km^2. These sourcing data hint at both the travel range and the repeated patterns of movement that were part of the larger settlement system.

Table 7.3 Obsidian projectile point types by geochemical source.

Point type	Associated dates (BP)	Geochemically sourced artifacts					Total
		Beatty's Butte	Double H / Whitehorse	Double O	Massacre Lake / Guano Valley	Rimrock Spring	
Rosegate	1500 - 600	9	1	2	1		13
Elko	3000 - 1500	2	1			1	4
Pinto	5000 - 2700	1					1
Total		12	2	2	1	1	

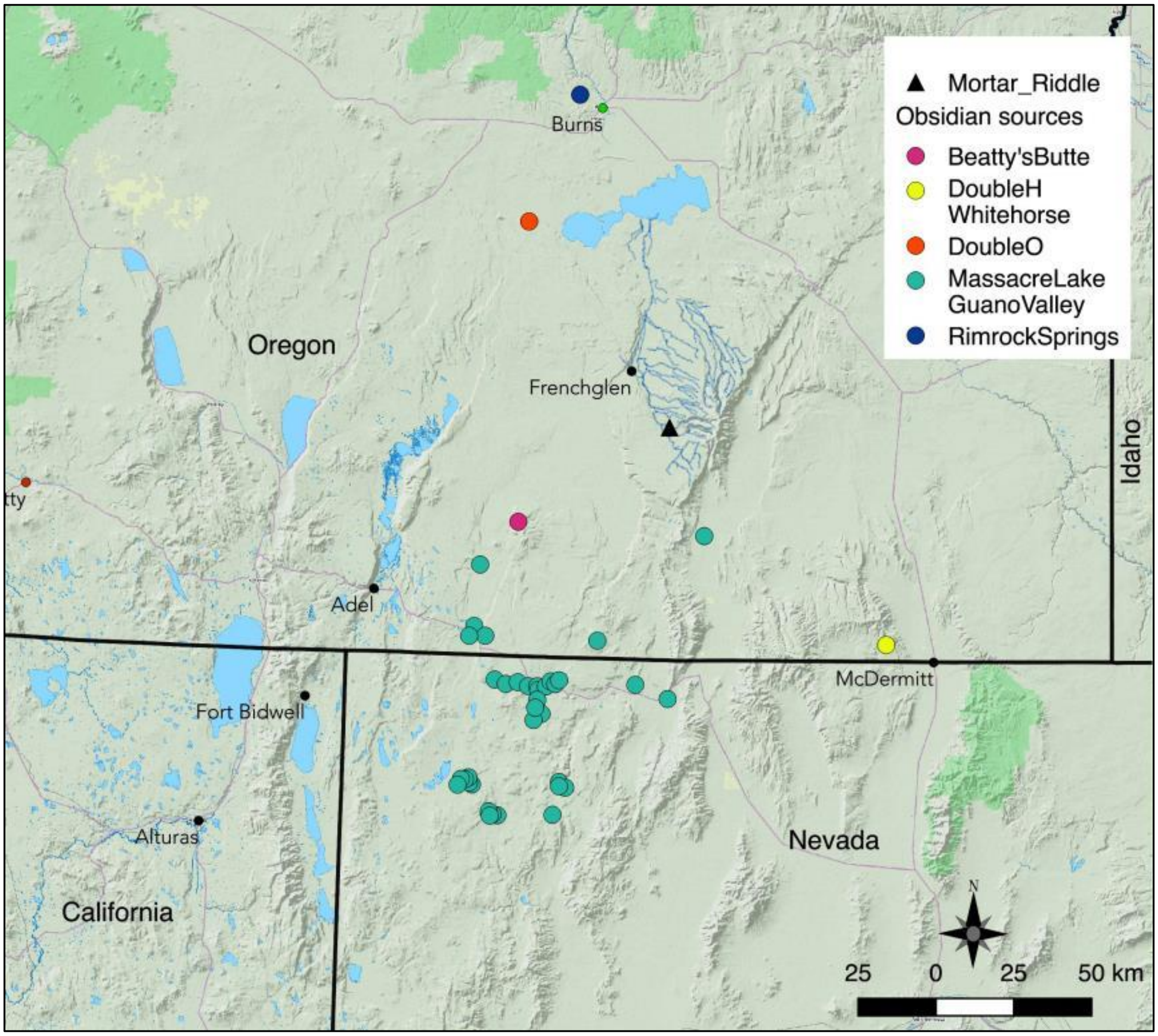

Figure 7.11 Mortar Riddle sample typologically diagnostic projectils points manufacted from obsidian geochemically sourced to locations indicated in the map.

Other flaked stone tools recovered *in situ* reflect the continuum of flaked stone tool manufacture. Scrapers, utilized flakes, and cores are most prevalent (Table 7.3). A single chopper was manufactured from cryptocrystalline silicate; its form and size would have been suitable for cutting the branches of smaller trees and shrubs. There were two flaked stone drills, one manufactured from obsidian and the other from cryptocrystalline silicate, suggesting that household occupants worked holes into materials with a range of textures. One basalt and one obsidian biface were recovered from the hearth area. Scrapers were manufactured from obsidian,

basalt, and cryptocrystalline silicate. Given the range of raw materials represented by both bifaces and scrapers it seems likely that the residents engaged in cutting and scraping both soft and hard materials. Utilized flakes, expediently produced and mostly of obsidian, were identified both in and outside the house. One utilized core made of basalt was recovered from the house floor lens, east of the ready-to-use mortar. Four additional basalt cores and one cryptocrystalline silicate core were also recovered, suggesting the residents were prepared to make additional flaked stone tools as needed.

Table 7.4 Other, non-projectile flaked-stone tools.

Other tools	Obsidian*	CCS	Basalt	Indeterminate Material	TOTAL	
Utilized flake	6	1	2	2	11	16.4%
Scraper	5	1	3	1	10	14.9%
Drill	1	1			2	3.0%
Chopper		1			1	1.5%
Uniface	1				1	1.5%
Blade			1		1	1.5%
Biface	1		1		2	3.0%
Utilized core			1		1	1.5%
Core			4	2	6	9.0%
Can not determine	16	1	1	14	32	47.8%
Total	30	5	13	19	67	

The spatial distribution of flaked stone tools adds another layer of information about household activities. Projectile points were abundant (n=42) and widely dispersed within the house (Figure 7.12); perhaps the most striking aspect of their distribution are the areas where they are absent. The largest of these two "empty" spaces is along the west side of the house and the second is south of the hearth. The former may represent a sleeping area. Other tool types (drill, scraper, utilized flake, uniface, biface, chopper) are less abundant and also generally absent from this area. The latter may represent a lithic reduction area from which finished tools were removed; debitage exhibits very high concentrations just south of the hearth (Figure 7.13), suggesting this

area may have served as a place to work flaked stone and/or to collect debris from such activity. If the clustering of the smallest debitage represents an active drop zone, the knapper would have had the proximity of the hearth for light and warmth.

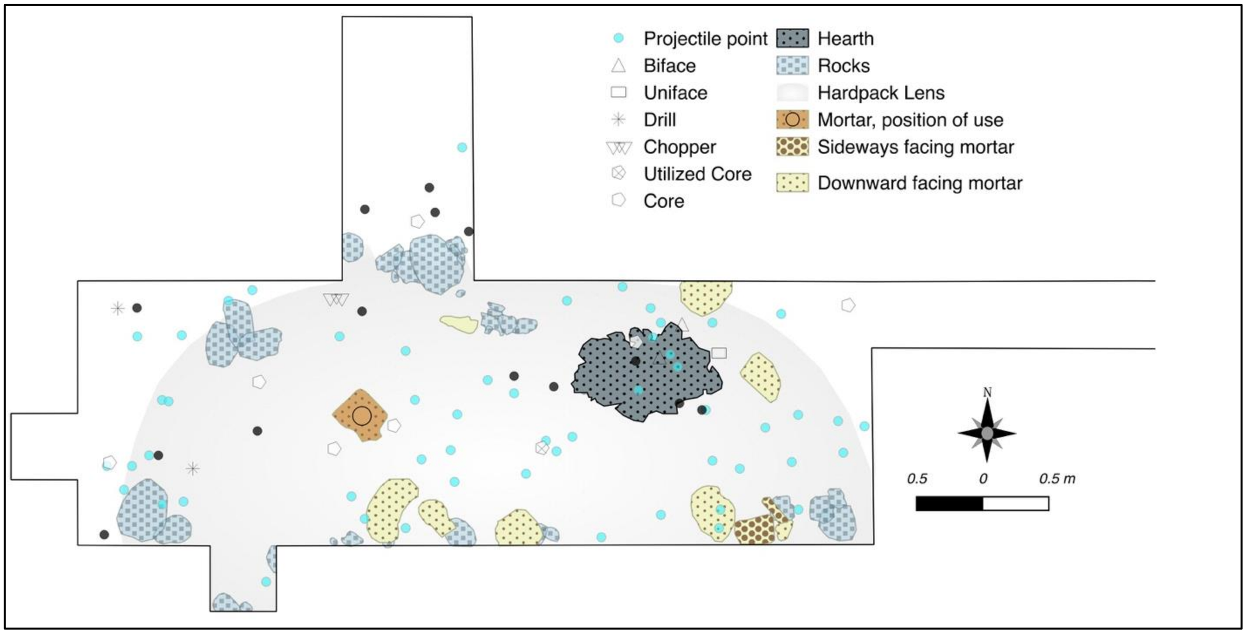

Figure 7.12 North Block plan view: Projectile points recovered *in situ*.

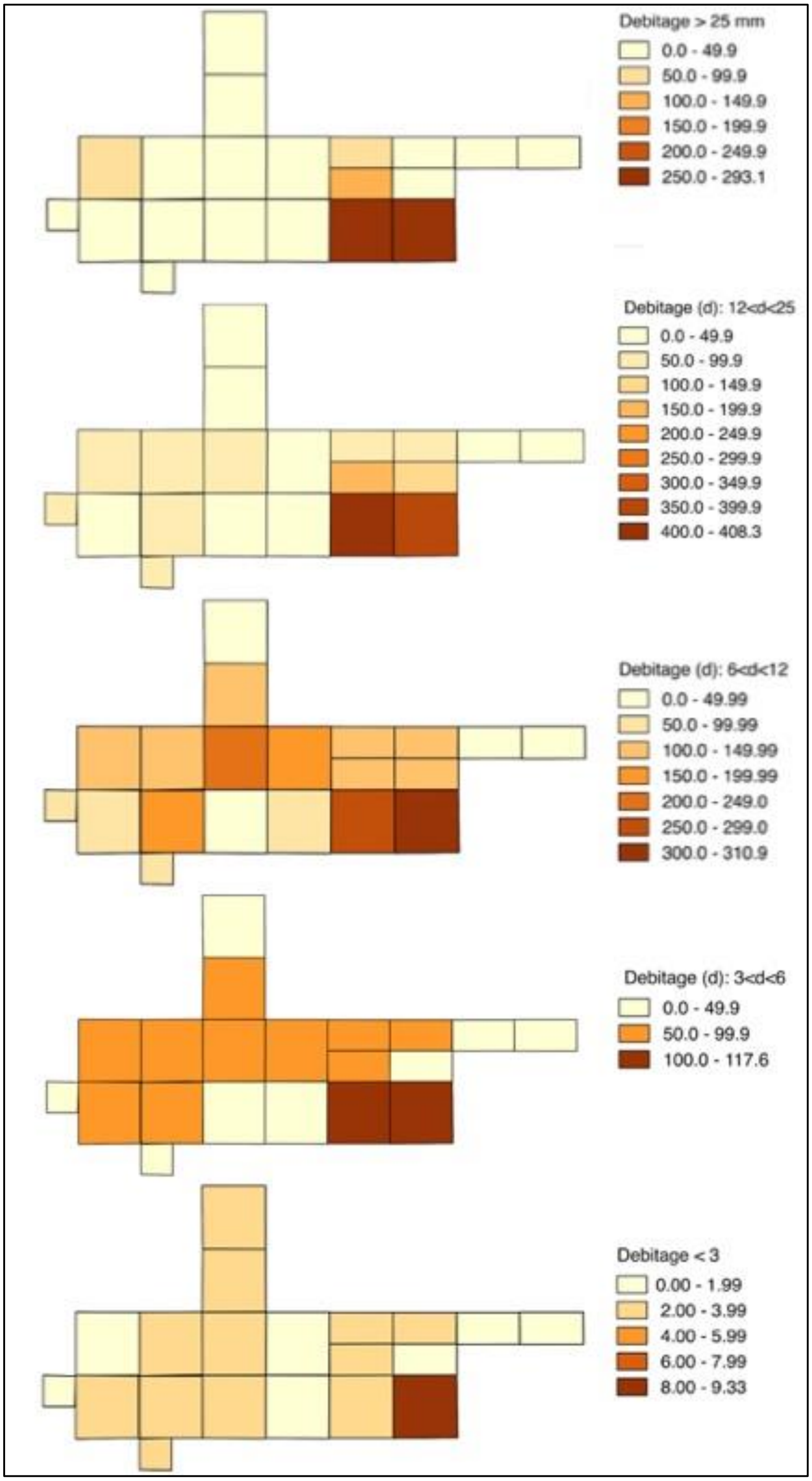

Figure 7.13 Debitage distributional pattern associated with the hearth and beyond the house perimeter. The separate figures show debitage sizes ranging from larger than 25 mm (0.98”) at the top to less than 3 mm (0.12”) at the bottom.

In sum, the presence and spatial location of formal flaked stone tools, utilized flakes, lithic raw material, and debitage represent a variety of household economic behaviors. Dart and arrow projectile points suggest hunting was an important activity. Other formal tools may have been used for a variety of cutting and puncturing and scraping tasks. Both the quantities of artifacts and the diversity of tool types suggest a long-term residence, where many kinds of activities occurred. Clustering of debitage south of the hearth suggests a possible work area for lithic reduction. In agreement with the ethnographic model, residents may have stored many of the formal tools and raw material cores against the inner perimeter of the house walls. Some care appears to have been taken to keep one area within the house, just southwest of the active mortar, clear of sharp-edged objects; this is suggested as a possible sleeping area.

Faunal Remains

Faunal remains provide direct evidence of some of the food resources that were part of daily life for this household. The zooarchaeological sample NISP totals 24,979 and weighs 3157.92 grams (Table 7.5). Diversity of the sample is represented by 5 taxonomic classes, 12 orders, and 23 families. Specimens identified to at least the level of taxonomic Class total 16,770, weigh 2,842.75 grams.

Large mammals dominated the assemblage, though smaller mammals also made a significant contribution to the sample. Birds, fish, and invertebrates were represented in significantly smaller amounts. Identified large mammals include mule deer, elk, bighorn sheep, and pronghorn antelope. Indentified small mammals include marmot, ground squirrel, jackrabbit, cottontail, beaver, porcupine, and chipmunk., Felid, and *Canis* sp. are also represented. Birds and fish were of minor importance but included pheasant, coot, tui chub, trout, and white sturgeon. The minimum number of individuals (MNI) identified in the sample total 34 (Table 7.6).

All identified taxa are endemic to the northern Great Basin except for the *Olivella* sp. specimen, which is from a marine environment the closest of which is 350 miles as the crow flies,

though some species may originate from southern California waters or as far north as the coastal environment of Washington State. The ecology of most animals represented as subsistence within the faunal remains are taxa represented could be expected to be encountered within a few kilometers' walk of Mortar Riddle. Taxa with larger habitat ranges such as pronghorn and mule deer, may require a day's hike to locate and pursue. The model indicates that solitary hunters or small groups of males would pursue large game in such a logistical manner. While Kelly's informants suggest that Surprise Valley Paiute did not hunt big horn sheep, the occupants of Mortar Riddle apparently did.

Specimens were recovered in situ as well as from 1/8" mesh screen in the field. The sample itself is well preserved, but highly fragmentary. There are two clusters of high bone density, one next to the hearth, and the other outside the shelter near its western edge (Figure 7.13). This patterned is also true for burned bone.

Table 7.5 Mortar Riddle Site (35HA2627) sample identified taxa

Identified Taxa				Count	%	Weight (grams)	%
ACTINOPTERYGII				46	0.2%	1.17	0.0%
	Acipenseriformes	Acipenseridae	Acipenser transmontanus	1	0.0%	0.07	0.0%
	Cypriniformes	Cyprinidae		5	0.0%	0.13	0.0%
			Gila bicolor	15	0.1%	0.45	0.0%
	Salmoniformes			9	0.0%	0.24	0.0%
		Salmonidae		0	0.0%	0	0.0%
			Oncorhynchus mykiss	13	0.1%	0.25	0.0%
			Oncorhynchus spp.	3	0.0%	0.07	0.0%
AVES				227	0.9%	33.42	1.1%
	Anseriformes	Anatidae	Anas spp.	2	0.0%	0.24	0.0%
	Gruiformes	Rallidae	Fulica americana	2	0.0%	0.67	0.0%
		Phasianidae	C.f. Phasianus colchicus	1	0.0%	0.03	0.0%

(Table 7.5, cont.)

Identified Taxa				Count	%	Weight (grams)	%
MAMMALIA	Artiodactyl			348	1.4%	49.96	1.6%
		Antilocapridae	Antilocapra americana	25	0.1%	24.22	0.8%
		Bovidae	Ovis canadensis	3	0.0%	27.98	0.9%
		Cervidae		131	0.5%	36.17	1.1%
			Odocoileus hemionus	42	0.2%	39.24	1.2%
			C.f. Odocoileus hemionus	2	0.0%	1.38	0.0%
			Cervus canadensis	1	0.0%	7.31	0.2%
	Carnivora			3	0.0%	0.3	0.0%
		Canidae		1	0.0%	0.28	0.0%
			Canis spp.	12	0.0%	7.3	0.2%
			c.f. *Canis* sp.	2	0.0%	10.03	0.3%
		Felidae	Felis sp.	1	0.0%	0.08	0.0%
			C.f. Lynx rufus	4	0.0%	1.44	0.0%
	Rodentia			1423	5.7%	108.9	3.4%
		Castoridae	Castor canadensis	1	0.0%	1.86	0.1%
		Cricetidae		1	0.0%	0.05	0.0%
			Neotoma sp.	1	0.0%	0.08	0.0%
		Erethizontidae	Erethizon dorsatum	10	0.0%	3.39	0.1%
			C.f. Erethizon dorsatum	1	0.0%	0.2	0.0%
		Murid		6	0.0%	0.69	0.0%
		Sciuridae		36	0.1%	0.98	0.0%
			Marmota flaviventis	162	0.6%	44.9	1.4%
			C.f. Marmota flaviventis	32	0.1%	5.09	0.2%
			Marmota spp.	92	0.4%	18.03	0.6%
			Spermophilus towndsendii	287	1.1%	17.94	0.6%
			C.f. Spermophilus townsendii	40	0.2%	1.49	0.0%
			Spermophilus spp.	297	1.2%	24.16	0.8%
			Tamias minimus	1	0.0%	0.01	0.0%
			Mammal 1	7	0.0%	0.13	0.0%
			Mammal 2	540	2.2%	25.23	0.8%
			Mammal 3	1309	5.2%	71.85032	2.3%
			Mammal 4	2375	9.5%	304.9	9.6%
			Mammal 5	2172	8.7%	1162.64	36.7%
			Mammal 6	2	0.0%	20.05	0.6%
			Mammal X	6968	27.9%	763.24	24.1%

(Table 7.5, cont.)

Identified Taxa				Count	%	Weight (grams)	%
REPTILIA			Serpentes	3	0.0%	0.27	0.0%
VERTEBRATES				2492	10.0%	133.25	4.2%
MOLUSCA				15	0.1%	3.66	0.1%
GASTROPODA		Olivelidae	Olivella sp.	1	0.0%	0.03	0.0%
BIVALVIA				40	0.2%	5.58	0.2%
		Margaritiferidae	Margaritifera falcata	5	0.0%	11.51	0.4%
			UNID	5717	22.9%	191.43	6.0%
			TOTAL	24980		3168.64032	

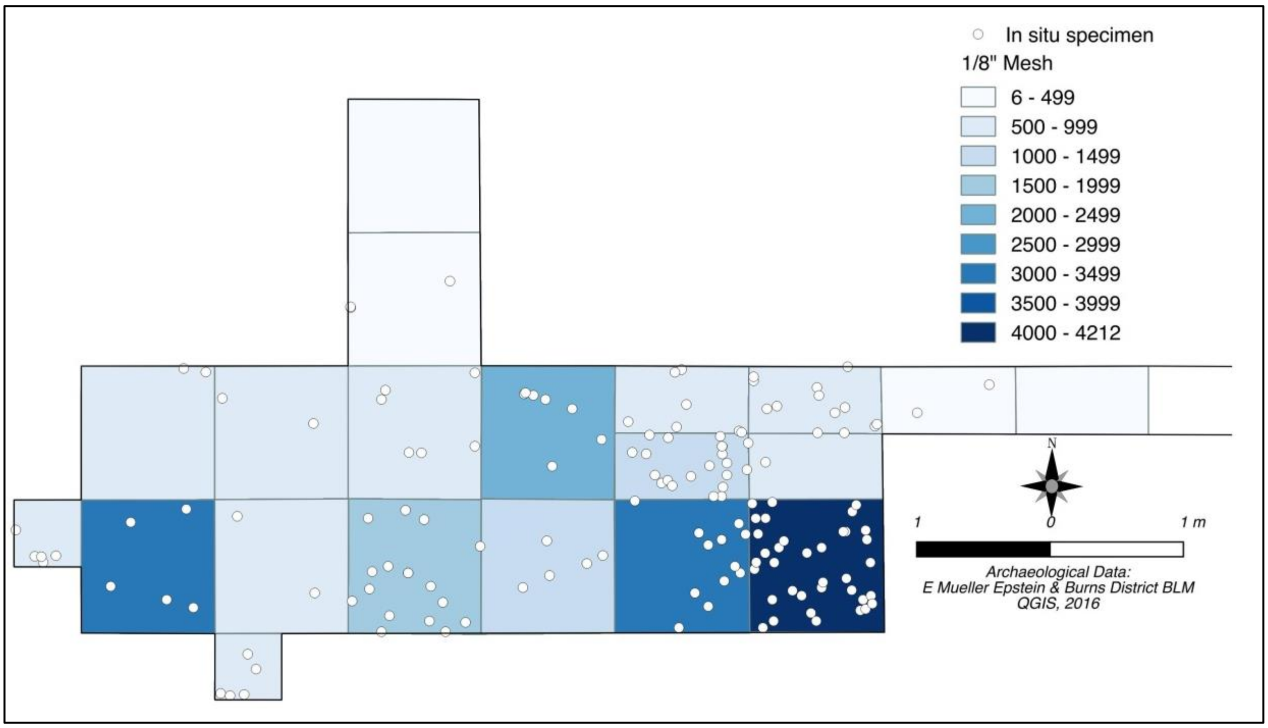

Figure 7.14 Subject Sample Fauna Recovered In situ and Choropleth Indicating Relative Concentration of Faunal Specimens (By Count) Recovered From 1/8" mesh.

Table 7.6 Minimum number of individuals (MNI) identified within the Mortar Riddle subject sample.

MNI	Common Name	Scientific name
1	White sturgeon	Acipenser transmontanus
2	Tui chub	Gila Bicolor
1	Trout	Onchrynchus mykiss
1	Coot	Fulca americana
1	Pronghorn antelope	Antilocapra americana
3	Mule deer	Odocoileus hemionous
1	Elk	Cervus elaphus
1	Bighorn sheep	Ovis canadensis
2	Coyote/dog*	Canis sp.
1	Jackrabbit	Lepus californicus
1	Cottontail	Sylvilagus nuttali
1	Beaver	Castor canadensis
1	Porcupine	Erethizon dorsatum
7	Marmot	Marmota flaviventris
7	Ground squirrels	Spermophilus townsendii
1	Chipmunk	Tamias minimus
1	Western Pearlshell	Margaritifera falcata
1	Olivella	Olivella sp.
1	Pheasant	C.f. Phasianus colchicus
1	Lynx	C.f. Lynx rufus

Bone modifications, including cut marks, breakage patterns, and thermal alteration, can provide useful clues to how and where an animal was butchered and cooked. Roughly 35% of the sample showed such modifications (Figure 7.15). Most of the burned bone collected in situ was recovered within proximity of the hearth feature, regardless of size-class (Figure 7.16). Fractured bone was clustered in the southeastern corner of the housefloor (Figure 7.17). In contrast, while a few cut specimens were collected *in situ* southwest of the hearth feature, most of the screen-recovered cut specimens were concentrated in the western portion of the excavation block, in the area outside the western wall of the house (Figure 7.18). Viewed in combination this suggests that some butchering and discard may have occurred outside the house, while final food preparation and cooking occurred inside near the hearth.

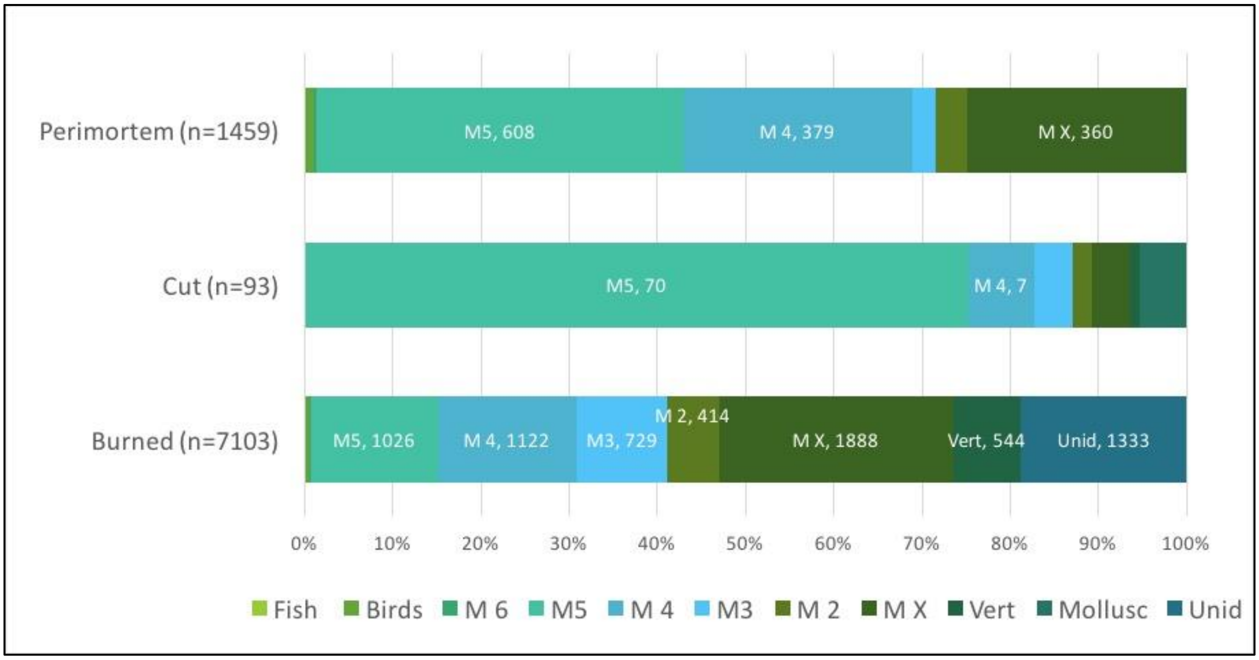

Figure 7.15 Subsistence-related Modifications b=By Taxon and Size Class. Mammal Identified to a Size Class are noted by and "M" followed by the Arabic Numeral Indicating the Size Class, a Comma, and then the NISP Value.

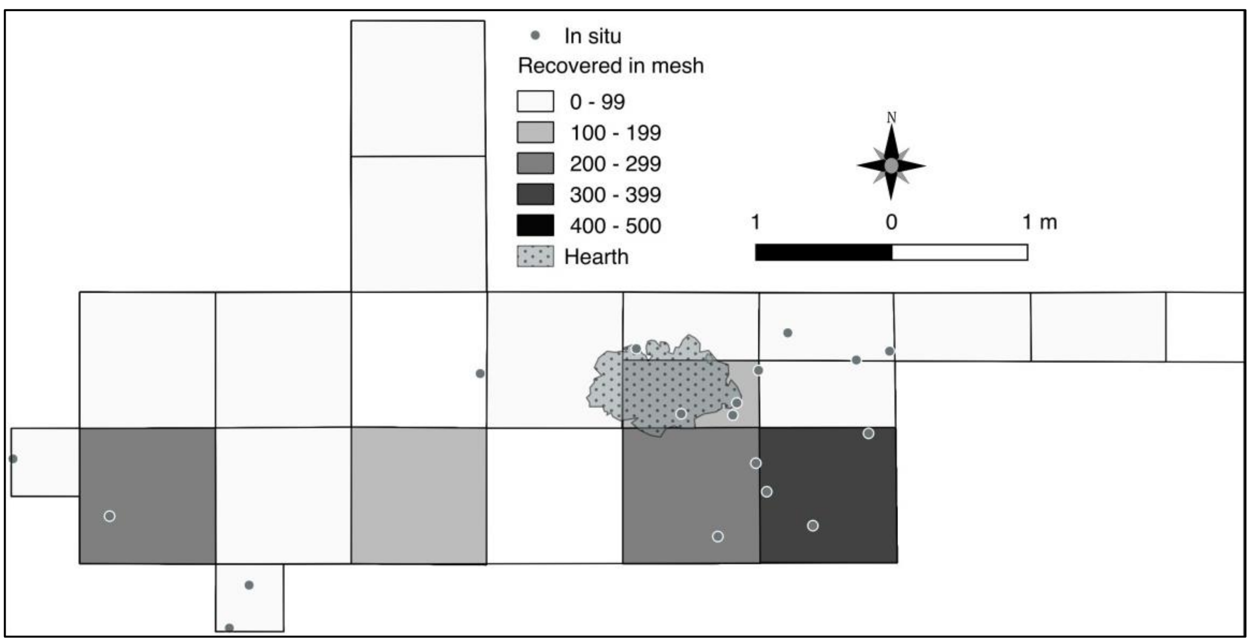

Figure 7.16 Thermally Altered Subject Sample Fauna Recovered In situ and Choropleth Indicating Relative Concentration of Thermally Altered Faunal Specimens (By Count) Recovered From 1/8" mesh.

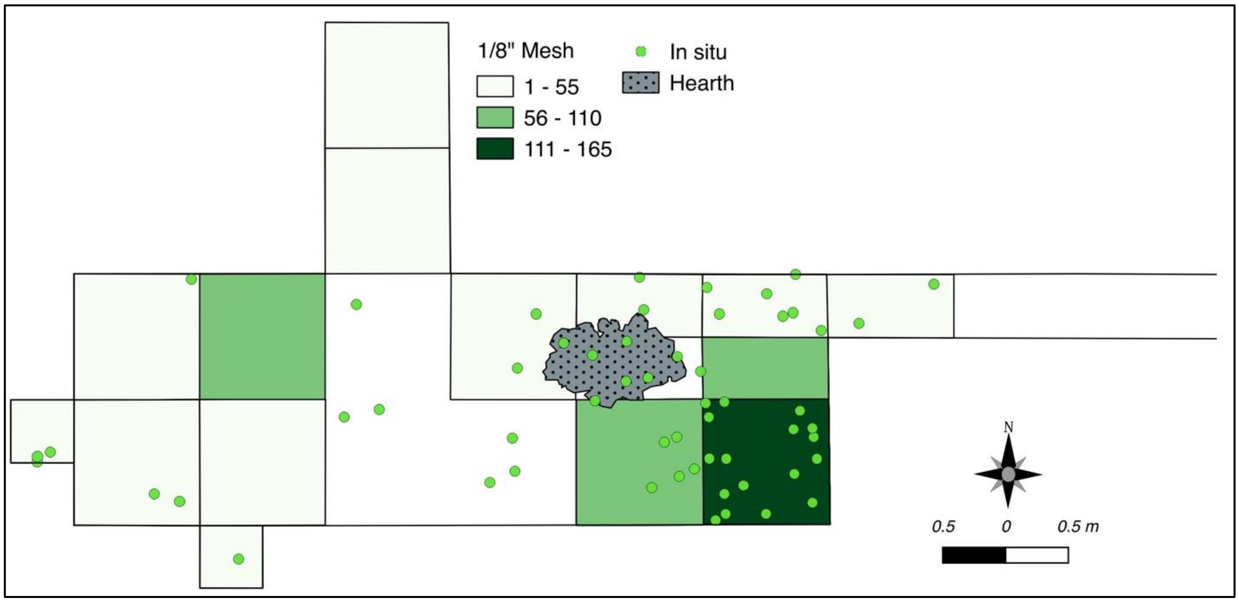

Figure 7.17 Subject Sample Fauna Recovered In situ with Perimortem Modificiation and Choropleth Indicating Relative Concentration of Faunal Specimens (By Count) with Perimortem Modifican Recovered From 1/8" mesh

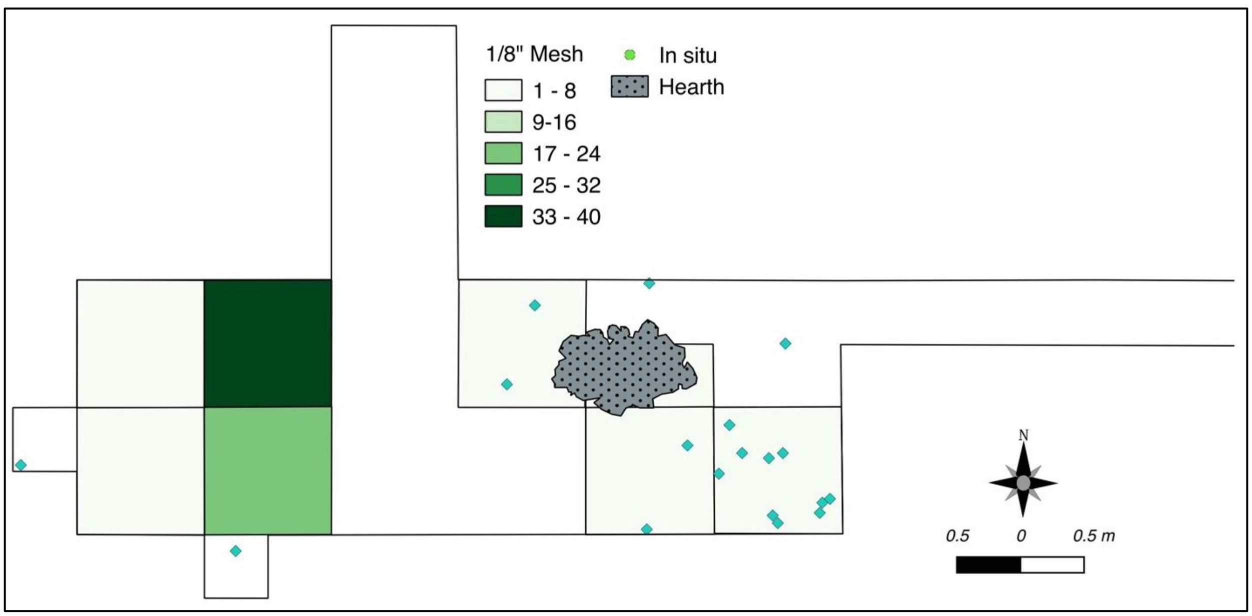

Figure 7.18 Subject Sample Fauna Recovered In situ with Cut Marks and Choropleth Indicating Relative Concentration of Faunal Specimens (By Count) with Cut Marks Recovered From 1/8" mesh

Large mammal body part representation reveals both high and low utility portions of deer, but only low utility parts of pronghorn, and only low and moderate utility parts of bighorn sheep (Figure 7.19 – Figure 7.21). All three large game animals are represented by teeth or other cranial fragments; given that these remains were found inside a dwelling (not at a kill site), it suggests that

complete carcasses were carried to Mortar Riddle. Given the high degree of fragmentation of the bone at this site, some of the lack of high utility body parts may be explained by a combination of taphonomic processes and small sample size. It is also worth noting that while the abundance of projectile points suggest house residents included able hunters, large game is often shared among hunter-gatherers, and our sample is currently limited to a single house within a larger community; some of the missing high utility parts may be represented in other, as of yet unexcavated, houses.

Teeth also provide a line of evidence for when an animal was hunted by indicating the age and season of death. Dental remains representing a yearling mule deer suggest the deer was dispatched June or early July. A deciduous mandibular second premolar represents what is most likely *Canis* sp. –dog or coyote- not older than 9 months. Female coyotes are monoestrus and breed between late January and late March and gestation lasts nine weeks. This places the age at death for this individual during the winter. Marmot's are also monoestrus with young born about six weeks post thaw. Marmot deciduous cheek teeth are fully developed one month later and are replaced by permanent molars at 4 to 4.5 months. Thus, loose cheek teeth with incomplete root development indicate marmot death sometime between late summer and fall.

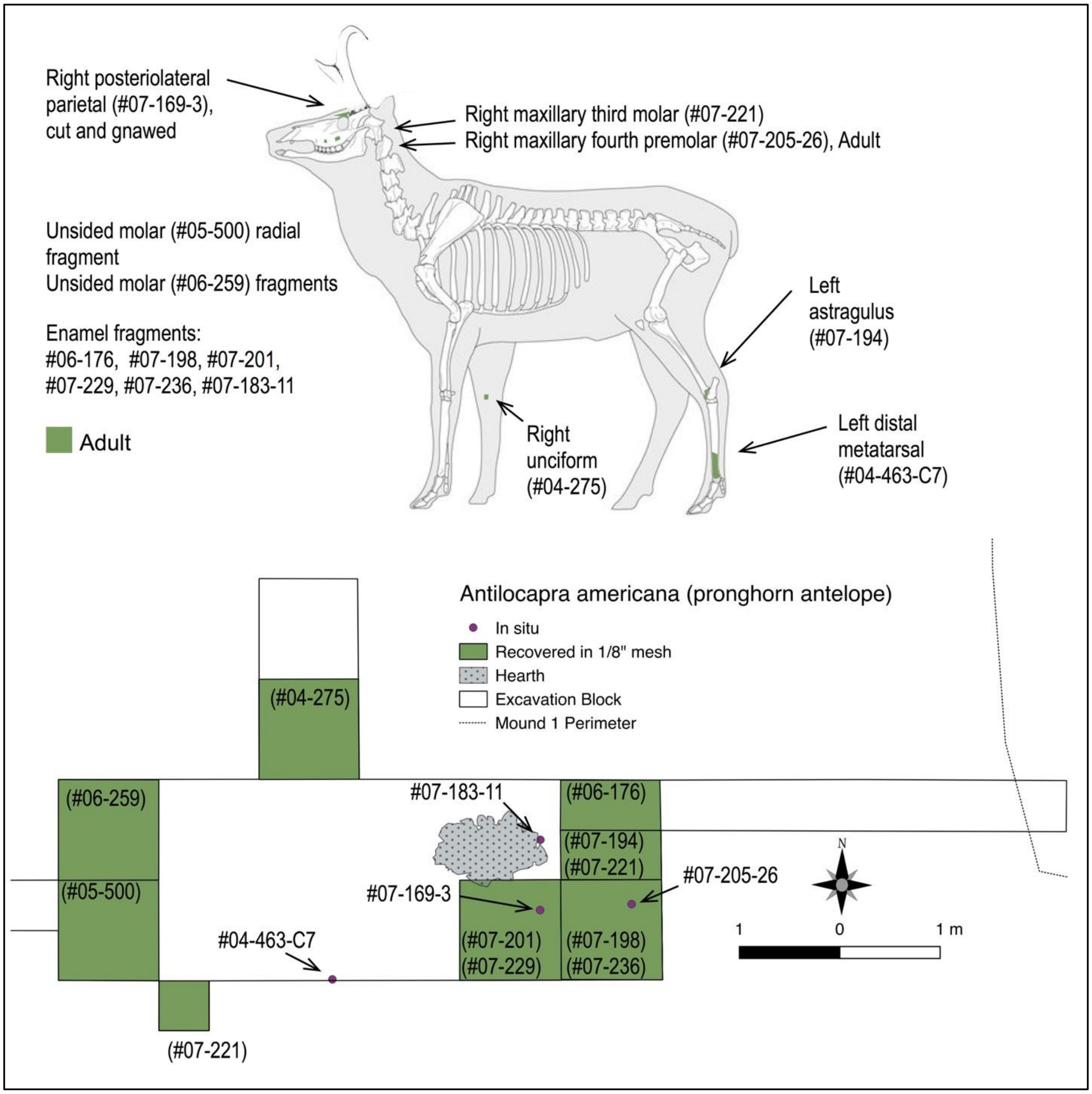

Figure 7.19 Pronghorn antelope specimens recovered from Mortar Riddle Site subject lens, in situ and from 1/8" mesh.

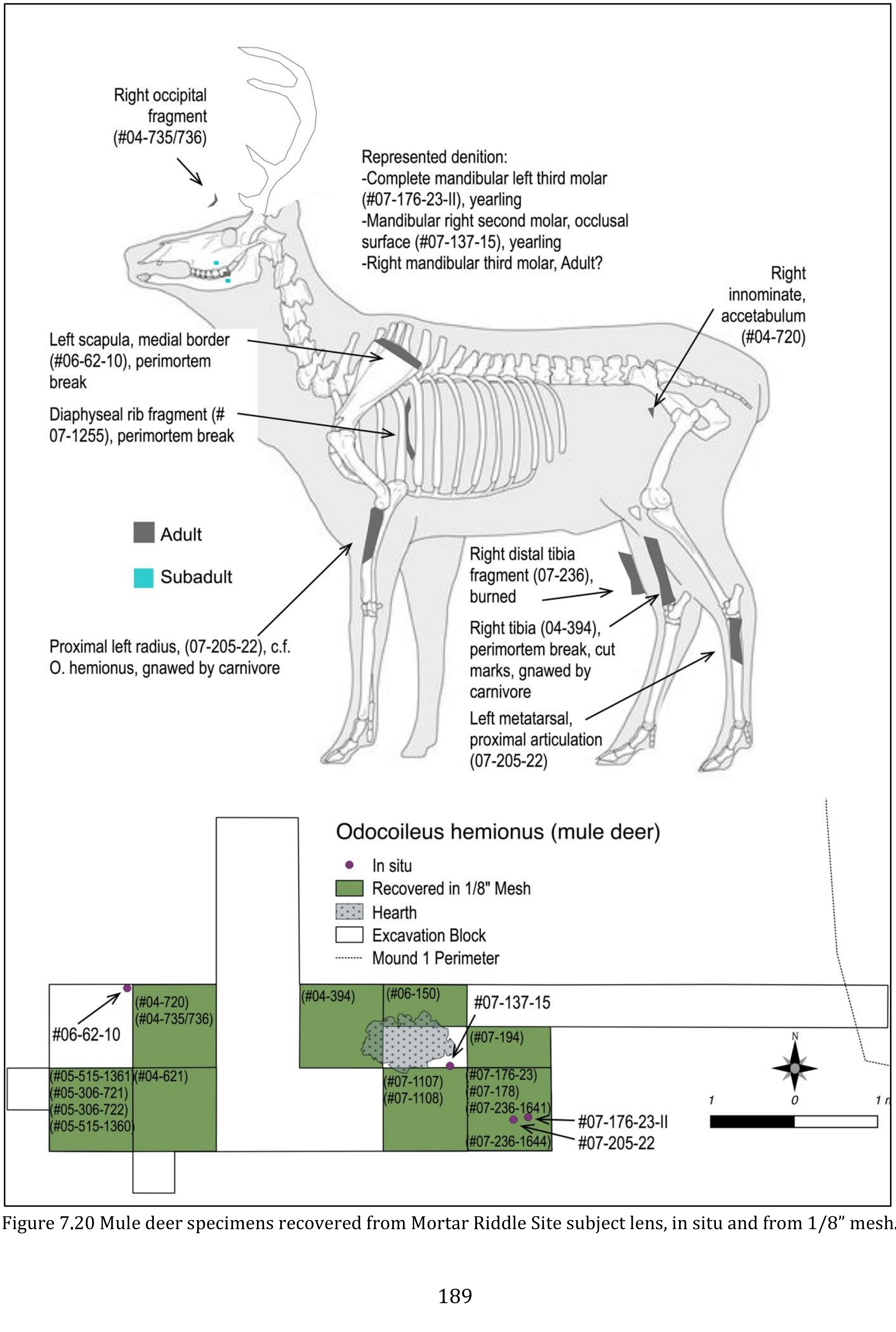

Figure 7.20 Mule deer specimens recovered from Mortar Riddle Site subject lens, in situ and from 1/8" mesh.

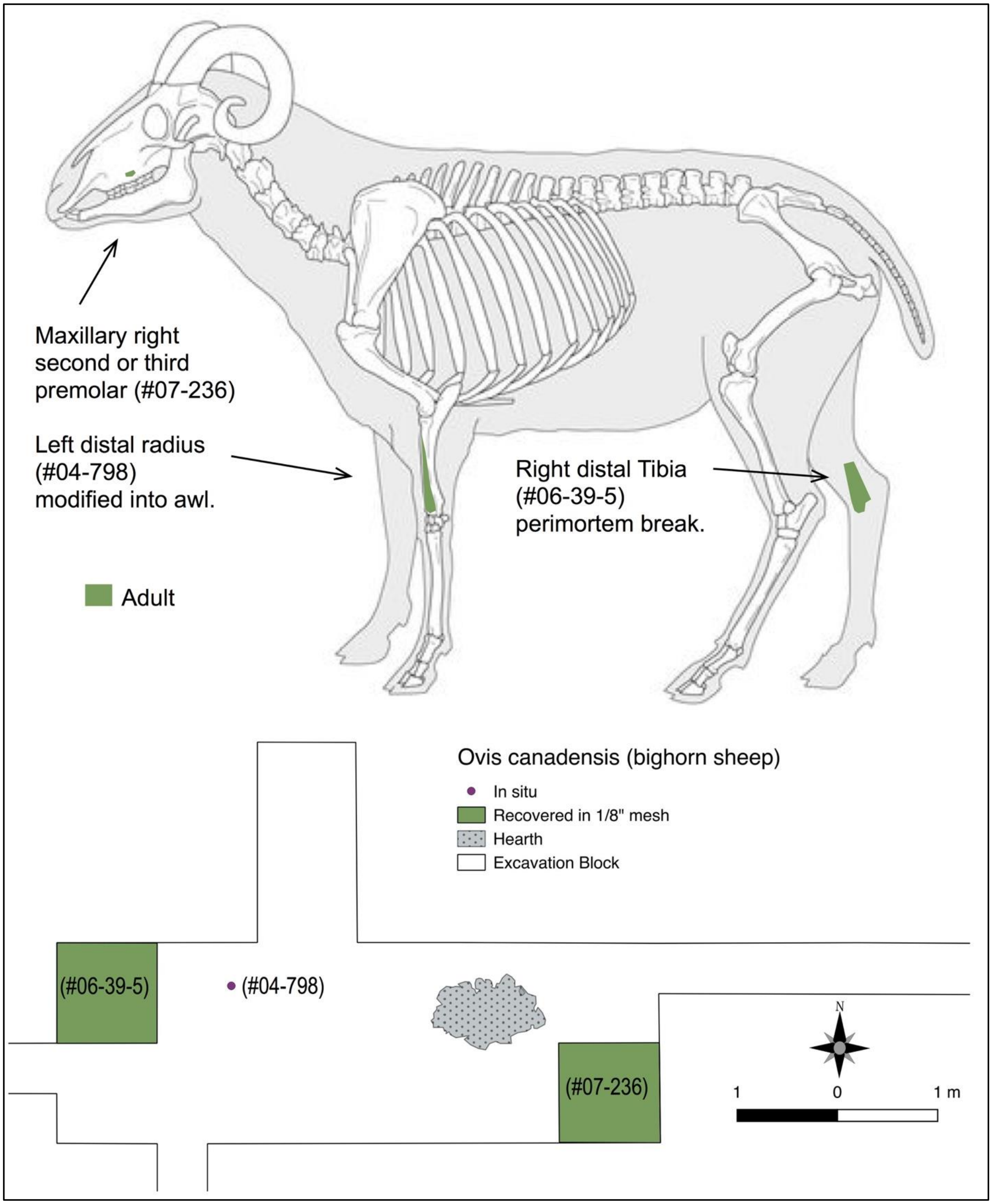

Figure 7.21 Bighorn sheep specimens recovered from Mortar Riddle Site subject lens, in situ and from 1/8" mesh.

Worked bone provides another line of evidence for the kinds of activities that were part of daily life at Mortar Riddle. There were 23 formal bone artifacts identified (Figure 7.22). These consisted of beads (n=17), game pieces (n=4), and bone awls (n=2) (Figure 7.23). These artifacts suggest that residents used objects of ornamentation and incorporated gaming into their social life. Gambling is an important social activity to the extent that the Surprise Valley Paiute travelled to a 'gambling grounds' near Beatty, Oregon (Kelly 1932:172). The model indicates bone awls were used in house production, while manufacturing basketry, and drilling shell beads or pipe bowls (Kelly 1932:104, 118, 120, 140). In ethnographic times, beads carried a monetary value (Kelly 1932:117). One could pay for a doctor/shaman's services with beads, doctor's used beads in treating their patients, individuals valued their beads as containers of metaphysical power, one may offer beads in hopes of making amends for social transgressions, and, if stolen, could result in the loss of power (Kelly 1932: 191, 202).

The formal bone artifacts for which source fauna could be identified were most frequently made from mammal bone (n=9), followed by bird bone (n=2). There were also two items made from mollusk shell (n=2). There was no direct evidence of bone-working in the house in the form of obvious manufacturing by-products, such as a scored but unbroken bead blanks. Although the stone tool assemblage included items that could be used to cut, scrape, drill, and abrade bone or shell.

Five formal bone artifacts were collected in situ (Figure 7.24), two meters or more west of the hearth. The bone artifacts found there include a bone tube, a game piece, the proximal portion of a pendant, and two bone awls. Considering the distribution of the formal bone artifacts, formal ground stone and flaked stone tools the image of the domestic floor surface sharpens (Figure 7.25). While food processing activities appear to be focused in the area near the hearth, formal bone artifacts are found within the otherwise empty space in the southwestern part of the house, hypothesized as a sleeping area. At least two hypotheses can be offered: these may have been lost

while sleeping or gaming in the sleeping area, or they may have been intentionally tucked into bedding or near the house wall perimeter, as valuable items to be kept out of common work areas.

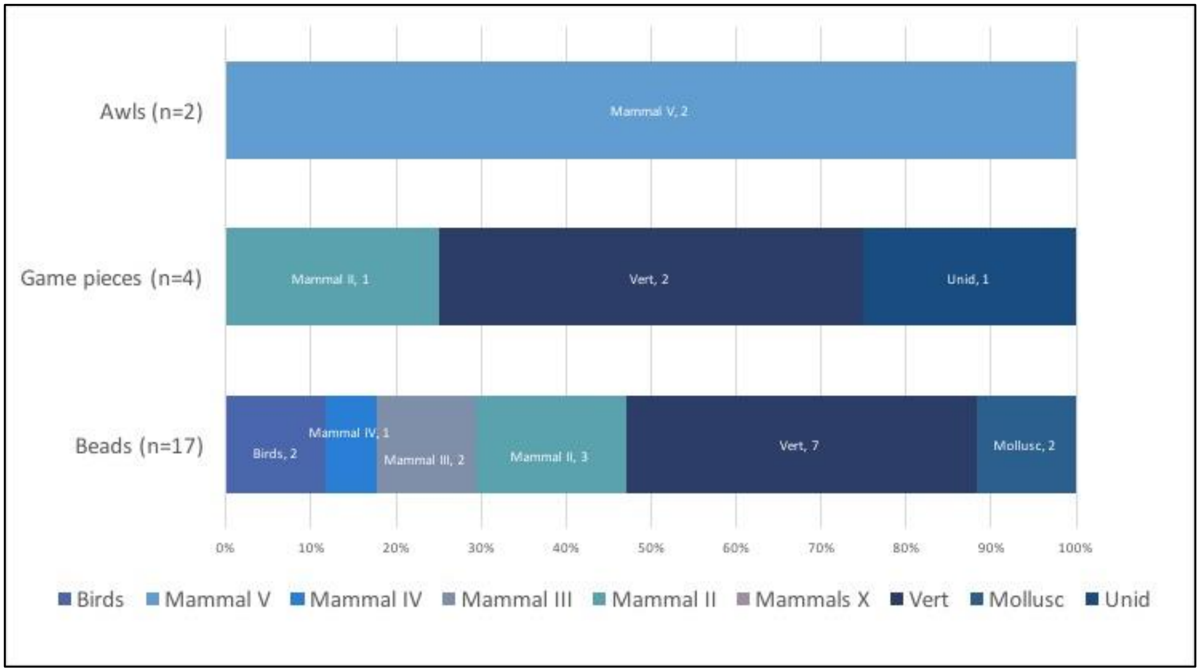

Figure 7.22 Formal Bone artifacts identified within the Mortar Subject samples by taxonomic class. Identified mammals are organized by size-class.

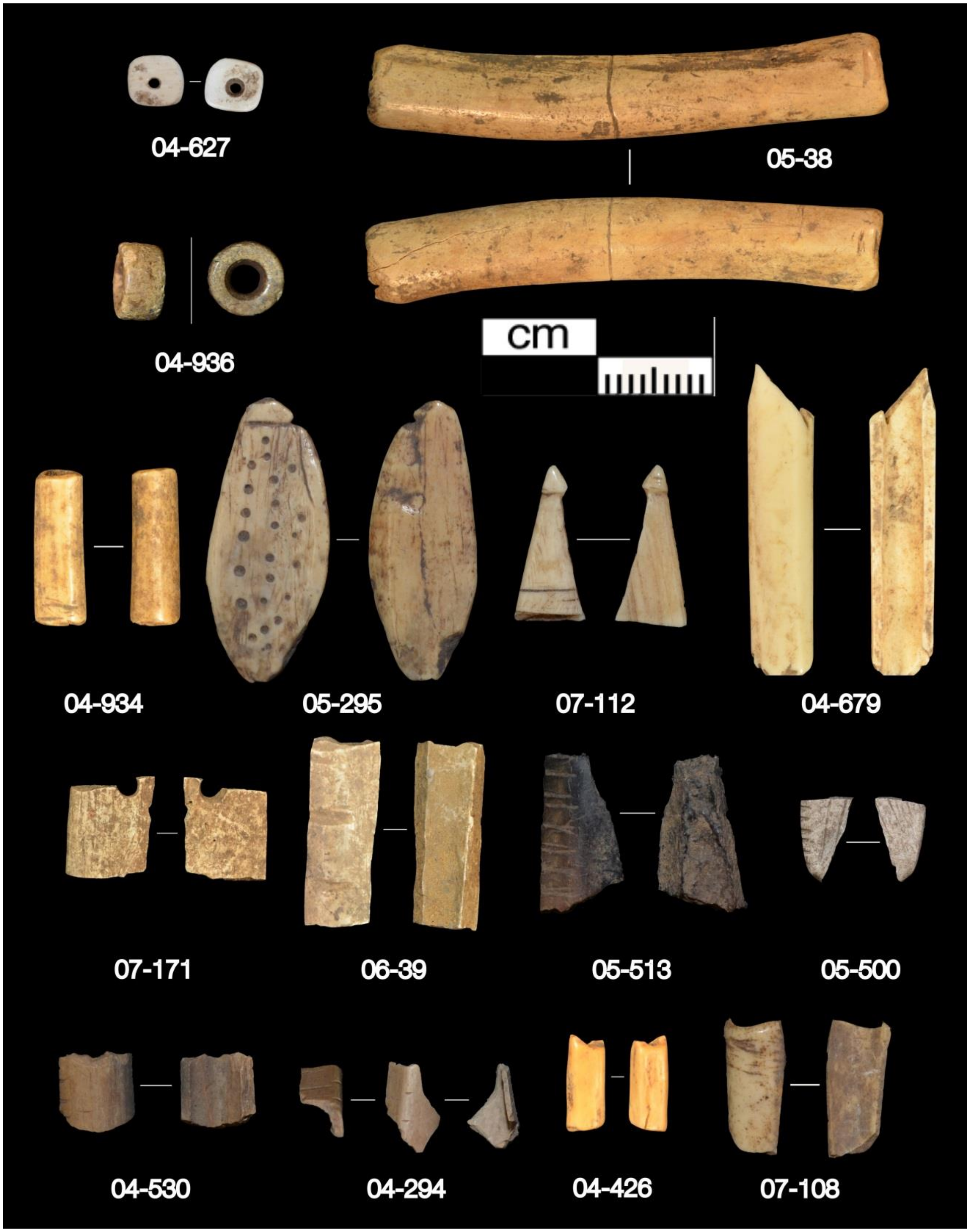

Figure 7.23 Mortar Riddle subject sample formal bone beads, pendants, and tube. Top row: *Olivella* sp. whorl bead (04-627) large bead bone tube (05-38). Second row: steatite bead (04-936) and reverse of large bone tube (05-38). Third row: bone bead (04-934), incised pendant/game piece (05-295), possible broken pendant or head scratcher (07-112), longitudinally fractured bone bead (04-679). Fourth row: drilled calcinated compact bone fragment (07-171), scored calcinated bone tube fragment (06-39), scored and burned bone fragment (05-513), scored and calcinated bone fragment (05-500). Fifth row: scored and burned bone bead fragment (04-530, 04-294), bone bead with small score mark (04-426), bone bead fragment (07-108).

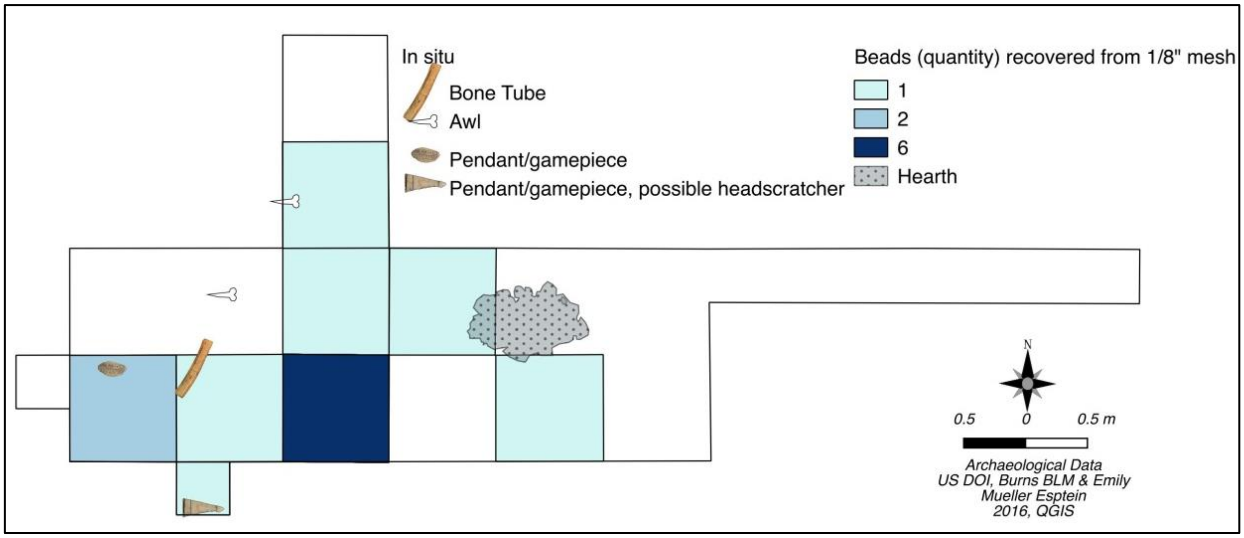

Figure 7.24 Subject Sample Fauna Recovered In situ with Cut Marks and Choropleth Indicating Relative Concentration of Faunal Specimens (By Count) with Cut Marks Recovered From 1/8" mesh

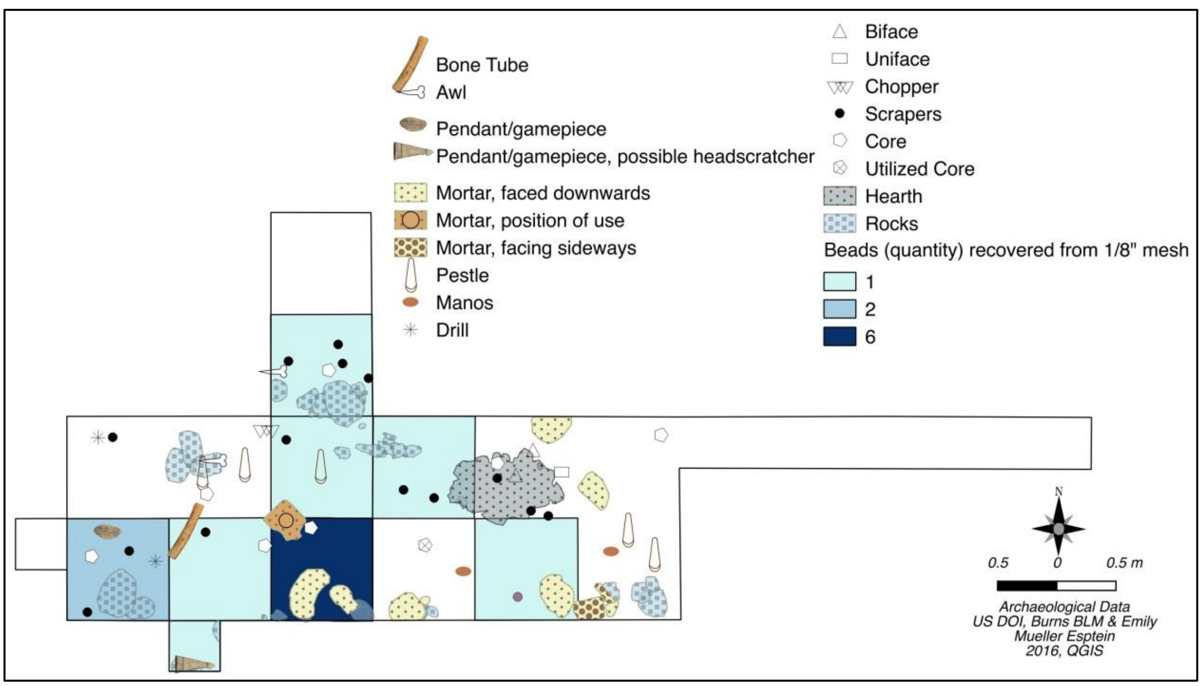

Figure 7.25 The Mortar Riddle Site subject sample formal artifacts within the North Block.

In sum, the Mortar Riddle Site (35HA2627) archaeology includes a house floor, evidence of a structure, and the spatial inside the house consistsent with a possible sleeping area, cooking area, and plant processing area. Plant processing was obviously of significant importance to residents at this site and the abundance of mortars, according to the model suggests, a reliance on hard seeds

and seeds are associated with collection activities in the late summer/early fall. Evidence indicative of hunting includes the abundance of projectile points as well as faunal specimens representing subsistence taxa according to the model, except for the presence of a beaver tooth and a single white sturgeon scut. As discussed above, juvenile deer and marmot teeth, respectively, suggest site use during the spring and fall. The presence of the coyote mandible with teeth indicative of a yearling coyote suggests winter site use. Residents exhibit evidence for connections far beyond Tse'tse'ede in the represented marine shell bead and flaked stone artifacts geochemically sourced to distant locales. While the subject house floor lens dates to a period that becomes increasingly drier and warmer –turning to drought ca 700 years BP- the evidence above suggests a successful food security strategy that involved a mixed economy of gathered plants and diversified hunting at the household level, with use of a substantial dwelling during fall, winter, and spring. This dwelling was located in the uplands adjacent to a riverine system. Of course, this floor lens is but one window into the past, a matter to which I return in the next chapter.

ROARING TRIANGULATION SITE (35HA385)

The second study site is Roaring Triangulation. I focus on two components of the site, both of which predate the dry-period house at Mortar Riddle. The first stratum dates to cal 1995 – 1560 BP and is associated with a drier period. The second, and later, stratum dates to cal 1215 – 1150 BP and is associated with a relative increase in moisture. First I evaluate the evidence for a living surface, an archaeological lens providing the material signatures of a hearth and the structural remains of a house.

Early (Dry) Component

The earlier component includes the archaeological remains of a compacted lens of charcoal and fire-hardened earth, with a scatter of fire-cracked rock, and ash deposited in two separate locations of the excavation block (Figure 7.26). A hearth may have been more localized towards the south wall and became dispersed following its use. An alternative explanation is a hot stone bed, as

described in the model (Chapter 5). There is some indication that an arc of rocks with a diameter of less than 2m ringed this use area, but their organization is somewhat ambiguous and we did not observe any evidence of a superstructure, such as postholes (Figure 7.27). The variety of lithic artifacts and faunal remains associated with the lens is indicative of domestic activities, when compared to Mortar Riddle, but the relatively low numbers of both, in combination with the lack of evidence for postmolds, suggests a more ephemeral type of shelter and a more temporary use of the site.

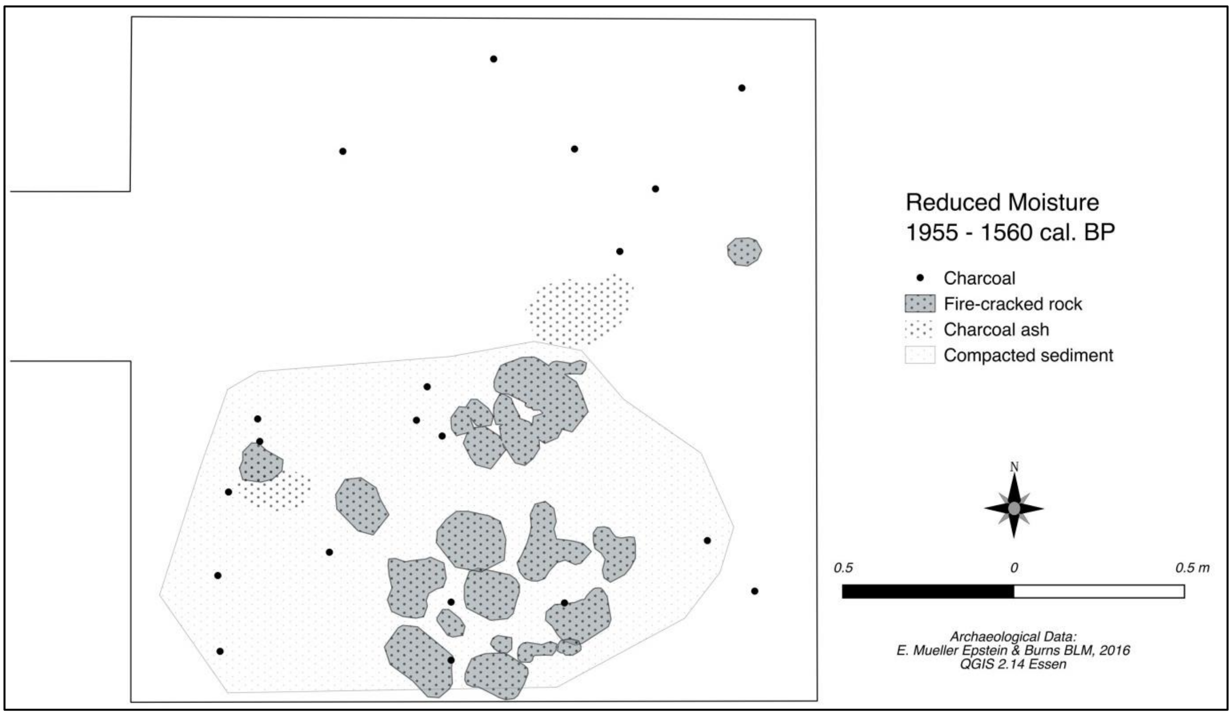

Figure 7.26 Roaring Triangulation Site Early Subject Stratum (cal BP 1995 – 1560) warmer period of reduced effective moisture. Distribution of in situ recovered charcoal samples, the compacted sediment lens, and hearth feature.

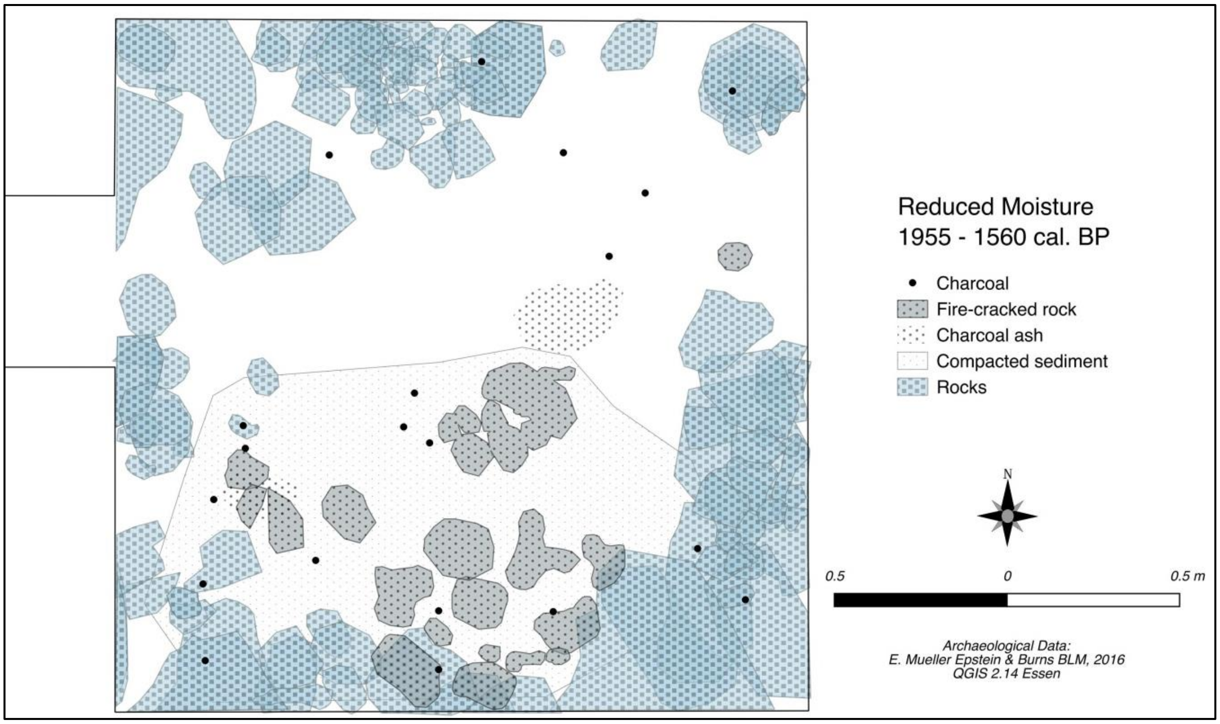

Figure 7.27 Roaring Triangulation Site Early Subject Stratum (cal BP 1995 – 1560) warmer period of reduced effective moisture. Distribution of identified basalt rock boulders.

Having established the presence of domestic activities at Roaring Triangulation, the next set of questions concerns the types of associated subsistence activities represented by artifacts and faunal remains. What hunting and gathering activities are evidenced and how do their spatial distribution contribute to our understanding of the use of this household space?

Ground Stone

There were seven complete ground stone tools identified in the early component. One nether stone, one pestle (Figure 7.28), and four additional hand stones were recovered in a linear pattern running northwest to southeast in the north half of the early stratum, while an additional hand stone was recovered in association with the hearth. All hand stones were recovered within a drop zone (1.2 meter) of the nether stone (Figure 7.29). The nether stone exhibits a centrally placed hammer strike on the use surface and a negative flake scar radiating from the impact strike on the opposite surface (Figure 7.30); it is unclear whether this was intentional or accidental damage. Four additional fragments of hand stones were recovered north of the hearth feature (Figure 7.31);

perhaps these fragmented stones were repurposed as a cooking stones or for the stones used in a sweat lodge, both activities (Kelly 1932:98, 202-204). Before one used the rocks for either purposes, they were placed in the coals of a fire. After they were heated, one would then remove the rocks to the sweat bath or to be placed in a basket of water. Individuals lined some baskets with pitch to them water proof. When cool water touches the hot stones, the rocks may break in reaction to the termperature differential. Exposing the in a fire and then placed in water held within waterproof baskets, a cooking technique documented

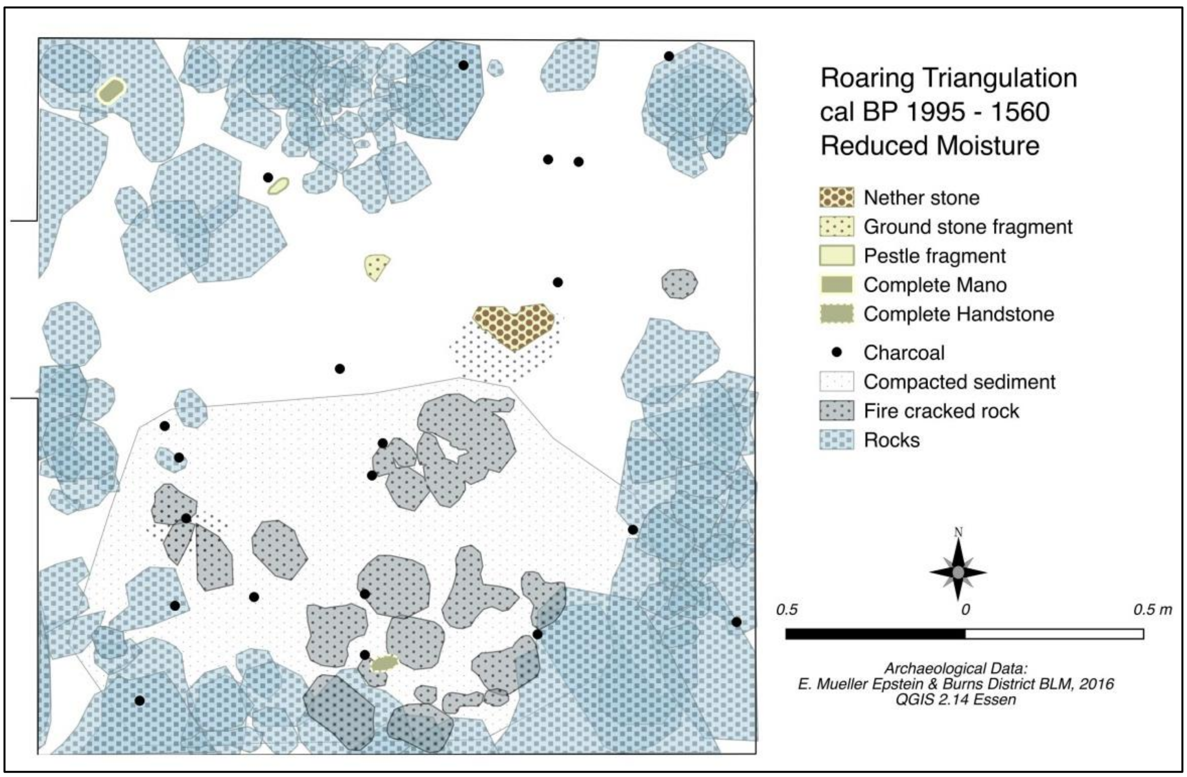

Figure 7.28 Roaring Triangulation Site Early Subject Stratum (cal BP 1995 – 1560) warmer period of reduced effective moisture. Distribution of identified ground stone artifacts.

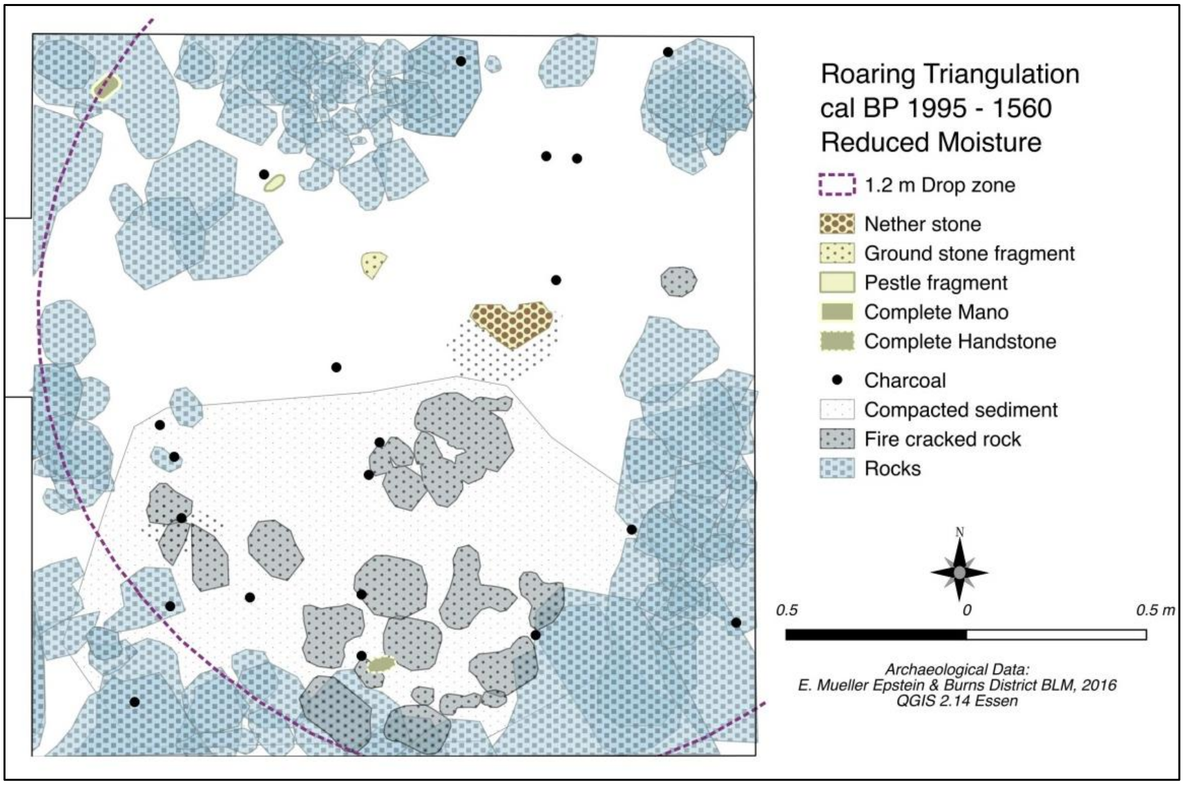

Figure 7.28 Roaring Triangulation Site Early Subject Stratum (cal BP 1995 – 1560) period of reduced effective moisture. Drop zone (1.2 meter) perimeter around nether stone artifact.

Figure 7.29 Roaring Triangulation Site Early Subject Stratum (cal BP 1995 – 1560) period of reduced effective moisture. a) Nether stone impact strike on use-surface and b) flake scar on inferior surface.

Figure 7.31 Hand stones recovered from Roaring Triangulation Site Early (Dry) period.

Ground stone artifacts are associated with plant processing, indicating that this was one of the subsistence activities of the residents of this dwelling. Great Basin ethnographic models indicate that women were typically responsible for most plant processing. While the investment in netherstones during the arid climatic regine at Roaring Triangulation is much less than that seen during the arid climatic regime at Mortar Riddle, plant foods were part of the subsistence strategy at both dry-period sites. Roaring Triangulation is less than a mile from a spring (Roaring Springs). Less drought-tolerant plants, like grasses, may have survived in proximity to functional springs when their distribution declined elsewhere as a result of reduced precipitation. As a contemporary

example, Great Basin wild rye (*Elymes spp.*) with a tremendous tap root, tends to grow in locations where a matrix with some depth retains adequate moisture.

Flaked Stone

Both atlatl and spear points, indicative of big game hunting, were recovered *in situ* from the early component. There are three of these: one Northern Side Notched, one large necked Stem point, and one point of an indeterminate style (Table 8.7; Figure 7.32). Two of the projectile points were recovered in the southwest part of the dwelling and the third was found more centrally, closer to the hearth and the nether stone (Figure 7.33).

All points recovered *in situ* were manufactured from obsidian geochemically sourced to Beatty's Butte (Figure 7.34). Three additional projectile points were recovered from the screen; these include one Gatecliff Split Stem and a possible Pinto point, both manufactured from obsidian geochemically sourced to Double H/Whitehorse, and another Northern Side Notched manufactured from obsidian geochemically sourced to Beatty's Butte. Both local obsidian sources are located towards the mountain's southern margin on the east and west sides. Together, the locations of the two obsidian sources and the site suggest a trade or traveling range that covered a nearly 28,000 km^2 area. This is nearly double the traveling range defined for Mortar Riddle.

The topographic location of Roaring Triangulation is also worth noting. Beatty's Butte, located in the southern end of Catlow Valley, is clearly visible from the site. The site's 360° view also provides an optimal location for hunting game, especially as the animals travel to or from the perennial Roaring Springs. It also provides a good vantage point for spotting other people moving through the valley.

Table 7.7 Roaring Triangulation Site Early Subject Stratum (cal BP 1995 – 1560) period of reduced effective moisture. Projectile point styles recovered from the early Roaring Triangulation Subject component.

Point Type	Associated Dates (BP)	Beatty's Butte	Double H / Whitehorse	Total
Gatecliff Splitstem	5000 - 3000		1*	1
Northern Side-notched	6500 - 4500	2*		2
Pinto	5000 - 2700		1*	1
Indeterminate		2		2
Total		4	2	

Note: Asterix indicates one projectile point was recovered from 1/8 mesh

Figure 7.32 Projectile point syltes recovered *in situ* from the the Roaring Triangulation Site Early Subject Stratum (cal BP 1995 – 1560) during the period of reduced effective moisture. Left to right: Indeterminate Corner-notched projectile point, Northern Side-notched, Northern Side-notched, and Indeterminate stem.

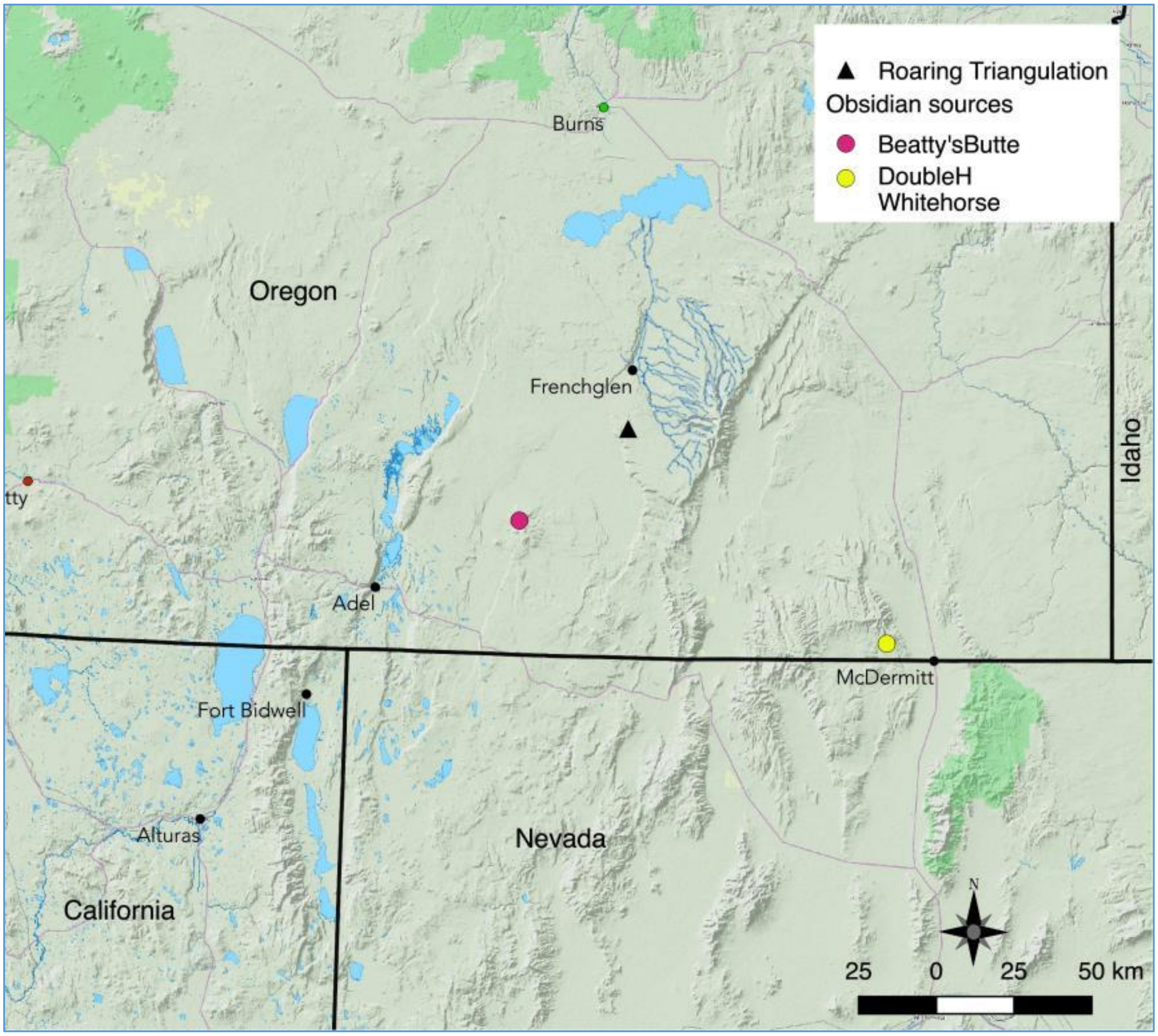

Figure 7.33 Roaring Triangulation early (warmer and drier) sample typologically diagnostic projectils points manufacted from obsidian geochemically sourced to locations indicated in the map.

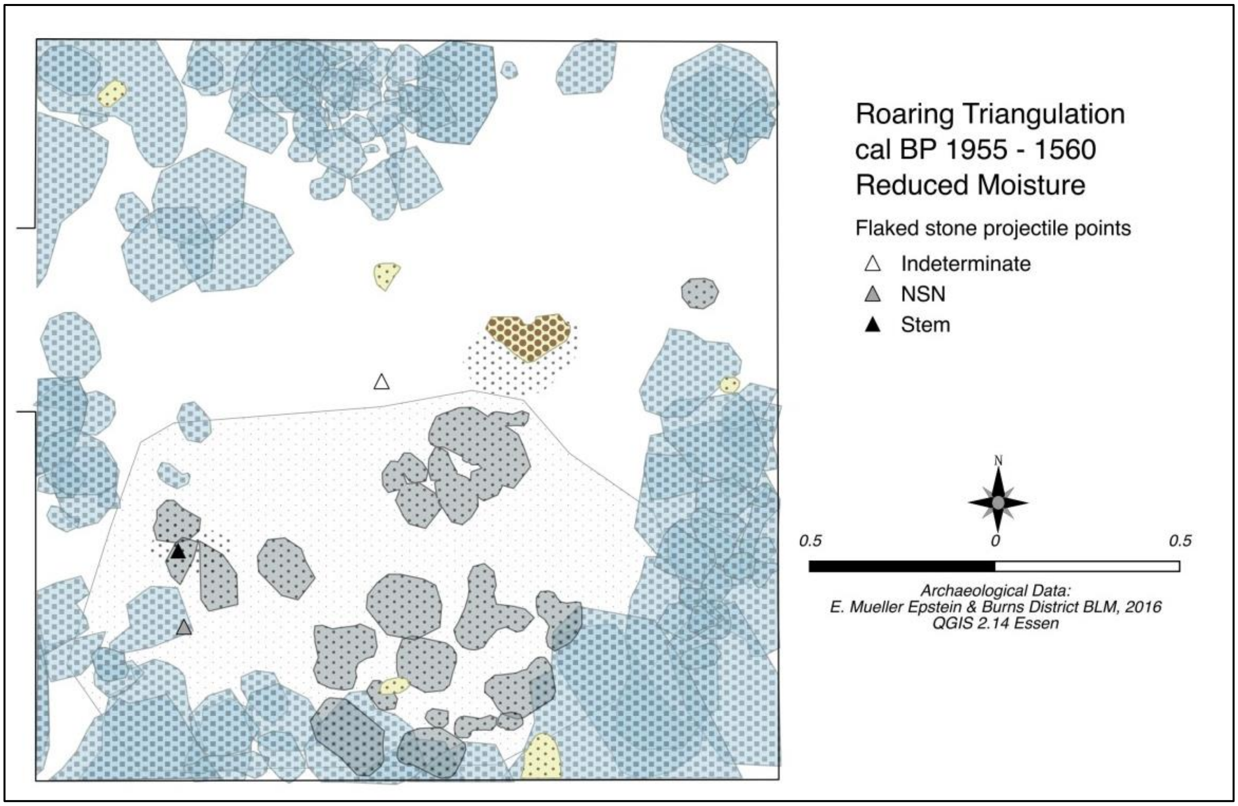

Figure 7.34 Projectile points recovered in situ from the early component at Roaring Triangulation Site.

Table 7.8 Non-projectile point tools recovered from the Roaring Triangulation Site Early Subject Stratum (cal BP 1995 – 1560) during the period of reduced effective moisture.

	Obsidian*	Basalt	Fine grained volcanic	Indeterminate	TOTAL	
Biface	6				6	23.1%
Core/Scraper		1			1	3.8%
Biface/Scraper	1				1	3.8%
Edge only tool	6		1		7	26.9%
Utilized Flake	2				2	7.7%
Scraper	2				2	7.7%
Uniface	2				2	7.7%
Graver reworked from projectile point	2				2	7.7%
Flake Scraper				1	1	3.8%
Perforator	1				1	3.8%
Reworked tool	1				1	3.8%
Total	23	1	1	1	26	

There are 26 other flaked stone tools. These are dominated by bifaces and utilized flakes, though combination scrapers, gravers, and perforators are also prevalent in the sample (Table 7.8, Figure 7.35). The variety of tools suggests site occupants engaged in a variety of both general and precision cutting activities, as well as scraping and perforating. Most of these were made of obsidian (n=23, 88.5%) while one core/scraper is basalt, and one edge only tool is fine-grained volcanic. The spatial distribution of these tools lacks clear organization. Instead there is a light scatter of diverse tool types across the living surface, sometimes in association with the hearth area and ground stone. Larger tools are dispersed along the inside of the stone ring. It should be noted that given the small size of the living surface, the entire area would fall within the drop/reach zone of a centrally-seated individual.

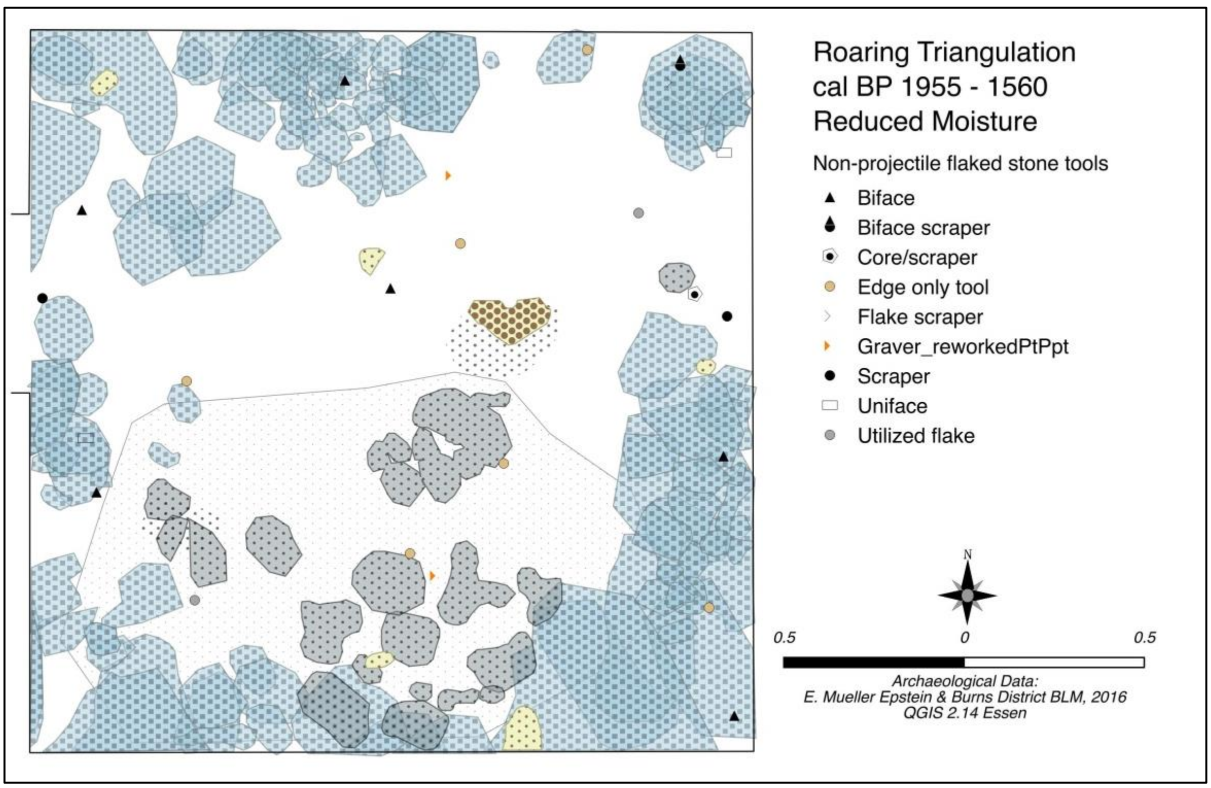

Figure 7.35 Other (non-projectile) flaked stone tools recovered from the early component at Roaring Triangulation Site

Faunal Remains

The zooarchaeological sample NISP totals 610 and weighs 109.07 grams (Table 7.9). Diversity of the sample is represented by three taxonomic classes, five orders, and six families.

Specimens identified to at least the level of taxonomic class total 468 and weigh 66.7 grams (Figure 7.36). Mammals dominated the assemblage, though birds were also identified. Large mammals (e.g., deer) dominated the assemblage in their relative contribution to diet, though midsized mammals (e.g. marmots) out ranked other mammals and birds by count. Specimens were recovered in situ as well as from 1/8" mesh screen in the field.

The sample itself is well preserved, but highly fragmentary. Teeth were often the best preserved specimens used to make species level identifications. Post-cranial specimens were identifiable as such, but cultural subsistence activities reduced elements to fragments with few diagnostic landmarks. Spatially, the highest density of faunal remains is concentrated near the hearth area, immediately to the east and north (Figure 7.37). The minimum number of individuals (MNI) identified in the sample total 10 and include one pronghorn antelope, two big horn sheep (*Ovis canadensis*), one mule deer, one coyote, one jackrabbit, one marmot, and two ground squirrels (Table 7.10). All identified taxa are endemic to the northern Great Basin and to Tse'tse'ede, and are expected among the fauna local to Tse'tse'ede. Juvenile mule deer and marmot remains are respectively indicative of Spring and Summer seasons.

Table 7.9 Roaring Triangulation Site (35HA2627) early sample identified taxa.

TAXON			Count	%	Weight (g)	%
ACTINOPTERYGII			1	0.2%	0.01	0.0%
AVES			3	0.5%	0.39	0.4%
Galliformes	Odontophoridae	C.f. Callipepla californica	1	0.2%	0.06	0.1%
MAMMALIA						
Artiodactyl			5	0.8%	0.52	0.5%
	Antilocapridae	Antilocapra americana	1	0.2%	8.91	8.2%
	Bovidae	Ovis canadensis	2	0.3%	24.02	22.0%
	Cervidae		22	3.6%	3.34	3.1%
		Odocoileus hemionus	2	0.3%	0.51	0.5%
Carnivora	Canidae	Canis sp.	1	0.2%	0.03	0.0%
Lagomorpha	Leporidae	Lepus californicus	1	0.2%	0.09	0.1%
Rodentia			8	1.3%	2.41	2.2%
	Sciuridae		5	0.8%	0.1	0.1%
		Marmota flaviventis	9	1.5%	1.58	1.4%
		C.f. Marmota flaviventis	5	0.8%	0.41	0.4%
		Spermophilus towndsendii	1	0.2%	0.23	0.2%
		C.f. Spermophilus townsendii	14	2.3%	0.58	0.5%
		Spermophilus spp.	32	5.2%	0.73	0.7%
		Mammal 1	4	0.7%	0.04	0.0%
		Mammal 2	28	4.6%	0.68	0.6%
		Mammal 3	242	39.7%	10.79	9.9%
		Mammal 4	121	19.8%	17.3	15.8%
		Mammal 5	49	8.0%	29.99	27.5%
		Mammal X	21	3.4%	4.51	4.1%
		UNID	32	5.2%	2.01	1.8%
		TOTAL	610		109.24	

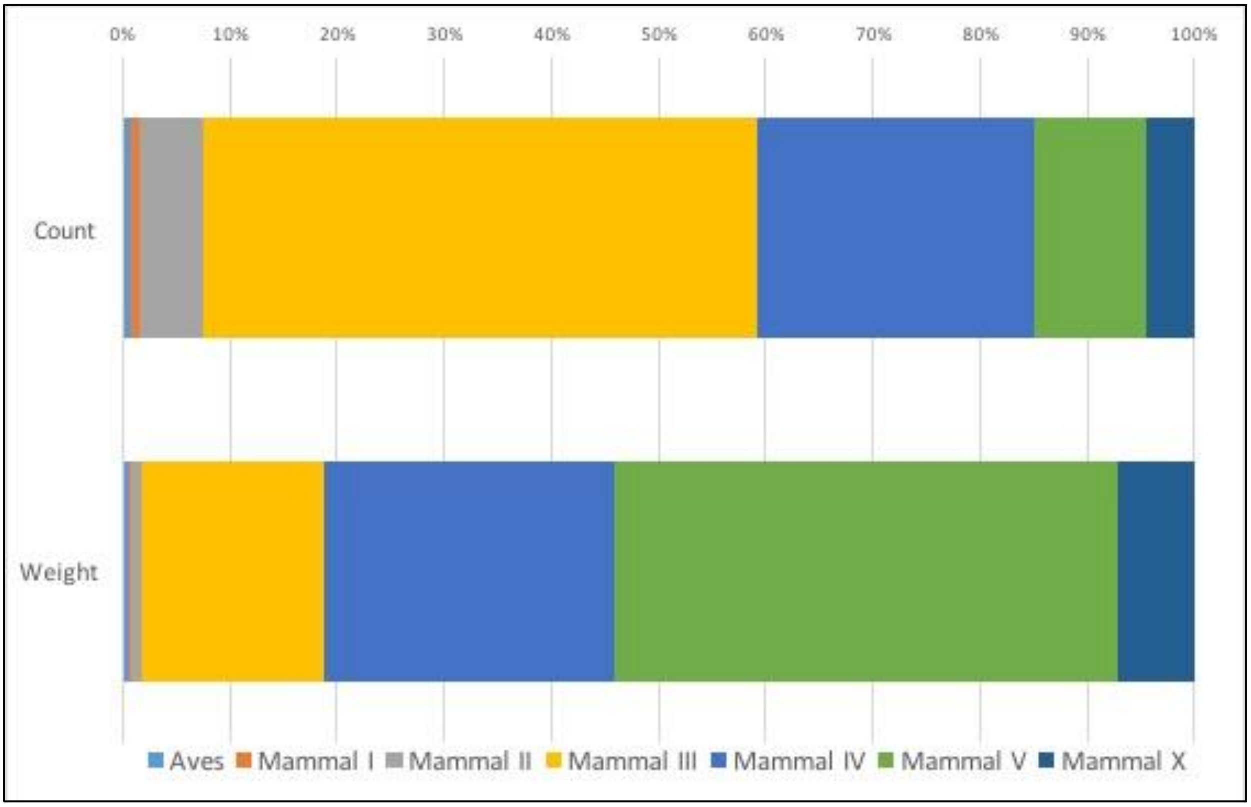

Figure 7.36 Identified taxonomic classes and their relative contribution to NISP and diet (excel Chart)

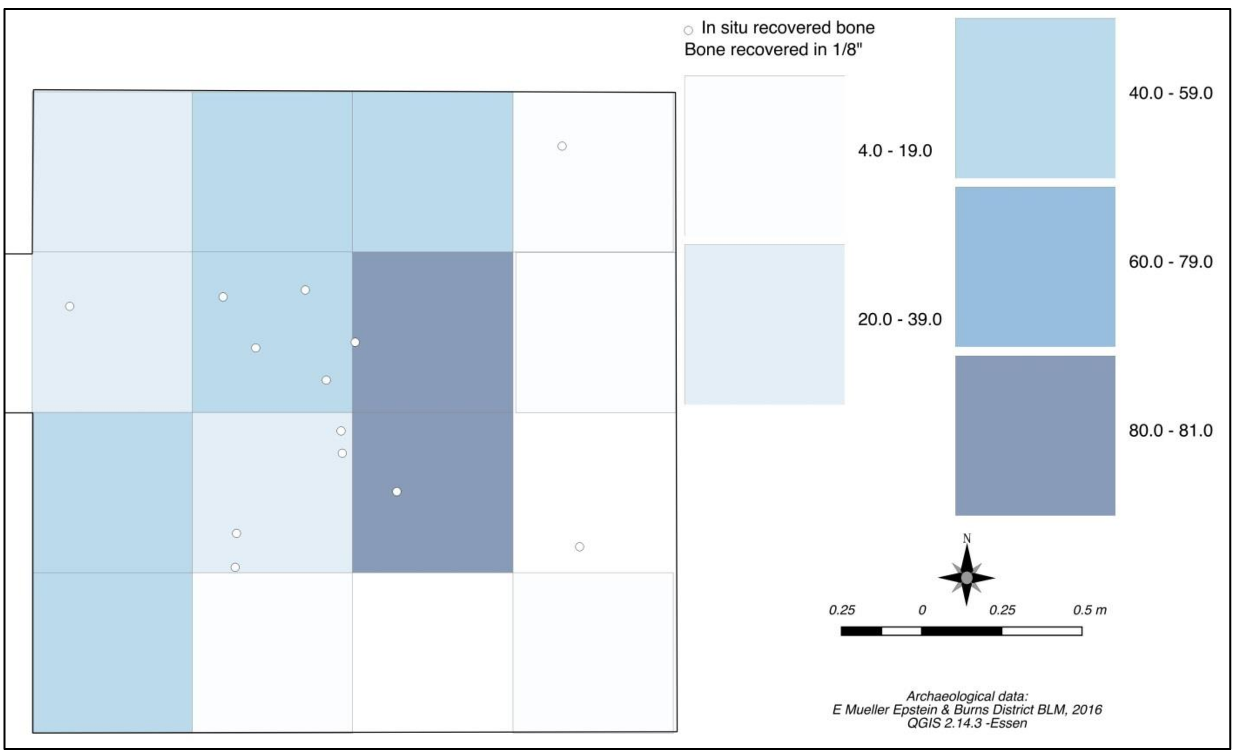

Figure 7.37 Subject sample fauna recovered in situ and the relative concentrations of faunal specimens recovered from 1/8" mesh.

Table 7.10 Minimum number of individuals (MNI) identified within the Early (DRY) period Roaring Triangulation faunal sample.

MNI	Common	Species	Identified specimens
1	California quail-like bird	C.f. Callipepla californica	Left distal ulna
1	Pronghorn antelope	Antilocapra americana	Complete right molar
2	Bighorn sheep	Ovis canadensis	Two right astragali
1	Mule deer	Odocoileus hemionous	Molar crown occlusal
1	Coyote/dog*	Canis sp.	Left canine
1	Jackrabbit	Lepus californicus	Left second maxillary incisor
1	Marmot	Marmota flaviventris	Right and left buccal mandible fragments
2	Ground squirrels	Spermophilus townsendii	Two left rostral fragments

*My results did not facilitate species level distinction between Coyote and Dog

Roughly a third (31.9%) of the faunal remains show modification associated with butchery and cooking activities; they exhibit cut marks, thermal alteration, or fracturing (Figure 7.38). Burned bone ranged between charred and calcined, most representing mammals. Most of the burned bone collected in situ was recovered of the charcoal, ash, and fire-cracked rock in the south half of the excavation block (Figure 7.39. Cut and fractured bone comprised a very small proportion of the faunal remains (1.14%) and were aggregated near the north margin of the floor (Figure 7.40).

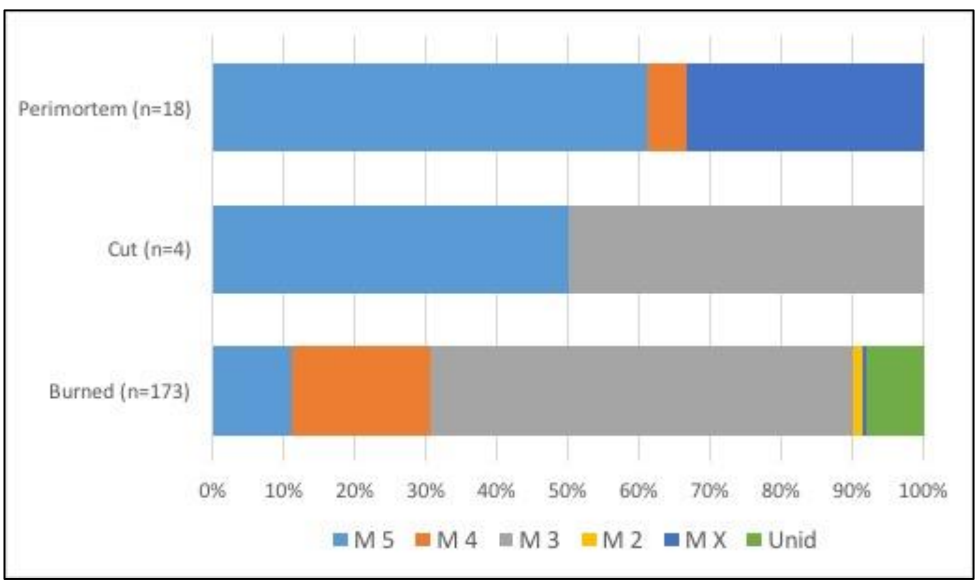

Figure 7.38 Subsistence-related modifications by Taxonomic Class

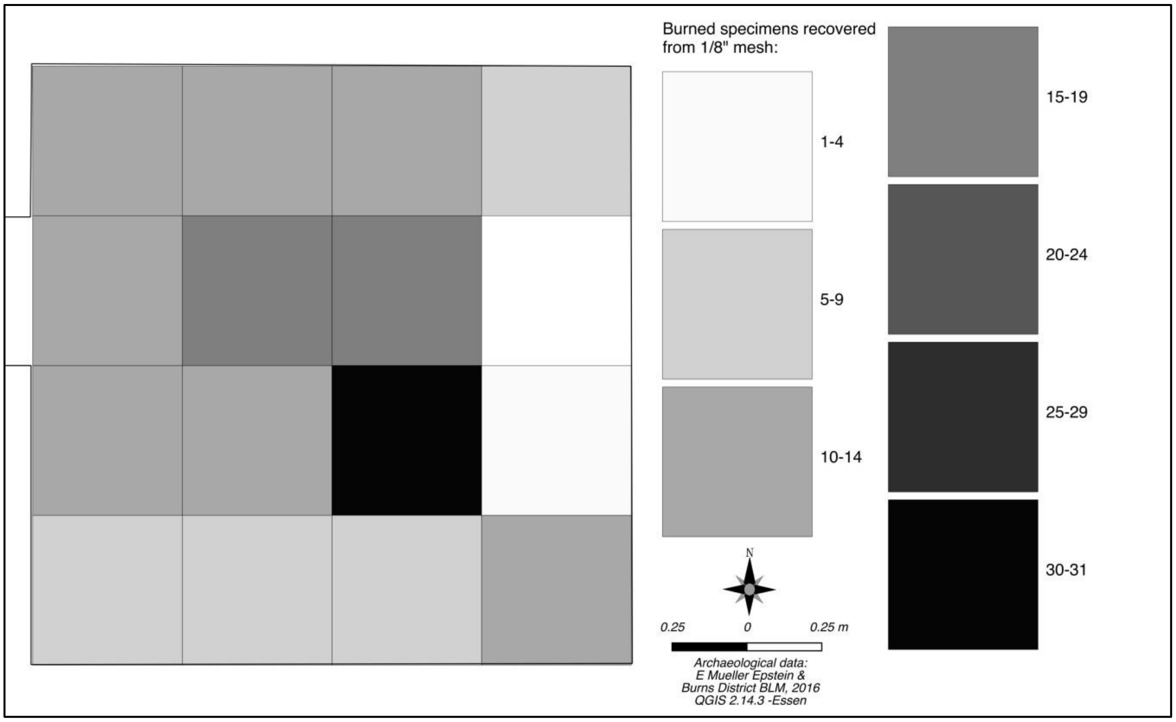

Figure 7.39 Location and density of burned specimens recovered from the earlier subject lens at Roaring Triangulation Site.

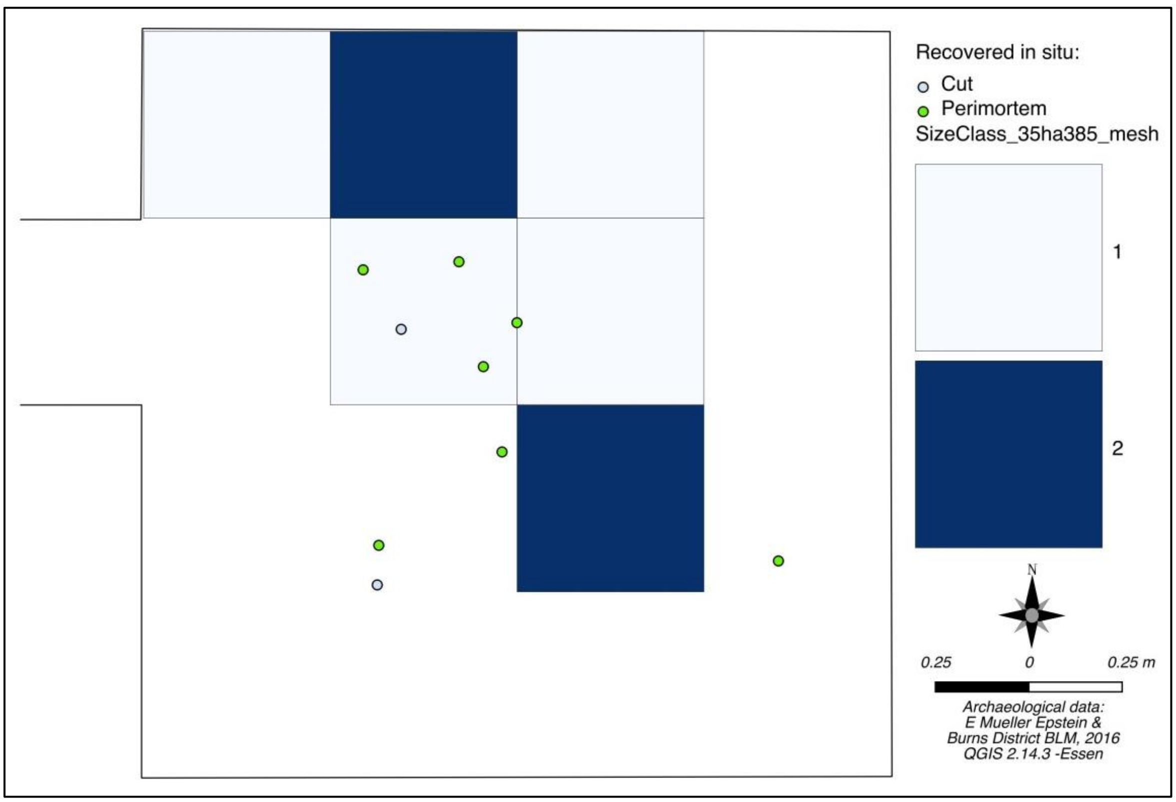

Figure 7.40 Specimens recovered from mesh and collected in situ exhibiting perimortem modification

Large mammal body part representation is limited, perhaps in part due to preservation. One pronghorn antelope (*Antilocapra Americana*) is represented by one complete molar, one mule deer (*Odocoileus hemionus*) is represented by one molar crown and buccal molar enamel, and two big horn sheep are represented by two right astragali. Given the presence of low utility elements at a residential site and the relative small horizontal exposure of a 2 x 2 meter excavation block, one can hypothesize that game animals were killed nearby or brought back to camp as complete carcases, to be butchered on site.

No formal bone artifacts were identified within the early component at Roaring Triangulation. Taphonomic indicators include intrusive rodents and carnivore gnaw marks (Figure 7.41). Intrusive rodent specimens total 84 and represent 13.7% of the total sample. Specimens with evidence for carnivore gnawing activity total three and include the two big horn sheep astragali and a long bone fragment representing a mammal of indeterminate size. All carnivore gnawed specimens were recovered in situ and may represent a resident dog or scavenging post-occupation.

The early component at Roaring Triangulation Site exhibits focused evidence for subsistence behaviors. Projectile points and big game fauna suggesting occupants were engaged in hunting activies. Ground stone artifacts and faunal refuse provide clear evidence for subsistence processing behaviors. The presence of low utility big game animal parts –teeth and astragali- along with the scrapers, utilized flakes, a perforator/drill, and a combination core/cutting tool on hand for reduction into new tools, support a hide processing hypothesis.

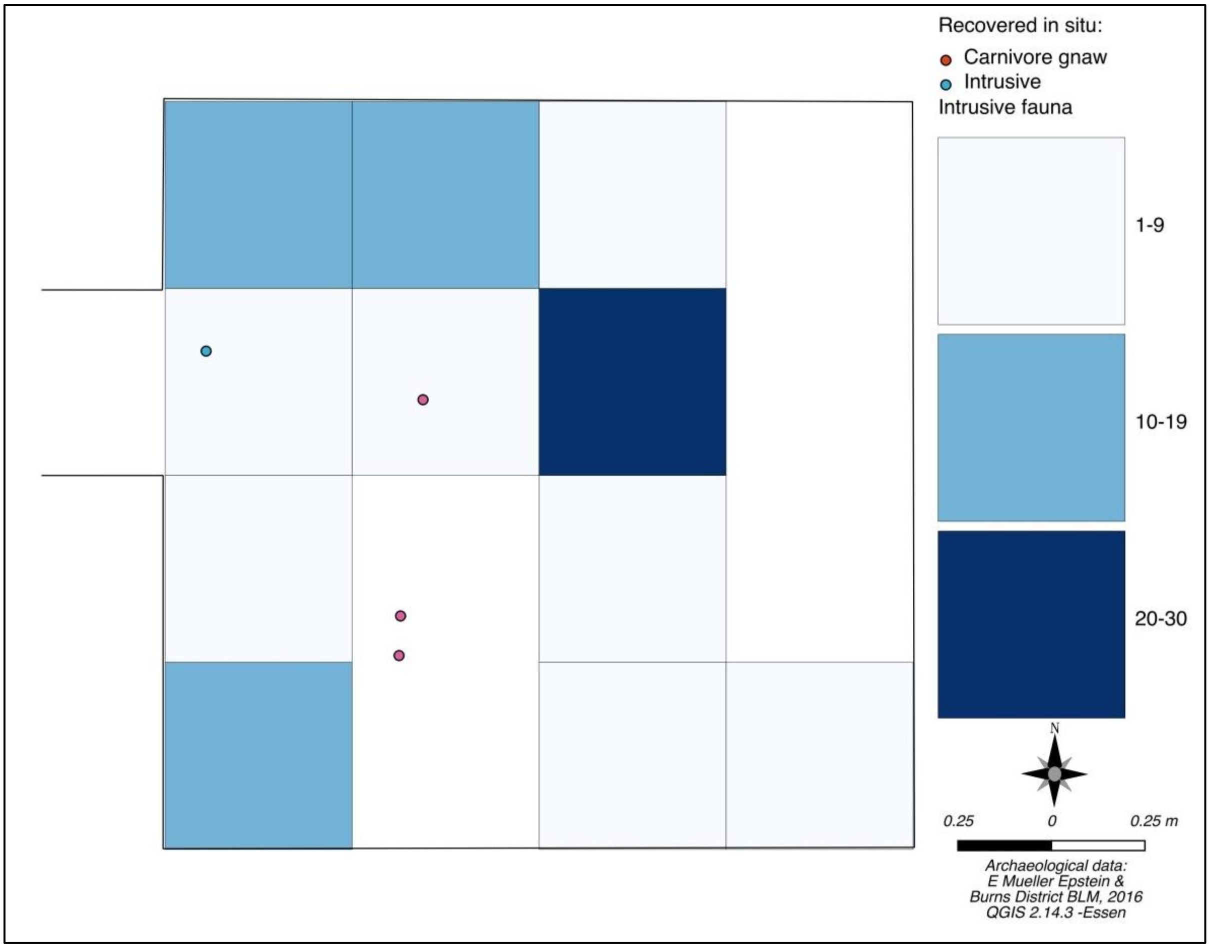

Figure 7.41 Distribution of intrusive and carnivore gnawed faunal specimens.

Later (Wet) Component

The second, later component at Roaring Triangulation is associated with a wetter climatic regime. This period is represented by a hearth situated within a charcoal stained sediment lens and associated with flaked stone and ground stone artifacts. We did not observe any post features or material indicative of a superstructure, nor did we identify the type of compacted lens typically associated with a well-used floor. A hearth is represented by the concentration of fire-cracked rock and charcoal samples recovered from the southcentral portion of the excavation block (Figure 7.41). The presence of a hearth in combination with the aggregated artifacts are indicative of domestic subsistence activities although not a well-defined house.

Adding to the challenge of interpretation, several large basalt rocks bisect the excavation block on a roughly northwest to southeast transect in an other-wise rock-free area (Figure 7.42). Ground stone artifacts fall on either side of that alignment as do associations of fire-cracked rock and patches of charcoal-rich soil (Figure 7.43). It is not clear whether the large basalt rocks bisect what was a single domestic area, or define a boundary between two such areas, each with its own hearth, the northern hearth area continuing beyond the extent of the excavation block. The following discussion of associated material remains will treat this 2x2 meter exposure as a window into a single domestic area.

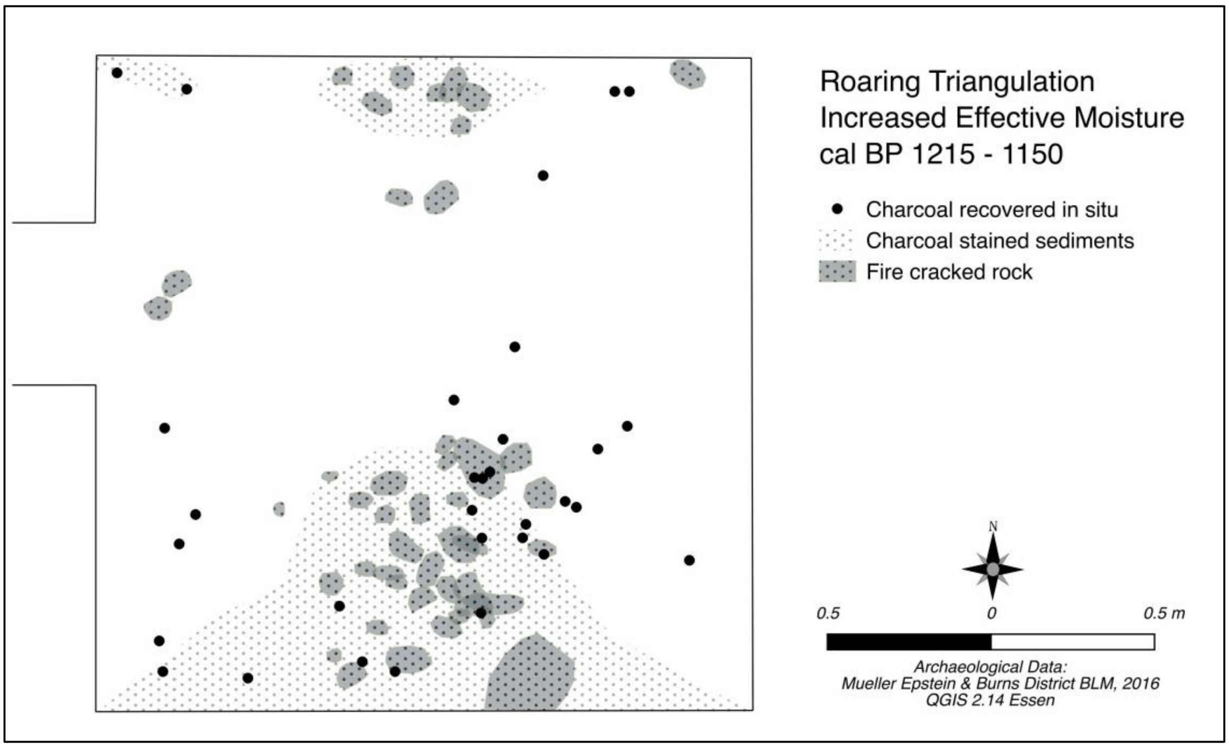

Figure 7.42 Roaring Triangulation Site Later Subject Stratum (cal BP 1215 – 1150) hearth feature

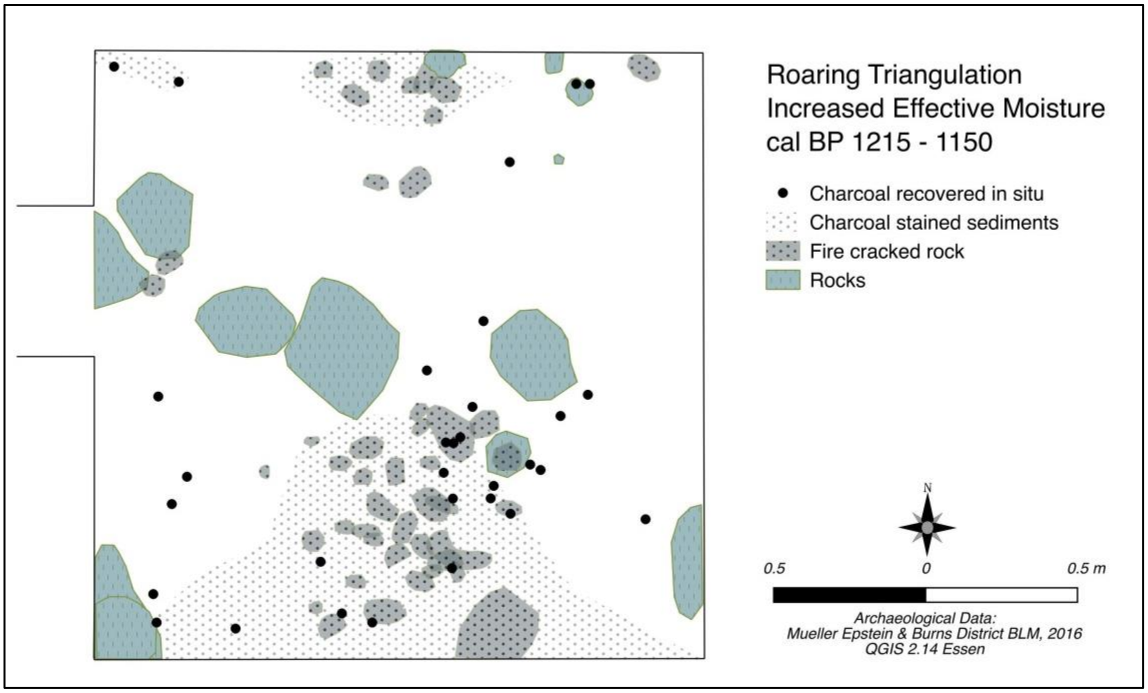

Figure 7.43 Roaring Triangulation Site Later Subject Stratum (cal BP 1215 – 1150) distribution of large basalt cobbles

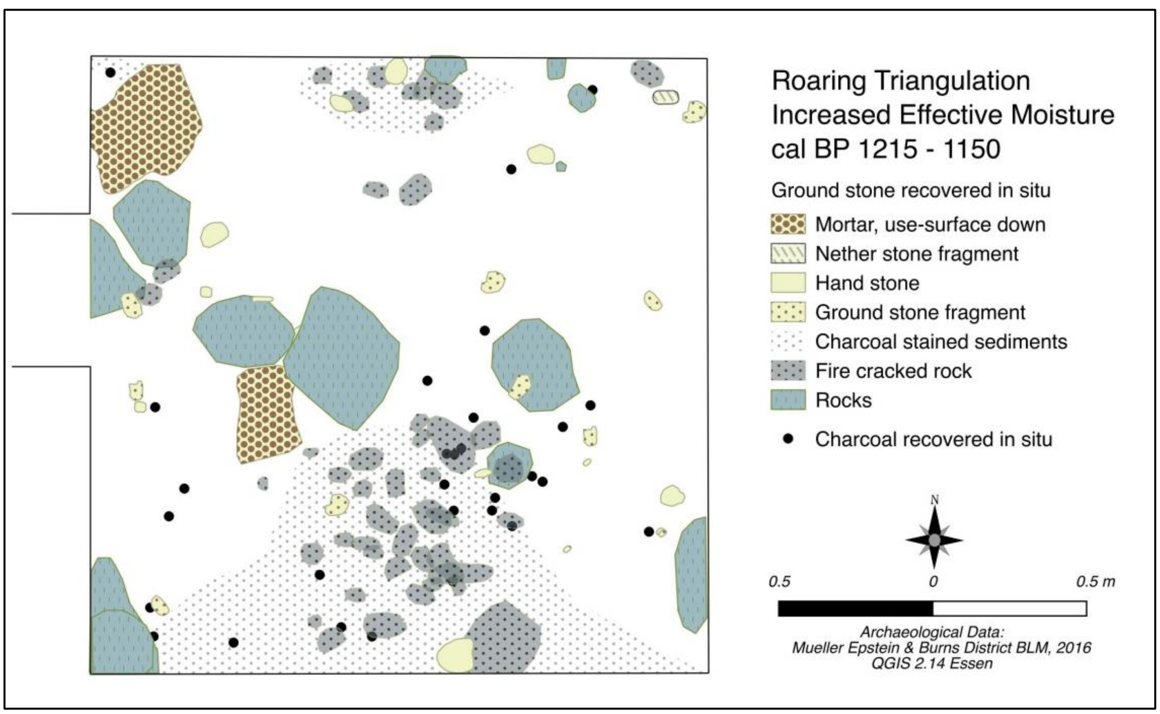

Figure 7.44 Roaring Triangulation Site Later Subject Stratum (cal BP 1215 – 1150) distribution of ground stone artifacts

Ground Stone

Thirty-one ground stone tools were recovered from the later component (Table 8.11). Two nether stone mortars were recovered in situ along the large rock alignment, with their use-surfaces pointed down. A single nether stone fragment was identified in the northeastern corner of the excavation block.

Hand stones total 12, nine of which fall within the 1.2 m drop zone of the centrally located mortar (Figure 7.44). Six hand stones are common to both mortars based on the intersection of their dropzones and three are outside either drop zone. Three fragmented ground stone artifacts were recovered in association with the hearth (Figure 7.45), perhaps repurposed as cooking stones to heat and boil water inside waterproof baskets.

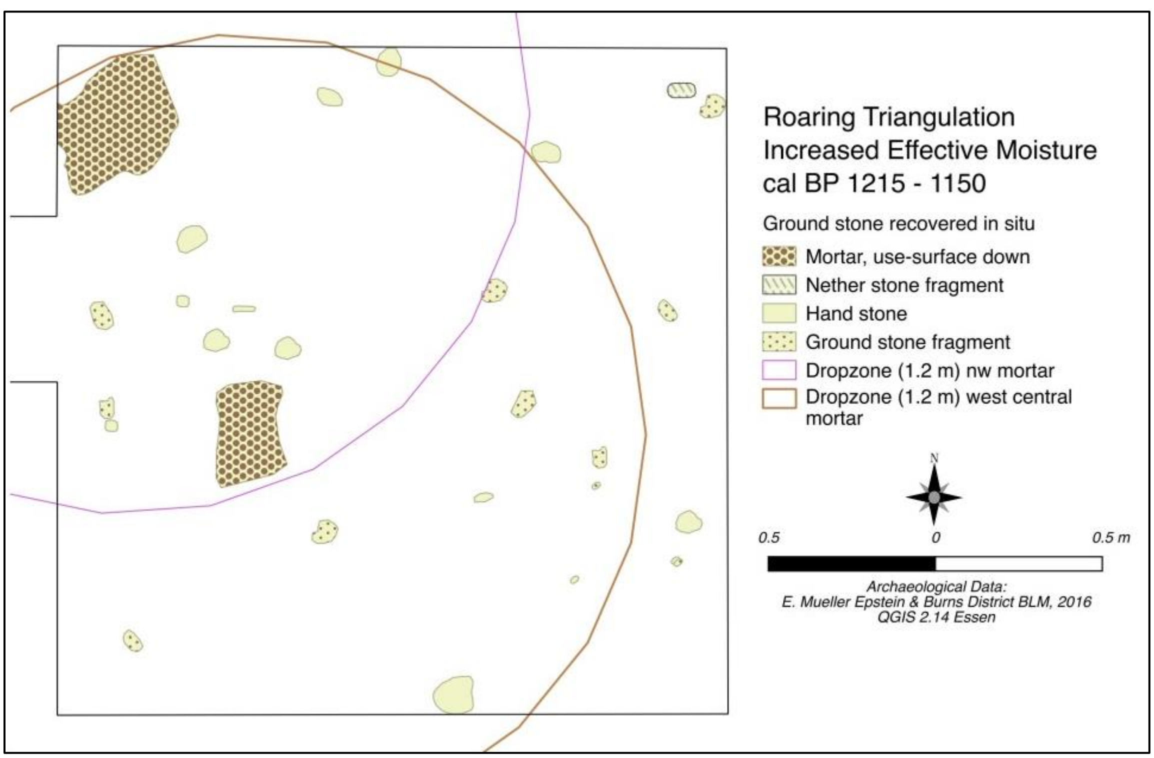

Figure 7.45 Hand Stones Recovered From the Later (Wet) at Roaring Triangulation Site.

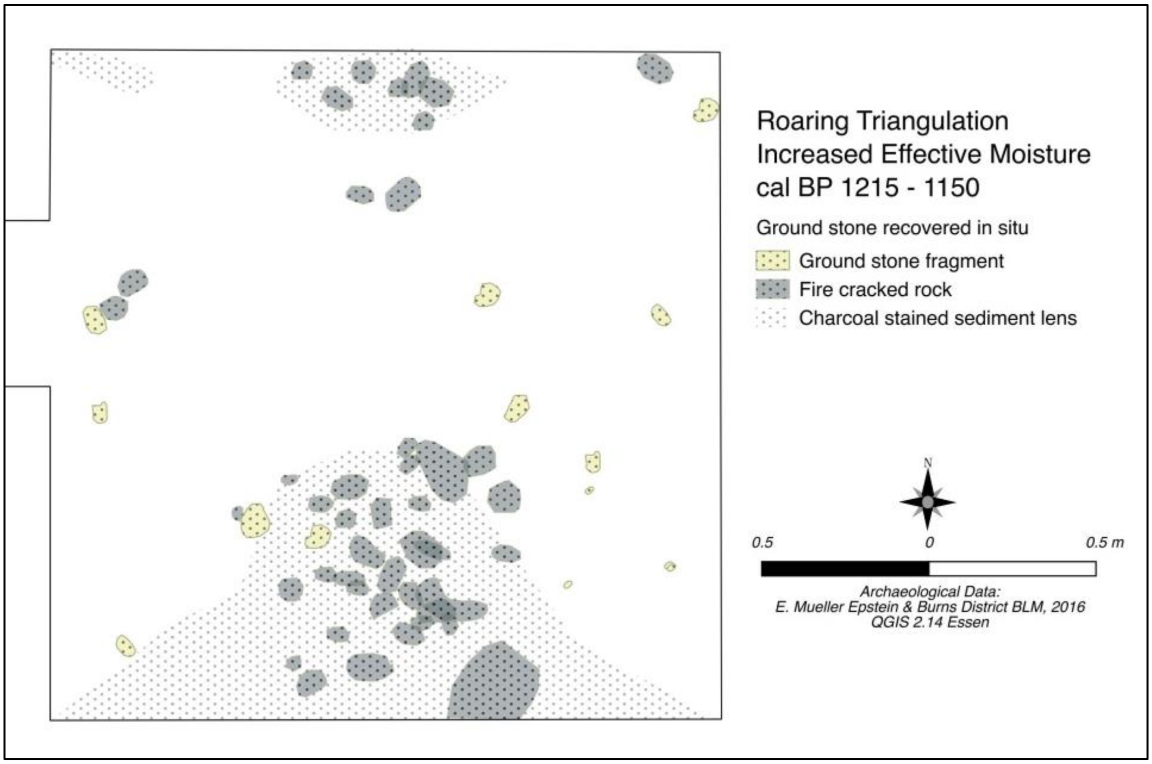

Figure 7.46 Ground stone recovered from Roaring Triangulation Site (DRY) period

The presence of two usable mortars in a face-down position, in combination with multiple handstones within reach, suggest that plant processing was a staple activity in this domestic area. It also suggests that there was an intent to return and reuse the mortars, protecting their working surfaces in the meantime.

One other stone item should be mentioned, a fragment of worked piece of volcanic tuff (Figure 7.46). The item was originally at least 5 cm in diameter and exhibited finely notched edges. Extrapolating from the remaining fragment the original shape appears to have been a rounded rectangle.

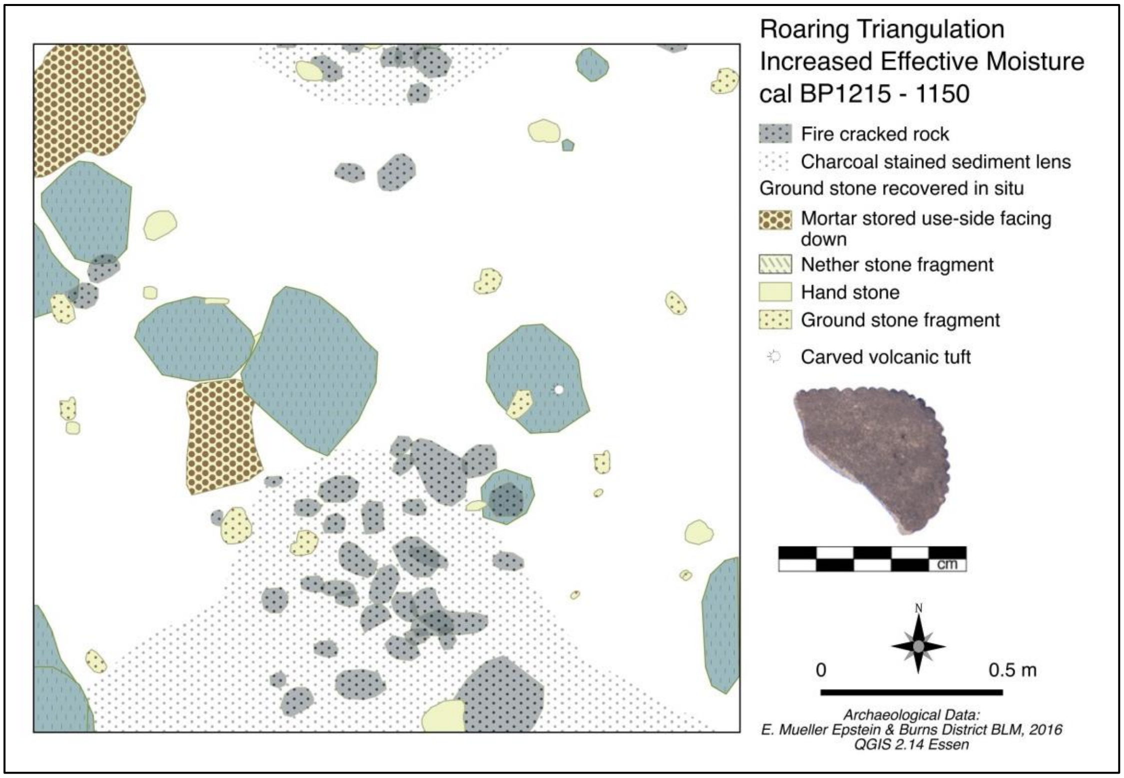

Figure 7.47 Ground and incised stone recovered from the Roaring Triangulation Site

Table 7.11 Ground stone recovered during the Later (DRY) component at Roaring Triangulation

Type	Morpho-functional types	Count	Percentage
Nether stone	Hopper mortar	2	6.5%
	Unidentified nether stone fragment	1	3.2%
Hand stone	Unidentified hand stone fragments	12	38.7%
Unidentified ground stone	Ground stone Unidentified	8	25.8%
	Thermally altered ground stone	8	25.8%
	TOTALS	31	

Flaked Stone

Projectile points recovered *in situ* from the later component total 12 and consist of two Northern Side Notched, seven Elko, and three Rosegate series points. (Table 8.12). Projectile points were recovered in the eastern half of the exposed living surface (Figure 7.47). A drop zone centered on the south-central hearth area would encompass most of the points. All projectile points and other tools were manufactured from obsidian and a total of three geochemical sources

are represented: including Beatty's Butte, Double O, and Long Valley (Figure 7.48). These three sources and the site location represent a trade or travel area of 3,246.3 km^2.

Table 7.12 Roaring Triangulation Site Later Subject Stratum (cal BP 1215 – 1150) obsidian projectile points and represented geochemical sources.

Point type	Associated dates (BP)	Geochemically sourced artifacts			Not sourced	TOTAL
		Beatty's Butte	Double O	Long Valley		
Rosegate	1500 - 600	2			1	3
Elko	3000-1500	3	1		3	7
Northern Side notched	7,000 - 5,000	1		1		2
Total		6	1	1		

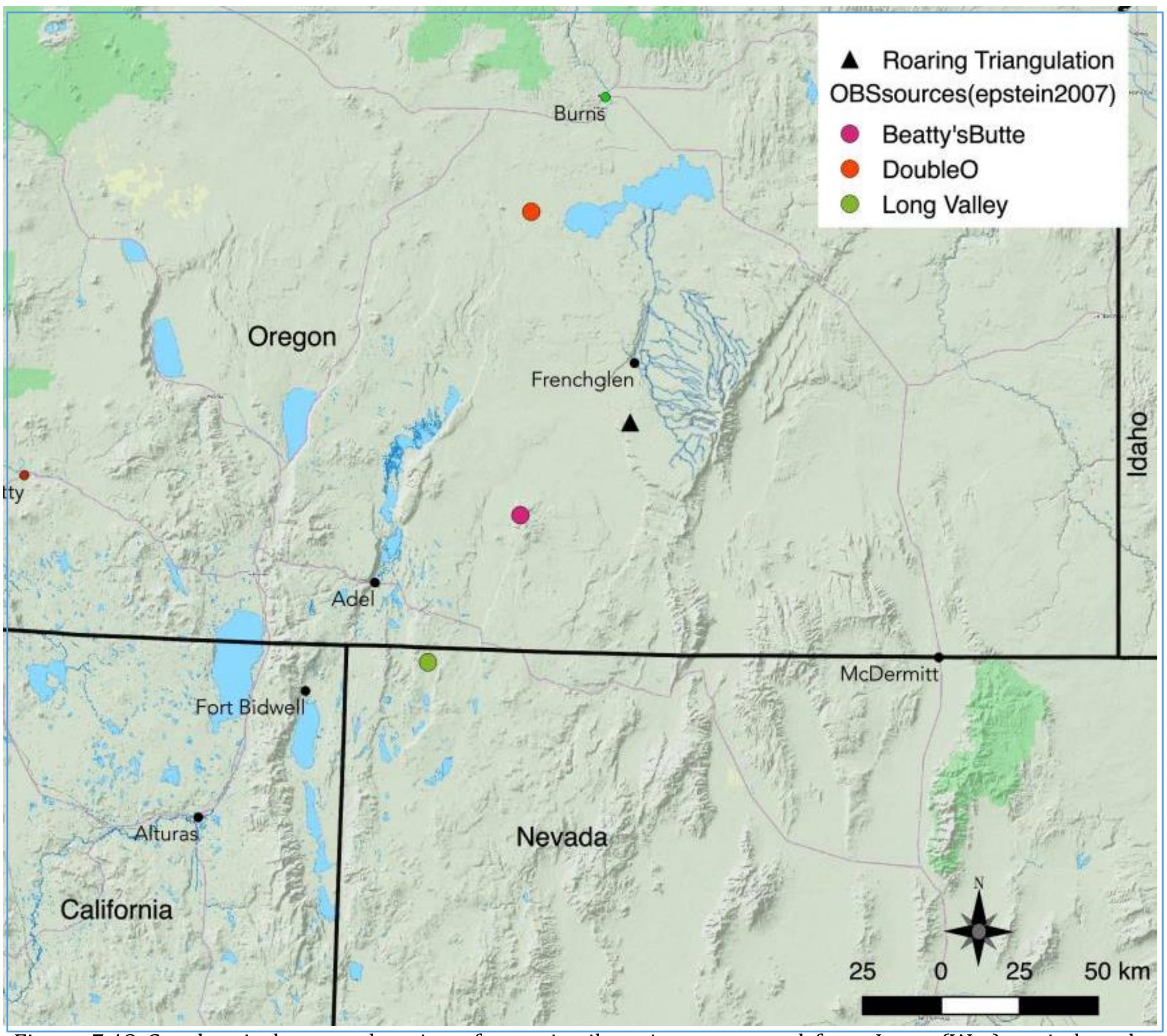

Figure 7.48 Geochemical source locations for projectile points recovered from Later (Wet) period at the Roaring Triangulation

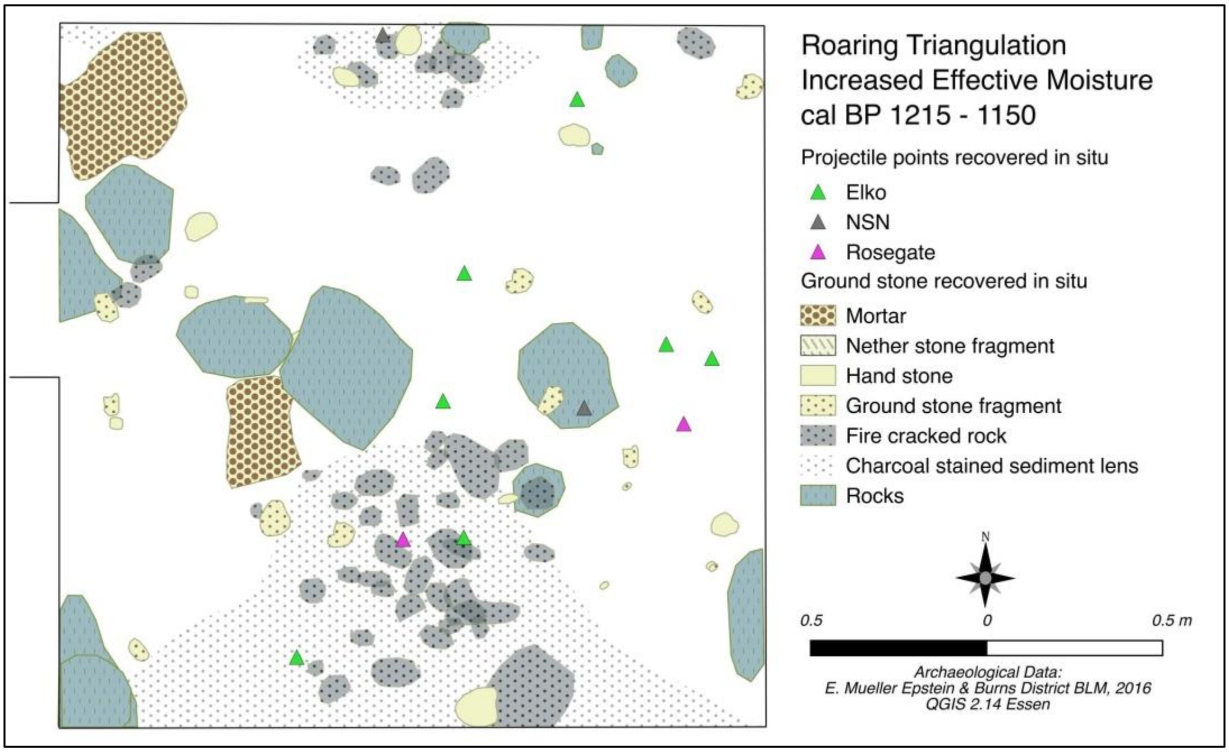

Figure 7.49 Roaring Triangulation Site Later Subject Stratum (cal BP 1215 – 1150) plandview distribution of projectile points recovered in situ.

Other flaked stone tools total 23 and are represented by three main types of tools, bifaces, scrapers, and an engraver (Table 7.13, Figure 7.49). Again, all tools are manufactured from obsidian. The distribution of these other tools appears more scattered although again most would fall within a dropzone centered near the southcentral hearth area. Bifaces total 14 and two of those were manufactured from Beatty's Butte obsidian and another two from Double H/Whitehorse material. The remaining tools consist of one graver, one edge only tool, four flake scrapers, and three formal scrapers.

Table 7.13 Later (WET) period (cal BP 1215 – 1150) other, non-projectile, tools and their represented geochemical sources.

Tool type	Geochemically sourced artifacts		Not sourced	Total
	Beatty's Butte	Double O		
Biface	2	2	10	14
Edge only			1	1
Graver			1	1
Flakescraper			4	4
Scraper			3	3

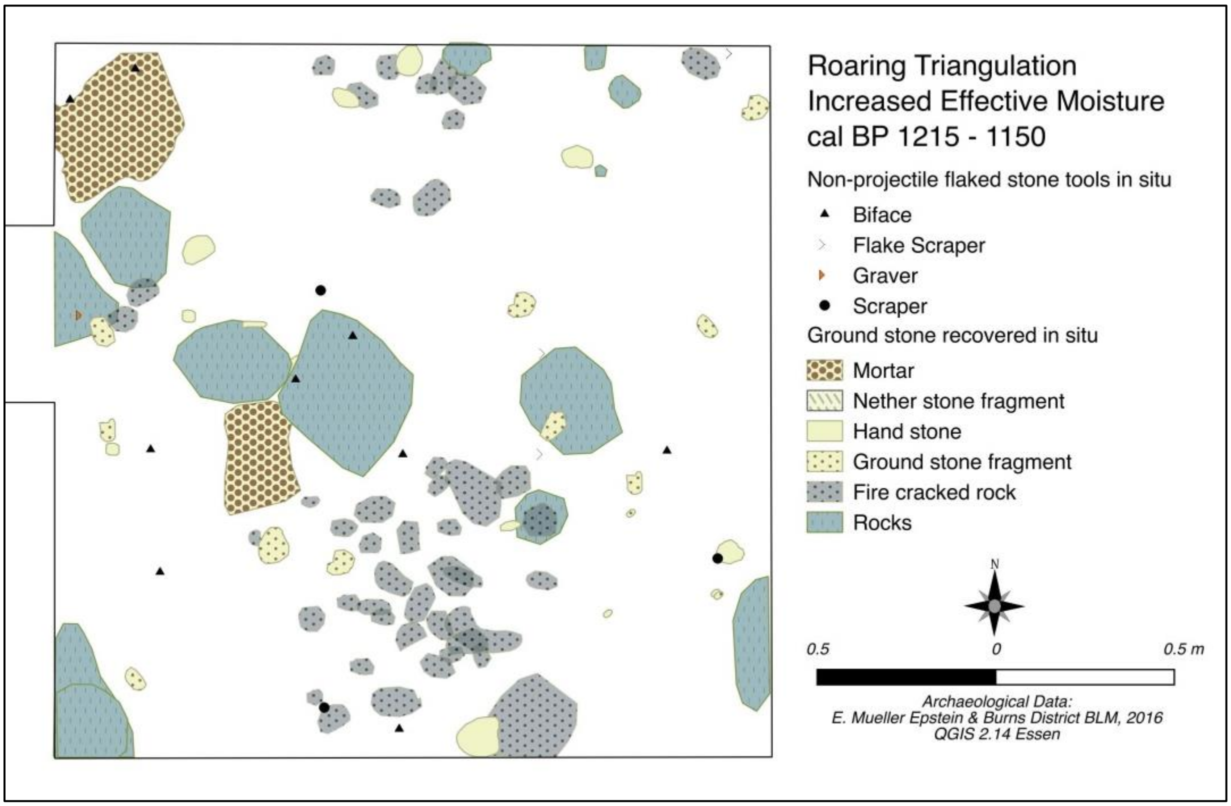

Figure 7.50 Roaring Triangulation Site Later Subject Stratum (cal BP 1215 – 1150) plandview distribution of non-projectile flaked stone tools recovered in situ.

In combination the flaked stone artifacts suggest a mix of activities, including hunting, heavy and fine cutting and a significant investment in scraping. No cores were recovered but the bifaces could also have served as source material; flakes removed in the process of tool sharpening could have been repurposed for an entirely new task.

Faunal Remains

The zooarchaeological sample NISP totals 101 and weighs 17.81 grams and was recovered in situ and from 1/8" mesh (Table 7.14). The sample itself is well preserved, though specimens are fragmented. Screen and *in situ* recovered specimens were all clustered in a relatively small area immediately north and east of the hearth area (Figure 7.50).

Diversity of the sample is represented by two taxonomic classes, three orders, and three families. Mammals dominate the sample, though two bird specimens were also identified (Figure 7.51). Mammals are relatively evenly split by count among Size Class III, IV, and V. The minimum number of individuals (MNI) identified in the sample total three, consisting of one juvenile mule deer, one badger, and one juvenile marmot (Table 7.15). All identified taxa are endemic to the northern Great Basin and expected among the fauna local to Tse'tse'ede. The presence of juvenile deer and marmot suggest site use during, respectively, spring as well as late summer and fall.

Table 7.14 Taxa identified in Later (Wet) period (cal BP 1215 – 1150) Roaring Triangulation faunal sample.

TAXON				Count	%	Weight (grams)	%
VERTEBRATES				14		0.92	
AVES				3	75.0%	0.11	45.8%
MAMMALIA	Artiodactyl			3	75.0%	0.07	29.2%
			Odocoileus hemionus	4	100.0%	0.73	304.2%
	Carnivora	Taxidea	Taxidea taxus	1	25.0%	2.09	870.8%
	Rodentia	Sciuridae	Marmota sp.	1	25.0%	0.05	20.8%
			Mammal III	29	725.0%	9.92	4133.3%
			Mammal IV	19	475.0%	17.3	7208.3%
			Mammal V	23	575.0%	2.84	1183.3%
			UNID	4	100.0%	0.24	100.0%
			TOTAL	101		34.27	

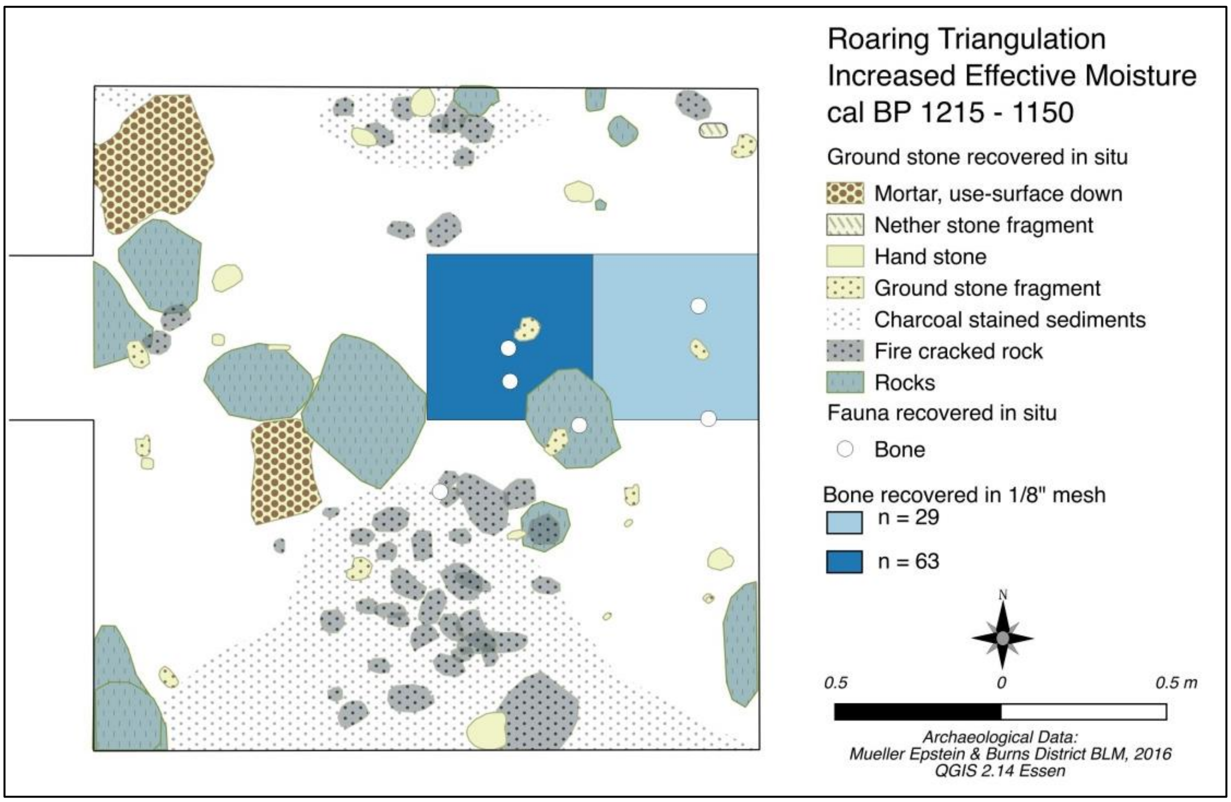

Figure 7.51 Roaring Triangulation Site Later Subject Stratum (cal BP 1215 – 1150) recovered *in situ* and the relative concentrations of faunal specimens recovered from 1/8" mesh.

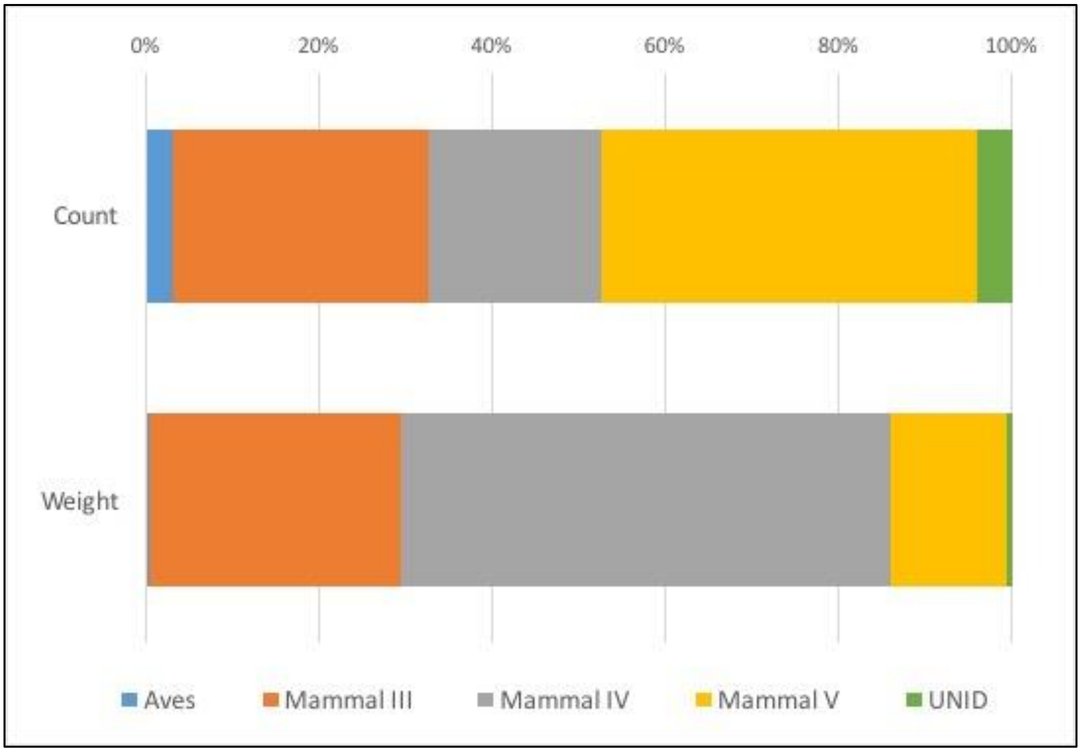

Figure 7.52 Roaring Triangulation Site Later Subject Stratum (cal BP 1215 – 1150) identified taxonomic classes and their relative contribution to NISP and diet.

Table 7.15 MNI identified in Later (Wet) (cal BP 1215 – 1150) Roaring Triangulation faunal sample

MNI	Common	Species	Identifed Specimen
1	Mule deer (juvenile)	Odocoileus hemionous	Left mandibular second premolar, Left mandibular second molar
1	Taxidea taxus	Badger	Left caudal parietal fragment
1	Marmot (juvenile)	Marmota flaviventris	Complete right second deciduous molar

Butchering and cooking activities are evidenced by fractured and burned bone (Figure 7.52). Most of the burned bone collected in situ was recovered within proximity of the hearth feature and all burned specimens were recovered from 1/8" mesh (Figure 7.53). Burned specimens represent mammals identified to Size III, IV, and V, which are respectively marmot, coyote, and deer sized taxa. Given the presence of juvenile deer teeth, it is possible the burned Size IV specimens represent juvenile deer (Figure 7.54).

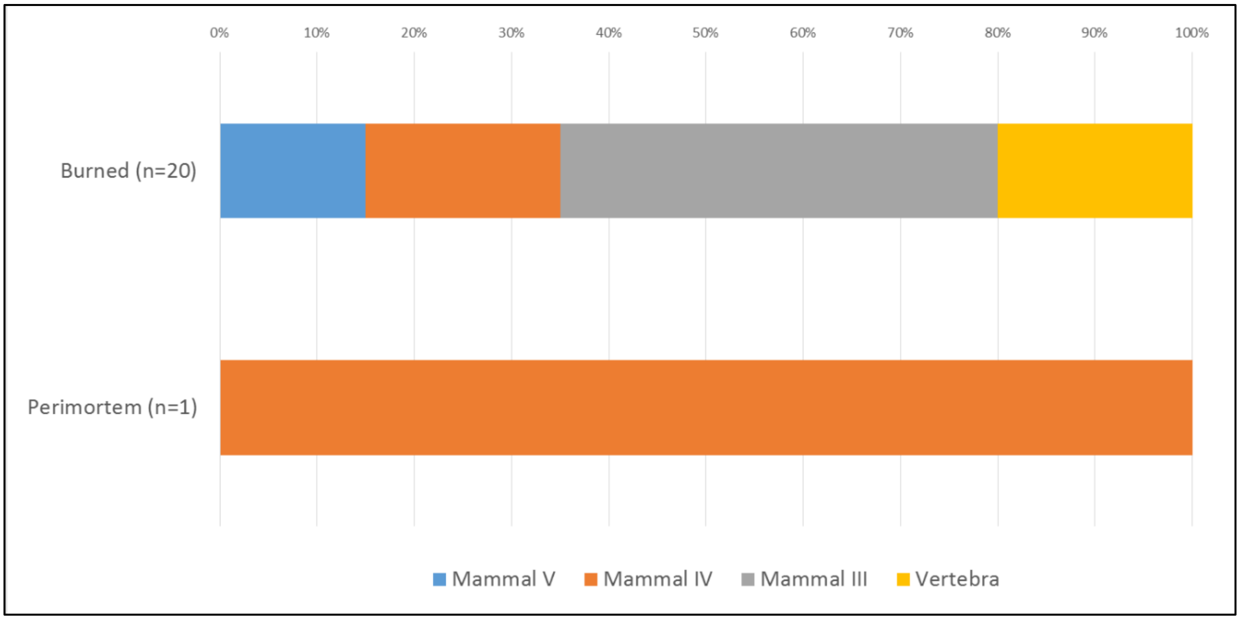

Figure 7.53 Roaring Triangulation Site Later Subject Stratum (cal BP 1215 – 1150) subsistence-related modifications by Taxonomic Class and Size-Class (Excel Chart)

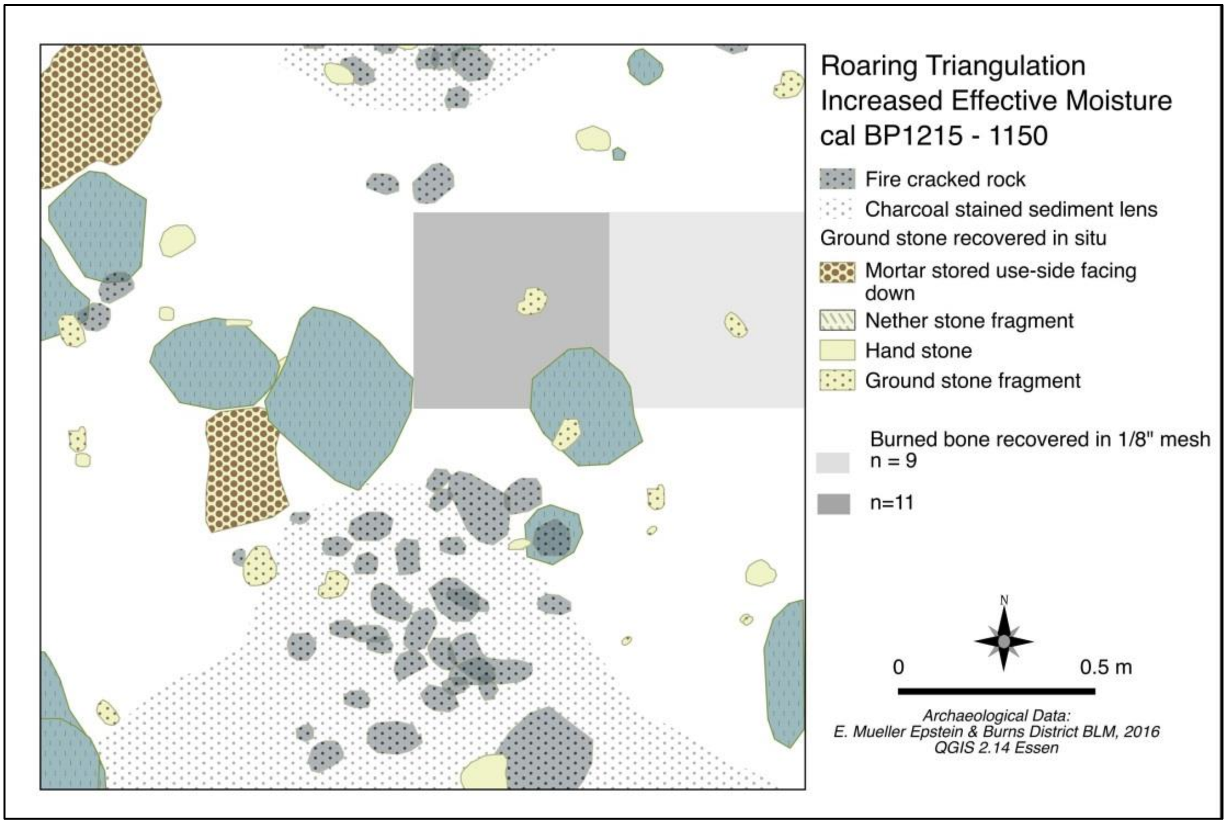

Figure 7.54 Roaring Triangulation Site Later Subject Stratum (cal BP 1215 – 1150) burned specimens recovered from 1/8" mesh. Note: Burned specimens were not identified in situ.

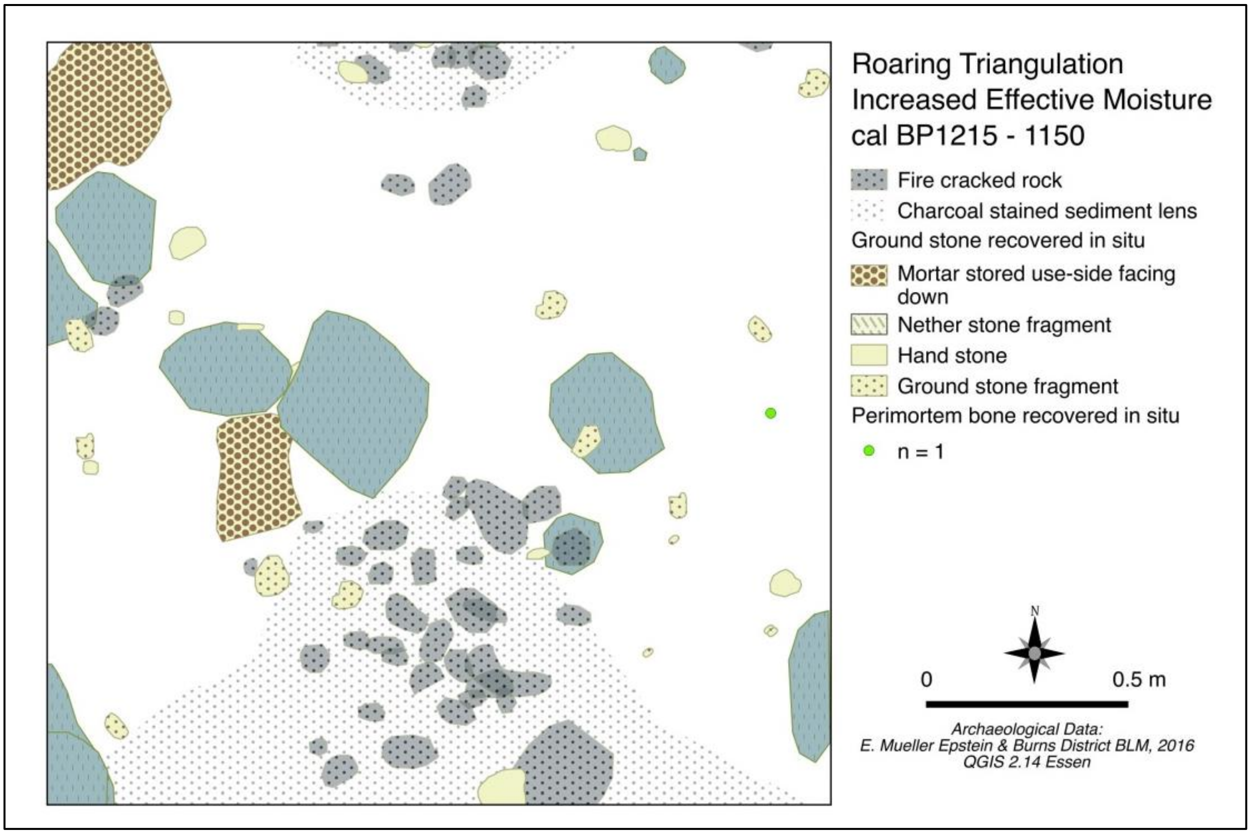

Figure 7.55 Roaring Triangulation Site Later Subject Stratum (cal BP 1215 – 1150) specimen exhibiting perimortem modification recoverted in situ.

Bone taphonomy adds to our understanding of the use and abandonment of the later component. There were six splintered long bone specimens representing Class IV mammals (the size of coyote or juvenile deer) and one specimen that exhibited carnivore gnaw marks representing a Class V mammal (the size of adult deer or pronghorn) (Figure 7.52). This combination of weathering and scavenging suggests the living surface was left exposed following use by site occupants.

Summary

Here I return to my original questions concerning evidence for household subsistence strategies and climatically-associated variations in those strategies. Key attributes of each of my three subject contexts are summarized in Table 7.16.

Table 7.16 Analytical Results for Roaring Triangulation and Mortar Riddle

		Roaring Triangulation		Mortar Riddle
Horizontal exposure or excavated area		2 m^2	2 m^2	5 m^2
cal BP		1955 - 1560	1215 - 1150	860 - 840
General climate		Dry	Moist	Very dry, drought
Distance to water		4.6 km		200 m
Elevation		1,745 m (5,724')		1,561 m (5,120')
Hearth		Yes	Yes	Yes
Compacted floor		Yes	No	Yes
Superstructure evidence		No	No	Yes
Projectile point quantity		n = 6	n = 12	n=54
Identified diagnostic projectile point types listed in rank order		Northern Side-notched, Gatecliff and Pinto	Elko, Rosegate, and Northern Side-notched	Rosegate, Elko series
Other flaked stone tool quantities		26	23	74
Other tool types		Biface, Core/scraper, Flake scraper, Graver, Perforator, Reworked tool, Scraper, Utilized flake	Biface, Edge only tool, Flake scraper, Graver, Scraper	Biface, Blade, Core, Chopper, Drill, Flake, Scraper, Uniface, Utilized flake
Nether stones		1	3	12
Complete hand stones		Yes	No	Yes
Beads, ornaments, special objects		No	Yes	Yes
NISP		610	101	24979
Weight (g)		109.07	17.81	3157.92
MNI		10	3	36
Identified taxa associated with specific season in model	Fall			Duck, mudhen
	Winter			Bobcat
	Spring		Juvenile deer	Fish, pheasant-like bird
	Summer	Marmot	Marmot	Marmot, porcupine
Identified taxa the model indicates are taken at all times of the year		Pronghorn, Bighorn, Deer, Cottontail		Pronghorn, Bighorn, Deer, Cottontail, Jackrabbit
Opportunistic			Badger	N/A
Unexpected				Beaver, Freshwater mussels
Not eaten		*Canis* sp.		*Canis* sp.

The evidence for a domestic living surface is perhaps most ephemeral at the later component of Roaring Triangulation; this may represent the nature of the use of this location during wetter climatic regimes. There is a hearth with fire-cracked rocks and charcoal-stained sediments with a associated scatter of groundstone and flaked stone artifacts that attest to activities of plant-processing, hunting, and a mix of cutting and scraping work. There is a small sample of faunal remains indicative of the dispatch and cooking of at least three animals. The lack of evidence for a permanent superstructure and the possible repositioning of basalt rocks over a former living surface, as well as the small faunal sample and the faunal taphonomy of exposure, fits an image of short-term use, while the turned-down mortars suggest an intent to return to the site at a later date, and thus a cycle of re-visit and re-occupation.

The earlier component at Roaring Triangulation has more faunal evidence for subsistence use and processing, as though individuals planned to come for the specific purposes of hunting game, processing hides, and moving on –or back- to a new or more substantial residential site. The closest perennial water source, Roaring Springs, seems the most logical location by which to situate a residential site and would fit the model for winter site locations.

The hearth feature and compacted sediment lens along with posthole features and fire-hardened earth at Mortar Riddle provides the strongest evidence of a house structure and household –and likely, households- planning to remain in that location for some time. The formal bone and shell artifacts along with a notable investment in ground stone tool production also suggests that occupants did not use this site as a temporary residence. Faunal remains also support this notion, not simply with respect to assemblage size, but as indicators for the season of occupation. Represented taxa indicate spring, summer, and fall occupation. Finally, the site exhibits evidence for life beyond and connected with subsistence activities and not simply because of the identified game pieces. Flaked stone tools manufactured from obsidian geochemically sourced to locations as far away as Burns and marine shell beads suggest the household was connected to

individuals farther afield and those connections and behaviors were folded into the very fabric of daily life.

CHAPTER 8. DISCUSSION AND CONCLUSIONS

In this dissertation, I presented the archaeological evidence of a house structure, a campsite / hunting location, and a hunting camp at high elevation. Mortar Riddle (35HA2627), Roaring Triangulation (35HA385), Big Mound (35HA2626), and the High Ring site (BLM Site #0502063004Si) represent four windows into hunter-gatherer subsistence strategies in the northern Great Basin during the Archaic. In the previous chapter I described the results of archaeological investigations, laboratory analyses, and the spatial configuration of artifacts and features, as well as the analysis of faunal remains. In this chapter I discuss how the results of this study vary from the Surprise Valley Model. I then explain how the results represent a pattern of residential occupation that began during the Middle Archaic and grew in intensity after cal BP 2000, which is congruent with key characteristics of the Late Archaic pattern evident in the broader region. A discussion of how this study may be used and improved for other hunter-gatherer household archaeology research follows.

Tse'tse'ede Archaeology and the Surprise Valley Model

During a relatively dry period (cal BP 1955 – 1560), a group of individuals likely set up a temporary late summer/early fall hunting camp at the Roaring Triangulation Site (35HA385), away from their winter house, which may very well have been Roaring Springs Cave, a point to which I return below. Using projectile points manufactured from obsidian geochemically sourced to Beatty's Butte and Double H/Whitehorse, hunters –likely a group or groups of males- dispatched big game, including two big horn sheep, one pronghorn antelope, and a mule deer, perhaps as the animals migrated down the drainage to the Catlow Valley in the autumn or to water at Roaring Springs. As hunters brought game back to the camp, women likely used many of the non-projectile flaked stone tools, such as the bifaces, core/scrapers, and biface/scrapers, to remove hides before butchering the animal for meat. Plant foods were likely gathered near the site and processed by a

woman using the nether stone (metate) and one of the complete manos. Mitigating the risk of an unsuccessful hunt, those that stayed near the residential base could set traps or snares for small mammals, such as marmot or jackrabbit. Both taxa were identified within the faunal sample. Though no house structure was observed in the sample lens, it is plausible site occupants created a windbreak consisting of stacked rocks to the south of the hearth.

About 345 years later moister conditions returned (cal 1215 – 1150 BP). During this period, occupants continued to use projectile points manufactured from Beatty's Butte (one Northern Side-notched, three Elko, and two Rosegate), but also had access to Double O obsidian (one Elko) and to Long Valley obsidian (one Northern Side-notched), suggesting that their travel range and/or social networking had expanded to the north and south. Bifaces dominated the other flaked stone tools, and represent both a good cutting tool and a source of raw material from which to flake other tools. Two ground stone hopper mortars were observed with their working surfaces faced downward, suggesting they were in storage mode. Despite an increase in recovered projectile points compared to the earlier occupation, which suggest that male hunting groups may have used the area, few faunal remains were recovered. Evidence for a single yearling deer and a juvenile marmot do, however, suggest occupational length at the site was brief but repeated in spring and then again in the late summer or early fall.

Mortar Riddle Site (35HA2627) presents the best evidence for a house structure at 860 BP. Evidence for a superstructure includes charred postholes, daub fragments, and purposefully placed or moved basalt rocks that encircle a hardened floor lens. The lens measures 4.65 meters (12.25 ft) in diameter, a size that is consistent with that outlined in the model. Though the floral taxa of charred posts remains unknown, their diameter compares favorably with willow, which is demonstrably smaller than mature juniper boughs or trunks. Aside from posthole molds and the presence of ground stone mortars placed on end, in storage mode, against what I interpreted to be house walls, little of the excavated house matches the model's predictions. The house foundation

was excavated 50 cm (19.7 in) into existing cultural deposits, making it a semi-subterranean house. The Surprise Valley Model does not include houses with excavated floors. Likewise, the model did not predict the presence of daub, the presence of which suggests someone packed the outside of the house with wet clayey-silt that later hardened when sunbaked. These daub specimens were thermally altered to the point that they do not dissolve in water today, as would be expected if the specimen were merely the negative cast of a root (Lyons 2011, personal communication). Neither does the model indicate the use of rocks to support posts or anchor mat or grass coverings. The Mortar Riddle house clearly deviates from the construction outlined in the model. Nevertheless, the house seems to have been constructed with the intent to withstand wind and precipitation.

The Honey Lake Paiute, also Northern Paiute speakers, lived in the region south of the Surprise Valley Paiute, west of Pyramid Lake, and north of the Washoe. The Honey Lake Paiute are ethnographically known to have constructed semi-subterranean winter houses; the floor was excavated to about 30 cm (12 in) into the earth and a willow pole framework was erected to which women tied grass thatch bundles or tule matts (Riddell 1960: 41). The excavated sediment was banked around the outside of the house and a perimeter ditch was excavated outside the berm to direct rain water and melting away from the house.

The distribution of features and artifacts at each site revealed varying signatures of human behavior. The distribution of two large hopper mortars with use-surfaces neither facing up or down, but obliquely positioned to the side, are indicative of a house wall, according to the model. These two mortars incidentally follow a break in the arch established by the posts and rocks. The break in the distributional pattern established by the rocks and mortars exhibits an east facing break. The interruption in the pattern may represent an east facing doorway, from which one could see the rising sun and face the Little Blitzen River located downslope. A large hearth appears to be located just west of this break. Considered together, the rock-lined hearth may be a doorway hearth.

Plant processing activities were of clear importance to occupants and the evidence suggests a great number of people participated in the activity at the same time. The presence of mortars, let alone so many mortars, was not predicted by the model. Piudy exclaimed to Kelly "What would we use those for? We have no hard seeds" as reason mortars were not used (1932:137). It is interesting to note that mortars are ascribed to "*Bahi'zoho*, an animal that looked like an Indian," who is responsible for "These stone things [that] come from the stories. When animals were people they made them" (1932:139). The detail is a reminder of how the past is likely far more complex than what we are able to elucidate from the archaeological record.

Results of palynological assessments of sediment samples cored from the meadow adjacent to the site and the Little Blitzen River produced abundant evidence of Indian Rice Grass (*Orysopsis hymenoides* ssp.) (Epstein 2006). While many other grass species grow within the site's boundaries and beyond, Indian Rice grass pollen was abundant in sediment cores recovered at depths of one meter below the surface, making it a likely candidate for ground stone processing. Indian Rice Grass prefers sandy soils though it can grow in a variety of locations and is winter hardy, but it does not tolerate extended periods of inundation or shading (USDA 2017:2). It's possible that the species grew in abundance at the time of Mortar Riddle's occupation. Future work at the site ought to focus on paleobotanical studies not only to test this hypothesis, but also to inventory the cultural use of plants at the site.

Hunting was also of clear importance to household occupants, as flaked stone projectile points recovered from the subject lens totaled 54 and are dominated by Rosegate Series primarily manufactured from Beatty's Butte obsidian, but new sources of raw obsidian tool stone suggest an expanded range of travel, be it by the site occupants or those travelling through the Donner und Blitzen drainage on western Tse'tse'ede. The distribution size graded debitage recovered during excavation reveals intention to keep tool manufacture and rejuvenation activities outside near the fire or outside the house.

Faunal evidence reveals the clear importance of large game mammals for subsistence. High utility portions of deer and big horn sheep along with the lower utility pronghorn subsistence refuse specimens were located outside the house and in association with the hearth. Spatial distribution of the subsistence refuse is separate from that of formal bone and shell tools and ornaments.

Most subsistence taxa described in the model were identified within recovered sample. Also identified were species not predicted in the model, such as Bighorn sheep (*Ovis canadensis*), beaver *(Castor canadensis),* and freshwater mussels *(Margaritifera* spp.). We should remember that the model based on the ethnographic data collected by Kelly (1932) was collected after substantial environmental changes that may explain why no one reported hunting bighorn sheep or expressed memory of doing so.

Represented taxa support the interpretation that the site was used during the Spring, Summer, and Fall. Limited, but provocative evidence exists for winter site use. If the tooth articulated with the mandible I conservatively identified as representing *Canis* spp. does in fact represent a nine-month old *Canis latrans* (coyote), we know the animal died during the winter. Since that specimen exhibits evidence for perimortem modification, it's likely that a human and coyote were on site during the winter. While coyotes were not included in the list of edible taxa, they do bear fur and may have been a subsistence option of last resort, when winter caches were depleted.

Non-local taxa identified from the house floor, including an *Olivella* sp. bead and a single white sturgeon (*Acipenser* sp.) scute, the nearest source of which would have been the Malheur or Snake Rivers prior to hydroelectric dam construction. Exotic faunal specimens suggest social-economic networks connected site inhabitants to coastal communities and locations within the Columbia Plateau.

A steatite bead recovered from the northern portion of the house floor also suggests connections to the Sierra Nevada range, given that the closest steatite sources are located along the California- Oregon border in areas ethnographically occupied by Shasta (Dixon 1907:409) and Pit River groups (Achomawi and Atsugewi) (Garth 1953:175).

Bone gaming pieces and beads that were likely manufactured from local fauna suggest indicate household life entailed activities beyond sustaining minimal caloric requirements. The bone tube is particularly interesting given the description of treatments to cure an ill person by having a shaman suck out the affecting pain (Kelly 1932: 191). This Shamanistic treatment is also practiced by Shaman of the Achomawi and Atsugewi groups, Surprise Valley Paiute neighbors to the southwest with which they periodically intermarried (deAngulo 1929:315; Kelly 1932:165; Garth 1953:130). Garth (1953:187) notes Atsugewi the use of bone tubes for storing "pains" within the center of a *qaqu,* feather bundle. Shaman of the Shasta group also used the *qaqu* for the same purposes (Dixon 1908:218). Whether or not this was the intended function of the bone tube is unknown. It is interesting and perhaps unsurprising that neighboring groups share some aspects of Shamanistic behaviors, given their other points of connection.

The Surprise Valley Paiute acquired fish, sometimes basketry hats, digging roots, oak bows, and beads from the Achomawi and Atsugewi in exchange for moccasins, tool stone, and sometimes roots (Kelly: 96, 101, 114, 151, 152). It is interesting to note that the Achomawi and Atsugewi lived in earth covered lodges that were excavated into the earth about 30 cm (12 in) they used mortars with a basketry hopper and pestle to process various botanical resources, but primarily acorns (Garth 1953:143, 140, 149). The Mortar Riddle evidence reveals an investment of time at the residential occupation while maintaining/participating in social and trade networks with groups in distant regions, the totality of which can be viewed within a single house floor (Figure 8.1).

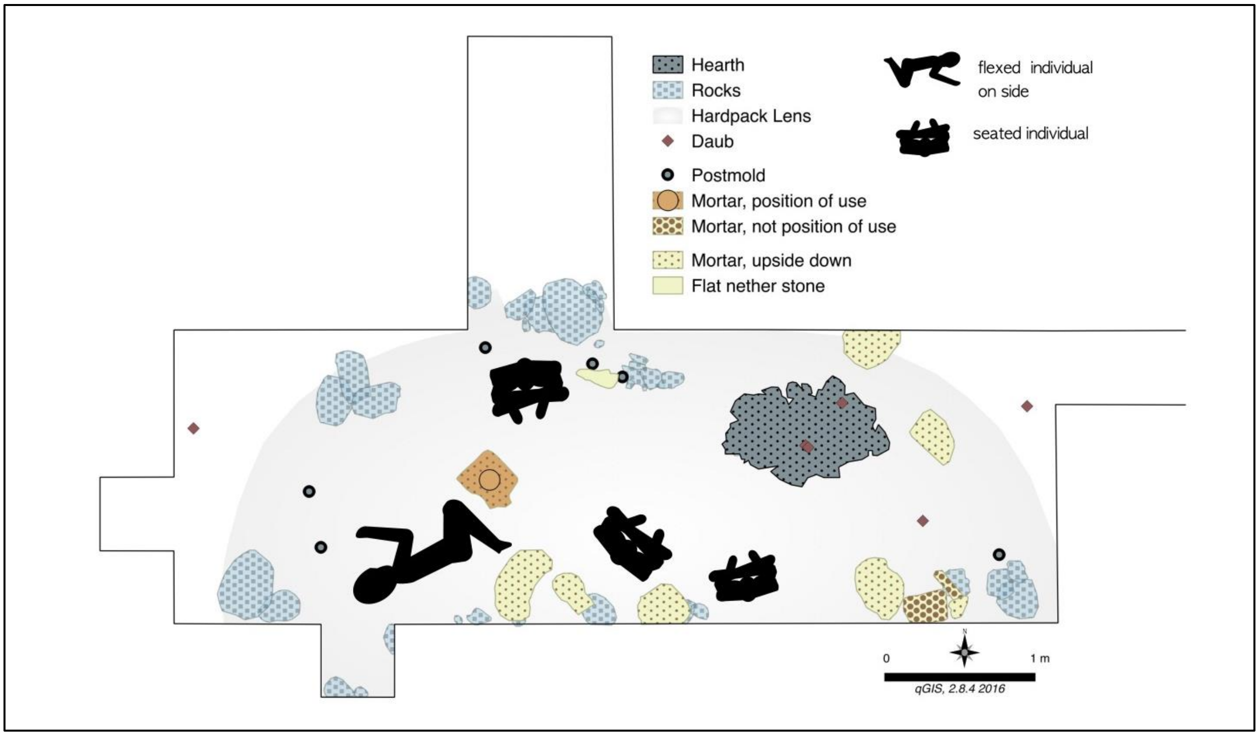

Figure 8.1 Hypothetical use of Mortar Riddle house with activity zones.

Since the house was identified within the largest of at least five mounds observed at the site, evidence of four or five other houses may remain unexcavated at the site and that fits the model for winter houses expected at a winter village site. Furthermore, the population may have totaled to 36 or potentially 54 people in the upland valley. Some of the other mounded earth features may include cache locations. The excavated house at Mortar Riddle appeared to have a doorway opening to the southeast and if this is the case for the other houses, doorways at the village did not face each other but opened to the commanding visual presence of Tse'tse'ede's higher elevations.

Big Mound (35HA2626) was surveyed and mapped, and limited subsurface testing was completed before a wildland fire forced our retreat from the Little Blitzen drainage. Testing focused on the largest and southern most mound, which measured roughly 50 meters in length (west to east), 25 meters wide (north to south), and one meter tall. Artifacts observed on the surface include five hopper mortars, two metates, two manos and projectile points dominated by Northern Side-notched and Elko series points. If the surface collected projectile points accurately reflect the

antiquity of the Big Mound site's subsurface deposits, then it would appear that Middle Archaic occupations did make use of Tse'tse'ede's interior.

Big Mound is a fantastic hunting location, overlooking a draw leading prey into the Little Blitzen Flood Plain to the north and a 4689 acre broad flat in the opposite direction. The big mound NISP totaled 1,261 and weighed 160.39 grams, 86.2% of which was burned and highly fragmented. Most of the sample specimens represented Mammals identified to a size category and, in rank order, they are Unknown Size Category X (43.4%, n=547) followed by Size Category IV (21.9%, n=276) and Size Category V (20.2%, n=255). Identified species include pronghorn antelope represented by a single molar and marmot represented by five burned specimens. Only 13 bones representing mammals smaller than a marmot and a single bird bone was identified. The bird bone was burned along with half of the small mammal bones. The domestic activities represented at Big Mound and the size of the cultural deposit suggest the site was likely residential and that structural remains may exist below the surface. In sum, results suggest occupants processed floral and faunal resources in occupations during the Middle to early Late Archaic.

Northern Side-notched and Elko series points are the most numerous types among those collected from the surface at the High Ring (BLM #0502063004Si) site, located above 9,000' on Tse'tse'ede. A single Cottonwood triangular, along with mid-section and distal point fragments that may very well have represented other Later Archaic points, were also identified and collected. Subsurface testing of a rock ring in which we observed a centrally located hearth included a total of 210 pieces of debitage. Below that, we encountered an increasing number aluminum foil fragments. This apparent mixing of prehistoric and modern materials raises questions about the integrity of the site that would be best answered with additional stratigraphic excavations in combination with radiocarbon dating. Close examination of debitage frequency in another testing location within the site boundaries suggest there are intact buried prehistoric cultural deposits at the site. The range of represented projectile point styles is clear evidence that the site, overlooking the snow melt and

spring-fed headwaters of the Little Blitzen River, was a prime summer hunting location from the Mid through Late Holocene.

Burns BLM archaeologists have identified other sites with rock rings above 9,000'; a ground stone hopper mortar was observed at one and another site included a faint pictograph within the site boundaries that faced the west (Mueller Epstein 2011; Thomas 2004). Clearly, higher elevations of Tse'tse'ede were used prehistorically for hunting and hunters may have processed some floral resources to supplement their journey. Future testing may clarify prehistoric use of this alpine region, especially at sites where cultural features indicative of domestic activities still exist.

Tse'tse'ede and the Northern Great Basin

The results of this study join the dataset of northern and northwestern Great Basin sites with house structures (Table 8.1). A comparison of these sites to the results of archaeological investigations I report in this dissertation reveals a diverse range of house types, construction methods and materials, associated features and artifacts.

In general, houses dating to more than 2500 BP are typically pole and thatch (also known as wikiups) with central hearths. House floors are not excavated though they exhibit shapes that vary in description from saucer to bowl to steep-sided. The mean house diameter is 6.0 meters. Not all sites exhibit charred posts, or evidence of a superstructure. All houses associated with this time frame are located near the valley floor during a climate period of greater moisture and reduced evaporation / cooler temperatures. King's Dog is an outlier within the older house group in that it dates to the period of very dry and increased evaporation / warmer temperatures. King's Dog also exhibited the presence of a large central beams and an earthen ramp to the eastern doorway.

8.1 Middle and Late Archaic northern and western Great Basin Houses (all measurements given in meters)

Site	Age (BP) or PPT type	Climate	House location on landscape	House Type	Structural evidence	Diameter	Pit depth *Floor lens	Floor	Hearth
King's Dog	6000 – 4500	Dry / Warm	Lake, Basin	Semi-subterranean earth lodge	Juniper Beam post, doorway ramp	8	0.5	Steep-sided	Central
Bergen Site	5930 – 3660	Moist / Cool	Lake, Basin	Pole and thatch	One post mold in 9C	4	N/A	Saucer	Central
Big M	4900 - 4530		Lake, Basin	Pole and thatch	Post mold	6	0.3	Bowl	Inside
King's Dog	4500 - 3000		Lake, Basin	Pole and thatch	Post mold	5.0 - 5.5		Saucer	Central
Dunn Site	3200		Riverine	Semi-subterranean	Post mold	6	0.36	Saucer	Central
Rodriquez	2620 +/- 80		Lake, Basin	Pole and thatch	Post mold	3.0 - 4.5		Saucer	Central
Broken Arrow	2000 - 1800	Dry / Warm	Lake, Basin	Wickiup		3.0 +	.10*	Clay lined floor	Central
Carlon Village	1800		Lake, Basin	Rock ring	Post mold; central posts	4.5 - 7.6	60 - 100	Steep sided, compacted	Central
Laurie's Site, House #1	1890 +/- 40		Lake, Basin	House pit or brush wickiup	Post mold		0.41*		Central
Laurie's Site, House #2	1580 +/- 40		Lake, Basin	House pit			0.25*	Compacted Clay-lined	
Boulder Village	1500-100	Transition	Upland	Rock ring	Juniper & Brush	2.9 - 4.2	0 - 2	Excavated, Boulder & Stone Sides	
McCoy Creek	1270 - 990	Moist / Cool	Riverine	Pole and thatch	Post mold	3.4 - 3.6	0.19*	Saucer Clay-lined	Central Rock-lined
Mortar Riddle	860 - 840	Dry / Warm	Riverine, upland	Pole and Thatch	Post mold	4.6	20 - 50	Excavated, compacted floor	Inside
Peninsula Site	380 - 240		Basin	Pole and thatch; Gable roof	Buttress Poles	5	0.2	Rock rings	Inside
ZX Ranch, House #1	Rosegate	Transition	Lake, Basin			6.7	0.3	Bermed pit	Central

Younger houses exhibit a reduced diameter with a mean value of 4.8 m. Many of the younger group are also located in the valley bottom and in lake-side settings, with multiple house structures in relatively close proximity. Boulder Village and Mortar Riddle are both located in upland settings, with multiple house structures in relatively close proximity. Both these sites were occupied were occupied during the hot and dry period of the Late Archaic.

Details of house structures also show some diversity during this time. A gabled roof overlay the house floor at the Penninsula site, the same house where daub provided additional evidence of the house structure. At Broken Arrow and McCoy Creek sites, both of which are located in the Harney Basin, archaeologists observed clay deposits in the house floor.

The distribution of artifacts inside the Mortar Riddle house is difficult to compare to contemporary northern Great Basin houses (Table 8.2). The McCoy Creek site House floor #2 is the best documented house floor to compare to Mortar Riddle, as it is closest in age and profile and plan view maps exist for the features that include their spatial distribution (Musil 1995:96, 116). A comparison of the two house contexts follows below (Table 8.3)

Both sites exhibit excavated house floors where a large hopper mortar was observed about one meter from the rock lined hearth inside the house. A collection of ground stone artifacts are found within a 1.2 m drop zone of a hopper mortar and a grinding stone slab. The hearth at McCoy Creek was excavated into the floor in contrast to that observed at Mortar Riddle.

Flaked stone projectile points dominated the assemblage in addition to fragmented tools. Like Mortar Riddle, most of the projectile points were classified as Rosegate series points with Elko series points being second most abundant. Debitage revealed household members focus on tool rejuvenation and late stage manufacturing activities, which is supported by the limited number of cores. Unfortunately tool stone material sources are unknown for this site.

Table 8.2 Interior House data available for Middle and Late Archaic houses of the northern and western Great Basin

Site	Age (BP) or PPT type	Climate	House location on landscape	House Type	Excavation Method Complete	Planview	Spatial distribution of artifacts
King's Dog	6000 – 4500	Dry / Warm	Lake, Basin	Semi-subterranean earth lodge	Yes	No	No
Bergen Site	5930 – 3660	Moist / Cool	Lake, Basin	Pole and thatch	Yes	Yes	Yes
Big M	4900 - 4530		Lake, Basin	Pole and thatch	Yes	No	No
King's Dog	4500 - 3000		Lake, Basin	Pole and thatch	Yes	No	No
Dunn Site	3200		Riverine	Semi-subterranean	Yes, Trench first	Yes	Yes
Rodriquez	2620 +/- 80		Lake, Basin	Pole and thatch	Yes	No	No
Broken Arrow	2000 - 1800	Dry / Warm	Lake, Basin	Wickiup	No	Yes	Yes
Carlon Village	1800		Lake, Basin	Rock ring	Yes	Yes	Yes
Laurie's Site, House #1	1890 +/- 40		Lake, Basin	House pit or brush wickiup	No	Yes	Yes
Laurie's Site, House #2	1580 +/- 40		Lake, Basin	House pit	No	Yes	Yes
Boulder Village	1500-100	Transition	Upland	Rock ring	Yes, some	No	No
McCoy Creek	1270 - 990	Moist / Cool	Riverine	Pole and thatch	Yes, Trench first	Yes	Yes
Mortar Riddle	860 - 840	Dry / Warm	Riverine, upland	Pole and Thatch	No	Yes	Yes
Peninsula Site	380 - 240		Basin	Pole and thatch; Gable roof	Yes	Yes	No
ZX Ranch, House #1	Rosegate	Transition	Lake, Basin	Trench, L-shape	No	Yes	Limited

Table 8.3 McCoy Creek Block B, Component II House Floor #2 compared to Mortar Riddle and Roaring Triangulation

		McCoy Creek, Block B, Component II	Mortar Riddle
cal BP		1150 - 900	860 - 840
General climate		Moist	Very dry, drought
Distance to water		< 50 m	200 m
Elevation		1265 m (4,150)	1,561 m (5,120')
Hearth		Yes	Yes
Compacted floor		Yes	Yes
Superstructure evidence		No	Yes
Projectile point quantity		n = 22	n=54
Identified diagnostic projectile point types listed in rank order		Rosegate, Elko	Rosegate, Elko series
Other tool types		Bifaces, Drill, Utilized Flake	Biface, Blade, Core, Chopper, Drill, Flake, Scraper, Uniface, Utilized flake
Nether stones		9	12
Complete hand stones		Yes	Yes
Beads, ornaments, special objects		Yes	Yes
NISP		10935	24979
Weight (g)			3157.92
MNI			36
Identified taxa associated with specific season in model	Fall	Duck, coot	Duck, coot
	Winter	Bobcat	Bobcat
	Spring	Fish, pheasant-like bird	Fish, pheasant-like bird
	Summer	Marmot	Marmot, porcupine
Identified taxa the model indicates are taken at all times of the year		Deer, Cottontail, Jackrabbit	Pronghorn, Bighorn, Deer, Cottontail, Jackrabbit
Opportunistic			N/A
Unexpected		Mink, Freshwater mussels, and perching birds	Beaver, Freshwater mussels
Not eaten		Canis sp.	Canis sp.

Beads and an incised pendant are similar to those recovered from the Mortar Riddle house floor (Musil 1995:159, Figure 66 e, g - j). Incidentally, an incised rodent tooth identified as gambling die (Musil 1995:159, Figure 66 b) bears striking similarities to one recovered from the South Block

at the Mortar Riddle Site (Mueller 2007). Fragmented bone tools similar to those recovered from Mortar Riddle were also identified (Musil 1995:157, Figure 65 b, c, and e).

Fauna recovered the McCoy Creek site house floor includes all classes of vertebrates in addition to fresh water mussels. Represented fish species included tui chub, trout, and suckers. One large vertebra was identified as representing a redband trout that may have been up to 100 cm long (Greenspan 1991, appendix B). Water fowl and terrestrial fauna are represented, though large game is far more important to the Mortar Riddle household. The housefloor faunal sample at McCoy Creek is tabulated according to represented species habitat zone or resource to the household (Table 8.4). A striking difference is in the relative abundance of specimens representing fur-bearing species at McCoy Creek, important for surviving winter anywhere in the northern or western Great Basin. Mortar Riddle, on the other hand, is clearly a big game destination as are rodents.

Table 8.4 Represented species habitat or utility to McCoy Creek and Mortar Riddle Households by specimen count.

	McCoy Creek	Mortar Riddle
Aquatic	1015	158
Large game	675	2726
Fur-bearing	1157	23
Rodents	485	2390
Birds	49	32
Fish	571	92
Amphibians and reptiles	98	3

In sum, Musil (1995:169) described the occupation of House floor #2 as dating to a time of intense and extensive occupation that reflect a “relatively sedentary residential occupation.” Given the location of the site near McCoy Creek, a tributary to the Donner und Blitzen River, it is conceivable that the site occupants at some point travelled to the upland Little Blitzen River Valley.

Tse’tse’ede Settlement and Subsistence System

Archaeology presented in this dissertation adds to the understanding of the Late Archaic period and, specifically, demonstrates the presence of a system of household and communities

securing food on the western uplift of Tse'tse'ede. Groups managed their food security needs and maintained long-distance connection to groups far afield during times of drought. Together these sites are components of a settlement and subsistence system, anchored by the Donner und Blitzen River (Figures 3.3, 3.4, 4.1).

Mortar Riddle, the site with the strongest evidence for a long term occupation, is located only 150 meters from the perennial Little Blitzen River. The Late Archaic Mortar Riddle house detailed in this dissertation may well represent a year round occupation from which groups staged logistical forays to secure resources or to maintain social connections with neighboring groups. Big Mound may represent another such residential site and one with a strategic visual advantage for game or people approaching from the west. The High Ring Site would have functioned as a hunting destination Mortar Riddle and Big Mound Site occupants logistically travelled to in the summer. Sites between the two elevational zones that Oetting (1992) recorded in the Little Blitzen, Big Indian, and Little Indian River include cultural material and features indicative of domestic activities seem to fit into this system as short term residential camps associated with logistical forays away from larger bases, like Mortar Riddle.

Along the Catlow Rim, the Roaring Triangulation Site likely served as a multi-purpose destination. Located about 5 km (3.2 miles) east and upslope 1000' (308 meters) of the Roaring Springs Cave, Roaring Triangulation may very well have functioned as a logistical hunting and gathering destination for those groups that wintered at the cave site. At the Roaring Triangulation site one could conceivably interact with groups travelling through the area. Exotic items recovered from Roaring Springs Cave and Mortar Riddle suggests established social and economic networks functioned for some time and perhaps some interaction with groups in the Harney Basin floor at sites like McCoy Creek. Visitors approaching any of the subject sites from the Catlow Valley floor were likely spotted by folks at Roaring Triangulation Site.

Skull Creek Dunes, about 30 miles south of Roaring Springs Cave, appears to have functioned more as a logistical gathering location, perhaps visited repeatedly over the years in the fall by groups who typically wintered farther south at Catlow Cave. Other more ephemeral sites exist in the Catlow Valley between those sites and the Beatty's Butte obsidian source, evidence of logistical treks for raw tool stone (e.g. O'Grady et al. 2000).

The vertical relief between the mountain's summit and the Catlow Valley floor offered sufficient habitat variety and dependable water resources to sustain plant and animal resources throughout an annual cycle during the Middle and Late Archaic Periods. Between 6,000 and 3,000 years ago groups likely wintered in the cave sites and made logistical treks to Roaring Triangulation, Skull Creek Dunes, and the higher elevations of the mountain.

The excavated sites presented in this dissertation add new data to the Late Archaic record of household and village sites in the northern Great Basin. In particular, the pattern for the western flank of Tse'tse'ede plausibly functioned in a system that was distinctive from that operating in the lower elevations of Harney Basin. The best evidence for this comes from the contemporaneously occupied Laurie's Site and the Broken Arrow Site. Obsidian tools recovered respectively from a house floor and a domestic surface lens were manufactured with raw material from sources located to the north and east (O'Grady 2006). Obsidian source data is not available for the McCoy Creek and Dunn Sites, although these sites do exhibit house styles similar to the Mortar Riddle house. The similarity in identified faunal resources –though different in relative abundances- and some similarities in formal bone tools and exotic beads, suggests a similar pattern to that seen at the upland Mortar Riddle or Big Mound site. A comparison of represented obsidian sources at the different sites would certainly illuminate the discussion of relationships between the two site clusters.

While it is challenging to build regional and chronological comparisons, given the diversity of research designs and associated strategies of archaeological data recovery and analysis, it seems

clear that household archaeology, when controlled for location on the landscape and for dates of occupation and associated climatic regimes, can be productive. Provocative at this point are some of the variations in house construction; ephemeral evidence for hearth-centered activity surfaces with minimal or very temporary superstructures were observed in addition to artifact-rich hard-packed floors with wooden superstructures anchored by rock or daub or both, to semi-subterranean pit houses completely rimmed with rock or clay berms. While some of these variations seem associated with contemporary uses of residential bases and more logistical camps, others prompt questions about variations in the degree of permanence of residential bases that may be tied to elevational home on the larger landscape or to mobility strategies in the face of climatic change.

Utility of Hunter-gatherer Household Archaeology

My focus on the house as the analytical unit allowed me to frame my interpretation of activities, such as plant food processing, hunting, butchering, cooking, hide scraping, lithic tool manufacture, gaming, use and production of ornaments and beads, and the acquisition of exotic beads and goods, within the social context of a household. This allowed not only a focused look at a particular "socio-economic unit" where strategic food security decisions played out, but also a more holistic sense of hunter-gatherer life, where activities that do not directly contribute to caloric acquisition, such as gaming, are nevertheless folded into the subsistence system and can be associated with a household, a time, and a place. Given the dated floors and their associated climatic regimes, I was able to compare household activities and diet between drier and wetter periods. These floors did not have to be completed excavated, though that helps clarify use of space. By combining evidence from groundstone, flaked stone, worked bone and shell, and dietary faunal remains, I could connect specific subsistence activities with particular site locations on the landscape. By comparing patterns of obsidian sources I could map some general patterns of movement across the larger region.

In summary, the Late Archaic pattern for semi-sedentary village sites that flourished after Cal 2000 BP represents clear evidence for a largely sedentary settlement pattern. Sites are found in close proximity to perennial streams and springs, with quick access to the vertical relief associated with a range of floral and faunal resources available throughout the year. The sedentary nature of the Lake Archaic settlement pattern is a continuation from earlier times with the main difference being an increased number of houses, indicative of larger populations, and the expansion of sites into the uplands or other vacant locations. Elko and Rosegate series projectile points are associated with these Late Archaic village sites along with other flaked stone tools, ground stone artifacts, and, in some cases, embellished artifacts with unknown function. Houses structures tended to have smaller diameters, and add to the diversity of floor types observed in Middle Holocene houses. Some houses exhibited excavated floors while others did not and still others exhibited evidence for clay-lined foundations. Postholes were observed in most of the Late Archaic houses, some with piled rocks and sediment berms providing foundational support for walls constructed of perishable materials.

Conclusions

The model for household food security generally passed with respect to predicting represented taxa, but not with regard to represented house types and construction materials. Represented material culture suggests relationship networks reaching into Northern California and southwestern Oregon in addition to in situ development of housing styles. The strongest aspect of the model is that it illuminates the individual (single work spaces) within the analytic unit of the household; consequently, the spaces occupied by an individual and shared with a household are visible and represent particular roles that connected that group to a community of households sharing a subsistence and settlement system, and exotic items indicate points of connection between that household and a larger regional social and economic network.

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Appendix A - Subject Site Catalogs

Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
3004Si	11-1	U1_qAse	sur.-20		1/8"	28	debitage	lithic
3004Si	11-2	U1_qAse	sur.-20		1/8"		charcoal	carbon
3004Si	11-3	U1_qAse	sur.-20		1/8"		foil	aluminum
3004Si	11-4	U1_qAse	sur.-20		1/8"		unknown	Unknown
3004Si	11-5	U1_qBsw	sur.-20		1/8"		foil	aluminum
3004Si	11-9	U1_qBsw	sur.-20		1/8"	9	charcoal	Carbon
3004Si	11-10	U1_qBsw	sur.-20		1/8"	3	debitage	lithic
3004Si	11-12	U1_qAse	20-30		1/8"		foil	aluminum
3004Si	11-13	U1_qAse	20-30		1/8"	89	debitage	lithic
3004Si	11-14	U1_qBsw	20-30		1/8"		charcoal	carbon
3004Si	11-15	U1_qBsw	20-30		1/8"		foil	aluminum
3004Si	11-16	U1_qBsw	20-30		1/8"	66	debitage	lithic
3004Si	11-22	U2_qAnw	20-30		1/8"	1	debitage	Lithic
3004Si	11-24	U2_qAnw	30-40		1/8"	5	debitage	lithic
3004Si	11-25	U2_qAnw	30-40		1/8"		charcoal	carbon
3004Si	11-27	U2_qAnw	40-50		1/8"		charcoal	carbon
3004Si	11-28	U2_qAnw	40-50		1/8"	2	debitage	lithic
3004Si	11-30	U2_qAnw	50-60		1/8"			
3004Si	11-6	U1_qBsw	sur.-20	3		1	debitage	lithic
3004Si	11-7	U1_qBsw	sur.-20	1		1	foil	aluminum
3004Si	11-8	U1_qBsw	sur.-20	2		9	foil	aluminum
3004Si	11-11	U1_qAse	20-30	1			charcoal	carbon
3004Si	11-17	U1_qAse	30-40	1		1	c.v. sample	Sediment
3004Si	11-18	U1_qBsw	30-40	1		1	c.v. sample	Sediment
3004Si	11-19	U2_qAnw	sur.-20	1		1	c.v. sample	sediment
3004Si	11-20	U2_qAnw	20-30	1		1	c.v. sample	Sediment
3004Si	11-21	U2_qAnw	20-30	2			charcoal	carbon
3004Si	11-23	U2_qAnw	30-40	1		1	c.v. sample	Sediment
3004Si	11-26	U2_qAnw	40-50	1		1	c.v. sample	Sediment
3004Si	11-29	U2_qAnw	50-60	1		1	c.v. sample	Sediment
35HA2626	11-100	U2_qAnw	20-30	A1		1	c.v. sample	sediment
35HA2626	11-101	U2_qAnw	20-30	A2		1	tooth	bone
35HA2626	11-102	U2_qAnw	20-30	A3		1	horn	bone
35HA2626	11-103	U2_qAnw	20-30		1/8	1	charcoal	Carbon
35HA2626	11-104	U2_qAnw	20-30		1/8		debitage	lithic
35HA2626	11-106	U2_qAnw	30-40	A1		1	c.v. sample	Sediment
35HA2626	11-108	U2_qAnw	30-40		1/8	1	projectile point	lithic
35HA2626	11-109	U2_qAnw	30-40		1/8		charcoal	Carbon
35HA2626	11-110	U2_qAnw	30-40		1/8		debitage	lithic
35HA2626	11-112	U2_qAnw	30-40		1/8		debitage	lithic
35HA2626	11-113	U3_qAnw	sur.-20	A1		1	pp-stem	lithic
35HA2626	11-114	U3_qAnw	sur.-20	A2		1	tool	lithic
35HA2626	11-115	U3_qAnw	sur.-20	A3		1	tool	lithic
35HA2626	11-116	U3_qAnw	sur.-20	A4		1	tool	lithic
35HA2626	11-117	U3_qAnw	sur.-20	A5		1	tool	lithic
35HA2626	11-118	U3_qAnw	sur.-20	A6		1	tool	lithic
35HA2626	11-119	U3_qAnw	sur.-20		1/8		debitage	lithic
35HA2626	11-121	U3_qAnw	20-30	A1		1	c.v. sample	sediment
35HA2626	11-122	U3_qAnw	20-30	A2		1	tool	lithic
35HA2626	11-123	U3_qAnw	20-30	A3		1	GDS-mano	lithic
35HA2626	11-124	U3_qAnw	20-30		1/8	1	projectile point	lithic
35HA2626	11-125	U3_qAnw	20-30		1/8	1	drill	ltihic
35HA2626	11-126	U3_qAnw	20-30		1/8		debitage	Lithic
35HA2626	11-128	U3_qAnw	30-40	A1		1	c.v. sample	Sediment
35HA2626	11-129	U3_qAnw	30-40	A2		1	tool	lithic

Appendix A - Subject Site Catalogs

Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA2626	11-133	U3_qAnw	30-40		1/8	1	tool	lithic
35HA2626	11-134	U3_qAnw	30-40		1/8	1	tool	lithic
35HA2626	11-135	U4_qAnw	sur.-20	A1		1	projectile point	lithic
35HA2626	11-137	U4_qAnw	sur.-20		1/8	1	projectile point	lithic
35HA2626	11-138	U4_qAnw	sur.-20		1/8	1	projectile point	lithic
35HA2626	11-139	U4_qAnw	sur.-20		1/8		debitage	lithic
35HA2626	11-140	U5_qAnw	sur.-20		1/8	1	scraper	lithic
35HA2626	11-141	U5_qAnw	sur.-20		1/8	1	projectile point	lithic
35HA2626	11-142	U5_qAnw	sur.-20		1/8	1	projectile point	lithic
35HA2626	11-143	U5_qAnw	sur.-20		1/8		debitage	lithic
35HA2626	11-145	U5_qAnw	20-30	A1		1	c.v. sample	Sediment
35HA2626	11-146	U5_qAnw	20-30	A2		1	gds	lithic
35HA2626	11-148	U5_qAnw	20-30	A4		1	gds	lithic
35HA2626	11-149	U5_qAnw	20-30		1/8	1	tool	lithic
35HA2626	11-150	U5_qAnw	20-30		1/8	1	debitage	lithic
35HA2626	11-152					1	pp-corner notch	Lithic
35HA2626	11-153	U1_qAsw	20-30	A1		1	c.v. sample	Sediment
35HA2626	11-155	U1_qAsw	20-30		1/8		debitage	lithic
35HA2626	11-156	U1_qAsw	20-30		1/8	1	daub	Fired sediment
35HA2626	11-157	U5_qAnw	20-30		1/8	10	daub	Fired sediment
35HA2626	11-158	U5_qAnw	20-30		1/8	1	tool	lithic
35HA2626	11-159	U1_qAse	20-30	A1		1	c.v. sample	Sediment
35HA2626	11-161	U1_qAse	20-30	A2		1	flake	lithic
35HA2626	11-163	U1_qAse	20-30	A4		1	c.v. sample	sediment
35HA2626	11-164	U1_qAse	20-30		1/8		debitage	lithic
35HA2626	11-166	U1_qAse	20-30		1/8		charcoal	carbon
35HA2626	11-167	U2_qAnw	20-30		1/8	8	daub	Fired sediment
35HA2626	11-168	U3_qAnw	10-20		1/8	1	daub	Fired sediment
35HA2626	11-169	U4_qAnw	10-20		1/8	3	daub	Fired sediment
35HA2626	11-170	U1_qAsw	10-20		1/8	2	daub	Fired sediment
35HA2626	11-171	U1_qAse	20-30		1/8	3	daub	Fired sediment
35HA2626	11-172	U1_qAse	10-20		1/8	4	daub	Fired sediment
35HA2626	11-173	U1_qAnw	20-30		1/8	11	daub	Fired sediment
35HA2626	11-174	U1_qAne	20-30		1/8	10	daub	Fired sediment
35HA2626	11-175	U1_qAsw	20-30		1/8	2	daub	Fired sediment
35HA2626	11-69	U1_qAnw	sur.-20		1/8	389	debitage	lithic
35HA2626	11-70	U1_qAne	sur.-20		1/8		charcoal	Carbon
35HA2626	11-72	U1_qAne	sur.-20		1/8		debitage	lithic
35HA2626	11-73	U1_qAse	sur.-20	A1		1	biface	lithic
35HA2626	11-75	U1_qAse	sur.-20		1/8	1	projectile point	lithic
35HA2626	11-76	U1_qAse	sur.-20		1/8	1	utilized flake	lithic
35HA2626	11-77	U1_qAse	sur.-20		1/8		debitage	lithic
35HA2626	11-81	U1_qAsw	sur.-20		1/8		charcoal	Carbon
35HA2626	11-82	U1_qAsw	sur.-20		1/8	1	drill	lithic
35HA2626	11-83	U1_qAsw	20-30		1/8		debitage	lithic
35HA2626	11-85	U1_qAnw	20-30	A2		1	biface	lithic
35HA2626	11-86	U1_qAnw	20-30	A3		1	c.v. sample	Sediment
35HA2626	11-88	U1_qAnw	20-30		1/8		debitage	lithic
35HA2626	11-90	U1_qAne	20-30	A1		1	c.v. sample	sediment
35HA2626	11-91	U1_qAne	20-30		1/8	1	projectile point	Lithic
35HA2626	11-93	U1_qAne	20-30		1/8		debitage	debitage
35HA2626	11-94	U2_qAnw	sur.-10	A1		1	GDS	lithic
35HA2626	11-96	U2_qAnw	sur.-10		1/8	85	debitage	lithic
35HA2626	11-97	U2_qAnw	10-20	A1		1	c.v. sample	Sediment
35HA2626	11-98	U2_qAnw	10-20		1/8		debitage	lithic

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Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA2627	12904	U4_qD	3	D2		1	Utilized Flake	CCS_flake
35HA2627	13270	U4_qD	3	D3		1	Utilized Flake	Obsidian_flake
35HA2627	13635	U4_qD	3	D4		1	Utilized Flake	Obsidian_flake
35HA2627	14365	U4_qD	3	D6		1	Ochre	Iron Oxide
35HA2627	35996	U5_qC	1b	C2		1	GroundStone	Lithic_GDS
35HA2627	36361	U5_qC	1b	C3		1	GroundStone	Lithic_GDS
35HA2627	36727	U5_qC	1b	C4		1	Tool	Obsidian_tool
35HA2627	37092	U5_qC	1b	C5		1	Tool	CCS_tool
35HA2627	37457	U5_qC	1b	C6		1	Tool	Obsidian_tool
35HA2627	04-267	U2_qC	2	C3		1	GroundStone	Lithic_GDS
35HA2627	04-268	U2_qC	2	C4		1	Core	Basalt_core
35HA2627	04-271	U2_qC	2	C7		1	Sidescraper	Obsidian_scraper
35HA2627	04-272	U2_qC	2	C8		1	Edgescraper	CCS_scraper
35HA2627	04-274	U2_qC	2	C10		1	Charcoal	Carbon
35HA2627	04-278	U2_qC	2	C2		1	Rosegate	Obsidian_ppt
35HA2627	04-297	U2_qC	3	C3		1	Charcoal	Carbon
35HA2627	04-301	U3_qA	F1	A2		1	Charcoal	Carbon
35HA2627	04-304	U3_qA	F1	A5		1	Pestle	Pestle_GDS
35HA2627	04-308	U3_qA	F1	A8		1	GroundStone	Lithic_GDS
35HA2627	04-311	U3_qA	F1	A13		1	GroundStone	Lithic_GDS
35HA2627	04-315	U3_qA	F1	A17		1	Charcoal	Carbon
35HA2627	04-316	U3_qA	F1	A18		1	ElkoCornerNotched	Obsidian_ppt
35HA2627	04-317	U3_qA	F1	A19		1	Scraper	Obsidian_scraper
35HA2627	04-321	U3_qA	F1	A23		1	Charcoal	Carbon
35HA2627	04-322	U3_qA	F1	A24		1	Rosegate	Obsidian_ppt
35HA2627	04-323	U3_qA	F1	A25		1	Ochre	Iron Oxide
35HA2627	04-327	U3_qA	F1	A29		1	GroundStone	Lithic_GDS
35HA2627	04-328	U3_qA	F1	A30		1	GroundStone	Lithic_GDS
35HA2627	04-329	U3_qA	F1	A31		1	GroundStone	Lithic_GDS
35HA2627	04-403	U2_qC	3	C9		1	End/EdgeScraper	Obsidian_scraper
35HA2627	04-404	U2_qC	3	C10		1	Charcoal	Carbon
35HA2627	04-405	U2_qC	3	C11		1	Charcoal	Carbon
35HA2627	04-407	U2_qC	3	C13		1	Ochre	Iron Oxide
35HA2627	04-409	U2_qC	3	C15		1	Edgescraper/Blade	Basalt_scraper
35HA2627	04-470	U3_qD	2	D4		1	Utilized Flake	Obsidian_flake
35HA2627	04-473	U3_qD	2	D2		1	Charcoal	Carbon
35HA2627	04-474	U3_qD	2	D7		1	Charcoal	Carbon
35HA2627	04-475	U3_qD	2	D3		1	Rosegate/pinstem?	Obsidian_ppt
35HA2627	04-476	U3_qD	2	D5		1	Charcoal	Carbon
35HA2627	04-478	U3_qD	2	D8		1	Utilized Core	Basalt_core
35HA2627	04-480	U3_qD	3	D2		1	Charcoal	Carbon
35HA2627	04-482	U3_qD	3	D5		1	Charcoal	Carbon
35HA2627	04-520	U3_qC	1	C1		1	Rosegate/pinstem?	Obsidian_ppt
35HA2627	04-521	U3_qC	1	C2		1	Elko Eared	Obsidian_ppt
35HA2627	04-522	U3_qC	1	C3		1	GroundStone	Lithic_GDS
35HA2627	04-523	U3_qC	1	C4		1	Rosegate	Obsidian_ppt
35HA2627	04-534	U3_qC	1	C7		1	Rosegate	Obsidian_ppt
35HA2627	04-566	U3_qD	1	D8		1	Ppt, tip frag	Obsidian_ppt
35HA2627	04-570	U3_qD	1	D7		1	Rosegate	Lithic_ppt
35HA2627	04-573	U3_qD	1	D9		1	Ppt, base frag	Obsidian_ppt
35HA2627	04-574	U3_qD	1	D10		1	Elko Eared	Obsidian_ppt
35HA2627	04-575	U3_qD	1	D6		1	Utilized Flake/Scraper	Obsidiain_utilizedflakescraper
35HA2627	04-600	U3_qC	2	C8		1	Charcoal	Carbon
35HA2627	04-602	U3_qC	2	C11		1	Charcoal	Carbon
35HA2627	04-606	U3_qC	2	C6		1	Charcoal	Carbon

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Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA2627	04-623	U3_qB	2	B9		1	Charcoal	Carbon
35HA2627	04-626	U3_qB	2	B12		1	Scraper	Obsidian_scraper
35HA2627	04-652	U3_qB	1	B3		1	Edgescraper	Basalt_scraper
35HA2627	04-659	U3_qB	1	B12		1	Rosegate	Obsidian_ppt
35HA2627	04-661	U3_qB	1	B11		1	Humboldt, tip frag	Obsidian_ppt
35HA2627	04-662	U3_qB	1	B10		1	Rosegate	Obsidian_ppt
35HA2627	04-666	U3_qC	3	C3		1	Charcoal	Carbon
35HA2627	04-667	U3_qC	3	C4		1	Charcoal	Carbon
35HA2627	04-669	U3_qC	3	C6		1	Charcoal	Carbon
35HA2627	04-671	U3_qC	3	C8		1	Ppt, tip frag	Obsidian_ppt
35HA2627	04-672	U3_qC	3	C9		1	Willowleaf	Obsidian_ppt
35HA2627	04-674	U3_qC	3	C11		1	Core	Basalt_core
35HA2627	04-675	U3_qC	3	C12		1	Humboldt, tip frag	Basalt_ppt
35HA2627	04-688	u4_qD	1	D12		1	Elko Eared	Obsidian_ppt
35HA2627	04-729	U4_qB	1	B14		1	Chopper/Scrapper	CCS_chopper
35HA2627	04-730	U4_qB	1	B13		3	Wood	Botanical
35HA2627	04-756	U4_qB	2	B2		1	Rosegate	Obsidian_ppt
35HA2627	04-757	U4_qB	2	B3		1	Charcoal	Carbon
35HA2627	04-758	U4_qB	2	B4		1	Utilized Flake	Basalt_flake
35HA2627	04-759	U4_qB	2	B5		1	Rosegate	Obsidian_ppt
35HA2627	04-761	U4_qB	2	B6		1	Core	Lithic_core
35HA2627	04-763	U4_qD	2	D2		1	Scraper	Obsidian_scraper
35HA2627	04-764	U4_qD	2	D3		1	GroundStone	Lithic_GDS
35HA2627	04-765	U4_qD	2	D4		1	Utilized Flake	Lithic_utilizedflake
35HA2627	04-791	U4_qD	3	D4		1	Core	CCS_core
35HA2627	04-933	U3_qC	3	N/A		1	HopperMortar	HopperMortar_GDS
35HA2627	04-991	U4_qB	3	B2		1	GroundStone	Lithic_GDS
35HA2627	04-u1	U4_qB	3	B3		1	GroundStone	Lithic_GDS
35HA2627	04-u3	U4_qB	3	B5		1	Pestle	Pestle_GDS
35HA2627	04-u4	U4_qB	3	B6		1	GroundStone	Lithic_GDS
35HA2627	04-u5	U4_qB	3	B7		1	GroundStone	Lithic_GDS
35HA2627	05-297	U4_qC	1c	C4		1	EndScraper	Obsidian_scraper
35HA2627	05-298	U4_qC	1c	C5		1	RosegateCornerNotch	CCS_ppt
35HA2627	05-299	U4_qC	1c	C6		1	Ash	Carbon
35HA2627	05-301	U4_qC	1c	C8		1	RosegateCornerNotch	Obsidian_ppt
35HA2627	05-302	U4_qC	1c	C9		1	Drill/Graver	CCS_drill
35HA2627	05-305	U4_qC	1c	C12		1	RosegateCornerNotch	Obsidian_ppt
35HA2627	05-489	U4_qA	1c	A4		1	Wood	Botanical
35HA2627	05-490	U4_qA	1c	A5		1	RosegateCornerNotch	Obsidian_ppt
35HA2627	05-491	U4_qA	1c	A6		1	Humboldt, tip frag	Obsidian_ppt
35HA2627	05-492	U4_qA	1c	A7		1	HandStone	HandStone_GDS
35HA2627	05-499	U4_qC	2	C2		1	ElkoCornerNotched	Obsidian_ppt
35HA2627	05-505	U4_qC	3	C2		1	RosegateCornerNotch	Obsidian_ppt
35HA2627	05-506	U4_qC	3	C3		1	Charcoal	Carbon
35HA2627	05-507	U4_qC	3	C4		1	Core	Lithic_core
35HA2627	05-508	U4_qC	3	C5		1	Ochre	Iron Oxide
35HA2627	05-509	U4_qC	3	C6		1	HammerStone	Lithic_Hammerstone
35HA2627	05-510	U4_qC	3	C7		1	RosegateCornerNotch	CCS_ppt
35HA2627	05-511	U4_qC	3	C8		1	EndScraper	Obsidian_scraper
35HA2627	05-512	U4_qC	3	C9		1	Charcoal	Carbon
35HA2627	06-147-10	U5_qA	3	A8b		1	Charcoal	Carbon
35HA2627	06-147-11	U5_qA	3	A8c		1	Charcoal	Carbon
35HA2627	06-147-3	U5_qA	3	A3		1	Charcoal	Carbon
35HA2627	06-147-4	U5_qA	3	A4		1	C/D	Obsidian_ppt
35HA2627	06-147-7	U5_qA	3	A7		1	Core	Basalt_core

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Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA2627	06-147-8	U5_qA	3	A8		1	Charcoal	Carbon
35HA2627	06-147-9	U5_qA	3	A8a		1	Sediment sample	Matrix
35HA2627	06-173-2	U5_qB	3	B2		1	Core	Basalt_core
35HA2627	06-21-98	U4_qA	1c	A1		1	Daub	Fired Sediment
35HA2627	06-33-2	U5_qA	1b	A?		1	Projectile Point	Obsidian_ppt
35HA2627	06-41-1	U4_qA	2	A2		1	Stem	Obsidian_ppt
35HA2627	06-62-11	U4_qA	3	A11		1	Scraper	Lithic_scraper
35HA2627	06-62-12	U4_qA	3	A12		1	Utilized Flake	Lithic_flake
35HA2627	06-62-5	U4_qA	3	A5		1	C/D	Lithic_ppt
35HA2627	06-62-6	U4_qA	3	A6		1	Utilized Flake	Obsidian_flake
35HA2627	06-62-8	U4_qA	3	A8		1	Drill	Obsidian_drill
35HA2627	06-62-9	U4_qA	3	A9		1	Utilized Flake	Obsidian_flake
35HA2627	06-70-2	U5_qA	1c	A2		1	Charred wood fragment	Carbon
35HA2627	06-70-4	U5_qA	1c	A4		1	PossStem	CCS_ppt
35HA2627	06-70-6	U5_qA	1c	A6		1	Charcoal	Carbon
35HA2627	06-70-7	U5_qA	1c	A7		1	Ochre	Iron Oxide
35HA2627	06-77-3	U5_qA	2	A3		1	Pinto	Lithic_ppt
35HA2627	06-77-5	U5_qA	2	A5		1	Charcoal	Carbon
35HA2627	07-112-6	U9_qB	3	B6		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-137-11	U5_qA	1c	A11		1	Charcoal	Carbon
35HA2627	07-137-13	U5_qA	1c	A13		1	EndScraper	Obsidian_scraper
35HA2627	07-137-16	U5_qA	1c	A16		1	C/D	Lithic_ppy
35HA2627	07-137-19	U5_qA	1c	A19		1	Charcoal	Carbon
35HA2627	07-137-2	U5_qA	1c	A2		1	Tool	Lithic_tool
35HA2627	07-137-20	U5_qA	1c	A20		1	GroundStone	Lithic_GDS
35HA2627	07-137-3	U5_qA	1c	A3		1	Scraper	Basalt_scraper
35HA2627	07-137-4	U5_qA	1c	A4		1	GroundStone	Lithic_GDS
35HA2627	07-137-5	U5_qA	1c	A5		1	GroundStone	Lithic_GDS
35HA2627	07-137-6	U5_qA	1c	A6		1	GroundStone	Lithic_GDS
35HA2627	07-137-7	U5_qA	1c	A7		1	GroundStone	Lithic_GDS
35HA2627	07-137-8	U5_qA	1c	A8		1	Charcoal	Carbon
35HA2627	07-137-9	U5_qA	1c	A9		1	GroundStone	Lithic_GDS
35HA2627	07-142-1	U5_qA	1c	A		1	Daub	Fired Sediment
35HA2627	07-149-1	U5_qC	1c	C1		1	C/D	Obsidian_ppt
35HA2627	07-149-10	U5_qC	1c	C10		1	Charcoal	Carbon
35HA2627	07-149-12	U5_qC	1c	C12			Tool	Lithic_tool
35HA2627	07-149-2	U5_qC	1c	C2			Charcoal	Carbon
35HA2627	07-149-4	U5_qC	1c	C4			Charcoal	Carbon
35HA2627	07-149-5	U5_qC	1c	C5			Elko	Obsidian_ppt
35HA2627	07-149-7	U5_qC	1c	C7			GroundStone	Lithic_GDS
35HA2627	07-156-2	U5_qD	1c	D2		1	GroundStone	Lithic_GDS
35HA2627	07-156-3	U5_qD	1c	D3		1	Daub	Fired Sediment
35HA2627	07-156-4	U5_qD	1c	D4		1	Tool	Lithic_tool
35HA2627	07-156-6	U5_qD	1c	D6		1	Rosegate	Obsidian_ppt
35HA2627	07-156-7	U5_qD	1c	D7		1	Charcoal	Carbon
35HA2627	07-156-9	U5_qD	1c	D9		1	GroundStone	Lithic_GDS
35HA2627	07-162-1	U5_qA	1c	A1		1	Rosegate	Lithic_ppt
35HA2627	07-169-1	U5_qC	1c	C1		1	C/D	Obsidian_ppt
35HA2627	07-169-10	U5_qC	1c	C10		1	GroundStone	Lithic_GDS
35HA2627	07-169-2	U5_qC	1c	C2		1	Charcoal	Carbon
35HA2627	07-169-5	U5_qC	1c	C5		1	Charcoal	Carbon
35HA2627	07-169-8	U5_qC	1c	C8		1	Rosegate	Obsidian_ppt
35HA2627	07-169-9	U5_qC	1c	C9		1	GroundStone	Lithic_GDS
35HA2627	07-176-1	U5_qD	1c	D1		1	GroundStone	Lithic_GDS
35HA2627	07-176-10	U5_qD	1c	D10		1	Rosegate	Lithic_ppt

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Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA2627	07-176-11	U5_qD	1c	D11		1	Charcoal	Carbon
35HA2627	07-176-13	U5_qD	1c	D13		1	GroundStone	Lithic_GDS
35HA2627	07-176-14	U5_qD	1c	D14		1	GroundStone	Lithic_GDS
35HA2627	07-176-18	U5_qD	1c	D18		1	GroundStone	Lithic_GDS
35HA2627	07-176-20	U5_qD	1c	D20		1	GroundStone	Lithic_GDS
35HA2627	07-176-21	U5_qD	1c	D21		1	GroundStone	Lithic_GDS
35HA2627	07-176-22	U5_qD	1c	D22		1	Pin stem	Obsidian_ppt
35HA2627	07-176-25	U5_qD	1c	D25		1	GroundStone	Lithic_GDS
35HA2627	07-176-3	U5_qD	1c	D3		1	GroundStone	Lithic_GDS
35HA2627	07-176-4	U5_qD	1c	D4		1	GroundStone	Lithic_GDS
35HA2627	07-176-5	U5_qD	1c	D5		1	GroundStone	Lithic_GDS
35HA2627	07-176-6	U5_qD	1c	D6		1	GroundStone	Lithic_GDS
35HA2627	07-176-7	U5_qD	1c	D7		1	GroundStone	Lithic_GDS
35HA2627	07-176-9	U5_qD	1c	D9		1	Elko	Lithic_ppt
35HA2627	07-183-12	U5_qA	2	A12		1	Sediment sample	Matrix
35HA2627	07-183-13	U5_qA	2	A13		1	Charcoal	Carbon
35HA2627	07-183-14	U5_qA	2	A14		1	Charcoal	Carbon
35HA2627	07-183-15	U5_qA	2	A15		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-183-16	U5_qA	2	A16		1	Charcoal	Carbon
35HA2627	07-183-17	U5_qA	2	A17		1	Charcoal	Carbon
35HA2627	07-183-19	U5_qA	2	A19		1	Charcoal	Carbon
35HA2627	07-183-2	U5_qA	2	A2		1	Charcoal	Carbon
35HA2627	07-183-20	U5_qA	2	A20		1	Charcoal	Carbon
35HA2627	07-183-21	U5_qA	2	A21		1	Ochre	Iron Oxide
35HA2627	07-183-22	U5_qA	2	A22		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-183-23	U5_qA	2	A23		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-183-24	U5_qA	2	A24		1	Scraper	Basalt_scraper
35HA2627	07-183-25	U5_qA	2	A25		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-183-28	U5_qA	2	A28		1	Charcoal	Carbon
35HA2627	07-183-30	U5_qA	2	A30		1	Charcoal	Carbon
35HA2627	07-183-32	U5_qA	2	A32		1	Rosegate	Lithic_ppt
35HA2627	07-183-33	U5_qA	2	A33		1	GroundStone	Lithic_GDS
35HA2627	07-183-34	U5_qA	2	A34		1	GroundStone	Lithic_GDS
35HA2627	07-183-38	U5_qA	2	A38		1	Charcoal	Carbon
35HA2627	07-183-39	U5_qA	2	A39		1	Charcoal	Carbon
35HA2627	07-183-4	U5_qA	2	A4		1	Charcoal	Carbon
35HA2627	07-183-5	U5_qA	2	A5		1	Charcoal	Carbon
35HA2627	07-183-6	U5_qA	2	A6		1	Charcoal	Carbon
35HA2627	07-183-7	U5_qA	2	A7		1	Charcoal	Carbon
35HA2627	07-183-8	U5_qA	2	A8		1	Daub	Fired Sediment
35HA2627	07-183-9	U5_qA	2	A9		1	Charcoal	Carbon
35HA2627	07-191-11	U5_qB	2	B11		1	Charcoal	Carbon
35HA2627	07-191-14	U5_qB	2	B14		1	HandStone	HandStone_GDS
35HA2627	07-191-15	U5_qB	2	B15		1	HandStone	HandStone_GDS
35HA2627	07-191-4	U5_qB	2	B4		1	Charcoal	Carbon
35HA2627	07-191-6	U5_qB	2	B6		1	Charcoal	Carbon
35HA2627	07-191-8	U5_qB	2	B8		1	Stem	Lithic_ppt
35HA2627	07-198-10	U5_qC	2	C10			Charcoal	Carbon
35HA2627	07-198-2	U5_qC	2	C2		1	Charcoal	Carbon
35HA2627	07-198-4	U5_qC	2	C4			GroundStone	Lithic_GDS
35HA2627	07-198-6	U5_qC	2	C6			Charcoal	Carbon
35HA2627	07-198-7	U5_qC	2	C7			GroundStone	Lithic_GDS
35HA2627	07-198-8	U5_qC	2	C8			GroundStone	Lithic_GDS
35HA2627	07-205-12	U5_qD	2	D12		1	Scraper	Lithic
35HA2627	07-205-15	U5_qD	2	D15		1	GroundStone	Lithic_GDS

Appendix A - Subject Site Catalogs

Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA2627	07-205-16	U5_qD	2	D16		1	GroundStone	Lithic_GDS
35HA2627	07-205-17	U5_qD	2	D17		1	Tool	Lithic_tool
35HA2627	07-205-18	U5_qD	2	D18		1	GroundStone	Lithic_GDS
35HA2627	07-205-2	U5_qD	2	D2		1	HandStone	HandStone_GDS
35HA2627	07-205-4	U5_qD	2	D4		1	Elko	Obsidian_ppt
35HA2627	07-205-5	U5_qD	2	D5		1	Tool	Obsidian_tool
35HA2627	07-205-6	U5_qD	2	D6		1	Rosegate	Obsidian_ppt
35HA2627	07-205-7	U5_qD	2	D7		1	Coprolite	Coprolite
35HA2627	07-205-8	U5_qD	2	D8		1	GroundStone	Lithic_GDS
35HA2627	07-205-9	U5_qD	2	D9		1	GroundStone	Lithic_GDS
35HA2627	07-212-1	U5_qA	3	A1		1	Charcoal	Carbon
35HA2627	07-212-10	U5_qA	3	A10		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-212-12	U5_qA	3	A12		1	Elko	Obsidian_ppt
35HA2627	07-212-13	U5_qA	3	A13		1	Utilized Flake	Basalt_flake
35HA2627	07-212-15	U5_qA	3	A15		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-212-16	U5_qA	3	A16		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-212-3	U5_qA	3	A3		1	Uniface Frag	Obsidian_uniface
35HA2627	07-212-5	U5_qA	3	A5		1	Rosegate	Obsidian_ppt
35HA2627	07-212-6	U5_qA	3	A6		1	Charcoal	Carbon
35HA2627	07-212-8	U5_qA	3	A8		1	Daub	Fired Sediment
35HA2627	07-219-17	U5_qB	3	B17		1	HandStone	HandStone_GDS
35HA2627	07-219-4	U5_qB	3	B4		1	Scraper	Basalt_tool
35HA2627	07-219-8	U5_qB	3	B8		1	Scraper	Obsidian_tool
35HA2627	07-226-11	U5_qC	3	C11			Charcoal	Carbon
35HA2627	07-226-12	U5_qC	3	C12			Charcoal	Carbon
35HA2627	07-226-13	U5_qC	3	C13			Charcoal	Carbon
35HA2627	07-226-5	U5_qC	3	C5			Charcoal	Carbon
35HA2627	07-226-6	U5_qC	3	C6			Charcoal	Carbon
35HA2627	07-233-10	U5_qD	3	D10		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-233-11	U5_qD	3	D11		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-233-12	U5_qD	3	D12		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-233-13	U5_qD	3	D13		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-233-14	U5_qD	3	D14		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-233-15	U5_qD	3	D15		1	GroundStone	Lithic_GDS
35HA2627	07-233-16	U5_qD	3	D16		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-233-17	U5_qD	3	D17		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-233-2	U5_qD	3	D2		1	Sediment Sample	Matrix
35HA2627	07-233-22	U5_qD	3	D22		1	GroundStone	Lithic_GDS
35HA2627	07-233-24	U5_qD	3	D24		1	Gatecliff	Obsidian_ppt
35HA2627	07-233-26	U5_qD	3	D26		1	C/D	Lithic_ppt
35HA2627	07-233-3	U5_qD	3	D3		1	GroundStone	Lithic_GDS
35HA2627	07-233-30	U5_qD	3	D30		1	GroundStone	Lithic_GDS
35HA2627	07-233-31	U5_qD	3	D31		1	FCR	Lithic_FCR
35HA2627	07-233-35	U5_qD	3	D35		1	GroundStone	Lithic_GDS
35HA2627	07-233-36	U5_qD	3	D36		1	GroundStone	Lithic_GDS
35HA2627	07-233-37	U5_qD	3	D37		1	GroundStone	Lithic_GDS
35HA2627	07-233-38	U5_qD	3	D38		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-233-4	U5_qD	3	D4		1	GroundStone	Lithic_GDS
35HA2627	07-233-42	U5_qD	3	D42		1	Charcoal	Carbon
35HA2627	07-233-43	U5_qD	3	D43		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-233-5	U5_qD	3	D5		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-233-9	U5_qD	3	D9		1	GroundStone	Lithic_GDS
35HA2627	07-50-1	U8_qD	1c	D1		1	Tool	Obsidian_tool
35HA2627	07-67-5	U8_qD	3	D5		1	Charcoal	Carbon
35HA2627	07-67-6	U8_qD	3	D6		1	Charcoal	Carbon

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Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA2627	07-67-7	U8_qD	3	D7		1	GDS/FCR	Lithic_GDS/FCR
35HA2627	07-99-2	U9_qB	1c	B2		1	Projectile Point	Obsidian_ppt
35HA2627	07-99-3	U9_qB	1c	B3		1	Tool	Obsidian_tool
35HA2627	05-001 -1	U4_qA	20-30		<3		debitage	lithic
35HA2627	05-037 -1	U4_qA	30-40		<3		debitage	lithic
35HA2627	05-064 -1	U4_qA	40-50		<3		debitage	lithic
35HA2627	05-001 -2	U4_qA	20-30		<6		debitage	lithic
35HA2627	05-037 -2	U4_qA	30-40		<6		debitage	lithic
35HA2627	05-064 -2	U4_qA	40-50		<6		debitage	lithic
35HA2627	05-001 -3	U4_qA	20-30		<12		debitage	lithic
35HA2627	05-064 -3	U4_qA	40-50		<12		debitage	lithic
35HA2627	05-037 -3	U4_qA	30-40		<12		debitage	lithic
35HA2627	05-001 -4	U4_qA	20-30		<25		debitage	lithic
35HA2627	05-037 -4	U4_qA	30-40		<25		debitage	lithic
35HA2627	05-064 -4	U4_qA	40-50		<25		debitage	lithic
35HA2627	05-001 -5	U4_qA	20-30		<25		debitage	lithic
35HA2627	05-064 -5	U4_qA	40-50		<25		debitage	lithic
35HA2627	05-037 -5	U4_qA	30-40		<25		debitage	lithic
35HA2627	06-079 -1	U5_qAn	30-40		<3		debitage	lithic
35HA2627	06-149 -1	U5_qAn	40-50		<3		debitage	lithic
35HA2627	06-072 -1	U5_qAn	20-30		<3		debitage	lithic
35HA2627	06-072 -2	U5_qAn	20-30		<6		debitage	lithic
35HA2627	06-079 -2	U5_qAn	30-40		<6		debitage	lithic
35HA2627	06-149 -2	U5_qAn	40-50		<6		debitage	lithic
35HA2627	06-072 -3	U5_qAn	20-30		<12		debitage	lithic
35HA2627	06-079 -3	U5_qAn	30-40		<12		debitage	lithic
35HA2627	06-149 -3	U5_qAn	40-50		<12		debitage	lithic
35HA2627	06-072 -4	U5_qAn	20-30		<25		debitage	lithic
35HA2627	06-079 -4	U5_qAn	30-40		<25		debitage	lithic
35HA2627	06-149 -4	U5_qAn	40-50		<25		debitage	lithic
35HA2627	06-072 -5	U5_qAn	20-30		<25		debitage	lithic
35HA2627	06-079 -5	U5_qAn	30-40		<25		debitage	lithic
35HA2627	06-149 -5	U5_qAn	40-50		<25		debitage	lithic
35HA2627	07-164 -6	U5_qAs	20-30		<3		debitage	lithic
35HA2627	07-214 -5	U5_qAs	40-50		<3		debitage	lithic
35HA2627	07-139 -10	U5_qAs	20-30		<3		debitage	lithic
35HA2627	07-185 -6	U5_qAs	30-40		<3		debitage	lithic
35HA2627	07-164 -5	U5_qAs	20-30		3<x<6		debitage	lithic
35HA2627	07-214 -4	U5_qAs	40-50		3<x<6		debitage	lithic
35HA2627	07-139 -9	U5_qAs	20-30		3<x<6		debitage	lithic
35HA2627	07-185 -5	U5_qAs	30-40		3<x<6		debitage	lithic
35HA2627	07-214 -3	U5_qAs	40-50		6<x<12		debitage	lithic
35HA2627	07-164 -4	U5_qAs	20-30		6<x<12		debitage	lithic
35HA2627	07-139 -8	U5_qAs	20-30		6<x<12		debitage	lithic
35HA2627	07-185 -4	U5_qAs	30-40		6<x<12		debitage	lithic
35HA2627	07-214 -2	U5_qAs	40-50		12<x<25		debitage	lithic
35HA2627	07-164 -3	U5_qAs	20-30		12<x<25		debitage	lithic
35HA2627	07-185 -3	U5_qAs	30-40		12<x<25		debitage	lithic
35HA2627	07-139 -7	U5_qAs	20-30		12<x<25		debitage	lithic
35HA2627	07-214 -2	U5_qAs	40-50		12<x<25		debitage	lithic
35HA2627	07-164 -3	U5_qAs	20-30		12<x<25		debitage	lithic
35HA2627	07-185 -3	U5_qAs	30-40		12<x<25		debitage	lithic
35HA2627	07-139 -7	U5_qAs	20-30		12<x<25		debitage	lithic
35HA2627	07-139 -6	U5_qAs	20-30		<25		debitage	lithic
35HA2627	07-214 -1	U5_qAs	40-50		<25		debitage	lithic

Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA2627	07-185 -2	U5_qAs	30-40		<25		debitage	lithic
35HA2627	06-093 -1	U5_qBn	30-40		<3		debitage	lithic
35HA2627	06-175 -1	U5_qBn	40-50		<3		debitage	lithic
35HA2627	06-086 -1	U5_qBn	20-30		<3		debitage	lithic
35HA2627	06-086 -2	U5_qBn	20-30		<6		debitage	lithic
35HA2627	06-093 -2	U5_qBn	30-40		<6		debitage	lithic
35HA2627	06-175 -2	U5_qBn	40-50		<6		debitage	lithic
35HA2627	06-086 -3	U5_qBn	20-30		<12		debitage	lithic
35HA2627	06-093 -3	U5_qBn	30-40		<12		debitage	lithic
35HA2627	06-175 -3	U5_qBn	40-50		<12		debitage	lithic
35HA2627	06-093 -4	U5_qBn	30-40		<25		debitage	lithic
35HA2627	06-175 -4	U5_qBn	40-50		<25		debitage	lithic
35HA2627	06-086 -4	U5_qBn	20-30		<25		debitage	lithic
35HA2627	06-086 -5	U5_qBn	20-30		<25		debitage	lithic
35HA2627	06-093 -5	U5_qBn	30-40		<25		debitage	lithic
35HA2627	06-175 -5	U5_qBn	40-50		<25		debitage	lithic
35HA2627	07-192 -9	U5_qBs	30-40		<3		debitage	lithic
35HA2627	07-146 -8	U5_qBs	20-30		<3		debitage	lithic
35HA2627	07-220 -5	U5_qBs	40-50		<3		debitage	lithic
35HA2627	07-146 -7	U5_qBs	20-30		3<x<6		debitage	lithic
35HA2627	07-220 -4	U5_qBs	40-50		3<x<6		debitage	lithic
35HA2627	07-192 -8	U5_qBs	30-40		3<x<6		debitage	lithic
35HA2627	07-146 -6	U5_qBs	20-30		6<x<12		debitage	lithic
35HA2627	07-220 -3	U5_qBs	40-50		6<x<12		debitage	lithic
35HA2627	07-192 -7	U5_qBs	30-40		6<x<12		debitage	lithic
35HA2627	07-192 -6	U5_qBs	30-40		12<x<25		debitage	lithic
35HA2627	07-220 -2	U5_qBs	40-50		12<x<25		debitage	lithic
35HA2627	07-192 -6	U5_qBs	30-40		12<x<25		debitage	lithic
35HA2627	07-220 -2	U5_qBs	40-50		12<x<25		debitage	lithic
35HA2627	07-220 -1	U5_qBs	40-50		<25		debitage	lithic
35HA2627	07-146 -4	U5_qBs	20-30		<25		debitage	lithic
35HA2627	07-192 -5	U5_qBs	30-40		<25		debitage	lithic
35HA2627	07-151 -5	U5_qC	20-30		<3		debitage	lithic
35HA2627	07-170 -10	U5_qC	20-30		<3		debitage	lithic
35HA2627	07-228 -7	U5_qC	40-50		<3		debitage	lithic
35HA2627	07-200 -18	U5_qC	30-40		<3		debitage	lithic
35HA2627	07-151 -4	U5_qC	20-30		3<x<6		debitage	lithic
35HA2627	07-228 -6	U5_qC	40-50		3<x<6		debitage	lithic
35HA2627	07-170 -9	U5_qC	20-30		3<x<6		debitage	lithic
35HA2627	07-200 -17	U5_qC	30-40		3<x<6		debitage	lithic
35HA2627	07-228 -5	U5_qC	40-50		6<x<12		debitage	lithic
35HA2627	07-170 -8	U5_qC	20-30		6<x<12		debitage	lithic
35HA2627	07-151 -3	U5_qC	20-30		6<x<12		debitage	lithic
35HA2627	07-200 -16	U5_qC	30-40		6<x<12		debitage	lithic
35HA2627	07-146 -5	U5_qC	20-30		12<x<25		debitage	lithic
35HA2627	07-228 -4	U5_qC	40-50		12<x<25		debitage	lithic
35HA2627	07-170 -7	U5_qC	20-30		12<x<25		debitage	lithic
35HA2627	07-151 -2	U5_qC	20-30		12<x<25		debitage	lithic
35HA2627	07-200 -15	U5_qC	30-40		12<x<25		debitage	lithic
35HA2627	07-146 -5	U5_qC	20-30		12<x<25		debitage	lithic
35HA2627	07-228 -4	U5_qC	40-50		12<x<25		debitage	lithic
35HA2627	07-170 -7	U5_qC	20-30		12<x<25		debitage	lithic
35HA2627	07-151 -2	U5_qC	20-30		12<x<25		debitage	lithic
35HA2627	07-200 -15	U5_qC	30-40		12<x<25		debitage	lithic
35HA2627	07-228 -3	U5_qC	40-50		<25		debitage	lithic

Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA2627	07-170 -6	U5_qC	20-30		<25		debitage	lithic
35HA2627	07-151 -1	U5_qC	20-30		<25		debitage	lithic
35HA2627	07-200 -14	U5_qC	30-40		<25		debitage	lithic
35HA2627	07-158 -6	U5_qD	20-30		<3		debitage	lithic
35HA2627	07-207 -8	U5_qD	30-40		<3		debitage	lithic
35HA2627	07-235 -10	U5_qD	40-50		<3		debitage	lithic
35HA2627	07-177 -12	U5_qD	20-30		<3		debitage	lithic
35HA2627	07-158 -5	U5_qD	20-30		3<x<6		debitage	lithic
35HA2627	07-235 -9	U5_qD	40-50		3<x<6		debitage	lithic
35HA2627	07-207 -7	U5_qD	30-40		3<x<6		debitage	lithic
35HA2627	07-177 -11	U5_qD	20-30		3<x<6		debitage	lithic
35HA2627	07-158 -4	U5_qD	20-30		6<x<12		debitage	lithic
35HA2627	07-235 -8	U5_qD	40-50		6<x<12		debitage	lithic
35HA2627	07-207 -6	U5_qD	30-40		6<x<12		debitage	lithic
35HA2627	07-177 -10	U5_qD	20-30		6<x<12		debitage	lithic
35HA2627	07-158 -3	U5_qD	20-30		12<x<25		debitage	lithic
35HA2627	07-207 -5	U5_qD	30-40		12<x<25		debitage	lithic
35HA2627	07-177 -9	U5_qD	20-30		12<x<25		debitage	lithic
35HA2627	07-235 -7	U5_qD	40-50		12<x<25		debitage	lithic
35HA2627	07-158 -3	U5_qD	20-30		12<x<25		debitage	lithic
35HA2627	07-207 -5	U5_qD	30-40		12<x<25		debitage	lithic
35HA2627	07-177 -9	U5_qD	20-30		12<x<25		debitage	lithic
35HA2627	07-235 -7	U5_qD	40-50		12<x<25		debitage	lithic
35HA2627	07-158 -2	U5_qD	20-30		<25		debitage	lithic
35HA2627	07-235 -6	U5_qD	40-50		<25		debitage	lithic
35HA2627	07-207 -4	U5_qD	30-40		<25		debitage	lithic
35HA2627	07-177 -8	U5_qD	20-30		<25		debitage	lithic
35HA2627	07-340 -6	U6_qA	30-40		<3		debitage	lithic
35HA2627	07-346 -1	U6_qA	40-50		<3		debitage	lithic
35HA2627	07-340 -7	U6_qA	30-40		<6		debitage	lithic
35HA2627	07-346 -2	U6_qA	40-50		<6		debitage	lithic
35HA2627	07-346 -3	U6_qA	40-50		<12		debitage	lithic
35HA2627	07-340 -8	U6_qA	30-40		<12		debitage	lithic
35HA2627	07-340 -9	U6_qA	30-40		<25		debitage	lithic
35HA2627	07-340 -10	U6_qA	30-40		<25		debitage	lithic
35HA2627	07-346 -4	U6_qA	40-50		<25		debitage	lithic
35HA2627	07-381 -2	U6_qB	40-50		<3		debitage	lithic
35HA2627	07-381 -3	U6_qB	40-50		<6		debitage	lithic
35HA2627	07-381 -4	U6_qB	40-50		<12		debitage	lithic
35HA2627	07-381 -5	U6_qB	40-50		<12		debitage	lithic
35HA2627	07-381 -6	U6_qB	40-50		<25		debitage	lithic
35HA2627	07-064 -5	U8_qD	30-40		<3		debitage	lithic
35HA2627	07-052 -11	U8_qD	20-30		<3		debitage	lithic
35HA2627	07-069 -5	U8_qD	40-50		<3		debitage	lithic
35HA2627	07-052 -10	U8_qD	20-30		3<x<6		debitage	lithic
35HA2627	07-064 -4	U8_qD	30-40		3<x<6		debitage	lithic
35HA2627	07-069 -4	U8_qD	40-50		3<x<6		debitage	lithic
35HA2627	07-064 -3	U8_qD	30-40		6<x<12		debitage	lithic
35HA2627	07-052 -9	U8_qD	20-30		6<x<12		debitage	lithic
35HA2627	07-069 -3	U8_qD	40-50		6<x<12		debitage	lithic
35HA2627	07-064 -2	U8_qD	30-40		12<x<25		debitage	lithic
35HA2627	07-069 -2	U8_qD	40-50		12<x<25		debitage	lithic
35HA2627	07-052 -8	U8_qD	20-30		12<x<25		debitage	lithic
35HA2627	07-064 -2	U8_qD	30-40		12<x<25		debitage	lithic
35HA2627	07-069 -2	U8_qD	40-50		12<x<25		debitage	lithic

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35HA2627	07-052 -8	U8_qD	20-30		12<x<25		debitage	lithic
35HA2627	07-052 -7	U8_qD	20-30		<25		debitage	lithic
35HA2627	07-069 -1	U8_qD	40-50		<25		debitage	lithic
35HA2627	07-064 -1	U8_qD	30-40		<25		debitage	lithic
35HA2627	07-114 -5	U9_qB	40-50		<3		debitage	lithic
35HA2627	07-107 -6	U9_qB	30-40		<3		debitage	lithic
35HA2627	07-101 -5	U9_qB	20-30		<3		debitage	lithic
35HA2627	07-101 -4	U9_qB	20-30		3<x<6		debitage	lithic
35HA2627	07-114 -4	U9_qB	40-50		3<x<6		debitage	lithic
35HA2627	07-107 -5	U9_qB	30-40		3<x<6		debitage	lithic
35HA2627	07-114 -3	U9_qB	40-50		6<x<12		debitage	lithic
35HA2627	07-101 -3	U9_qB	20-30		6<x<12		debitage	lithic
35HA2627	07-107 -4	U9_qB	30-40		6<x<12		debitage	lithic
35HA2627	07-101 -2	U9_qB	20-30		12<x<25		debitage	lithic
35HA2627	07-107 -3	U9_qB	30-40		12<x<25		debitage	lithic
35HA2627	07-114 -2	U9_qB	40-50		12<x<25		debitage	lithic
35HA2627	07-101 -2	U9_qB	20-30		12<x<25		debitage	lithic
35HA2627	07-107 -3	U9_qB	30-40		12<x<25		debitage	lithic
35HA2627	07-114 -2	U9_qB	40-50		12<x<25		debitage	lithic
35HA2627	07-107 -2	U9_qB	30-40		<25		debitage	lithic
35HA2627	07-101 -1	U9_qB	20-30		<25		debitage	lithic
35HA2627	07-114 -1	U9_qB	40-50		<25		debitage	lithic
35HA385	08-175-1	U9_qBne	30-40	B1		1	c.v. sample 5x5x10cm	Sediment
35HA385	08-176-2	U9_qBne	30-40	B2		1	GDS	Lithic
35HA385	08-178-4	U9_qBne	30-40	B4		1	GDS	Lithic
35HA385	08-179-5	U9_qBne	30-40	B5		1	projectile point	Lithic
35HA385	08-180-6	U9_qBne	30-40	B6		1	pp-corner notch	Lithic
35HA385	08-189-1	U9_qBne	40-50	B1		1	c.v. sample 5x5x10cm	Sediment
35HA385	08-212-1	U9_qBne	70-80	B1		1	c.v. sample 5x5x5cm	Sediment
35HA385	08-213-2	U9_qBne	70-80	B2		1	core	Lithic
35HA385	08-214-3	U9_qBne	70-80	B3		1	tool	Lithic
35HA385	08-218-1	U9_qBne	80-90	B1		1	c.v. sample 5x5x5cm	Sediment
35HA385	08-219-2	U9_qBne	80-90	B2		1	GDS	Lithic
35HA385	08-220-3	U9_qBne	80-90	B3		1	GDS/FCR	Lithic
35HA385	09-601-1	U9_qBnw	40-50	B1		1	c.v. sample	Sediment
35HA385	09-601-3	U9_qBnw	40-50	B3		1	Charcoal	Carbon
35HA385	09-601-5	U9_qBnw	40-50	B5		1	GDS	Lithic
35HA385	09-601-6	U9_qBnw	40-50	B6		1	pp-base(fragment)	Lithic
35HA385	09-601-7	U9_qBnw	40-50	B7		1	Tool	Lithic
35HA385	09-638-1	U9_qBnw	30-40	B1		1	c.v. sample	Sediment
35HA385	09-638-3-I	U9_qBnw	30-40	B3		1	carved volcanic tuft	Lithic
35HA385	09-638-4-I	U9_qBnw	30-40	B4		1	Tool	Lithic
35HA385	09-638-5-II	U9_qBnw	30-40	B5		1	Charcoal	Carbon
35HA385	09-638-6-II	U9_qBnw	30-40	B6		1	Charcoal	Carbon
35HA385	09-638-7-II	U9_qBnw	30-40	B7		1	GDS	Lithic
35HA385	10-1362	U17_qCse	30-40	C1		1	c.v. sample	sediment
35HA385	10-1363	U17_qCse	30-40	C2		1	gds	lithic
35HA385	10-1364	U17_qCse	30-40	C3		1	gds	lithic
35HA385	10-1365	U17_qCse	30-40	C4		1	projectile point	lithic
35HA385	10-1366	U17_qCse	30-40	C5		1	projectile point	lithic
35HA385	10-1379	U17_qCsw	30-40	C1		1	c.v. sample	sediment
35HA385	10-1380	U17_qCsw	30-40	C2		1	gds	lithic
35HA385	10-1381	U17_qCsw	30-40	C3		1	sample	Sediment
35HA385	10-1382	U17_qCsw	30-40	C4		1	GDS-mortar	sediment
35HA385	10-1383	U17_qCsw	30-40	C5			charcoal	Carbon

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35HA385	10-1384	U17_qCsw	30-40	6			charcoal	carbon
35HA385	10-1389	U17_qDsw	30-40	D1		1	c.v. sample	Sediment
35HA385	10-1390	U17_qDsw	30-40	D2		1	gds	lithic
35HA385	10-1391	U17_qDsw	30-40	D3		1	projectile point	lithic
35HA385	10-1396	U17_qDse	30-40	D1		1	c.v. sample	Sediment
35HA385	10-1397	U17_qDse	30-40	D2		1	gds	lithic
35HA385	10-1398	U17_qDse	30-40	D3		1	tool	lithic
35HA385	10-1404	U9_qAne	30-40	A1		1	gds	lithic
35HA385	10-1405	U9_qAne	30-40	A2		1	biface	lithic
35HA385	10-1406	U9_qAne	30-40	A3		1	projectile point	lithic
35HA385	10-1415	U9_qBsw	30-40	B1		1	c.v. sample	sediment
35HA385	10-1416	U9_qBsw	30-40	B2		1	gds	lithic
35HA385	10-1417	U9_qBsw	30-40	B3		1	charcoal	carbon
35HA385	10-1418	U9_qBsw	30-40	B4		1	charcoal	carbon
35HA385	10-1419	U9_qBsw	30-40	B5		1	charcoal	Carbon
35HA385	10-1420	U9_qBsw	30-40	B6		1	pp-side notch	lithic
35HA385	10-1421	U9_qBsw	30-40	B7		1	charcoal	carbon
35HA385	10-1427	U9_qAnw	30-40	A1		1	gds	lithic
35HA385	10-1429	U9_qAnw	30-40	A3			charcoal	Carbon
35HA385	10-1430	U9_qAnw	30-40	A4		1	gds	lithic
35HA385	10-1436	U9_qCnw	30-40	C1		1	c.v. sample	Sediment
35HA385	10-1437	U9_qCnw	30-40	C2		1	charcoal	carbon
35HA385	10-1438	U9_qCnw	30-40	C3			charcoal	carbon
35HA385	10-1439	U9_qCnw	30-40	C4			charcoal	Carbon
35HA385	10-1440	U9_qCnw	30-40	C5			charcoal	carbon
35HA385	10-1449	U9_qAse	30-40	A1		1	projectile point	lithic
35HA385	10-1450	U9_qAse	30-40	A2		1	gds	Lithic
35HA385	10-1451	U9_qAse	30-40	A3		1	c.v. sample	Lithic
35HA385	10-1459	U9_qAsw	30-40	A1		1	c.v. sample	Sediment
35HA385	10-1460	U9_qAsw	30-40	A2			charcoal	carbon
35HA385	10-1461	U9_qAsw	30-40	A3		1	gds	lithic
35HA385	10-1462	U9_qAsw	30-40	A4		1	gds	lithic
35HA385	10-1470	U9_qCne	30-40	C1		1	c.v. sample	Sediment
35HA385	10-1471	U9_qCne	30-40	C2		1	tool	Lithic
35HA385	10-1472	U9_qCne	30-40	C3			charcoal	Carbon
35HA385	10-1473	U9_qCne	30-40	C4			charcoal	Carbon
35HA385	10-1474	U9_qCne	30-40	C5			charcoal	Carbon
35HA385	10-1484	U9_qDnw	30-40	D1		1	c.v. sample	sediment
35HA385	10-1485	U9_qDnw	30-40	D2		1	tool	lithic
35HA385	10-1487	U9_qDnw	30-40	D4			charcoal	Carbon
35HA385	10-1496	U9_qDne	30-40	D1		1	c.v. sample	sediment
35HA385	10-1497	U9_qDne	30-40	D2		1	gds	lithic
35HA385	10-1498	U9_qDne	30-40	D3		1	gds	lithic
35HA385	10-1499	U9_qDne	30-40	D4		1	gds	lithic
35HA385	10-1503	U9_qBse	30-40	B1		1	c.v. sample	sediment
35HA385	10-1504	U9_qBse	30-40	B2		1	gds	lithic
35HA385	10-1505	U9_qBse	30-40	B3		1	gds	lithic
35HA385	10-1506	U9_qBse	30-40	B4		1	gds	lithic
35HA385	10-1507	U9_qBse	30-40	B5		1	tool	lithic
35HA385	10-1508	U17_qCsw	40-50	C1		1	c.v. sample	sediment
35HA385	10-1510	U17_qCsw	40-50	3		1	tool	lithic
35HA385	10-1511	U17_qCsw	40-50	4		1	tool	lithic
35HA385	10-1515	U17_qDsw	40-50	D1		1	c.v. sample	sediment
35HA385	10-1516	U17_qDsw	40-50	D2		1	projectile point	lithic
35HA385	10-1517	U17_qDsw	40-50	D3		1	projectile point	lithic

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35HA385	10-1518	U17_qDsw	40-50	D4			charcoal	carbon
35HA385	10-1519	U17_qDsw	40-50	D5		1	tool	lithic
35HA385	10-1526	U17_qCse	40-50	C1		1	c.v. sample	sediment
35HA385	10-1536	U17_qDse	40-50	D1		1	c.v. sample	sediment
35HA385	10-1537	U17_qDse	40-50	D2		1	gds	lithic
35HA385	10-1538	U17_qDse	40-50	D3		1	charcoal	carbon
35HA385	10-1539	U17_qDse	40-50	D4		1	charcoal	lithic
35HA385	10-1545	U9_qAnw	40-50	A1		1	c.v. sample	sediment
35HA385	10-1546	U9_qAnw	40-50	A2		1	graver	lithic
35HA385	10-1547	U9_qAnw	40-50	A3			charcoal	carbon
35HA385	10-1548	U9_qAnw	40-50	A4		1	gds	lithic
35HA385	10-1549	U9_qAnw	40-50	A5		1	gds	lithic
35HA385	10-1561	U9_qAsw	40-50	A1		1	c.v. sample	sediment
35HA385	10-1562	U9_qAsw	40-50	A2			charcoal	carbon
35HA385	10-1563	U9_qAsw	40-50	A3		1	tool	lithic
35HA385	10-1564	U9_qAsw	40-50	A4		1	tool	lithic
35HA385	10-1565	U9_qAsw	40-50	A5			charcoal	carbon
35HA385	10-1566	U9_qAsw	40-50	A6		1	sample	Sediment
35HA385	10-1572	U9_qAse	40-50	A1		1	c.v. sample	sediment
35HA385	10-1573	U9_qAse	40-50	A2		1	ground stone	lithic
35HA385	10-1574	U9_qAse	40-50	A3		1	tool	lithic
35HA385	10-1584	U9_qBsw	40-50	B1		1	c.v. sample	Sediment
35HA385	10-1586	U9_qBsw	40-50	B3			charcoal	carbon
35HA385	10-1587	U9_qBsw	40-50	B4			charcoal	carbon
35HA385	10-1588	U9_qBsw	40-50	B5			charcoal	carbon
35HA385	10-1589	U9_qBsw	40-50	B6			charcoal	carbon
35HA385	10-1590	U9_qBsw	40-50	B7		1	projectile point	lithic
35HA385	10-1591	U9_qBsw	40-50	B8		1	tool	lithic
35HA385	10-1594	U9_qBsw	40-50	B11			charcoal	carbon
35HA385	10-1599	U9_qBse	40-50	B1		1	c.v. sample	sediment
35HA385	10-1600	U9_qBse	40-50	B2		1	tool	lithic
35HA385	10-1601	U9_qBse	40-50	B3			charcoal	carbon
35HA385	10-1602	U9_qBse	40-50	B4			charcoal	carbon
35HA385	10-1603	U9_qBse	40-50	B5		1	tool	lithic
35HA385	10-1608	U9_qCnw	40-50	C1		1	c.v. sample	Sediment
35HA385	10-1614	U9_qCne	40-50	C1		1	c.v. sample	sediment
35HA385	10-1615	U9_qCne	40-50	C2		1	tool	lithic
35HA385	10-1616	U9_qCne	40-50	C3		1	projectile point	lithic
35HA385	10-1625	U9_qDne	40-50	D1		1	c.v. sample	sediment
35HA385	10-1627	U9_qDne	40-50	D3		1	charcoal	Carbon
35HA385	10-1633	U9_qDnw	40-50	D1		1	c.v. sample	sediment
35HA385	10-1634	U9_qDnw	40-50	D2			charcoal	carbon
35HA385	10-1635	U9_qDnw	40-50	D3		1	gds	lithic
35HA385	10-1645	U9_qAne	40-50	A1		1	c.v. sample	sediment
35HA385	10-1646	U9_qAne	40-50	A2		1	tool	lithic
35HA385	10-1647	U9_qAne	40-50	A3		1	gds	lithic
35HA385	10-1921	U9_qCne	70-80	C1		1	c.v. sample	sediment
35HA385	10-1922	U9_qCne	70-80	C2			charcoal	carbon
35HA385	10-1923	U9_qCne	70-80	C3			charcoal	carbon
35HA385	10-1925	U9_qCne	70-80	C1		1	c.v. sample	sediment
35HA385	10-1929	U9_qAsw	70-80	A1		1	c.v. sample	Sediment
35HA385	10-1930	U9_qAsw	70-80	A2			charcoal	carbon
35HA385	10-1932	U17_qDse	70-80	D1		1	c.v. sample	sediment
35HA385	10-1933	U17_qDse	70-80	D2			charcoal	carbon
35HA385	10-1934	U17_qDse	70-80	D3		1	tool	lithic

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35HA385	10-1935	U17_qDse	70-80	D4		1	tool	lithic
35HA385	10-1936	U17_qDse	70-80	D5		1	tool	lithic
35HA385	10-1942	U9_qBsw	70-80	B1		1	c.v. sample	sediment
35HA385	10-1943	U9_qBsw	70-80	B2		1	debitage	lithic
35HA385	10-1945	U17_qDsw	70-80	D1		1	c.v. sample	Sediment
35HA385	10-1946	U17_qDsw	70-80	D2		1	projectile point	lithic
35HA385	10-1947	U17_qDsw	70-80	D3			charcoal	carbon
35HA385	10-1949	U9_qAnw	70-80	A1		1	c.v. sample	Sediment
35HA385	10-1950	U9_qAnw	70-80	A2		1	tool	lithic
35HA385	10-1952	U9_qAnw	70-80	A4		1	tool	lithic
35HA385	10-1954	U9_qAne	70-80	A1		1	c.v. sample	sediment
35HA385	10-1956	U9_qAne	70-80	A3		1	gds	lithic
35HA385	10-1958	U9_qAne	70-80	A5			charcoal	carbon
35HA385	10-1960	U9_qAne	70-80	A7		1	tool	lithic
35HA385	10-1962	U9_qAne	70-80	A9		1	projectile point	lithic
35HA385	10-1966	U17_qCse	70-80	C1		1	c.v. sample	Sediment
35HA385	10-1967	U17_qCse	70-80	C2		1	gds	Lithic
35HA385	10-1969	U9_qBnw	70-80	B1		1	c.v. sample	Sediment
35HA385	10-1970	U9_qBnw	70-80	B2		1	gds	lithic
35HA385	10-1972	U9_qDnw	70-80	D1		1	c.v. sample	Sediment
35HA385	10-1973	U9_qDnw	70-80	D2		1	projectile point	Lithic
35HA385	10-1975	U9_qBse	70-80	B1		1	c.v. sample	Sediment
35HA385	10-1976	U9_qBse	70-80	B2			charcoal	Carbon
35HA385	10-1981	U9_qCnw	70-80	C1		1	c.v. sample	Sediment
35HA385	10-1984	U9_qDne	70-80	D1		1	c.v. sample	Sediment
35HA385	10-1986	U17_qCsw	70-80	C1		1	c.v. sample	Sediment
35HA385	10-1987	U17_qCsw	70-80	C2		1	gds	lithic
35HA385	10-1988	U17_qCsw	70-80	C3		1	tool	lithic
35HA385	10-1989	U17_qCsw	70-80	C4		1	gds	lithic
35HA385	10-1992	U9_qBse	80-90	B1		1	c.v. sample	Sediment
35HA385	10-1993	U9_qBse	80-90	B2		1	tool	lithic
35HA385	10-1995	U17_qCsw	80-90	C1		1	c.v. sample	Sediment
35HA385	10-1998	U9_qCne	80-90	C1		1	c.v. sample	Sediment
35HA385	10-2003	U9_qAne	80-90	A1		1	c.v. sample	Sediment
35HA385	10-2006	U17_qDse	80-90	D1		1	c.v. sample	Sediment
35HA385	10-2008	U9_qBnw	80-90	B1		1	c.v. sample	Sediment
35HA385	10-2010	U9_qCnw	80-90	C1		1	c.v. sample	Sediment
35HA385	10-2011	U9_qCnw	80-90	C2		1	tool	lithic
35HA385	10-2012	U9_qCnw	80-90	C3		1	projectile point	lithic
35HA385	10-2013	U9_qCnw	80-90	C4		1	charcoal	Carbon
35HA385	10-2015	U9_qBsw	80-90	B1		1	c.v. sample	Sediment
35HA385	10-2018	U17_qCse	80-90	C1		1	c.v. sample	Sediment
35HA385	10-2019	U17_qCse	80-90	C2		1	tool	lithic
35HA385	10-2022	U9_qAse	80-90	A1		1	c.v. sample	Sediment
35HA385	10-2023	U9_qAse	80-90	A2		1	tool	lithic
35HA385	10-2024	U9_qAse	80-90	A3			charcoal	Carbon
35HA385	10-2026	U9_qAse	80-90	A5		1	ochre	Iron Oxide
35HA385	10-2028	U9_qDne	80-90	D1		1	c.v. sample	Sediment
35HA385	10-2029	U9_qDne	80-90	D2		1	tool	lithic
35HA385	10-2031	U9_qDne	80-90	D4			charcoal	Carbon
35HA385	10-2032	U9_qDne	80-90	D5		1	gds	lithic
35HA385	10-2035	U17_qDsw	80-90	D1		1	c.v. sample	Sediment
35HA385	10-2036	U17_qDsw	80-90	D2			charcoal	Carbon
35HA385	10-2037	U17_qDsw	80-90	D3			charcoal	Carbon
35HA385	10-2039	U9_qDnw	80-90	D1		1	c.v. sample	sediment

Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA385	10-2040	U9_qDnw	80-90	D2			charcoal	carbon
35HA385	10-2042	U9_qAnw	80-90	A1		1	c.v. sample	Sediment
35HA385	10-2046	U9_qAsw	80-90	A1		1	c.v. sample	Sediment
35HA385	10-2047	U9_qAsw	80-90	A2		1	pp-stem	lithic
35HA385	10-2048	U9_qAsw	80-90	A3			charcoal	carbon
35HA385	10-2051	U17_qCsw	90-100	C1		1	c.v. sample	sediment
35HA385	10-2053	U9_qAnw	90-100	A1		1	c.v. sample	Sediment
35HA385	10-2055	U9_qAse	90-100	A1		1	c.v. sample	sediment
35HA385	10-2057	U9_qAse	90-100	A3			charcoal	carbon
35HA385	10-2062	U17_qDsw	90-100	D1		1	c.v. sample	Sediment
35HA385	10-2063	U17_qDsw	90-100	D2		1	tool	lithic
35HA385	10-2067	U9_qAsw	90-100	A1		1	c.v. sample	Sediment
35HA385	10-2068	U9_qAsw	90-100	A2			charcoal	Carbon
35HA385	10-2069	U9_qAsw	90-100	A3		1	tool	lithic
35HA385	10-2070	U9_qAsw	90-100	A4		1	tool	lithic
35HA385	10-2071	U9_qAsw	90-100	A5		1	tool	ltihci
35HA385	10-2074	U9_qDne	90-100	D1		1	c.v. sample	Sediment
35HA385	10-2075	U9_qDne	90-100	D2		1	tool	lithic
35HA385	10-2077	U9_qBnw	90-100	B1		1	c.v. sample	sediment
35HA385	10-2078	U9_qBnw	90-100	B2			charcoal	Carbon
35HA385	10-2079	U9_qBnw	90-100	B3		1	tool	lithic
35HA385	10-2082	U17_qCse	90-100	C1		1	c.v. sample	Sediment
35HA385	10-2083	U17_qCse	90-100	C2		1	charcoal	Carbon
35HA385	10-2085	U9_qBsw	90-100	B1		1	c.v. sample	Sediment
35HA385	10-2086	U9_qBsw	90-100	B2		1	tool	lithic
35HA385	10-2087	U9_qBsw	90-100	B3		1	tool	lithic
35HA385	10-2089	U17_qDse	90-100	D1		1	c.v. sample	Sediment
35HA385	10-2090	U17_qDse	90-100	D2		1	tool	lithic
35HA385	10-2091	U17_qDse	90-100	D3		1	tool	lithic
35HA385	10-2094	U9_qBse	90-100	B1		1	c.v. sample	sediment
35HA385	10-2096	U9_qCne	90-100	C1		1	c.v. sample	Sediment
35HA385	10-2097	U9_qCne	90-100	C2			charcoal	Carbon
35HA385	10-2098	U9_qCne	90-100	C3		1	gds	lithic
35HA385	10-2101	U9_qCnw	90-100	C1		1	c.v. sample	sediment
35HA385	10-2102	U9_qCnw	90-100	C2		1	tool	lithic
35HA385	10-2103	U9_qCnw	90-100	C3		1	projectile point	lithic
35HA385	10-2104	U9_qCnw	90-100	C4		1	charcoal	carbon
35HA385	10-2106	U9_qDnw	90-100	D1		1	c.v. sample	sediment
35HA385	10-2108	U9_qDnw	90-100	D1		1	c.v. sample	Sediment
35HA385	10-2109	U9_qDnw	90-100	D2		1	tool	lithic
35HA385	10-1367	U17_qCse	30-40		1/8	1	tool	lithic
35HA385	10-1368	U17_qCse	30-40		1/8	1	tool	lithic
35HA385	10-1369	U17_qCse	30-40		1/8	1	tool	lithic
35HA385	10-1370	U17_qCse	30-40		1/8	1	tool	lithic
35HA385	10-1371	U17_qCse	30-40		1/8	1	tool	lithic
35HA385	10-1372	U17_qCse	30-40		1/8	1	tool	lithic
35HA385	10-1373	U17_qCse	30-40		1/8	1	tool	lithic
35HA385	10-1374	U17_qCse	30-40		1/8	1	drill	lithic
35HA385	10-1375	U17_qCse	30-40		1/8	1	projectile point	lithic
35HA385	10-1376	U17_qCse	30-40		1/8		debitage	Lithic
35HA385	10-1377	U17_qCse	30-40		1/8	1	bone	bone
35HA385	10-1378	U17_qCse	30-40		1/8		charcoal	carbon
35HA385	10-1385	U17_qCsw	30-40		1/8	1	tool	lithic
35HA385	10-1386	U17_qCsw	30-40		1/8		debitage	Lithic
35HA385	10-1387	U17_qCsw	30-40		1/8	2	bone	bone

Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA385	10-1388	U17_qCsw	30-40		1/8		charcoal	carbon
35HA385	10-1392	U17_qCsw	30-40		1/8	1	tool	lithic
35HA385	10-1393	U17_qCsw	30-40		1/8		debitage	Lithic
35HA385	10-1394	U17_qCsw	30-40		1/8	2	bone	Bone
35HA385	10-1395	U17_qCsw	30-40		1/8		charcoal	carbon
35HA385	10-1399	U17_qDse	30-40		1/8	1	projectile point	lithic
35HA385	10-1400	U17_qDse	30-40		1/8	1	tool	Lithic
35HA385	10-1401	U17_qDse	30-40		1/8		debitage	lithic
35HA385	10-1402	U17_qDse	30-40		1/8	2	bone	bone
35HA385	10-1403	U17_qDse	30-40		1/8		charcoal	carbon
35HA385	10-1407	U9_qAne	30-40		1/8	1	pp-tip(fragment)	lithic
35HA385	10-1408	U9_qAne	30-40		1/8	1	pp-tip(fragment)	lithic
35HA385	10-1409	U9_qAne	30-40		1/8	1	tool	Lithic
35HA385	10-1410	U9_qAne	30-40		1/8	1	tool	lithic
35HA385	10-1411	U9_qAne	30-40		1/8		debitage	lithic
35HA385	10-1412	U9_qAne	30-40		1/8	3	bone	Bone
35HA385	10-1413	U9_qAne	30-40		1/8		charcoal	carbon
35HA385	10-1414	U9_qAne	30-40		1/8	1	daub	Fired sediment
35HA385	10-1423	U9_qBsw	30-40		1/8	1	projectile point	lithic
35HA385	10-1424	U9_qBsw	30-40		1/8		debitage	lithic
35HA385	10-1425	U9_qBsw	30-40		1/8	3	bone	Bone
35HA385	10-1426	U9_qBsw	30-40		1/8		charcoal	carbon
35HA385	10-1431	U9_qAnw	30-40		1/8	1	tool	lithic
35HA385	10-1432	U9_qAnw	30-40		1/8	1	tool	lithic
35HA385	10-1433	U9_qAnw	30-40		1/8		debitage	lithic
35HA385	10-1434	U9_qAnw	30-40		1/8	2	bone	bone
35HA385	10-1435	U9_qAnw	30-40		1/8		charcoal	Carbon
35HA385	10-1441	U9_qCnw	30-40		1/8	1	projectile point	lithic
35HA385	10-1442	U9_qCnw	30-40		1/8	1	core	lithic
35HA385	10-1443	U9_qCnw	30-40		1/8	1	tool	lithic
35HA385	10-1444	U9_qCnw	30-40		1/8	1	tool	lithic
35HA385	10-1445	U9_qCnw	30-40		1/8	1	tool	lithic
35HA385	10-1446	U9_qCnw	30-40		1/8		debitage	lithic
35HA385	10-1447	U9_qCnw	30-40		1/8	15	bone	bone
35HA385	10-1448	U9_qCnw	30-40		1/8		charcoal	carbon
35HA385	10-1452	U9_qAse	30-40		1/8	1	pp-midsection(fragment)	lithic
35HA385	10-1453	U9_qAse	30-40		1/8	1	pp-base(fragment)	lithic
35HA385	10-1454	U9_qAse	30-40		1/8	1	pp-base(fragment)	lithic
35HA385	10-1455	U9_qAse	30-40		1/8	1	tool	lithic
35HA385	10-1456	U9_qAse	30-40		1/8		debitage	lithic
35HA385	10-1457	U9_qAse	30-40		1/8	9	bone	bone
35HA385	10-1458	U9_qAse	30-40		1/8		charcoal	carbon
35HA385	10-1463	U9_qAsw	30-40		1/8	1	pp-tip(fragment)	lithic
35HA385	10-1464	U9_qAsw	30-40		1/8	1	pp-tip(fragment)	lithic
35HA385	10-1465	U9_qAsw	30-40		1/8	1	tool	lithic
35HA385	10-1466	U9_qAsw	30-40		1/8	1	pp-base(fragment)	lithic
35HA385	10-1467	U9_qAsw	30-40		1/8		debitage	lithic
35HA385	10-1468	U9_qAsw	30-40		1/8	16	bone	bone
35HA385	10-1469	U9_qAsw	30-40		1/8		charcoal	carbon
35HA385	10-1475	U9_qCne	30-40		1/8	1	pp-base(fragment)	lithic
35HA385	10-1476	U9_qCne	30-40		1/8	1	pp-tip(fragment)	lithic
35HA385	10-1477	U9_qCne	30-40		1/8	1	tool	lithic
35HA385	10-1478	U9_qCne	30-40		1/8	1	tool	lithic
35HA385	10-1479	U9_qCne	30-40		1/8	8	bone	bone
35HA385	10-1480	U9_qCne	30-40		1/8		debitage	lithic

Appendix A - Subject Site Catalogs

Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA385	10-1481	U9_qCne	30-40		1/8		charcoal	carbon
35HA385	10-1482	U9_qCne	30-40		1/8	2	seed	Botanical
35HA385	10-1483	U9_qCne	30-40		1/8	2	daub	Fired sediment
35HA385	10-1488	U9_qDnw	30-40		1/8	1	tool	lithic
35HA385	10-1489	U9_qDnw	30-40		1/8	1	tool	lithic
35HA385	10-1490	U9_qDnw	30-40		1/8	1	tool	lithic
35HA385	10-1491	U9_qDnw	30-40		1/8		debitage	Lithic
35HA385	10-1492	U9_qDnw	30-40		1/8	4	bone	bone
35HA385	10-1493	U9_qBse	30-40		1/8		debitage	lithic
35HA385	10-1494	U9_qBse	30-40		1/8	2	bone	bone
35HA385	10-1495	U9_qBse	30-40		1/8		charcoal	Carbon
35HA385	10-1500	U9_qDne	30-40		1/8		debitage	lithic
35HA385	10-1501	U9_qDne	30-40		1/8	1	bone	bone
35HA385	10-1502	U9_qDne	30-40		1/8		charcoal	carbon
35HA385	10-1512	U17_qCsw	40-50		1/8		debitage	lithic
35HA385	10-1513	U17_qCsw	40-50		1/8	4	bone	bone
35HA385	10-1514	U17_qCsw	40-50		1/8		charcoal	carbon
35HA385	10-1520	U17_qCsw	40-50		1/8	1	projectile point	lithic
35HA385	10-1521	U17_qCsw	40-50		1/8	1	pp-tip(fragment)	lithic
35HA385	10-1522	U17_qCsw	40-50		1/8	1	projectile point	lithic
35HA385	10-1523	U17_qCsw	40-50		1/8		debitage	lithic
35HA385	10-1524	U17_qCsw	40-50		1/8	5	bone	bone
35HA385	10-1525	U17_qCsw	40-50		1/8		charcoal	carbon
35HA385	10-1529	U17_qCse	40-50		1/8	1	pp-tip(fragment)	lithic
35HA385	10-1530	U17_qCse	40-50		1/8	1	tool	lithic
35HA385	10-1531	U17_qCse	40-50		1/8	1	tool	lithic
35HA385	10-1532	U17_qCse	40-50		1/8		debitage	ltihic
35HA385	10-1533	U17_qCse	40-50		1/8		bone	bone
35HA385	10-1534	U17_qCse	40-50		1/8		charcoal	Carbon
35HA385	10-1535	U17_qCse	40-50		1/8		daub	Fired sediment
35HA385	10-1540	U17_qDse	40-50		1/8	1	tool	lithic
35HA385	10-1541	U17_qDse	40-50		1/8	1	tool	lithic
35HA385	10-1542	U17_qDse	40-50		1/8		debitage	lithic
35HA385	10-1543	U17_qDse	40-50		1/8		bone	bone
35HA385	10-1544	U17_qDse	40-50		1/8		charcoal	carbon
35HA385	10-1550	U9_qAnw	40-50		1/8	1	tool	lithic
35HA385	10-1551	U9_qAnw	40-50		1/8	1	tool	lithic
35HA385	10-1552	U9_qAnw	40-50		1/8	1	tool	lithic
35HA385	10-1553	U9_qAnw	40-50		1/8	1	tool	Lithic
35HA385	10-1554	U9_qAnw	40-50		1/8	1	tool	lithic
35HA385	10-1555	U9_qAnw	40-50		1/8	1	tool	lithic
35HA385	10-1556	U9_qAnw	40-50		1/8	1	tool	lithic
35HA385	10-1557	U9_qAnw	40-50		1/8		debitage	lithic
35HA385	10-1558	U9_qAnw	40-50		1/8		bone	bone
35HA385	10-1559	U9_qAnw	40-50		1/8		charcoal	carbon
35HA385	10-1560	U9_qAnw	40-50		1/8	1	daub	Fired sediment
35HA385	10-1567	U9_qAsw	40-50		1/8	1	tool	lithic
35HA385	10-1568	U9_qAsw	40-50		1/8	1	tool	lithic
35HA385	10-1569	U9_qAsw	40-50		1/8		debitage	lithic
35HA385	10-1570	U9_qAsw	40-50		1/8		bone	bone
35HA385	10-1571	U9_qAsw	40-50		1/8		charcoal	carbon
35HA385	10-1575	U9_qAse	40-50		1/8	1	projectile point	lithic
35HA385	10-1576	U9_qAse	40-50		1/8	1	tool	lithic
35HA385	10-1577	U9_qAse	40-50		1/8	1	tool	lithic
35HA385	10-1578	U9_qAse	40-50		1/8	1	tool	ltihic

Appendix A - Subject Site Catalogs

Site	Catalog	Unit_quad	level	In situ	1/8"	n	Artifact	Material
35HA385	10-1579	U9_qAse	40-50		1/8	1	tool	ltihic
35HA385	10-1580	U9_qAse	40-50		1/8	1	tool	lithic
35HA385	10-1581	U9_qAse	40-50		1/8		debitage	lithic
35HA385	10-1582	U9_qAse	40-50		1/8	7	bone	bone
35HA385	10-1583	U9_qAse	40-50		1/8		charcoal	carbon
35HA385	10-1595	U9_qBsw	40-50		1/8	1	tool	lithic
35HA385	10-1596	U9_qBsw	40-50		1/8		debitage	ltihic
35HA385	10-1597	U9_qBsw	40-50		1/8		bone	bone
35HA385	10-1598	U9_qBsw	40-50		1/8		charcoal	carbon
35HA385	10-1604	U9_qBse	40-50		1/8	1	pp-tip(fragment)	lithic
35HA385	10-1605	U9_qBse	40-50		1/8		debitage	lithic
35HA385	10-1606	U9_qBse	40-50		1/8		bone	bone
35HA385	10-1607	U9_qBsw	40-50		1/8		charcoal	carbon
35HA385	10-1610	U9_qCnw	40-50		1/8		debitage	lithic
35HA385	10-1611	U9_qCnw	40-50		1/8		bone	bone
35HA385	10-1612	U9_qCnw	40-50		1/8	1	daub	Fired sediment
35HA385	10-1613	U9_qCnw	40-50		1/8		charcoal	Carbon
35HA385	10-1617	U9_qCne	40-50		1/8	1	projectile point	lithic
35HA385	10-1618	U9_qCne	40-50		1/8	1	tool	lithic
35HA385	10-1619	U9_qCne	40-50		1/8	1	tool	Lithic
35HA385	10-1620	U9_qCne	40-50		1/8	1	tool	lithic
35HA385	10-1621	U9_qCne	40-50		1/8	1	tool	lithic
35HA385	10-1622	U9_qCne	40-50		1/8		debitqage	lithic
35HA385	10-1623	U9_qCne	40-50		1/8		bone	bone
35HA385	10-1624	U9_qCne	40-50		1/8		charcoal	Carbon
35HA385	10-1628	U9_qDne	40-50		1/8	1	projectile point	lithic
35HA385	10-1629	U9_qDne	40-50		1/8	1	projectile point	lithic
35HA385	10-1630	U9_qDne	40-50		1/8		debitage	lithic
35HA385	10-1631	U9_qDne	40-50		1/8		bone	bone
35HA385	10-1632	U9_qDne	40-50		1/8		charcoal	carbon
35HA385	10-1636	U9_qDnw	40-50		1/8	1	unknown	lithic
35HA385	10-1637	U9_qDnw	40-50		1/8	1	tool	lithic
35HA385	10-1638	U9_qDnw	40-50		1/8	1	tool	lithiic
35HA385	10-1639	U9_qDnw	40-50		1/8	1	tool	lithic
35HA385	10-1640	U9_qDnw	40-50		1/8	1	tool	lithic
35HA385	10-1641	U9_qDnw	40-50		1/8	1	gds	lithic
35HA385	10-1642	U9_qDnw	40-50		1/8		debitage	lithic
35HA385	10-1643	U9_qDnw	40-50		1/8		bone	bone
35HA385	10-1644	U9_qDnw	40-50		1/8		charcoal	carbon
35HA385	10-1648	U9_qAne	40-50		1/8	1	drill	lithic
35HA385	10-1649	U9_qAne	40-50		1/8	1	tool	lithic
35HA385	10-1650	U9_qAne	40-50		1/8		debitage	lithic
35HA385	10-1651	U9_qAne	40-50		1/8		bone	Bone
35HA385	10-1652	U9_qAne	40-50		1/8		charcoal	carbon

Appendix B - Sample Fauna , all Subject Sites

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2626	11-68	1736	1	A(nw)	10-20	18		Mammal II	Unknown	Unknown	Unknown	Unknown	scapula	Lateral	fragment	left	Adult		1	0.01
35HA2626	11-78	1755	1	A(se)	10-20	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Tibia	Proximal	fragment	left	Adult	Burned/calcined	1	0.11
35HA2626	11-68	1734	1	A(nw)	10-20	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Mandible	Body	fragment	left	Adult	burned	1	0.52
35HA2626	11-78	1754	1	A(se)	10-20	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Radius	Proximal	fragment	left	Adult	Burned/calcined	1	0.25
35HA2626	11-68	1735	1	A(nw)	10-20	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Articular surface	fragment	unknown	Adult		1	0.12
35HA2626	11-68	1733	1	A(nw)	10-20	18		MAmmal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	6	0.54
35HA2626	11-71	1741	1	A(ne)	10-20	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Articular surface	fragment	unknown	Adult	Burned/calcined	3	1.07
35HA2626	11-80	1746	1	A(sw)	10-20	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	11	1.92
35HA2626	11-78	1753	1	A(se)	10-20	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	7	0.89
35HA2626	11-74	1748	1	A(se)	10-20		2	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.67
35HA2626	11-68	1732	1	A(nw)	10-20	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	26	6.76
35HA2626	11-71	1740	1	A(ne)	10-20	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	30	4.93
35HA2626	11-79	1743	1	A(sw)	10-20		1	Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	1	2.75
35HA2626	11-80	1745	1	A(sw)	10-20	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	5	2.06
35HA2626	11-78	1752	1	A(se)	10-20	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	16	4.54
35HA2626	11-67	1729	1	A(nw)	10-20		2	Mammal V	Artiodactyl	Unknown	Unknown	c.f. bovid or antilocaprid	Molar	crown	enamel	Unknown	Adult		1	0.12
35HA2626	11-68	1730	1	A(nw)	10-20	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Molar	crown	enamel	Unknown	Adult	Burned/calcined	2	0.3
35HA2626	11-78	1751	1	A(se)	10-20	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Phalanx	Proximal	fragment	Unknown	Adult	Burned/calcined	1	0.87
35HA2626	11-68	1731	1	A(nw)	10-20	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	crown	enamel	Unknown	Adult		4	0.19
35HA2626	11-71	1739	1	A(ne)	10-20	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	crown	enamel	unknown	Adult		2	0.18
35HA2626	11-80	1744	1	A(sw)	10-20	18		Mammal V	Unknown	Unknown	Unknown	Unknown	tooth	crown	enamel	unknown	Adult		2	0.07
35HA2626	11-78	1749	1	A(se)	10-20	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	crown	enamel	unknown	Adult	Burned/calcined	2	0.06
35HA2626	11-78	1750	1	A(se)	10-20	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Crown	enamel	Unknown	Adult		8	0.51
35HA2626	11-66	1728	1	A(nw)	10-20		1	Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.03
35HA2626	11-71	1742	1	A(ne)	10-20	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	27	1.57
35HA2626	11-68	1737	1	A(nw)	10-20	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	35	1.78
35HA2626	11-80	1747	1	A(sw)	10-20	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	25	1.42
35HA2626	11-78	1756	1	A(se)	10-20	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	44	3.07
35HA2626	11-68	1738	1	A(nw)	10-20	18		UNID	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	6	0.5
35HA2626	11-78	1757	1	A(se)	10-20	18		UNID	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	6	0.3
35HA2626	11-92	1771	1	A(ne)	20-30	18		Aves II	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.08
35HA2626	11-92	1768	1	A(ne)	20-30	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Incisor	crown	fragment	Unknown	Adult	Burned/calcined	2	0.06
35HA2626	11-92	1769	1	A(ne)	20-30	18		Mammal II	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.06
35HA2626	11-165	1784	1	A(se)	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Cranial	Dorsal	fragment	Unknown	Adult		1	0.54
35HA2626	11-92	1767	1	A(ne)	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Fibula	epiphysis	fragment	left	Adult	Burned/calcined	1	0.02
35HA2626	11-154	1776	1	A(sw)	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	8	0.39
35HA2626	11-92	1766	1	A(ne)	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	mandible	Anterior	fragment	left	Adult	Burned/calcined	1	0.13
35HA2626	11-89	1762	1	A(nw)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	73	5.55
35HA2626	11-154	1774	1	A(sw)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	20	1.98
35HA2626	11-154	1775	1	A(sw)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	4	0.48
35HA2626	11-160	1777	1	A(se)	20-30		1	Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.27
35HA2626	11-162	1778	1	A(se)	20-30		3	Mammal IV	unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.76
35HA2626	11-165	1781	1	A(se)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	14	3.06
35HA2626	11-84	1758	1	A(nw)	20-30		1	Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Articular surface	fragment	unknown	Adult	Gnawed - Carnivore, burned/calcined	1	1.82
35HA2626	11-87	1759	1	A(nw)	20-30		4	Mammal V	Unknown	Unknown	Unknown	Unknown	Phalanx	distal	fragment	unknown	Adult	Burned/calcined	1	0.78
35HA2626	11-89	1761	1	A(nw)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	burned/calcined	15	3.86
35HA2626	11-92	1765	1	A(ne)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	29	7.85
35Ha2626	11-165	1780	1	A(se)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	3	1.78
35HA2626	11-89	1760	1	A(nw)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Crown	enamel	Unknown	Adult		7	0.4
35HA2626	11-92	1763	1	A(ne)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	crown	enamel	Unknown	Adult	Burned/calcined	3	0.1
35HA2626	11-92	1764	1	A(ne)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	crown	enamel	unknown	Adult		10	0.62
35HA2626	11-165	1779	1	A(se)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Crown	enamel	Unknown	Adult		8	0.47
35HA2626	11-165	1782	1	A(se)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	48	3.45
35HA2626	11-165	1783	1	A(se)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult		21	1.43
35HA2626	11-154	1773	1	A(sw)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	tooth	crown	enamel	Unknown	Adult	Burned/calcined	2	0.16
35HA2626	11-92	1770	1	A(ne)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	39	2.13
35HA2626	11-92	1772	1	A(ne)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	4	0.16
35HA2626	11-165	1786	1	A(se)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	9	0.34
35HA2626	11-165	1785	1	A(se)	20-340	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Mandible	body	fragment	right	Adult		1	0.08
35HA2626	11-95	1790	2	A(nw)	0-10	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	3	0.46
35HA2626	11-95	1789	2	A(nw)	0-10	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Adult		1	0.15
35HA2626	11-95	1791	2	A(nw)	0-10	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	6	0.4
35HA2626	11-99	1796	2	A(nw)	10-20	18		Aves II	Unknown	Unknown	Unknown	Unknown	Phalanx II	Proximal	fragment	Unknown	Adult		1	0.03
35HA2626	11-99	1793	2	A(nw)	10-20	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	15	4.33
35HA2626	11-99	1794	2	A(nw)	10-20	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Gnawed - Carnivore, burned/calcined, weathered, digested?	5	1.58
35HA2626	11-99	1792	2	A(nw)	10-20	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Unknown	enamel	unknown	Adult	Burned/calcined	2	0.07
35HA2626	11-99	1795	2	A(nw)	10-20	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	43	2.55
35HA2626	11-99	1797	2	A(nw)	10-20	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	5	0.24
35HA2626	11-105	1806	2	A(nw)	20-30	18		Mammal II	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	Unknown	Unknown	Adult	Burned/calcined	1	0.04
35HA2626	11-105	1805	2	A(nw)	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Cranial	Unknown	Unknown	Unknown	Adult	Burned/calcined	1	0.14
35HA2626	11-105	1804	2	A(nw)	20-30	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Incisor	Labial	enamel	Unknown	Adult		1	0.03
35HA2626	11-105	1803	2	A(nw)	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	mandible	body	fragment	left	Adult	burned	1	0.29
35HA2626	11-105	1802	2	A(nw)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	5	0.75
35HA2626	11-102	1788	2	A(nw)	20-30		3	Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	cancelous	Unknown	Adult		1	0.54
35HA2626	11-105	1801	2	A(nw)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	fragment	Unknown	Adult	Burned/calcined	16	4.72

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2626	11-101	1787	2	A(nw)	20-30		2	Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Molar	buccal/lingual	enamel	unknown	Adult		1	0.19
35HA2626	11-105	1799	2	A(nw)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Adult	burned	3	0.16
35HA2626	11-105	1800	2	A(nw)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Adult		6	0.39
35HA2626	11-105	1798	2	A(nw)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	burned/scored	1	0.05
35HA2626	11-105	1807	2	A(nw)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	Unknown	Unknown	Adult	Burned/calcined	34	2.31
35HA2626	11-105	1808	2	A(nw)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Adult	Burned/calcined	3	0.21
35HA2626	11-107	1810	2	A(nw)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.49
35HA2626	11-107	1809	2	A(nw)	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Adult		3	0.16
35HA2626	11-107	1811	2	A(nw)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	15	0.96
35HA2626	11-107	1812	2	A(nw)	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Adult	burned	2	0.06
35HA2626	11-120	1818	3	A(nw)	10-20	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	63	3.93
35HA2626	11-120	1817	3	A(nw)	10-20	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Articular surface	fragment	Unknown	Adult	Burned/calcined	3	1.87
35HA2626	11-120	1814	3	A(nw)	10-20	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	13	5.55
35HA2626	11-120	1815	3	A(nw)	10-20	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.44
35HA2626	11-120	1816	3	A(nw)	10-20	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult		2	0.43
35HA2626	11-120	1813	3	A(nw)	10-20	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Adult		10	0.45
35HA2626	11-120	1819	3	A(nw)	10-20	18		Mammal X	Unknown	Unknown	Unknown	Unknown	unknown	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	7	0.32
35Ha2626	11-127	1826	3	A(nw)	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Atlas	Complete	complete	n/a	Adult		1	0.12
35HA2626	11-127	1823	3	A(nw)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	9	1.2
35HA2626	11-127	1821	3	A(nw)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	9	2.53
35Ha2626	11-127	1822	3	A(nw)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult		1	0.26
35HA2626	11-127	1820	3	A(nw)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Adult	Burned/calcined	11	0.49
35HA2626	11-127	1824	3	A(nw)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	33	2.13
35HA2626	11-127	1825	3	A(nw)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	fragment	Unknown	Adult		3	0.33
35HA2626	11-127	1828	3	A(nw)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult		2	0.14
35HA2626	11-127	1827	3	A(nw)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	3	0.07
35HA2626	11-132	1831	3	A(nw)	30-40		5	Mammal II	Rodentia	Unknown	Unknown	Unknown	femur	Proximal	fragment	right	Adult	Intrusive	1	0.07
35HA2626	11-111	1836	3	A(nw)	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	rib	Unknown	fragment	Unknown	Adult	Burned/calcined	1	0.04
35HA2626	11-111	1837	3	A(nw)	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Vertebra	body	fragment	Unknown	Adult		1	0.03
35HA2626	11-111	1834	3	A(nw)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	10	1.66
35HA2626	11-111	1835	3	A(nw)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	8	1.42
35HA2626	11-130	1829	3	A(nw)	30-40		3	Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	0.69
35HA2626	11-131	1830	3	A(nw)	30-40		4	Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	1.06
35Ha2626	11-111	1833	3	A(nw)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	3	0.95
35HA2626	11-111	1832	3	A(nw)	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Adult		5	0.5
35HA2626	11-111	1838	3	A(nw)	30-40	18		MAmmal X	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	fragment	Unknown	Adult	Burned/calcined	15	0.95
35HA2626	11-111	1839	3	A(nw)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult		15	0.77
35HA2626	11-136	1845	4	A(nw)	10-20	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Unknown	Maxilla	body	fragment	Unknown	Adult		1	0.16
35HA2626	11-136	1843	4	A(nw)	10-20	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	10	1.12
35HA2626	11-136	1844	4	A(nw)	10-20	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Cut, burned/calcined	2	0.37
35HA2626	11-136	1842	4	A(nw)	10-20	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult		8	3.37
35HA2626	11-136	1841	4	A(nw)	10-20	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	11	6.35
35HA2626	11-136	1840	4	A(nw)	10-20	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Adult		6	0.37
35HA2626	11-136	1846	4	A(nw)	10-20	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		11	0.67
35HA2626	11-136	1847	4	A(nw)	10-20	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	13	0.7
35HA2626	11-144	1853	5	A(nw)	10-20	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult		1	0.1
35HA2626	11-144	1851	5	A(nw)	10-20	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Articular surface	fragment	Unknown	Adult	Burned/calcined	1	0.25
35HA2626	11-144	1852	5	A(nw)	10-20	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	5	0.68
35HA2626	11-144	1848	5	A(nw)	10-20	18		Mammal V	Artiodactyl	Cervidae	Unknown	c.f. Odocoileus hemionus	molar	Unknown	enamel	Unknown	Juvenille		2	0.09
35HA2626	11-144	1850	5	A(nw)	10-20	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	9	2.45
35HA2626	11-144	1849	5	A(nw)	10-20	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Adult		8	0.39
35HA2626	11-144	1854	5	A(nw)	10-20	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	burned/calcined	75	4.13
35Ha2626	11-151	1856	5	A(nw)	20-20	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Adult		4	0.17
35HA2626	11-151	1859	5	A(nw)	20-3	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	12	1.1
35HA2626	11-151	1858	5	A(nw)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	fragment	Unknown	Adult	Perimortem break	5	0.86
35HA2626	11-147	1855	5	A(nw)	20-30		3	Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Articular surface	fragment	Unknown	Adult	Perimortem break	1	1.21
35HA2626	11-151	1857	5	A(nw)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Burned/calcined	25	7.68
35HA2626	11-151	1860	5	A(nw)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	31	1.42
35HA2626	11-151	1861	5	A(nw)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult		3	0.13
35HA2627	04-319	677	1	B	80-90	18		Actinopterygii	Cypiniformes	Cyprinidae	Gila sp.	Gila bicolor	Cleithrum	Articular surface	fragment	Right	Adult		1	0.01
35HA2627	04-394	638	1	D	80-90	18		Actinopterygii	Salmoniformes	Unknown	Unknown	Unknown	Ectopterygoid	Compelte	Complete	Left and Right	Adult		2	0.04
35HA2627	04-057	616	1	C	80-90	18		Actinopterygii	Cypiniformes	Cyprinidae	Gila sp.	Gila bicolor	Opercle	Complete	complete	Left	Unknown		1	0.07
35HA2627	04-479	655	1	A	80-90	18		Actinopterygii	Cypiniformes	Cyprinidae	Gila sp.	Gila bicolor	Rib	Complete	complete	Unknown	Unknown	burned	1	0.01
35HA2627	04-319	676	1	B	80-90	18		Actinopterygii	Cypiniformes	Cyprinidae	Gila sp.	Gila bicolor	Pharengeal	Articular surface	fragment	Right	Adult		1	0.04
35HA2627	04-395	637	1	D	80-90	18		Actinopterygii	Salmoniformes	Unknown	Unknown	Unknown	Sphenotic	Compelte	Compelte	Left and Right	Adult		2	0.01
35HA2627	04-319	678	1	B	80-90	18		Actinopterygii	Salmoniformes	Salmonidae	Unknown	Unknown	Vertebra	Complete	complete	N/A	Adult		3	0.03
35HA2627	04-319	675	1	B	80-90	18		Aves	Galliformes	Odontophoridae	Callipepla sp.	C.f. Callipepla californica	Carpometacarpus	Proximal	fragment	Left	Adult	Burned/calcined	1	0.08

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	04-225	614	1	C	80-90	18		Aves	Aves	Aves	Aves	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		3	0.37
35HA2627	04-402	636	1	D	80-90	18		Aves.	Pelecaniformes	Ardeidae	Ardea sp.	Ardea sp.	Phalanx II	Unknown	Compelte	Left	Unknown		1	0.08
35HA2627	04-393	635	1	D	80-90	18		Aves.	Pelecaniformes	Ardeidae	Ardea sp.	Ardea sp.	Ulna	Proximal	fragment	Left	Adult		1	0.14
35HA2627	04-479	656	1	A	80-90	18		Bivalvia	Bivalvia	Margaritiferidae	Marmota sp.	Margaritifera falcata	Nacre	Unknown	fragment	Unknown	Unknown		1	0.01
35HA2627	04-479	668	1	A	80-90	18		C.f. Mammal II	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Scored, burned/calcined	1	0.03
35HA2627	04-226	625	1	C	80-90	18		Mamaml V	Artiodactyl	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Tool/burned	1	0.55
35HA2627	04-049	611	1	C	80-90	18		Mammal I	Rodentia	Sciuridae	Heteromyidae sp.	Heteromyidae perognathus sp.	various	various	various	various	Adult	Intrusive	6	0.08
35HA2627	04-319	680	1	B	80-90	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Unknown	Intrusive	6	0.11
35HA2627	04-048	612	1	C	80-90	18		Mammal I	Rodentia	Muridae	Microtinae microtus sp.	Microtinae microtus sp.	Mandible	Complete	complete	Left	Adult	Intrusive	1	0.03
35HA2627	04-387	627	1	D	80-90	18		Mammal I	Rodentia	Muridae	Microtinae microtus sp.	Microtus sp.	Mandible	Complete	Complete	Right	Adult	Intrusive	1	0.07
35HA2627	04-479	652	1	A	80-90	18		Mammal I	Rodentia	Sciuridae	Unknown	Unknown	Various	Various	Various	Various	various	Intrusive	20	0.28
35HA2627	04-044	610	1	C	80-90	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	various	various	various	various	various	Intrusive	90	3.72
35HA2627	04-479	657	1	A	80-90	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Astragalus	Complete	complete	Left	Adult	Burned/calcined	1	0.01
35HA2627	04-319	673	1	B	80-90	18		Mammal II	Lagomorpha	Leporidae	Sylvilagus sp.	C.f. Sylvilagus nuttali	Molar	Unknown	fragment	Unknown	Unknown		1	0.11
35HA2627	04-383	630	1	D	80-90	18		Mammal II	Rodentia	Cricetidae	Cinerea	Neotoma cinerea	Various	Various	various	Various	Unknown	Intrusive	7	0.49
35HA2627	04-385	631	1	D	80-90	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Various	Various	various	Various	Unknown	Intrusive	33	2.06
35HA2627	04-319	681	1	B	80-90	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Unknown	Intrusive	82	2.19
35HA2627	04-319	682	1	B	80-90	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Unknown	Burned/calcined	2	0.1
35HA2627	04-386	632	1	D	80-90	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Various	Various	various	Various	Unknown	Intrusive	38	1.29
35HA2627	04-392	641	1	D	80-90	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Various	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	2	0.09
35HA2627	04-479	658	1	A	80-90	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		19	0.64
35HA2627	44-1	613	1	C	80-90	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	Mandible	Buccal	Buccal	Left	Adult	Burned	1	0.05
35HA2627	04-319	671	1	B	80-90	18		Mammal II	Lagomorpha	Leporidae	Sylvilagus sp.	C.f. Sylvilagus nuttali	Tibia	Distal	fragment	Right	Adult		1	0.1
35HA2627	04-383	629	1	D	80-90	18		Mammal II	Rodentia	Cricetidae	Cinerea	Neotoma cinerea	Tibia	Proximal	fragment	left	Adult	Intrusive, gnawed (rod)	1	0.24
35HA2627	04-479	653	1	A	80-90	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Various	Various	various	Various	various	Intrusive	119	6.04
35HA2627	04-319	683	1	B	80-90	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Various	Unknown	fragment	Unknown	Unknown	Intrusive	7	1.13
35HA2627	04-384	628	1	D	80-90	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Various	Various	various	Various	Unknown	Intrusive	4	0.37
35HA2627	04-223	619	1	C	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		32	2.68
35HA2627	04-319	684	1	B	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Unknown	Burned/calcined	28	0.95
35HA2627	04-319	685	1	B	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Unknown	Intrusive	23	1.04
35HA2627	04-391	649	1	D	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	6	0.24
35HA2627	04-479	659	1	A	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		82	2.49
35HA2627	04-479	660	1	A	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned/calcined	27	0.81
35HA2627	04-319	674	1	B	80-90	18		Mammal III	Lagomorpha	Leporidae	Lepus sp.	Lepus californicus	Molar	Occlusal	fragment	Unknown	Adult	Burned/calcined	1	0.15
35HA2627	04-399	634	1	D	80-90	18		Mammal III	Lagomorpha	Leporidae	Brachylagus sp.	Brachylagus idahoensis	Radius	Complete	Complete	Right	Adult		1	0.28
35HA2627	04-045	608	1	C	80-90	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	various	various	various	various	adult	Intrusive	11	1.21
35HA2627	04-479	654	1	A	80-90	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	various	various	various	various	various	Intrusive	5	0.54
35HA2627	04-319	672	1	B	80-90	18		Mammal III	Rodentia	Erethizontidae	Erethizon	Erethizontidae dorsatum	LM	Complete	Complete	Right	Adult		1	0.35
35HA2627	04-400	642	1	D	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		32	1.63
35HA2627	04-319	679	1	B	80-90	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Molar	Complete	complete	Unknown	Adult	Burned/calcined	1	0.08
35HA2627	04-508	651	1	D	80-90		3	Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Rib	Complete	complete	Unknown	Adult	Intrusive	1	0.61
35HA2627	04-388	640	1	D	80-90	18		Mammal IV	Carniovora	Unknown	Unknown	Unknown	Bulla	Lateral	fragment	Left	Adult		1	0.22
35HA2627	04-222	621	1	C	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	burned/calcined	4	0.28
35HA2627	04-319	686	1	B	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Unknown	Burned/calcined	35	2.05
35HA2627	04-319	687	1	B	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		47	3.86
35HA2627	04-391	648	1	D	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	9	0.86
35HA2627	04-400	644	1	D	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		20	2.42
35HA2627	04-479	661	1	A	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	various	Unknown	fragment	Unknown	Unknown		19	2.81
35HA2627	04-479	662	1	A	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	10	1.19
35HA2627	04-479	669	1	A	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Scored, burned/calcined	1	0.24
35HA2627	04-400	645	1	D	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral	4	9.62
35HA2627	04-227	617	1	C	80-90	18		Mammal V	Artiodactyl	Unknown	Unknown	C.f. Ovis canadensis	Incisor	Occlusal	enamel	Unknown	Unknown	Burned/calcined	1	0.05
35HA2627	04-400	643	1	D	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Vertebra	Articular surface	Body	N/A	Juvenille	Gnawed - Carnivore	1	0.92
35HA2627	04-221	623	1	C	80-90	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Incisor	Labial	enamel	Unknown	Unknown		1	0.07
35HA2627	04-222	620	1	C	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		17	8.63
35HA2627	04-479	665	1	A	80-90	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Crown	crown	Unknown	Juvenille		1	0.11
35HA2627	04-222	622	1	C	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	31	7.11
35HA2627	04-055	626	1	C	80-90		2	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Exfoliating/Gnawed (carn.)	1	1.24
35HA2627	04-319	690	1	B	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned/calcined	17	6.55
35HA2627	04-319	691	1	B	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		16	3.38
35HA2627	04-319	688	1	B	80-90	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Various	enamel	Unknown	Unknown	Burned/calcined	3	0.61
35HA2627	04-319	689	1	B	80-90	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Various	enamel	Unknown	Unknown		16	1.7
35HA2627	04-387	639	1	D	80-90	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Labial	enamel	Unknown	Unknown		5	0.27
35HA2627	04-391	647	1	D	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	12	4.36
35HA2627	04-400	646	1	D	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		20	4.45
35HA2627	04-479	663	1	A	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	spiral	4	4.42
35HA2627	04-479	664	1	A	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	12	5.37
35HA2627	04-479	666	1	A	80-90	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Buccal	enamel	Unknown	Unknown	Burned/calcined	4	0.11
35HA2627	04-479	667	1	A	80-90	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Buccal	enamel	Unknown	Unknown		6	0.37
35HA2627	04-051	618	1	C	80-90	18		Mammal V	Carniovora	Felidae	Lynx sp.	C.f. Lynx rufus	UI3	Complete	complete	Left	Adult		1	0.06
35HA2627	04-221	624	1	C	80-90	18		Mammal VI	Artiodactyl	Unknown	Unknown	Unknown	Incisor	Labial	enamel	Unknown	Unknown		1	0.2
35HA2627	04-380	650	1	D	80-90		2	Mollusca	Bivalvia	Margaritiferidae	Margaritifera sp.	Margaritifera falcata	Hinge	Unknown	fragment	Right	Adult	Cut at umbo	1	3.99

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	04-220	615	1	C	80-90	18		Mollusca	Bivalvia	Unknown	Unknown	Unknown	Nacre	Unknown	fragment	Unknown	Unknown		2	0.03
35HA2627	04-479	670	1	A	80-90	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		40	1.35
35HA2627	04-319	692	1	B	80-90	18		Vertebrate	Unknown	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Unknown		111	1.97
35HA2627	04-395	633	1	D	80-90	18		Vertebrate	Unknown	Unknown	Unknown	Unknown	Various	Various	various	Various	Unknown	Intrusive	43	1.48
35HA2627	04-494	706	4	C	20-30	18		Actinopterygii	Cypiniformes	Cyprinidae	Gila sp.	Gila bicolor	Ultimate vertebra	Complete	complete	N/A	Unknown		1	0.04
35HA2627	04-306	731	4	C	20-30	18		Actinopterygii	Salmoniformes	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Preopercle	Articular surface	fragment	Right	Unknown		1	0.01
35HA2627	04-306	732	4	C	20-30	18		Actinopterygii	Salmoniformes	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Coracoid	Articular surface	fragment	Right	Unknown		2	0.01
35HA2627	04-306	733	4	C	20-30	18		Actinopterygii	Salmoniformes	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Auricular	Articular surface	fragment	Right	Unknown		1	0.01
35HA2627	04-306	734	4	C	20-30	18		Actinopterygii	Salmoniformes	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Frontal	Articular surface	fragment	Unknown	Unknown		1	0.01
35HA2627	04-494	705	4	C	20-30	18		Actinopterygii	Cypiniformes	Cyprinidae	Gila sp.	Gila bicolor	Posttemporal	Complete	complete	Left and Right	Adult		2	0.02
35HA2627	04-306	749	4	C	20-30	18		Aves	Unknown	Unknown	Unknown	Unknown	Ulna	Diaphyseal	fragment	Unknown	Unknown	Exfoliating	1	1
35HA2627	04-494	707	4	C	20-30	18		Aves	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		1	0.31
35HA2627	04-296	696	4	C	20-30		3	Aves	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	bead	1	0.42
35HA2627	04-306	727	4	C	20-30	18		Bivalvia	Unionoida	Unknown	Unknown	Unknown	Nacre	Unknown	Mantle	Unknown	Unknown		1	0.01
35HA2627	04-306	746	4	C	20-30	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	Various	Various	fragment	Various	Unknown	Intrusive	10	0.12
35HA2627	04-494	698	4	C	20-30	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	Various	various	fragment	various	Unknown	Intrusive	9	0.12
35HA2627	04-494	700	4	C	20-30	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Astragalus	Complete	complete	Left	Adult	Burned/calcined	1	0.01
35HA2627	04-306	730	4	C	20-30	18		Mammal II	Rodentia	Unknown	Unknown	c.f. Spermophilus townsendii	Ulna	Diaphyseal	fragment	Unknown	Unknown	Cut	1	0.05
35HA2627	04-306	744	4	C	20-30	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	dorsal	fragment	Right	Unknown	Burned/calcined	1	0.06
35HA2627	04-306	745	4	C	20-30	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Lateral	fragment	Unknown	Unknown	Burned/calcined	3	0.04
35HA2627	04-494	709	4	C	20-30	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Various	Various	fragment	Unknown	Unknown	Intrusive	74	2.88
35HA2627	04-494	701	4	C	20-30	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Complete	fragment	Left	Adult	Burned/calcined	1	0.16
35HA2627	04-306	742	4	C	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Various	Various	fragment	Various	Unknown	Intrusive	103	3.86
35HA2627	04-306	743	4	C	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Various	Various	fragment	Various	Unknown	Burned	18	0.59
35HA2627	04-306	729	4	C	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	UI1	1/2 linear toothM	fragment	Unknown	Unknown	Red paint?	1	0.11
35HA2627	04-494	708	4	C	20-30	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		91	5.82
35HA2627	04-494	699	4	C	20-30	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Occipital	Articular surface	fragment	Left	Adult	Intrusive	1	0.01
35HA2627	04-494	703	4	C	20-30	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Various	Various	fragment	Various	Adult	Burned/calcined	11	0.36
35HA2627	04-494	702	4	C	20-30	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Zygomatic	Complete	fragment	Left and Right	Adult	Burned/calcined	2	0.03
35HA2627	04-494	704	4	C	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Various	Various	fragment	Various	Unknown	Intrusive	24	4.85
35HA2627	04-494	712	4	C	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Molar	root	root	Unknown	Unknown	Burned/calcined	1	0.03
35HA2627	04-306	740	4	C	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Ulna	Diaphyseal	fragment	Left	Unknown	Burned	1	0.32
35HA2627	04-306	741	4	C	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Various	Various	fragment	Various	Unknown		12	1.72
35HA2627	04-494	711	4	C	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Ulna	Diaphyseal	fragment	Left	Adult	Burned/calcined	1	0.29
35HA2627	04-306	739	4	C	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Various	Various	fragment	Various	Adult	Intrusive	7	1.31
35HA2627	04-494	710	4	C	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Various	Various	fragment	Unknown	Unknown	Burned/calcined	105	2.47
35HA2627	04-306	725	4	C	20-30	18		Mammal IV	Carniovora	Canidae	Canis	Canis sp.	UM3	Occlusal	fragment	Right	Juvenille		1	0.04
35HA2627	04-306	724	4	C	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Mandible	Labial	fragment	Unknown	Unknown	Burned/calcined	1	0.93
35HA2627	04-306	738	4	C	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	38	4.57
35HA2627	04-494	714	4	C	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	36	1.85
35HA2627	04-306	728	4	C	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Green fracture	1	0.85
35HA2627	04-306	737	4	C	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		18	4.36
35HA2627	04-494	713	4	C	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		46	4.48
35HA2627	04-306	721	4	C	20-30	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Molar	Labial	enamel	Unknown	Unknown		4	0.35
35HA2627	04-306	722	4	C	20-30	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Molar	Labial	enamel	Unknown	Unknown	burned	1	0.01
35HA2627	04-300	695	4	C	20-30		7	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Spiral	1	5.49
35HA2627	04-494	715	4	C	20-30	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Various	enamel	Unknown	Unknown	Burned/calcined	6	0.45
35HA2627	04-494	716	4	C	20-30	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Various	enamel	Unknown	Unknown		8	0.61
35HA2627	04-306	723	4	C	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Incisor	Labial	fragment	Unknown	Unknown		1	0.23
35HA2627	04-304	693	4	C	20-30		11	Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Mandible	Buccal	fragment	Left	Adult	Burned/calcined	1	1.75
35HA2627	04-487	697	4	C	20-30		2	Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Metatarsal	Distal	fragment	Left	Adult	Spiral	1	5.74
35HA2627	04-306	720	4	C	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Spiral, exfoliating	1	2.41
35HA2627	04-306	735	4	C	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	22	8.03
35HA2627	04-306	736	4	C	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		6	8.17
35HA2627	04-494	717	4	C	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	56	10.64
35HA2627	04-494	718	4	C	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		41	22.54
35HA2627	04-303/494	694	4	C	20-30		10	Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Rib	Diaphyseal	fragment	Unknown	Adult	Spiral	1	7.57
35HA2627	04-306	726	4	C	20-30	18		Marmota III	Lagomorpha	Leporidae	Lepus sp.	Lepus californicus	Molar	Occlusal	crown	Unknown	Unknown		1	0.06
35HA2627	04-494	719	4	C	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		91	2.17
35HA2627	04-306	747	4	C	20-30	18		Vertebrate	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	213	7.57
35HA2627	04-306	748	4	C	20-30	18		Vertebrate	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		292	11.03
35HA2627	06-39	996	4	A	30-40	18		Actinopterygii	Salmoniformes	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Cleithrum	Complete	complete	Right	Adult		1	0.02
35HA2627	05-500	1060	4	C	30-40	18		Actinopterygii	Salmoniformes	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Dentary	Mesial	fragment	Right	Adult		1	0.02
35HA2627	06-40-1	970	4	A	30-40		3	Actinopterygii	Salmoniformes	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Opercle	Complete	complete	Right	Adult		1	0.07
35HA2627	06-39	997	4	A	30-40	18		Actinopterygii	Salmoniformes	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Subopercle	Complete	complete	Right	Adult		1	0.03
35HA2627	05-500	1061	4	C	30-40	18		Actinopterygii	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		2	0.04

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	06-39	998	4	A	30-40	18		Actinopterygii	Salmoniformes	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Vertebra	Complete	complete	N/A	Adult		1	0.01
35HA2627	06-39	1000	4	A	30-40	18		Aves	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.34
35HA2627	06-39	999	4	A	30-40	18		Aves	Gruiformes	Rallidae	Fulca sp.	Fulica americana	Tarsometatarsus	Diaphyseal	fragment	Right	Adult		1	0.58
35HA2627	05-500	1059	4	C	30-40	18		Aves III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		1	0.4
35HA2627	05-500	1062	4	C	30-40	18		Bivalvia	Unionoida	Unknown	Unknown	Unknown	Nacre	Unknown	fragment	Unknown	Adult		2	0.01
35HA2627	06-39	1003	4	A	30-40	18		Bivalvia	Unionoida	Unionidae	Margaritifera sp.	Margaritifera falcata	Valve	Anterior	fragment	Right	Adult		1	0.58
35HA2627	06-39	995	4	A	30-40	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	Unknown	Various	fragment	Various	Adult	Intrusive	10	0.12
35HA2627	05-500	1056	4	C	30-40	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	various	Unknown	fragment	Unknown	Adult	Intrusive	3	0.02
35HA2627	05-500	1055	4	C	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	9	0.28
35HA2627	06-39	990	4	A	30-40	18		Mammal II	Rodentia	Muridae	Unknown	Unknown	Mandible	Distal	fragment	Right	Adult	Intrusive	1	0.61
35HA2627	06-39	988	4	A	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Mesial	fragment	Right	Adult	Burned/calcined	1	0.1
35HA2627	06-39	992	4	A	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Mesial	fragment	Left	Adult	Intrusive	1	0.2
35HA2627	05-500	1049	4	C	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	maxilla	Distal	fragment	Unknown	Adult	Burned/calcined	1	0.04
35HA2627	06-39	993	4	A	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Molar	Complete	Complete	Various	Adult	Intrusive	7	0.1
35HA2627	05-500	1054	4	C	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Phalanx	Distal	complete	Unknown	Adult	Burned/calcined	1	0.01
35HA2627	05-500	1051	4	C	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Radius	Complete	complete	Right	Adult	Burned/calcined	1	0.02
35HA2627	05-500	1053	4	C	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Rib	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.02
35HA2627	06-39	989	4	A	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Tibia	Distal	fragment	Right	Adult	Burned/calcined	1	0.07
35HA2627	05-500	1052	4	C	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Tibia	Distal	fragment	left	Adult	Burned/calcined	2	0.08
35HA2627	06-39	994	4	A	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Unknown	Various	fragment	Various	Adult	Intrusive	14	0.82
35HA2627	05-500	1057	4	C	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	various	various	fragment	Unknown	Adult	Intrusive	25	1.26
35HA2627	05-500	1058	4	C	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	various	various	fragment	Unknown	Adult	Intrusive	26	1.26
35HA2627	05-500	1050	4	C	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Zygomatic	Complete	complete	Right	Adult	Burned/calcined	1	0.03
35HA2627	06-39	978	4	A	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Nasal	Distal	fragment	Left	Adult	Burned/calcined	1	0.06
35HA2627	06-39	986	4	A	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		3	0.89
35HA2627	06-39	987	4	A	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Intrusive	4	0.5
35HA2627	05-500	1046	4	C	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	31	2.75
35HA2627	05-500	1047	4	C	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult		27	2.11
35HA2627	06-39	979	4	A	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Metacarpal	Proximal	fragment	Unknown	Adult	Burned/calcined	1	0.09
35HA2627	06-39	976	4	A	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Ulna	Articular surface	fragment	Right	Adult	Burned/calcined	2	0.58
35HA2627	05-500	1048	4	C	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	various	Various	fragment	Unknown	Adult	Intrusive	5	0.41
35HA2627	06-39	982	4	A	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		41	6.37
35HA2627	05-500	1043	4	C	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	16	2.67
35HA2627	05-500	1044	4	C	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	24	3.87
35HA2627	06-39-3	973	4	A	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Scapula	Proximal	fragment	Right	Adult		1	0.96
35HA2627	05-500	1045	4	C	30-40	18		Mammal IV	Carniovora	Carnivora	Canis sp.	Canis sp.	Astragalus	Anterior	fragment	Right	Adult	Burned/calcined	1	0.49
35HA2627	06-39	983	4	A	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	29	2.72
35HA2627	06-39	984	4	A	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Cut, scored	1	0.3
35HA2627	06-39	985	4	A	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Scored, burned/calcined	1	0.28
35HA2627	06-39	977	4	A	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Spiral, gnawed - carnivore	1	2.2
35HA2627	06-39	980	4	A	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Spiral	21	12.6
35HA2627	06-39	981	4	A	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Spiral, burned/calcined	24	8.79
35HA2627	05-500	1040	4	C	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	16	8.57
35HA2627	05-500	1041	4	C	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	5	3.69
35HA2627	05-500	1042	4	C	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		3	0.92
35HA2627	06-39	974	4	A	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	various	enamel	Unknown	Unknown		5	0.54
35HA2627	06-39	975	4	A	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	various	enamel	Unknown	Unknown	Burned/calcined	2	0.06
35HA2627	05-500	1064	4	C	30-40	18		Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	Molar	Unknown	enamel	Unknown	Adult		1	0.21
35HA2627	06-39-4	971	4	A	30-40	18		Mammal V	Artiodactyl	Cervidae	Unknown	c.f. Odocoileus hemionus	radius	Proximal	fragment	Left	Adult	Gnawed - Carnivore	1	0.84
35HA2627	06-39-5	972	4	A	30-40	18		Mammal V	Artiodactyl	Bovidae	Ovis sp.	Ovis canadensis	tibia	Distal	fragment	Right	Adult	perimortem break	1	6.71
35HA2627	05-500	1037	4	C	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Adult	Burned/calcined	3	0.09
35HA2627	05-500	1038	4	C	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Adult		7	0.51
35HA2627	05-500	1039	4	C	30-40	18		Mammal VI	Artiodactyl	Cervidae	Cervus	Cervus elaphus	Antler	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	7.31
35HA2627	05-500	1036	4	C	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Burned/calcined	1	0.05
35HA2627	05-500	1063	4	C	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		130	4.68
35HA2627	05-500	1065	4	C	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Adult		87	3.18
35HA2627	06-39	1001	4	A	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Various	Various	fragment	Unknown	Adult		236	8.91
35HA2627	06-39	1002	4	A	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	various	Various	fragment	Unknown	Adult	Burned/calcined	62	2.06
35HA2627	06-66	1354	4	A	40-50	18		Actinopterygii	Salmoniformes	Salmonidae	Unknown	Unknown	Angular	Complete	Complete	Left	Adult		1	0.04
35HA2627	06-66	1353	4	A	40-50	18		Actinopterygii	Salmoniformes	Salmonidae	Unknown	Unknown	Preopercle	Complete	complete	LEft	Adult		1	0.04
35HA2627	05-515	1398	4	C	40-50	18		Actinopterygii	Salmoniformes	Salmonidae	Unknown	Unknown	Preopercle	complete	complete	Left	Adult		1	0.01
35HA2627	05-515	1399	4	C	40-50	18		Actinopterygii	Unknown	Unknown	Unknown	Unknown	Unknown	Various	fragment	Unknown	Adult		6	0.07
35HA2627	06-66	1355	4	A	40-50	18		Actinopterygii	Salmoniformes	Salmonidae	Unknown	Unknown	Vertebra	Body	fragment	N/A	Adult	Burned/calcined	1	0.01
35HA2627	06-66	1352	4	A	40-50	18		Aves II	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult		5	0.74
35HA2627	05-515	1396	4	C	40-50	18		Aves II	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	7	0.48
35HA2627	05-515	1397	4	C	40-50	18		Aves II	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		8	0.7
35HA2627	06-66	1347	4	A	40-50	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	LI1	Complete	complete	left	Adult	Intrusive	1	0.01
35HA2627	06-66	1349	4	A	40-50	18		Mammal I	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Intrusive	3	0.09
35HA2627	05-515	1392	4	C	40-50	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Intrusive	14	0.17
35HA2627	05-515	1393	4	C	40-50	18		Mammal I	Rodentia	Muridae	Unknown	Unknown	Maxilla	Distal	fragment	left	Adult		1	0.01

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35Ha2627	06-66	1348	4	A	40-50	18		Mammal I	Unknown	Unknown	Unknown	Unknown	Vertebra	Body	fragment	Unknown	Adult	Intrusive	1	0.01
35HA2627	06-66	1343	4	A	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Calcaneous	Proximal	fragment	right	Adult	Burned/calcined	1	0.1
35HA2627	05-515	1376	4	C	40-50	18		Mammal II	Lagomorpha	Leporidae	Lepus sp.	c.f. Lepus sp.	Caudal vertebra	Complete	complete	N/A	Adult		1	0.01
35HA2627	06-62-3	1314	4	A	40-50		3	Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Cranial	Superior	complete	N/A	Adult	Intrusive	1	7.89
35HA2627	05-515	1382	4	C	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Cranial	Unknown	fragment	Unknown	Adult	Burned/calcined	4	0.09
35HA2627	06-66	1345	4	A	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Humerus	Right	fragment	Unknown	Adult	Burned/calcined	1	0.04
35HA2627	05-515	1377	4	C	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Incisor	Occlusal	fragment	Unknown	Adult		2	0.1
35HA2627	05-515	1378	4	C	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Incisor	Crown	fragment	Unknown	Adult	Burned/calcined	1	0.14
35HA2627	05-515	1385	4	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Incisor	crown	fragment	Unknown	Adult	intrusive	10	0.64
35HA2627	06-66	1339	4	A	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Incisors	complete	complete	unknown	Adult	Intrusive	9	0.53
35HA2627	06-66	1346	4	A	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Burned/calcined	16	0.48
35HA2627	05-515	1389	4	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	various	Adult	Intrusive	32	1.33
35HA2627	05-515	1402	4	C	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Bead, burned/calcined	1	0.01
35HA2627	06-66	1341	4	A	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Body	complete	Right	Adult	Intrusive	2	0.7
35HA2627	06-66	1344	4	A	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	body	fragment	Unknown	Adult	Burned/calcined	1	0.02
35HA2627	05-515	1381	4	C	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Body	fragment	Left	Adult	Burned/calcined	4	0.21
35HA2627	05-515	1383	4	C	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Body	fragment	Left	Adult	Intrusive	6	1.18
35HA2627	05-515	1384	4	C	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Body	fragment	Right	Adult	Intrusive	3	0.79
35HA2627	06-66	1342	4	A	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Lateral	fragment	Left	Adult	Intrusive	2	0.26
35HA2627	05-515	1388	4	C	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	anterior	fragment	left	Adult	Intrusive	3	0.24
35HA2627	05-515	1387	4	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Maxilla	Anterior	fragment	right	Adult	Intrusive	4	0.12
35HA2627	06-66	1338	4	A	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	molars	complete	complete	unknown	Adult	Intrusive	4	0.07
35HA2627	05-515	1386	4	C	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Molars	Complete	complete	Unknown	Adult	intrusive	13	0.16
35HA2627	05-515	1375	4	C	40-50	18		Mammal II	Lagomorpha	Leporidae	Lepus sp.	c.f. Lepus sp.	phalanx	complete	fragment	Unknown	Adult		1	0.04
35HA2627	05-515	1374	4	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Rib	Body	fragment	Unknown	Adult	Intrusive	1	0.06
35HA2627	06-66	1340	4	A	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	various	Unknown	fragment	Unknown	Adult	intrusive	24	1.41
35HA2627	06-66	1332	4	A	40-50	18		Mammal III	Unknown	Unknown	Unknown	c.f. Marmota flaviventis	Longbone	Unknown	fragment	Unknown	Adult		16	1.46
35HA2627	05-515	1373	4	C	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Astragalus	Proximal	fragment	left	Adult	Intrusive	1	0.1
35HA2627	05-515	1372	4	C	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Carpal	Complete	complete	right	Adult	Intrusive	2	0.18
35HA2627	06-66	1334	4	A	40-50	18		MAmmal III	Rodentia	Sciuridae	Marmota sp.	c.f. Marmota flaviventis	Clavicle	Diaphyseal	complete	right	Adult	Intrusive	1	0.1
35HA2627	05-515	1370	4	C	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	LI1	Occlusal	fragment	Right	Adult	Burned/calcined	1	0.34
35HA2627	06-66	1331	4	A	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	LM	Complete	complete	Right	Adult		1	0.09
35HA2627	06-66	1333	4	A	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	c.f. Marmota flaviventis	Tibia	Diaphyseal	complete	right	Juvenille	intrusive	1	0.8
35HA2627	05-515	1380	4	C	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	25	1.23
35HA2627	06-66	1328	4	A	40-50	18		Mammal III	Rodentia	Erethizontidae	Erethizon	Erethizon dorsatum	Molar	1/2 linear toothM	fragment	Unknown	Adult		1	0.04
35HA2627	05-515	1371	4	C	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	parietal	lateral	fragment	right	Adult	intrusive	1	0.81
35HA2627	06-66	1335	4	A	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	c.f. Marmota flaviventis	Radius	Diaphyseal	complete	right	Adult	Intrusive	1	0.26
35HA2627	05-515	1379	4	C	40-50	18		Mammal III	Rodentia	Erethizontidae	Erethizon	Erethizon dorsatum	Radius	Diaphyseal	fragment	right	Adult	Burned/calcined	1	1.1
35HA2627	06-66	1337	4	A	40-50	18		Mammal III	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	Scaphoid	complete	complete	right	Adult	Burned/calcined	1	0.04
35HA2627	06-66	1336	4	A	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	c.f. Marmota flaviventis	Scapula	lateral	fragment	right	Adult	intrusive	1	0.1
35HA2627	06-66	1329	4	A	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	c.f. Marmota flaviventis	Tibia	Distal	fragment	Right	Adult	burned	1	0.21
35HA2627	06-66	1330	4	A	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	UI1	Occlusal	fragment	LEft	Adult	Burned/calcined	1	0.17
35HA2627	06-66	1325	4	A	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		1	0.56
35HA2627	06-66	1326	4	A	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	17	1.43
35HA2627	06-66	1327	4	A	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	13	2.1
35HA2627	05-515	1368	4	C	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	58	7.46
35HA2627	05-515	1369	4	C	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Various	fragment	Unknown	Adult		16	2.65
35HA2627	04-XXX	1403	4	D	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	1.92
35HA2627	06-66	1358	4	A	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Cranial	Unknown	fragment	Unknown	Adult	Perimortem, pathological	1	4.54
35HA2627	06-66	1320	4	A	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Incisor	Buccal	Enamel	Unknown	Adult		1	0.1
35HA2627	06-66	1322	4	A	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	18	3.89
35HA2627	05-513	1359	4	C	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult	Scored, burned/calcined	1	0.29
35HA2627	05-515	1360	4	C	40-50	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Molar	Occlusal	fragment	Unknown	Juvenille		2	0.27
35HA2627	06-66	1323	4	A	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	12	9.63
35HA2627	05-515	1364	4	C	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	19	26.71
35HA2627	05-515	1367	4	C	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		22	12.39
35HA2627	06-66	1318	4	A	40-50	18		Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	Molar	Radial	fragment	Unknown	Adult		1	2.24
35HA2627	05-515	1361	4	C	40-50	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Molar	Buccal	enamel	Unknown	Adult		2	0.15
35HA2627	06-66	1319	4	A	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Molar	Buccal	Enamel	Unknown	Adult	Burned/calcined	8	0.33
35HA2627	06-66	1321	4	A	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Molar	Buccal	Enamel	Unknown	Adult		12	1.03
35HA2627	05-515	1366	4	C	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Phalanx	Distal	articular process	Unknown	Adult	Perimortem break	1	0.28
35HA2627	06-62-10	1316	4	A	40-50		10	Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Scapula	Medial	fragment	LEft	Adult	Perimortem break	1	2.68
35HA2627	06-62-7	1315	4	A	40-50		7	Mammal V	Artiodactyl	Unknown	Unknown	Unknown	temporal	Medial	fragment	Left	Adult	Perimortem break	1	2.63
35HA2627	05-515	1362	4	C	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Adult		8	0.5
35HA2627	05-515	1363	4	C	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Adult	Burned/calcined	11	0.46
35HA2627	06-66	1324	4	A	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		5	0.8
35HA2627	05-515	1365	4	C	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Vertebra	Inferior	epiphyseal plate	N/A	Adult		1	0.45
35HA2627	06-66	1351	4	A	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		71	2.81
35HA2627	06-66	1350	4	A	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone frag	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	18	0.45
35HA2627	05-515	1395	4	C	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	35	1.17
35HA2627	05-515	1394	4	C	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		158	8.95
35HA2627	05-515	1391	4	C	40-50	18		Marmota III	Lagomorpha	Leporidae	Lepus sp.	Lepus californicus	UI2	Complete	complete	Left	Adult		1	0.03
35HA2627	06-66	1317	4	A	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Scored, burned/calcined	1	0.06
35HA2627	06-66	1356	4	A	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	48	1.11

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	06-66	1357	4	A	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		55	1.79
35HA2627	05-515	1400	4	C	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		161	4.75
35HA2627	05-515	1401	4	C	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	41	0.89
35HA2627	05-515	1390	4	C	40-60	18		Marmota III	Lagomorpha	Leporidae	Lepus sp.	Lepus californicus	Molar	Occlusal	fragment	Unknown	Adult		1	0.07
35HA2627	74-2	760	5	A(n)	20-30	18		Actinopterygii			Gila sp.	Gila bicolor	Cleithrum	Articular surface	fragment	Right	Unknown		1	0.03
35HA2627	07-171	904	5	C-1c-II	20-30	18		Aves	Galliformes	Phasianidae	Phasianus sp.	C.f. Phasianus colchicus	Digit 2	Complete	complete	Left	Unknown		1	0.03
35HA2627	07-152	863	5	C-1c-I	20-30	18		Aves	Unknown	Unknown	Unknown	Unknown	various	various	fragment	Unknown	Unknown		5	0.18
35HA2627	07-171	901	5	C-1c-II	20-30	18		Aves	Unknown	Unknown	Unknown	Unknown	Cuneiform	Proximal	fragment	Right	Unknown	Burned/calcined	1	0.01
35HA2627	07-171	902	5	C-1c-II	20-30	18		Aves	Unknown	Unknown	Unknown	Unknown	Digit 3	Complete	complete	Unknown	Unknown		1	0.04
35HA2627	07-171	903	5	C-1c-II	20-30	18		Aves	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		1	0.04
35HA2627	07-176-12	922	5	D-1c-II	20-30	18		Aves	Unknown	Unknown	Unknown	Unknown	Tarsometatarsus	Diaphyseal	fragment	Unknown	Unknown	Gnawed - Carnivore	1	1.86
35HA2627	07-178	950	5	D-1c-II	20-30	18		Aves	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		2	0.1
35HA2627	07-140/165	789	5	A(s)	20-30	18		Aves			Fulca sp.	Fulca americana	Ulna	Proximal	fragment	Left	Adult	Burned/calcined	1	0.09
35HA2627	88-3	780	5	B(n)	20-30	18		Aves	Unknown	Unknown	Unknown	Unknown	Ulna	Diaphyseal	fragment	Unknown	Unknown		1	0.26
35HA2627	07-140/165	790	5	A(s)	20-30	18		Bivalvia	Unionoida	Unknown	Unknown	Unknown	Nacre	Laterial	fragment	Unknown	Unknown		1	0.01
35HA2627	07-162-2	781	5	A(s)-1c-II	20-30		2	Bivalvia	Unionoida	Unknown	Unknown	Unknown	Mantle	Laterial	fragment	Unknown	Unknown		1	0.1
35HA2627	70-5	750	5	A(n)	20-30		5	Bivalvia	Unionoida	Unknown	Unknown	Unknown	Nacre	Mesial	fragment	Unknown	Unknown		1	0.15
35HA2627	88-2	765	5	B(n)	20-30	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	Femur	Complete	complete	Right	Adult	Intrusive	1	0.03
35HA2627	07-171	894	5	C-1c-II	20-30	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	Teeth	various	complete	various	Unknown	Intrusive	2	0.01
35HA2627	88-5	774	5	B(n)	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Rib	Articular surface	fragment	Unknown	Adult	Burned/calcined	1	0.01
35HA2627	07-152	857	5	C-1c-I	20-30	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Astragalus	Complete	complete	Right	Adult	Burned/calcined	2	0.04
35HA2627	07-152	858	5	C-1c-I	20-30	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Calcaneous	Proximal	fragment	Right	Adult	Burned/calcined	1	0.02
35HA2627	07-152	859	5	C-1c-I	20-30	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Calcaneous	Complete	complete	Left	Adult	Burned/calcined	1	0.02
35HA2627	07-152	862	5	C-1c-I	20-30	18		Mammal II	Rodentia	Sciuridae	Unknown	c.f. Spermophilus townsendii	various	Various	fragment	Unknown	Unknown	Intrusive	9	0.51
35HA2627	07-152	861	5	C-1c-I	20-30	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Mandible	Buccal	fragment	Unknown	Adult	Burned/calcined	3	0.07
35HA2627	88-5	773	5	B(n)	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Nasal	Complete	complete	Left	Adult	burned	1	0.01
35HA2627	88-5	772	5	B(n)	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Phalanx	Complete	complete	Unknown	Adult	Burned/calcined	3	0.01
35HA2627	88-5	775	5	B(n)	20-30	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	Tarsal	Complete	complete	Unknown	Adult	Burned/calcined	1	0.01
35HA2627	07-152	856	5	C-1c-I	20-30	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Tarsal	Complete	complete	Unknown	Adult	Burned/calcined	1	0.01
35HA2627	07-147	798	5	B(s)	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Scapula	Laterial	Body	Right	Unknown	Intrusive	1	0.01
35HA2627	07-171	892	5	C-1c-II	20-30	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Unknown	Mandible	Various	fragment	various	Unknown	Intrusive	3	0.24
35HA2627	07-171	893	5	C-1c-II	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	various	various	fragment	various	Unknown	Intrusive	3	0.13
35HA2627	07-171	897	5	C-1c-II	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Phalanx	Complete	complete	Unknown	Unknown	Burned/calcined	2	0.02
35HA2627	07-171	899	5	C-1c-II	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Calcaneous	Complete	complete	Right	Unknown	Burned/calcined	1	0.03
35HA2627	07-171	898	5	C-1c-II	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Ulna	Proximal	fragment	Right	Unknown	Burned/calcined	1	0.03
35HA2627	07-178	929	5	D-1c-II	20-30	18		Mammal II	Unknown	Unknown	Unknown	Unknown	humerus	Distal	fragment	Unknown	Unknown	Burned/calcined	1	0.03
35HA2627	07-178	930	5	D-1c-II	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Illium	Unknown	fragment	right	Unknown	Burned/calcined	1	0.04
35HA2627	07-178	931	5	D-1c-II	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Ulna	Proximal	grag	right	Unknown	Burned/calcined	1	0.04
35HA2627	07-152	860	5	C-1c-I	20-30	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Ulna	Articular surface	fragment	Unknown	Adult	Burned/calcined	1	0.01
35HA2627	07-178	932	5	D-1c-II	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	various	Unknown	fragment	Unknown	Adult	intrusive	23	1.18
35HA2627	88-2	764	5	B(n)	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Various	Various	fragment	Unknown	Unknown	Intrusive	19	0.68
35HA2627	07-137-21	787	5	A(s)-1c-I	20-30		21	Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Incisor	Complete	complete	Right	Adult	Intrusive	1	0.61
35HA2627	07-137-18	786	5	A(s)-1c-I	20-30		18	Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	1	0.04
35HA2627	07-137-10	782	5	A(s)-1c-I	20-30		10	Mammal III	Lagomorpha	Leporidae	Lepus sp.	Lepus californicus	Scapula	Body	fragment	Left	Adult		1	1.43
35HA2627	07-137-17	785	5	A(s)-1c-I	20-30		17	Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Tibia	Distal	fragment	Right	Adult	Burned/calcined	1	0.38
35HA2627	07-152	852	5	C-1c-I	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		7	0.26032
35HA2627	07-159-3	918	5	D-1c-I	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	2	0.11
35HA2627	74-1	753	5	A(n)	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	7	0.28
35HA2627	74-3, 74-4	757	5	A(n)	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		7	0.33
35HA2627	88-4	763	5	B(n)	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		5	0.3
35HA2627	88-5	771	5	B(n)	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned/calcined	3	0.27
35HA2627	88-4	768	5	B(n)	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Various	Various	fragment	Various	various	Intrusive	7	0.55
35HA2627	07-176-8	921	5	D-1c-II	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Femur	Proximal	fragment	Left	Adult	Cut, pathology	1	1.43
35HA2627	07-152	854	5	C-1c-I	20-30	18		Mammal III	Rodentia	Marmota	Marmota sp.	Marmota flaviventis	Various	Complete	complete	Unknown	Unknown	Intrusive	3	0.21
35HA2627	07-171	891	5	C-1c-II	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	various	Various	fragment	various	Unknown	Intrusive	10	1.79
35HA2627	07-171	900	5	C-1c-II	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Humerus	Distal	fragment	Right	Unknown	Perimortem break	1	0.44
35HA2627	07-178	936	5	D-1c-II	20-30	18		Mammal III	Lagomorpha	Unknown	Unknown	Unknown	UI2	Complete	complete	Right	Unknown		1	0.01
35HA2627	07-171	896	5	C-1c-II	20-30	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Phalanx	Distal	fragment	Unknown	Juvenille	Burned/calcined	1	0.01
35HA2627	07-171	895	5	C-1c-II	20-30	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Phalanx	Proximal	fragment	Unknown	Unknown	Burned/calcined	1	0.04
35HA2627	07-178	933	5	D-1c-II	20-30	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	various	Diaphyseal	fragment	Unknown	Unknown	Intrusive	4	0.26
35HA2627	07-178	934	5	D-1c-II	20-30	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Rib	Proximal	fragment	Unknown	Unknown	Burned/calcined	1	0.06
35HA2627	07-152	855	5	C-1c-I	20-30	18		Mammal III	Lagomorpha	Leporidae	Lepus sp.	c.f. Lepus sp.	Molar	Occlusal	fragment	Unknown	Adult	Burned/calcined	1	0.06
35HA2627	07-178	935	5	D-1c-II	20-30	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Ulna	Diaphyseal	fragment	Left	Unknown		1	0.81
35HA2627	07-152	853	5	C-1c-I	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longboon	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	29	1.48
35HA2627	07-159-3	917	5	D-1c-I	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Mandible	distal	fragment	Unknown	Unknown		1	0.06
35HA2627	07-171	883	5	C-1c-II	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Bead	1	0.1
35HA2627	07-178	937	5	D-1c-II	20-30	18		Mammal IV	Carniovora	Felidae	Lynx sp.	C.f. Lynx rufus	Incisor	Labial	fragment	Unknown	Unknown	Burned	2	0.05
35HA2627	07-147	797	5	B(s)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		3	0.21
35HA2627	07-152	850	5	C-1c-I	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		36	4.17
35HA2627	07-159-3	912	5	D-1c-I	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Proximal	articular process	Unknown	Unknown	Gnawed - Carnivore, burned/calcined	1	0.87
35HA2627	07-159-3	915	5	D-1c-I	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		5	0.94
35HA2627	07-159-3	916	5	D-1c-I	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	14	1.12
35HA2627	07-171	889	5	C-1c-II	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Various	fragment	Unknown	Unknown	Cut, burned/calcined	1	0.17
35HA2627	07-171	890	5	C-1c-II	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Various	fragment	Unknown	Unknown		105	6.54

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	07-176-19-II-b	926	5	D-1c-II	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Perimortem break	27	6.29
35HA2627	07-178	943	5	D-1c-II	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		39	7.14
35HA2627	07-178	944	5	D-1c-II	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	12	1.53
35HA2627	74-1	752	5	A(n)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	11	1.09
35HA2627	74-3	756	5	A(n)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		6	0.93
35HA2627	88-5	770	5	B(n)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned/calcined	12	1.05
35HA2627	07-169-3-II	870	5	C-1c-II	20-30		3	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		1	0.69
35HA2627	07-149-3	838	5	C-1c-I	20-30		3	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Gnawed - Carnivore	1	0.95
35HA2627	07-147	796	5	B(s)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	3	0.16
35HA2627	07-152	851	5	C-1c-I	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	35	3.28
35HA2627	07-171	888	5	C-1c-II	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	77	4.63
35HA2627	88-4	762	5	B(n)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		9	1.09
35HA2627	07-149-8	839	5	C-1c-I	20-30		8	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Spiral, burned/calcined	1	1.52
35HA2627	07-156-5-I	907	5	D-1c-I	20-30		5	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Perimortem break	1	11.11
35HA2627	07-140/165	788	5	A(s)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown		11	4.14
35HA2627	07-159-3	913	5	D-1c-I	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned	5	1.35
35HA2627	07-176-15	923	5	D-1c-II	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Cranial	Unknown	fragment	Unknown	Unknown	Perimortem break	1	0.8
35HA2627	07-169-3	868	5	C-1c-II	20-30		3	Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	Parietal	Dorsal	articular process	Right	Unknown	Cut/Gnawed - Carnivore	1	2.9
35HA2627	07-137-15	784	5	A(s)-1c-I	20-30		15	Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	LM2	Complete	complete	Right	Subadult		1	0.87
35HA2627	07-169-13	877	5	C-1c-II	20-30		13	Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Molar	Crown	fragment	Unknown	Juvenille		1	0.24
35HA2627	07-149-9	840	5	C-1c-I	20-30		9	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Spiral, exfoliating	1	3.82
35HA2627	07-149-9	841	5	C-1c-I	20-30		9	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Spiral	1	1.28
35HA2627	07-149-9	842	5	C-1c-I	20-30		9	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.81
35HA2627	07-149-11	843	5	C-1c-I	20-30		11	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Exfoliating	1	1.66
35HA2627	07-156-8-I	909	5	D-1c-I	20-30		8	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	3.63
35HA2627	07-156-8-I	911	5	D-1c-I	20-30		8	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.47
35HA2627	07-178	940	5	D-1c-II	20-30	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Molar	root	fragment	Unknown	Juvenille		1	0.07
35HA2627	07-171	881	5	C-1c-II	20-30	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Molar	Crown	fragment	Unknown	Unknown	Burned/calcined	1	0.12
35HA2627	07-147	793	5	B(s)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Labial/lingual	enamel	Unknown	Unknown		3	0.18
35HA2627	07-152	844	5	C-1c-I	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Buccal	enamel	Unknown	Unknown	Burned/calcined	2	0.15
35HA2627	07-152	845	5	C-1c-I	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Molar	Unknown	fragment	Unknown	Unknown		1	0.51
35HA2627	07-152	846	5	C-1c-I	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Buccal	enamel	Unknown	Unknown		5	0.14
35HA2627	07-171	878	5	C-1c-II	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Astragalus	Unknown	fragment	Right	Unknown	Burned/calcined	1	1.33
35HA2627	07-171	879	5	C-1c-II	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Phalanx	Articular surface	fragment	Unknown	Unknown	burned/cat	1	0.25
35HA2627	07-171	882	5	C-1c-II	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	various	enamel	Unknown	Unknown	broken	14	0.96
35HA2627	07-156-8-I	908	5	D-1c-I	20-30		8	Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Labial	enamel	Unknown	Unknown	broken	7	1.17
35HA2627	88-4	767	5	B(n)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Various	enamel	Various	Unknown		9	0.56
35HA2627	07-178	938	5	D-1c-II	20-30	18		Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	Molar	Crown	fragment	Unknown	Adult		1	1.99
35HA2627	07-178	942	5	D-1c-II	20-30	18		Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	Molar	crown	fragment	Unknown	Adult	burned	1	0.13
35HA2627	07-176-23	927	5	D-1c-II	20-30	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Molar	Crown	fragment	Unknown	Adult		1	2.11
35HA2627	07-178	939	5	D-1c-II	20-30	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Molar	Crown	fragment	Unknown	Adult		1	1.63
35HA2627	07-178	941	5	D-1c-II	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Molar	Unknown	enamel	Unknown	Adult		11	0.6
35HA2627	88-5	777	5	B(n)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Phalanx	Articular surface	fragment	Unknown	Adult	Burned/calcined	1	0.37
35HA2627	07-137-14	783	5	A(s)-1c-I	20-30		14	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		6	1.71
35HA2627	07-169-3-II	869	5	C-1c-II	20-30		3	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral	1	0.95
35HA2627	07-169-3-II	871	5	C-1c-II	20-30		3	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		2	0.88
35HA2627	07-169-4	872	5	C-1c-II	20-30		4	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	spiral	1	9.56
35HA2627	07-169-6	873	5	C-1c-II	20-30		6	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral, splintering	1	3.82
35HA2627	07-169-7	874	5	C-1c-II	20-30		7	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral, burned/calcined	1	1.03
35HA2627	07-169-11	875	5	C-1c-II	20-30		11	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral	1	3.26
35HA2627	07-169-12	876	5	C-1c-II	20-30		12	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral, gnawed - carnivore	1	6.62
35HA2627	07-147	794	5	B(s)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	9	2.34
35HA2627	07-147	795	5	B(s)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		4	1.6
35HA2627	07-152	847	5	C-1c-I	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		13	2.68
35HA2627	07-152	848	5	C-1c-I	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral, burned/calcined	8	5.03
35HA2627	07-152	849	5	C-1c-I	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	16	2.66
35HA2627	07-159-3	914	5	D-1c-I	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		3	0.94
35HA2627	07-171	880	5	C-1c-II	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Scored, burned/calcined	1	1.49
35HA2627	07-171	884	5	C-1c-II	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral, burned/calcined	2	0.65
35HA2627	07-171	885	5	C-1c-II	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	27	5.31
35HA2627	07-171	886	5	C-1c-II	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral	15	3.8
35HA2627	07-171	887	5	C-1c-II	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		12	1.79
35HA2627	07-176-16	924	5	D-1c-II	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Perimortem break	1	3.87
35HA2627	07-176-19-II-a	925	5	D-1c-II	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Perimortem break	1	2.13
35HA2627	07-176-2	920	5	D-1c-II	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	1	0.81
35HA2627	07-176-24	928	5	D-1c-II	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Periomortem	1	8.54
35HA2627	07-178	945	5	D-1c-II	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		21	9.55
35HA2627	07-178	946	5	D-1c-II	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	40	13.31
35HA2627	74-1	751	5	A(n)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	4	1.25
35HA2627	74-3	755	5	A(n)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Various	Diaphyseal	fragment	Unknown	Unknown		5	5.76
35HA2627	88-4	761	5	B(n)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		14	3.61
35HA2627	88-5	769	5	B(n)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned/calcined	13	3.13
35HA2627	07-152	864	5	C-1c-I	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Various	Various	fragment	Unknown	Adult	Burned/calcined	236	7.14
35HA2627	07-152	865	5	C-1c-I	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Various	Various	fragment	Unknown	Adult		75	2.4
35HA2627	74-1	754	5	A(n)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	21	0.57
35HA2627	74-4	758	5	A(n)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		4	0.23

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	88-4	766	5	B(n)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		78	3.91
35HA2627	88-5	776	5	B(n)	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Burned/calcined	66	1.99
35HA2627	07-178	947	5	D-1c-II	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		170	9.2
35HA2627	07-178	948	5	D-1c-II	20-30	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown	Burned/calcined	146	9.12
35HA2627	07-140/165	791	5	A(s)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Unknown		92	2.63
35HA2627	07-140/165	792	5	A(s)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Unknown	Burned/calcined	42	1.41
35HA2627	07-147	799	5	B(s)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown	Burned/calcined	40	1.14
35HA2627	07-147	800	5	B(s)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		26	0.69
35HA2627	07-178	949	5	D-1c-II	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		395	12.8
35HA2627	07-156-8-I	910	5	D-1c-I	20-30		8	UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		7	0.17
35HA2627	07-159-3	919	5	D-1c-I	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		65	1.97
35HA2627	07-171	905	5	C-1c-II	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Various	fragment	Unknown	Adult		145	4.67
35HA2627	07-171	906	5	C-1c-II	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Various	fragment	Unknown	Adult	Burned/calcined	74	1.97
35HA2627	07-152	866	5	C-1c-I	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	various	various	fragment	Unknown	Adult	Burned/calcined	11	0.18
35HA2627	07-152	867	5	C-1c-I	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Various	Various	fragment	Unknown	Adult		17	0.4
35HA2627	74-4, 73-1	759	5	A(n)	20-30	18		Vertebrate	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		6	0.19
35HA2627	88-4	779	5	B(n)	20-30	18		Vertebrate	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown		11	0.39
35HA2627	88-5	778	5	B(n)	20-30	18		Vertebrate	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Burned/calcined	8	0.26
35HA2627	07-186	1031	5	A(s)	30-40	18		Actinopterygii	Salmoniformes	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Caudal bony plate	various	fragment	N/A	Adult		1	0.01
35HA2627	07-201-3	1140	5	C	30-40	18		Actinopterygii	Salmoniformes	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Cleithrum	Complete	complete	right	Adult		1	0.03
35HA2627	07-208	1161	5	D	30-40	18		Actinopterygii	Actinopterygii	Acipenseriformes	Acipenser	Acipenser transmontanus	Dermal denticle	Complete	complete	N/A	Adult		1	0.07
35HA2627	07-186	1032	5	A(s)	30-40	18		Actinopterygii	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Adult		2	0.04
35HA2627	07-201-3	1141	5	C	30-40	18		Actinopterygii	Unknown	Unknown	Unknown	Unknown	Unknown	various	fragment	Unknown	Adult		3	0.15
35HA2627	06-81	966	5	A(n)	30-40	18		Aves	Unknown	Unknown	Unknown	Unknown	Coracoid	Diaphyseal	fragment	Left	Unknown		1	0.48
35HA2627	07-186	1030	5	A(s)	30-40	18		Aves I	Unknown	Unknown	Unknown	Unknown	Longbone	various	fragment	Unknown	Adult		4	0.19
35HA2627	07-194	1101	5	B(s)	30-40	18		Aves I	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		2	0.19
35HA2627	07-208	1174	5	D	30-40	18		Aves II	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		11	0.62
35HA2627	07-201-3	1139	5	C	30-40	18		Aves II	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		3	0.15
35HA2627	07-183-18	1009	5	A(s)	30-40		18	Aves III	Unknown	Unknown	Unknown	Unknown	Sternum	Distal	lateral caudal process	Left	Adult		1	0.6
35HA2627	06-77-2	968	5	A(n)	30-40		2	Bivalvia	Unionoida	Unknown	Unknown	Unknown	Nacre	Unknown	fragment	Unknown	Unknown		1	0.08
35HA2627	07-201-3	1142	5	C	30-40	18		Bivalvia	Unionoida	Unknown	Unknown	Unknown	Mantle	Lateral	fragment	Unknown	Adult		1	0.01
35HA2627	07-201-3	1138	5	C	30-40	18		Mammal I	Rodentia	Muridae	Unknown	Unknown	Mandible	Distal	fragment	Right	Adult	Intrusive	1	0.02
35HA2627	07-201-3	1137	5	C	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Various	Various	fragment	Unknown	Adult	Intrusive	43	1.63
35HA2627	07-208	1188	5	D	30-40	18		Mammal II	Lagomorpha	Leporidae	Sylvilagus sp.	Sylvilagus nuttali	Calcaneous	Proximal	fragment	left	Adult	burned	1	0.04
35HA2627	07-208	1185	5	D	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Dental elements	Unknown	fragment	Unknown	Adult	Intrusive	19	0.89
35HA2627	07-194	1097	5	B(s)	30-40	18		Mammal II	Rodentia	Unknown	Unknown	c.f. Spermophilus townsendii	Incisor	Crown	fragment	Unknown	Adult	Intrusive	4	0.11
35HA2627	07-201-3	1130	5	C	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Incisor	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.01
35HA2627	06-81	957	5	A(n)	30-40	18		Mammal II	Rodentia	Unknown	Unknown	c.f. Spermophilus townsendii	various	Various	fragment	Unknown	Unknown	Intrusive	13	0.43
35HA2627	07-208	1190	5	D	30-40	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	6	0.1
35HA2627	07-201-3	1129	5	C	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Distal	fragment	Right	Adult	Burned/calcined	2	0.1
35HA2627	07-201-3	1134	5	C	30-40	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Phalange	Distal	fragment	Unknown	Adult	Burned/calcined	2	0.02
35HA2627	07-186	1019	5	A(s)	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Phalanx	Complete	complete	Unknown	Adult	Burned/calcined	1	0.01
35HA2627	07-201-3	1133	5	C	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Radius	Distal	fragment	Right	Adult	Burned/calcined	1	0.04
35HA2627	07-208	1187	5	D	30-40	18		Mammal II	Lagomorpha	Leporidae	Sylvilagus sp.	Sylvilagus nuttali	Ul2	Complete	complete	right	Adult		1	0.06
35HA2627	07-186	1033	5	A(s)	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Ulna	Proximal	fragment	Right	Adult	Burned/calcined	1	0.02
35HA2627	07-201-3	1132	5	C	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Ulna	Proximal	fragment	Left	Adult	Burned/calcined	1	0.07
35HA2627	07-208	1189	5	D	30-40	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		9	0.16
35HA2627	07-186	1022	5	A(s)	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	various	various	various	various	Adult	Intrusive	11	0.35
35HA2627	07-201-3	1136	5	C	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	various	Various	fragment	Unknown	Adult	Intrusive	20	1.15
35HA2627	06-95	1075	5	B(n)	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	various	Unknown	fragment	Unknown	Adult	Intrusive	5	0.11
35HA2627	07-186	1023	5	A(s)	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Various	Various	various	Various	Adult	Intrusive	11	0.37
35HA2627	07-194	1098	5	B(s)	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Various	Various	various	Various	Adult	Intrusive	5	0.2
35Ha2627	07-208	1186	5	D	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Adult	Intrusive	21	0.51
35HA2627	07-201-3	1135	5	C	30-40	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Vertebra	Ventral	fragment	N/A	Adult	Burned/calcined	1	0.01
35HA2627	07-201-3	1131	5	C	30-40	18		Mammal II	Rodentia	Unknown	Unknown	c.f. Spermophilus townsendii	Zygomatic	Diaphyseal	fragment	Left	Adult	Burned/calcined	1	0.01
35HA2627	06-95	1073	5	B(n)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	12	0.38
35HA2627	07-201-3	1122	5	C	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Bulla	Lateral	fragment	right	Adult	Intrusive	1	0.01
35HA2627	07-201-3	1126	5	C	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Cranial	Lateral	fragment	Unknown	Adult	Intrusive	2	0.19
35HA2627	07-208	1176	5	D	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Humerus	Proximal	fragment	Right	Adult	Intrusive	1	0.43
35HA2627	07-208	1177	5	D	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	humerus	Proximal	fragment	Right	Adult	Perimortem break	1	0.34
35HA2627	07-191-5	1082	5	B(s)	30-40		5	Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Incisor	Complete	Complete	Right	Adult	Worked	1	0.65
35HA2627	07-208	1182	5	D	30-40	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Incisors	Unknown	fragment	Unknown	Adult		3	0.09
35HA2627	07-201-3	1119	5	C	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Radius	Proximal	fragment	Right	Juvenille	Burned/calcined	1	0.11
35HA2627	07-208	1179	5	D	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Molars	Complete	fragment	Unknown	Juvenille	Intrusive	3	0.12
35HA2627	07-201-3	1123	5	C	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	11	1.19
35HA2627	07-201-3	1124	5	C	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	6	0.32
35HA2627	07-191-29	1088	5	B(s)	30-40		29	Mammal III	Rodentia	Castoridae	Castor sp.	Castor canadensis	LP4	Complete	complete	Right	Adult		1	1.89
35HA2627	06-81	954	5	A(n)	30-40	18		Mammal III	Rodentia	Erethizontidae	Erethizon	Erethizon dorsatum	LP4	Complete	complete	Left	Adult		1	0.22

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	06-81	955	5	A(n)	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Mandible	Complete	complete	Right	Adult	Intrusive	1	3.12
35HA2627	07-205-21	1155	5	D	30-40		21	Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Mandible	Mesial	fragment	Left	Adult	Intrusive, pathological	1	2.18
35HA2627	07-186	1018	5	A(s)	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	mandible	Diaphyseal	Buccal	right	Adult	Burned/calcined	1	0.43
35HA2627	07-201-3	1127	5	C	30-40	18		Mammal III	Lagomorpha	Leporidae	Lepus sp.	Lepus californicus	Maxilla	ventral	fragment	N/A	Adult		1	0.05
35HA2627	07-208	1175	5	D	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Maxilla	Distal	fragment	Unknown	Adult	Burned/calcined	2	0.18
35HA2627	07-201-3	1121	5	C	30-40	18		Mammal III	Lagomorpha	Leporidae	Lepus sp.	Lepus californicus	Metacarpal	Unknown	fragment	Unknown	Adult	Burned/calcined	1	0.05
35HA2627	07-208	1178	5	D	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Metacarpal	Proximal	fragment	Unknown	Adult	Intrusive	1	0.07
35HA2627	07-208	1181	5	D	30-40	18		Mammal III	Rodentia	Erethizontidae	Erethizon	Erethizon dorsatum	Molar	Occlusal	fragment	Unknown	Adult		1	0.01
35HA2627	06-81	962	5	A(n)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	7	0.41
35HA2627	06-81	963	5	A(n)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		6	0.33
35HA2627	06-95	1074	5	B(n)	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Nasal	Mesial	fragment	Left	Adult	Intrusive	1	0.33
35HA2627	07-201-3	1128	5	C	30-40	18		Mammal III	Lagomorpha	Leporidae	Lepus sp.	Lepus californicus	Rib	Medial	fragment	Unknown	Adult		1	0.05
35HA2627	07-201-3	1117	5	C	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Rib	Diaphyseal	fragment	Unknown	Adult		1	0.23
35HA2627	07-201-3	1120	5	C	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	teeth	Various	various	Various	Adult	Intrusive	11	0.73
35HA2627	07-183-35	1013	5	A(s)	30-40		35	Mammal III	Rodentia	Unknown	Unknown	Unknown	Ulna	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	0.26
35HA2627	07-201-3	1125	5	C	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Humerus	Proximal	fragment	Unknown	Juvenille	Gnawed - Carnivore	2	0.49
35HA2627	07-208	1183	5	D	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		93	2.36
35HA2627	07-208	1184	5	D	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	148	4.64
35HA2627	07-186	1020	5	A(s)	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Various	Various	various	Various	Adult	Intrusive	6	0.39
35HA2627	07-186	1021	5	A(s)	30-40	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Various	various	various	various	Adult	Intrusive	2	0.23
35HA2627	07-208	1180	5	D	30-40	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Various	Various	fragment	Unknown	Adult	Intrusive	9	0.38
35HA2627	06-95	1071	5	B(n)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	21	1.95
35HA2627	06-95	1072	5	B(n)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	20	2.72
35HA2627	07-183-3	1004	5	A(s)	30-40		3	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Splinter	17	4.92
35HA2627	07-183-3	1005	5	A(s)	30-40		3	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned	1	0.08
35HA2627	07-183-27	1011	5	A(s)	30-40		27	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Splinter	15	2.55
35HA2627	07-183-36	1014	5	A(s)	30-40		36	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Splinter	14	0.84
35HA2627	07-191-10	1085	5	B(s)	30-40		10	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Perimortem break	1	0.77
35HA2627	07-205-10	1149	5	D	30-40		10	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	1.61
35HA2627	07-194	1094	5	B(s)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	27	2.29
35HA2627	07-194	1095	5	B(s)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		12	0.96
35HA2627	07-201-3	1115	5	C	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	50	6.42
35HA2627	07-208	1171	5	D	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	58	7.69
35HA2627	07-208	1166	5	D	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Distal	fragment	Unknown	Subadult		1	0.41
35HA2627	06-81	956	5	A(n)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Various	Articular surface	fragment	Unknown	Unknown		5	0.73
35HA2627	07-208	1164	5	D	30-40	18		Mammal IV	Carniovora	Felidae	Lynx sp.	C.f. Lynx rufus	Tibia	Distal	fragment	Right	Adult	burned	1	1.12
35HA2627	07-186	1017	5	A(s)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Tooth		root	Unknown	Adult	Burned	2	0.1
35HA2627	07-201-3	1116	5	C	30-40	18		Mammal IV	Carniovora	Felidae	Lynx sp.	C.f. Lynx rufus	Ulna	Proximal	fragment	Left	Adult	Burned/calcined	1	0.27
35HA2627	07-208	1165	5	D	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	burned	1	0.83
35HA2627	07-201-3	1118	5	C	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Cranial	Lateral	fragment	Unknown	Adult	Gnawed - Carnivore	1	0.57
35HA2627	07-205-25	1159	5	D	30-40		25	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break, gnaw-carn	1	0.71
35HA2627	07-205-13	1151	5	D	30-40		13	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Worked, exfoliating	1	2.4
35HA2627	07-205-24	1157	5	D	30-40		24	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break, exfoliating	1	0.42
35HA2627	07-186	1026	5	A(s)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	14	2.44
35HA2627	07-186	1027	5	A(s)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		30	5.11
35HA2627	07-208	1172	5	D	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		119	11.27
35HA2627	07-205-23	1156	5	D	30-40		23	Mammal IV	Unknown	Unknown	Unknown	Unknown	rib	Diaphyseal	fragment	Unknown	Adult	Worked, exfoliating	1	1.21
35HA2627	06-81	951	5	A(n)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Unknown	Tool/burned	1	0.12
35HA2627	06-81	960	5	A(n)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	10	0.69
35HA2627	06-81	961	5	A(n)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		20	2.26
35HA2627	06-95	1066	5	B(n)	30-40	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Antler	Unknown	fragment	Unknown	Adult		1	1.27
35HA2627	07-208	1167	5	D	30-40	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Antler	Shaft	fragment	Unknown	Adult		2	0.47
35HA2627	07-194	1089	5	B(s)	30-40	18		Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	Astragalus	Medial	fragment	Left	Adult	Burned/calcined	1	0.75
35HA2627	07-208	1173	5	D	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Frontal	Anterior	fragment	N/A	Adult		1	0.44
35HA2627	06-95	1069	5	B(n)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	18	5.39
35HA2627	06-95	1070	5	B(n)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	11	3.96
35HA2627	07-183-9	1006	5	A(s)	30-40		9	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Spiral	1	2.2
35HA2627	07-183-10	1007	5	A(s)	30-40		10	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Gnawed - Carnivore	3	0.77
35HA2627	07-183-26	1010	5	A(s)	30-40		26	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	2	3.24
35HA2627	07-183-31	1012	5	A(s)	30-40		31	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	1.79
35HA2627	07-191-2	1080	5	B(s)	30-40		2	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	1.33
35HA2627	07-191-3	1081	5	B(s)	30-40		3	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.67
35HA2627	07-191-7	1083	5	B(s)	30-40		7	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Perimortem break	1	2.18
35HA2627	07-191-9	1084	5	B(s)	30-40		9	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Perimortem break	1	2.94
35HA2627	07-191-12	1086	5	B(s)	30-40		12	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	10.55
35HA2627	07-191-13	1087	5	B(s)	30-40		13	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	1.93
35HA2627	07-198-3	1104	5	C	30-40		3	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	3.89
35HA2627	07-198-5	1105	5	C	30-40		5	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	1.89
35HA2627	07-198-9	1106	5	C	30-40		9	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	2.43
35HA2627	07-205-3	1148	5	D	30-40		3	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	8.87
35HA2627	07-205-11	1150	5	D	30-40		11	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	0.85
35HA2627	07-205-14	1152	5	D	30-40		14	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	1.99
35HA2627	07-205-19	1153	5	D	30-40		19	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break, exfoliating	1	2.58
35HA2627	07-205-20	1154	5	D	30-40		20	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	2.99
35HA2627	07-186	1024	5	A(s)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	11	4.27
35HA2627	07-186	1025	5	A(s)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		13	4.76
35HA2627	07-194	1092	5	B(s)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	32	6.77
35HA2627	07-194	1093	5	B(s)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		11	3

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	07-201-3	1111	5	C	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Anivil abrasion, burned/calcined	1	0.74
35HA2627	07-201-3	1112	5	C	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	40	13.01
35HA2627	07-201-3	1113	5	C	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	41	22.46
35HA2627	06-81	953	5	A(n)	30-40	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Antler	Distal	fragment	Unknown	Unknown	Gnawed - Carnivore	1	0.42
35HA2627	07-201-3	1114	5	C	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	84	11.67
35HA2627	06-81	952	5	A(n)	30-40	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Various	enamel	Unknown	Unknown		3	0.36
35HA2627	07-208	1168	5	D	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	17	6.11
35HA2627	07-208	1169	5	D	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		8	2.09
35HA2627	07-208	1170	5	D	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	30	9.66
35HA2627	07-205-22	1158	5	D	30-40		26	Mammal V	Artiodactyl	Bovidae	Ovis sp.	Ovis canadensis	LP4	Complete	complete	Left	Adult		1	2.59
35HA2627	07-205-26	1160	5	D	30-40		22	Mammal V	Artiodactyl	Bovidae	Ovis sp.	Ovis canadensis	Metatarsal	Proximal	fragment	Left	Adult	Perimortem break	1	14.63
35HA2627	07-183-11	1008	5	A(s)	30-40		11	Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	Molar	Crown	enamel	Unknown	Adult		1	0.42
35HA2627	07-201-3	1109	5	C	30-40	18		Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	Molar	Unknown	fragment	Unknown	Adult		1	0.1
35HA2627	07-201-3	1107	5	C	30-40	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Molar	Unknown	fragment	Unknown	Adult		10	1.01
35HA2627	07-201-3	1108	5	C	30-40	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Molar	Unknown	fragment	Unknown	Adult	Burned/calcined	2	0.1
35HA2627	07-201-3	1110	5	C	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Molar	Unknown	fragment	Unknown	Adult		13	0.84
35HA2627	06-77-4	969	5	A(n)	30-40		4	Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Radius	Diaphyseal	fragment	Left	Adult	Spiral, hammer strike, gnawed-carnivore	1	14.07
35HA2627	07-194	1090	5	B(s)	30-40	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	tooth	Crown	enamel	Unknown	Adult		5	0.37
35HA2627	06-81	958	5	A(n)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	28	7.09
35HA2627	06-81	959	5	A(n)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		22	6.32
35HA2627	07-186	1015	5	A(s)	30-40	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Occlusal	enamel	Unknown	Adult	Burned/calcined	2	0.05
35HA2627	07-186	1016	5	A(s)	30-40	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Lateral	enamel	Unknown	Adult		8	0.26
35HA2627	07-194	1096	5	B(s)	30-40	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Crown	enamel	Unknown	Adult	Burned/calcined	3	0.15
35HA2627	06-95	1067	5	B(n)	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	Enamel	Unknown	Adult		3	0.22
35HA2627	07-194	1091	5	B(s)	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Crown	enamel	Unknown	Adult		1	0.17
35HA2627	07-208	1162	5	D	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Buccal	enamel	Unknown	Adult	Burned/calcined	5	0.28
35HA2627	07-208	1163	5	D	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Buccal	enamel	Unknown	Adult		14	0.78
35HA2627	06-95	1068	5	B(n)	30-40	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Toothe	Unknown	enamel	Unknown	Adult	Burned/calcined	1	0.04
35HA2627	06-95	1076	5	B(n)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	12	0.51
35HA2627	07-186	1028	5	A(s)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Various	fragment	Unknown	Adult	Burned/calcined	152	7.34
35HA2627	06-81	964	5	A(n)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	23	0.83
35HA2627	06-81	965	5	A(n)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		50	1.64
35Ha2627	07-208	1191	5	D	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		65	2.17
35HA2627	07-208	1192	5	D	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	66	1.71
35HA2627	07-194	1100	5	B(s)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	various	Unknown	fragment	Unknown	Adult		101	273
35HA2627	06-95	1077	5	B(n)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Adult		49	1.74
35HA2627	07-186	1029	5	A(s)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	various	fragment	Unknown	Adult		217	9.96
35HA2627	07-201-3	1144	5	C	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	129	5.43
35HA2627	07-201-3	1145	5	C	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		212	10.62
35HA2627	07-201-3	1143	5	C	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	teeth	Labial	enamel	Unknown	Adult		8	0.24
35HA2627	07-194	1099	5	B(s)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Adult	Burned/calcined	96	2.93
35HA2627	06-81	967	5	A(n)	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	various	various	fragment	Unknown	Unknown		92	3
35HA2627	06-95	1078	5	B(n)	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	8	0.14
35HA2627	06-95	1079	5	B(n)	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		11	0.43
35HA2627	07-186	1034	5	A(s)	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	121	2.36
35HA2627	07-186	1035	5	A(s)	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		227	4.47
35HA2627	07-201-3	1146	5	C	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	132	3.07
35HA2627	07-201-3	1147	5	C	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		242	8.12
35HA2627	07-208	1193	5	D	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		450	10.17
35HA2627	07-208	1194	5	D	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	165	3.19
35HA2627	07-194	1102	5	B(s)	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	various	Unknown	fragment	Unknown	Adult	Burned/calcined	14	0.32
35HA2627	07-194	1103	5	B(s)	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	various	Unknown	fragment	Unknown	Adult		12	0.34
35HA2627	06-150	1430	5	A(n)	40-50	18		Actinopterygii	Salmoniformes	Salmonidae	Unknown	Unknown	Quadrate	Lateral	fragment	Left	Adult		1	0.01
35HA2627	07-215	1465	5	A(s)	40-50	18		Actinopterygii	Salmoniformes	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Vertebra	Complete	complete	N/A	Adult		2	0.02
35HA2627	07-236	1719	5	D	40-50	18		AVES	Unknown	Unknown	Unknown	Unknown	egg shell	N/A	fragment	N/A	Adult		1	0.01
35HA2627	06-176	1510	5	B(n)	40-50	18		Aves	Anseriformes	Anatidae	Anas sp.	Anas sp.	Humerus	Inferior	fragment	right	Adult	Perimortem break	1	0.1
35HA2627	06-176	1511	5	B(n)	40-50	18		Aves	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	8	0.39
35HA2627	06-150	1428	5	A(n)	40-50	18		Aves	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.05
35HA2627	06-150	1429	5	A(n)	40-50	18		Aves	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		6	0.6
35HA2627	06-176	1509	5	B(n)	40-50	18		Aves	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		1	0.25
35HA2627	06-176	1512	5	B(n)	40-50	18		Aves	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	12	0.82
35HA2627	06-176	1517	5	B(n)	40-50	18		Aves	Unknown	Unknown	Unknown	Unknown	Longbone	Articular surface	fragment	Unknown	Adult		1	0.13
35HA2627	07-236	1722	5	D	40-50	18		AVES	unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.07
35HA2627	07-236	1723	5	D	40-50	18		AVES	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult		25	2.06
35HA2627	07-299	1618	5	C	40-50	18		Aves	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Burned/calcined	4	0.12
35HA2627	07-299	1619	5	C	40-50	18		Aves	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	fragment	Unknown	Adult		6	0.36
35HA2627	07-215	1464	5	A(s)	40-50	18		Aves II	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult		6	0.26
35HA2627	07-221	1554	5	B(s)	40-50	18		Aves II	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	3	0.1
35HA2627	07-221	1555	5	B(s)	40-50	18		Aves II	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult		2	0.12
35HA2627	07-215	1463	5	A(s)	40-50	18		Aves II	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.24

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	07-236	1720	5	D	40-50	18		Aves III	Unknown	Unknown	Unknown	Unknown	Cuneiform	Complete	complete	Unknown	Adult		1	0.09
35HA2627	07-229	1587	5	C	40-50	18		Aves III	Anas	Unknown	Unknown	C.f. Branta canadensis	femur	distal	fragment	left	Adult	Perimortem break	1	0.12
35HA2627	07-212-14	1437	5	A(s)	40-50		14	Aves III	Unknown	Unknown	Unknown	C.f. Branta canadensis	Longbone	Diaphyseal	fragment	Unknown	Adult	Gnawed - Carnivore	1	1.71
35HA2627	06-150	1427	5	A(n)	40-50	18		Aves III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	2	1.49
35HA2627	06-147-2	1404	5	A(n)	40-50		2	Aves III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		1	1.14
35HA2627	07-236	1718	5	D	40-50	18		Aves III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	Unknown	Unknown	Adult	Worked	1	0.46
35Ha2627	07-236	1721	5	D	40-50	18		AVES III	Unknown	Unknown	Unknown	Unknown	Phalanx IV	Proximal	fragment	Left	Adult		1	0.15
35HA2627	07-245-2	1442	5	A(s)	40-50		2	Bivalvia	Unionoida	Unionidae	Margaritifera sp.	Margaritifera falcata	Valve	Anterior	fragment	Right	Adult	Cut	1	1.67
35HA2627	07-219-2	1518	5	B(s)	40-50		2	Bivalvia	Unionoida	Unionidae	Margaritifera sp.	Margaritifera falcata	Valve	Anterior	fragment	Left	Adult	Cut	1	2.34
35HA2627	07-226-3	1558	5	C	40-50		3	Bivalvia	Unionoida	Unionidae	Margaritifera sp.	Margaritifera falcata	valve	Dorsal	fragment	left	Adult	Exfoliating	1	0.62
35HA2627	06-147-5	1405	5	A(n)	40-50		5	Bivalvia	Unionoida	Unknown	Unknown	Unknown	Valve	Mantle	fragment	Unknown	Adult		1	0.34
35HA2627	07-299	1623	5	C	40-50	18		Mammal I	Rodentia	Muridae	Unknown	Unknown	mandible	Anterior	fragment	left	Adult	intrusive	1	0.03
35HA2627	07-236	1710	5	D	40-50	18		Mammal I	Unknown	Unknown	Unknown	Unknown	femur	Proximal	fragment	left	Adult	Intrusive	1	0.01
35HA2627	07-236	1711	5	D	40-50	18		Mammal I	Unknown	Unknown	Unknown	Unknown	humerus	Distal	fragment	right	Adult	Intrusive	1	0.01
35HA2627	07-236	1708	5	D	40-50	18		Mammal I	Unknown	Unknown	Unknown	Unknown	Innominate	complete	complete	left	Adult	intrusive	1	0.01
35HA2627	06-176	1507	5	B(n)	40-50	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	intrusive	14	0.28
35HA2627	07-299	1625	5	C	40-50	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Intrusive	3	0.01
35HA2627	07-236	1712	5	D	40-50	18		Mammal I	Rodentia	Muridae	Unknown	Unknown	maxilla	anterior	fragment	N/A	Adult	Intrusive	1	0.01
35HA2627	07-236	1713	5	D	40-50	18		MAmmal I	Rodentia	Sciuridae	Unknown	Unknown	Maxilla	Lateral	fragment	right	Adult	Intrusive	1	0.01
35HA2627	06-176	1508	5	B(n)	40-50	18		Mammal I	Rodentia	Sciuridae	Unknown	Unknown	Molar	Complete	complete	Unknown	Adult	Intrusive	5	0.03
35HA2627	07-236	1709	5	D	40-50	18		Mammal I	Unknown	Unknown	Unknown	Unknown	Ulna	complete	complete	left	Adult	Intrusive	1	0.01
35HA2627	07-299	1624	5	C	40-50	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	femur	complete	complete	right	Juvenille	Intrusive	1	0.01
35HA2627	07-221	1543	5	B(s)	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	maxilla	body	fragment	left	Adult		1	0.04
35HA2627	07-229	1593	5	C	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	maxilla	Anterior	fragment	left	Adult	Burned/calcined	1	0.04
35Ha2627	07-236	1691	5	D	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Scapula	Lateral	fragment	right	Adult	Burned/calcined	1	0.03
35HA2627	07-215	1456	5	A(s)	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Astragalus	Complete	complete	Right	Adult	Burned/calcined	1	0.01
35HA2627	07-236	1707	5	D	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Astragalus	complete	complete	right	Adult	Intrusive	1	0.05
35HA2627	07-299	1614	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Astragalus	complete	complete	right	Adult	intrusive	2	0.04
35HA2627	06-176	1497	5	B(n)	40-50	18		Mammal II	Rodentia	Unknown	Unknown	c.f. Spermophilus townsendii	Calcaneous	Complete	complete	right	Adult	Burned/calcined	1	0.04
35HA2627	07-221	1551	5	B(s)	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Caudal vertebra	Complete	complete	N/A	Adult		2	0.01
35HA2627	07-229	1598	5	C	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Caudal vertebra	complete	complete	N/A	Adult	Burned/calcined	1	0.02
35HA2627	07-299	1606	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	clavicle	Lateral	fragment	Left	Adult	Intrusive	1	0.01
35HA2627	07-215	1455	5	A(s)	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Cranial	Unknown	fragment	Unknown	Adult	Burned/calcined	3	0.05
35HA2627	07-221	1544	5	B(s)	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Cranial	Superior	fragment	N/A	Adult	Burned/calcined	1	0.03
35HA2627	07-221	1550	5	B(s)	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	cranial	Inferior	fragment	Unknown	Adult		1	0.01
35HA2627	07-229	1602	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	cranial	Superior	fragment	N/A	Adult	Intrusive	15	0.42
35HA2627	07-236	1692	5	D	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Cranial	Unknown	fragment	unknown	Adult	Burned/calcined	5	0.1
35HA2627	07-236	1705	5	D	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	cranial	Unknown	fragment	Unknown	Adult	Intrusive	9	0.21
35HA2627	07-299	1607	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	femur	Complete	complete	right	Adult	Intrusive	2	0.62
35HA2627	07-299	1609	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	femur	distal	fragment	Unknown	Adult	Intrusive	1	0.04
35HA2627	07-229	1591	5	C	40-50	18		Mammal II	Lagomorpha	Leporidae	Sylvilagus sp.	Sylvilagus nuttali	humerus	Distal	fragment	right	Adult	cut	1	0.14
35HA2627	06-150	1424	5	A(n)	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Incisor	complete	complete	Unknown	Adult	Intrusive	6	0.35
35HA2627	06-176	1505	5	B(n)	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Incisor	Unknown	complete	Right	Adult	intrusive	1	0.02
35HA2627	07-215	1454	5	A(s)	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Incisor	Unknown	fragment	Unknown	Adult	Burned/calcined	1	0.01
35HA2627	07-215	1459	5	A(s)	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Incisor	1/2 linear toothM	fragment	Unknown	Adult	intrusive	3	0.12
35HA2627	07-221	1546	5	B(s)	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Incisor	Shaft	fragment	Unknown	Adult	Burned/calcined	1	0.03
35HA2627	07-221	1549	5	B(s)	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Incisor	Shaft	fragment	Unknown	Adult		3	0.1
35HA2627	07-229	1595	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	incisor	crown	fragment	unknown	Adult	burned	2	0.04
35HA2627	07-299	1612	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	incisor	crown	fragment	right	Adult	Intrusive	4	0.12
35HA2627	07-212-4	1433	5	A(s)	40-50		4	Mammal II	Lagomorpha	Leporidae	Sylvilagus sp.	Sylvilagus nuttali	Innominate	Lateral	fragment	Right	Adult	cut	1	0.98
35HA2627	06-176	1504	5	B(n)	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Innominate	Unknown	fragment	Unknown	Adult	Intrusive	1	0.31
35HA2627	07-236	1699	5	D	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	LI1	crown	fragment	right	Adult	Intrusive	8	0.33
35HA2627	07-236	1700	5	D	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	LI1	crown	fragment	unknown	Adult	intrusive	8	0.16
35HA2627	07-236	1701	5	D	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	LI1	crown	fragment	left	Adult	Intrusive	2	0.12
35HA2627	06-176	1499	5	B(n)	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	5	0.07
35HA2627	06-150	1425	5	A(n)	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Intrusive	4	0.13
35HA2627	06-176	1503	5	B(n)	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Intrusive	10	0.49
35HA2627	07-215	1460	5	A(s)	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	intrusive	11	0.26
35HA2627	07-221	1548	5	B(s)	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult		3	0.12
35HA2627	07-229	1603	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Intrusive	3	0.14
35HA2627	07-236	1657	5	D	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult		39	0.97
35HA2627	07-236	1658	5	D	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	47	1.01
35HA2627	06-176	1501	5	B(n)	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Madnible	Distal	fragment	left	Adult	intrusive	2	0.15
35HA2627	07-221	1545	5	B(s)	40-50	18		Mammal II	Rodentia	Unknown	Unknown	c.f. Spermophilus townsendii	mandible	body	fragment	Unknown	Adult	Burned/calcined	1	0.08
35HA2627	06-176	1500	5	B(n)	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	mandible	Complete	fragment	Right	Adult	Intrusive	2	0.75
35HA2627	07-212-19	1440	5	A(s)	40-50		19	Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Complete	complete	right	Adult	intrusive	1	0.34
35HA2627	07-221	1547	5	B(s)	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Anterior	fragment	left	Adult		1	0.03
35HA2627	07-236	1688	5	D	40-50	18		MAmmal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	body	fragment	left	Adult	Burned/calcined	1	0.02
35HA2627	07-236	1697	5	D	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	mandible	Distal	fragment	right	Adult	Intrusive	4	0.76
35HA2627	07-229	1599	5	C	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	mandible	body	fragment	Unknown	Adult	Intrusive	11	0.27
35HA2627	06-150	1423	5	A(n)	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Distal	fragment	Unknown	Adult	Intrusive	2	0.18
35HA2627	06-176	1498	5	B(n)	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Ventral	fragment	Left	Adult	Burned/calcined	1	0.06
35HA2627	06-176	1502	5	B(n)	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Ventral	fragment	right	Adult	Intrusive	1	0.17
35HA2627	07-229	1594	5	C	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Anterior	fragment	unknown	Adult	Burned/calcined	4	0.01

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	07-229	1600	5	C	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Anterior	fragment	Left	Adult	Intrusive	1	0.13
35HA2627	07-236	1689	5	D	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Anterior	fragment	right	Adult	Burned/calcined	1	0.03
35HA2627	07-236	1693	5	D	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	anterior	fragment	right	Adult	Intrusive	1	0.13
35HA2627	07-236	1695	5	D	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Medial	fragment	left	Adult	Intrusive	4	0.21
35HA2627	07-236	1696	5	D	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Medial	fragment	unknown	Adult	Intrusive	4	0.1
35HA2627	07-229	1597	5	C	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Maxilla	body	fragment	unknown	Adult	Burned/calcined	4	0.1
35HA2627	07-299	1608	5	C	40-50	18		Mammal II	rodentia	Unknown	Unknown	Unknown	Maxilla	Medial	fragment	right	Adult	Intrusive	1	0.05
35HA2627	06-176	1488	5	B(n)	40-50	18		Mammal II	Lagomorpha	Leporidae	Sylvilagus sp.	Sylvilagus nuttali	Metatarsal	Distal	fragment	Right	Adult	Burned/calcined	1	0.11
35HA2627	07-215	1453	5	A(s)	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Molar	1/2 linear toothM	fragment	Unknown	Adult	Burned/calcined	1	0.01
35HA2627	07-229	1601	5	C	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	molar	complete	complete	unknown	Adult	Intrusive	14	0.19
35HA2627	07-236	1698	5	D	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Molar	complete	complete	unknown	Adult	Intrusive	16	0.2
35HA2627	07-215	1458	5	A(s)	40-50	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Molar	1/2 linear toothM	fragment	Unknown	Adult	Intrusive	1	0.01
35HA2627	07-229	1590	5	C	40-50	18		Mammal II	Lagomorpha	Leporidae	Unknown	Unknown	Molar	crown	fragment	unknown	Adult	burned	1	0.08
35Ha2627	07-236	1694	5	D	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	palatine	Medial	fragment	right	Adult	Intrusive	5	0.46
35HA2627	07-215	1457	5	A(s)	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Phalanx	complete	complete	Unknown	Adult	Burned/calcined	1	0.01
35HA2627	07-229	1596	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	phlanax	complete	complete	unknown	Adult	Burned/calcined	1	0.01
35HA2627	07-299	1604	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	phlanx	Diaphyseal	complete	Unknown	Adult	Intrusive	3	0.04
35HA2627	07-299	1613	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	ribs	medial	fragment	Unknown	Adult	Intrusive	4	0.04
35HA2627	07-299	1615	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	scapula	Medial	fragment	left	Adult	intrusive	1	0.02
35HA2627	07-229	1592	5	C	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	temporal	Medial	fragment	left	Adult	Burned/calcined	1	0.04
35HA2627	07-299	1610	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	c.f. Spermophilus townsendii	Tibia	distal	fragment	Left	Adult	Perimortem break	1	0.07
35HA2627	06-176	1496	5	B(n)	40-50	18		Mammal II	Lagomorpha	Leporidae	Sylvilagus sp.	Unknown	tibia	Proximal	fragment	right	Adult		1	0.28
35HA2627	07-236	1702	5	D	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	UI1	crown	fragment	right	Adult	intrusive	4	0.18
35HA2627	07-236	1703	5	D	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	UI1	crown	fragment	left	Adult	intrusive	2	0.1
35HA2627	07-236	1690	5	D	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	ulna	Proximal	fragment	right	Adult	Burned/calcined	1	0.01
35Ha2627	07-236	1704	5	D	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Ulna	proximal	fragment	right	Adult	Intrusive	4	0.31
35HA2627	07-299	1611	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	ulna	proximal	fragment	right	Adult	intrusive	1	0.05
35HA2627	07-236	1706	5	D	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	vertebra	unknown	complete	N/A	Adult	Intrusive	7	0.2
35HA2627	07-299	1605	5	C	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	vertebrae	unknown	complete	N/A	Adult	intrusive	6	0.09
35HA2627	07-236	1685	5	D	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Incisor	Crown	fragment	left	Adult		2	0.63
35HA2627	07-236	1668	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	humerus	proximal	fragment	right	Juvenille	Burned/calcined	1	0.14
35HA2627	06-176	1485	5	B(n)	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Mandible	Body	fragment	Right	Adult	Burned/calcined	1	0.09
35HA2627	07-236	1672	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	mandible	body	fragment	left	Adult		1	0.25
35HA2627	07-236	1674	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Astragalus	complete	complete	unknown	Adult		1	0.15
35HA2627	07-229	1574	5	C	40-50	18		Mammal III	Rodentia	Unknown	Unknown	c.f. Marmota flaviventis	Calcaneous	Proximal	fragment	right	Adult	Burned/calcined	1	0.04
35HA2627	06-176	1483	5	B(n)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Caudal vertebra	Complete	complete	Unknown	Adult	Burned/calcined	1	0.02
35HA2627	07-229	1582	5	C	40-50	18		Mammal III	Unknown	Unknown	Unknown	c.f. Marmota flaviventis	Clavicle	Lateral	fragment	left	Adult		1	0.07
35HA2627	06-150	1422	5	A(n)	40-50	18		Mammal III	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Cranial	Complete	complete	N/A	Adult	Intrusive	1	1.2
35HA2627	07-221	1540	5	B(s)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	cranial	Superior	fragment	Unknown	Adult		1	0.5
35HA2627	07-229	1581	5	C	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	cranial	Superior	fragment	Unknown	Adult		1	0.26
35HA2627	07-229	1588	5	C	40-50	18		Mammal III	Rodentia	unknown	Unknown	c.f. Marmota flaviventis	femur	Distal	fragment	right	Adult	Perimortem break	1	0.09
35HA2627	06-176	1484	5	B(n)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Femur	Distal	fragment	Unknown	Adult	Burned/calcined	1	0.16
35HA2627	06-176	1492	5	B(n)	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Incisor	Diaphyseal	fragment	left	Adult		2	0.73
35HA2627	06-176	1493	5	B(n)	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Incisor	Diaphyseal	fragment	Unknown	Adult	broken	4	0.36
35HA2627	07-229	1575	5	C	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Incisor	Crown	fragment	Unknown	Adult	Burned/calcined	3	0.14
35HA2627	07-236	1673	5	D	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Incisor	crown	fragment	unknown	Adult	Burned/calcined	3	0.19
35Ha2627	07-236	1686	5	D	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Incisor	crown	fragment	right	Adult		2	0.76
35HA2627	06-176	1482	5	B(n)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Incisor	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.12
35HA2627	07-221	1538	5	B(s)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Incisor	labial	enamel	Unknown	Adult		1	0.02
35HA2627	07-229	1580	5	C	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Incisor	crown	fragment	Unknown	Adult		1	0.01
35HA2627	07-229	1576	5	C	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.25
35HA2627	07-229	1572	5	C	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Molar	Occlusal	complete	Unknown	Juvenille	burned	1	0.01
35HA2627	07-221	1536	5	B(s)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	11	0.31
35HA2627	07-229	1584	5	C	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	scored	1	0.24
35HA2627	07-221	1541	5	B(s)	40-50	18		Mammal III	Rodentia	Unknown	Unknown	c.f. Marmota flaviventis	mandible	lateral	articular condyle	left	Adult		1	0.09
35HA2627	07-221	1534	5	B(s)	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Mandible	body	fragment	left	Adult	burned	1	0.12
35HA2627	07-221	1539	5	B(s)	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	mandible	body	fragment	unknown	Adult		1	0.07
35HA2627	07-236	1663	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	mandible	body	fragment	Unknown	Adult	Burned/calcined	1	0.11
35HA2627	07-236	1676	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	mandible	body	fragment	unknown	Adult		1	0.13
35HA2627	07-236	1678	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	mandible	body	fragment	left	Adult		1	0.15
35HA2627	07-212-11	1436	5	A(s)	40-50		11	Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Mandible	Complete	complete	Right	Adult		1	3.66
35HA2627	07-229	1578	5	C	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	maxilla	Anterior	fragment	right	Adult		1	0.43
35HA2627	06-176	1489	5	B(n)	40-50	18		Mammal III	Lagomorpha	Leporidae	Lepus sp.	Lepus californicus	Metatarsal	Proximal	fragment	Unknown	Adult	burned	1	0.17
35HA2627	07-236	1671	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Metatarsal	Complete	complete	Unknown	Adult	Cut, burned/calcined	1	0.18
35HA2627	06-176	1495	5	B(n)	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Metatarsal	complete	complete	Unknown	Adult	intrusive	1	0.11
35HA2627	07-229	1586	5	C	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Metatarsal	Proximal	fragment	Unknown	Adult	Perimortem break	1	0.05
35HA2627	06-150	1420	5	A(n)	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Molar	1/2 linear toothM	fragment	Unknown	Adult	Burned/calcined	1	0.03
35HA2627	06-150	1421	5	A(n)	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Molar	Complete	fragment	Unknown	Adult	Intrusive	3	0.17
35HA2627	07-229	1579	5	C	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	molar	complete	complete	Unknown	Adult		3	0.17
35HA2627	07-236	1675	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	molar	Complete	complete	Unknown	Adult		8	0.26
35HA2627	07-236	1683	5	D	40-50	18		Mammal III	Carniovora	Unknown	Unknown	Unknown	molar	1/2 linear toothM	fragment	Unknown	Adult		1	0.12
35HA2627	07-236	1670	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	nasal	Anterior	fragment	left	Adult		1	0.04
35HA2627	07-236	1684	5	D	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Occipital	Inferior	fragment	right	Adult		1	0.05
35Ha2627	07-236	1677	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	palatine	body	fragment	unknown	Adult		1	0.16
35HA2627	07-236	1680	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	palatine	lateral	fragment	right	Adult		1	0.13
35HA2627	07-229	1577	5	C	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Phalanx	complete	complete	Unknown	Adult	Burned/calcined	3	0.07
35HA2627	07-221	1542	5	B(s)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Phalanx	complete	complete	Unknown	Adult		2	0.06
35HA2627	07-229	1585	5	C	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Phalanx	complete	fragment	unknown	Adult		2	0.08

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	06-176	1487	5	B(n)	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Radius	distal	fragment	Right	Adult	Burned/calcined	1	0.2
35HA2627	07-236	1667	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Radius	Proximal	fragment	right	Adult	Burned/calcined	1	0.09
35HA2627	07-236	1666	5	D	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	rib	medial	fragment	unknown	Adult	Burned/calcined	1	0.07
35HA2627	07-233-21	1628	5	D	40-50		21	Mammal III	Unknown	Unknown	Unknown	Unknown	scapula	body	fragment	Unknown	Adult	Perimortem break, gnaw-carn	1	0.61
35HA2627	07-229	1573	5	C	40-50	18		Mammal III	Rodentia	Unknown	Unknown	c.f. Marmota flaviventis	temporal	Mesial	fragment	right	Adult	Burned/calcined	1	0.09
35HA2627	07-236	1665	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	temporal	Lateral	fragment	left	Adult	Burned/calcined	1	0.09
35HA2627	07-236	1679	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	temporal	Lateral	fragment	left	Adult		1	0.27
35HA2627	07-236	1681	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	tibia	Distal	fragment	left	Adult		1	1.07
35HA2627	07-236	1682	5	D	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Tooth	crown	enamel	Unknown	Adult		3	0.07
35HA2627	06-150	1419	5	A(n)	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	UI1	Occlusal	complete	Left	Adult	Burned/calcined	1	0.43
35HA2627	06-176	1486	5	B(n)	40-50	18		Mammal III	Rodentia	Unknown	Unknown	c.f. Marmota flaviventis	ulna	Diaphyseal	fragment	Left	Adult	Burned/calcined	2	0.24
35HA2627	07-221	1535	5	B(s)	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Ulna	Diaphyseal	fragment	right	Adult	Burned/calcined	1	0.11
35HA2627	07-236	1664	5	D	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	ulna	Proximal	fragment	left	Adult	Burned/calcined	1	0.2
35HA2627	07-215	1452	5	A(s)	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	UM3	Complete	complete	Unknown	Adult		1	0.11
35HA2627	06-176	1494	5	B(n)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Articular surface	fragment	Unknown	Adult	Perimortem break	5	0.49
35HA2627	07-236	1660	5	D	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	body	fragment	Unknown	Adult	Perimortem break	1	0.5
35HA2627	07-236	1669	5	D	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Articular surface	fragment	Unknown	Adult	Burned/calcined	4	0.28
35HA2627	07-236	1687	5	D	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	unknown	Articular surface	fragment	unknown	Adult		10	1.12
35HA2627	07-229	1583	5	C	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	various	Articular surface	articular process	Unknown	Adult	Perimortem break	8	1.13
35HA2627	07-236	1661	5	D	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	bulla	Unknown	fragment	Unknown	Adult		1	0.21
35HA2627	06-150	1416	5	A(n)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Cranial	Lateral	fragment	Unknown	Adult		2	0.63
35HA2627	07-233-19	1626	5	D	40-50		19	Mammal IV	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult	Perimortem break, exfoliating	1	1.76
35HA2627	06-176	1491	5	B(n)	40-50	18		Mammal IV	Carniovora	Canidae	Canis sp.	Canis sp.	dlp2	complete	complete	left	Juvenille		1	0.01
35HA2627	06-150	1413	5	A(n)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	89	5.11
35HA2627	06-150	1414	5	A(n)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		34	2.95
35HA2627	06-176	1478	5	B(n)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	73	7.05
35HA2627	06-176	1480	5	B(n)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break, gnaw-carn	1	0.3
35HA2627	06-176	1481	5	B(n)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	29	5.81
35HA2627	07-121-17	1438	5	A(s)	40-50		17	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break, gnaw-carn	1	0.9
35HA2627	07-219-10	1521	5	B(s)	40-50		10	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	2.22
35HA2627	07-229	1570	5	C	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	38	3.61
35HA2627	07-229	1571	5	C	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	30	4.3
35HA2627	07-236	1655	5	D	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	141	10.19
35HA2627	07-236	1656	5	D	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	165	16.32
35HA2627	07-233-39	1635	5	D	40-50		35	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	1.01
35HA2627	07-233-25	1630	5	D	40-50		25	Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break, gnaw-carn	1	1.35
35HA2627	06-150	1418	5	A(n)	40-50	18		Mammal IV	Rodentia	Erethizontidae	Erethizon	Erethizon dorsatum	Molar	1/2 linear toothM	fragment	Unknown	Adult	broken	1	0.11
35HA2627	07-229	1569	5	C	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Scapula	Articular surface	fragment	Unknown	Adult	Burned/calcined	1	0.24
35HA2627	07-229	1567	5	C	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	tooth	apical	root	unknown	Adult	Burned/calcined	1	0.1
35HA2627	07-236	1662	5	D	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	tooth	Labial/lingual	enamel	Unknown	Adult		1	0.05
35HA2627	06-150	1415	5	A(n)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Articular surface	fragment	Unknown	Adult	Perimortem break	5	0.79
35Ha2627	06-176	1479	5	B(n)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Articular surface	fragment	Unknown	Adult	Perimortem break	1	0.7
35HA2627	07-229	1561	5	C	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Adult	Scored, burned/calcined	1	0.15
35HA2627	07-229	1568	5	C	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	unknown	Articular surface	fragment	Unknown	Adult	Burned/calcined	2	0.29
35HA2627	07-236	1659	5	D	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	unknown	epiphysis	epiphyseal plate	Unknown	Adult		1	0.08
35HA2627	06-150	1417	5	A(n)	40-50	18		Mammal IV	Carniovora	Canidae	Canis sp.	Canis sp.	UP2	Complete	complete	Left	Adult		1	0.04
35HA2627	06-176	1490	5	B(n)	40-50	18		Mammal IV	Carniovora	Canidae	Canis sp.	Canis sp.	LM3	complete	complete	Right	Adult		1	0.08
35HA2627	07-215	1450	5	A(s)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	25	2.17
35HA2627	07-215	1451	5	A(s)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		36	3.32
35HA2627	07-221	1524	5	B(s)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Scored, burned/calcined	1	0.02
35HA2627	07-221	1531	5	B(s)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	36	3.98
35HA2627	07-221	1532	5	B(s)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Perimortem break	58	5.17
35HA2627	07-221	1537	5	B(s)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Scored	1	0.22
35HA2627	07-221	1533	5	B(s)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Juvenille	Perimortem break	1	0.2
35HA2627	07-233-40	1636	5	D	40-50		40	Mammal V	Unknown	Unknown	Unknown	Unknown	Diaphysis	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	3.37
35HA2627	07-236	1647	5	D	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Molar	buccal/lingual	enamel	Unknown	Adult	Burned/calcined	3	0.07
35HA2627	07-233-27	1631	5	D	40-50		27	Mammal V	Unknown	Unknown	Unknown	c.f. Odocoileus hemionus	Scapula	body	fragment	Right	Adult	Perimortem break, gnaw-carn	1	5.8
35HA2627	07-236	1641	5	D	40-50	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Tibia	Distal	fragment	right	Adult	burned	1	1.02
35HA2627	07-236	1643	5	D	40-50	18		Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	tooth	buccal/lingual	enamel	Unknown	Adult		3	0.34
35HA2627	07-236	1642	5	D	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Bulla	Medial	fragment	right	Adult		1	0.38
35HA2627	07-233-29	1633	5	D	40-50		29	Mammal V	Unknown	Unknown	Unknown	c.f. Odocoileus hemionus	Femur	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	8.76
35HA2627	07-226-9	1559	5	C	40-50		9	Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	femur	Diaphyseal	fragment	left	Adult	Perimortem break	1	12.94
35HA2627	07-219-3	1519	5	B(s)	40-50		3	Mammal V	Artiodactyl	Unknown	Unknown	Unknown	femur	Diaphyseal	fragment	left	Adult	Perimortem break	1	15.34
35HA2627	07-212-7	1434	5	A(s)	40-50		7	Mammal V	Unknown	Unknown	Unknown	Unknown	Femur	Diaphyseal	fragment	left	Adult	Perimortem break	11	10.06
35HA2627	07-233-34	1634	5	D	40-50		34	Mammal V	Unknown	Unknown	Unknown	c.f. Odocoileus hemionus	Innominate	body	fragment	left	Adult	Perimortem break, gnaw-carn	1	3.97
35HA2627	06-176	1469	5	B(n)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult	Worked	1	0.28
35HA2627	07-219-9	1520	5	B(s)	40-50		9	Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	10.88
35HA2627	07-233-41	1637	5	D	40-50		41	Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	3.87
35HA2627	07-236	1651	5	D	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Worked	1	0.37
35HA2627	07-236	1652	5	D	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Worked	1	1.29

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	06-150	1407	5	A(n)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Red paint?	1	0.18
35HA2627	06-150	1411	5	A(n)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	19	4.33
35HA2627	06-150	1412	5	A(n)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	18	5.27
35HA2627	06-176	1468	5	B(n)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Worked, burned/calcined	1	0.51
35HA2627	06-176	1470	5	B(n)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Worked	1	1.17
35HA2627	06-176	1475	5	B(n)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	36	10.08
35HA2627	06-176	1476	5	B(n)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	17	10.91
35HA2627	06-176	1477	5	B(n)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	17	10.91
35HA2627	06-147-6	1406	5	A(n)	40-50		6	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	9.28
35HA2627	07-212-9	1435	5	A(s)	40-50		9	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	4.02
35HA2627	07-212-18	1439	5	A(s)	40-50		18	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Worked, burned/calcined	1	1.08
35HA2627	07-215	1448	5	A(s)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	7	2.42
35HA2627	07-215	1449	5	A(s)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		6	3.34
35HA2627	07-221	1530	5	B(s)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Perimortem break	7	2.01
35HA2627	07-219-14	1522	5	B(s)	40-50		14	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	2.25
35HA2627	07-219-15	1523	5	B(s)	40-50		15	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem, pathological	1	1.53
35HA2627	07-221`	1529	5	B(s)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	18	2.73
35HA2627	07-229	1565	5	C	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	16	4.24
35HA2627	07-229	1566	5	C	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	17	6.77
35HA2627	07-236	1653	5	D	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Burned/calcined	47	14.25
35HA2627	07-236	1654	5	D	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	17	9.24
35HA2627	07-233-20	1627	5	D	40-50		20	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break, cut, hammer strike	1	6.54
35HA2627	07-233-23	1629	5	D	40-50		23	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	6.08
35HA2627	07-233-28	1632	5	D	40-50		28	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	2.89
35HA2627	07-221	1528	5	B(s)	40-50	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	mandible	body	fragment	left	Adult		1	0.52
35HA2627	07-215	1445	5	A(s)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Metapodial	Diaphyseal	fragment	Unknown	Adult	Cut, burned/calcined	1	0.72
35HA2627	06-176	1471	5	B(n)	40-50	18		Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	molar	Buccal	enamel	Unknown	Adult		5	0.8
35HA2627	07-229	1562	5	C	40-50	18		Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	Molar	Various	enamel	Unknown	Adult		4	0.55
35HA2627	06-150	1408	5	A(n)	40-50	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Molar	Unknown	fragment	Unknown	Adult	broken	1	0.32
35HA2627	07-236	1644	5	D	40-50	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Molar	crown	fragment	Unknown	Adult		4	0.24
35Ha2627	06-176	1472	5	B(n)	40-50	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Molar	Unknown	enamel	Unknown	Adult		2	0.16
35HA2627	07-236	1646	5	D	40-50	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Molar	buccal/lingual	enamel	Unknown	Adult		3	0.18
35HA2627	06-176	1473	5	B(n)	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Molar	Unknown	enamel	Unknown	Adult	Burned/calcined	8	0.39
35HA2627	07-236	1649	5	D	40-50	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Phalanx	Proximal	fragment	Unknown	Adult	Perimortem break	1	0.45
35HA2627	07-236	1650	5	D	40-50	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	phalanx	distal	fragment	Unknown	Adult	Perimortem break, gnaw-carn	1	0.25
35HA2627	07-226-14	1560	5	C	40-50		14	Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	tibia	Diaphyseal	fragment	right	Adult	Perimortem break	1	12.46
35HA2627	07-215	1443	5	A(s)	40-50	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	tooth	Lateral	enamel	Unknown	Adult	Burned/calcined	1	0.09
35HA2627	07-215	1444	5	A(s)	40-50	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	tooth	Lateral	enamel	Unknown	Adult		1	0.02
35HA2627	07-221	1526	5	B(s)	40-50	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	tooth	Unknown	enamel	unknown	Adult	Burned/calcined	5	0.18
35HA2627	07-221	1527	5	B(s)	40-50	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Adult		6	0.22
35HA2627	07-236	1645	5	D	40-50	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	tooth	buccal/lingual	enamel	Unknown	Adult	burned	3	0.13
35HA2627	06-150	1409	5	A(n)	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Adult	Burned/calcined	2	0.07
35HA2627	06-150	1410	5	A(n)	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Adult		4	0.1
35HA2627	07-215	1446	5	A(s)	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Lateral	enamel	Unknown	Adult	burned	1	0.03
35HA2627	07-215	1447	5	A(s)	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Lateral	enamel	Unknown	Adult		8	0.33
35HA2627	07-229	1563	5	C	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Various	enamel	Unknown	Adult		12	0.59
35HA2627	07-229	1564	5	C	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	various	enamel	Unknown	Adult	Burned/calcined	1	0.02
35HA2627	07-236	1648	5	D	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	buccal/lingual	enamel	Unknown	Adult		13	0.55
35HA2627	06-176	1474	5	B(n)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Adult		6	0.25
35HA2627	07-221	1525	5	B(s)	40-50	18		Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	UM3	Buccal	enamel	Left	Adult	burned	1	0.59
35HA2627	07-236	1640	5	D	40-50	18		Mammal V	Artiodactyl	Bovidae	Ovis sp.	Ovis canadensis	UP2 or 3	complete	complete	Right	Adult		1	1.84
35HA2627	07-212-20	1441	5	A(s)	40-50		20	Mammal VI	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	1.28
35HA2627	06-176	1514	5	B(n)	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	73	2.49
35HA2627	07-221	1553	5	B(s)	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		89	2.08
35Ha2627	07-236	1714	5	D	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	tooth	crown	enamel	unknown	Adult	Burned/calcined	4	0.1
35HA2627	06-150	1426	5	A(n)	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		68	2.45
35HA2627	07-299	1617	5	C	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	125	4.21
35HA2627	06-176	1513	5	B(n)	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		81	4.17
35HA2627	07-215	1461	5	A(s)	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	28	0.57
35HA2627	07-215	1462	5	A(s)	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		40	1.67
35HA2627	07-221	1552	5	B(s)	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	39	1.15
35HA2627	07-236	1715	5	D	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Adult	Burned/calcined	398	9.96
35HA2627	07-236	1716	5	D	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Adult		672	17.04
35HA2627	07-299	1616	5	C	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		222	8.02
35HA2627	07-229	1589	5	C	40-50	18		Marmota III	Rodentia	Unknown	Unknown	c.f. Marmota flaviventis	ulna	Proximal	fragment	right	Adult	Perimortem break	1	0.69
35Ha2627	07-236	1717	5	D	40-50	18		Reptilia	Squamata	Serpentes	Unknown	Unknown	Vertebra	Complete	complete	N/A	Adult		1	0.05
35HA2627	07-299	1620	5	C	40-50	18		Reptilia	Squamata	Serpentes	Unknown	Unknown	Vertebra	Unknown	complete	N/A	Adult		1	0.21
35HA2627	07-221	1556	5	B(s)	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	20	0.38
35HA2627	07-221	1557	5	B(s)	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult		38	0.8
35HA2627	06-150	1431	5	A(n)	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	21	0.39
35HA2627	06-150	1432	5	A(n)	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		40	1.76
35HA2627	06-176	1515	5	B(n)	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		71	1.91
35HA2627	06-176	1516	5	B(n)	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	18	0.59
35HA2627	07-215	1466	5	A(s)	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	35	0.61
35HA2627	07-215	1467	5	A(s)	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		76	1.36
35HA2627	07-236	1724	5	D	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Adult		126	3.32
35HA2627	07-299	1621	5	C	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	36	0.67
35HA2627	07-299	1622	5	C	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		390	4.24

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	06-341	1204	6	A	30-40	18		Aves II	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	burned	1	0.11
35HA2627	06-341	1203	6	A	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Distal	fragment	right	Juvenille	Intrusive	1	0.31
35HA2627	06-341	1201	6	A	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult		12	0.41
35HA2627	06-341	1202	6	A	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	fragment	Unknown	Adult	Burned/calcined	19	0.61
35HA2627	06-341	1200	6	A	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Mandible	Unknown	fragment	Unknown	Adult	Intrusive	1	0.14
35HA2627	06-341	1198	6	A	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult		16	1.56
35HA2627	06-341	1199	6	A	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Burned/calcined	29	2.65
35HA2627	06-341	1197	6	A	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Enamel	Unknown	fragment	Unknown	Adult		1	0.02
35HA2627	06-341	1195	6	A	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Burned/calcined	12	5.41
35HA2627	06-341	1196	6	A	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Perimortem break	5	1.83
35HA2627	06-341	1205	6	A	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		25	0.63
35HA2627	06-382	1726	6	B	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.05
35HA2627	06-382	1727	6	B	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.04
35HA2627	06-344-3	1638	6	A	40-50		3	Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	unknown	Adult	Perimortem break	1	5.49
35HA2627	06-344-4	1639	6	A	40-50		4	Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	3.1
35HA2627	06-382	1725	6	B	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	crown	enamel	Unknown	Adult		3	0.17
35HA2627	07-53	802	8	D(nw)	20-30	18		Actinopterygii	Unknown	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Cleithrum	Complete	complete	Right	Adult		1	0.04
35HA2627	07-53	803	8	D(nw)	20-30	18		Actinopterygii	Unknown	Unknown	Gila sp.	Gila bicolor	Preopercle	Complete	complete	Right	Unknown		1	0.01
35HA2627	07-53	804	8	D(nw)	20-30	18		Actinopterygii	Unknown	Salmonidae	Onchrychus sp.	Onchrychus clarkii	Parasphenoid	Complete	complete	N/A	Unknown		1	0.02
35HA2627	07-53	819	8	D(nw)	20-30	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	Various	Various	fragment	Various	Adult	Intrusive	3	0.01
35HA2627	07-53	816	8	D(nw)	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Various	Various	fragment	Various	Unknown	Intrusive	11	0.84
35HA2627	07-53	811	8	D(nw)	20-30	18		Mammal III	Rodentia	Unknown	Marmota sp.	c.f. Marmota flaviventis	LI1	Occlusal	fragment	Left	Adult	Burned/calcined	1	0.12
35HA2627	07-53	815	8	D(nw)	20-30	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Phalanx	Unknown	fragment	Unknown	Unknown	Burned/calcined	3	0.04
35HA2627	07-53	813	8	D(nw)	20-30	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		3	0.78
35HA2627	07-53	814	8	D(nw)	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Molar	Occlusal	fragment	Unknown	Adult	Burned/calcined	1	0.01
35HA2627	07-53	812	8	D(nw)	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Various	Various	fragment	Various	Adult	Intrusive	4	0.34
35HA2627	07-53	809	8	D(nw)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		4	0.68
35HA2627	07-53	810	8	D(nw)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	3	0.47
35HA2627	07-53	805	8	D(nw)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Labial/lingual	enamel	N/A	Unknown		3	0.08
35HA2627	07-53	806	8	D(nw)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Labial/lingual	enamel	N/A	Unknown	Burned/calcined	1	0.03
35HA2627	07-53	807	8	D(nw)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		8	1.74
35HA2627	07-53	808	8	D(nw)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	10	2.01
35HA2627	07-50-3	801	8	D(nw)	20-30		3	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		1	1.74
35HA2627	07-53	817	8	D(nw)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown	Burned/calcined	79	1.7
35HA2627	07-53	818	8	D(nw)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		128	4.14
35HA2627	07-65	1206	8	D(ne)	30-40		2	Bivalvia	Unionoida	Unknown	Unknown	Unknown	Valve	Unknown	fragment	Unknown	Adult		1	0.17
35HA2627	07-65	1219	8	D(ne)	30-40	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	LI1	Complete	fragment	Left	Adult	Intrusive	2	0.02
35HA2627	07-65	1217	8	D(ne)	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Distal	fragment	Left	Adult	Burned/calcined	1	0.05
35HA2627	07-65	1213	8	D(ne)	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	complete	complete	Right	Adult		3	0.7
35HA2627	07-65	1218	8	D(ne)	30-40	18		Mammal II	rodentia	Unknown	Unknown	Unknown	Various	various	fragment	Unknown	Adult	Intrusive	12	0.44
35HA2627	07-65	1214	8	D(ne)	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	humerus	Diaphyseal	fragment	Unknown	Adult		1	0.37
35HA2627	07-65	1212	8	D(ne)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		9	0.39
35HA2627	07-65	1216	8	D(ne)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	longbone	Diaphyseal	fragment	Unknown	Adult	burned/calcined	23	0.43
35HA2627	07-65	1210	8	D(ne)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	14	1.37
35HA2627	07-65	1211	8	D(ne)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		12	3.5
35HA2627	07-65	1208	8	D(ne)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	5	3.04
35HA2627	07-65	1209	8	D(ne)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.8
35HA2627	07-65	1207	8	D(ne)	30-40		3	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	1.48
35HA2627	07-65	1215	8	D(ne)	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth enamel	Unknown	fragment	Unknown	Adult		4	0.3
35HA2627	07-65	1220	8	D(ne)	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Adult		40	1.09
35HA2627	07-70	1279	8	D	40-50	18		Actinopterygii	Unknown	Unknown	Unknown	Unknown	Ectopterygoid	fragment	fragment	Right	Adult		2	0.01
35HA2627	07-70	1276	8	D	40-50	18		Actinopterygii	Salmoniformes	Unknown	Unknown	Unknown	Vertebra	Complete	Complete	N/A	Adult		1	0.01
35HA2627	07-70	1277	8	D	40-50	18		Aves I	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.09
35HA2627	07-70	1270	8	D	40-50	18		Aves III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Scored, burned/calcined	1	0.61
35HA2627	07-70	1271	8	D	40-50	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	Axis	Complete	complete	N/A	Adult		1	0.01
35HA2627	07-70	1261	8	D	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Clavicle	Lateral	fragment	LEft	Adult	Burned/calcined	1	0.06
35Ha2627	07-70	1267	8	D	40-50	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Clavicle	Lateral	fragment	Left	Adult	Intrusive	1	0.03
35HA2627	07-70	1265	8	D	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Incisor	Complete	fragment	Left	Adult		2	0.08
35Ha2627	07-70	1268	8	D	40-50	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Innominate	Lateral	fragment	Right	Adult	Intrusive	1	0.2
35HA2627	07-70	1262	8	D	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.02
35HA2627	07-70	1264	8	D	40-50	18		Mammal II	Mandible	Sciuridae	Unknown	c.f. Spermophilus townsendii	Mandible	Distal	fragment	Left	Adult	Intrusive	3	0.07
35HA2627	07-70	1259	8	D	40-50	18		Mammal II	Rodentia	Sciuridae	Unknown	c.f. Spermophilus townsendii	maxilla	Distal	fragment	Right	Adult	Burned/calcined	4	0.07
35HA2627	07-70	1263	8	D	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Maxilla	Lateral	fragment	Right	Adult		1	0.04
35HA2627	07-70	1260	8	D	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Nasal	Lateral	fragment	Unknown	Adult	Burned/calcined	1	0.02
35HA2627	07-70	1278	8	D	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Phalanges	Distal	fragment	Unknown	Adult	Intrusive	2	0.01
35HA2627	07-70	1266	8	D	40-50	18		Mammal II	Unknown	Sciuridae	Unknown	Unknown	Ribs	frag	fragment	Unknown	Adult	Intu	5	0.15
35Ha2627	07-70	1269	8	D	40-50	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Tibia	Distal	fragment	LEft	Adult	Intrusive	1	0.04
35HA2627	07-70	1258	8	D	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	7	0.26
35HA2627	07-70	1257	8	D	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		22	1.45
35HA2627	07-70	1256	8	D	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	15	1.21
35HA2627	07-70	1253	8	D	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	2	0.53

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	07-70	1254	8	D	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	8	1.82
35HA2627	07-70	1246	8	D	40-50		69	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	2.84
35HA2627	07-70	1247	8	D	40-50		50	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	2.66
35HA2627	07-70	1248	8	D	40-50		24	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	2.31
35HA2627	07-70	1252	8	D	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Metapodial	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	1.28
35HA2627	07-70	1251	8	D	40-50	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Molar	1/2 linear toothM	fragment	Unknown	Adult		1	0.03
35HA2627	07-70	1250	8	D	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Molar	Unknown	enamel	Unknown	Adult		6	0.2
35HA2627	07-70	1255	8	D	40-50	18		Mammal V	Artiodactyl	Cervidae	Unknown	c.f. Odocoileus hemionus	Rib	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	0.54
35HA2627	07-70	1249	8	D	40-50	18		Mammal VI	Artiodactyl	Unknown	Unknown	Unknown	Incisor	Labial	enamel	Unknown	Adult	burned	1	0.23
35HA2627	07-70	1272	8	D	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	25	0.8
35HA2627	07-70	1273	8	D	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		27	0.71
35HA2627	07-70	1274	8	D	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Adult		38	0.74
35HA2627	07-70	1275	8	D	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Adult	Burned/calcined	1	0.01
35HA2627	07-102	823	9	B(nw)	20-30	18		Actinopterygii	Cypiniformes	Cyprinidae	Gila sp.	Gila bicolor	Pharengeal	Complete	complete	Right	Adult		1	0.01
35HA2627	07-99-5	821	9	B(nw)	20-30		5	Bivalvia	Unionoida	Unionidae	Margaritifera sp.	Margaritifera falcata	Valve	Anterior	fragment	Right	Adult	Exfoliating	1	1.89
35HA2627	07-102	828	9	B(nw)	20-30	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Incisor	Occlusal	fragment	Various	Adult	Burned/calcined	3	0.05
35HA2627	07-102	829	9	B(nw)	20-30	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Maxilla	Labial	fragment	Unknown	Adult	Burned/calcined	2	0.04
35HA2627	07-102	824	9	B(nw)	20-30	18		Mammal II	Lagomorpha	Leporidae	Unknown	Unknown	Mandible	Articular surface	fragment	Left	Unknown		1	0.04
35HA2627	07-102	825	9	B(nw)	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Tibia	Distal	fragment	Right	Unknown	Burned/calcined	1	0.07
35HA2627	07-102	827	9	B(nw)	20-30	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	various	Various	fragment	Various	Adult	Intrusive	9	0.41
35HA2627	07-102	826	9	B(nw)	20-30	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Ip1	Complete	complete	Right	Juvenille	intrusive	1	0.06
35HA2627	07-102	834	9	B(nw)	20-30	18		Mammal III/IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	60	2.06
35HA2627	07-102	835	9	B(nw)	20-30	18		Mammal III/IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		47	3.29
35HA2627	07-102	833	9	B(nw)	20-30	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		3	0.89
35HA2627	07-102	830	9	B(nw)	20-30	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Unknown		5	0.31
35HA2627	07-102	831	9	B(nw)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	11	4.16
35HA2627	07-102	832	9	B(nw)	20-30	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Adult	spiral	6	2.79
35HA2627	07-99-4	820	9	B(nw)	20-30		4	Mammal VI	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	1	1.1
35HA2627	07-102	822	9	B(nw)	20-30	18		Reptilia	Squamata	Serpentes	Unknown	Unknown	Vertebra	Complete	complete	N/A	Unknown		1	0.01
35HA2627	07-102	836	9	B(nw)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	7	0.2
35HA2627	07-102	837	9	B(nw)	20-30	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		20	0.46
35HA2627	07-108	1222	9	B(nw)	30-40	18		Aves I	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	Unknown	Unknown	Adult	Bead	1	0.09
35HA2627	07-108	1243	9	B	30-40	18		Aves II	Anseriformes	Anatidae	Anas sp.	Anas sp.	humerus	distal	fragment	right	Adult	burned	1	0.14
35HA2627	07-108	1239	9	B(nw)	30-40	18		Mammal I	Rodentia	Sciuridae	Tamias sp.	Tamias minimus	Maxilla	Distal	fragment	Right	Adult	Intrusive	1	0.01
35HA2627	07-108	1240	9	B(nw)	30-40	18		Mammal I	Rodentia	Sciuridae	Unknown	Unknown	Pelvis	Lateral	fragment	Left	Adult	Intrusive	1	0.05
35HA2627	07-108	1236	9	B(nw)	30-40	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.06
35HA2627	07-108	1238	9	B(nw)	30-40	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Intrusive	8	0.19
35HA2627	07-108	1235	9	B(nw)	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Distal	fragment	Left	Adult	Burned/calcined	1	0.08
35HA2627	07-108	1237	9	B(nw)	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Medial	fragment	Left	Adult	Intrusive	1	0.1
35HA2627	07-108	1233	9	B(nw)	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Mandible	Medial	fragment	Right	Adult	Intrusive	1	1.18
35HA2627	07-108	1232	9	B(nw)	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota flaviventris	Marmota flaviventis	Maxilla	Medial	fragment	Left	Adult	Intrusive	1	0.41
35HA2627	07-108	1231	9	B(nw)	30-40	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Phalanx	Unknown	fragment	Unknown	Adult	Burned/calcined	1	0.02
35HA2627	07-108	1230	9	B(nw)	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Radius	Proximal	fragment	Right	Adult	Burned/calcined	1	0.12
35HA2627	07-108	1229	9	B(nw)	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Scapula	Lateral	fragment	Right	Adult	Burned/calcined	1	0.05
35HA2627	07-108	1234	9	B(nw)	30-40	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Adult	Intrusive	5	0.38
35HA2627	07-108	1227	9	B(nw)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult		18	1.24
35HA2627	07-108	1228	9	B(nw)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Burned/calcined	21	2.07
35HA2627	07-105-2	1221	9	B(nw)	30-40		2	Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	Unknown	Unknown	Adult	Perimortem break	1	2.25
35HA2627	07-108	1225	9	B(nw)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Burned/calcined	1	2.88
35HA2627	07-108	1226	9	B(nw)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Adult	Perimortem break	1	1.77
35HA2627	07-108	1223	9	B(nw)	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Adult		2	0.07
35HA2627	07-108	1224	9	B(nw)	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Adult	Burned	1	0.04
35HA2627	07-108	1241	9	B(nw)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.58
35HA2627	07-108	1242	9	B	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Unknown	26	1.37
35HA2627	07-108	1244	9	B	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		30	0.52
35HA2627	07-108	1245	9	B	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	burned	4	0.15
35HA2627	07-115	1309	9	B	40-50	18		Aves II	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		14	0.82
35HA2627	07-115	1310	9	B	40-50	18		Aves III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	11	0.74
35HA2627	07-112-2	1280	9	B(nw)	40-50		2	Aves III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	1	1.64
35HA2627	07-112-5	1283	9	B	40-50		5	Bivalvia	Unionoida	Unknown	Unknown	Unknown	Mantle	Unknown	ffrag	Unknown	Adult	Cut	1	0.45
35HA2627	07-115	1304	9	B	40-50	18		Mammal I	Rodentia	Sciuridae	Unknown	Unknown	Maxilla	Anterior	fragment	Right	Adult	Intrusive	1	0.02
35HA2627	07-115	1305	9	B	40-50	18		Mammal I	Rodentia	Muridae	Unknown	Unknown	Maxilla	Anterior	fragment	Right	Adult	Intrusive	1	0.01
35HA2627	07-115	1306	9	B	40-50	18		Mammal I	Rodentia	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Adult	Intrusive	10	0.21
35HA2627	07-115	1300	9	B	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Complete	complete	Left	Adult	Intrusive	1	0.2
35HA2627	07-115	1302	9	B	40-50	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Incisors	Complete	complete	Left	Adult	Intrusive	2	0.18
35HA2627	07-115	1301	9	B	40-50	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Maxilla	Complete	complete	N/A	Adult	Intrusive	1	0.09
35HA2627	07-115	1303	9	B	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		8	0.24
35HA2627	07-115	1299	9	B	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	3	0.14
35HA2627	07-115	1294	9	B	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Incisor	Complete	complete	Left	Adult	Instrusive	1	0.47
35HA2627	07-112-4	1282	9	B	40-50		4	Mammal III	Unknown	Unknown	Unknown	Unknown	LI1	Occlusal	fragment	Right	Adult	Burned/calcined	1	0.2
35HA2627	07-115	1292	9	B	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	12	1.16
35HA2627	07-115	1298	9	B	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		2	0.18
35HA2627	07-115	1293	9	B	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Molar	1/2 linear toothM	fragment	Unknown	Adult	Intrusive	2	0.1

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA2627	07-115	1297	9	B	40-50	18		Mammal III	Rodentia	Sciuridae	Unknown	Unknown	Patella	Posterior	fragment	Left	Adult	Worked	1	0.14
35HA2627	07-115	1295	9	B	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Phalanx	Distal	fragment	Unknown	Adult	Burned/calcined	1	0.02
35HA2627	07-115	1296	9	B	40-50	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Phalanx	Complete	fragment	Unknown	Adult		2	0.04
35HA2627	07-115	1291	9	B	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned	3	0.55
35HA2627	07-115	1286	9	B	40-50	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Incisor	Lingual	enamel	Unknown	Adult		2	0.1
35HA2627	07-115	1287	9	B	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Worked/Gnawed - Carnivore	1	0.7
35HA2627	07-115	1288	9	B	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Gnawed - Carnivore	2	1.07
35HA2627	07-115	1289	9	B	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.99
35HA2627	07-115	1290	9	B	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Perimortem break	4	0.71
35HA2627	07-115	1284	9	B	40-50	18		Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	Molar	buccal	enamel	Unknown	Adult		1	0.04
35HA2627	07-115	1285	9	B	40-50	18		Mammal VI	Artiodactyl	Unknown	Unknown	Unknown	Incisor	Lingual	enamel	Unknown	Adult		1	0.2
35HA2627	07-115	1307	9	B	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	21	1.03
35HA2627	07-115	1308	9	B	40-50	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		16	1.1
35HA2627	07-115	1311	9	B	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Worked	1	0.02
35HA2627	07-115	1312	9	B	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		61	0.44
35HA2627	07-115	1313	9	B	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Burned/calcined	15	0.25
35HA2627	07-112-3	1281	9	B	40-50		3	UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult	Incised, pendant?	1	0.1
35HA385	06-39	991	4	A	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Complete	Complete	Left and Right	Adult	Intrusive	4	0.98
35HA385	09-658-I	234	9	B(nw)	30-35	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	burned	3	0.07
35HA385	09-658-I	235	9	B(nw)	30-35	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		7	0.28
35HA385	09-638-2-I	232	9	B(nw)	30-35		2	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		1	0.14
35HA385	09-658-I	236	9	B(nw)	30-35	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	Enamel	Unknown	Unknown		1	0.04
35HA385	08-187	83	9		30-40	18		Aves	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		2	0.06
35HA385	08-187	84	9		30-40	18		Aves	Unknown	Unknown	Unknown	Unknown	Sternum	Unknown	fragment	Unknown	Unknown		1	0.05
35HA385	08-177-3	82	9		30-40		3	Mammal IV	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown		1	0.27
35HA385	08-187	85	9		30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown	Burned/calcined	4	0.37
35HA385	09-638-8-II	233	9	B(nw)	30-40		8	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		1	0.38
35HA385	08-187	86	9		30-40	18		Vertebrate	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown	Burned/calcined	4	0.16
35HA385	08-187	87	9		30-40	18		Vertebrate	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown		9	0.37
35HA385	09-659-II	238	9	B(nw)	35-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	Unknown	Unknown	Unknown		5	0.17
35HA385	09-659-II	237	9	B(nw)	35-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Unknown	burned	2	0.03
35HA385	09-659-II	239	9	B(nw)	35-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	Unknown	Unknown	Unknown		19	1.53
35HA385	10-1570	259	9	A(sw)	40-50	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Various	Unknown	Unknown	Unknown	Unknown	Burned/calcined	7	0.28
35HA385	10-1570	257	9	A(sw)	40-50	18		Mammal III	Lagomorpha	Leporidae	Lepus sp.	Lepus californicus	Calcaneous	Ventral	articular condyle	Right	Adult	Burned/calcined	1	0.08
35HA385	09-623	242	9	B(nw)	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	LM2	Complete	Complete	Right	Juvenille		1	0.05
35HA385	09-623	244	9	B(nw)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	Unknown	Unknown	Unknown		15	0.49
35HA385	09-601-2	240	9	B(nw)	40-50		2	Mammal III	Carniovora	Mustelidae	Taxidea sp.	Taxidea taxus	Parietal	Dorsal	fragment	Left	Unknown		1	2.09
35HA385	09-623	241	9	B(nw)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown	Burned	6	0.35
35HA385	10-1570	260	9	A(sw)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	Unknown	Unknown	Unknown	Burned	3	0.26
35HA385	10-1570	262	9	A(sw)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	Unknown	Unknown	Unknown		17	0.56
35HA385	08-192	91	9		40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Splinter	1	0.22
35HA385	08-192	93	9		40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		1	0.15
35HA385	10-1570	261	9	A(sw)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	Unknown	Unknown	Unknown	burned	1	0.19
35HA385	10-1570	263	9	A(sw)	40-50	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown		1	0.16
35HA385	08-192	89	9		40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Spiral, burned/calcined	1	0.36
35HA385	08-192	90	9		40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown	Gnawed - Carnivore	1	0.43
35HA385	10-1570	258	9	A(sw)	40-50	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Bulla	Mesial	fragment	Unknown	Unknown	broken	1	1.03
35HA385	09-601-4	245	9	B(nw)	40-50		4	Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	LP2, LM2	Occlusal	crown	Left	Subadult		4	0.73
35HA385	08-190-2	88	9		40-50		2	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Spiral	1	8.56
35HA385	09-623	243	9	B(nw)	40-50	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown		4	0.24
35HA385	08-192	92	9		40-50	18		Vertebrate	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown	Splinter	5	0.22
35HA385	10-2227	466	9	B(nw)	70-80	18		Actinopterygii	Unknown	Unknown	Unknown	Unknown	Vertebra	Complete	complete	N/A	Unknown		1	0.01
35HA385	10-2229	485	9	A(se)	70-80	18		Aves	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	Unknown	Unknown	Unknown		1	0.08
35HA385	10-2233	502	9	C(ne)	70-80	18		Mammal I	Unknown	Unknown	Unknown	Unknown	various	Various	various	Various	Unknown		3	0.03
35HA385	10-2234	506	9	D(ne)	70-80	18		Mammal I	Unknown	Unknown	Unknown	Unknown	various	various	various	various	Unknown	Intrusive	1	0.01
35HA385	10-2227	473	9	B(nw)	70-80	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Humerus	Diaphyseal	fragment	Right	Unknown	Burned/calcined	1	0.22
35HA385	10-1951	318	9	A(nw)	70-80		3	Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Cranial	N/A	complete	N/A	Adult	Intrusive	1	2
35HA385	10-2228	476	9	A(sw)	70-80	18		Mammal II	Lagomorpha	Leporidae	Lepus sp.	Lepus californicus	Incisor	Occlusal	fragment	Left	Unknown	Burned/calcined	1	0.09
35HA385	10-2225	453	9	A(nw)	70-80	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	various	Unknown	fragment	Unknown	Unknown	Intrusive	3	0.18
35HA385	10-2227	472	9	B(nw)	70-80	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	various	various	various	various	Unknown	Intrusive	29	0.55
35HA385	10-2226	465	9	A(ne)	70-80	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		7	0.16
35HA385	10-2230	491	9	B(sw)	70-80	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown	Intrusive	1	0.01
35HA385	10-2232	499	9	C(nw)	70-80	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Various	Various	various	Various	Unknown	intrusive	4	0.15
35HA385	10-2227	480	9	B(nw)	70-80	18		Mammal III	Rodentia	Unknown	Unknown	Unknown	Metatarsal	Proximal	fragment	Unknown	Unknown		1	0.07
35HA385	10-2225	455	9	A(nw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown	Burned/calcined	1	0.02
35HA385	10-2225	456	9	A(nw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		5	0.18
35HA385	10-2226	463	9	A(ne)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned/calcined	11	0.43
35HA385	10-2226	464	9	A(ne)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		6	0.24
35HA385	10-2227	479	9	B(nw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	11	0.48
35HA385	10-2227	471	9	B(nw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		11	0.45

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA385	10-2228	477	9	A(sw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	8	0.41
35HA385	10-2231	494	9	B(sw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	4	0.43
35HA385	10-2231	495	9	B(sw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		5	0.2
35HA385	10-2232	497	9	C(nw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	1	0.09
35HA385	10-2234	505	9	D(ne)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	5	0.17
35HA385	10-2232	498	9	C(nw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Juvenille		1	0.04
35HA385	10-2225	454	9	A(nw)	70-80	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Mandible	Labial	fragment	Right	Unknown	Burned/calcined	1	0.1
35HA385	10-1926	322	9	A(se)	70-80		2	Mammal III	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown		1	0.19
35HA385	10-2228	478	9	A(sw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		5	0.19
35HA385	10-2228	480	9	A(sw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Various	Various	various	Various	Unknown	Intrusive	3	0.03
35HA385	10-2230	490	9	B(sw)	70-80	18		Mammal IV	Carniovora	Canidae	Canis	Canis sp.	Canine	Occlusal	crown	Left	Unknown		1	0.03
35HA385	10-2228	479	9	A(sw)	70-80	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		4	0.33
35HA385	10-2229	483	9	A(se)	70-80	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	Unknown	Unknown	Unknown	Burned/calcined	3	0.08
35HA385	10-2229	484	9	A(se)	70-80	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	Unknown	Unknown	Unknown		4	0.35
35HA385	10-2230	488	9	B(sw)	70-80	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		5	0.47
35HA385	10-2230	489	9	B(sw)	70-80	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned/calcined	10	0.7
35HA385	10-2233	500	9	C(ne)	70-80	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		8	0.68
35HA385	10-2233	501	9	C(ne)	70-80	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	1	0.03
35HA385	10-2225	457	9	A(nw)	70-80	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown	Burned/calcined	3	0.27
35HA385	10-2225	460	9	A(nw)	70-80	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		3	0.5
35HA385	10-2232	496	9	C(nw)	70-80	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	4	0.37
35HA385	10-1927	247	9	A(se)	70-80		3	Mammal V	Artiodactyl	Bovidae	Ovis sp.	Ovis candensis	Astragalus	Complete	complete	right	Adult	Cut/Gnawed - Carnivore	1	9.14
35HA385	10-1955	248	9	A(ne)	70-80		2	Mammal V	Artiodactyl	Bovidae	Ovis sp.	Ovis candensis	Astragalus	Complete	complete	right	Adult	Cut/Gnawed - Carnivore	1	14.88
35HA385	10-2227	467	9	B(nw)	70-80	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Antler	Medial	fragment	Unknown	Unknown	Worked, burned/calcined	1	0.92
35HA385	10-2230	487	9	B(sw)	70-80	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Antler	Diaphyseal	fragment	Unknown	Unknown	fragmented	16	1.92
35HA385	10-2231	492	9	B(sw)	70-80	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	antler	Unknown	fragment	Unknown	Unknown		1	0.25
35HA385	10-2225	458	9	A(nw)	70-80	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Unknown		1	0.05
35HA385	10-2231	493	9	B (sw)	70-80	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Labial	enamel	Unknown	Unknown		1	0.02
35HA385	08-216	97	9		70-80	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		1	0.12
35HA385	10-1957	319	9	A(ne)	70-80		4	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral	1	4.42
35HA385	10-1959	320	9	A(ne)	70-80		6	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral	1	5.41
35HA385	10-1961	321	9	A(ne)	70-80		8	Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown	Spiral	1	2.84
35HA385	10-1977	323	9	B(se)	70-80		3	Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown	spiral	1	1.32
35HA385	10-2225	459	9	A(nw)	70-80	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown	Spiral, burned/calcined	3	0.92
35HA385	10-2226	461	9	A(ne)	70-80	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		6	1.84
35HA385	10-2226	462	9	A(ne)	70-80	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	spiral	1	0.2
35HA385	10-2227	468	9	B(nw)	70-80	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		1	1.8
35HA385	10-2229	482	9	A(se)	70-80	18		MAmmal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	Unknown	Unknown	Unknown		3	0.72
35HA385	10-2234	503	9	D(ne)	70-80	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	4	0.82
35HA385	10-2234	504	9	D(ne)	70-80	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown		1	0.13
35HA385	10-2227	475	9	B(nw)	70-80	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		9	0.15
35HA385	10-2227	474	9	B(nw)	70-80	18		UNID	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	modified?	1	0.05
35HA385	10-2228	481	9	A(sw)	70-80	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown		2	0.08
35HA385	10-2229	486	9	A(se)	70-80	18		UNID	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	Unknown	Unknown	Unknown		2	0.01
35HA385	08-216	98	9		70-80	18		Vertebrate	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		1	0.05
35HA385	10-2016	328	9	B(sw)	80-90		2	Aves	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown		1	0.12
35HA385	10-2248	571	9	D(nw)	80-90	18		Mammal I	Rodentia	Sciuridae	Unknown	Unknown	Various	Various	fragment	Unknown	Adult	Intrusive	3	0.06
35HA385	08-224	99	9		80-90	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	Nasal	Unknown	ventral	Right	Unknown		1	0.01
35HA385	10-2240	537	9	A(ne)	80-90	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	various	Unknown	fragment	Unknown	Unknown	Intrusive	3	0.1
35HA385	10-2244	554	9	B(sw)	80-90	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	Cranial	Inferior	fragment	Unknown	Unknown	Intrusive	1	0.13
35HA385	10-2248	570	9	D(nw)	80-90	18		Mammal II	Rodentia	Sciuridae	Unknown	Unknown	Mandible	Buccal	fragment	Unknown	Adult	Intrusive	2	0.04
35HA385	10-2246	562	9	C(nw)	80-90	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	Vertebra	Complete	complete	N/A	Juvenille	intrusive	6	0.17
35HA385	10-2239	532	9	A(nw)	80-90	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Illium	Articular surface	Acetabulum	Left	Unknown		1	0.03
35HA385	10-2241	541	9	B(nw)	80-90	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	intrusive	1	0.05
35HA385	10-2240	536	9	A(ne)	80-90	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Maxilla	Medial	fragment	Unknown	Unknown	Intrusive	1	0.15
35HA385	10-2247	564	9	C(ne)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	4	0.23
35HA385	10-2248	568	9	D(nw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.08
35HA385	10-2247	563	9	C(ne)	80-90	18		Mammal III	Rodentia	Marmota	Marmota sp.	c.f. Marmota flaviventis	Mandible	Buccal	fragment	Left	Adult	Burned/calcined	1	0.4
35HA385	10-2248	569	9	D(nw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Adult		2	0.05
35HA385	10-2249	573	9	D(nw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	2	0.08
35HA385	10-2249	574	9	D(nw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Adult		1	0.03
35HA385	10-2242	545	9	A(sw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Various	Various	fragment	Unknown	Adult	burned/calcined	1	0.3
35HA385	10-2239	530	9	A(nw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		5	0.16
35HA385	10-2239	531	9	A(nw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	2	0.09
35HA385	10-2240	534	9	A(ne)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	4	0.13
35HA385	10-2240	535	9	A(ne)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown		5	0.2

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA385	10-2241	539	9	B(nw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	burned	2	0.09
35HA385	10-2241	540	9	B(nw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		10	0.45
35HA385	10-2243	548	9	A(se)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	5	0.26
35HA385	10-2243	549	9	A(se)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		8	0.23
35HA385	10-2244	553	9	B(sw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		8	0.41
35HA385	10-2245	556	9	B(se)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		2	0.07
35HA385	10-2246	561	9	C(nw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		13	0.51
35HA385	10-2247	565	9	C(ne)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Distal	fragment	Unknown	Adult		1	0.12
35HA385	10-2244	552	9	B(sw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	2	0.1
35HA385	10-2245	555	9	B(se)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	2	0.07
35HA385	10-2247	567	9	D(nw)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult		2	0.22
35HA385	10-2239	529	9	A(nw)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		2	0.28
35HA385	10-2242	544	9	A(sw)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	1	0.12
35HA385	10-2242	546	9	A(sw)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		6	0.48
35HA385	10-2244	550	9	B(sw)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	15	8
35HA385	10-2244	551	9	B(sw)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Cranial	lateral	fragment	Unknown	Unknown		2	0.24
35HA385	10-2246	558	9	C(nw)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	1	0.21
35HA385	10-2246	559	9	C(nw)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		1	0.36
35HA385	10-2247	566	9	D(nw)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Adult	burned/car	3	0.3
35HA385	10-2240	533	9	A(ne)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Various	Various	fragment	Unknown	Unknown		10	0.95
35HA385	10-2243	547	9	A(se)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		4	0.74
35HA385	10-2246	557	9	C(nw)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Cranial	Lateral	fragment	Unknown	Unknown		1	0.21
35HA385	10-2056	329	9	A(se)	80-90		2	Mammal V	Artiodactyl	Antilocapridae	Antilocapra	Antilocapra americana	Molar	N/A	complete	Right	Adult	broken	1	8.91
35HA385	10-2249	572	9	D(nw)	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Adult	Burned/calcined	1	0.3
35HA385	10-2025	325	9	A(se)	80-90		4	Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown	Spiral, exfoliating, worked	1	1.08
35HA385	10-2025	326	9	A(se)	80-90		4	Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral	1	0.24
35HA385	10-2025	327	9	A(se)	80-90		4	Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown	Spiral, burned/calcined	1	0.84
35HA385	10-2058	330	9	A(se)	80-90		4	Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown	Spiral, exfoliating, gnawed - carnivore	1	1.18
35HA385	10-2004	324	9	A(ne)	80-90		2	Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown	spiral	5	3.04
35HA385	10-2241	538	9	B(nw)	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Spiral, burned/calcined	1	0.61
35HA385	10-2242	542	9	A(sw)	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	1	0.28
35HA385	10-2242	543	9	A(sw)	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		1	0.84
35HA385	10-2246	560	9	C(nw)	80-90	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	1	0.04
35HA385	08-224	100	9		80-90	18		Vertebrate	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown	Burned/calcined	1	0.03
35HA385	10-2256	589	9	B(nw)	90-100	18		Aves	Galliformes	Odontophoridae	Callipepla sp.	C.f. Callipepla californica	Ulna	distal	fragment	Left	Unknown		1	0.06
35HA385	10-2255	588	9	A(ne)	90-100	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	Nasal	Ventral	ventral	Left	Unknown	intrusive	1	0.01
35HA385	10-2257	590	9	A(sw)	90-100	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	Nasal	complete	complete	Left	Unknown	intrusive	1	0.01
35HA385	10-2259	599	9	B(sw)	90-100	18		Mammal II	Unknown	Unknown	Unknown	Unknown	various	various	frargment	Unknown	Unknown	intrusive	2	0.05
35HA385	10-2260	600	9	C(nw)	90-100	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Atlas	Lateral	fragment	Left	Unknown	Intrusive	1	0.01
35HA385	10-2262	603	9	D(nw)	90-100	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown		1	0.01
35HA385	10-2257	591	9	A(sw)	90-100	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Molars	Occlusal	fragment	Unknown	Unknown	Intrusive	2	0.06
35HA385	10-2254	585	9	A(nw)	90-100	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		7	0.35
35HA385	10-2258	594	9	A(se)	90-100	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		6	0.17
35HA385	10-2258	595	9	A(se)	90-100	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	2	0.04
35HA385	10-2259	598	9	B(sw)	90-100	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		4	0.26
35HA385	10-2260	601	9	C(nw)	90-100	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown		7	0.82
35HA385	10-2261	602	9	C(ne)	90-100	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown		2	0.09
35HA385	10-2262	605	9	D(nw)	90-100	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown		1	0.04
35HA385	10-2262	604	9	D(nw)	90-100	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	1	0.07
35HA385	10-2263	607	9	D(ne)	90-100	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	2	0.07
35HA385	10-2262	606	9	D(nw)	90-100	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	molar	Buccal	enamel	Unknown	Unknown		1	0.08
35HA385	10-2254	586	9	A(nw)	90-100	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	enamel	buccal	fragment	Unknown	Unknown		2	0.07
35HA385	10-2255	587	9	A(ne)	90-100	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		4	0.39
35HA385	10-2257	592	9	A(sw)	90-100	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		3	0.36
35HA385	10-2259	597	9	B(sw)	90-100	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	spiral	2	1.54
35HA385	10-2257	593	9	A(sw)	90-100	18		UNID	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		2	0.07
35HA385	10-2258	596	9	A(se)	90-100	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown		2	0.04
35HA385	09-987	118	10	B(ne)	30-40	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown		1	0.03
35HA385	09-406	120	10	A(nw)	30-40	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Ulna	Proximal	fragment	Right	Unknown		1	0.08
35HA385	09-1006	115	10	B(nw)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown	burned	1	0.03
35HA385	09-512	124	10	A(ne)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown	Burned	13	0.38
35HA385	09-1006	114	10	B(nw)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Unknown		1	0.04
35HA385	09-512	125	10	A(ne)	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Maxilla	Unknown	fragment	Right	Unknown	Burned	1	0.11
35HA385	09-406	121	10	A(nw)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown	Burned/calcined	2	0.07

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA385	09-987	119	10	B(ne)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown	Burned/calcined	8	0.56
35HA385	09-406	122	10	A(nw)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown	Burned/calcined	4	0.21
35HA385	09-512	126	10	A(ne)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown	Burned/calcined	1	0.38
35HA385	10-1263	255	10	A(sw)	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Unknown	Unknown	longbone fragment	Unknown	Unknown	Spiral	1	2.28
35HA385	09-1006	116	10	B(nw)	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	enamel	Unknown	Unknown		1	0.09
35HA385	09-406	123	10	A(nw)	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	enamel fragment	Unknown	Unknown		1	0.06
35HA385	09-512	127	10	A(ne)	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Tooth	Unknown	Enamel	Unknown	Unknown		1	0.03
35HA385	09-930	180	13	A(nw)	30-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Various	Unknown	fragment	Unknown	Unknown	Intrusive	9	0.34
35HA385	09-1041	205	13	B(nw)	30-40	18		Mammal II	Unknown	Unknown	Unknown	Unknown	various	Unknown	Unknown	Unknown	Unknown		22	0.75
35HA385	09-903-14	184	13	A(ne)	30-40		14	Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Mandible	Unknown	complete	Right	Adult		1	3.46
35HA385	09-930	179	13	A(nw)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		17	0.63
35HA385	09-903-3	183	13	A(ne)	30-40		3	Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned	1	0.17
35HA385	09-1020	190	13	A(ne)	30-40	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Incisor	Complete	fragment	Right	Adult		3	0.14
35HA385	09-903-11	171	13	A(nw)	30-40		11	Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		1	0.11
35HA385	09-903-15	174	13	A(nw)	30-40		15	Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	broken	1	0.43
35HA385	09-903-17	175	13	A(nw)	30-40		17	Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	broken	7	0.24
35HA385	09-930	178	13	A(nw)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	burned	5	0.36
35HA385	09-1020	188	13	A(ne)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	burned	3	0.09
35HA385	09-1020	189	13	A(ne)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		11	0.36
35HA385	09-1041	203	13	B(nw)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Burned	12	0.73
35HA385	09-1041	204	13	B(nw)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	Unknown	Unknown	Unknown		3	0.26
35HA385	09-961	212	13	B(ne)	30-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	Unknown	Unknown	Unknown		5	0.11
35HA385	09-930	177	13	A(nw)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		2	0.27
35HA385	09-1020	186	13	A(ne)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	burned	3	0.41
35HA385	09-1020	187	13	A(ne)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		4	0.35
35HA385	09-1023-8	199	13	B(nw)	30-40		8	Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Femur	Proximal	Head	Right	Adult	Gnawed - Carnivore	1	4.58
35HA385	09-1020	185	13	A(ne)	30-40	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Tooth	Unknown	fragment	Unknown	Adult		2	0.17
35HA385	09-903-12	172	13	A(nw)	30-40		12	Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Antler	Unknown	tip	Unknown	Unknown	Tool/burned	1	0.67
35HA385	09-1041	202	13	B(nw)	30-40	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	Unknown	fragment	Unknown	Unknown		2	0.11
35HA385	09-903-8	169	13	A(nw)	30-40		8	Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Metapodial	Unknown	fragment	Unknown	Unknown	Burned	1	1.76
35HA385	09-903-9	170	13	A(nw)	30-40		9	Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned	1	0.49
35HA385	09-1023-9	200	13	B(nw)	30-40		9	Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		1	2.12
35HA385	09-1041	201	13	B(nw)	30-40	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	distal metapodia	Distal	fragment	Unknown	Unknown	Burned	1	1.36
35HA385	09-903-13	173	13	A(nw)	30-40		13	Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned	1	0.7
35HA385	09-930	176	13	A(nw)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned	2	0.47
35HA385	09-1020	191	13	A(ne)	30-40	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown		5	0.06
35HA385	10-2143	264	13	D(ne)	40-50	18		Mammal II	Lagomorpha	Leporidae	Sylvilagus sp.	Sylvilagus nuttali	Mandible	Dorsal	process	left	Adult	broken	1	0.37
35HA385	09-803-I	155	14	B(nw)	30-35	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown		1	0.04
35HA385	09-803-I	154	14	B(nw)	30-35	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	burned	2	0.02
35HA385	09-785-4	151	14	B(nw)	30-40		4	Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Femur	Complete	complete	Left	Adult	Intrusive	1	0.3
35HA385	09-1048	145	14	A(ne)	30-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned	1	0.05
35HA385	09-1048	144	14	A(ne)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown		3	0.73
35HA385	09-785-2	150	14	B(nw)	30-40		2	Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	Unknown	Unknown	Unknown		1	4.11
35HA385	09-785-8	152	14	B(nw)	30-40		8	Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	Unknown	Unknown	Unknown		1	0.72
35HA385	09-785-11	153	14	B(nw)	30-40		11	Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	Unknown	Unknown	Unknown	Spiral	1	10
35HA385	09-534	141	14	A(nw)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	burned	3	0.11
35HA385	09-811-II	156	14	B(nw)	35-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Mandible	Complete	complete	Left	Adult		1	0.14
35HA385	09-811-II	157	14	B(nw)	35-40	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Vertebra	Complete	complete	N/A	Adult		1	0.07
35HA385	09-811-II	158	14	B(nw)	35-40	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	N/A	Unknown		2	0.05
35HA385	09-811-II	162	14	B(nw)	35-40	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned	5	0.09
35HA385	09-811-II	160	14	B(nw)	35-40	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		1	0.11
35HA385	09-811-II	159	14	B(nw)	35-40	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	LM3	Labial	fragment	Right	Adult		1	0.54
35HA385	09-811-II	161	14	B(nw)	35-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned	3	0.62
35HA385	09-542	142	14	A(nw)	40-50	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Tooth	Unknown	fragment	Unknown	Unknown		10	0.14
35HA385	09-542	143	14	A(nw)	40-50	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown	burned	1	0.02
35HA385	09-1062-2	134	15	A(ne)	30-40		2	Mammal III	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown	Gnawed - Carnivore	1	0.56
35HA385	09-1061	136	15	B(nw)	30-40	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Unknown	fragment	Unknown	Unknown	burned	1	0.75
35HA385	09-721	137	15	B(nw)	30-40	18		Mammal X	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		1	0.06
35HA385	10-2223	443	17	D(sw)	70-80	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	Spermophilus townsendii	Humerus	Distal	fragment	Right	Unknown	Intrusive	1	0.23
35HA385	10-2222	442	17	C(se)	70-80	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Intrusive	8	0.14
35HA385	10-2223	444	17	D(sw)	70-80	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Molar	Occlusal	fragment	Rght	Unknown	Intrusive	1	0.01
35HA385	10-2221	438	17	C(sw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned/calcined	3	0.1
35HA385	10-2221	439	17	C(sw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		3	0.13
35HA385	10-2222	440	17	C(se)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	fragment	Unknown	Unknown	Burned/calcined	3	0.18
35HA385	10-2224	451	17	D(se)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	fragment	Unknown	Unknown	Burned/calcined	4	0.14
35HA385	10-2224	452	17	D(se)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Various	Unknown	fragment	Unknown	Unknown		8	0.39
35HA385	10-2222	441	17	C(se)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown		4	0.13
35HA385	10-2223	445	17	D(sw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	fragment	Unknown	Unknown		9	0.43

Site Number	Cat#	Faunal#	Unit	Quad	Level	Mesh	CS	Class	Order	Family	Genus	Genus sp.	Element	End	Part	Side	Age	Modification	Count	Weight (grams)
35HA385	10-2223	446	17	D(sw)	70-80	18		Mammal III	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	fragment	Unknown	Unknown	Burned/calcined	6	0.25
35HA385	10-2223	447	17	D(sw)	70-80	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	spiral	1	0.31
35HA385	10-2224	448	17	D(se)	70-80	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	tooth	Unknown	enamel	Unknown	Unknown	Burned/calcined	1	0.05
35HA385	10-2224	449	17	D(se)	70-80	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	fragment	Unknown	Unknown	Spiral, burned/calcined	1	0.94
35HA385	10-2224	450	17	D(se)	70-80	18		Mammal V	Unknown	Unknown	Unknown	Unknown	longbone	Unknown	fragment	Unknown	Unknown	burned/calcined	1	0.15
35HA385	10-2237	525	17	D(sw)	80-90	18		Aves	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	Unknown	Unknown	Unknown		1	0.19
35HA385	10-2236	520	17	C(se)	80-90	18		Mammal II	Rodentia	Sciuridae	Spermophilus sp.	c.f. Spermophilus townsendii	Various	Various	various	Various	Unknown	Intrusive	2	0.16
35HA385	10-2235	512	17	C(sw)	80-90	18		Mammal II	Rodentia	Unknown	Unknown	Unknown	Various	Ventral	various	Various	Unknown	Intrusive	5	0.12
35HA385	10-2237	524	17	D(sw)	80-90	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	Unknown	Unknown	Unknown		3	0.08
35HA385	10-2235	511	17	C(sw)	80-90	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	various	Various	various	Various	Unknown	Intrusive	5	0.41
35HA385	10-2236	513	17	C(se)	80-90	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Scapula	Lateral	fragment	Left	Adult	Cut	1	0.5
35HA385	10-2235	510	17	C(sw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	fragment	Unknown	Unknown	Burned/calcined	6	0.19
35HA385	10-2236	518	17	C(se)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	5	0.27
35HA385	10-2236	519	17	C(se)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		4	0.12
35HA385	10-2237	522	17	D(sw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Unknown	Unknown	Unknown	Unknown	Burned/calcined	4	0.17
35HA385	10-2237	523	17	D(sw)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	various	Unknown	Unknown	Unknown	Unknown		7	0.45
35HA385	10-2239	528	17	D(se)	80-90	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	4	0.21
35HA385	10-2092	331	17	D(se)	80-90		4	Mammal III	Unknown	Unknown	Unknown	Unknown	Long bone Unknown	Diaphyseal	fragment	Unknown	Unknown		1	0.13
35HA385	10-2236	517	17	C(se)	80-90	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		6	0.25
35HA385	10-2236	514	17	C(se)	80-90	18		Mammal V	Artiodactyl	Cervidae	Odocoileus sp.	Odocoileus hemionus	Molar	Occlusal	fragment	Unknown	Unknown		1	0.43
35HA385	10-2238	527	17	D(se)	80-90	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Antler	Core	fragment	Unknown	Unknown		1	0.17
35HA385	10-2237	521	17	D(sw)	80-90	18		Mammal V	Artiodactyl	Cervidae	Unknown	Unknown	Tooth	various	enamel fragment	Unknown	Unknown		1	0.01
35HA385	10-2235	507	17	C(sw)	80-90	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Antler	Medial	fragment	Unknown	Unknown		1	0.2
35HA385	10-2236	515	17	C(se)	80-90	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Antler	Diaphyseal	fragment	Unknown	Unknown		1	0.2
35HA385	10-2235	508	17	C(sw)	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral	1	1.17
35HA385	10-2235	509	17	C(sw)	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	fragment	Unknown	Unknown		1	0.09
35HA385	10-2236	516	17	C(se)	80-90	18		Mammal V	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Spiral, burned/calcined	1	0.32
35HA385	10-2237	526	17	D(sw)	80-90	18		UNID	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown		3	0.05
35HA385	10-2252	583	17	D(sw)	90-100	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota flaviventis	Mandible	Buccal	fragment	Right	Unknown		1	0.28
35HA385	10-2250	576	17	C(sw)	90-100	18		Mammal III	Rodentia	Sciuridae	Marmota sp.	Marmota monax	Molar	Complete	complete	Left	Adult		1	0.08
35HA385	10-2250	575	17	C(sw)	90-100	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Various	Diaphyseal	fragment	Unknown	Adult		11	0.54
35HA385	10-2250	577	17	C(sw)	90-100	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	2	0.04
35HA385	10-2251	579	17	C(se)	90-100	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	cut	1	0.1
35HA385	10-2251	580	17	C(se)	90-100	18		Mammal III	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		7	0.24
35HA385	10-2250	578	17	C(sw)	90-100	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown		1	0.09
35HA385	10-2251	581	17	C(se)	90-100	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Longbone	Diaphyseal	fragment	Unknown	Unknown	Burned/calcined	2	0.07
35HA385	10-2253	584	17	D(se)	90-100	18		Mammal IV	Unknown	Unknown	Unknown	Unknown	Unknown	Diaphyseal	fragment	Unknown	Unknown		5	0.15
35HA385	10-2251	582	17	C(se)	90-100	18		Mammal V	Artiodactyl	Unknown	Unknown	Unknown	Enamel	Labial	fragment	Unknown	Unknown		1	0.05
35HA385	10-1263	256	18	C(se)	30-40	18		Mammal II	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown		1	0.31

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Publications:

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