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Excavated Households Excavated Lives:

Social Reproduction, Identity, and Everyday Life for the

Ancient Maya in Northwestern Belize

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Excavated Households Excavated Lives:

Social Reproduction, Identity, and Everyday Life for the Ancient Maya in Northwestern Belize

by

Clarissa Marlene Trachman, B.A.;M.A.

Dissertation

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Dedication

This dissertation is dedicated to all who have touched my life.
You live in my heart now and always.

….And to those who haven't yet found their way, *anything* is possible.

Acknowledgements

Seven years have passed since I was admitted to doctoral program in anthropology at The University of Texas at Austin. As is true also for the many who have gone before me, it is impossible to earn a Ph.D. without an enormous amount of interaction, help, and support from our supervisor, professors, advisors, peers, colleagues, family and friends. This dissertation would have been outright impossible to complete alone and is the composite result of the accomplishments, support, and work of many people.

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I am also certainly also a product, directly or indirectly, of R.E.W. Adams, who set the stage for research in the Three Rivers Region with the Rio Azul and Ixcanrio projects and without whom the PfBAP would not exist. It is the PfBAP who supported all of my graduate research. I could not have accomplished this dissertation research without that support. I am deeply appreciative to the project and its director Fred Valdez, Jr. for all that it provided for me, including my practical needs in the field and essential intellectual support, and the Francis Meskell Research Award funds. Along with the PfBAP, I received important funding and technology support from The

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I am very grateful to have had an office in the Mesoamerican Archaeological Research Lab (MARL) that Fred Valdez, Jr. provided for me. I was able to complete all of my dissertation writing in that office. Some of my friends and fellow graduate students Grant Aylesworth, Marisol Cortes-Rincon, Maria Dawson, David Hyde, Richard Meadows, Elizabeth Reid, and Ann Scott also have/had an office there making it a distinct pleasure.

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Excavated Households Excavated Lives:

Social Reproduction, Identity, and Everyday Life for the

Ancient Maya in Northwestern Belize

Publication No.______________

Clarissa Marlene Trachman, Ph.D.
The University of Texas at Austin, 2007

Supervisor: Fred Valdez, Jr.

The primary aim of the dissertation research presented in this dissertation was a deeper understanding of ancient Maya households. A microscale analytical approach was employed towards an understanding of how households participated in and contributed to social reproduction, social identity construction, and social and economic organization, primarily for the Late Classic period (A.D. 600-900). How is/are ideology/ies reflected in ancient Maya households? Are microscale production and consumption patterns articulated to the larger society economically? Can identity be evaluated materially for the Maya at the microscale? How is Maya society reproduced? Are identities constructed at the microscale and passed from generation to generation?

Excavations were conducted in the settlement areas near the site of Dos Hombres, Belize. Using an activity based approach to investigating households in the

field, both architectural and non-architectural contexts were investigated in order to acquire as great a variety of data as possible including that towards subsistence activities, economic activities, everyday domestic activity such as food preparation, special domestic ritual activity, mortuary behavior, and architecture.

The resulting archaeological data provided an important opportunity to consider the ways that identities were expressed materially and spatially for the ancient Maya. Identity is clearly manifest in these Maya households materially in costume elements, the use of space, and ritual symbolism. All of which are not only aspects of identity expression, they are also material mechanisms for the socialization of gender, age, and status, an important social function of the household. This research establishes that domestic social reproduction, production, consumption, ritual, and symbolism all are a part of a dynamic social system in which these Maya actors practiced everyday life not separate from or necessarily subjugated to the larger Maya universe but as an integral part of it.

The study also uncovered that each household had diverse ways identity and social relationships were practiced and expressed materially. I propose a notion concerning a form of ideology born and elaborated at the microscale which allows for this fluid participation in Maya society specifically as was feasible or desired at a given moment based on a host of considerations in each household.

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Chapter 1: Introduction and Background: Dos Hombres in Context

This study was conceived from an interest in household archaeology in general, and specifically, an interest in the role and interaction of households within ancient Maya society as manifested in daily life. Archaeologically, social, economic, and political relationships are visible through the material residue of these daily activities. I carried out this study of ancient households using a decidedly microscale approach towards a multi-scale analysis (see Tringham 1991; Joyce and Hendon 2000, citing Tringham).

The significance of daily life can be understood from deliberate action, actions which constitute culture and society (Bourdieu 1973:99). In this dissertation I aim to elucidate the role of households in the social reproduction of ancient Maya society. I will first demonstrate that each of the three households in this study exhibit important differences in architecture, domestic activity, portable material culture, and both mortuary and non-mortuary ritual. The differences are important reflection of the ways in which the members of these households expressed their social identity/ies. I will then discuss a series of interpretive aspects that explain this diversity reflecting their fluid involvement in both their community and ancient Maya society.

Households have been a topic in anthropology for over a century (see Chapter 2). Until recently, however, archaeological household studies in the central Maya lowlands have been approached primarily as a component of regional settlement pattern research. Only a few studies were taken on specifically designed to investigate the household level of social organization. Ashmore and Wilk's (1988) influential work fostered a number of household studies that focused on the domestic activities that were visible archaeologically. Ancient Maya households have also sometimes been viewed as homogenous, and the inhabitants of them a simple undifferentiated group of "common" folk (Yaeger and Robin 2004). However, households are sensitive to society and household archaeology provides an exceptional opportunity to see how culture, identity, diversity, and change are reflected in everyday life from household to household (see Robin 2004). As I hope to demonstrate, ancient Maya households are far from homogenous. Rather, they are dynamic, diverse, and in the case of the ancient Maya have the ability to differentially participate in their social world.

Research Goals

My ultimate purpose in conducting this research project was to gain a more detailed understanding of the everyday life of the people who lived in the ancient Maya households of the Maya lowlands and how the lives of these people were situated within the larger community and society. I kept several questions in mind while carrying out this dissertation research of ancient Maya households and their social world. How is/are ideology/ies reflected in ancient Maya households? Are microscale production and consumption patterns articulated to the larger society economically? Can identity be evaluated materially for the Maya at the microscale? How is Maya society reproduced? Are identities constructed at the microscale and passed from generation to generation? An archaeology driven by questions that consider the identity and social relationships of households gives a human essence to the interpretations of archaeological remains and credits the people who once lived in the households of the past with intentional, thoughtful, and deliberate action (Tringham 1991, 1995).

In order to begin answering the questions about ancient Maya households in northern Belize, this I developed several research goals. One of the research goals was methodologically oriented. Since I held the intention of utilizing an activity based approach to the archaeology of households, I hoped to excavate each household chosen for this study thoroughly enough to be able to recognize the specific activities of each. This meant that I would have to limit the number of households to be excavated to three given the resources at hand. I also kept in mind the problems of capturing discrete activity surfaces and attempted to develop a sampling method/s that might increase these data.

My interpretive goals were designed to evaluate the meaning of the activities represented in the data collected for each household in order to understand symbolic expressions within the household, both in ritual and daily life. Symbolism also holds the potential to reflect identity construction, ideology, and social reproduction. In addition to assessing the meaning of the activities found for each household, I had the objective to ascertain how activities and their respective symbolic meaning/s may have articulated to the community/ies and society as a whole. This goal was complemented by a comparative analysis between the households investigated which also served to assess any diversity among or between them and explore possible explanations.

Organization of this Work

The first section of this dissertation, Chapter 1 and Chapter 2, set the stage for this research project. The first part of Chapter 1, the present chapter, introduces the research questions from which the study was designed. The second half of this chapter provides a history of research conducted by the Programme for Belize Archaeological Project, which supported these efforts, an overview of the environment of this northwest Belize study area, and a summary of Maya culture history. Chapter 2 establishes the theoretical and methodological foundation for this study of ancient households.

Chapters 3, 4, and 5 present the results of the excavations at the three households, chosen for this investigation. The results are organized first by a discussion of material culture, then the subsequent interpreted activity areas, and finally an analysis of household ritual as documented (or not) at each.

The final chapter, Chapter 6, provides an interpretive perspective of each household’s materiality, social relationships to community and polity, labor organization, and identity and social reproduction. The raw data for the material remains documented at each household are appended to the end of the dissertation.

The Rio Bravo Conservation and Management Area

Physical Geography

This study was conducted in the Rio Bravo Conservation and Management Area (RBCMA) located in northwest Belize (Figure 1.1). The Programme for Belize, a nonprofit organization, owns and manages the RBCMA. The Programme for Belize Archaeological Project (PfBAP) has the task of identifying and recording all of the archaeological remains for this area as well as providing some direction for the protection of these resources.

The geologic formation for Northwestern Belize has been defined as the eastern edge of the Petén Karst Plateau (Dunning et al 1998). The plateau is a high limestone platform formation that accumulated sediment was under water during the Eocene (58–47 mya) (Brokaw and Mallory 1993; Wright et al 1959). The consolidated limestones are of the Tertiary (65–1.6 mya) (James and Ginsburg 1979; Wright et al 1959). Faulting during the Pliocene (13–2 mya) have created a series of steps in elevation from high in the west to lower elevation in the east by a series of escarpments forming the karstic uplands of northwestern Belize (Dunning et al 2003; Ford and Fedick 1988; Wright et al 1959). Two of these escarpments are found to span across the RBCMA and have accompanying rivers, the Booth's River and Booth's Escarpment and the Rio Bravo and Rio Bravo Escarpment (Brokaw and Mallory 1993) (Figure 1.1). A third escarpment, the La Lucha, parallels the other two and enters from the southwest, extending from Guatemala into the northwestern-most portion of the conservation area (Dunning et al 2003).

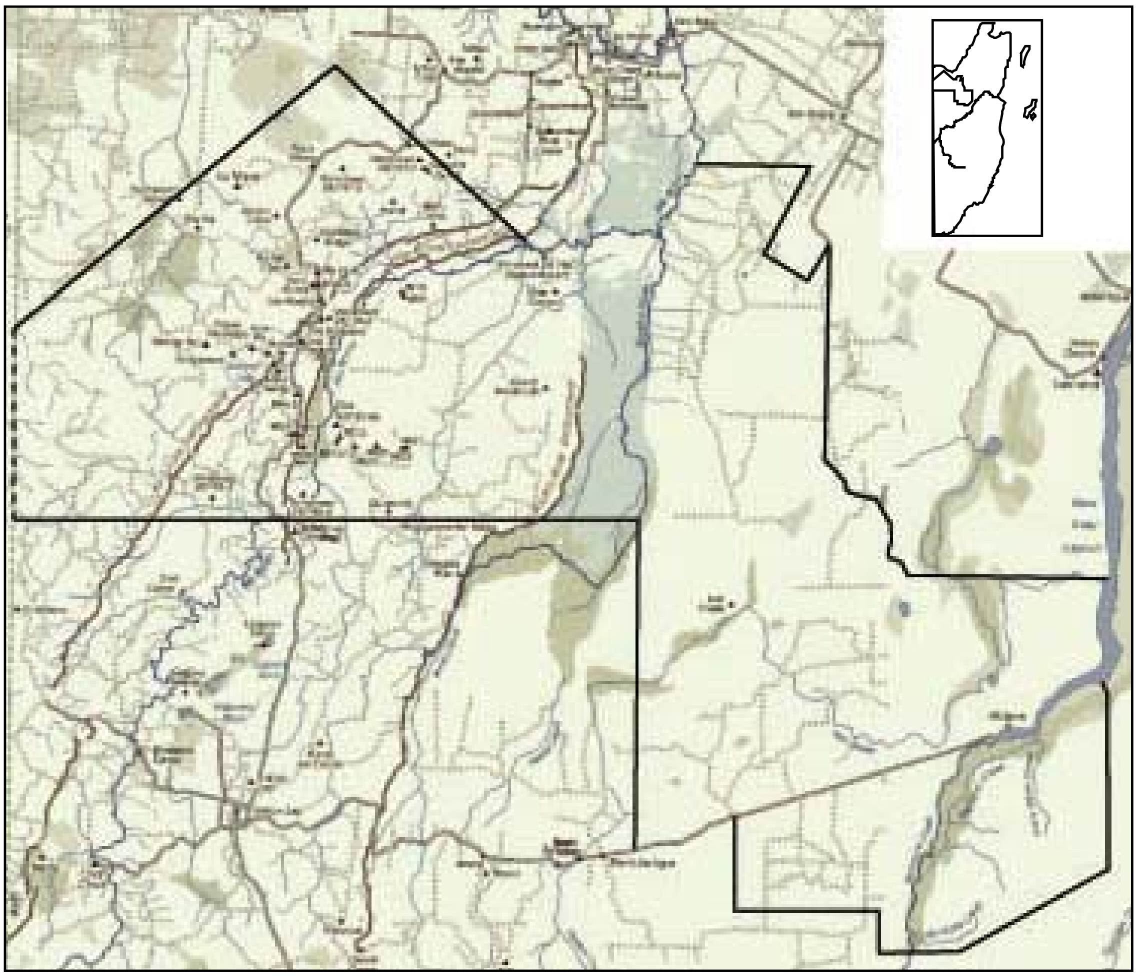

Figure 1.1: Map of the Rio Bravo Conservation and Management Area (Courtesy R.E.W Adams, cartography by Bruce Moses; © 2005 PfBAP).

The site of Dos Hombres is located just below the Rio Bravo Escarpment, east of the Rio Bravo, within the Rio Bravo Embayment (Brokaw and Mallory 1993).

Ancient settlement in the area extends in each direction past the limits of the Dos Hombres site proper and much settlement is located on the face of the Rio Bravo Escarpment itself (Lohse 2001; Trachman 2003; Walling et al 2005; Walling et al 2006). The Rio Bravo Escarpment's maximum elevation is approximately 200 m above sea level.

Environment

The climate of the RBCMA is tropical with seasonal variation in rainfall and temperature (Dunning et al 2003; Lentz 1999). The lowest temperatures span November to February and the highest in April and May. The rainy season lasts from the end of May to December or January with an annual rainfall of 1500–2000 mm (Dunning et al 2003; Lentz 1999). The dry season correlates with the high temperatures for the year occurring as early as late March.

The tropical climate of northwest Belize supports the tropical forest ecology. Meerman and Sabido (2001:25) have classified the majority of the area encompassed by the RBCMA to be "predominately tropical evergreen seasonal broadleaf lowland forest over calcareous soils: Tehuantepec-Peten Variant." This is interspersed with lowland shrub and swamp forest in low-lying areas (Meerman and Sabido 2001). Meerman and Sabido's (2001) ecosystem classes can be further refined. Specifically within the RBCMA, Brokaw and Mallory (1993) have defined several subzones. These primary vegetation zones are Upland Forest, Transition Forest, Scrub Swamp Forest, Riparian Forest, and Cohune Palm Forest (Brokaw and Mallory 1993).

The Upland Forest relates closely to the primary classification by Meerman and Sabido (2001). It covers the majority of the RBCMA and the soils are shallow gray or brown clays with gravelly soils interspersed (Brokaw and Mallory 1993; Meerman and Sabido 2001). This forest occurs on escarpment faces, notably along the Rio Bravo uplands (Brokaw and Mallory 1993). Two of the households investigated in this study are located in the Upland Forest of the Rio Bravo Escarpment face. The vegetation characteristic in the Upland Forest include *Manilkara zapota* (Zapote), *Brosimum alicastrum* (Ramón or Breadnut), *Protium copal* (Copal), and *Orbignya cohune* (Cohune palm) (Brokaw and Mallory 1993).

The Scrub Swamp Forest is a seasonally inundated poorly draining swamp with clay soils in low-lying areas (Brokaw and Mallory 1993). The Transition Forests cover large areas found in between Scrub Swamp Forest and Upland Forest (Brokaw and Mallory 1993). One of the three households is located in this transitional zone. This zone and the household is adjacent to a Scrub Swamp Forest, the same forest in which the site center of Dos Hombres is located (Houk 1996). An even lower-lying bajo of Scrub Swamp Forest is located between the site proper and Pak'il Nah. The vegetation comprising the Transition Forests is *Calophyllum brasiliense* (Santa Maria), *Gymnanthes lucida* (False Lignum Vitae), *Manilkara zapota* (Zapote), *Metopium brownei* (Black Poisonwood), and *Swietenia macrophylla* (Mahogany) (Brokaw and Mallory 1993).

PfBAP History of Research

The PfBAP began research in 1992 under the direction of Dr. R. E. W. Adams (Adams et al 2004; Adams and Valdez 1993; Valdez and Adams 1995) (Figure 1.2). The project was first conceived as an extension of the Rio Azul Project and Ixcanrio Regional Project in Guatemala (Adams 1989, 1990, 1999, 2000; Adams and Valdez 2003; Adams et al 2004; Valdez 2005). From this perspective northeastern Guatemala and northwestern Belize formed a region defined as the Three Rivers Region (Adams 1999; Scarborough and Valdez 2003; Adams et al 2004). The PfBAP focuses its efforts in the northwestern Belize portion of the Three Rivers Region. The PfBAP, currently under the direction of Dr. Fred Valdez, Jr., is a long term research effort that conducts research on the almost 260,000 acre RBCMA (Adams et al 2004; Valdez 2005).

The earliest research in the area was by J. E. S. Thompson in the 1930's who recorded some of the stelae at the site La Milpa (Adams et al 2004; Valdez and Adams 1995). In the 1970's and 1980's La Milpa and several other sites were visited several times by members of the Institute of Archaeology, Belize (Adams et al 2004; Valdez and Adams 1995). Neivens mapped the nearby site of Blue Creek, located just to the northwest of the PfBAP project boundary in 1976 (Guderjan 1991). In 1988 aerial and ground reconnaissance were conducted by Ford and Fedick (1988) in approximately 150,000 acres of the current lands. In 1988 and again in 1990 Guderjan (1991) conducted preliminary investigations at several sites in the RBCMA, La Milpa included, along with several sites just outside the area such as Chan Chich, Blue Creek, and settlement survey in the Gallon Jug property.

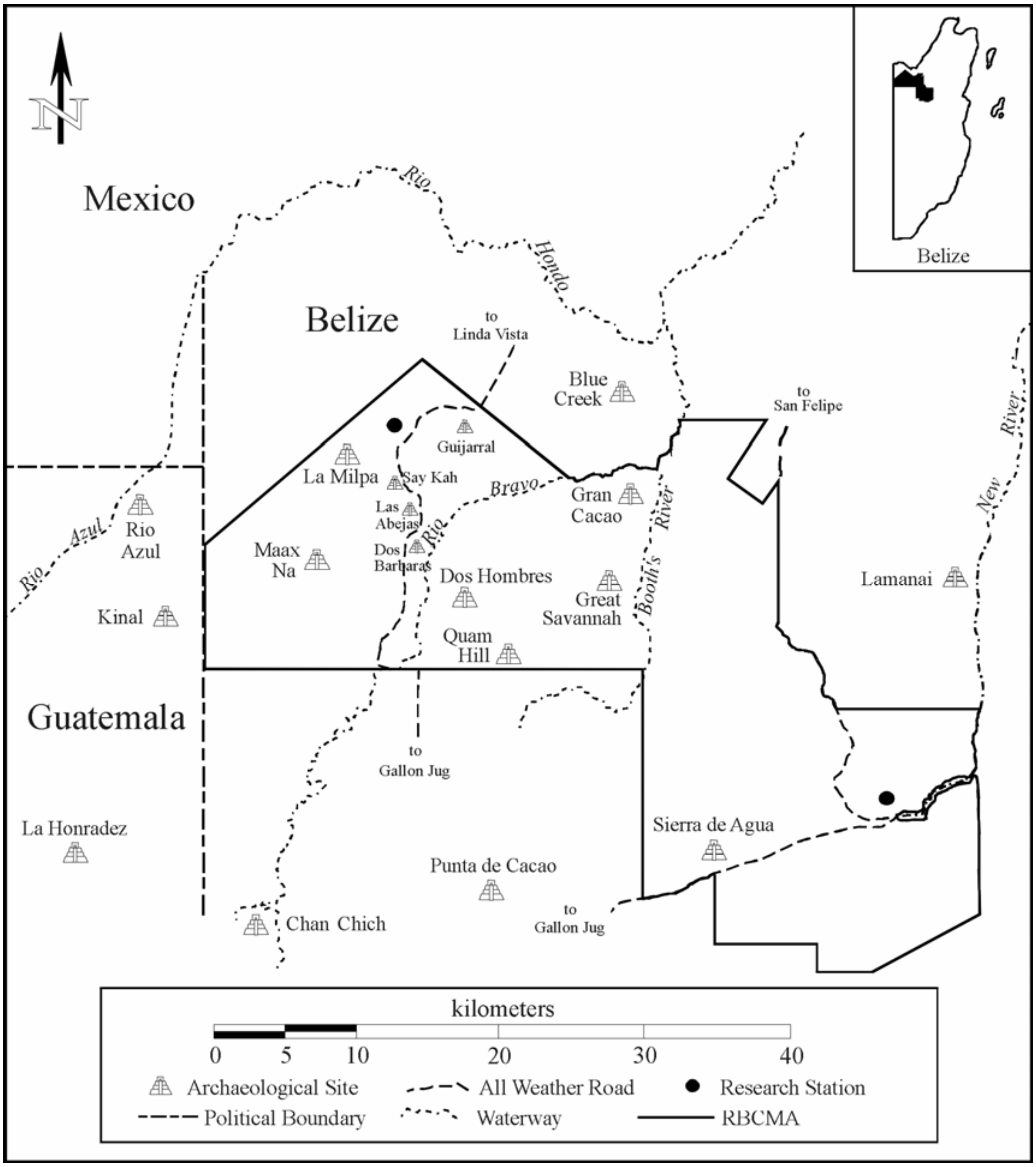

Figure 1.2: The PfBAP research area and location of selected sites (after Lohse 2001; © PfBAP).

It was in 1991 that R. E. W. Adams was first invited by the Programme for Belize to focus regional efforts in the RBCMA as an extension of his efforts at Rio Azul and the surrounding region (Adams et al 2004; Valdez 2005). Norman Hammond also began research at the site of La Milpa in 1992 (Hammond et al 1998; Tourtellot et al 1993).

One of the two primary PfBAP research goals is to identify and record archaeological sites and remains in the property for the interests of the Programme for Belize (Adams et al 2004; Valdez 2005; Valdez and Adams 1995). Another of the primary goals is to ascertain social, political, and organization in the region (Adams et al 2004; Valdez 2005; Valdez and Adams 1995). The regional approach, under the auspices of the PfBAP, requires the ongoing coordination of numerous research interests, themes, and site investigations.

A number of investigations have taken place at large and middle sized sites within the area charged to PfBAP (Figure 1.2). As already mentioned investigations have taken place at the sites of La Milpa, arguably one of the largest sites in Belize (Hammond and Tourtellot 2004; Hammond et al 1998; Tourtellot et al 2003a; Tourtellot et al 2003b; Tourtellot et al 1998). The site of Dos Hombres, located below the Rio Bravo Escarpment in the southern portion of the property has been investigated by Houk (1996, 2003; see also Brown 1995). Two other major sites, Maax Na (King and Shaw 2003; King and Shaw 2006; Shaw et al 2005) and Gran Cacao (Durst 1996; Lohse and Sagebiel 2006; see also Lohse 1995; Durst 1995), are both currently being investigated. Several small sites, or minor centers, have also been investigated including Dos Barbaras (Lewis 2005; Me-Bar and Lewis 2005), Guijarral (Buttles 1995; Hughbanks 1994, 1995), Las Abejas (Sullivan 1997), and Say Kah (Houk and Lynden 2005; Houk et al 2006).

As a complimentary perspective much of the research conducted under the PfBAP has focused outside of major and minor centers. These studies focus on community organization and formation (Sunahara and Meadows 2005; Walling et al 2005; Walling et al 2006; Hyde 2005; Hyde et al 2006), hinterland settlement patterns and their meaning/s (Glaab and Taylor 2005; Hageman 2006; Lohse 2001; Robichaux 1995; Everson 2003; Tourtellot et al 2003b), Maya social organization (Aylesworth 2005; Hageman 2004; Grazioso Sierra 1998; Hageman and Lohse 2003; Scarborough and Valdez 2003; Sullivan 1997), and ancient households (Durst 1998; Ferries 2002; Muñoz 1997; Trachman 2003). A considerable amount of work has also been centered on the geography of the past and present (Dunning et al 2003; Dunning et al 1999), landscape and water management (Chmilar 2005; Hughbanks 2005; Kunen 2001; Kunen and Hughbanks 2003; Scarborough et al 1995; Walling 1995; Weiss-Krejci and Sabas 2002), terracing, and wetland agriculture (Baker 2003).

Thematically, lineage organization (Hageman 2004), heterarchy (Scarborough and Valdez 2003), political economy (Adams et al 2004; Hammond and Tourtellot 2004; Sullivan 2002), and identity, age, and gender (Trachman n.d., 2006; Trachman and Valdez 2006) are included in the topics that have been addressed by researchers associated with the PfBAP.

Material culture studies for the PfBAP have also been plentiful. Ceramics have been undertaken by Sullivan (2003; Sullivan and Sagebiel 2003; Sullivan and Valdez n.d., 2004, 2006; Valdez et al 1993) for the majority of the PfBAP project area, while Sagebiel (2005, 2006; Sullivan and Sagebiel 2003) analyzed the La Milpa ceramics. These comprehensive ceramic analyses have produced a chronology of the culture history for the PfBAP project area (Table 1.1). Lithics (Hyde 2003; Jespersen-Tovar 1996; Lewis 2003), obsidian (Trachman 1999a, 1999b, 2002; Trachman and Titmus 2003), and small finds (Valdez and Buttles 1994, 1995) are studied on an ongoing basis since the projects inception. Finally, continuing osteological analysis is performed by Julie Mather Saul and Frank P. Saul (2003), along with a mortuary study (Geller 2004).

Time Period	***Three Rivers Regional Ceramic Phases***	***Assigned Dates***
Terminal Classic	TR-Tepeu 3	A.D. 800/850–900
Late Classic	TR-Tepeu 2	A.D. 700–800/850
	TR-Tepeu 1	A.D. 600–700
Early Classic	TR-Tzakol 3	A.D. 450–600
	TR -Tzakol 1-2	A.D. 250–450
Late Preclassic	TR-Chicanel (Floral Park)	A.D. 100–250
	TR-Chicanel (Early-Middle)	400 B.C.–A.D. 100
Middle Preclassic	TR-Mamon	600 B.C.–400 B.C.
	TR-Swasey	±800 B.C.–600 B.C.

Table 1.1: Three Rivers regional ceramic phases (after Sullivan and Sagebiel 2003).

Maya Culture History

In terms of modern political boundaries, the Maya Region as a whole encompasses portions of Mexico, including the Mexican Yucatán Peninsula and Chiapas, along with Guatemala, Belize, Honduras, and El Salvador (Figure 1.3). The geographic limits of the Maya Region are rather large. As a result the area can be divided into three primary geographies, Pacific coastal plains, the volcanic highlands, and the tropical lowlands (Adams 1991; Grube 2001). The Pacific coastal plains extend along the Pacific coast of Chiapas, Guatemala, and El Salvador (Adams 1991; Grube 2001). The Volcanic highlands span from central and southern Chiapas across southern Guatemala and into El Salvador and Honduras. The tropical lowlands have the largest expanse within the Maya Region stretching across the entire Yucatán Peninsula into northern and eastern Chiapas and northern and eastern Guatemala, and Belize (Adams 1991).

This dissertation is based in the Maya lowlands and that will be the emphasis of this discussion of culture history. The lowlands can be further divided geographically into three primary areas, southern, central, and northern lowlands. The southern lowlands are a transitional area, between the highlands and the central lowlands, and include eastern Chiapas through central and eastern Guatemala (Sharer 1994). The northern lowlands cover the northern half of the Yucatán Peninsula bounded by coastline on three sides. The geology is a karstic limestone platform (Dunning et al 1998; Dunning et al 2003). The karstic limestone geology found in the northern lowlands extends south into the central lowlands. The central lowlands encompass the area between the southern and northern lowlands, including Belize, northern Guatemala, and in Mexico, northern Chiapas, Tabasco, southern Campeche, and southern Quintana Roo.

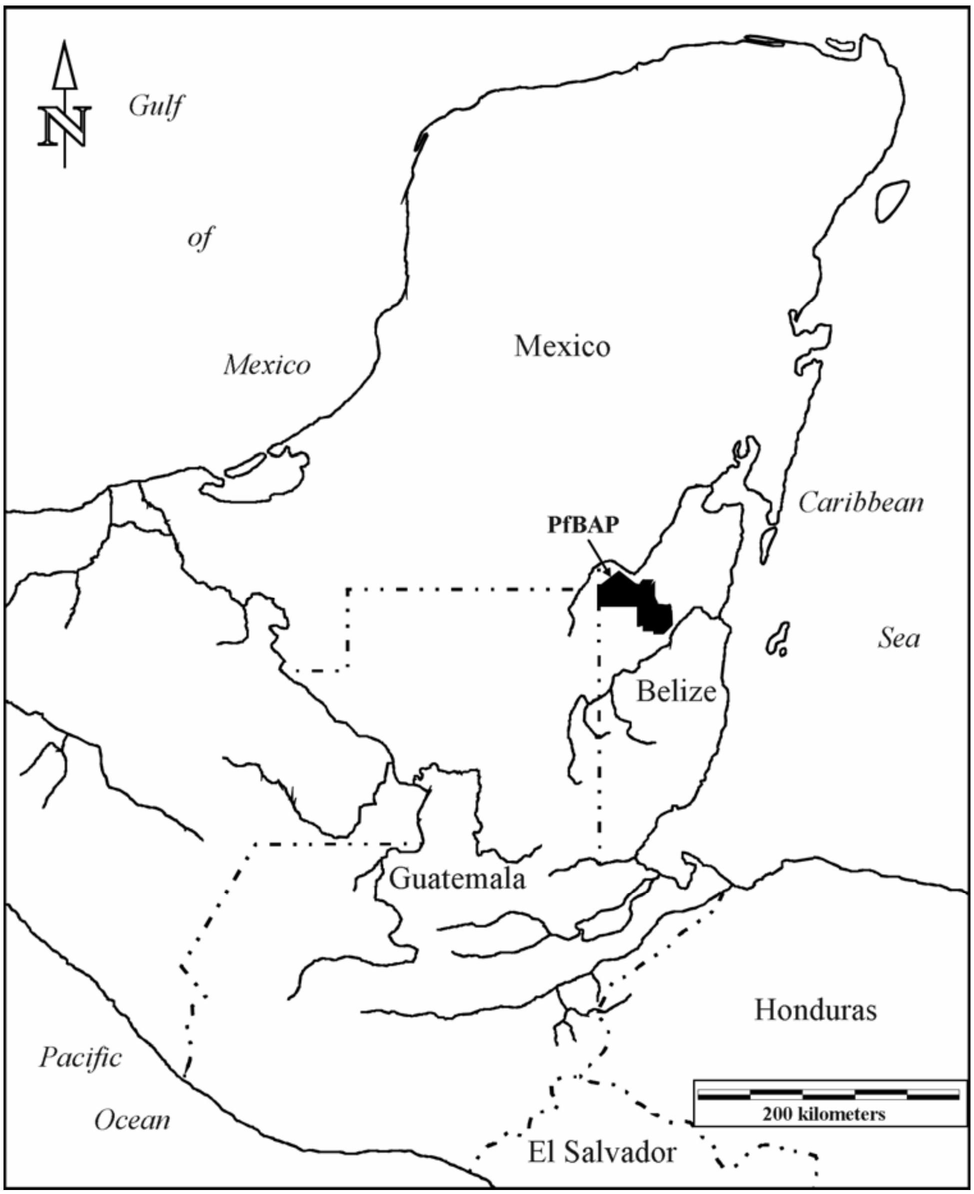

Figure 1.3: Map of the Maya Region.

This study took place in the eastern edge of the Petén forest of the central Maya lowlands, now known as northwestern Belize. Since the research took place in the central lowlands, the culture history sequence will be based primarily on what has been derived for that area by Sullivan and Valdez (2004) (Table 1.2).

Maya Chronological Sequence		
Time Period	***Phase (Sphere)***	***Dates***
Postclassic	Late	A.D. 1200–1500
	Early	A.D. 850/900–1200
Terminal Classic	(Tepeu 3)	A.D. 800/850–900
Late Classic	(Tepeu 2)	A.D. 700–800/850
	(Tepeu 1)	A.D. 600–700
Early Classic	(Tzakol 3)	A.D. 450–600
	(Tzakol 1-2)	A.D. 250–450
Late Preclassic	(Floral Park)	A.D. 100–250
	(Chicanel)	400 B.C.–A.D. 100
Middle Preclassic	Late (Mamon)	600–400 B.C.
	Early (Swasey)	1000–600 B.C.
Early Preclassic		± 1800 –1000 B.C.

Table 1.2: Chronological sequence for the Maya lowlands (after Sullivan and Valdez 2004, Table 1).

Early Preclassic

The primary Maya chronology for the region starts with the Early Preclassic (± 1800–1000 B.C.). Early Preclassic remains are sparse primarily found in the Soconusco region which is located along the Pacific coast of Chiapas and the adjacent area just across the Guatemalan border (e.g. Arroyo et al 2002; Lesure and Blake 2002; Love 1999). Some of the earliest pottery in Mesoamerica is found in the Soconusco in the Early Preclassic Barra phase (± 1700–1500 B.C.) (Sharer 1994). Tecomates (neckless jars) are the most common ceramic form in the Barra complex, the phase that represents the earliest settled villages in the region. Villages in the Early Preclassic were situated in proximity to natural resources, architecture was strictly domestic, and possible status differences are present but are informal (Lesure and Blake 2002).

The Locona and Ocos ceramic phases (1500–1200 B.C.) follow the Barra phase with ceramics that are characteristically more elaborate in both form and decoration (Adams 1991; Sharer 1994). It is during the Ocos phase that the first settled village at Izapa was documented (Ekholm 1969; Lowe, Lee and Martinez 1982). Early Preclassic material has also been documented at Puerto Escondido, Honduras (Joyce and Henderson 2001) in the southeastern Maya periphery.

Middle Preclassic (1000–400 B.C.)

The Middle Preclassic is divided in two primary phases, Early (1000–600 B.C.) and Late Middle Preclassic (600–400 B.C.). In the Early Middle Preclassic settled village life continued as well as the primary means of subsistence, farming, fishing, and hunting. Architecture was again primarily domestic, with very low platforms or no platforms at all and fully perishable structures (Hammond et al 1991a).

The ceramics of the Early Middle Preclassic include the Swasey, Eb, and Xe complexes as found or defined at sites including Altar de Sacrificios (Adams 1971), Barton Ramie (Gifford 1976), Colha (Valdez 1987), Cuello (Hammond 1991; Kosakowsky and Pring 1998), and Uaxactun (Ricketson and Ricketson 1937). These ceramics are characterized by low sided dishes and red slips. T-shaped adzes are a distinctive tool form for the Early Middle Preclassic (Hester 1985; Hester et al 1996).

During the Early Middle Preclassic the subsistence activities were similar to the Early Preclassic, with farming, and wild food sources still being exploited. Adams (1999) noted that farmers moved into the Rio Azul area at this time, ca. 900 B.C. These farming villages are characterized by groupings of households.

Villages continued into the Late Middle Preclassic (600–400 B.C.) along with the first evidence of hierarchical status and increasing social complexity. This is reflected primarily in the earliest documented public or monumental architecture along with material diversity in burials. In addition to domestic structures, monumental architecture occurred in the form of round structures, found at sites like Cahal Pech (Aimers et al 2000), Cuello (Gerhardt and Hammond 1991), and Uaxactun (Ricketson and Ricketson 1937), and demonstrates creation of public space and emerging leadership. Hendon (2000a), however, has argued that at least few of these round structures were actually domestic, such as the example at Uaxactun along with that seen at Rio Azul (Hendon 1989). Round structures at the northern Belize site of Colha have also been interpreted to be domestic (Potter et al 1984). Domestic architecture was also often apsidal in shape positioned on a low platform.

By the end of the Middle Preclassic monumental architecture is unquestionably documented at the sites of Colha (Anthony and Black 1994), Rio Azul (Adams 1999;

Valdez 2000, 2003), and Nakbe (Hansen 1991) indicating the development of a centralized authority. The Rio Azul example is seen in Structure G-103-Sub 2. It is one of the earliest Maya structures documented having decorated façade (Adams 1999; Valdez 2000, 2003). Constructed in the Middle Preclassic, it was decorated with stucco J scrolls and a U-shaped element along with thick rolling plaster (Valdez 2000, 2003). The decorative elements connect this site with the site of Izapa, located in the Chiapan coastal plain. Other monumental architecture is found in the northern lowlands at the site of Dzibilchaltun as well as Kaminaljuyu in the southern Guatemalan highlands.

Materially, the ceramic assemblages are characterized by the Mamom ceramic complex which was the first widespread ceramic style in the Maya area, along with the Joventud complex (Valdez 1987). T-shaped adzes continued to be used in the Late Middle Preclassic along with the addition of burins that were used to perforate shell to make beads (Hester 1985). Similar Late Middle Preclassic remains have been documented in the PfBAP project area at La Milpa (Hammond and Tourtellot 1993), and Dos Hombres (Brown 1995).

Late Preclassic (400 B.C.–A.D. 250)

By the Late Preclassic, population increases are widespread. Monumental public architecture is found in the form of temples, palaces, and administrative buildings. This architecture is characterized by thick rolling plaster, rounded edges, red paint and decorated facades, as indicated by the precursors found on Structure G-103-Sub 2 at Rio Azul (Valdez 1992, 2000, 2003). In addition, large stucco masks flank stairways in the form of various deities including bird deities and jaguar deities. Examples of this characteristic architecture were found at the sites including Cerros (Freidel 1986), Lamanai (Pendergast 1981), El Mirador (Matheny 1987), and Uaxactun (Ricketson and Ricketson 1937). Another important architectural innovation relating to ritual occurs at this time in the Maya lowlands with the construction of ballcourts documented at the sites of Colha (Eaton 1979) and Cerros (Freidel 1986). The two combined elements of increased size and elaboration of decoration found on public architecture both demonstrate that rulers were able to mobilize labor and utilize specialists.

Religious specialists and publicly visible expression of religion is also evident in the Late Preclassic as reflected in temple structures and carved relief. The site of Izapa exemplifies these elements having a substantial concentration of carved monuments by the beginning of the Late Preclassic. Although there were no hieroglyphic texts carved onto them, it is apparent that they are reflective of a complex religious and political ideology (Guernsey 2006). The Izapan art style is also seen at Kaminaljuyu and Rio Azul in the Late Preclassic. There are other visible signs that interaction within the Maya region in the Late Preclassic intensified. Goods are being traded around the Maya area including obsidian, jade, stingray spines, and marine shell. The increase in traded items signifies an increase in status differentiation both socially and economically.

Domestic architecture is found apsidal, round, and rectangular and most are positioned atop low platforms. The Late Preclassic brings about a distinct differentiation in domestic structures reflected in masonry structures with thatched roofs and plaster floors associated with elite status residents.

Changes in ceramics are reflected in a stylistic standardization such that the Chicanel ceramic complex is widespread by the later part of the Late Preclassic, characterized by waxy red slips. Regional differences did still occur between the lowlands and the highlands such that the highland Chicanel ceramics were sometimes coated with stucco and painted (Valdez 1987). Spouted vessels are a form that is new for the Late Preclassic added to the more common forms of dishes and bowls.

Lithic assemblages for the Late Preclassic are dominated by two tool forms, both manufactured at the site of Colha, the large thin oval biface and the tranchet tool (Hester 1985; Hester and Shafer 1994; Shafer 1985; Shafer and Hester 1983, 1991). Two other forms of chipped stone that have been documented in this time period are stemmed macroblades and the earliest eccentrics (or chipped stone symbols; see Meadows 2001). The earliest evidence for obsidian prismatic blade workshops also is documented in the Late Preclassic.

Two additional innovations that have been found to date to this period are the earliest examples of hieroglyphic writing, and mural art for the central lowlands. Both of these have very recently been documented at the site of San Bartolo in the central lowlands (Saturno et al 2006; Taube et al 2004). The earliest hieroglyphs were previously thought to have been at the site of El Mirador. The San Bartolo glyph panel dates to between 300 and 200 B.C. from associated radiocarbon samples. The murals date to around 100 B.C. and are important because they reflect some of the first imagery related to the creation of the Maya universe (Saturno et al 2006; Taube et al 2004).

The end of the Late Preclassic, or the Terminal Late Preclassic (A.D. 150–250) is sometimes associated with a slight decline at a few sites like El Mirador (Matheny 1987), along with defensive features and the advent of an architectural element, the corbel vault. Although this time is not well understood, it is a dynamic time that may reflect further socio-political complexity and competition.

In the RBCMA, the Late Preclassic is well represented at sites like La Milpa (Hammond and Tourtellot 1993), Dos Hombres (Brown 1995; Trachman 2003), Las Abejas (Sullivan 1997), and the nearby sites of Blue Creek (Guderjan and Driver 1995) and Chan Chich (Houk 2000). These remains are found in architecture, ceramics, lithics, and mortuary deposits supporting the notion of increased complexity and status differentiation of the time.

Early Classic A.D. 250–600

The Early Classic period is marked by a new long ranging Mesoamerican alliance (Sharer 1994). Teotihuacan in central Mexico had come into its greatest power flourishing from about 100 B.C.–A.D. 500/600 (Adams 1991; Martin 2001). By A.D. 400 Teotihuacan gained control over much of the long distance trade between its territory in central Mexico and the Maya area. In the Early Classic Kaminaljuyu formed an important trade relationship with Teotihuacan, probably exporting many items found in the Maya highlands such as cacao, obsidian, and jadeite (Adams 1991).

Meanwhile, a new political power was also rising in the central lowlands. Tikal was a powerful city in the Early Classic and likely conquered Rio Azul around A.D. 400 (Adams 1987). Tikal experienced tremendous population growth which some have suggested is related to a decline at El Mirador (Sharer 1994). Tikal is considered one of the largest Maya centers in the Maya Region. It was occupied in the Late Preclassic, as evidenced by construction in the North Acropolis, but clearly grew to the large force it is known for in the Early Classic (Sharer 1994). Part of the success of Tikal can be attributed to an alliance with Teotihuacan via Kaminaljuyu when Curl Nose of Teotihuacan descent married a woman at Tikal of the ruling lineage.

With this affiliation, Tikal thrived and gained political and economic power over much of the central lowlands. The alliance benefited Teotihuacan in the ability to gain access to important tropical lowland resources such as hard woods, medicinal plants, and feathers. The Teotihuacan influence is also seen in some of the stelae of this time which depict Maya rulers dressed in the costume of the Teotihuacan deity Tlaloc (Martin and Grube 2000). Materially, the Teotihuacan relationship is visible at Tikal and across the lowlands (and highlands) by the presence of Teotihuacan style fine orange pottery, tripod cylinders, and green obsidian. Teotihuacan Talud-Tablero architecture is visible at Tikal and several other lowland sites like Uaxactun, Rio Azul, Calakmul, and Yaxha (Adams 1991; Braswell 2003; Sharer 1994).

On the whole Maya architecture in the Early Classic was more angular with the widespread use of cut stone and thinner plaster veneers. Corbel vaulted ceilings were much more common and are documented in both large structures and tombs.

Colonnaded structures have been documented for both the southern and northern Lowlands by the Early Classic (Driver 2002). Even though there is considerable change in the architecture of site centers, there is little change at this time for domestic architecture.

Materially, ceramics are characterized by polychrome decoration, ring bases, and an increase in basal flange bowls in addition to the characteristic Teotihuacan styles. However, tool forms continue much the same as for the Late Preclassic (Hester 1985). Early Classic remains documented by the PfBAP occur at several sites, similar to the Late Preclassic locations, including La Milpa (Hammond and Tourtellot 1993), Dos Hombres (Brown 1995; Durst 1998), and the Barba Group (Hageman 2004) and other regional sites including Blue Creek (Guderjan and Driver 1995) and Chan Chich (Houk 2000).

As the Early Classic draws to a close, between A.D. 500 and 600, Teotihuacan declines in power, a hiatus felt throughout the Maya Region. Tikal suffers greatly as economic and political prosperity declines. Simultaneous with the decline at Tikal, other sites in the Maya Lowlands gain new power and prosperity at the expense of Tikal (Martin and Grube 2000; Schele and Freidel 1990). Palenque, Caracol, and Calakmul, Naranjo, Yaxchilan compete to subsume much of the Tikal regional power and all begin to gain in political and economic strength as the Late Classic ensues (Sharer 1994).

Late Classic A.D. 600–800/850

The Late Classic corresponds with immense population growth in the Maya area combined with the development of a highly stratified complex social, political, and economic organization. Large construction efforts are seen throughout the region (Sharer 1994). New stylistic variations in public and monumental architecture are visible, and ballcourts are incredibly common as well as *sacbeob* (roadways) and shrines (see Houston 1998). Roof combs were also a common architectural element in the Late Classic. Roof combs were a highly visible and effective mode of communication, having been stuccoed over and painted with ideological information (Sharer 1994).

Three important regional lowland architectural styles emerged at this time, the Puuc, Chenes, and Rio Bec styles (Sharer 1994). The Puuc architecture is located in the northern lowlands and reached its peak in the Terminal Classic. It is distinguished by masonry construction with finely shaped non-load bearing veneer stones over a rubble core. The lower part of the façade is usually undecorated while the upper part is decorated with elaborate stone mosaic designs (Adams 1991; Sharer 1994).

Chenes style architecture is a variation of the Puuc style. It differs in that the lower portions of the façades are often decorated as well as the doorways (Adams 1991; Sharer 1994). The Rio Bec architecture is similar also to the Puuc style, however, the upper portions of the structures have an additional architectural element. A false tower is found the top of monumental architecture having a negative batter or angle that possibly served to alleviate visual distortions (Adams 1991; Sharer 1994). Some of the decorative elements that are seen in all three styles include serpents, choc masks, and geometric designs.

Multiple structures with angular architecture were common in the architecture of the Late Classic period, though apsidal structures continue throughout. High status households have often been documented with cut stone masonry walls, plaster floors, and corbel vaulted roofs (Johnston and Gonlin 1998). Late Classic ceramic traditions display multiple modes of decoration and forms with a simultaneous increase in standardization (Valdez 1987).

Chipped stone assemblages from the Late Classic have a new form, the general utility biface, and thin oval biface are generally smaller in size than the Preclassic antecedents (Hester 1985; Hester and Shafer 1994; Shafer 1985). Marine shell and greenstone have a much more limited distribution which may be related to changes in socio-economic organization.

Several models have been suggested to explain the Late Classic complex political organization. Regional states have been proposed along with a competing model of a city-state system, or also referred to as centralized versus segmentary states. An incredible amount of debate and literature has been generated as a result (e.g. Adams and Smith 1981; Chase and Chase 1996; Demarest 1992; Fox et al 1996; Marcus 1993, 2003; Sanders and Webster 1988; Sharer 1994). What *is* clear is that, by the Late Classic, rulership was hereditary and often patrilineal, though there were notable exceptions.

Late Classic Maya society was also characteristically socially stratified. Sharer (1994) has discussed a two-tiered stratification comprised of elite members and non-elite members. In this scenario the elite occupied the civic ceremonial centers and busied themselves with activities related to governing, ideology, and religious specialization, while the non-elite occupied the hinterland settlements and practiced agriculture (Tate 1992). A three tiered system has also been proposed. Here the model is similar, but there would be the addition of a "middle" class possibly comprised of craft specialists, warriors, and merchants who may have lived in or near the centers (Adams 1991). Given the complexity and diversity demonstrated archaeologically, the social picture is also likely complex.

Terminal Classic A.D. 800/850–900

Although materially there are many trends that continued from the Late Classic into the Terminal Classic, it is a time of considerable change for the ancient Maya. Ultimately, the Terminal Classic marks at time of certain decline, especially evident in the central lowlands (see Demarest et al 2004). It is a period of transition from the Classic period to the Postclassic period. As Rice et al (2004) note, the end of the Terminal Classic can also be viewed to have marked the beginning of something new, the Postclassic.

A number of explanations including both internal and external factors have been posited to have led to the visible population decline and the end of any new major construction at many sites in the central lowlands (Sharer 1994). Some of the explanations that have been posited include drought (Gill 1994, 2000), warfare (Demarest 2004; Demarest et al 1997; Inomata 1997), overpopulation stresses, denuded landscapes from deforestation (Dunning et al 2003:19; Rice 1993), and some combination thereof (Valdez and Buttles 2007). It was once thought that the decline was a very rapid event evidenced by the abandonment of sites and the end of a hieroglyphic history in the central lowlands (Chase and Chase 2004a:15). It is more likely to have been the consequence of longer term environmental and cultural changes that led into the Postclassic.

Although occupation continues at sites like Lamanai (Graham 2004; Loten 1985; Pendergast 1985) and Santa Rita Corozol (Chase and Chase 2004b) in the Postclassic, many central lowland sites are not reoccupied after the Terminal Classic period. In the PfBAP research area, few Postclassic remains have been documented (Adams et al 2004; Durst 1996). Both the site of La Milpa (Hammond and Bobo 1994) and Dos Hombres (Houk 1996) seem to have had Postclassic visitations, or pilgrimages, but no reoccupation of sites in the area is evident.

Dos Hombres: Research and Occupation History

Previous Research

Several previous studies have been carried out in and around the site of Dos Hombres (Figure 1.4). The first of these was a settlement survey conducted by Robichaux (1995) in the settlement area to the southwest of the Dos Hombres site core and north of La Milpa. Robichaux (1995) found that the majority of the settlement in that area dated to the Late Classic (A.D. 600–800/850) period at a density as high as 480 persons per km^2. Another study of the site center proper was carried out by Houk (1996). Houk's work helped to establish the first chronology of the site. Houk (1996) was also interested in the layout of the site and how it compared to other contemporaneous sites in the central lowlands. He found that the site was similar in layout to other major sites in the area such as La Milpa and proposed the possibility that many of the sites in the Petén were laid out according to Maya cosmology.

Three other investigations were carried out in specific groups associated with the Dos Hombres center. Brown (1995) conducted excavations into the A-2 courtyard group located adjacent to Plaza A and determined this to be a residential group. Subsequently, Durst (1998) initiated an investigation of an elite residential courtyard group, Group B-4, just west of the ballcourt (Figure 1.4). The excavations revealed the first documentation of Early Classic (A.D. 250–600) occupation in the Dos Hombres civic ceremonial center. Durst's (1998) excavations were focused on Structure B-16. While excavating the fill from inside the room of this Early Classic structure, a patch was encountered in the plaster floor. Further investigation of the patch led to the discovery of an Early Classic tomb with a lens of obsidian artifacts (Trachman 1999a; 1999b; 2002).

The final investigations in the Dos Hombres center were carried out in Group D by Aylesworth (2005; see also Lohse 1999) (Figure 1.4). Aylesworth's (2005) investigation established the chronological sequence for the hilltop group as well as assessing much of the architecture.

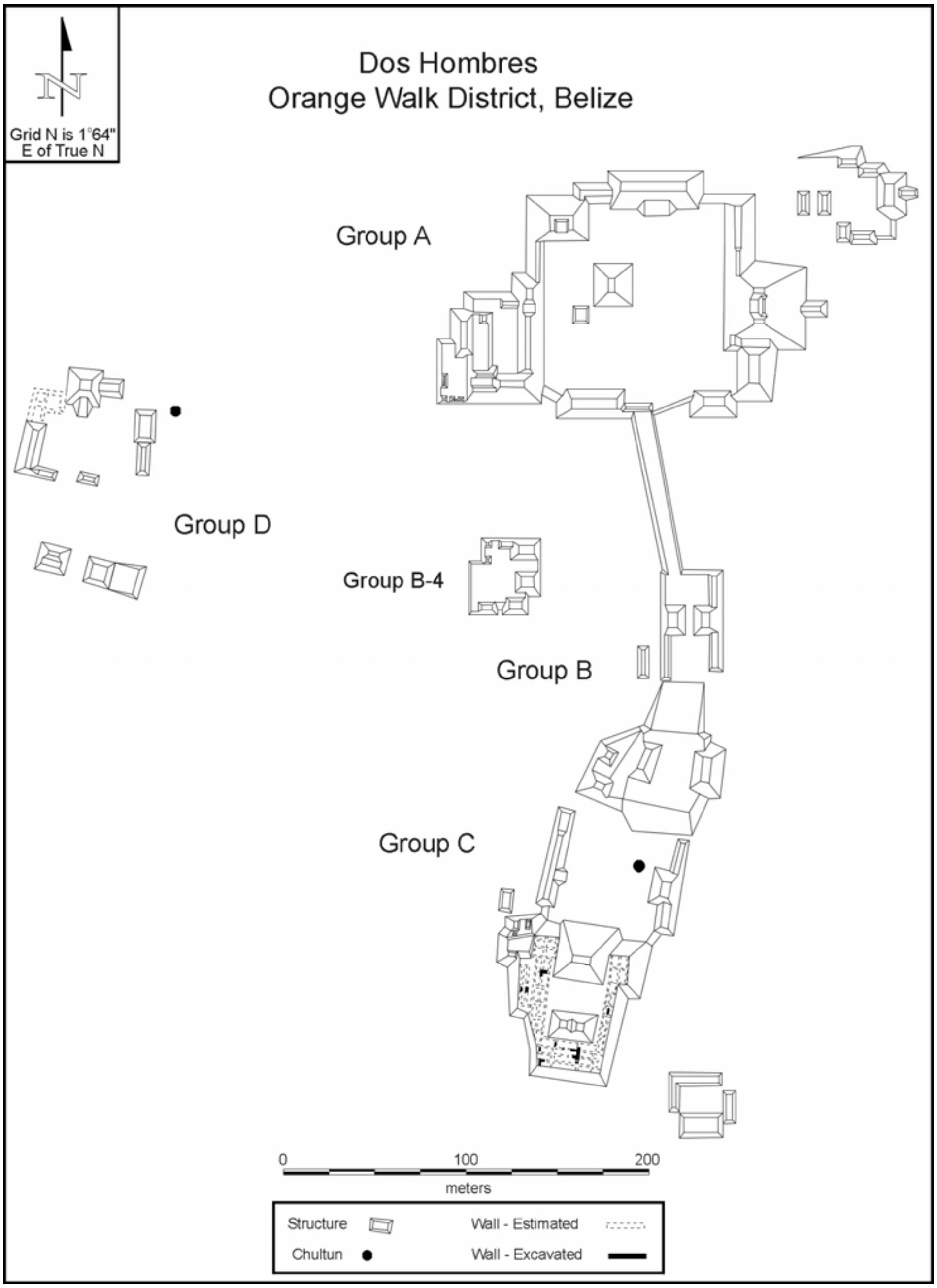

Figure 1.4: Map of Dos Hombres (after Houk 1996; Lohse 1999; © PfBAP).

A settlement pattern survey was conducted in the late 1990's by Lohse (2001), who placed two 2500 m long transects to the east and west of the Dos Hombres center. Once these two transects were laid out, archaeological survey, testing, and environmental assessment was carried out by Lohse's team (2001). Survey was also conducted just to the north of the site (Hageman and Lohse 2003; Figure 1.5).

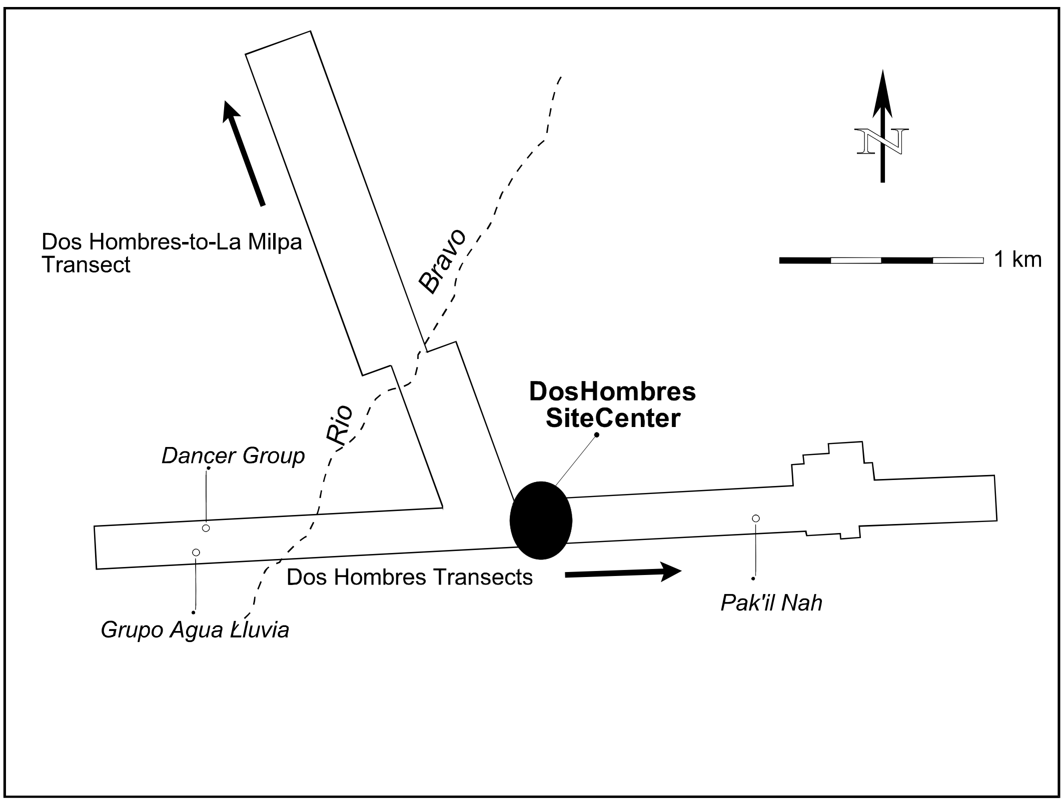

Figure 1.5: Dos Hombres nearby transect surveys (after Hageman and Lohse 2003, Figure 9.2).

Dos Hombres Culture History

Deriving from Houk's (1996) work in the Dos Hombres center (Figure 1.4), the site was occupied from the Middle Preclassic (±800–600 B.C.) to the Terminal Classic (A.D. 800/850–900) with only visitations to the site in the Postclassic (Tables 1.1 and 1.2). After the initial settlement in the Middle Preclassic, the population grew enough in the early part of the Late Preclassic (400 B.C.–A.D. 100) to form a village positioned in the northern portion of the site (Houk 1996:235). Houk (1996:235) also suggests that there was a slight population decline at the end of the Late Preclassic and stayed low during the Early Classic (A.D. 250–600). Two temples, C-2 and C-3 were built in the Early Classic (Houk 1996) as well as the B-4 Group, an elite residential group just west of the ballcourt (Durst 1998), and there was a significant Early Classic occupation documented in Group D (Aylesworth 2005) (Figure 1.4).

Major construction was obvious at the site at the beginning of the Late Classic (Tepeu 1, A.D. 600–700) with a major expansion of Plaza A, with subsequent construction projects in Groups B and C, as well as the construction of the ballcourt (Houk 1996:235). Group D also underwent an expansion in the Late to Terminal Classic (Tepeu 2-3, A.D. 700–900) as exemplified by the very large structure D-1 (Aylesworth 2005:70) (Figure 1.4). In addition to expansions in the civic ceremonial center, there appears to have been a significant population growth in the settlement areas as most of these residences date to the Late to Terminal Classic (Tepeu 1-3, A.D. 600–900) (Lohse 2001; Robichaux 1995).

It was in the Terminal Classic that the site core of Dos Hombres was abandoned as signified by the termination of the Acropolis, Group C, by sealing the entryway to the upper platform, along with scattered occurrences of smashed vessels (Houk 1996:236). The Postclassic material at the site is very limited and indicates only pilgrimages or visitations (Houk 1996:236).

While there is little evidence for fortification in the form of defensible features, walls or moats, Lohse (1999) has suggested that the location of Group D on the hilltop would have been a defensible vantage. There is only one water management feature in the site core, specifically a reservoir just to the south of Group C. Architecturally, Dos Hombres has similar construction for the terminal occupation phase (Tepeu 2-3), vaulted structures, as well as some with perishable roofs, red plaster on both interior and exterior of walls, and dry laid construction fill (Houk 1996). These architectural elements were combined to create complexes of range and temple structures intermingled with elite residences and the elaborate Acropolis configuration of the southern group (Houk 1996) (Figure 1.4).

Chapter 2: Theoretical and Methodological Approaches to The Archaeology of Everyday Maya Life

Theoretical Approach

In order to begin an inquiry of any topic in archaeology, we must first lay out our approach. In this way, we are both explicit, and ideally, less biased by subconscious perceptions. This effort at exposing our hidden meaning(s) often leads us to an essential but sometimes dreaded theoretical pursuit. Theorizing about archaeological topics then circularly can take us back to the muddy waters of meaning laden terms that we attempt to illuminate. Often the meaning we find in our conceptual approach to archaeological deposits is socially embedded in a modern understanding of our world. So in our pursuit to avoid bias by hyper-defining our terms, we have difficulty escaping the very nature of the bias, our own world view. This doctoral investigation will only attempt an escape of my own biased notions of the topics of households and everyday life, terms as meaning laden as any other in anthropology or archaeology. Family, kinship, production, consumption, ideology, gender, age, child, and social status are just a few other terms that come to mind when we think of households and the people who might occupy them.

Households and Everyday Life

Defining households. A good deal of literature exists concerning the anthropology of households. Much of the research earlier in this century focused on structure of household units. As a result kinship, inheritance, and marriage rules defined the basis for familial relationships and therefore they defined the household in terms of its structure (Yanagisako 1979). Much attention was placed on defining the term family versus household. The terms family, nuclear family, and extended family were contrasted with *household* which was determined by co-residence (Yanagisako 1979). Goody (1972:105; see also 1976:20), while acknowledging wider familial relations, emphasized the nuclear family in much of his work and considered the family a universal form. This effort in defining the family was an attempt at defining the familial relationships that structured the family and household for researchers like Goody (1972) and Bender (1967, 1971). With a structural approach they (Bender 1967, 1971; Goody 1972) were most interested in establishing the terms, rules, or norms that formulated and supported the family cross culturally. Marriage rules, land tenure and inheritance brought significance to the household by structuring the family or familial relationships of the people residing in them. Households in this way were the basic organizing unit of society. Defining both household and the family quickly became problematic under the biased constraints of normative thinking.

Soon to follow, function replaced structure as the focus of household studies. Much like the critiques of structural terms used to describe household occupants and their organizing principles, that used to understand household function have at some point come under fire as well. Simply beginning to think about defining household function brings a host of meaning laden terms and binary opposites again such as, domestic production and/or consumption, and biological versus social reproduction. Sahlins (1972), drawing from Chayanov (1966), perceived the household to be the basic unit of production in a given society thereby acknowledging the relationship between technological innovation and the demands for household labor. The benefit of recognizing the value of domestic production emphasized the advantage that the larger family groups had in that production. Extended families became larger domestic work forces, more people to work the fields for example. Biological reproduction in this light was a crucial mechanism by which the labor force was expanded within the household.

Both the structural and functional approaches have spurred very meaningful discourse between theoretical trajectories. It is certainly difficult to attempt a cross-cultural definition of households and/or their occupants or activities and nearly impossible to create a cross-theoretical one (Yanagisako 1979). Each of us must choose our own grounding theoretical force. What stands out as an essential issue from these earlier studies is the need to account for variability in households in both form and function even within a single culture. One very hopeful avenue was found in a concept called the *developmental cycle*. It was a model applied to the differences seen in household form or family form. Household variation was attributed to demographic changes over time (Fortes 1958). Ultimately this model was based on an assumption of a single overall form that was being observed at some point in process of a biological reproductive growth development (Fortes 1958). In other words all households would assumably have a single developmental trajectory, growth over time, a part of the model that later some tried to move beyond (see Goody 1973). What is beneficial from this is the notion that households undergo change(s) over time, an inescapable aspect that must be grappled with. The developmental cycle can account for some of the variation in households, but other social factors are at play in household diversity as well (Yanagisako 1979). The concept of developmental cycle still leans towards cultural evolution, even taken beyond simple demographics, such that each household is presumed to undergo a similar course or set of change over its 'life cycle.' The very nature of the terminology, developmental cycle, evokes the idea that there is an established cycle or sequence, as is applied to the life cycle of biological beings.

Households are not separate from the social and political factors around them nor are their actions. Terms that have been used to define their position or niche in society, such as *private*, have often served simply to place them in contrast with larger conceptual notions or institutions like economy, politics, and social life. These tend to exist in the opposed realm of the *public*. Henrietta Moore (1994:88) has proposed that households have a very social role and by nature they exist within and are inseparable from public concerns. She (Moore 1994:88) sees households as "permeable" units that both influence and are influenced by the larger scales of society.

Archaeologically, households and their human occupants are especially conducive to an activity based approach which essentially defines households materially. This functional perspective was proposed for archaeology by Ashmore and Wilk (1988; see also Wilk and Netting 1984). Ashmore and Wilk (1988) viewed archaeological households as activity groups that participate in activities that leave an observable archaeological trace. Household activities in the past were defined in this light very similarly to the more modern examples in anthropology. They are the most admirable aspects of day to day effort which in the ancient past resulted in production, reproduction, pooling of resources, co-residence, shared ownership and so on (Ashmore and Wilk 1988).

Archaeologically speaking, these activities do leave a definable material trace. The activity based approach lends itself to some flexibility in recognizing that the participation in these activities by each household could occur in varying degrees. The functional or behavioral approach is clearly useful for archaeological investigations of households and is clearly echoed in an number of household investigations in Mesoamerica (Feinman et al 2002; Gonlin 1994; Inomata et al 2002; Killion et al. 1989; Manzanilla 1986; Manzanilla and Barba 1990; Santley and Hirth 1993; Sheehy 1991; Sheets 2000; Sheets et al. 1990; Webster and Gonlin 1988; Webster et al 1997; Wilk 1988; Winter 1986) and beyond (see Allison 1999a; Beaudry 1989; Stanish 1989 and many others).

The importance of an activity based approach is obviously crucial to any archaeology of households given the nature of archaeological inquiry. However, Hendon (1996) has observed that activities alone do not fully address the household and its role within society. She (Hendon 1996) argues that households are also rich with symbol and metaphor and that these aspects can also be observed materially. Hendon (1996:47) extends the definition of the archaeological household beyond a co-residential activity group adding that it is also a "symbolically meaningful social group." This definition of households as applied to archaeology opens the door to alternative productive or reproductive activities. Household ritual is an important way that households express symbolic meaning along with the distribution and organization of space and labor. The expanded definition places households and the people who live in them squarely in social context and social practice.

Practice and agency. *Practice* is essentially what people do, similar to *activity*. Practice, however, acknowledges that the activities of people have social and symbolic meaning. Conceptually people have choices about how they take care of their everyday tasks and social obligations (Bourdieu 1977; de Certeau 1984; Robben 1989). In a very practical sense, culture is expressed by what people do which is based in the social or symbolic significance of the action (Bourdieu 1977; Giddens 1979). The very ability to choose to do things according to the established status quo, or alter the action slightly or altogether, whether by taking a completely different action or simply by inaction, is explicitly related to the concept of *agency*. Agency can be held or utilized by individuals or groups of individuals (Dobres and Robb 2000).

Agency by definition can only exist within a society that has an existing framework or set of norms. Each entity, individual or group, exercising agency either acts to support the framework or not, but is often limited still by that framework, since it is the very structure that defines itself to begin with (Bourdieu 1977; Giddens 1979; for a review of agency see also Dornan 2002). In cultural context, then households full of people acting in their daily lives formulate or are in essence culture (Bourdieu 1973:99).

Furthermore, it is the consequence(s) of long term repeated actions that accounts for social change, actions that are both intentional and unintentional (Dobres and Robb 2000). In sum, if culture is expressed by what people do and those actions have meaning, either literally or symbolically, then it follows that understanding those actions provides a direct understanding of culture. In terms of archaeology those actions are visible specifically from their material residue, hence the importance of the activity-based approach.

Ruth Tringham (1991) reminds us that households are full of people, people and what they do each day. The material remains of household activities are what we see archaeologically, but we cannot forget that it is people who perform the activity. These people are as diverse and complex as the archaeologist who is investigating them and their daily lives. We cannot get around the fact that these people have social and familial relationships with each other within the household and between the household often based on the very diversity that they display. Households are full of people of varying age, sex, gender, class, and ethnicity. These aspects of identity often are the basis for social, political, and economic relationships. Identity then is crucial to an understanding of households and their relationship to their society. As Tringham (1988:16; see also 1991) stated "the very act of investigating…the history of human social relations at a microscale, [enriches] and humanizes our imaginations, our models, and the archaeological record itself. It allows us to engage in a study of a prehistory with 'faces.'"

My derived definition of 'household.' Households are dynamic and diverse co-residential groups who act and interact in many ways that are visible materially and symbolically. They also hold and shelter real people who both individually and collectively have direct bearing and relationship to the culture in which they live, and all its various parts– social life, ideology/ies, politics, economy, ritual, identity, and religion(s)— in which they are clearly embedded. This theoretical definition is admittedly eclectic. However, it extracts the most salient points from concepts proposed over the course of household studies.

Ancient Maya, households were likely composed of extended family kin groups. This supposition is based on Farriss' (1984:133) interpretation of colonial Maya households which she argues were extended family groups based on existing colonial records, such as wills. It is through these same records that Farriss (1984:133) also suggests that the optimal household extended family group was made up of three generations of patrilateral kin.

Ethnographically the issue is not as clear, apparently varying somewhat by community. Modern Maya households are sometimes made up of extended family kin groups (Collier 1975; Redfield and Villa Rojas 1971), though there are also communities with predominately nuclear family households, as well as those having both nuclear and extended family households (Nash 1985). Nash (1985:105) suggests that this trend towards nuclear family groups is a more recent trend at least for the highlands of Chiapas, probably influenced by colonization.

Based on the working theoretical definition of household, I will attempt to interpret the material remains of the three households excavated for this study. These efforts will be aimed towards an understanding of how the ancient Maya of northwestern Belize acted and interacted daily with and within their world socially, economically, ritually, and ideologically, as well as how they reproduced, changed, or otherwise expressed their identity.

Households: Making and Using Things

Certainly the notion of production and all its varying degrees and modes is laden with meaning in anthropology, as is the notion of consumption, whether these are applied to household or other scales of society, or to pre-complex societies or pre- or post-industrial ones. Further complicating the picture is its application in archaeology. For archaeology productive activities and consumptive activities, at any scale, is a practical concern as well as a theoretical one. Presumably activities leave an archaeological material trace. At least, that is certainly our hope given in the recent theoretical trends in our discipline. We have desired to understand the processes of the past (Binford and Binford 1968; Binford 1972, 1983; Taylor 1948), past behavior (Shiffer 1976, 1987, 1999), and a contextualized symbolic meaning of actions and materials from the past (Hodder 1986, 1992). Along these lines, in order to begin tackling an activity based approach to archaeological household research it is of fundamental important to define our approach to the kinds of activities from which a perception of these ancient people will be derived.

Anthropologically many functional aspects of household have been addressed from a Marxist perspective using the categories of production and consumption (also reproduction). The two terms, production and consumption, are binary opposites that may limit our perception while also are not mutually exclusive. I will discuss these topics with the hope of developing a more fluid application of them to household studies. The goal is to accomplish a wider ranging conception of the ways that people make and use things in and around the household and how that may or may not articulate to other scales of social organization thereby reproducing society.

Productive Activity. The possibility of fluid or varying degrees of participation in productive activities is immediately apparent when considering households archaeologically from an activity-based approach. Much attention has been focused on explaining variable levels of productive activity in Mesoamerica from household production to full craft specialization all taking place in the household or adjoining workshop. This literature has traditionally leaned towards political economy modeling over the past 20 years. Purely political economy interpretations regarding the meaning of household work or productive and consumptive activities by nature leave the domestic sphere with little autonomy.

The topic of production intensity arises repeatedly in this considerable literature concerning craft specialization, the most sophisticated level of production for ancient complex societies (Brumfiel 1987; Brumfiel and Earle 1987; Clark 1995; Clark and Parry 1990; Costin 1991; Hester and Shafer 1987, 1992, 1994; Lewis 1995; Shafer 1985; Shafer and Hester 1991). Political economy models of production leave households with only two positions. Either the production at the household is at the mercy of the state and essentially owned by the state, or it is simply a part-time interest for use within the household itself, an unspecialized endeavor which does not provide a significant contribution to the political economy.

Two significant problems are evident in the political economy modeling of household production from a craft specialization perspective. First, there is a confusion of terminology related to the concept of household production based on the part-time/full-time analysis of intensity (Brumfiel and Earle 1987). From this perspective household production is usually considered to be part-time, non-specialized, utilitarian and uninteresting to the highest social authorities, greatly reducing the significance of domestic productive activities. The second issue that arises from criticisms of domestic production is an issue of deciding which activities are actually "productive." Households do often produce things to be utilized within the household and sometimes beyond. When a household relies on itself for certain items needed on a daily basis it removes the need or responsibility for others to provide it. As a result the household is implicitly participating in the overall economic system even when not producing a surplus. Some recent research has noted the importance of social identity in craft production (Costin 1998:3). Most are generally still only concerned with that production that occurs over and above that needed for household maintenance.

Some important inroads have recently been made concerning agricultural subsistence by households (see Dunning 2004; Robin 1999, 2003, 2002; Yeager and

Robin 2004). However, food acquisition and food preparation in general has not been of interest to the political economy models in that it does not relate directly to the acquisition of wealth (Hendon 1996:50). In day to day life it may have often been necessary to produce things not meant to be exchanged or that lived outside of a direct exchange relationship. Clearly, that does not have to limit its social *value*. Value is a judgment that is made within a cultural context (Appadurai 1986:5; Holbrook 1999:5). Since sustaining the household, however, does sustain the social order, it is important to look at all kinds of productive activities.

If culture is visible in human action, then the products of that action is an essential means by which archaeologists derive an understanding of past cultures (Dietler and Herbich 1998:233). Following this same line of thinking, material culture has a social and technological context from which it derives meaning (Chilton 1999:1). Material culture perspectives broaden the notion of production to one that goes beyond the end product itself and includes the practices associated with technology, manufacture, use, and discard, all crucial aspects of social identity (Chilton 1999; Costin 1999; Dietler and Herbich 1998). Dietler and Herbich (1998:235) have observed that the making, exchanging, using, and discarding of things are an important part of human social activity. "Both things and techniques are embedded in and conditioned by social relations and cultural practice, and this fact holds out the promise that an understanding of this complex interrelationship may inform about society and culture in general" (Dietler and Herbich 1998:235). A further emphasis on the importance of the everyday practice of material culture production and use is clear when we consider that "people mediate their social relationships through the production and use of artifacts" (Dobres 2000:1). The arena of the household as a context for making things then becomes a meaningful key to social practice whether the items made are sent for use outside the household or used within it.

One way to broaden the exploration of productive activities within the household is to expand the notion of production to include maintenance and subsistence activities. Including all productive activities helps to remove the bias of *value*. The set of tasks involved in food processing for example, as Hendon (1996) has noted, requires the acquisition of particular knowledge and skills. Food processing in a productive sense may be one of the most important sets of social activities performed by households (Fung 1995; Hastorf 1991). Gero and Scattolin (1995) have experimented with applying commonly accepted concepts of specialized production to so-called non-specialized productive activities. This type of approach shifts the focus to social relations within the household (and also between households) organized around all kinds of productive activity.

Use Activity. In addition to being a locus of production, households are also important locations for the consumption of material culture (Allison 1999b:8). Due to the issues in defining household production (as outlined above), household consumption has received limited attention. Much of the difficulty stems from a Marxist analysis, which considers productive labor to be truly productive only when a surplus is produced, so that there is a quantifiable market value for the activities associated (Narotzky 1997:149; Sacks 1974:213). In this type of analysis, household subsistence or utilitarian production is equated with household consumption, such that it is a natural outcome of production as opposed to an active influence in productive activities (Allison 1999b:8).

Costin and Earle (1989:691), and Meadows (1999:105) note that, decisions concerning what and how people consume are socially, economically, and politically driven. Douglas and Isherwood (1996:34 [1979]), also emphasize that consumption is embedded in social process, and argue that goods are imbued with information or ideology, allowing consumers to engage in series of social exchanges outside that of the product itself. Along these same lines a potential source for motivating consumption is identity construction, or the construction of selfhood (Firat and Dholakia 1998:128).

Consumption relationships, then, are based in processes of decision-making within particular social, economic, and political contexts (Narotzky 1997). Narotzky (1997:140) describes households as bundles of relationships that are constantly being negotiated. She notes that consumption relations exist at many levels of society including 'domestic networks,' that emphasize inter-household relationships, while acknowledging the importance of intra-household relations. The interactions of people involving issues of power and access to resources constitute some of the relationships formed around consumption.

It is evident from this discussion that "making" and "using" things is sometimes overlapping and indistinguishable. It is difficult sometimes to determine when an item of material culture ceases to be produced and begins to be consumed, as in the example of food processing. Likewise, some items of material culture are produced for the express purpose of being utilized or consumed during the process of producing something else. An activity-based approach to households helps to shift the focus from categories to practices.

Reproducing Social Identity: Gender, Age, and Class

It is important to remember that people are the residents of households and are represented by the activities that we seek to uncover archaeologically. The relationships among people are acted out, at least in part, in the household setting. Internal household relationships are social ones and are culturally defined. In addition to these relationships are social relationships inter-household relationships and the relationship of the household to the larger community or society as a whole. One way to examine internal household relationships and/or activities in social context is through the consideration of reproduction. Moore (1994:88) argues that we cannot understand the internal relationships of households or their connections to larger scales of society unless we examine the relations of reproduction.

Reproduction has been commonly addressed from three perspectives, biological reproduction, reproduction of the labor force, and *social reproduction*. For the purposes of this study, I will focus on the issue of social reproduction as derived from Henrietta Moore's work (see Moore 1988; 1994). Social reproduction moves beyond biological reproduction to the ways in which society produces individuals who hold particular social identities and are differentiated appropriately (Moore 1994:90).

Social reproduction, or the social relations of reproduction "are a set of arrangements which reproduce the human group from generation to generation" including, but not limited to, the means of constructing and organizing sex, gender, procreation, and domestic labor (Moore 1988:48). Since households are not bounded units and are also an entity that is itself reproduced within a particular social context, reproductive relations are not limited to the household an indication that their consideration is primary to an understanding of social, political, and economic aspects of society beyond the household (Moore 1994:89). As Moore states (1994:93) "what makes households distinctive is not that they produce people and thereby reproduce society, but that they – along with many other institutions – produce specific sorts of persons with specific social identities."

Gender identity construction(s). Archaeological issues of gender construction have typically relied on feminist theory. Historically feminism has undergone a series of dominant concerns which have often been explained using a wave metaphor. The 'first wave' was concerned with women's voting rights during the late 19th century women's suffrage movement. The 'second wave' of unrest came in the 1960's during the equal rights movement. 'Third wave' feminism has been closely tied to the postmodern interests in the cultural and symbolic aspects of gender difference and relations (Gilchrist 1999:2). Archaeologically, the trajectory has been similar. Early studies regarding gender in the past was geared towards *finding* women in prehistory (Conkey and Gero 1991; Gero and Conkey 1991; Tringham 1991). This was a valiant, valuable, and necessary step towards a more evenly deciphered past.

Gender focused archaeology has also been heavily criticized for its admittedly feminist perspective. It resulted in the tendency to focus efforts in archaeological gender research towards women specifically (absent of sexuality), while also limiting the effect that time has on sex, sexuality, and gender, along with other factors in the construction of identity, such as age (Meskell 1998:211). Feminist theory has, however, provided an important framework from which archaeological research began to draw. The use of this framework in archaeology has developed inroads into the conceptions of identities of the past beyond the category of women to more diverse identity constructions, their context, and the varying expression of these over time. The result has been the acknowledgement of changing or fluid conceptions and expressions of identity/ies.

I will rely on Gilchrist's (1999:1) definition of gender as the cultural construction of sexual difference in historical context. Her definition emphasizes the issue that gender is an expression of a cultural construct, yet the biological relationship cannot be denied or overlooked since gender is often directed by the cultural construction of human biological difference. Gender is also often regulated or governed by that cultural construction or in other words the cultural and historical context that defines it (Butler 2004:40). Maleness and femaleness for each individual is also embodied, held and expressed within and from the body. Following these lines, sexuality is also an embodied practice that may be governed in the same ways as gender and by the same forces (Butler 2004:40). The expression of, or performance of, gender and sex/uality is where power attaches to action (Butler 1993:225).

Age as a factor of identity. The construction and organization of gender and other kinds of difference related to identity are central to social reproduction (Moore 1994:92). Gender specific manners of being may be perceived as "learned behavior, resulting from historically specific processes of socialization" (Gilchrist 1999:9). Sofaer Derevenski (1997a: 487) has suggested that gender and age be studied together acknowledging the temporal aspect of identity construction as subject to change over the life course. Such an approach also acknowledges that socialization is also a construct defined in cultural context. Age and the human life cycle may continually be socialized as each person moves across their life.

The most recent studies regarding age have come from a concern over the invisible, much like the origins of gender archaeology. Therefore children have been the initial focus of new approaches to the archaeology of identity related to age groups (Ardren and Hutson 2006; Baxter 2005; Greenfield 2000; Joyce 2000a; Kamp 2002; Kamp et al. 1999; Meskell 1994; Moore and Scott 1997; Sillar 1994; Sofaer Derevenski 1994, 1997a, 1997b, 2000; Trachman 2006; Trachman and Valdez 2006; Wilkie 2000). Children are also social beings who, like adults, are capable of a plethora of interactions. Obviously children were present in the past and participated in the circumstances of their daily life, their community, and their society. The actions of children are as likely to leave patterns or traces in the archaeological record as any individual's or group of individuals.

It can be challenging to derive a culturally and historically meaningful theoretical definition however of child or childhood. It is as difficult as defining any other theoretical notion that we want to approach archaeologically, such as *household* or *gender*. It is important to start by deconstructing preconceived ideas in our own modern categorization of age distinctions. Western understandings of age compartmentalize life cycle experiences and can bias our ability to approach an investigation of childhood (Sofaer Derevenski 1994).

With this in mind, children can be defined by the cultural perception of a person's life stages. Ariés (1965) emphasized the significance of considering historical context in our conceptions of children. It follows then, that age divisions are socially constructed within the context of a particular social history (Sofaer Derevenski 1997b:194; Gilchrist 1999:89). Defining the concept of child*hood* follows likewise. It is the *experience of* particular ages, derived contextually and historically, which establishes childhood. Children are also active participants in the negotiation of that experience (Sofaer Derevenski 2000:8).

Given that society is reproduced by the proper socialization of individuals (Moore 1994). I would like to reiterate that it cannot be assumed that socialization is only practiced during childrearing, or during the early phases of the lifecycle which we associate with childhood. It is nonetheless an important aspect of the childhood experience. Socialization is practiced at multiple scales of society and is a process that occurs differentially over the course of a person's life. It is difficult to achieve a full understanding of how societies reproduce diverse identities over the life course without addressing the multiple factors of identity fluidly.

Material expressions of gender, age, and position. Of specific importance for archaeology, in terms of identity/ies and the reproduction of culturally and historically situated people, is their material consequence. Sørensen (2000:94) has suggested that it is "…the physicality of objects, which gives them the ability to transcend the life of individuals and the limits of events, is seen as providing the material environment for the reproduction of society, including its gender ideologies."

The expectations, obligations, and consequences of identity, based on factors like age, gender and status are often coded in material culture, writ both large and small. In addition to personal interactions, children learn about identity and all the accompanying expectations, especially those related to appropriate behavior through the material world around them (Sofaer Derevenski 1997b:196, 2000:8; Gilchrist 1999:90; Sørensen 2000:9; see also Joyce 2000a, 2000b; and Joyce and Hendon 2000). Buildings, monuments, temples, and other structures in the Maya region are often inscribed with information about certain events and people. They are also encoded with acceptable, normal expectations of behavior that are habitually reinforced by repetitive action (Bourdieu 1977). Portable items are also imbued with cultural information about identity and present a very special way of communicating because they can be produced, utilized, and enjoyed in much more private settings. Interaction with portable items is often much more personal or intimate. Given the power of objects to hold information, productive activity becomes a way in which agency is held. Creativity and decision making prove to be important factors in which or whether (encoded) information is repeated in the productive process and passed along and whether or not particular items are reproduced at all.

Material objects connect generations to each other and are essential for arbitrating or reconciling tradition (Sørensen 2000:9). Costume ornaments and other personal adornment for example, is a fundamental mechanism for reproducing and communicating role distinctions and positioning among interacting members of a group (Dietler and Herbich 1998:242; see also Joyce 1999; Sørensen 2000). Joyce (1999, 2000a, 2000b) has successfully highlighted the importance of costume in expressing both social and individual difference for the ancient Maya. Identity, expressed through sculpture, painted images, portable artifacts, and symbolic action and their role in identity formation is also being addressed in Mesoamerica (Ardren 2002; Ardren and Hutson 2006; Benavides 1998; Brumfiel 1991; Joyce 1992, 1993; McCafferty and McCafferty 1991, 1994; McCafferty and McCafferty 1999; Trachman and Valdez 2006). Most of these acknowledge the importance of symbolic meaning in material expression along with everyday activity and specific symbolic action. Ritual is often considered outside of everyday life or daily activity. However, when ritual is contextualized within the household, these symbolic activities are not necessarily separate from everyday experience. Since the beliefs that ritual embody are a part of ideology, whether the symbolic acts are performed everyday or not, they are arguably a part of everyday thought.

A final thought in considering the materiality of households and their reproductive nature for archaeology concerns an added perspective to activities within the household. I also would argue that if food processing is a productive activity, nurturing activities are also productive activities. If household reproduce socially appropriate people, then they might also produce them. Certainly, child rearing is an activity of social reproductive, but it may also be productive. Care of the elderly might not seem to be an action of social reproduction at first glance. However, I would argue that since we are socialized repeatedly or continually over the course of our lives, care of the elderly is also a household reproductive activity. It provides an opportunity for elders (and other adults) to pass on tradition, oral history, and stories thereby reproducing an understanding of their world.

Households also reproduce ideology. Identity is constructed and expressed within a framework of ideology, or a set of beliefs about the world, or the society in which people live. It includes political, economic, social, and religious aspects and by definition ideology is *shared*. Since households reproduce society in reproducing properly enculturated persons (Moore 1994), they also by extension clearly reproduce the ideology of that society. Since ideology must be shared in order to function, the interested groups may be of varying sizes or scales of social organization within that society, including the microscale. Given the level of household participation in or acknowledge of that belief system that is necessary in order for the beliefs to survive, then clearly households interact with or hold ideology. With the understanding of the pragmatics of ideology, the household participants are viewed having a more active social role in regards to cultural beliefs. Rather than simply being spoon fed their culture by the dominant political forces, or in the case of the Maya the royal or elite few, household members might experience a certain flexibility in how it participates in the set of cultural beliefs under which it operates. Therefore, they would also possess the ability to negotiate ideology and in essence change it to a degree or not, actively or passively. In other words, for household members negotiation often happens within a culturally and historically contextualized framework. Negotiation is the ongoing maintenance of an agreed view of rights and obligations (Sørensen 2000:61).

Given the diversity of needs and obligations within households, as well as conflict within and between households and the people who occupy them, an ability to negotiate the parameters of ideology and identity expression is crucial for the society to reproduce itself (Moore 1994). Many of these same attributes have been ascribed to other levels of social organization which are essentially social aggregates of households, like corporate groups, or "house societies" (see Lévi-Strauss 1983, 1987; and also for application to the Maya region see Gillespie 2000; Hendon 2000b; Joyce 2000b; Joyce and Gillespie 2000). Households, or the microscale of social organization or reproduction, are the locus of reproducing ideology and society, and they must be able to legitimize their position, negotiate their position, and express their position materially within the existing cultural framework, and possibly even outside it. In this way, each household tells its own story based on its own context, in time and space, and its own sort of developmental cycle. As a result each household asserts its identity based a diverse set of circumstances. I further suggest the possibility that households not only reproduce society and thereby ideology, but also produce their own ideology of sorts in the process that legitimizes the ability for this fluidity of cultural expression.

At any rate, social identities created within a specific social sphere have direct implication on daily activity, material symbolism, and material distribution in and around the household as well as outside it and impact our ability to visualize the lives we are excavating.

Field and Analysis Methodological Goals

The best approach to methods is, of course, a logical one with the research questions and theoretical perspectives in mind. We must answer our research questions with appropriate methods and also balance this with the use of the most advanced and accepted modes of operation within our field. The world of proposition is an idealistic one. What is executed in reality, once we reach our international destination, have successfully crossed the long parcel of jungle in our 1960's model UT surplus pickup truck, or on foot, donkey or whatever our type of transportation is available, we may find we have forgotten our compass, were unable to charge the batteries to the Total Data Station, or do not have the equipment we need at all.

An archeologist's job then is not only to balance the research question, theoretical perspective(s), and current acceptable professional practices, but also to consider our site's location, geography, accessibility, and our financial resources. In sum, we have to get the most/best data for the time and money spent. Needless to say, I began my project in an ideal world with some great methodological goals and ended in the cold light of day with the best fieldwork and analysis that I could muster during a given season (with an ever changing and growing ability) and more data than I could have predicted or even imagined.

Fieldwork

I chose households from the settlement area around Dos Hombres for the dissertation project for three reasons. First, each household is a accessible by an all-weather road within the PfBAP property, a short 20-25 minutes drive from camp. Although one household was nearly an hours walk from the road, the other two were located very near the road at the top of the Rio Bravo escarpment. Second, work has been done in the civic ceremonial center so that some knowledge of the construction sequence and occupational history of Dos Hombres is known (Brown 1995; Houk 1996). Finally, and especially, this settlement area was previously mapped in two different transect surveys (Hageman and Lohse 2003; Lohse 2001; Figure 1.5). Previous mapping of large swaths of household settlement areas here make the project economically feasible and prime for a microscale focus with excavations methods detailed enough to reasonably investigate each household group thoroughly.

As noted in the previous chapter, Lohse (2001; see also Hageman and Lohse 2003) established six different environmental subzones across the Dos Hombres transect survey research area. I excavated three households within two different environmental subzones (Figure 1.5). Blake (1988) has observed that households vary greatly according to available resources that are specific to its environmental setting. Sampling within two different environmental subzones will help to identify some level of diverse resources due to the nature of each subzone's ecology and available raw materials. I chose the Escoba Bajo (transitional area) and Transitional Uplands subzones for this research since they had the most settlement in them in general and the areas were accessible as already noted.

Maya households. I delineated the physical archaeological form of household, its architecture, or in this case the unexcavated mounds, much the same as have many settlement studies in the Maya Lowlands (Adams 1981; Hageman 2004; Lucero et al 2004; O'Mansky and Dunning 2004; Rice and Puleston 1981; Robichaux 1995; Tourtellot 1988), combined with previous Maya household research (Becker 2001; Carmean 1991; Fauvet-Berthelot 1986; Gonlin 1994; Sheehy 1991; Sheets 2000; Sheets et al 1990; Webster and Gonlin 1988; Webster et al 1997). I also drew upon ethnographic (Blake 1988; Fauvet-Berthelot 1986; Wauchope 1973) and historic information (Alexander 1999) as did many of the other studies. The result is typically a group or cluster of mounds that are focused on an open space or adjoin to an open space such as a yard, courtyard, or plaza-like space. In some cases a basal platform supports single or multiple structures. Other variations include the incorporation of the open activity space onto the platform as well, or simply one or more structures can be found spatially associated with very little formal architecture but generally still with an activity space adjoining. The smallest of these are very small, low mounds often nearly invisible (Johnston 2004).

Interestingly, the physical attributes and spatial arrangements of archaeological households look similar to the many modern configurations. There is a household compound with either single or multiple structures and usually a garden associated as well. They also essentially can grow or change over time as is possible or needed. Often modern Maya houses are partially or fully perishable and sometimes stucco masonry eventually replaces perishable material during the household life cycle. Alexander (1999) and Killion (1990) remind us of the importance of the house-lot as domestic activity space since it is not only architecture, but the open spaces in which many Maya household activities take place (see also Becker 2001; Robin 1999, 2003).

On-mound exposures. In addition to environment and resources, social positioning in conjunction with the life cycle of the household are also factors that contribute to the diversity that is possible in the material remains of households and their activities along with their architecture and spatial form. Therefore, both horizontal stripping and deeply probing excavations were used in order to control for the diachronic and synchronic nature of the deposits and gain a better understanding of these aspects of each household. An excavation grid was also set up separately for each set of excavations divided per mound group. Each household group was given an operation designation according to the PfBAP designation system.

Each of the three household groups chosen for investigation was excavated with a goal of a 50-70% sample of architecture. Deep vertical exposures were carried out in order to establish construction sequences (if any), chronology, and stratigraphic sequence(s) for on-mound contexts. Shallow horizontal exposures were used on occupation floors and architecture in order to determine architectural form and style, along with the activities associated with the structure or feature that the mound may have represented. I have chosen an activity based approach to the archaeology with attention to the spatial distributions of both activities and artifact towards an understanding of both the activities practiced on a daily basis along with the ways that people oriented themselves and used their space in the household. Therefore, piece-plotting of interior occupation surfaces were used in order to collect information activities that may have taken place in those interior or areas or in conjunction with various features that had mound morphology. In addition, interior features were excavated including burials and associated grave goods along with other potential ritual deposits.

Discard. A final aspect of any consideration of using or consuming things has to do with the archaeological consequence of use activity, discard. Discard is really the last interaction that a person or household has with an item. Discard also can leave a detectable material trace and patterning, though sometimes not easily decipherable (Schiffer 1987). The original concern for the disposal of trash came from archaeologists concerned with behavior and how behavior affected material, in this case disposed of material, patterning in the archaeological record (e.g. Hayden and Cannon 1983, 1984; LeeDecker 1994; Rathje and Murphy 1992; Rathje and Ritenbaugh 1984; Schiffer 1976; 1987). These studies have relied heavily on the use of ethnographic observations applied to archaeological deposits.

Middens are considered to be final discard areas with great potential for archaeological research. They can be either primary or secondary locations of discard, since trash is sometimes moved from its original waste disposal site after initial deposition in an effort to manage waste at a larger scale (Shiffer 1987:67). Often when trash is moved from a primary to a secondary location, some remnants or a thin layer of the trash remains in its primary context, a residue left behind. This is referred to as a *sheet trash* by Schiffer (1987:45) and has also been applied archaeologically to thin deposits of trash that are common around areas of habitation. It is difficult to tell whether the thin deposits represent strewn patterns of primary discard or the warehouse-disposal modeling of Schiffer's (1987:45). There is also danger in the terminology of conflating different kinds of discard practices, but it is something that can be difficult to tease apart on the ground.

Some trash as Hayden and Cannon (1983:126) point out can be valued differentially by how readily it lends itself to reuse or recycling. When items are set aside for potential reuse or tentative disposal it has been referred to as *provisional discard* in archaeology (Deal 1983; Hayden and Cannon 1983; Schiffer 1987). Some provisionally discarded items are definitely on their way to permanent discard, while others are really in a sort of storage, either for later possible use or later discard. Schiffer (1987:68) also noted that household trash cans could be a sort of provisional discard. Inevitably a discussion about provisional discard will lead to the associated topic of storage. It seems that discard and storage may exist on a continuum with dumps at one end of the scale and containers on the other. Schiffer (1987:69) used the examples of basements, pantries, medicine cabinets that are sometimes cleaned out and the stored items reassessed and possibly thrown away. Somewhere along the continuum from storage to discard or similar to provisional discard might also be something like *provisional storage*, for items that may have been closer to use than provisional discard or things that will be recycled or reused. The concept of heirlooming or storing away things with sentimental or symbolic value, but little use, reuse or economic value is another alternative or point along the continuum. These items are in a special kind of provisional storage since the items are clearly taken out of use, but not discarded. The sentimental or symbolic value could also change over time as in the example of the basements. The various forms of discard are clearly an important consideration, especially in developing appropriate methods and analysis (see below) in an archaeological investigation of households. As a result I utilized several approaches to excavation in order to be able to sample all kinds of activity, discard activity included.

Off-mound exposures. The off-mound excavations were developed to study activities, including discard activities, occurring in potentially diverse forms. A series of 1 x 1 m, and 1 x 2 m test units were placed, mostly arbitrarily, but evenly (and in one case systematically), around each of the house lots. Generally these test pits were utilized for two purposes. First, areas that were around the household lot were tested for midden or discard areas. Second, these and additional test pits were used to observe subsurface modifications to the open spaces in and around each household. Both subsurface and super-surface features were also excavated and the exposures of these were either widened or terminated according to their initial exposures or findings. The features associated with each household group that were tested were done so based on an assessment of the surface morphology. They included terraces, middens, hearths, very small mounds, possible walls, and depressions.

Paleobotanical Sampling. In addition, soil samples were collected from various contexts including both on-mound and off-mound excavations. Soil samples were to be used to determine both micro- and macro-botanical remains in order to gain data concerning the foodways of these ancient households. Soil samples were taken from each stratigraphic level of several designated units for each household, often utilizing the midden test pits to do so. These data were to serve as a line of evidence concerning the foodways of the ancient households. Half of the samples were taken and intended for later pollen analysis. Those were subsequently exported to Texas. The remainder was set aside for macro-botanical analysis. The majority (2/3) of the macro-botanical soil samples underwent flotation in a field flotation device. The flotation device utilized was a very sophisticated model made by FLOTE-TECH. The Model #A1, Serial #79 was an aluminum double compartment separation and recovery unit with a motorized water pump. The unit performed "multi-modal flotation" using both water and diffused air to remove up to 30 gallons per minute of sediment. It had both heavy and light fraction capacity with fine fraction screen at 0.285 mm and an overall water capacity of 100 gallons.

Of the samples processed in the flotation device, a cursory glance was taken at the organic remains. Outside of the recovery of additional human remains from the floted samples, taken from in and around burial contexts, no floral or faunal remains were identified macroscopically. The very poor preservation of soils in the shallow household deposits is likely the reason for the lack of observable remains, rather than an indication of a complete absence of foodstuffs in the samples necessarily. As a result, no further analysis of these remains has taken place to date. Given the resources available for the present study, it did not seem prudent to spend additional resources with this line of evidence. However at a later date, an analysis by a contracted paleoethnobotanist may be considered in order to substantiate (or contradict) these preliminary observations regarding the preservation of botanicals. This could be accomplished by using any of the (1/3) remaining flotation samples as well as an analysis of the pollen samples.

Activity Test Pits: An experimental test pitting program was designed with two goals in mind, one being to assess the effectiveness of the method and the other to detect areas that were clearly indicative of activities and their locales. Each unit was excavated only down to the terminal occupation surface on the open plaza floor. The recovered artifacts were examined both quantitatively and qualitatively. The quantitative information for each of these units relies on the assumption that certain activities would be performed repeatedly in the same or nearby areas and an overall density calculated could minimally indicate "hot spots" for activity in general. The qualitative data may reveal more about which kind of activity was performed in a given locale.

One caveat should be made here with regards to all of the excavations in this study, including the activity test pits having to do with the problem of the 'Pompeii Premise' (see Schiffer 1985; Ciolek-Torrello 1989). This is issue that must be addressed when using the piece-plotting or otherwise collecting artifacts associated with an occupation surface and/or activity area as an activity-based household methodology either on-mound/architecture or off. From previous research of Maya households it is clear that households are often occupied over a long period (McAnany 1993:79) and yet often have relatively shallow, thin deposits. This is related to what Schiffer (1987) has termed cultural site formation processes. Therefore, locating the debris that is on or associated with an occupation floor or surface in this case can represent much more than a snapshot in time. Natural site formation processes in the eastern Petén tropical forest of the central Maya lowlands can also have its own destructive or formative effects skewing what is seen on or around the household spatially. As with any archaeological project performed in any environment, both natural and cultural site formation processes must be taken into account when interpreting the excavated data (Schiffer 1985, 1987; Ciolek-Torrello 1989). Using activity based methods in the excavations in and around each household was still very useful in ascertaining the types of activities that might have taken place in a given locale and each locale's spatial relationship within the household/lot.

Material Analyses

The vast majority of the artifact analyses were conducted in the in the R.E.W. Adams Archaeological Research Facility field laboratory. Several people contributed to the material analyses by performing the analysis of a class of artifacts. Specifically the ceramic analysis and the osteological analysis which are both appended to the end of this dissertation. Lauren Sullivan (2003) is the PfBAP project ceramicist and is credited for the very careful typological, morphological, and chronological assessments related to the ceramics found in each of the three households investigated in this study (see Appendix B). Julie Saul and Frank Saul (2003) are the PfBAP project osteologists and are credited for their thoughtful analysis of the human remains excavated in this dissertation research along with some of the burial excavations as well. Their full report is appended to the end of this dissertation along with a report glossary (see Appendix D). As for the remainder of artifact categories, chipped stone, small finds, obsidian, groundstone, and faunal remains, I performed these analyses and am responsible for any and all shortcomings found in their methodology or results. These data are presented in raw form in the Appendices of this work (Table 2.1).

Chipped stone. I followed a general methodology previously laid out by the PfBAP lithic analyst David Hyde for my analysis of chipped stone. I took a basic set of typologies while adding and modifying a few type categories that I considered to be particularly meaningful for household lithic assemblages (see Appendix A, Tables A.1 and A.2). Initially, chipped stone was placed into three categories, formal tools, informal tools, and debitage. The formal and informal tools were analyzed based on similar typologies and goals set out in previous technological analyses in northern Belize (Barrett 2004; Hester 1985; Hester and Shafer 1994; Hyde 2003; Iceland 1997; Shafer 1985, 1994). I also performed use wear analysis on the formal tools in addition to their technological analysis. The tool analysis utilized concepts also laid out by Andrefsky (1998).

Appendix	***Table***	***Artifact Category***
Appendix A	A.1	Formal Tools
	A.2	Informal Tools
	A.3	Debitage
	A.4	Obsidian
Appendix B	B.1	Ceramic Data (Lauren Sullivan)
Appendix C	C.1	Groundstone
	C.2	Small Finds
Appendix D	n/a	Osteology Report (Julie Saul and Frank Saul)
Appendix E	E.1	Faunal Data

Table 2.1: Material analyses data per appendix.

As for the debitage analysis, I used a technological typology that would emphasize the ability to replicate the study as clearly as possible (see Andrefksy 2001). Although the typology is fairly simple and traditional, it does lend itself to a reduction sequence. The flake categories that I used are: primary, secondary, and tertiary flakes; biface reduction flakes; pressure flakes; and blades. In addition to a typology of flakes, I also used a typology of cores that divided cores in to flake cores or blade cores, determined by the length of remnant arises or scars on the core. Then various attributes of the cores were also recorded (see Appendix A, Table A.3). A future goal will be to perform a replication study to fully understand these household lithic assemblages as is a necessary step in the completion of a typological analysis (Johnson 2001).

As for the respective numbers of debitage versus tools, specifically informal tools, the picture may actually be slightly skewed. The analysis of informal tools is often determined by form, scrapers, perforators, and such. It is also sometimes assessed by the observation of use-wear present on a flake or other type of debitage. A flake can be considered an expedient tool, or in this analysis an informal tool, namely a *utilized flake*. In those particular cases, and specifically in this analysis, this type of informal tool was classified by examining each piece macroscopically and the use of a 5x hand lens. Given that, it is highly possible that more of the debitage collected could have been utilized than was visible, the overall category of Utilized Flake may be biased by the methods chosen for the basis of classification. Some use-wear cannot be seen without higher powered magnification and may have gone undetected in this collection. Conversely, it is also possible that some of the use-wear that was detected was actually caused by depositional or post-depositional excavation and handling.

Chipped stone materials were also assessed during the analysis of chipped stone formal and informal tools and debitage. I used a visual means of typing each category of stone based on my own experiences over the years and also based on Luedtke's (1992) definitions and descriptions. The types of stone, other than obsidian, that were identified in the assemblages included limestone, chert, chalcedony, jasper, petrified wood, and quartzite. I also then graded each on a relative scale of quality based on the level of graininess. It is a qualitative judgment and is clearly limited to the relative quality, or best and worst quality, of stone that was actually collected in the overall assemblages.

Obsidian. Obsidian tools were analyzed technologically as well primarily utilizing the typological scheme devised by Clark and Bryant (1997). The basic typologies were modified and/or combined with the technological aspects known from local prismatic blade production assemblage found in the civic ceremonial center of Dos Hombres (Trachman 1999a, 1999b, 2002; Trachman and Titmus 2003). Metric data was also collected on all obsidian chipped artifacts along with macroscopic use wear attributes and platform type (see Appendix A, Table A.4).

Small finds. As for marine shell artifacts, both modified shell and unmodified, typologies were established by early researchers in the Maya region, first Kidder (1947) then subsequently by Andrews (1969), Willey (1972) and most recently reviewed and modified by Buttles (2002) and Hohmann (2002). My typologies followed both Buttles (2002) and Hohmann (2002) in the classification of different types of shell artifacts including beads, discs, pendants, and adornos (see Appendix C, Table C.2). I consulted several sources for marine shell species identification (Abbott 1962; Humfrey 1975; Morris 1973) as well as relying on Palma Buttles for species identification of several of the Preclassic shell artifacts for which she has extensive experience. Greenstone beads and ornaments were also analyzed according to the bead typologies set out by Buttles (2002). Buttles also aided in the mineral identification of several of the greenstone beads. Both marine shell and greenstone artifacts were analyzed metrically as well as morphologically and color documented using a Munsell color chart.

Groundstone. I consulted a number of sources related to groundstone typologies and found that some typologies were based on ancient function and some were based on description. The usual problems arose in the use of descriptive terms that imply function, but are based on modern knowledge. One example of this is the use of the term "whetstone" seen in many site reports. Generally, I steered clear of such terminology while utilizing appropriate typologies laid out in previous reports (Buttles 2002; Clark 1988; Glaab and Valdez 2000; Willey 1978; Willey et al 1994). I also collected metric data as well as made mineral identifications where possible (see Appendix C, Table C.1).

Faunal Analysis. All faunal analysis was performed in the field lab. Each species of bone or shell was identified counted and weighed. Only faunal shell, primarily in the form of freshwater snails, was documented in any of the excavations. Therefore there was no need to employ a faunal specialist. The only faunal bone found (N=2) was from rodents and these were clearly intrusive. Otherwise, the only other animal remains were from marine shells that were found in the form of ornaments. These were identified for species and analyzed as outlined above in the small finds section.

Chapter 3: Excavated Households Excavated Lives: The Results at Pak'il Nah

The data and their resulting analyses, presented in this and the subsequent two chapters, were gathered over the course of five years and represent a total of 18 months of excavation and four months of laboratory analysis.

As previously mentioned, two different settlement surveys had been performed in the Dos Hombres vicinity (see Hageman and Lohse 2003; Lohse 2001) prior to my undertaking this work. The Dos Hombres transect survey ran to the east and west of the site, and the Dos Hombres-to-La Milpa transect survey approached the site from the northeast (Figure 1.5). This household investigation took place within the limits of the Dos Hombres transect survey both east and west of the site. The Dos Hombres transect survey was accomplished by designating two 2,500 m long transects comprised of ten 250 m^2 blocks in each transect (Lohse 2001). Transect A, the western transect, began at the northern end of the Dos Hombres ballcourt and continued west 2500 m, while Transect B, the eastern transect began at the southern end of the Dos Hombres ballcourt and continued east of the site 2500 m (Figure 3.1).

The Operation 26 household group is located in Block 5 of Transect B, the eastern transect. Block 5 is the fifth survey block of ten beginning at the ballcourt of the site of Dos Hombres and moving directly east of the site (Lohse 2001; Figure 3.1). Therefore, Operation 26 was 1,150 m east of the site center.

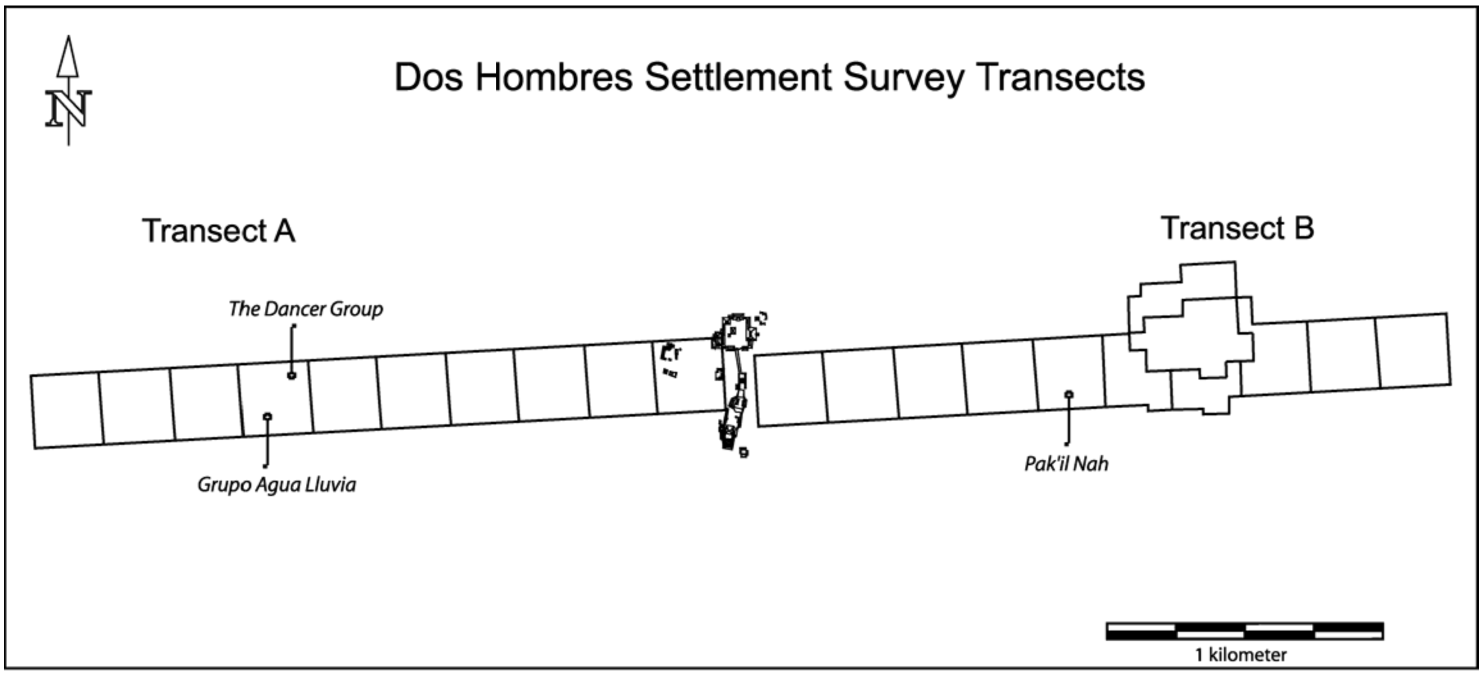

Figure 3.1: Dos Hombres settlement survey transects (after Lohse 2001, figure 5.1).

The environmental subzone for blocks 1 through 4 of the eastern trending Transect B is primarily defined as Escoba Bajo, a poorly draining area with thick vertisolic clay soils (Hageman and Lohse 2003:112; Lohse 2001:51). The Escoba Bajo subzone was also previously described, though not named as such, by Brokaw and Mallory (1993:22) as a low lying swamp forest with seasonal rains, clay soils, and poor drainage.

Block 5 was defined as being located in the Aguada Margin subzone, a zone of varying topography and thin loamy soils over limestone bedrock mixed with pockets of clay indicative of the nearby bajo (Lohse 2001:57). Block 5, however, is a transitional area that is at the interface of both the bajo, and the aguada margin zones. In other words, elements of the bajo are present in Block 5, such as the dense undulating clay soils, while the general topography is beginning to trend upward toward the aguada margins with taller vegetation including some hardwood species mixed with some of the same species as is represented in the Escoba Bajo (Lohse 2001:57). Within Block 5, the Op 26 household group was originally designated number 10 in the sequence of mapping by the earlier mapping team. Hence its survey field designation was the B-V-10 group, the tenth group mapped in Block 5 of the B transect.

The B-V-10 group was further designated at the time of excavation as Operation 26 according to PfBAP excavation designation standards. For ease of identification however, I have given each household group a non-numeric proper name. From here forward the Dos Hombres (RB2), Operation 26 household group will be referred to as *Pak'il Nah* (*masonry house*). The Pak'il Nah group is not known to have been excavated prior to the investigations presented here. There is evidence of it being known of at least among *Chicleros,* as there is a Chicle tree (*Manikara zapota*) present within the mound group that has at one time been tapped and is marked with the characteristic criss-cross machete scars.

Vegetation within and surrounding the group is a blending of vegetation from the nearby bajo zone and that of the aguada margins zone. Escoba palm (*Cryosophila argentea*) and low-growing vines are mixed with Chicle (*Manikara zapota*), Ceiba (*Ceiba pentandra*), Gumbo Limbo (*Bursera simaruba*) and Allspice (*Pimenta dioica*) trees. The natural soils are thin organic layers over limestone bedrock with intermittent areas of shallow clay to clay loam.

Excavation Summary

Summary of Work

Pak'il Nah, a plazuela group, is the largest residential group in survey Block 5 and possibly the whole of the eastern transect (Figure 3.2). Size in this case refers to both the land area occupied by the group of mounds or structures and the size of these combined structures. The size of structures is based on the height of the largest mound which is Structure 1 at approximately 2.2 m in height, while the space the group occupies is approximately 1600 m^2.

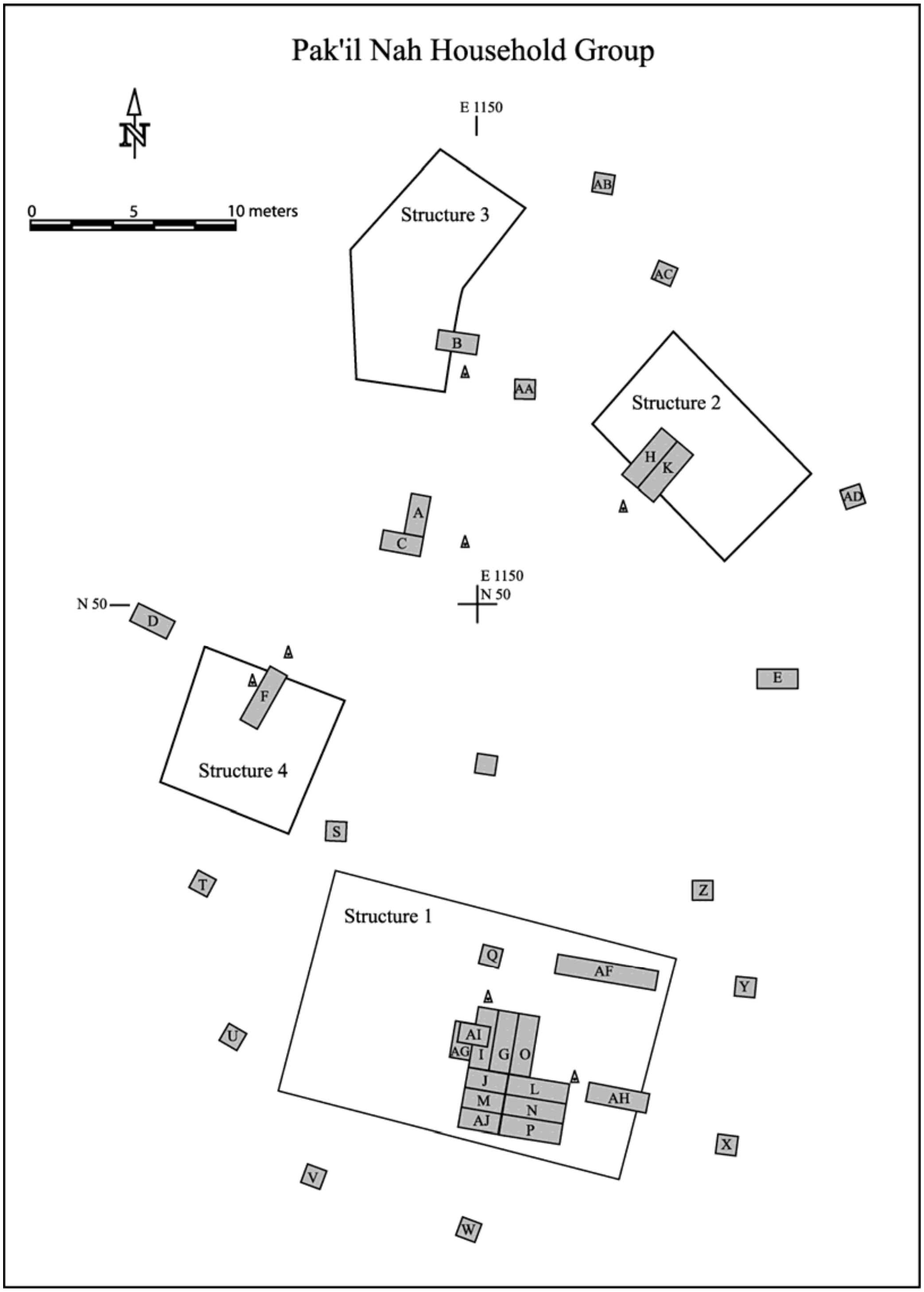

Figure 3.2: Plan map of Pak'il Nah with excavation units.

Preliminary excavations were carried out at Pak'il Nah during the summer (May through July) of 1999. The group was remapped and we began test excavations during that season with a total of eight excavation units. Four on-mound units, one on each mound, were excavated for preliminary investigation of the structures and their construction phases and chronological assessments (Appendix B). Four off-mound units were also placed in and around the open courtyard area to begin a preliminary investigation of activity areas, and to determine soil depths, extent of subsurface modifications, if any, and the potential for midden deposits.

Work in general was slow at Pak'il Nah in 1999 (as well as subsequent seasons) for two important reasons. First and foremost was the issue of accessibility. Pak'il Nah is located approximately 1.2 km (1150 m) east of the site center of Dos Hombres which was a 30–40 minute walk from an all-weather road through the Rio Bravo Conservation and Management Area. Therefore Pak'il Nah was approximately a one hour walk each way after a 25–30 minute drive from the R.E.W. Adams Archaeological Research Facility a.k.a. "Texas Camp." For each day in the field a total of three hours were spent traveling to and from this ancient household group. As a result only a five hour work day was possible and full investigation was impossible to accomplish in one summer season alone.

In February of 2001 I returned to Pak'il Nah with a field crew of seven to complete investigations there. Our fieldwork lasted from February until June of that summer. The spring dry season was a very productive time and that summer the rainy season was kind. Twenty six additional excavation units were placed both on and off of architecture during this season. The on-mound units (N=13) were placed in order to further expose the structures we had begun to investigate in 1999. An off-mound excavation program (N=13 units) was also accomplished. The combined number of units for both seasons was a total of 34, with 17 on architecture and 17 off of architecture (Figure 3.2).

In general Pak'il Nah was occupied during the Tepeu 2-3 phase of the Late to Terminal Classic Period, A.D. 700–900 as has been defined for northwestern Belize (Sullivan and Sagebiel 2003:26; Sullivan and Valdez 2004:191). A more detailed discussion of chronology follows below. No other evidence of any other phase of occupation was found at the group. Each of the structures revealed a single phase of construction, with some mixing of earlier ceramic sherds in the subfloor construction fills.

Architecture

Four structures, originally identified as mounds, are present at the Pak'il Nah group. Each was numbered sequentially at the time that they were surveyed, beginning with the largest and southern most and continuing in a counter clockwise fashion with ascending numbers.

During this household investigation, all four mounds were excavated in varying degrees in order to determine whether the mound represented a structure, platform, a structure and platform combined, or something non-architectural. A total of 17 excavation units of varying sizes were used to expose architectural features (Figure 3.2).

Given the size of each mound and the remote location of the Pak'il Nah group, the most attention and/or labor was focused toward the largest structure, Structure 1. The size of Structure 1 compared to the others was primarily the determining factor for this. Some portion of each of the other three small mounds was already exposed on the ground surface. Thus, given their relative short height and small size it was clear that much could be learned about them with minimal exposures.

Structure 1. The Structure 1 mound was just over two meters at maximum height prior to excavation. Structure 1 refers to the southernmost mound at the Pak'il Nah group. It was originally mapped as a U-shaped building, however, excavations later revealed that the U-shaped aspect of the mound was somewhat illusory. The actual structure and accompanying platform are each rectangular in shape (Figure 3.3).

Excavation revealed a masonry structure with elaborate architectural features. The architectural elements were elaborate in relative terms to the other three structures within the group as well as other household excavations performed in the settlement area around the Dos Hombres civic ceremonial center.

Structure 1 is a one roomed structure oriented east-west and situated on the southern portion of its platform. The structure has a north facing doorway. The walls of the structure are of cut stone masonry, approximately one meter thick (Figure 3.4). Given the state of preservation at the time of excavation, the actual thickness is approximate and ranges from 99 cm to 102 cm. Plaster was fairly well preserved on the interior of the walls, depending on the depth of fill, and sporadically though less well preserved on the exterior of the walls.

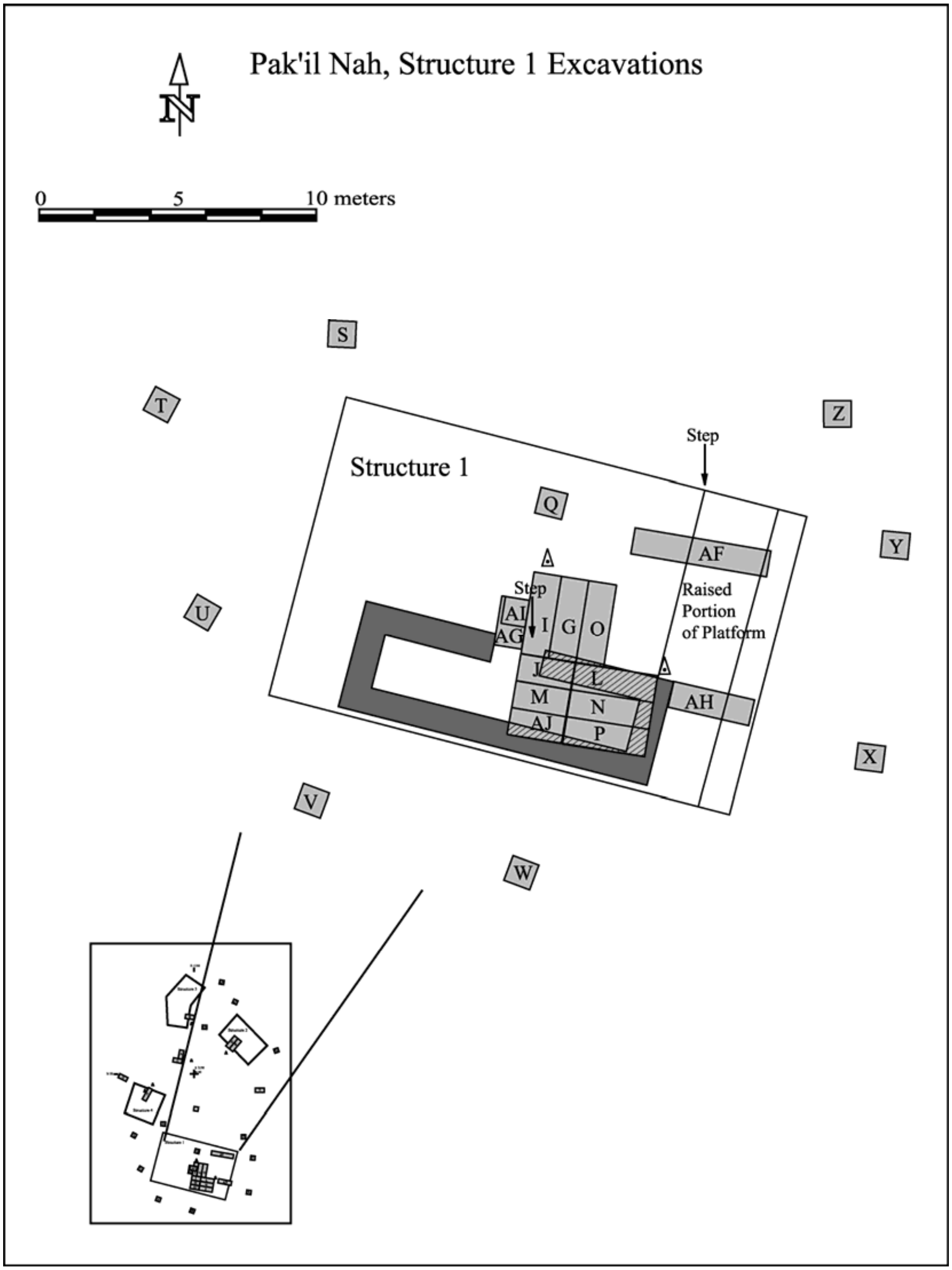

Figure 3.3: Structure 1 with excavation units.

Figure 3.4: Structure 1 north wall exterior.

Approximately 45% of the building was excavated (Figures 3.3 and 3.5). All excavations took place in the eastern end of the structure. Subop G was first opened in order to find the front wall of the structure and possibly its entryway. It did catch the edge of the entryway, so the exposure was expanded. Subop I continued this exposure of the doorway opening (Figure 3.6). Subop AG was later opened to find the adjacent entry molding or wall butt of the western section of the north wall. Visible in the west unit wall profile, it was evident that the doorway opening is approximately 2 m in width. An artifact deposit was found just north of the entryway to the structure (discussed in detail below) in situ. These were piece plotted just as they were found, lying on the plaster floor just north of the north wall and just north and east of the entryway (Figure 3.6). The exterior of the north or front wall was partially preserved revealing elaborate cut stone and masonry architecture. The wall core was exposed and revealed a while solid wet fill made of a composite of plaster, cobble and gravel.

Figure 3.5: Overview of Structure 1 room interior.

None of the roof of Structure 1was preserved, but each wall had fair preservation with some plaster preserved on the interior of each. This preservation was likely due to the extensive fill burying the structure. The amount or height of the wall preserved (as well as the stucco on it) was commensurate to the amount of fill covering

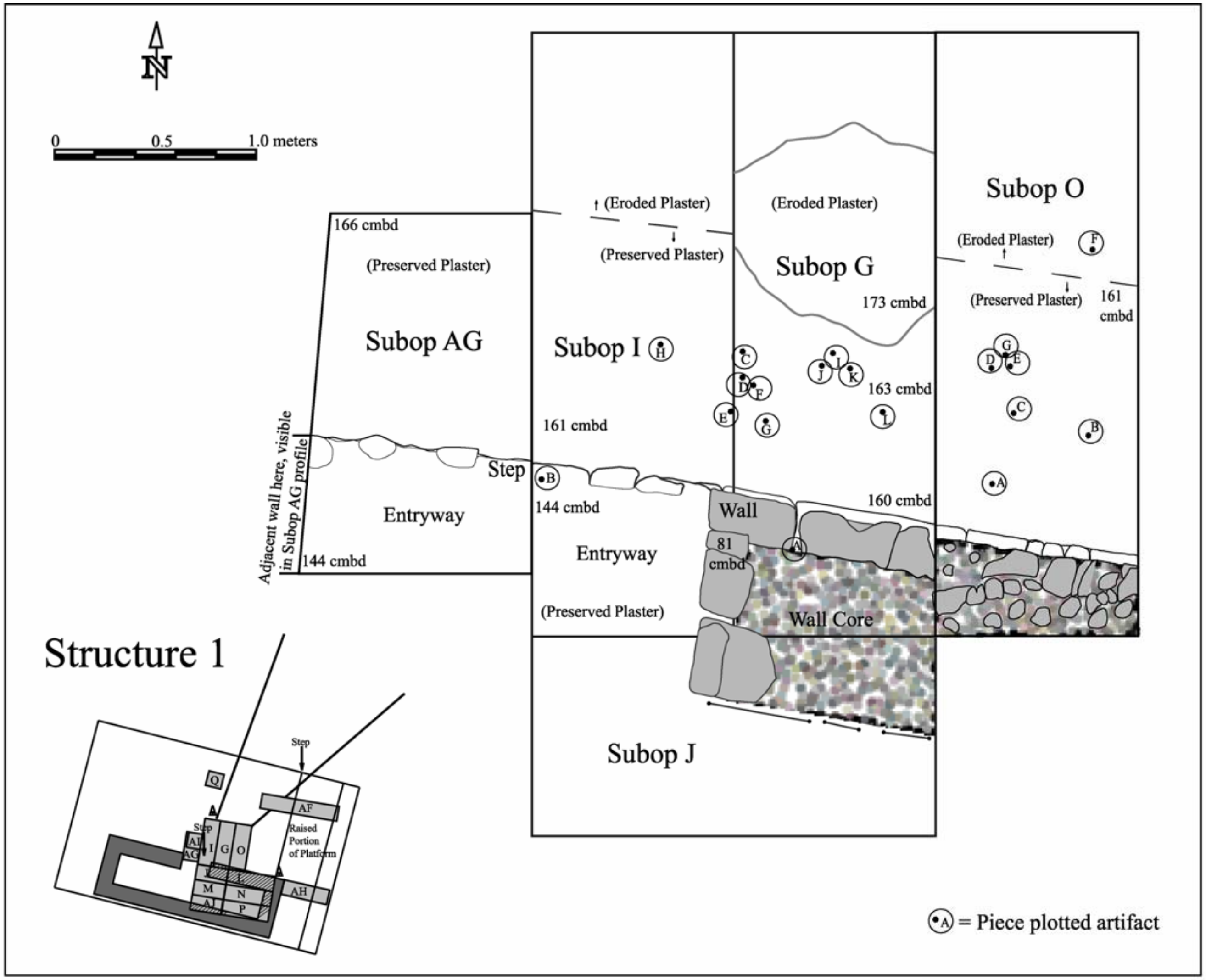

Figure 3.6: Plan of Structure 1 exposures in Subops G, I, J, O, and AG.

it. The height of the preserved portion of the front or north wall varied from the west to east. The shortest part of the wall was the west portion at the entryway measuring 56 cm in height. It was found to be gradually higher moving eastward toward the east wall of the structure (Figure 3.7), 146 cm in height at its maximum. The length of this north wall from the edge of the opening in the doorway to the interior corner where it met the east wall was 361 cm. The highest remnant standing wall with the greatest preservation was the east wall at standing 163 cm at its maximum. The length of the east wall interior was 221 cm from the interior corner at the south wall to the interior corner of the north wall. The south or back wall had the least preservation and stood at a remnant height of 71 cm at its shortest and a maximum of 89 cm (Figure 3.8). The south wall was only partially excavated lengthwise, revealing a 4 m length of it, an estimated 50% of its probable maximum length (Figure 3.3). As previously noted, the plaster stucco on the walls was relatively well preserved and ranged in thickness from 1 to 2 cm. At least two layers of plaster were detected in areas that were well preserved.

The room was filled with what initially appeared to be collapse debris consisting of a high quantity of loose limestone marl mixed with cobble. The same loose marl and cobble fill as was encountered covering the exterior of the structure and completely covering the platform as well. As this marl fill was removed from inside the room, a number of very large cut limestone blocks were also removed. These large blocks had the characteristic shape of vault stones. The thickness of the walls and these large shaped stones are evidence that the structure likely had a corbel vaulted ceiling. The architectural style of the structure is one commonly seen across the lowlands at sites like Tikal (Haviland 1985) as well as the nearby Group D at Dos Hombres (Aylesworth 2005).

Figure 3.7: Structure 1 north wall interior.

Figure 3.8: Structure 1 south wall interior.

The fill inside the room became more and more unusual as the excavations continued. First, the area within doorway and continuing back from it (south) almost to the south/back wall had a different kind of fill than what was found in the rest of the room interior, or even the fill over the structure's exterior. It was similar in color and composition, but had a very different texture. It was hard and dense and very difficult to remove. It resembled remarkably the wall core found inside the north wall. In other words, it was a wet fill composite of plaster, cobble, and gravel and hardened similar to the wall core.

Another interesting find within the loose marl fill was in the eastern portion of the room. It was clear that a burning episode took place inside the structure. The evidence was present in the interior room fill itself, just 30 cm above the plaster floor. The marl turned grey and a discrete deposit of charcoal was uncovered along with a red pigment or ochre all at the same level (Figure 3.9). Additionally, a stain in the soil adjacent to the charcoal was noted. Evidence for burning was also present on the interior stucco of the north wall. The burning episode appeared to have been localized to the far eastern portion of the room (Figure 3.10).

Only minimal subfloor excavations were carried out in Structure 1. Subop AI was placed in front of and just to the north of (or outside of) the doorway (Figure 3.3). The excavation in unit AI did not reveal a dedicatory cache or other sealed deposit, however, subfloor chronology was still assessed from the subfloor fill and the construction of the structure dates clearly to the Late Classic, Tepeu 2-3. Only one construction episode was evident from excavations below the floor and the subfloor fill contained primarily Tepeu 2-3 ceramics, although two construction fill lots, Level 5 and Level 6, both had several earlier sherds mixed in (Appendix B). An additional subfloor (platform) excavation in subop I resulted in an important ceramic find, a set of five sherds that fit together with a painted surface decoration of a scene including the hand of a human figure, a staff, and hieroglyphs (Figure 3.11). These have been typed as Tepeu 2-3 orange polychrome, also assisting in dating the construction of the building (Appendix B).

The platform or paved surface underneath Structure 1 was found to be a ground level one. The plastered surface around the structure itself was actually slightly below the modern ground level where there was no fill over it, only humus ca. 5 cm deep. The ground level plastered platform did not raise the building off the ground, rather another secondary platform localized immediately under the structure lifted it and resulted in a single step in the doorway of the structure. The height of the step was measured at approximately 19–20 cm (Figure 3.4).

The preservation of the ground level plaster platform was remarkable, and likely the result of the same marl fill that was inside most of the room, but not that of the doorway (Figure 3.12). The excavation of Subop AI revealed only single phase construction, or no earlier buildings below Structure 1 as discussed above. It revealed two detectable layers of plaster stucco on the floor of this ground level platform, similar to the stucco on the interior of the structure wall. The two plaster layers on this terminal floor surface were approximately 4 to 6 cm thick together. Subop AI also revealed an interesting subfloor feature. A platform remodeling or refurbishing was located below

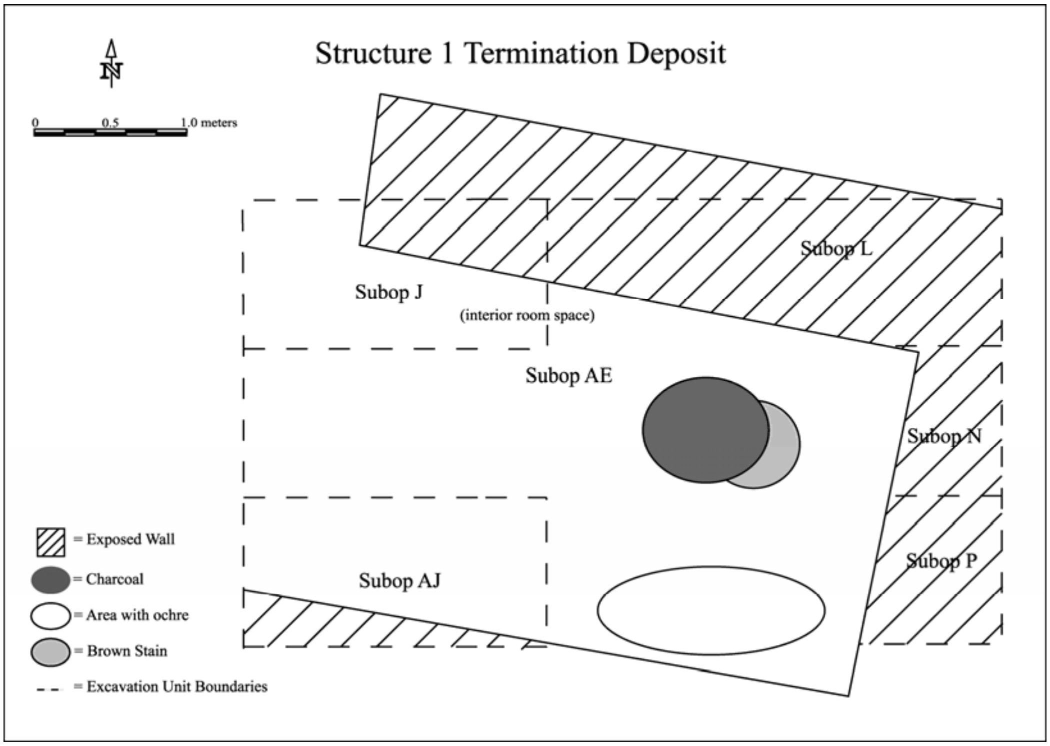

Figure 3.9: Structure 1 termination deposit.

these two terminal layers of plaster. The remodeling would have effectively raised the height of the platform slightly since the original platform surface was located some 20 to 22 cm below the terminal floor. The ground level platform potentially provided a paved surface for a number of activities and had its own stepped features (Figure 3.13) on its ends meeting with the sides of the structure (Figure 3.3).

Figure 3.10: Structure 1, interior juncture of north and east walls.

Figure 3.11: Hieroglyphic sherds.

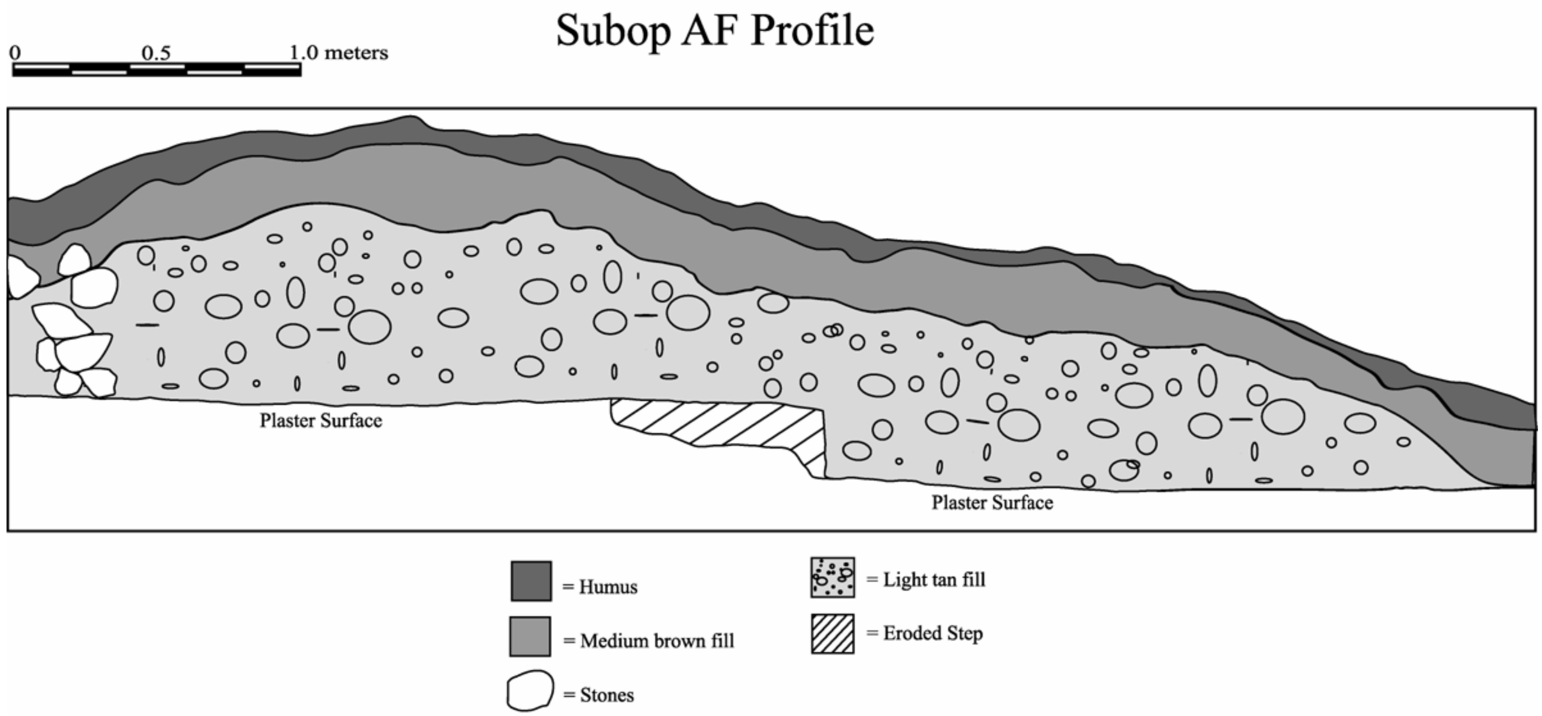

Figure 3.12: Subop AF Profile.

Figure 3.13: Subop AF overview.

Finally, one other architecture feature was found the east side of the structure exterior (Figure 3.14). It is both part of the exterior of the east wall of the structure and the ground level platform surface and step below. It resembled a bench-like feature jutting out from the wall's exterior surface. It had well preserved plaster associated both on the wall exterior above it and on the bench-like feature itself. Given the limited exposure of it, a preliminary interpretation might be that a raised shelf-like area was built possibly for storage with a possible thatch roof extension. Clearly more excavation would be needed to securely interpret this particular architectural feature.

Figure 3.14: Subop AH overview.

Structure 2. Structure 2 is one of three low platform mounds at Pak'il Nah. It was constructed of cobble in a single phase of construction which is a common architectural type seen in the Late to Terminal Classic in this area (Figure 3.2). Subops H and K were placed on Structure 2 directly adjacent to each other and partly on the platform and partially off of it (lengthwise) in order to sample the remains on the top of the platform and to delineate the front (southwest) platform retaining wall. Subops H and K were 1 x 3 m units both excavated on the southwest side of the Structure 2 platform (and off or in front of it). Both units were excavated to approximately 15 cm below the ground surface. The Structure 2 chronology was determined solely from these upper deposits. All of the ceramic material that was excavated from Subops H and K date to Tepeu 2-3 (A.D. 700–900).

Even though the excavations were shallow and no subsurface construction was sampled, they did reveal cobble construction on the surface of the platform. The southwest platform retaining wall, probably the front of the platform, was also located in both units (Figure 3.2). The retaining wall was also visible without excavation in various places around the exterior of platform and was present around the entire perimeter. Using the location of these retaining walls, the Structure 2 platform measures approximately 9 x 6 m and is rectangular in shape. There was no evidence of masonry or stone architecture on the platform surface; therefore it is likely that the platform supported a perishable structure.

Structure 3. Structure 3 is a low platform mound constructed of cobble in a single construction phase as is common in northwestern Belize in the Late to Terminal Classic (Figure 3.2). Subop B, a 1 x 2 m unit, was placed on Structure 3 and oriented such that it was partly on and partly off the Structure 3 platform mound. This was done in order to efficiently define the platform edge, sample the construction features, and sample the surface deposits all in one unit. The unit was excavated to bedrock, an average depth of 56 cm below the surface. The chronology of Structure 3 was also determined from this excavation. All ceramics excavated from Subop B were dated to Tepeu 2-3 (A.D. 700–900).

The excavations themselves exposed a cobble constructed platform with retaining walls around its exterior containing cobble construction fill. Again, this was the only excavation unit placed on the structure. However, much of the retaining wall was visible on the surface around the platform without excavating. Those observations were used in order to assess the shape and size of the platform. The shape of the platform was different than either Structure 2 or 4. It consists of two segments angled at approximately 40°. Given the shape of the platform, size was more difficult to assess. Figured in maximum length and width it is approximately 12 x 8.5 m. No evidence was detected on the platform surface itself of any stone or masonry architecture and is assumed to have had at least one perishable structure on it in antiquity. The estimated approximate height of the platform at its maximum is 42 cm above bedrock in Subop B. The bedrock undulates in this area and within the unit so there is a range of height from 34 to 42 cm above the bedrock.

Structure 4. Structure 4 is the last of the three low platform mounds of single phase cobble construction as was common in the Late to Terminal Classic in this area (Figure 3.2). Subop F, a 1 x 3 m unit, was placed on the Structure 4 platform. It also was placed such that it was partly on and partly off the mound in order to examine the platform retaining wall and sample construction of the mound and its surface deposits as efficiently as possible. The unit was excavated to bedrock throughout the unit averaging a depth of 74 cm below the ground surface.

The Structure 4 chronology is similar to that determined for Structures 2 and 3. Generally, most of the ceramics (N=365) both above and below the platform surface contexts date to Tepeu 2-3 (A.D. 700–900). An exception was noted for a mixed context just off the platform. Five ceramic sherds from Level 4 of this excavation are dated to Tepeu 3 only (A.D. 800/50–900 or Terminal Classic). Located just under the platform the sherds were found in the screen coming from a level of depth approximately 12 cm to 23 cm below the surface. Since the context of the Tepeu 3 sherds is construction fill, which is often a mixed context, sherds dating to Tepeu 2-3 were also present. It may signify that the platform was built slightly later or it may simply indicate that the Tepeu 2-3 designation is very broad and that there is some evidence that the occupation at Pak'il Nah actually occurred into the Terminal Classic, Tepeu 3.

Excavations of Structure 4 also revealed cobble construction, a platform retaining wall containing cobble construction fill, and no visible architectural remnants on the surface of the platform. As a result, it is again presumed that a perishable structure may have been present on the top of the platform. The platform retaining walls were visible intermittently on the ground surface, without excavation, around the exterior of the platform and thus used to determine the size and shape of the platform. The shape of the platform was almost square measuring approximately 7 x 7.2 m. The height of the platform is approximately 50 cm above the limestone bedrock.

Material Culture Analyses

Lauren Sullivan (2003; Appendix B) conducted the ceramic analysis, while I performed the material culture analyses for chipped stone, obsidian, ground stone, small finds, including mineral objects and shell, and the lithic raw material assessment for the Pak'il Nah assemblage. I also carried out the faunal analysis, though there were almost no remains in this category at the Pak'il Nah household group.

Ceramics

A total of 3,500 ceramic sherds were recovered from the Pak'il Nah household group and all comments written here are based on Sullivan's analysis (2003; Appendix B). As stated above, Pak'il Nah was occupied primarily during the Tepeu 2-3 phase, or the Late to Terminal Classic Period (Table 1.1). Tepeu 2-3 is defined for northwestern Belize as A.D. 700–900 (Sullivan and Sagebiel 2003:26; Sullivan and Valdez 2004:191).

There are two contexts that were found to date strictly to Tepeu 3, defined for northern Belize as A.D. 800/850–900 (Table 1.1; Sullivan and Sagebiel 2003:26; Sullivan and Valdez 2004:191). Both of these occurrences are somewhat limited. The first example of Tepeu 3 ceramics was in Subop F, in the northern portion of the unit. The provenience of these sherds was just under the platform in the subfloor construction fill. They were found in the screen coming from level 4, approximately 12 to 23 cmbs.

The second noted context for Tepeu 3 ceramics were those found on the surface at the very top of Structure 1. It was a single find and alone may not be incredibly significant.

The presence of Tepeu 3 in both of these contexts could indicate a couple of things. In regards to Structure 4, it may indicate that the platform was built slightly later that the others as opposed to similar timing for each. The single find on ground surface at the top of the Structure 1 mound may simply indicate an isolated visit to this location slightly after abandonment. However the isolated visit does not explain the subfloor date for Structure 4. Overall these ceramics may reflect that the length of occupation at Pak'il Nah, lasted until the later part of the Tepeu phase, A.D. 800/50–900. Otherwise it may simply be indicative of the Tepeu 2-3 designation being very broad and that the occupation at Pak'il Nah actually occurred later part of the Tepeu 2-3 designation which would place the occupation strictly in Tepeu 3.

Earlier dated sherds occur also at Pak'il Nah, including Chicanel (400 B.C.–A.D. 250) and Tzakol (A.D. 250–600) (Table 1.1). Some of the contexts in which these early sherds were found such as subfloor construction fill or intentional room fill (composed mostly of building materials), are mostly mixed with later ceramics. There is no case in which a discrete context of ceramics dating earlier than Tepeu 2-3 was found.

In all of the off-mound units the ceramic data are fairly uniform specifically in two respects. First, only two ceramic forms were determined for the all the midden test pits: bowls and jars. Second, the chronological assessment is the same for each unit, Tepeu 2-3 (Appendix B).

Ceramic forms are sometimes difficult to assess, therefore any comments here concerning forms are limited by what forms were actually able to be determined. Forms were detectable for approximately N=291 or 8% of the all sherds collected (N=3,500) at Pak'il Nah (Appendix B). Given these limitations in the analysis of ceramic forms, two observations can be made. First, the most prevalent ceramic form represented in the ceramic assemblage at Pak'il Nah is bowls (N=157), 54% of the sample with detectable forms. Jars overall are present in the second highest number (N=112), 39% of the sample with detectable forms. There are only nine sherds that represented plates, eight representing cylinders, and 1 drum fragment. As such, bowls and jars are the most common (detectable) form at Pak'il Nah. Domestic assemblages are commonly dominated by bowls and jars since households engage in repeated food preparation and storage, as well as water storage for both drinking and food preparation. The difference being that in a ceremonial context in which feasting is taking place occasionally, large decorated dishes, bowls, and plates used for serving vessels would have a greater presence the ceramic assemblage. In addition to bowls and jars dominating the overall assemblage, ceramic forms in the off-mound test units are predominately bowls and jars especially in midden contexts.

An important ceramic find at Pak'il Nah was in Subop I, lot 7, subfloor fill context, in front of and below the entrance of Structure 1. This is only the second hieroglyphic ceramic find in any of the previous investigations either in Dos Hombres or the settlement areas around it. It is five ceramic sherds that fit together from an orange polychrome cylinder vase that had a painted surface decoration. The painted scene has at least one person represented by a hand holding a staff with hieroglyphs above it (Figure 3.11). The style of the scene is very similar to that of other polychrome cylinder vases around the Maya lowlands from the Late Classic period (see Kerr 1989a, 1989b; also Coe 1978; Moholy-Nagy 1994; Robicsek 1981).

Lithics

The entire Pak'il Nah analyzed lithic assemblage amounts to 2,030 pieces of chipped stone (Table 3.1), including formal (N=21) and informal tools (N=52). A total of 1,957 pieces of analyzed debitage were in the lithic assemblage, weighing a total of 16.90 kg (Appendix A, Table A.3; Table 3.1). A sampling of approximately 75% of the total debitage excavated was analyzed while100% of the formal and informal tools were analyzed. The debitage in the analysis makes up 96% of the lithics analyzed at Pak'il Nah. As would be expected, by weight the debitage represents a smaller proportion of the lithic assemblage. The total weight of the debitage is 16,980 g which is approximately 79% of the overall weight of all lithics at Pak'il Nah (Table 3.1).

Lithic Totals			
Household	**Category**	**#each**	**Weight(g)**
Pak'il Nah	Debitage	1,957	16,980
Pak'il Nah	Formal Tools	21	1,398
Pak'il Nah	Informal Tools	52	3,175
Total	**All**	**2,030**	**21,553**

Table 3.1: Chipped stone totals for Pak'il Nah.

Debitage. The sampling of debitage from subfloor fill contexts was conducted primarily to reduce the redundancy of debitage data in secondary construction fill contexts, while also reducing the analysis workload. The sampling goal of analysis of a 75% sample of the total debitage excavated was carried out by sampling the subfloor fill of Structure 4 (50%). Repeated fill contexts that were above the floor of Structure 1, both in interior and exterior, were also sampled (60%), while debitage from all other contexts were analyzed in full. As such, 12 types of debitage are present in the Pak'il Nah assemblage (Table 3.2). The ubiquitous category of shatter occur in the highest quantity in number (N=877) at 45%. Second highest in number, and probably more significant are tertiary flakes (N=269), representing approximately 14% of the debitage. Chunks (N=268) are present in almost the same quantity as tertiary flakes, approximately 14%. Secondary flakes (N=199) at 10%, primary flakes (N=129) at 7%, and biface thinning flakes (N=120) at 6% respectively are the next highest in quantity. Collectively, all flakes (N=756), as a category including primary, secondary, tertiary, biface thinning, and retouch or pressure flakes, represent 39% of the debitage.

By weight the debitage composition appears only slightly different. Predictably, the chunks and cores are heaviest weighing 6,804 g together and representing 40% (Table 3.2) of the overall debitage weight. All categories of flakes, 6,255 g, collectively make up 37%, comparable to their relative quantity.

Pak'il Nah Debitage Types									
Provenience							***Material***		
Op	**Subop**	**Lot**	**Debitage Type**	**#each**	**Weight(g)**	**Heat**	**Chert**	**Lime-stone**	**Other**
26	All	All	Biface Thinning Flks	120	423.6	39	118	2	0
26	All	All	Chunks	268	3,731.2	139	268	0	0
26	All	All	Flake Core	26	3,073.6	18	26	0	0
26	All	All	Hammerstone	4	555.4	1	4	0	0
26	All	All	Percussion Blade	10	25.0	1	9	1	0
26	All	All	Blade	2	0.5	0	2	0	0
26	All	All	Primary Flakes	129	1,733.1	44	127	2	0
26	All	All	Retouch/Pressure Flk	39	11.4	22	38	0	1
26	All	All	Secondary Flakes	199	2,335.1	74	197	1	1
26	All	All	Shatter	877	1,275.7	569	877	0	0
26	All	All	Tertiary Flakes	269	1,762.7	102	254	14	1
26	All	All	Tested Cobbles	14	2,052.5	3	14	0	0
26	**All**	**All**	**TOTAL**	**1,957**	**16,979.8**	**1,012**	**1,934**	**20**	**3**

Table 3.2: Summary of debitage types and quantities at Pak'il Nah.

By context (Table 3.3), the most debitage, both in quantity and mass, was found in Subops F (N=419), G (N=129), and B (N=243). Subops F and B were both located on cobble platforms and include in them some amount of subfloor fill below the platform architecture, which likely accounts for the relatively high quantity of debitage in these units. Subop G (N=129), along with Subops I (N=96) and O (N=103) also had relatively high quantities of debitage. These units were located on the exterior of Structure 1 and include the intentional fill over the structure which was the same composition of the fill inside the structure.

Pak'il Nah Debitage per Subop									
Op	**Subop**	**Lot**	**Debitage Type**	**#each**	**Weight(g)**	**Chert**	**Chalc-edony**	**Lime-stone**	**other**
26	A	All	All	85	208.8	85			
26	AA	All	All	13	27.9	13			
26	AB	All	All	22	42.7	22			
26	AC	All	All	12	17.9	12			
26	AD	All	All	2	19.4	2			
26	AE	All	All	9	88.9	9			
26	AG	All	All	1	5.8	1			
26	AI	All	All	31	1,590.9	31			
26	B	All	All	243	2,059.3	243			
26	C	All	All	119	221.2	119			
26	D	All	All	65	281.2	65			
26	E	All	All	12	68.2	12			
26	F	All	All	419	4,749.8	418		1	
26	G	All	All	129	2,190.4	124		5	
26	H	All	All	61	342.9	60		1	
26	I	All	All	96	958.1	92		4	
26	J	All	All	65	622.5	64		1	
26	K	All	All	32	94.6	32			
26	L	All	All	31	111.0	30		1	
26	M	All	All	40	159.3	38	1	1	
26	N	All	All	32	179.4	31			1
26	O	All	All	103	1,478.4	98	1	4	
26	P	All	All	17	47.4	15		2	
26	Q	All	All	57	827.2	57			
26	R	All	All	62	81.4	62			
26	S	All	All	74	152.3	74			
26	T	All	All	38	143.0	38			
26	U	All	All	3	38.0	3			
26	W	All	All	13	15.2	13			
26	Y	All	All	20	55.9	20			
26	Z	All	All	51	100.8	51			

Table 3.3: Quantity of debitage per excavation unit at Pak'il Nah.

The quantities of debitage found in Subops A (N=85) and C (N=119) are more indicative of possible domestic activity, as discussed below. These units were located in the open plaza area and not in a fill context. Lastly, Subops R (N=62), S (N=74), T (N=38), Z (N=51), and D (N=65) also had relatively high densities of debitage. These subops (as discussed below) were located on areas of domestic activity or discard, but off of any architecture.

Finally, Subops H (N=61) and K (N=32) had comparatively much lower quantities of debitage than Subops F (N=419) and B (N=243) even though they were in similar contexts. Subops H and K were both located on Structure 2, but were not excavated below the cobble surface of the platform, while Subops F and B were both excavated to bedrock. Subops F and B include subfloor fill, while H and K do not. The two units were only excavated down to the architecture, an approximate depth of 15 cmbs. The contexts included do however include some collapse debris in a portion of each unit just southwest (outside) of its platform retaining wall.

Informal and Formal Tools. Both formal (N=21) and informal tools (N=52) were found in various contexts in and around the Pak'il Nah household group (Appendix A, Tables A.1 and A.2). Of the overall (non-obsidian) lithic assemblage at Pak'il Nah, including debitage, both formal and informal chipped stone tools together (N=73) make up only 4% of the assemblage (Appendix A). Informal tools make up the majority of this tool assemblage at 71%, while formal tools make up only 29% of the total tools. As stated in Chapter 2, this may biased given the fact that any use wear analysis of debitage was predominately macroscopic. It is highly possible that some of the debitage could also have been utilized, but went undetected.

A total of 52 informal tools are present at Pak'il Nah in six different forms (Appendix A, Table A.2). By far the most common form is Utilized Flakes (N=29) which make up approximately 56% of all informal tools. Within this category, 45% of the Utilized Flakes are tertiary flakes (N=13), while only two were primary flakes. Scrapers occur in the second highest number (N=10) making up almost 19% of the informal tools. The scrapers were found in two forms, End Scrapers (N=4) and End and Side Scrapers (N=6).

All other informal tool types (N=13) in the assemblage make up the remaining 25%. These are Choppers (N=6), Gravers (N=2), Perforators (N=3), and Burins (N=2) (Appendix A, Table A.2). The Choppers were all made expediently and were dual purpose and/or recycled from a previous form. Two of the choppers may also have been hammerstones and two of them were made from flake cores.

In terms of context, the vast majority (71%) of informal tools were found in construction fill contexts (N=37) (Appendix A, Table A.2). Subop F had the most informal tools (N=15) at 29%. Subop F was located on Structure 4. All but one of the informal tools found in Subop F were found below the platform surface in subfloor construction fill. Subop AI, on Structure 1, had the next highest quantity of informal tools (N=10) at 19%. Subop AI was primarily subfloor fill, and all of the informal tools found there were found below the two flooring episodes in the construction fill. Two other contexts Subop O, lot 6, and Subop I, lot 7 also sampled this same subfloor fill of the ground level platform of Structure 1. These two fill lots collectively had 19% of the informal tool collection in them (N=10). Subop Q, also in this same construction fill context, had two Utilized Flakes. One other fill context associated with Structure 1, in the interior room fill, several informal tools were found in four of these associated subops, 11% of the total informal tool assemblage. It includes four choppers, one utilized flake, and one end-and-side scraper.

The remaining 18% of informal tools were found in a variety of contexts (Appendix A, Table A.2). One end scraper and one utilized flake were each found on the floor of the platform just outside the doorway of Structure 1 with several other artifacts in a cluster. These were piece plotted and will be discussed further below. Another occupation floor association of informal tools was on Structure 2. One utilized flake and one end scraper were found on the surface of that cobble platform. Structure 3, Subop B, also had two informal tools associated with a possible floor/activity deposit, one chopper and one utilized flake. An end scraper was also noted in the platform fill of Subop B. Two different off-mound contexts each also had one informal tool. Subop A in the open area of the plazuela had a utilized flake in association with several pieces of debitage along with Subop AB, one of the midden test units, which had one utilized flake.

The formal tools (Appendix A, Table A.1) from Pak'il Nah are dominated by bifacial celts. As noted by Jason Barrett (2004: 370), this is the most common formal tool type in lithic assemblages all over the Maya lowlands. The second most common at this household group is a form called miscellaneous reworked biface. This particular type probably includes a variety of types if we were able to see them prior to the extensive wear, reworking, recycling, and discard conditions that they have endured.

Three other forms apparent at Pak'il Nah were found in very small number, but are somewhat more specific. The first is a thin oval biface which, for all three of the household assemblages included in this overall investigation, was somewhat rare. Oval bifaces have been found at other sites within the Rio Bravo area. David Hyde (2003) has noted their presence at Chan Chich, Dos Barbaras, Las Abejas, and Guijarral. They have also been noted at the nearby sites of Blue Creek (Barrett 2004), El Pedernal (Houk 2003; Hyde and McDow 2003) and other sites in the Ixcanrio Region (Buttles 2003; Houk 2003). Evidence was documented for oval biface production at the site of Colha in the Late Classic as well as the Late Preclassic (Shafer and Hester 1983). Skillfully made thin oval bifaces were found in the Late Preclassic workshop contexts mostly in the form of production failures (Shafer and Hester 1991), as well as domestic contexts (Shafer 1994). Further, Shafer and Hester (1986, 1990) documented a Late Classic oval biface found hafted, often referred to at the Puleston Axe, from excavations near the village of San Antonio, in Orange Walk District, Belize.

The Pak'il Nah assemblage includes one general utility biface (GUB) Type I, which was evidently reworked such that its secondary or recycled use was as a graver. GUBs are also found all over the Maya lowlands and are common to the Late Classic period. Hester (1985) originally described two types of them. One small bi-convex biface was also found at Pak'il Nah. The Bi-Convex Biface has a wear pattern consistent with a tool that may have been used as an agricultural tool (Valdez et al n.d.) or a stone cutting/quarrying tool (Titmus and Woods 2002; Woods and Titmus 1996). A similar tool type, also with extreme wear, has been reported from both the northern lowlands and the central lowlands, sometimes referred to as a *chisel* or *gouge* or large *drill* (see Andrews and Rovner 1973; Barrett 2004; Kidder 1947; Willey et al 1965). Those particular type names suggest a tool's possible use, whereas *elongate biface* (Moholy-Nagy 2003; Shafer 1994) insinuates the often lenticular shape. All of these may be the same tool, it is not yet certain, but the small bi-convex bifaces are very clearly a special purpose tool and often display extremely heavy wear. The wear is so severe in those excavated in this investigation that no flake scars are left remaining, rather the tools have been worn completely smooth around the perimeter of the used end and only a fragment of one these was found at Pak'il Nah. The final category of formal tools in the assemblage are of unknown types (N=3). These were impossible to categorize due to breakage so severe that even evidence of reworking as well as the original form was undetectable.

Addressing the formal tools according to context proves an important consideration at Pak'il Nah (Appendix A, Table A.1). In the process of excavation many artifacts were piece plotted, especially in architectural and non-architectural activity areas where surfaces or floors could be discerned. Four formal tools were found in association with the Structure 3 cobble platform of Subop B. Three of these were outside the platform retaining wall in a mixed context of collapse debris, while one was on the platform. This bifacial celt was piece plotted at 18 cm below the surface. No floor could be distinguished likely due to the absence of preserved plaster or the possibility that it had a dirt-packed surface originally. As such it is difficult to determine whether the artifact was truly on the surface of the platform. Structure 4 also had several formal tools associated with it. These were all excavated from Subop F, subfloor or sub-platform fill.

The building with the most formal tools associated with it is Structure 1. The majority of them were in subfloor fill, either below the landing just outside the doorway (N=1) in Subop AI, or below the plaster surface of the structures basal platform (N=8) in the north ends of Subops I and O. Tools types found in this subfloor fill were reworked bifaces, bifacial celts, one GUB Type1, and one small bi-convex biface. One Reworked Biface was also found in the interior room fill, Subop N.

Another important deposit of formal tools associated with Structure 1, is two tools that were found on the floor of the platform just outside, or north of, the front/north structure wall and entryway (Figure 3.6). These were found in Subops I and O and were likely in situ, representing a small storage area, as discussed more thoroughly below. Both are bifacial celts and several ceramic sherds were also found in clusters near these and piece plotted as well.

Lithic Raw Material. Several raw material types (non-obsidian) were utilized for chipped stone at Pak'il Nah (Table 3.4). The primary raw material resource that was utilized as chipped stone was chert, 98.6 percent of the assemblage, defined as microcrystalline quartz mixed with cryptocrystalline silica. The second most abundant source of lithic material used was limestone, 1.1 percent, defined as a non-clastic sedimentary rock. A few pieces of chalcedony (cryptocrystalline silicate), at 0.2 percent, and one quartzite flake (metamorphosed quartz sandstone) are also present in the lithic assemblage.

Lithic Raw Material								
Household	Type	Chert	Lime-stone	Chalcedony	Quartz-ite	Jasper &Petrif Wood	Unident.	**Total**
Pak'il Nah	Debit.	1,934	20	2	1			**1,957**
	Formal	19	2					**21**
	Inform	49	1	2				**52**
Total		**2,002**	**23**	**4**	**1**	**0**	**0**	**2,030**

Table 3.4: Concentrations of chipped stone raw material types.

Obsidian

A total of eight obsidian prismatic blade fragments were found at Pak'il Nah, for a total of 175.2 mm or 17.52 cm of cutting edge, or a total weight of 9.9 g of obsidian. The blade fragments found at Pak'il Nah are all third series (3s) pressure blades (Appendix A, Table A.4). Four are proximal fragments, while four are medial fragments. Of the four proximal fragments, three had single facet platforms with abrading as is the most common type of platform preparation in the Late Classic Period. The fourth has a multi-facet platform, also common in the Classic Period.

None of the obsidian blade fragments fit together. Therefore all were presumably broken in antiquity. Six of the blade fragments were found in off-mound units, both in midden test Subops S and T, and the plaza units, Subops B and C. Of the remaining two blade fragments, one was found on Structure 2 just under the humus, while the other was found in the interior room fill of Structure 1. All of the blades show evidence of use-wear visible either by eye or with the assistance of a 5x hand lens. The wear observed is consistent with that found in most other domestic contexts. No notching, often associated with hafting of blades, was observed on any of the obsidian blade fragments.

Groundstone

No groundstone artifacts, such as manos, metates, or bark beaters, were found at Pak'il Nah. This may be due to limited sampling. More sampling would be necessary in order to definitively assess their presence or absence.

Small Finds

Two polished mineral fragments were found at Pak'il Nah (Appendix C, Table C.2). The two are intentionally shaped and smoothed around the perimeters, though broken, with one flat and polished side or face, with the opposing face remaining rough. Both could be considered to be inlays, though the item that each was inlayed into was not found, only the broken cabochons themselves. Each was made of a different mineral, discussed below, and found in two different contexts (Appendix C, Table C.2).

The first of the two is a greenstone, possibly jadeite. It was broken in antiquity and was likely somewhat ovoid in shape originally (Figure 3.15). It was found in Subop K located on Structure 2. The provenience of the greenstone cabochon was just off of and to the southwest of the cobble platform architecture, approximately 20 cm below the surface in a dark clay loam just outside the platform retaining wall. Other artifacts associated with it in the same level were 49 ceramic sherds, all dating to Tepeu 2-3 (Appendix B), 12 pieces of debitage, consisting mostly of shatter (Appendix A, Table A.3), and one end scraper (Appendix A, Table A.2).

Figure 3.15: Mineral Fragments.

The second of these two cabochon fragments was peach or pink in color and possibly made from peach aventurine or a similar mineral (Appendix C, Table C.2). It has and overall roughly triangular shape. The single polished face is also triangular (Figure 3.15). The peach colored cabochon was found in Subop AI, located in front of the doorway of Structure 1 and below the plaster floor or landing below the single step. This level of subfloor fill also had 60 ceramic sherds, all dating to Tepeu 2-3 (Appendix B), one end scraper, one utilized flake (Appendix A, Table A.2), five pieces of debitage, and one multi-directional flake core (Appendix A, Table A.3).

Faunal Remains

Shell species, such as aquatic snails (freshwater univalves), aquatic mussels (freshwater bivalves), and land snails (terrestrial univalves) make up the majority of the faunal remains in most of the contexts investigated thus far in the Dos Hombres settlement area. The lack of faunal bone in these assemblages is likely due to poor preservation and/or the practice of refuse burning in antiquity.

Both ethnographic and archaeological data are abundant supporting the use of freshwater snails and mussels as a foodstuff by the ancient Maya (Halperin et al 2003; Healy et al 1990; Hohmann 2002; Moholy-Nagy 1978, 1994).

Almost no faunal remains were detected at the Pak'il Nah household group. Only one jute shell (Gastropoda:Pleuroceridae *Pachychilus*) was found in all of the excavations there and no animal bone was identified at all (see Appendix E). *Pachychilus* or aquatic jute snails preserve very well even in tropical environments due to their thick univalve shell. The likelihood that jute snails would be found at Pak'il Nah however is low at best, due to its location in the surrounding environment. Today, *Pachichilus* is found mostly in rivers and streams and their counterpart *Pomacea* (apple snail) is most commonly found in ponds and cisterns. *Pachychilus* are therefore best adapted to high energy freshwater environments (Healy et al 1990: 174; see also Hohmann, 2002; Meerman 2002; Nations 1979), while *Pomacea* is adapted to low energy freshwater environments (Moholy-Nagy 1978: 66). Though Pak'il Nah is located less than 300 m west of the aguada (seasonal lake), the aguada is not an energetic freshwater environment more suited to *Pachychilus*. The Rio Bravo, however, is the closest source of moving water, but is approximately 2.5 km west of the Pak'il Nah household group, on the opposite side of the Dos Hombres site center. Conversely, the aguada might have been an optimal environment for *Pomacea* yet none were encountered in the excavations at Pak'il Nah. Comparatively, Pak'il Nah had the fewest number of any species of freshwater shell of the three households excavated in this investigation (Table 3.5).

Given the shallow deposits stemming from the single phase of construction and short term occupation, and the tropical environment, it is understandable that no other types of faunal remains were found at Pak'il Nah. It is impossible to say, however, whether the lack of additional faunal remains is due to the lack of their presence in the past or the lack of their preservation to the present. The same could be said of the botanical remains or the lack thereof.

Freshwater Shell					Phylum:Mollusca	
Household	**Class:Family**	**Genus**	**Species**	**Habitat**	**N=x**	**Wt (g)**
Pak'il Nah	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	2.1
Pak'il Nah	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	0	0.0
Pak'il Nah	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	0	0.0
Pak'il Nah	***Total***	***All***	***All***	***Freshwater***	***1***	***2.1***
Dancer Group	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1,393	6,764.1
Dancer Group	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	36	112.2
Dancer Group	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	82	172.4
Dancer Grp	***Total***	***All***	***All***	***Freshwater***	***1,511***	***7,048.7***
Agua Lluvia	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	992	3,876.6
Agua Lluvia	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	18	93.1
Agua Lluvia	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	19	26.3
Agua Lluvia	***Total***	***All***	***All***	***Freshwater***	***1,029***	***3996.0***
All	**GRAND TOTALS**	**All**	**All**	**Freshwater**	**2,541**	**11,046.8**

Table 3.5: Faunal remains per household.

Pak'il Nah Household Activity

Discard

The off-mound excavations proved crucial in assessing the domestic activities at Pak'il Nah. At total of 17 off-mound units were placed arbitrarily in order to locate potential midden deposits around and within the perimeter of the Pak'il Nah group. These off-mound units revealed thin soils and specific activity areas related to the spatial organization of the group. In general, excavation units inside the perimeter of courtyard of the plazuela revealed very few if any artifacts in the northern half indicating that this area was kept clean. As determined from artifact densities resulting from the testing program, the prime midden areas occurred mainly in two locations between two sets of structures as well as three sides of Structure 1. Specifically, positive tests for midden debris were found between Structures 1 and 4, between Structures 2 and 3, and in front of and adjacent to the northeast corner of Structure 1 (Figure 3.16). None of these deposits were more than 65 cm deep. The average depth of the midden test units was 36.7 cm and none of the units were stratified. The artifact densities were calculated per m^3 of soil excavated after detailed analysis (Table 3.6).

A single level of deposited soil was encountered in each midden test unit below the very thin humus layer. This single layer of soil was present throughout each subop down to the limestone bedrock. The uniformity of the deposit in each excavation unit, each having the same soil type, a dark organic clay loam, is evidence that none of these were fortuitously situated in any remnant subfloor fill context (Table 3.6). It also

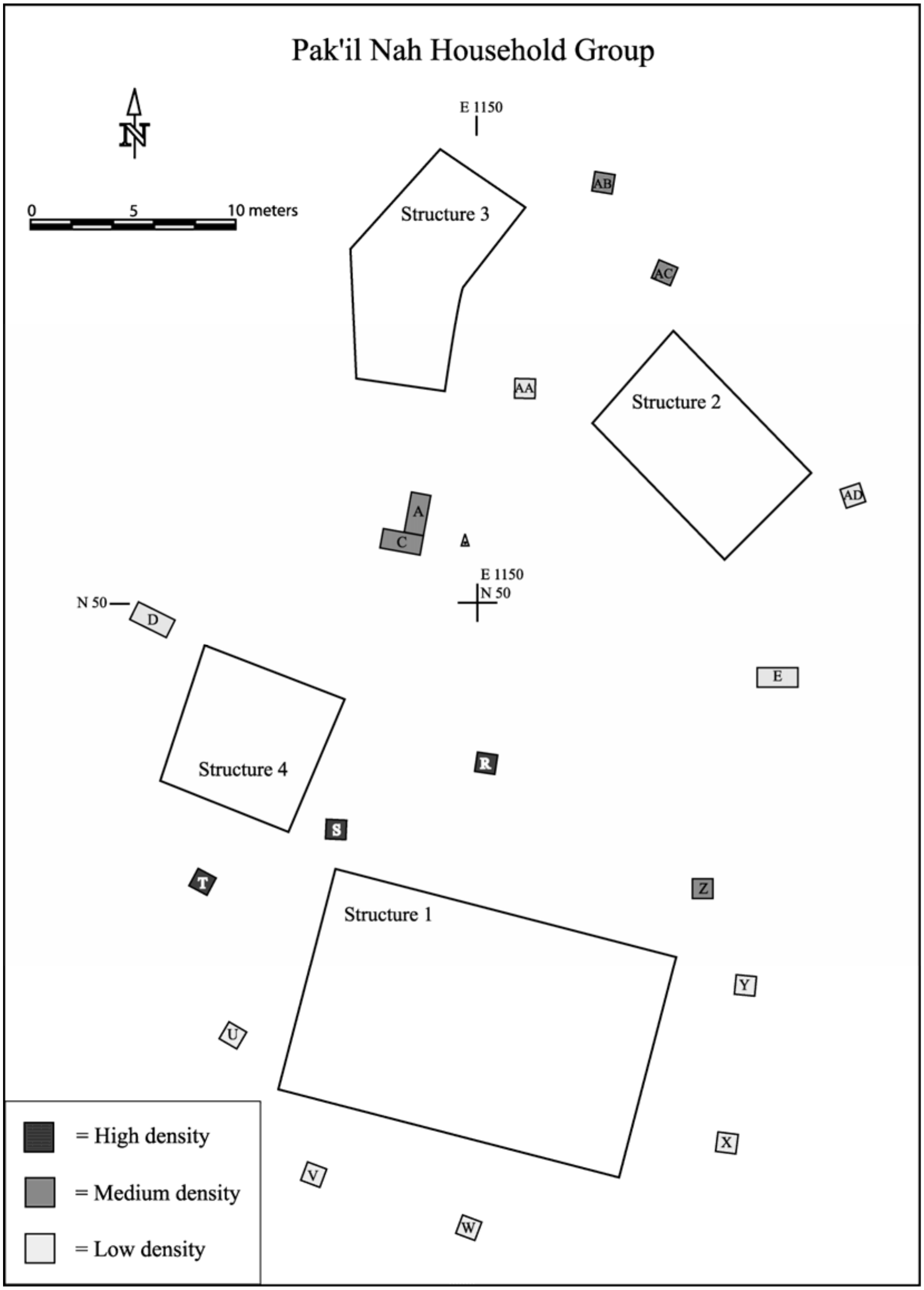

Figure 3.16: Off-mound units with relative densities.

indicates that no extensive modification or subsurface fill was placed in the courtyard during its occupation.

The artifacts found in these subops included ceramics, lithics, and obsidian artifacts (Appendix F, Table F.1), common items in domestic middens. The ceramics consisted only of fragments, no whole vessels were present. The lithic assemblage for the midden test units was primarily debitage and a few expedient tools, with only one biface present in subop AC. Three obsidian blade fragments were excavated in this set of subops, specifically from subops C, S, and T.

Off Mound Test Unit: Soil and Depth						
Provenience						
Site	**Op**	**Subop**	**Unit Size**	**Unit Depth**	**Soil Description**	**Soil Vol. in m^3**
RB 2	26	S	1 x 1 m	41 cm	Clay to clay loam	0.41
RB 2	26	T	1 x 1 m	41 cm	Clay to clay loam	0.41
RB 2	26	R	1 x 1 m	42 cm	Clay to clay loam	0.42
RB 2	26	C	1 x 2 m	24 cm	Clay to clay loam	0.24
RB 2	26	Z	1 x 1 m	50 cm	Clay to clay loam	0.50
RB 2	26	A	1 x 2 m	25 cm	Clay to clay loam	0.25
RB 2	26	E	1 x 2 m	11 cm	Clay to clay loam	0.11
RB 2	26	D	1 x 2 m	65 cm	Clay to clay loam	0.65
RB 2	26	AB	1 x 1 m	33 cm	Clay to clay loam	0.33
RB 2	26	AC	1 x 1 m	48 cm	Clay to clay loam	0.48
RB 2	26	Y	1 x 1 m	48 cm	Clay to clay loam	0.48
RB 2	26	U	1 x 1 m	32 cm	Clay to clay loam	0.32
RB 2	26	AA	1 x 1 m	33 cm	Clay to clay loam	0.33
RB 2	26	W	1 x 1 m	33 cm	Clay to clay loam	0.33
RB 2	26	X	1 x 1 m	43 cm	Clay to clay loam	0.43
RB 2	26	AD	1 x 1 m	24 cm	Clay to clay loam	0.24
RB 2	26	V	1 x 1 m	31 cm	Clay to clay loam	0.31

Table 3.6: Off mound test unit: soil, depth, and volume excavated.

At least one artifact was present in each off mound unit. A total artifact density was calculated in order to discern the presence/absence of a midden or the presence of an activity area within or near the location of each unit. Artifact densities were calculated in three different ways, depending on the artifact type. A ratio was then determined in order to rank each excavation unit in terms of its overall artifact density (Appendix F, Table F.2).

The density of each artifact type was first calculated using the volume of soil excavated. It is clear that there is a great difference between the simple numbers of lithic versus the overall weight of a given set of lithics when used to calculate density. Therefore two densities were figured for lithics, one based on number and one on weight. In calculating an overall density of artifacts per unit, the number of lithics was used in order to formulate a consistency with the number of ceramics and all other artifact types in the absence of ceramic weight data. The result is an overall artifact density per subop that can be ranked on a continuum from highest density to lowest density. This same method is used in calculating density in Chapters 4 (Dancer Group) and 5 (Agua Lluvia) also.

The heaviest amount of midden material (see Appendix F, Table F.2) occurred around Structure 1, especially in front of Structure 1 and between Structures 1 and 4 (Figure 3.16). Generally speaking the area directly behind (or south of) Structure 1 was relatively clean, while the front had a significant amount of midden material. The two test pits with the highest densities, units S and T, were located in between Structures 1 and 4. The density of artifacts in these two subops is four to five times higher than any other off-mound unit excavated.

The very high density of discarded artifacts in between Structures 1 and 4 might also be evidence as to the function of Structure 4. Given its location and lack of masonry architecture combined with the high density of ceramics in Subops S and T, the two associated off mound test units, Structure 4 may have been an area in which food preparation took place. The density of ceramics in Subop S was over 1,224 sherds per m^3, three times that for any of the other off mound units, while Subop T had a ceramic density of more than 861 sherds per m^3, or two times the density of the other units. In addition, three of the four obsidian blades found in the off-mound units were also found in Subops S and T, again between Structures 1 and 4, and may have aided in food preparation activities. Finally, the amount of heated or burned lithic material observed and collected in Subop F, located on Structure 4, is more than two times higher in number and approximately four times higher in weight than that found in any of the other excavation units.

If Structure 4 was indeed a locus of food preparation activity, then the presence of discarded debris in between it and Structure 1, as evidenced in Subops S and T, may have been provisional. In other words, it may have served as a temporary location for trash, such as a staging area, similar to a modern household trash can or receptacle (see Schiffer 1987:66). When the trash was removed to its more final discard location, it might leave behind thin layers of trash that might accumulate into a deeper deposit over time.

It is also important to note that the ceramics in Subop S include a high number (N=150) of very small eroded sherds sometimes referred to as "gunshot." Subop S had a density of the gunshot sherds of over 61 per m^3, three to five times the number for the other units. Subop T also had a relatively high proportion of them (N=80), with a density of 32 per m^3 which is at least two times that for the other units, but only half that of Subop S. Although all of the off-mound units contain some of these sherds, a high density of them can be an important factor. The location of Subop S is between Structures 1 and 4, but slightly north such that this area is actually inside the perimeter of the open space in front of Structure 1. The very small eroded sherds occurring in high quantity in a given context can indicate an area in which the ceramics were discarded and then trampled (Blackham 2000; Nielsen 1991). It is likely that a discard area was present in the space between Structures 1 and 4. In addition, it may have been an area that household members were repeatedly traversing. Such a walkway in this instance could be indicative of foot traffic that could be related to food serving activity.

Subops U, V, W, X, and Y had very low densities of artifacts (Appendix F, Table F.2). These units were situated behind and on the east side of Structure 1. It may not be surprising, however, that there is little trash behind Structure 1 given the architectural format (Figure 3.16). Sweeping or cleaning by the people living there would likely have been off the platform to the front/north of the structure, or the front corners. Subop Z, a good example of this, is positioned in front of (north) but toward the northeast corner of the platform of Structure 1. It had a high density of apparently discarded artifacts, the fourth highest, (Appendix F, Table F.2; Figure 3.16), while Subop Y very nearby, but to the side (east) of the structure had a low density of material.

Subops D and E were placed to assess midden debris and/or other possible activities at the eastern and western margins of the group. Subops E and D are ranked tenth and eleventh respectively in the relative density of material culture for the off-mound units at Pak'il Nah (Appendix F; Table F.2). Both units were excavated into the same clay loam as the others and down to bedrock and have only a fair density of artifacts. Though Subop D had higher raw numbers of artifacts than Subop E, or even A, its density is relatively low due to the higher volume of soil excavated from the unit, 1.3 m^3 (Appendix F; Table F.2). Certainly some midden debris exists in both of these areas, near Structures 2 and 4 (Figure 3.16). This deposit is a thin layer or is sheet-like. "Sheet middens," common in domestic contexts, often cover a good bit of the site and are produced by the removal of provisional waste and/or the recycling of waste (Schiffer 1987:45).

An interesting observation concerning the ceramics of Subop D, located just northwest of Structure 4, was made by Sullivan (2003). She noted that the ceramic sherds from this unit are slightly different than any others in the Pak'il Nah deposits. They are of the same types and forms as the other ceramics collected, but have different pastes, actually pastes resembling the ceramics from the Irish Creek Marsh area (Sullivan 2003). Irish Creek Marsh is located near Sierra de Agua, at which two sets of ancient ditched fields were found and investigated by Jeff Baker (2003). Sierra de Agua is located almost 30 km southeast of Pak'il Nah below the Booth's River Escarpment (see

Baker 2003). There is a distinct possibility that the Pak'il Nah, Subop D ceramics may have been traded in from this area given Sullivan's (2003) observation about the similarity in pastes. Thus far no other deposits of this type of ceramics have been noted for the Dos Hombres transects or in the data from the site center itself. Given the presence of this unique group of ceramics and their localized situation within the Pak'il Nah household, it is possible that the area excavated in or near Subop D (Figure 3.16) was either a storage area or a provisional discard area where large sherds, partially broken, marginally useful, or more immediately recyclable, might have been placed before final discard (see Deal 1983; Hayden and Cannon 1983; Schiffer 1987).

The off-mound Subops AA, AB, AC, and AD were all located in the northernmost part of the plazuela group, near or between Structures 2 and 3 (Figure 3.16). Subops AB and AC are of only fair density and located slightly north of Structures 2 and 3. Both units have comparable amounts of ceramics, but Subop AB has slightly more lithic material than AC (Appendix F; Table F.2). About half the ceramics in both subops are the very small eroded, or "gunshot," like that found in Subops S and T. The lithics of Subop AC are non-diagnostic general categories of debitage. Since the densities of both ceramics and lithics are only fair, the material found in Subops AB and AC are primarily indicative of some minimal discard which created a thin sheet midden.

Finally, Subops AA and AD have low densities of artifacts, some of the lowest of all the midden test units comparatively (Appendix F; Table F.2). Subop AA is located between Structures 2 and 3 toward the south end of the corridor-like space between them, towards the plaza (Figure 3.16). Subop AD is located near the southeast corner of

Structure 2. These two units might be indicative of a very thin sheet midden, but the results were not significant enough to clearly determine any specific activity/ies.

Activity Areas

Subops A, C, and R were all placed in the open plazuela area (Figure 3.16). Both A and C were 1 x 2 m units while Subop R was a 1 x 1 m unit. All three units, A, C, and R, were placed in order to assess the presence of midden debris, but also to investigate the depth of cultural deposits, depth to bedrock and the presence or absence of subsurface modifications. All three subops had a fair to moderate density of artifacts, again indicating the possibility of the area being habitually swept clean. However, due to their locations closer to the center of the plazuela, approximately 5–10 m from each nearby structure, their artifact densities might also indicate the use of this space for certain domestic activities. Subop R had a very high concentration of ceramics, over 416 per m^3, the third highest of all of the midden test pits (Appendix F; Table F.2). While both Subops A and C had high concentrations of lithics compared to the other off-mound units (Figure 3.16), Subop C actually had the highest density of lithics of all the midden tests at nearly one kilo per m^3 (Appendix F; Table F.2).

The high density of lithic material in Subop C is comprised of debitage (N=119) and one obsidian blade. Subop A's density, 868 g per m^3, is also nearly all debitage, with one exception, the presence of an informal tool, in this case a utilized flake. The composition of debitage types in both units is rather uniform between the two (Appendix A; Table A.3). The combined quantitative debitage composition for A and C is: primary flakes (N=2), secondary flakes (N=10), tertiary flakes (N=22), retouch or pressure flakes (N=10), chunks (N=33), and shatter (N=127). There is a predominance of shatter (broken flakes or very small flake fragments) and chunks, with the rest being identifiable flakes either percussion or very small pressure flakes. It is possible with this composition of debitage that this was an area where expedient tools or informal tools were made. Though certainly not produced in any high quantity, small amounts of flake tools or utilized flakes may have been fashioned simply for use in everyday tasks within the household.

As for the high density of ceramics in Subop R, the composition of these is characteristic of midden deposits, primarily body sherds with the predominant form being bowls, along with a few sherds from jar forms mixed in (Appendix B). There were also a moderate amount of lithics (N=62), all debitage, but only 193 g per m^3 (Appendix F; Table F.2). The configuration of debitage types of in Subop R, though is considerably different than in Subops A and C (Table 3.7). Excluding of the category of shatter, biface thinning flakes are the dominant debitage type. Importantly, there are two chert percussion blades in this group, one whole and one distal fragment. It is highly possible that both the biface thinning flakes and percussion blades are less indicative of any tool production at any level, formal or informal, but rather of the possibility of a processing activity area of some sort. The typology hints at the possibility that some of these could have been used as expedient tools. Subop S actually had the most chert blades (n=4), and also had two obsidian blades. The proximity of the two units, both to each other and to

Structure 4, suggests that Subop R may be evidence of an area of similar activity, as indicated on and around Structure 4, such as food processing.

Debitage Type	Form	N=x
Biface Thinning Flakes		7
Chunks		3
Percussion Blade	distal	1
Percussion Blade	whole	1
Primary Flakes		1
Retouch/Pressure Flakes		6
Secondary Flakes		1
Tertiary Flakes		5
Shatter		37

Table 3.7: Subop R debitage composition.

Three possible activity areas were found located on-mound, specifically on Structures 1, 2, and 3. Excavation of the exterior portion of the platform of Structure 1 revealed one of these activity areas. The deposits just outside or north of the front (north) structure wall and entrance include a possible set of in situ primary deposits lying on the plaster floor of the platform found in Subops I and O (Figure 3.3). A number of ceramic sherds (N=52) were all found in this area and piece plotted (Figure 3.6). All 19 sherds in Subop G were all from the same vessel. In addition, several sherds (N=8) represent one vessel in Subop I, and the same for Subop O (N=10, representing a single jar). In total, potentially at least three (reconstructable) vessels are represented in the artifact clusters. Two of these are jars, and the third form is a bowl. All of them date to Tepeu 2-3. Along with the ceramic vessels two Bifacial Celts, one scraper, and one utilized flake were found and plotted on this plaster platform floor just outside the doorway of Structure 1.

These artifacts are likely related to some domestic activity that took place. Given the forms of the vessels, at least two jars, it is possible that the area just outside the doorway was either a storage area, or a provisional discard area. Macroscopic use-wear attributes were recorded for all formal tools. Although it is only a preliminary wear analysis, a few interesting observations resulted from it. One of the bifacial celts, from Subop O, shows evidence of some lateral grinding and slight haft polish, but no visible distal polish or rounding. The other bifacial celt does show evidence of distal impact wear and slight distal polish along with definite haft polish, but the artifact is not completely spent. These findings support the idea that this area was a storage area for items that were in use.

Possible evidence for on-mound activity was found in Subops H and K (Figure 3.3). Both subops were placed on Structure 2, partly on the platform and partly off in order to sample the super-surface remains on the platform and define the location of the platform retaining wall as well. Artifacts collected in these two units were somewhat abundant even though both units were only excavated approximately 15 cm below the ground surface. It was difficult to discern, even in these shallow depths, whether these remains were in situ. As such, they were not piece plotted during the excavations with one exception. The greenstone fragment found associated with this structure was found just off or outside of the platform retaining wall in Subop K. Given the lack of clear primary context, the artifacts found in these two units cannot really be considered to be directly indicative of an activity. Although some were obviously located in collapse debris, none of the associated artifacts were encountered in any construction fill or subfloor context. Therefore, they may be indirectly related to an activity. Collectively the two units had 143 ceramic sherds, and 93 pieces of debitage, one utilized flake, one end scraper, one medial obsidian blade fragment, and one fragment of greenstone. These artifacts were distributed throughout the two units i.e. both on and off the platform in each unit.

Finally one other possible location of an on-mound activity area was noted on Structure 3, in Subop B (Figure 3.3). Thirteen water jar fragments were piece plotted in situ at approximately 18 cmbs. They are all a part of a single vessel dating Tepeu 2-3. A number of other artifacts were found in association with these including a bifacial celt, and two proximal obsidian prismatic blade fragments. Other ceramic sherds and debitage are included in the same level, which included some matrix below this activity surface find on top of the platform.

Mortuary Analysis

No human burials were encountered in the excavations in any context at Pak'il Nah. As such no human remains were documented or analyzed for this household group. The fact that no human remains or mortuary contexts were encountered in this investigation is likely the result of sampling limitations. Much of Structure 1's subfloor deposits were not investigated due to time and labor constraints and the resulting limited exposures (40%) of the interior floor space and no interior subfloor exploration. The only subfloor excavations in Structure 1 were just outside the doorway in two different exposures. The first was immediately outside the doorway and adjacent to, but below (north of) the single step into the entrance. The second subfloor exposure in Structure 1, was also exterior and located approximately 1.25 m north of (outside) the entranceway.

The same could be said for each of the other structures/platforms. Each of the other three mounds was sampled with very limited subfloor or sub-platform exposure. The sampling limitations and biases at Pak'il Nah, all restricted by time, labor and access, could easily account for the lack of burials. Additional subfloor sampling would be needed in order to appreciate the specific individuals who lived at Pak'il Nah.

Non-Mortuary Ritual Activity

As briefly mentioned above, Structure 1 was covered with what initially appeared to be collapse debris but as the excavations progressed it became clear that the fill inside and covering the building was not completely the result of collapse. The interior room fill consisted of a high quantity of loose limestone marl, tan in color, which was mixed with cobble and large stones. The same loose marl and cobble fill was also covering the exterior of the structure and was overlying the platform as well (Figure 3.12). While removing the fill from inside Structure 1, a number of very large cut limestone blocks were uncovered. These large blocks had a characteristic shape and size. Their shape was similar to that of vault stones, or the cut stones found in a corbel vaulted roof. The presence of these inside the room of the structure indicated a distinct possibility that the structure had a corbel vaulted ceiling.

Prior to excavating the loose fill inside the room of Structure 1, at the east end, an unusual deposit was encountered in the entryway. The fill was very dense in the doorway opening and directly back from it, almost all the way to the south/back wall. It was a different texture of fill than any inside the room or covering the structure, it was similar in composition, but had a lighter color, almost white. It was also hardened and very difficult to remove. It closely resembled the wall core found inside the facing stones of the north wall. The fill in the doorway was actually a cement-like wet fill composite made with plaster, cobble, and gravel similar to the wall core.

Another deposit was discovered inside the structure, specifically within the loose marl fill of the eastern portion of the room. Just 20 cm above the plaster floor, (87 cmbs), the loose marl fill turned grey and it became clear that a burning episode had taken place inside the structure. A discrete deposit of charcoal was uncovered in the center of the eastern portion of the room along with a brown, possibly organic, stain in the soil adjacent to and east of it (Figure 3.9). More than 637 g of charcoal was collected in total as well as a soil sample of the stain. A red pigment or ochre was also uncovered at the same level adjacent to and south of the charcoal concentration. The red pigment was spread across an area of approximately 1 x 2 m reaching the south structure wall (Figure 3.9). This helped to explain a small spot of red/orange pigment found at the top of the mound at the beginning of the excavation of the room interior. The ochre found at the top of the mound may have been pushed up by a root or burrowing animal, the result of natural formation processes. Evidence for burning was also present in a discoloration from scorching on the interior stucco of the north wall and part of the east wall (Figure 3.7). The burning episode appeared to have been localized to this east end of the room. However, since the west end of the room was not excavated, it is not known if the burning incident is evident there as well.

Each of these deposits might not be as significant if they had been noted separately. Considered together, they indicate an important ritual activity. The deposits of plaster/wet fill in the entryway may be a symbolic deposit representing the sealing off of the doorway or structure related to terminating it. Other deposits like this have sometimes been found in different forms, such as filling the doorway with trash, in terminated structures (see Inomata 2001). The fill inside the structure and on top of the platform may have been the result of either the ritual burning or more likely an intentional dismantling of the vaulted roof material to fill it. The loose fill present both inside the room and over the exterior, including on top of the platform of the structure are all the same color texture and composition and likely represents an intentional burying of the structure.

The symbolic sealing and covering of the structure along with the discrete hearth and red ochre inside the room are good evidence that this structure was terminated in a ritual fashion, deconstructed, sealed off, burned, and buried. The ritual termination of structures (and artifacts) was fairly common among the Late/Terminal Classic Maya, but seems much more common for temples and public structures than houses (see Freidel et al 1998; Mock 1998a, 1998b; Walker 1998). Only a few terminations have been noted in elite houses located within civic ceremonial centers (see Garber et al 1998; Freidel et al 1998). Structure 1 is the only building at the Pak'il Nah group that had evidence of ritual termination. However, it is highly likely that the entire household was terminated symbolically with this one event even if it was localized to or concentrated within the single structure.

One final note, outside of the Structure 1 entryway, as previously mentioned an artifact deposit was found and piece plotted in situ there (Figure 3.6). A number of (N=19) ceramic sherds were found in Subop G, all from the same vessel. Several sherds (N=8) representing one vessel were also found in Subop I, and the same (N=10) for Subop O. At least three, and possibly four, vessels may be represented in these artifact clusters that were piece plotted outside the entryway. Two bifacial celts, one scraper, and one utilized flake were found and plotted along with the ceramics and found in this same concentrated area on the plaster floor of the platform. It is not likely that this deposit was a part of the termination of Structure 1 which consisted of evidence of ritual burning, deconstruction of the roof, sealing of the doorway and finally burying the structure. It is more likely to be the result of everyday domestic activity, functioning as a storage area as previously noted. It was however covered over in the course of the termination by the same loose marl and cobble fill as was present inside the room.

Chapter 4: Excavated Households Excavated Lives: The Results at the Dancer Group

The Dos Hombres transect survey was performed previous to this work and accomplished by designating two 2,500 meter long transects running both east and west from the Dos Hombres civic ceremonial center (Lohse 2001). Transect A began at the northern end of the Dos Hombres ballcourt and continued west 2500 m (Figure 3.1). The Operation 28 household group, designated in survey as the A-VII-4 group, is located in Block 7 of Transect A, to the west of the site (Figure 3.1). Operation 28 is specifically in the seventh survey block from the ballcourt of Dos Hombres. Since each survey block was 250 m^2 (Lohse 2001), Operation 28 was approximately 1.55 km (1,550 m) west of the site center.

Traveling west from the site center of Dos Hombres, a total of four environmental subzones were defined for the transect survey (Lohse 2001:48). First is the Broken Ridges subzone in which the site center sits. The River Floodplain is the next subzone at around 600 m west of the ballcourt, in the vicinity of the Rio Bravo (Lohse 2001:49). Next is the Transitional Uplands subzone, located primarily on the face of the Rio Bravo Escarpment, beginning at 1,400 m west of Dos Hombres (Lohse 2001:49). One final subzone was defined for this transect, west of the Rio Bravo Escarpment face. Just at the top of the escarpment begins the Upland Bajo area.

Operation 28, in Block 7 of the west transect, is in the in the Transitional Uplands. This subzone occupies half of Block 6, all of Block 7, and half of Block 8. It is defined as a steeply sloping area having thin soils with interspersed spots of colluvial soil and hardwoods (Hageman and Lohse 2003:112; Lohse 2001:51). Brokaw and Mallory (1993:19) have described an area they identify as Upland Forest, likely the same or similar to this Transitional Upland delineation.

Operation 28 was also previously designated group A-VII-4 in the settlement survey according to PfBAP designation standards. I have named this household group the *Dancer Group* for ease of identification and reference. It will be referred to as such from here forward. Other than tape-and-compass mapping by the surveyors, no other research in the form of excavation has taken place at the Dancer Group prior to this research project. Additionally, no evidence was found indicating any historic knowledge though *Chiclero* camps are known at various places throughout the area.

The vegetation surrounding the Dancer Group today is primarily tall hardwood tree growth including Ramón or Breadnut (*Brosimum alicastrum*), Copal (*Protium copal*), Cohune palm (*Orbignya cohune*), Allspice (*Pimenta dioica*), Zapote or Chicle (*Manikara zapota*) and Strangler Fig (*Ficus cotinifolia*). Given the environment, Mahogony (*Swietenia macrophylla*) was once also a significant presence here.

Excavation Summary

Summary of Work

The Dancer Group is humble in size platform group with only two structures in the terminal occupation (Figure 4.1). The L-shaped platform is approximately 108 m^2 in area, however, additional space must also be considered as a part of the overall house lot. Just east of the platform is a terrace, which upon investigation is clearly modified. This entire area, platform, structures and the open space on this residential terrace could make up a house lot possibly as large as 500–600 m^2 in size.

Excavations took place at the Dancer Group household over the course of several seasons, from 1999 to 2001. They began in the summer of 1999 with preliminary excavations at the very end of that season. Three off-mound excavation units were placed in order to investigate the construction and chronology of the terrace feature and assess subsurface modifications, if any. Unlike Pak'il Nah, the Dancer Group was relatively easy to access. It required only a five to ten minute walk after our usual 20–30 minute drive from camp along the same all-weather road that passes north to south through the Rio Bravo Conservation and Management Area.

The bulk of the field research performed at the Dancer Group took place in the summer of 2000, and was finished up in the spring of 2001. Five additional off-mound units were placed and 16 on-mound subops were excavated (Figure 4.2). During the 2000 season a series of burials were discovered in the platform fill. Since the excavation of the three sets of mass burials was tedious and difficult due to poor preservation and a sizeable amount of bone, they were not completed until the spring season of 2001. It was at this time that the research was concluded at the Dancer Group household. For all three seasons of excavation at the Dancer Group a total of 24 units excavated, eight placed in off-mound contexts and 16 in on-mound contexts.

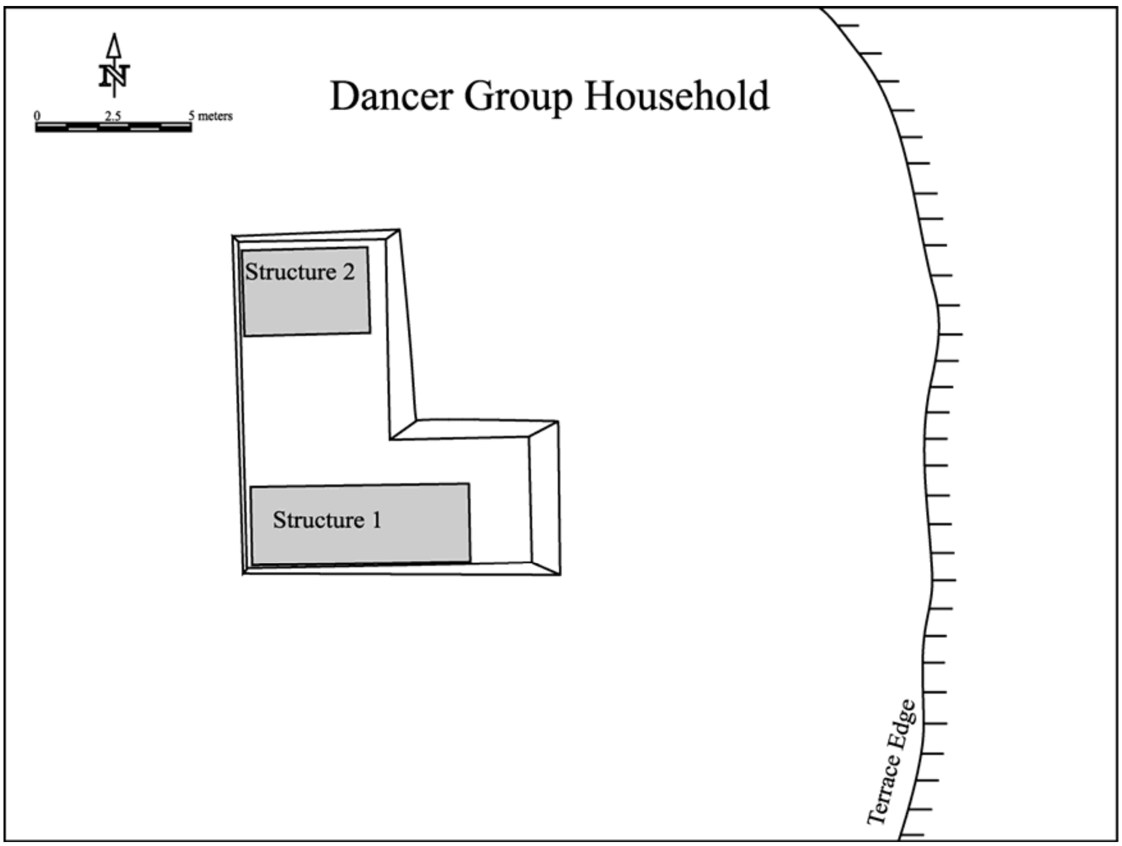

Figure 4.1: Dancer Group household.

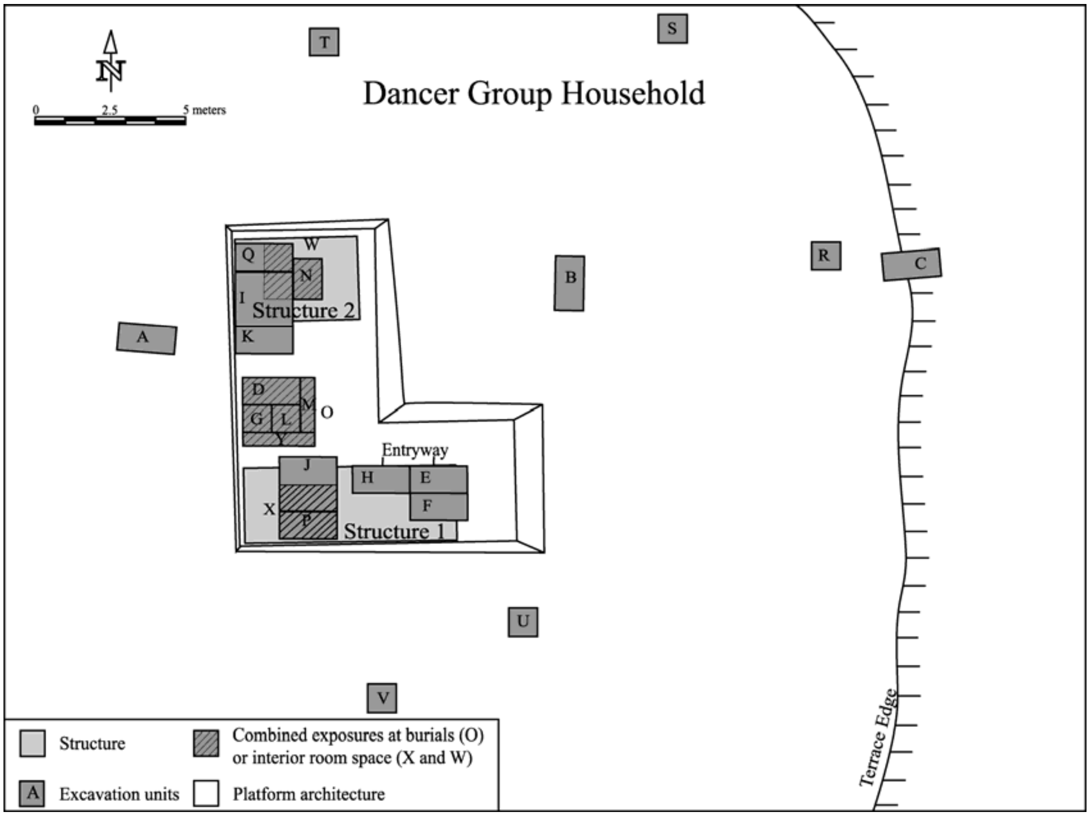

Figure 4.2: Dancer Group household with excavation units.

Landscape Features/Modifications

Since the group is situated on the face of the escarpment, similar to the other settlement in this same survey block, the area on which the platform is resting is terraced. The residential terrace is a significant landscaping effort along the escarpment with heavy modification of the slope. The terrace edge is a seemingly long running one present along and between several residential groups in this block. Landscape features or modifications in the area of settlement along the escarpment face are not uncomplicated endeavors and generally found in association with more than one residential group. Interestingly, they are in many cases partial modifications in which some aspects of the natural landscape is utilized or incorporated into the design. For example, the residential terrace edges were formed from pockets of natural outcroppings of limestone filled in with cut limestone retaining walls.

Of specific interest at the Dancer Group in terms of residential terracing or landscape modification, one excavation unit, Subop C, was placed on the edge of what appeared to be a terrace in order to assess whether it was in fact modified or a natural outcropping, since some indication of a terrace retaining wall was evident on the surface. Once excavated, a linear stone alignment perpendicular to the escarpment face was still partially in place. Though only one course of stone was left in place at the time of excavation an estimated four to five courses were likely standing at one time, all forming the terrace retaining wall. Terrace construction fill was eroding out of the exposed terrace edge inside the subop. The composition of the fill included gravel, marl, clay, and the usual secondary midden material commonly found in construction fill.

The composition of terrace fill matched that which was found in two other units excavated on top of the terrace. Subop B was placed on the terrace surface approximately 11 m west of the terrace wall and between it and the Dancer Group platform. It was a 1 x 2 m unit placed in order to determine the terrace fill sequence. The second, Subop R, was a 1 x 1 m unit located between Subops B and C approximately 2.5 m west of the terrace edge. It was excavated as a soil pit in order to gather samples of fill to be tested. Subops B, C, and R were each found to have three strata, including the occupation surface at the top. The occupation surface was composed mostly of clay. The terrace fill below the occupation surface in all three units was comparable in color, composition, and texture and likely was placed contemporaneously as reflected by ceramic analysis. The artifacts found in the fill below the surface all three terrace units (Subops B, C and R; Figure 4.1) was in this fill matrix rich with previously discarded artifacts, in other words recycled trash. The artifacts found in the terrace fill include ceramic sherds, a groundstone hammerstone, and informal and formal chert tools (Appendix F, Table F.3). Ceramic material was mixed in most of the terrace fill lots, Tepeu 2-3 with either or both Tzakol and Chicanel traces. However, in subop B which had the clearest sequence, the upper levels were strictly Tepeu 2-3 while only the lowest level, just above bedrock, had a mixture of Tepeu 2-3 with a small amount of Chicanel. In any case, it appears that the terrace was built in a second phase of construction (or possibly remodeled) in the Late to Terminal Classic Period during Tepeu 2-3 phase (A.D. 700 to 900). The construction phases will be further defined and discussed below.

In addition to the residential terracing that runs from one domestic group to another and sequentially down the face of the escarpment, other landscape modifications are present in block 7 that are not held singly by one household group nearby. One notable modification appears to be a possible water management feature. It is a ditch or channel cut into a limestone bedrock outcropping. Since the bedrock channel was not excavated during this research project, these are very preliminary observations and comments. Lengthwise, it runs perpendicular to the slope of the escarpment and behind as well as between at least three residential groups. It appears to possibly have multiple functions. First, it could stop sheet-wash or rain runoff down the face of the escarpment protecting the habitations that are positioned on the residential terraces along this same face. Secondly, it may have served a purpose in holding some of the seasonal rainwater for residential use. Most of this feature is visible on the ground surface. Cut marks are visible in the limestone bedrock that the channel is cut into, though there appears to be no lining in the portions of the channel that were visible without excavation. This feature was not only associated with the Dancer Group, appearing to terminate at it, but also passes by at least two other residential groups along the way.

Architecture

The Dancer Group is a small residential patio group in which the termination phase of occupation consists of an L-shaped platform with two structures on it. These are all visible mounds on the ground surface (Figure 4.1) and represent the terminal occupation phase of the household. The excavations demonstrated that at least one earlier phase of occupation also took place at the Dancer Group household.

The basal platform and the two structures were all excavated to varying degrees in order to assess the chronology of construction and occupation, architectural style, number of construction episodes, and materials used in the construction of the household group. A total of 16 excavation units were placed in architectural contexts towards these goals.

Platform. The platform is L-shaped, low, and terraced (Figure 4.2). It is constructed of cobble and clay fill with cobble facing stones around the perimeter and on top supporting the living or occupation surface including two small structures. The fill was a mixture of cobble, marl, gravel, and a clay soil along with artifacts or recycled trash present throughout. The shape of the platform is L-like with the long axis measuring approximately 12.5 m north to south and the short axis approximately 10.5 m east to west. The area of the platform is almost 94 m^2.

Two phases of construction were likely, as evidenced by the chronological assessments of the platform construction and subfloor construction fill (Figure 4.3), the chronology of the mortuary data within the platform fill (Appendix C, Table C.3), and the presence of an anomalous linear stone alignment that was discovered within the platform fill beneath Structure 2. Although it is not clear what the earliest manifestation of the platform may have looked like, it is apparent that the earliest phase of construction took place during the Chicanel phase of the Late Preclassic (400 B.C.–A.D. 250) as evidenced by the ceramic chronology (Appendix B, Table B.1).

Structure 1. Structure 1 is the southernmost structure of the two structures located on the L-shaped platform (Figure 4.2). It was less than 50 cm in height above the platform surface prior to excavation. The excavations revealed that only a single course of stone remained in situ marking the walls of Structure 1 (Figure 4.2). The architecture was likely formed of low and narrow stone bracings for perishable pole and thatch (and possibly stuccoed) walls. The foundation bracings are estimated to have been two to three courses high originally given the amount of collapse debris present. The roof of the structure was also perishable. I have observed many modern examples of walls constructed with both masonry and perishable materials. It is also reported ethnographically for Yucatán (Wauchope 1962, see Figure 20b), along with a few examples of stones lining the bottom of perishable structures for bracing in the highlands of Guatemala (e.g. Fauvet-Berthelot 1986).

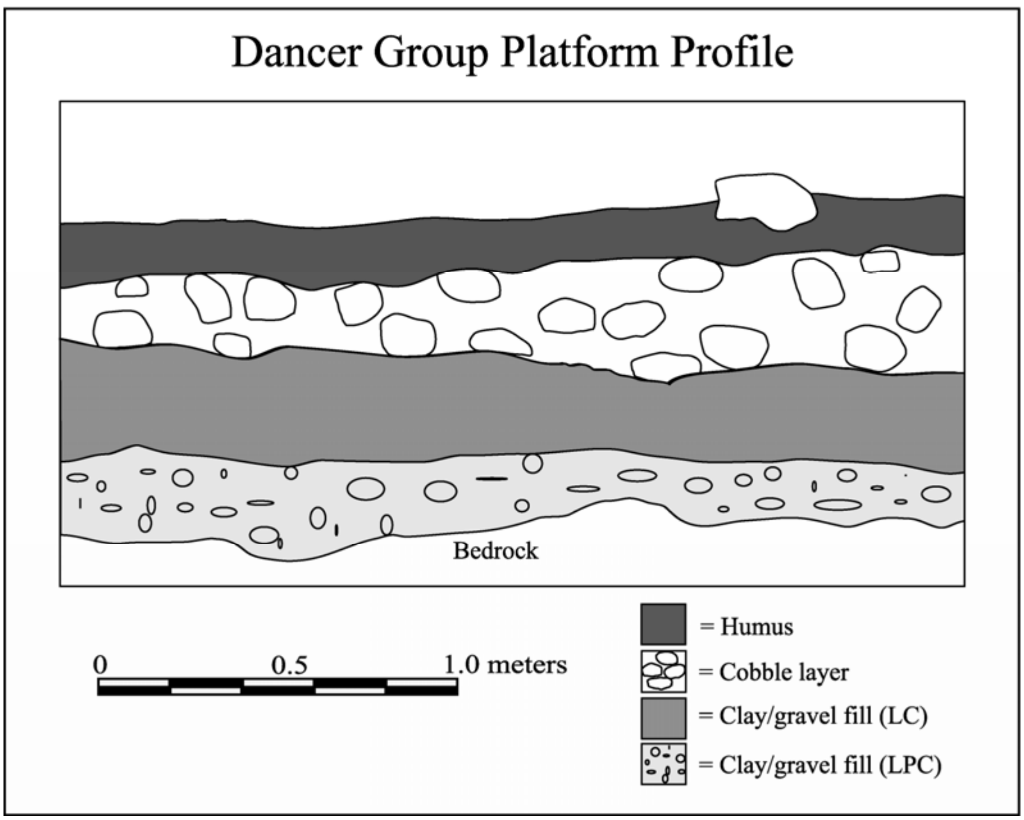

Figure 4.3: Profile of platform.

The over all exterior size of the rectangular structure is approximately 7.7 x 3 m. The remnant stone bracings from the walls of the structure at the time of excavation were roughly 50–70 cm wide at the foundation, making the dimensions of the interior space of the structure approximately 7.1 x 2.4 m at the foundation (Figure 4.2). The entryway is 2.0 m wide, faces to the north, and is on the north wall at the east end. The Structure's south wall was found to be present only intermittently and therefore its position is estimated based on only a few stones and the termination of the mound itself on the south side. The ceramics recovered from the Subops J, P, and X, positioned on the west side of Structure 1, are mixed chronologically in all contexts. The contexts represented in those units are both subfloor fill and interior space occupation surfaces. The absence of portions of the south wall of Structure 1 and the mixture of materials in those units is likely the result of natural site formation processes (Schiffer 1987). A possible scenario is that a tree may have been growing in the interior space of the post-abandonment structure with its roots penetrating into the subfloor fill. Once the tree died and fell it would have done extensive damage to the structure's interior occupation surface, the structure's south wall, as well as mixing the subfloor fill mixing the cultural material from top to bottom.

Structure 2. Structure 2 is the northernmost structure of the two structures on the L-shaped platform of the Dancer Group household (Figure 4.1). The unexcavated mound was also found to be less than 50 cm tall above the platform surface. Excavations revealed only a single course of stone in situ marking the position of the Structure 2 walls (Figure 4.2). The original stone portions of the walls were likely no more than two to three courses tall as evidenced by the amount (or lack) of collapse debris. Perishable materials, in pole and thatch style, possibly formulated the primary portions of the walls and roof of the structure. As with Structure 1, the stone portions or alignments associated with the walls were simply bracing or lining the inner and outer portions of the bottom of the actual perishable or pole walls. The exterior dimensions of the structure revealed in the excavations were slightly larger at 3.5 x 4.5 m. The remnant stone bracings from the walls of the structure are roughly 50–70 cm, at the foundation, making the dimensions of the interior space of the structure approximately with the interior space measuring approximately 3 x 4 m.

Structure 2 Sub-I. As already noted, in addition to an obvious earlier phase of occupation as reflected in ceramic chronology, a stone alignment was also encountered during the excavations at approximately 77 cmbs. The Sub-I linear feature was found within the subfloor fill, deep underneath Structure 2 at the bottom of the platform construction or base. At least two courses of stone were remaining forming the double linear stone alignment (Figure 4.4) just above the bedrock subsumed in a light colored (marl) subfloor construction fill matrix. The bottom of the lowest course of the remnant wall was at a depth of approximately 106 cmbs. The size of the substructure is unknown due to both the sparse nature of the deposit and the limited exposure of it.

Given that the feature was found at the bottom of a significant level of mixed Middle to Late Preclassic construction fill situated below the Tepeu 2-3 terminal phase, it is possible that this stone feature is actually an even earlier phase of construction than the fill surrounding it. It indicates the distinct possibility that there were actually three phases of construction. Since this very low level of fill surrounding the linear feature contains a both Chicanel and Mamon phase ceramics, the earliest construction could date as early as Middle Preclassic (600–400 B.C.). Given the mixed nature of the earliest ceramic context (Chicanel and Mamon), it is more likely that both of the earlier construction phases are Late Preclassic (400 B.C.–A.D. 250), while the latest phase is clearly Tepeu 2-3 Late Classic (A.D. 700–900).

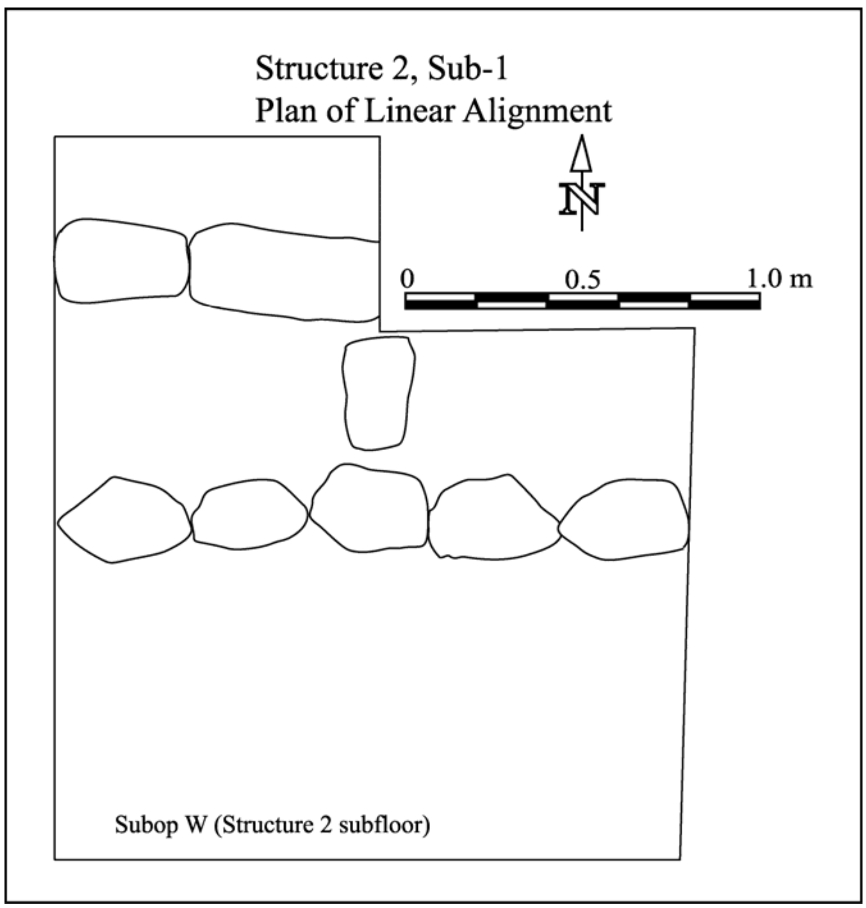

Figure 4.4: Plan of linear stone feature, Structure 2 Sub-1.

Material Culture Analyses

The ceramic analysis for the Dancer Group was conducted by Lauren Sullivan (2003; Appendix B). All remaining material culture analyses were performed by this author including all chert lithics, obsidian lithics, ground stone, small finds, and the lithic raw material assessment. Palma Buttles provided some of the marine shell species identification and mineral identifications of several of the greenstone artifacts. As for organic materials, though there were no preserved mammalian remains only freshwater shell species, I carried out the faunal analysis of this category at the Dancer Group household group.

Ceramics

A total of 4,149 ceramic sherds were collected from the Dancer Group excavations along with eight whole vessels from mortuary contexts and analyzed by Lauren Sullivan (2003; Appendix B). All comments presented here are interpretations based on that analysis in context with the excavated data. As stated above, the Dancer Group was occupied primarily during two different time periods, the Tepeu 2-3 phase of the Late to Terminal Classic Period with an earlier occupation during the Chicanel phase of the Late Preclassic (Table 1.1). Tepeu 2-3 is defined for northwest Belize as A.D. 700–900, while Chicanel is defined as 400 B.C.–A.D. 250 (Sullivan and Sagebiel 2003:26; Sullivan and Valdez 2004:191).

The chronological assessment of the platform with Structures 1 and 2 is very similar to the burial chronology. The chronology for structure 1 however, is skewed by natural site formation processes as previously noted. The likely root displacement of a fallen tree, post abandonment, caused such a disturbance to the Structure 1 deposits that all ceramics are mixed from all the associated excavations to bedrock at a depth of 126–132 cm. The lowest level of the subfloor excavations of Structure 1 which was located just above the bedrock in what would be presumed to be construction fill in the platform supporting the structure actually had ceramics from the Late Classic, Early Classic, and Late Preclassic.

The units placed in the center of the platform reflect the same Late Preclassic Chicanel phase in the lower strata with Late Classic Tepeu 2-3 following it as the terminal occupation phase of the Dancer Group. Structure 2 also has the identical ceramic chronology with Chicanel at the lowest strata in association with Str. 2 Sub-I and Tepeu 2-3 in the terminal occupation phase associated with the Structure 2 architecture in the uppermost levels.

The chronology of the off-mound units is less complex and provides a clear assessment as to the timing of the depositions in reference to the long term intermittent occupation of the Dancer Group. All lots from Subops A, S, U, and V date Tepeu 2-3 without any earlier types. Subop T was also a midden test pit, but produced little material. The only ceramic artifacts encountered in that unit were three unidentified body sherds that were badly eroded. As a result a tentative Tepeu 2-3 date was also assigned to that unit as well.

Subops B, C, and R were all located on the residential terrace adjacent to the platform architecture of the group. While the upper levels of each unit contained exclusively Tepeu 2-3 ceramics, the lowest levels were also dated Tepeu 2-3, but had some earlier ceramics mixed with them. The terrace feature was likely added in the Late Classic though the Late Preclassic (and possible Early Classic) occupation debris is present from earlier activity surfaces. The terrace was likely built over these surfaces to extend the living surface and possibly for further gardening activity (see below).

An analysis of the ceramic forms that are present at the Dancer Group reveals that the ceramic assemblage is generally characteristic of a domestic setting. The assessment of forms is generally biased by the ability to detect the form of a given sherd. With these limitations in mind, a few observations can be made. There are 386 (9%) occurrences of detectable forms. Bowls dominate the ceramic assemblage at 62% (N=238) of the detectable forms. Jars are the second most common detectable form at 26% (N=102). At the Dancer Group a significant number of plates and/or dishes were collected and are represented at 11% (N=43). At least six of these are whole vessels from burials which skews the picture just slightly. Without those from the burials in consideration, the plates and dishes comprise only 9% of the detectable forms. Certainly, the fact that bowls and jars are the most common forms found in the analysis is not surprising and further corroborates the domesticity of this platform group. Even considering the burial vessels, there is little evidence for the very large decorated ceremonial feasting vessels associated with civic ceremonial centers.

At first glance, the ceramic chronology might suggest that a 450 year gap in occupation exists at the Dancer group. Although some Tzakol is present, none is present in securely typed and unmixed contexts. It has been suggested by Sullivan and Valdez (n.d.) that the Early Classic may well be underrepresented. Based on thin-section analysis of both Late Preclassic and Early Classic assemblages from northwest Belize, they (n.d., 2006) have suggested that most of the ceramic productive changes happened with regards to technology that can only be seen microscopically rather than the macroscopic stylistic changes that type-variety analysis reflects. Given the domestic nature of the excavations at the Dancer Group, I would suggest that the conclusions of Sullivan and Valdez (n.d.) certainly apply here as well. It might be confirmed by a thin section study of the whole vessels found in the three burial episodes.

If the Early Classic is present, but the types resemble Late Preclassic, then the mortuary ceramics still indicate a gap in burials of 100–200 years. Late Preclassic Chicanel style pottery is present in both Burial Episodes 2 and 3, while Burial Episode 1 has a Tepeu 2-3 vessel and a Late Preclassic vessel (see below for detailed explanation of burial episodes). The presence of a Chicanel vessel in Episode 1 is either an heirloom artifact or more likely a result of the Late Classic re-entry into the platform to place additional burials, such that a Late Preclassic vessel from Episode 2 was collected and placed into Episode 1 at that time. What is most clearly missing in the mortuary chronology, aside from Early Classic material, is any representative material from the Tepeu 1 phase (A.D. 600–700), the early part of the Late Classic. As a result at least a 100 year gap exists in the mortuary chronology and can be extended to serve as the minimum period of abandonment of the household group with a maximum period that would include the Early Classic and span from A.D. 250–700.

Lithics

The excavations at the Dancer Group household produced a sizeable lithic assemblage (Appendix A, Table A.3). A total of 3,029 chipped stone artifacts were analyzed. While all of the formal and informal tools excavated (100%) were analyzed, a sample of approximately 80% of the debitage was analyzed. Sampling of the lithic debitage was conducted in order to reduce the analysis workload, decrease the redundancy of data in mixed or secondary refuse construction fill contexts, making the data set more meaningful. As such, of the total analyzed lithics, 95% (N=2,888) were debitage weighing 45.85 kg which represents 82% of the overall analyzed sample weight (Table 4.1, Appendix A, Table A.3). Formal (N=77) and informal (N=64) tools were also present, comprising only 5% of the overall chipped stone sample.

Debitage. The debitage sampling strategy produced a 75-80% sample performed by removing several repetitive subfloor fill lots in three of the four subfloor contexts. The subfloor fill contexts below Structure 1, Structure 2, and the terrace unit (Subop R) were sampled (60% each). All other contexts, including the burial fill/matrix were analyzed in full. The Dancer Group assemblage contained 18 types of debitage (Table 4.2, Appendix A, Table A.3). As is commonly the case shatter had the highest number (N=1,026) of any single category at 36% of the total number of debitage, but the lowest weight (1,570 g) or 3% of the overall debitage weight. Shatter is a fairly non-distinct type of debitage that is generally small and without a bulb of percussion. It is produced in many stages of the production of most tools.

Lithic Totals			
Household	**Category**	**#each**	**Weight(g)**
Dancer Grp	Debitage	2,888	45,850
Dancer Grp	Informal Tools	64	4,392
Dancer Grp	Formal Tools	77	5,611
Total	**All**	**3,029**	**55,854**

Table 4.1: Chipped stone totals for the Dancer Group.

Flakes of all types occurred in relatively high numbers (N=1,483) (Table 4.2, Appendix A, Table A.3). Individually the flake types occur in varying frequencies. Primary (N=193), secondary (N=360), tertiary (N=428), and biface thinning flakes (N=344) each occur in the assemblage representing all stages of bifacial tool production. Retouch flakes (N=144), some of which are small pressure flakes are also present in the sample, which result from the continual use of the tools or activity.

Included in the multiple type count of flakes is also a category of flakes that I have termed *biface reworking flakes* (N=14) (Table 4.2, Appendix A, Table A.3). This type of flake is a large flake that has obviously been removed from a biface, but has been removed from either the distal or proximal end. At times it was difficult to clearly discern if it was from the proximal or distal end, but most often it appeared to be distal. It is highly possible that these are intentional removals rather than having resulted from use or as a manufacturing error or failure. As a result I have given them a category of their own in the debitage class.

In addition to the presence of flakes, 10 chert hammerstones were also documented along with 143 flake cores for producing expedient tools or flake tools with one of these possibly being a bifacial blank. Cores, chunks (N=151), and hammerstones are overrepresented in weight due generally to their large size than all other debitage categories. Ten blade cores and five micro flake cores are also present in addition to the flake cores and chunks.

A number of chert blades were also encountered in the assemblage and kept in the debitage category since they did not show any macroscopic signs of use, but may prove differently if examined under a high powered microscope as discussed in Chapter 2. Both chert percussion blades (N=41) and pressure blades (N=8) were documented along with one burin (Table 4.2, Appendix A, Table A.3). Burins are often used to drill or perforate shell. However, this burin did not exhibit any macroscopic signs of wear.

Nine tested cobbles were also documented at the Dancer group. The tested cobbles each have at least three to four remnant flake scars, but at least 60% cortex still remaining on them. Finally, the last artifact of debitage was found in association with burial Episode 2 and may well be an intentional grave good rather than secondary fill refuse given its very close proximity. It is the largest single lithic artifact (2,275 g) in the assemblage and is likely an anvil. It probably served multiple purposes at various times, being a flake core and an anvil.

The Dancer Group Debitage Types									
Provenience							***Material***		
Op	**Subop**	**Lot**	**Debitage Type**	**#each**	**Weight(g)**	**Heat**	**Chert**	**Lime-stone**	**Other**
28	All	All	Anvil/Flake Core	1	2,275.1	1	1	0	0
28	All	All	Biface Reworking Flk	14	159.1	8	14	0	0
28	All	All	Biface Thinning Flks	344	928.4	121	341	3	0
28	All	All	Bifacial Flake Core	1	18.3	0	1	0	0
28	All	All	Blade Core	10	293.9	3	10	0	0
28	All	All	Burin	1	2.4	0	1	0	0
28	All	All	Chunks	151	2,708.2	93	149	0	2
28	All	All	Flake Core	142	20,757.3	38	140	2	0
28	All	All	Hammerstone	10	610.0	4	10	0	0
28	All	All	Micro Flake Core	5	137.0	2	5	0	0
28	All	All	Percussion Blade	41	294.8	17	40	0	1
28	All	All	Pressure Blade	8	16.3	1	8	0	0
28	All	All	Primary Flakes	193	3,749.6	84	182	4	7
28	All	All	Retouch/Pressure Flk	144	43.7	4	144	0	0
28	All	All	Secondary Flakes	360	6,346.9	166	350	3	7
28	All	All	Shatter	1026	1,570.4	387	1,024	1	1
28	All	All	Tertiary Flakes	428	2,787.7	189	425	1	2
28	All	All	Tested Cobbles	9	3,151.1	2	7	1	1
28	**All**	**All**	**TOTAL**	**2888**	**45,850.2**	**1,120**	**2,852**	**15**	**21**

Table 4.2: Summary of debitage types and quantities at the Dancer Group.

As for debitage accounted per context, subfloor construction fill had the highest quantity of debitage present (Table 4.3, Appendix A, Table A.3) as would be expected. Since the subfloor context was only sampled, it is not completely representative of the actual quantity present in subfloor fill contexts, but simply an estimated 75–80% sample. The construction fill in the terrace units also had high quantities of debitage present in them since that fill is identical in composition as the fill under the terminal occupation of the architecture. Both of these are comprised of secondary refuse material. The subfloor fill in the platform that was excavated from units that exposed the burial episodes was 100% analyzed rather than sampled due simply to the context. The burial fill had a high quantity of debitage, but are not considered burial goods, rather it falls into the same category as all the other construction fill at the group with the exception of the large anvil.

The Dancer Group Debitage per Subop									
Op	**Subop**	**Lot**	**Debitage Type**	**#each**	**Weight(g)**	**Chert**	**Chalc-edony**	**Lime-stone**	**other**
28	A	All	All	93	434.9	93			
28	B	All	All	150	1,724.4	149		1	
28	C	All	All	94	935.7	94			
28	D	All	All	507	5,096.6	501		2	4
28	E	All	All	71	1,233.2	69			2
28	G	All	All	107	1,086.8	105			2
28	H	All	All	59	1,337.4	56		2	1
28	I	All	All	237	7,150.5	228		5	4
28	J	All	All	175	4,391.4	167		3	5
28	K	All	All	57	2,777.8	55		1	1
28	L	All	All	11	950.4	11			
28	M	All	All	13	1,042.2	13			
28	N	All	All	126	4,331.5	124			2
28	O	All	All	1,034	6,121.3	1034			
28	P	All	All	22	1,255.0	22			
28	Q	All	All	4	225.9	4			
28	R	All	All	4	82.0	4			
28	S	All	All	3	4.9	3			
28	U	All	All	8	41.4	8			
28	V	All	All	75	519.2	74		1	
28	W	All	All	14	1,342.7	14			
28	X	All	All	22	3,596.0	22			
28	Y	All	All	2	170.0	2			

Table 4.3: Quantity of debitage per excavation unit at the Dancer Group.

Contexts that were not subfloor fill or burial fill fell primarily into two categories; 1) activity or terminal occupation surface debris, and 2) midden deposits. Midden deposits, specifically those in Subops A, U, and V had fair quantities of debitage (Table 4.3, Appendix A, Table A.3). The occupation surface deposits associated with Subops P and J need to be eliminated from consideration due to the natural disturbances already discussed. The remainder of possibilities is associated with Structure 2, Subops I, K, N, and Q. Interestingly the interior space of Structure 2, represented in Subop N, has a high quantity of debitage (N=126). However, level 3 of that unit is also subfloor fill therefore actually only 32 pieces of debitage are associated with interior room space.

Informal and Formal Tools. Formal (N=77) and informal tools (N=64) were also recovered from excavated contexts at the Dancer Group (Appendix A, Table A.2). However, in much lower densities as compared to debitage, such that combined formal and informal tools (N=141) make up only 5% of the (non-obsidian) chipped stone assemblage (Appendix A). By weight, the combined tools make up 18% of the lithics. Informal tools make up 45% of the total number of tools, while formal tools make up approximately 55% comparatively. The number of informal tools may be slightly skewed, as addressed in Chapter 2, since in some cases the designation of an informal tool was determined by macroscopic examination of any use wear present on debitage. It is possible that some of the debitage may also have been utilized, but not detectable with only 5X magnification.

Within the 64 informal tools from the Dancer Group, there were seven different types of tools (Appendix A, Table A.2). Scrapers (N=35) were the most abundant type making up exactly 50% of the informal tool group. Four different types of scrapers were noted, 24 end-and-side Scrapers, six side scrapers, and two end scrapers. End-and-side scrapers were obviously the most common type of scraper. There were also three discoid unifaces that also likely functioned as scrapers since their morphology is similar, but they are categorized separately due to their very large size and the discoid shape of the use edge or perimeter.

There were 17 gravers and/or perforators in the Dancer Group assemblage, comprising 27% of the informal tools. The distinction between graver (N=4) and perforator (N=10) was delineated by the "depth" or length of the engraving or perforating apparatus. A third category termed graver/perforator (N=3) was created when there was severe enough retouch as to not be able to discern if the original apparatus was more than 5–7 mm. One of these was made from a utilized flake and likely had more than one function during its life either simultaneously as a multi-purpose tool or consecutively.

In addition to scrapers and perforators, there were nine choppers documented for the Dancer Group excavations and three utilized flakes. All nine of the choppers were made from cores and can also be considered utilized cores or core tools. One of the utilized flakes was of chalcedony.

An examination of the presence or absence of informal tools by context is revealing (Appendix A, Table A.2), the implications of which will be discussed further in the activity area section below as well as the mortuary section. A simple distribution will be briefly discussed here. Most (70%) of the informal tools were encountered in the sampled subfloor construction fill contexts, including the disturbed construction fill deposits found below Structure 1 (N=11) and the intact fill below Structure 2 (N=13), non-mortuary fill in the platform (N=18), and in the terrace fill (N=3). The disturbed or mixed fill with terminal occupation surface deposits associated with Structure 1 contained six informal tools.

Informal tools found in Structure 2 occupation surface contexts may be somewhat indicative of ongoing activity in the exterior contexts (N=3) at the time of abandonment, especially with regards to provisional discard or storage. In the case of the informal tools found on the occupation surface in the interior of Structure 2 (N=4) it may be indicative of the caching of tools in the thatch roof as a secondary indicator of activity and storage as well. An additional six informal tools were included in the burial fill, a very large discoid uniface and a perforator in Episode 1, a Scraper in Episode 2, and two perforators and a scraper in the fill around Episodes 2 and 3. Finally and interestingly, there were no informal tools (N=0) found in any of the midden contexts or midden test units.

A total of 76 formal tools were documented for the Dancer Group household (Appendix A, Table A.1). The type of tools that occurred most frequently were miscellaneous reworked bifaces (N=33) comprising 43% of the formal tools. Of these only five were complete specimens. By nature of the category, miscellaneous reworked bifaces are generally very fragmented and heavily reworked prior to breakage and difficult to assign to any other biface type. Bifacial celts (N=22) were also abundant comprising almost 29% of the formal tools. Bifacial celts are very common in formal tool assemblages across the Maya lowlands (Barrett 2004:370). General utility bifaces, both Type 1 (N=5) and Type II (N=8), were present in the Dancer group tool assemblage. Hester (1985: 200) defined these for northern Belize and proposed that they may have been woodworking tools. Three unknown biface types were also noted. Unknown types sometimes are biface blanks or early stage bifaces which have not yet taken on a detectable form. As a result a type name cannot be assigned to it.

Three other types of formal tool were found at the Dancer Group and warrant discussion. First, three small bi-convex biface fragments were encountered in the excavations (Figure 4.5). As discussed in Chapter 3, this particular biface form has a wear pattern consistent with tools that may have been used as in agricultural (Valdez et al n.d.) or stone cutting/quarrying (Titmus and Woods 2002; Woods and Titmus 1996). The wear is so severe in those excavated at the Dancer Group that no flake scars can be seen remaining on either of the faces for two of the specimens having been worn completely smooth around the perimeter (Figure 4.5). All three are fragments and while two show extreme wear, the third also shows very heavy wear but to a slightly lesser degree than the others.

One proximal fragment of a thin oval biface was noted in the Dancer Group assemblage along with one projectile point, type unknown. Projectile points are somewhat rare in the Late Classic assemblages, and this may be misrepresented by such heavy reworking that it only appears to be in the projectile point size range.

As with the informal tools, over half (57%) of the formal tools were excavated from subfloor or terrace construction fill (N=44). Out of 76 total formal tools, 18 came from sub-platform construction fill, 10 from subfloor fill under Structure 2, 14 from the disturbed subfloor fill under Structure 1, and two formal tools from terrace construction fill. Another 15 (20%) formal tools came from the disturbed deposits associated with Structure 1, above the fill levels. The remaining 22% were found in association with the occupation levels of Structure 2 (N=13), the terrace wall (N=1), Burial Episode 2 (N=1) or burial fill (N=1), and the sheet midden just south of the group (N=1). Those associated with Structure 2 were found in collapse debris (N=6), and exterior (N=3) and interior (N=4) space.

Figure 4.5: Bi-convex biface fragment.

Lithic Raw Material. An analysis of raw material types utilized for chipped stone may provide some insight to procurement patterns for the Dancer Group. Several non-obsidian raw material types were utilized for chipped stone (Table 4.4). The primary lithic raw material resource utilized was chert, microcrystalline quartz mixed with cryptocrystalline silica. Two types of materials occurred in equal abundance as an alternative lithic resource, both limestone (non-clastic sedimentary rock) and quartzite (metamorphosed quartz sandstone). A few pieces of chalcedony (cryptocrystalline silicate), and one each of jasper (opaque chalcedony) and petrified wood (silicified wood) are also present in the lithic assemblage of this sample. Finally, two flakes, one primary and one secondary, were of an unidentified reddish material that was somewhat schist-like (metamorphosed slate).

Chronologically all materials occur in both occupations of the site. Chert occurs both in the Late Classic and Late Preclassic in comparable amounts. Quartzite, however, was found mostly in Tepeu 2-3 contexts (N=15), with only three pieces found in unmixed Chicanel contexts along with the jasper artifact (a percussion blade).

Lithic Raw Material								
Household	Type	Chert	Lime-stone	Chalcedony	Quartz-ite	Jasper &Petrif Wood	Unident.	**Total**
Dancer Group	Debit.	2,852	15		18	1 jasp	2	**2,888**
	Formal	74	1			1 pw		**76**
	Inform	60	2	3				**65**
Total		**2,986**	**18**	**3**	**18**	**2**	**2**	**3,029**

Table 4.4: Concentrations of lithic raw material types.

Obsidian

Obsidian was excavated in varying contexts at the Dancer Group as is often the case in Maya domestic contexts (Appendix A, Table A.4). Obsidian prismatic blades are ubiquitous in not only domestic contexts, but most others as well. The abundance of obsidian artifacts found at a given site is generally dependent on the context, the distance of the site from geological sources and the size or importance of the site along with its position along trade routes. A total of 25 obsidian artifacts were documented from the Dancer Group household for a total weight of 16.1 g. Of these 24 are prismatic blade fragments, classified as third series pressure blades. The total length of cutting edge for these pressure blades is 502.79 mm or 50.28 cm.

Of the pressure blade fragments, only one is a distal fragment (0.04%), while five are proximal (20.8%). The remaining 18 are all medial pressure blade fragments (75%). One of the 25 obsidian artifacts at the Dancer Group is a whole percussion flake with a multi-faceted striking platform. The proximal blade fragments primarily have single facet platforms with some minimal abrasion with one exception which has a multi-facet platform. With only five proximal fragments and the lack of diagnostic platform characteristics makes correlating technology with chronology impractical.

Interestingly, in terms of context, the whole percussion flake was encountered during excavation of the interior room space of Structure 2 and may have been used in activities taking place near the time of abandonment (see below). Eleven prismatic blade fragments were found in subfloor construction fill and two were found in construction fill in the terrace soil pit. All of these can be considered to be in secondary fill contexts. Two of the prismatic blade fragments found in the subfloor fill of Structure 2 fit together. It is difficult to say whether these were broken in use, in the secondary deposition into the construction fill context or modern excavations. Four blade fragments, all medial, were found associated with the terrace wall excavation in Subop C. These were found located on the wall itself and may have been either used there or discarded there (see below discussion on activity areas).

Two additional blade fragments were found to fit together that came from Subop J located on Structure 1. They are from two different levels/lots and were displaced from each other by the apparent tree-fall which affected much of the data regarding Structure 1. Whether the tree-fall itself actually broke the complete blade or it was broken in ancient use is impossible to discern. Two other blade fragments were found associated with Structure 1. Given the evidence for major disturbance by site formation processes, the tree-fall, not much can be interpreted by the presence of these two blades. Three obsidian prismatic blade fragments were documented in association with Structure 2 occupation were found in Subop I. Two of these were clearly associated with the occupation level of interior room space and may have been used in conjunction with the percussion flake found in the adjacent unit and all were likely to have been stored or cached in the roofing thatch (see below).

All of the blades show evidence of use-wear visible either by eye or with the assistance of a 5x hand lens. The wear that was documented is consistent with that found in most other domestic contexts. Only one medial prismatic blade fragment showed evidence of notching, which may indicate that it was hafted. Any in depth understanding of the function of these blades will require a microscopic use wear analysis. As such all use wear comments presented here are preliminary.

Groundstone

Four categories or types of groundstone artifacts occurred at the Dancer Group (Appendix C, Table C.1). The greatest number of groundstone artifacts documented are mano fragments (N=4). Manos and metates used to grind corn and other foods are ubiquitous across the Maya region. At the Dancer Group, however, no metates or metate fragments were documented, only mano fragments. Two of these are made from limestone, one from "sugary" quartzite, and another which the parent material was unidentifiable, but may be a variety of quartzite. Three of the mano fragments in the analysis were recovered from subfloor construction fill contexts. One mano fragment was documented from Subop J in the second level below the surface. However, this interior space of Structure 1 is interpreted as a disturbed and mixed resulting from a tree fall. All four manos are too fragmentary to detect the overall shape and cannot be categorized according to form.

Only three other groundstone artifacts were documented for the Dancer Group each of a different form. One limestone bark beater fragment was recovered from Subop L in the platform construction fill above the level of the burials. The bark beater fragment is a hand-held carefully shaped stone with ridges on the ventral surface much like many that have been documented around the Maya lowlands such as Altar de Sacrificios (Willey 1972), Barton Ramie (Willey et al 1965), Cerros (Garber 1989:25), Chan Chich (Glaab and Valdez 2000), Colha (Buttles 2002), Cuello (McSwain et al. 1991), La Libertad (Clark 1988), Lubaantun (Hammond 1975), Piedras Negras (Coe 1959), Seibal (Willey 1978), Tikal (Moholy-Nagy 2003), Uaxactun (Kidder 1947), and the southeastern Maya region such as Copan (Willey et al 1994). Bark beaters are generally classified also by their overall shape round, oval, or rectangular (see Buttles 2002). This particular fragment appears to be from an oval shaped type (Figure 4.6).

Figure 4.6: Bark beater fragment.

A discoid-shaped piece of quartzite groundstone with obvious hammerstone wear was documented in Subop R, in the terrace construction fill there. Coe identified a remarkably similar form as a *discoidal hammerstone* at the site of Piedras Negras (Coe 1959). Additional similar forms have been commonly referred to as rubbing or pounding stones (Willey 1978; Glaab and Valdez 2000), or anvil-pounders (Garber

1989). Other discoid-shaped pieces of stone sometimes referred to as stone discs also appear at many sites like Colha (Buttles 2002), Copan (Willey et al 1994) and others. Generally, these are of different sizes and smaller thickness and may have a different function than hammering or pounding. This particular discoidal specimen has visible pecking wear in localized areas, evidence of its use as a hammerstone, and has subsequently been classified after Coe (1959) as a *discoidal hammerstone*.

Lastly, a fragment of a recycled polishing or burnishing stone was also collected from the interior space of Structure 2. It was recycled and had a secondary use as a scraper after it had likely been broke in use. Its form most resembles a hand-held (or mano-like) polisher or plaster burnisher similar to those encountered at Seibal (Willey 1978) Copan (Willey et al 1994), smoothers at La Libertad (Clark 1988), or what Moholy-Nagy (2003:43) refers to as whetstones which are sometimes reused mano and metate fragments. As such this miscellaneous polisher may have been recycled more than once. The term whetstone, however, should not be confused with the function of the artifact. Although this polishing artifact was encountered in Subop N located in the interior room space of Structure 2, at the level of the Late Classic occupation surface, it is hard to say what it may have been used for subsequent to its original use as a polisher. Even though it was documented on a living surface, it is impossible to know if its primary function took place in its location of deposition, but certainly its secondary use as a scraper may have been. Scrapers served a number of functions among the ancient Maya. Any scraper wear on the artifact has yet to be studied; therefore its actual function is still unknown.

Small Finds

The category of Small Finds for the Dancer Group includes all of the ornamental artifacts of jade and shell that were recovered in the excavations there (Appendix C, Table C.2). What will be discussed here is only the non-mortuary small finds since the grave goods will be discussed separately below. The majority of these are items of personal adornment with two exceptions, one piece of shell detritus or debitage and one engraved shell disc, or adorno, that may have served a non-jewelry related function (Figures 4.7 and 4.8). Shell detritus is usually considered to be fragments of shell that are waste products with no other modifications most commonly associated with the manufacture of shell ornaments (Hohmann 2002:104). However, since only one piece of shell detritus was encountered at the Dancer Group and its context was the disturbed subfloor fill below Structure 1, no manufacturing activity can be inferred from this. It is likely simply secondary refuse included in the construction fill.

As for the engraved marine shell disc, it is circular in form, approximately 11mm in diameter, and has only minimal decoration on the ventral surface of the shell (Figure 4.7). It may be of the genus *Strombus.* Natural ridge-like texture is apparent on the dorsal surface. It was not likely used as personal adornment unless it was inlaid into another ornamental item or sat into the center of an earplug, similar to a slate disc referred to as a throat-disc at Uaxactun (Kidder 1947:42). The shell disc was found in the interior space of Structure 2, and an alternative suggestion for use (see below) is related to playing *patolli*. Shell discs have also been reported at Cerros (Garber 1989), Colha (Buttles 2002; Dreiss 1994), Pacbitun (Hohmann 2002), Piedras Negras (Coe 1959), and Seibal (Willey 1978).

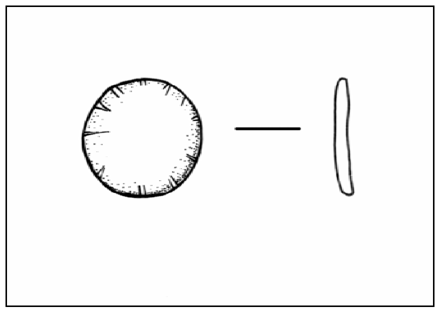

Figure 4.7: Shell disc (actual size; drawn by Dee Turman ; © PfBAP).

Figure 4.8: Marine shell detritus.

Only two other items in the small finds category occurred outside of burial contexts. First, a shell disk bead was found in Subop V. The disk bead is 8.5mm in diameter (at maximum), oval in shape, white, and also likely of the genus *Strombus*. Subop V exposed shallow scatter of midden debris, or sheet midden, along the south side of the Dancer Group. Given the context of the bead and the fact that no other ornaments were found with it, it could have either been intentionally discarded or simply lost while being worn. Shell disk beads are found in great abundance throughout the Maya region in numerous contexts as an element used in personal adornment either singly or in combined with other beads or pendants.

The last item of adornment that was not associated with burials was documented in the subfloor fill under Structure 2, just above the remnants of the earlier construction phase evidenced by Structure 2, Sub-I. The item is a greenstone earplug or earflare possibly of jadeite (Figure 4.9). It has a short neck that was hopefully fractured in deposition or prior to it. The neck diameter is almost 9 mm and the face of the earflare is oval-ish in shape with dimensions of approximately 24 x 19 mm. Earflares in this size range and form have been referred to as *miniature flares* at Uaxactun (Kidder 1947: 45) and is similar in form to Late Preclassic specimens documented at Cerros (Garber 1989:41) as well as many other sites and periods across the lowlands. This particular item was found in the secondary refuse of construction fill under Structure 2 absent of any other components or its counterpart.

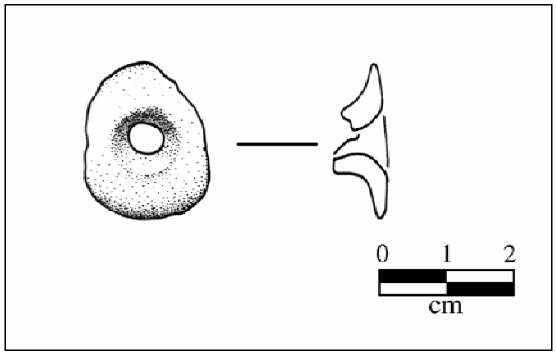

Figure 4.9: Greenstone earflare (drawn by Dee Turman ; © PfBAP).

Faunal Remains

As previously stated (Chapter 3) freshwater mollusks, mostly snails and mussels, are common in the faunal assemblages of archaeological sites across the Maya lowlands (see Andrews 1969; Moholy-Nagy 1978, 1994; Halperin et al. 2003; Willey et al 1965) as early as the early Middle Preclassic (1000–600 B.C.) as seen at Cahal Pech (Awe et al. 1990) and are currently still utilized in various ways today. Shell species, such as aquatic snails (freshwater univalves), aquatic mussels (freshwater bivalves), and land snails (terrestrial univalves) make up the majority, if not all, of the faunal remains in many of the contexts investigated thus far in the Dos Hombres settlement area.

The Dancer Group itself has freshwater mollusks shell present in high numbers in its faunal assemblage (Appendix E), unlike Pak'il Nah which had none. Of all three households excavated in this entire investigation, the Dancer Group had more freshwater shell than the other two. Freshwater mollusks are the only faunal remains preserved at the Dancer Group. The lack of other faunal material such as animal bone in the Dancer Group assemblage is likely due to poor preservation and/or the practice of refuse burning in antiquity and shallow midden deposition.

Pachychilus spp. shells, often referred to as *jute* in the region, have been found in many archaeological assemblages across the Maya lowlands in multiple contexts, both ritual and post-consumption, and spanning from the Middle Preclassic to the Postclassic and into the present day (Awe et al 1990; Halperin et al. 2003; Healy et al 1990, Hohmann 2002; Moholy-Nagy 1978, 1994; Nations 1979). As previously noted, these univalve freshwater snails quite possibly supplemented protein needs of the ancient Maya diet (Healy et al 1990) and may have been used in rituals both as a foodstuff in feasting as well as the ceremonial deposit of their remains or shells as has been observed in caves around the Maya Region (Halperin et al 2003).

Two species of *Pachychilus* were noted in this analysis. The predominant species found at the Dancer Group is by far *P. glaphyrus* (Morelet) which has distinctive shell sculpturing (Figure 4.10) (Healy et al. 1990) as opposed to the other species found in limited numbers at the Dancer Group having a smooth shell, *P. indiorum* (Morelet) (Figure 4.10). At least 75–80% of the *Pachychilus* found at the Dancer Group are *P. glaphyrus*.

Since the shell wall of *Pachychilus* is typically very thick the specimens preserve very well and only exhibit ancient modification in the form of spire lopping. Spire lopping is performed by removing a small bit of the very tail of the shell in order to remove the animal to eat it after it is cooked (Halperin et al. 2003: 214). Overall, *Pachychilus* occurred in greater numbers than any other species in the faunal assemblage, totaling 92 % (N=1393) (Table 4.5.; see also Appendix E, Table E.1). Only 3 % of the specimens found were shell (body) fragments (N=49) spread over five different excavation units, therefore the MNI of *Pachychilus* for the whole assemblage is 1,352 total. With respect to the distribution analysis, each value given is equal to a minimum number of individuals. The primary context in which jute were documented at the Dancer Group is subfloor fill (N=775), including the construction fill sampled on the terrace (Appendix E, Table E.1). The second highest number for any context was that of burial matrix, in which 430 jute shells were encountered (Appendix E, Table E.1). The remaining 188 jute found were located in three other contexts activity surfaces (N=62), midden deposits (N=92), and collapse debris (N=34) (Appendix E, Table E.1).

The subfloor fill and burial matrix found at the Dancer Group are both very similar in color, composition, and texture. The primary difference and reason for separating them in analysis is their overall context and association, being either associated with burials or not. It is clear, however, that much of the jute encountered there was found in a matrix used to fill the construction components, specifically the platform construction, in the architecture of the Dancer Group whether burial or not. Both contexts of subfloor fill are comprised of recycled midden debris. Therefore, most of the jute is found in secondary context and in high numbers. As such, these data support the reuse of jute shells for fill. The high numbers from this sample do not support the prehistoric grinding of shells at the Dancer Group as in the case of the modern Lacandon, suggested by Nations (1979) for use as lime, nor the use of ground shells as temper as suggested by Healy et al (1990).

Figure 4.10: Jute shells.

Pomacea flagellata (Say) or “apple snails” (Figure 4.11) have been documented in archaeological assemblages in both the lowlands of Belize and Guatemala (Hohmann 2002; Moholy-Nagy 1978, 1994) and they still occupy freshwater niches today (Meerman 2002). *Pomacea* or mainly fragments thereof found at the Dancer Group make up only 2% of the overall faunal assemblage (Table 4.5; see also Appendix E, Table E.1), and were documented primarily in fill contexts (approximately 78%). Four fragments were found in the collapse debris of the terrace wall exposed in Subop C (Figure 4.2). Two fragments were documented in the burial matrix of Burial Episode 1 dated Late Classic, while an additional two fragments were found in the fill underneath both Episodes 2 and 3. No *Pomacea* was found in any of the midden test units. The large open univalve shell of *Pomacea* is thin and therefore fairly fragile. As a result they most often occur in fragments rather than whole specimens at the Dancer Group. An accurate MNI was not possible as all quantities of Pomacea encountered in the excavations were fragments. The small sample size and proportion of the overall freshwater faunal assemblage is not surprising given the location of the Dancer Group in relation to the primary ecological preferences of *Pomacea*.

As discussed in Chapter 3, *Pachychilus* are best adapted to high energy freshwater environments like rivers and streams (Healy et al 1990), and *Pomacea* is adapted to low energy freshwater environments such as waterholes, swamps, and aguadas (Moholy-Nagy 1978: 66, 1994: 94). High energy niches are located very near the Dancer Group with a spring fed creek only 200–300 m east, at the bottom of the escarpment face on which the group is located and the Rio Bravo at around 450 m east of the creek. Alternatively, the aguadas, lakes, or swamps that *Pomacea* would generally be found in are located much farther away. The nearest aguada is more than 3.5 km east of the group (or 1500 m east of the Dos Hombres site center). Given the close proximity of the high energy freshwater environments, the high proportion of *Pachychilus* and low proportion of *Pomacea* is understandably related to local resource availability.

Figure 4.11: *Pomacea* shell.

Freshwater Shell					Phylum:Mollusca	
Household	**Class:Family**	**Genus**	**Species**	**Habitat**	**N=x**	**Wt (g)**
Pak'il Nah	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	2.1
Pak'il Nah	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	0	0.0
Pak'il Nah	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	0	0.0
Pak'il Nah	***Total***	***All***	***All***	***Freshwater***	***1***	***2.1***
Dancer Group	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1,393	6,764.1
Dancer Group	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	36	112.2
Dancer Group	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	82	172.4
Dancer Grp	***Total***	***All***	***All***	***Freshwater***	***1,511***	***7,048.7***
Agua Lluvia	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	992	3,876.6
Agua Lluvia	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	18	93.1
Agua Lluvia	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	19	26.3
Agua Lluvia	***Total***	***All***	***All***	***Freshwater***	***1,029***	***3996***
All	**GRAND TOTALS**	**All**	**All**	**Freshwater**	**2,541**	**11,046.8**

Table 4.5: Faunal remains per household.

Nephronaias spp. is a genus of freshwater mussels that are also primarily adapted to rivers and streams or more swiftly moving water (Awe et al 1990; Hohmann 2002: 100). Therefore *Nephronaias* occurs in the same niches as *Pachychilus* and were the only species of freshwater mussel identified in the Dancer Group assemblage. Although they occurred with much less frequency than *Pachychilus*, they number more than *Pomacea* and were interestingly deposited. Since all the *Nephronaias* documented at the Dancer Group appears to be post-consumption and deposited as two separated valves, all counts of bivalves (freshwater or marine) were of each single valve (or half of the mussel), rather than each count representing one MNI which would require two valves. As such no MNI was determined, though could possibly be presumed to be half the count presented in these findings.

The greatest number of *Nephronaias* valves encountered in a given context at the Dancer Group was associated with the burials and burial matrix, a total of 55. A significant and dense deposit (N=42) of *Nephronaias* valves were documented specifically in associated with the Late Preclassic dated Burial Episode 2. Essentially "stacks" of them were found clustered on the south side of Episode 2 near the east end (Figure 4.12). An additional 13 valves were found in burial matrix surrounding the burial Episodes: three in the Late Classic Episode 1; five in the matrix of Burial Episode 3; and an additional five were found in the matrix immediately under Episodes 2 and 3. No other occurrence of *Nephronaias* was found comparable to the number, density, or configuration of the deposit of 42 found in Burial Episode 2. Only two *Nephronaias* valves were found in non-fill contexts at the Dancer Group, both of them in the collapse debris of structure 2. The remaining 25 valves in the assemblage were all found in subfloor fill contexts under the platform open space, under Structures 1 and 2, or in the terrace fill off of the platform (Subop R) (Figure 4.2). No *Nephronaias* were found in any of the midden test excavations.

Certainly, the deposit of *Nephronaias* found in Burial Episode 2 is undoubtedly evidence of the use of freshwater mollusk shells in certain ritual deposits. However, Nephronaias is the only genus of freshwater mollusk found in ritual contexts. That does not necessarily eliminate the possibility of the use of them in ritual feasting after which the shells were discarded in the household midden and then possibly moved and reused in the domestic construction fill. Given these data, it may be that different rituals emphasized the use of different freshwater mollusks, such that non-mortuary rituals like

Figure 4.12: *Nephronaias* shells.

marriage, birth, or other lifecycle rituals may have employed *Pachychilus* (jute) in feasting, while *Nephronaias* may have been used specifically in mortuary rites. It must be stated, however, that none of the evidence presented here discounts the use of

Pachychilus as a household dietary supplement, as suggested by Healy et al (1990). It is highly possible that *Pachychilus* was used for both purposes simultaneously, for feasting events *and* as a dietary supplement.

Dancer Group Household Activity

Discard

Off-mound excavations were conducted around the perimeter of the Dancer Group as well as on the terrace surface for two primary purposes. First, Subops S, T, U, and V (all 1X1m units) were placed on the north and south sides of the group in order to test these areas for midden deposits (Figure 4.2). Subops S and T had little debris and can be considered a negative test, while U and V on the south side are clearly positive (Appendix F, Table F.4). Subops U and V are both very shallow yet have a high density (Table 4.6) of artifacts, primarily ceramic sherds and lithic debitage, located in a dark organic clay loam without the presence of the gravel and clay matrix associated with construction fill. Given the shallow depth, these units probably both sampled a sheet midden deposit adjacent to the Dancer Group on the south side. Interestingly, there were no informal tools found in either subop, and only one formal tool, a bifacial celt, found in Subop V. The remainder of the lithics found in both subops was debitage. A small white shell disk bead was also found in Subop V.

Subops A and B are also located off the platform group architecture (Figure 4.2). Subop A was located just 2 m west of the west platform retaining wall. Subop A also had a very high density of artifacts and the volume of soil excavated from it was comparable to that of Subop V even though the units were different sizes (Table 4.6). The density of ceramic sherds in Subop A was much lower than in the southern sheet midden deposit yet it contained the highest density of lithics, all debitage, and of faunal remains, all *Pachychilus* or jute snail shells (Table 4.6, and Appendix F, Table F.4). Clearly Subop A is also a midden deposit. It is also possible that the area behind, or to the west of the group was a processing area for jute as well as other foodstuffs. Most of these are slightly modified having their spire lopped which is necessary to remove and eat the animal after cooking (Figure 4.10). The area west represented by Subop A along with the southern area of Subops U and V are both midden deposits though there may be some distinction between the two areas and how refuse was handled. Given the remains found in each and their overall configuration it may well be that organics or waste food was cached to the west and therefore, possibly also processed there near Subop A. Other kinds of non-organic trash in smaller amounts were thrown off the south side of the platform. Soil chemistry analysis would need to be systematically performed in order to test this idea.

Regardless where the jute were processed at the Dancer Group household, the presence of high quantities of *Pachychilus* can be important. Jute snails were likely used to supplement the diet, but may also have been consumed during special events and were sometimes even found in caches (Healy et al. 1990), like one found in the ballcourt at Lubaantun (Hammond 1975). Generally speaking when Jute is found in this kind of cache the spire is not lopped as with those that are post-consumption, rather they are left intact. Questions also surface as to whether the jute shells that were found in Subop A were simply being stored there for future recycling into construction fill, since they are also present in fill contexts (N=775; burial fill/matrix N=430) or if there was another purpose for their storage. The recycling of all household trash is common across the Maya Region and may be mixed with the remnants of cut limestone quarry debris as suggested by Woods and Titmus (1997), to formulate construction fill for architecture. The limestone quarry debris is also a potential source of lime for household use.

Healy et al. (1990) have noted that modern Maya in the Toledo District of Belize have been known to grind jute shells for temper in pottery production. Nations (1979) also observed the Lacandon Maya using jute shells as a source of lime for processing corn. Given the fact that they are found primarily in subfloor construction fill and midden contexts at the Dancer Group (see Appendix E, Table E.1), then it may be more likely in this case that their primary reuse value was for construction fill rather than temper or lime. It is difficult to discern the remnants of their use as lime or post grinding evidence. However, their presence in such great abundance in near complete post-consumption form (with most of the spires lopped off) in both contexts seems to eliminate the possibility of other uses. If they were utilized secondarily for temper or lime the evidence for that might actually be their macroscopic *absence* rather than presence.

Artifact Densities for Off-Mound Test Excavations at the Dancer Group										
Subop/Lot		Artifact Densities								
Sub op	Lot	Unit Size	Unit Depth cmbs (Avg)	Soil Vol. in m^3	Ceramics N=x	Ceramics D=N/m^3	Lithics N=x	Lithics D=N/m^3	Faunal/ Freshwater Snail N=x	Faunal D=N/m^3
A	All	1 x 2	20 cm	0.40	30	75.00	93	232.50	76	190.00
B	1-2	1 x 2	15 cm	0.30	15	50.00	33	110.00	1	3.33
S	All	1 x 1	9 cm	0.09	4	44.44	3	33.33	0	0.00
T	All	1 x 1	34 cm	0.34	3	8.82	0	0.00	1	2.94
U	All	1 x 1	12 cm	0.12	29	241.67	8	66.67	0	0.00
V	All	1 x 1	37 cm	0.37	63	170.27	76	205.41	15	40.54

Table 4.6: Artifact densities for off-mound test excavations (summary of Appendix F, Table F.4).

Activity Areas

Subop B was located on an artificial terrace feature, evidence supported by the terrace wall found in Subop C and additional deep deposit of construction fill in Subop R. The deposits in the upper two levels of Subop B, however, can be examined for possible indications of activities taking place on the terrace or the eastern side of the house lot. First, the terrace ceramics date Tepeu 2-3 and therefore, the terrace was probably added to the group in the Late Classic. A few earlier sherds were mixed in the lowest lots of the terrace units indicating the earlier occupation of the household and surrounding space. The purpose of the terrace construction could serve one or several purposes. Certainly the building of the terrace would extend and/or level horizontally the space that was accessible for activities around the household. Indications of activity on the residential terrace from Subop B are minimal at best. The upper levels have ceramic sherds (N=33), debitage (N=33), and one jute shell (Table 4.6; see also Appendix F, Table F.3, and Table F.4). The density of artifacts is fairly high which may indicate discard since many of the artifacts are ceramic sherds. The debitage may be related to activity other than discard since there are secondary (N=2) and tertiary flakes (N=3) along with biface thinning flakes (N=7), a uni-directional core, chunks (N=3) and shatter (N=17). The debitage may indicate the everyday expedient tool making that might go on in a household at a small scale.

Another possible function of the terrace comes to light and can be considered an important purpose. It may have been added not only to extend the living space, but also to create a space for household gardening. Modern household gardens located within the house lot can be seen across the Maya region today (e.g. Fauvet-Berthelot 1986). Along these lines, Subop C located on the terrace wall does have some interesting data that may preliminarily support this function (Figure 4.2). Several artifacts were found associated with the wall architecture, actually found on the wall itself, four obsidian blade fragments, all medial segments, along with one miscellaneous reworked biface. The tools were either used in this area or stored there temporarily, or possibly discarded there. The types of tools indicate cutting and chopping activities, both of which could also be associated with small scale gardening. In addition, the last terrace unit, Subop R, was excavated exclusively for the purpose of collecting soil samples and determining the extent or depth of fill closer to the terrace wall, an aspect of landscape modification. Soil chemistry testing on these samples will be required in order to securely assess whether household gardening may have taken place on this residential terrace.

Potential activities and activity space in association with architecture is somewhat limited by the disturbances found on Structure 1. All the of the deposits in association with Structure 1's upper levels or terminal occupation level (Late Classic), even Subops H, E, and F must be presumed to be disturbed since very clearly Subops J, P, and X (Figure 4.2) are deep excavations with the clearest evidence of post-abandonment natural disturbance.

The platform surface in between Structures 1 and 2, excavated in the uppermost levels of Subops D, G, and Y yielded Tepeu 2-3 ceramic sherds (N=37), debitage (N=45), one miscellaneous reworked biface, and four jute shells. What is interesting again is that the composition of debitage may indicate small scale expedient tool production, or the production of flakes for household cutting such as in food processing or preparation. There were two flake cores along with primary (N=2), secondary (N=6), tertiary (N=7), and biface thinning flakes (N=8), chunks (N=3), and shatter (N=17), all part and parcel of the sequence for producing various kinds of tools including bifaces, scrapers, and flake tools or utilized flakes. Interestingly, one of the two flake cores was also a micro flake core meaning that the remnant scars on the core likely indicate the intentional removal or desire for very small flakes.

Evidence for activity in on-mound interior room space is best exemplified in the Structure 2 interior floor deposits. First, a small shell disc (Figure 4.7) was found in Subop N on the Tepeu 2-3 terminal occupation surface, or living floor, in Structure 2's interior room space (Figure 4.2). The shell artifact is circular, small (11 mm diameter) in size with natural ridge-like texture on the dorsal surface from the shells original exterior and small markings on the ventral side that may be a result of manufacture (Figure 4.7). The shell disc is possibly be made from a marine shell species of the genus *Strombus.* The purpose of the shell disc can only be speculated on, but its form suggests that it was not likely used as a pendant or bead since there was no means of suspending it, such as a drilled hole. One possibility is that it served as a gamepiece (see also Hohmann 2002:108) as evidenced from both archaeological research around the Maya region and the ethnohistoric literature of Mesoamerica.

A board game called *patolli* was a widespread phenomenon in ancient Mesoamerica having also a common board design in the shape of a cross (Miller and Taube 1993:132) with the variation of a cross inside a square (see Trik and Kampen 1983; and Smith 1982). It was played with beans that were painted on one side and used like dice (Smith 1977: 350). The beans are called *patolli* in Nahuatl and hence the name this board game is still referred to most frequently. A *patolli* board is pictured in the Florentine Codex (Sahagun 1905) with what are likely the painted beans. Smith (1977) has noted that archaeologically *patolli* boards are found across Mesoamerica, from Teotihuacán and Tula in Mexico spanning to a number of sites in the Maya area such as Caracol (Chase and Chase 1987), El Intruso (Muñoz 1997), Seibal (Smith 1982), Tikal (Trik and Kampen 1983) and others. *Patolli* boards are found in a variety of forms, but most commonly etched on the plaster floors, walls inside the private rooms of domestic structures and palaces, and sometimes (as in the case of Seibal) on altars and inside ceramic vessels. Most patolli boards have been documented in elite domestic or palace contexts; however, this is likely due to the differential preservation in the presence of thick plaster layers. The game is played much like parcheesi or backgammon and may have been accompanied by gambling (Miller and Taube 1993; Smith 1977).

Although beans were used in the *patolli* game similar to way dice are used, there is little mention of the ways in which one might mark their place on the game board (Figure 4.13). I would suggest that a shell disc might well perform that function very efficiently. No game board was encountered in the excavations at the Dancer Group. It is unclear whether that is due to the lack of its presence, the lack of preservation of any plaster living surfaces, or simply sampling. Given the presence of the possible game piece found inside Structure 2 on the Tepeu 2-3 (Late to Terminal Classic) occupation surface and the similar domestic and private context of many of the game boards found across the Maya lowlands, the playing of *patoll*i at the Dancer Group is certainly a possibility.

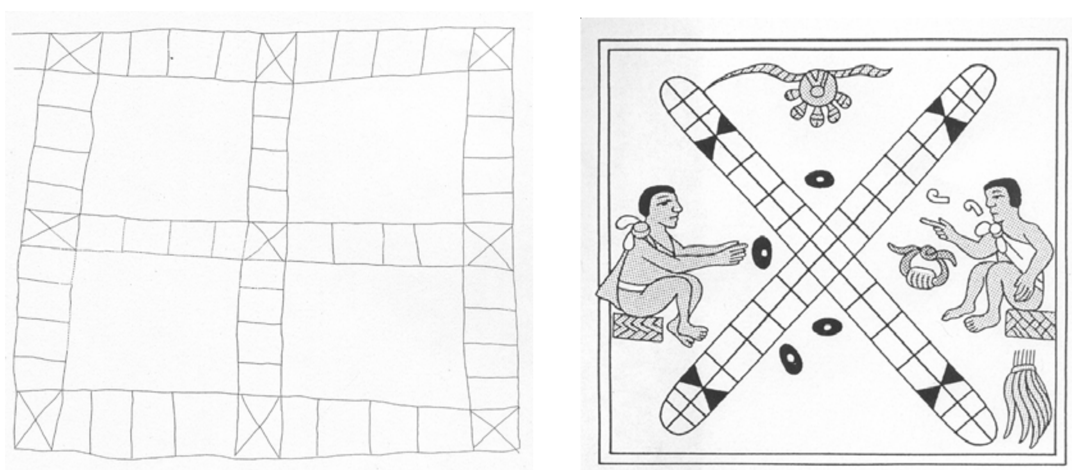

Figure 4.13: *Patolli* boards from Tikal (left; after Trik and Kampen 1983, figure 68) and the Florentine Codex (right; after Sahagun 1905, pl. XLVIII, no. 63).

Storage and Provisional Discard

Other deposits that were documented in the Late Classic occupation material from the interior space of Structure 2 include a bi-convex biface which may function as an agricultural tool (Valdez et al n.d.) or a limestone quarry tool (Woods and Titmus 1996, 1997). A fragment of a polisher of some sort was also found in the interior occupation debris. It is a hand-held, possibly recycled mano fragment used to polish an uneven surface. Various forms of these have been extensively reported around the lowlands and are sometimes referred to as whetstones (e.g. Moholy-Nagy 2003 and others) though that may not be indicative of their use. This particular artifact also showed signs of wear along the broken edge that was consistent with a scraper. Domestic tools often are recycled for various uses and also sometimes have more than one use simultaneously, somewhat like a Swiss Army Knife.

One particular ceramic deposit on the floor inside Structure 2 (Late Classic phase) warrants noting. At least 20 water jar sherd were found in a cluster in the eastern portion of Subop N (Figure 4.2), these were from the same water jar (Appendix B). The water jar may have been used to store water inside Structure 2 at the time of abandonment. Included in the occupation floor debris were three obsidian artifacts, a whole percussion macroflake, and two pressure blade fragments (one proximal and one medial), that may have been used in cutting/slicing activities taking place near the time of the end of the occupation at the Dancer Group household. All three obsidian artifacts exhibit wear and can be assumed to have functioned as tools. The whole macroflake is somewhat rare for Late Classic non-elite domestic deposits in northern Belize. Finished prismatic (pressure) blades are most commonly found in everyday domestic contexts of the Late Classic (as well as earlier). It is highly possible that this obsidian utilized flake, along with the two prismatic blade fragments were cached or stored inside the structure between usages. They may have actually been stored in the roof thatch as clearly exemplified at the ash preserved households of Cerén, El Salvador where they stored both blades and macroflakes in the roofing above doorways and in the corners (Sheets 2000:219; Sheets et al. 1990:85) since obsidian makes very sharp cutting implements. What must be noted here is that since much of Structure 2 was perishable, the roof and perishable portions of the wall would have collapsed onto the floor of the room and likely broken any pots sitting on the floor or any that might have been suspended. Vessels suspended from roof poles were also observed in the excavations at Cerén (Zier 1983:138).

As for chert tools found inside Structure 2, both formal and informal tools were documented (N=9) (Appendix A, Table A.1 and A.2). These tools may also have been cached in the roof thatch or simply stored in Structure 2 between usages like the obsidian tools and water jar. Three scrapers, a perforator, as well as the small bi-convex biface fragment already mentioned, a bifacial celt, GUB-Type II, and a miscellaneous reworked biface were all found in the floor deposits.

The presence of a provisional discard area on the west side, just outside the west wall of Structure 2 helps to substantiate the suggested location of a processing, food preparation, or kitchen area off the west side of the Dancer Group platform and an adjacent organic midden area. The provisional discard area just outside the west wall of

Structure 2 was revealed in Subop I (Figure 4.2), where large sections of the same vessel (plate) were found in situ leaning against the remnants of an alignment indicating the west structure wall.

Provisional discard areas often serve as a temporary location for trash, similar to a modern household trash can or receptacle (see Schiffer 1987:66). It also can be an area in which things are stored that are questionable trash. In other words, when a pot breaks in use, but could be recycled as a scraper or a spacer in ceramic production then it might be cached or stored away. The areas in which these artifacts are stored can also be referred to as provisional discard. It is the staging area in which the artifacts are broken but being stored for single recycling purposes (rather than large deposits of trash recycled to subfloor construction fill) that I believe is present on the west side of Structure 2.

Formal and informal tools were also found on or adjacent to two exterior walls of Structure 2, excavated from Subops I, K, and Q (Figure 4.2). Subop K and part of Subop I were located just outside the south wall of Structure 2 and had a scraper mapped next to the wall along with two miscellaneous reworked bifaces, one GUB-Type I, and a bifacial celt. Two mano fragments were also found along the south wall exterior. The west wall exterior was exposed in both Subops I and Q where a utilized flake, a perforator, and a GUB-Type II.

Structure 2 is a much smaller structure than Structure 1. It measures only 3.5 x 4.5 m (exterior dimensions). Given the size of the structure and the amount and variety of items encountered both inside and outside (the south and east exterior walls) of

Structure 2 it is highly possible that the structure was primarily used for storage and provisional discard related to recycling or reuse of single items.

Mortuary Analysis

During the excavation of Subop D, a 1 x 2 m unit which was opened in order to assess both the chronological and construction sequence of the platform architecture, a series of multiple burials was encountered. The original subop was positioned on the platform between Structures 1 and 2 (Figure 4.2). Subsequently, Subops G, L, M, and Y were opened one at a time as more burials were discovered in order expand the exposure of them. Once these units were excavated down to the level containing the first or shallowest set of burials, the exposures at that level within the subops were combined and designated Subop O.

The burials were documented in three sets containing the remains of multiple people and are referred to as "episodes." These episodes were numbered arbitrarily as they were encountered, rather than their number reflecting relative ages or depth. Each of these episodes, numbered 1–3 was spatially distinct from each other either vertically or horizontally or both, as well as chronologically (see Table 4.7).

Julie Saul and Frank Saul (2003; Appendix D) performed the osteological analysis and their findings are summarized in the comments below. Their report has also been placed in Appendix D of this work. Lauren Sullivan (2003; Appendix B) provided the ceramic analysis. The chronology and typology of all ceramics presented here are based on her report.

Dancer Group Burials					
Burial	**Subop**	**Lot**	**Person**	**Sex**	**Age at Death (years)**
Episode 1 (Multiple)	D	7	1*	Unknown	Adult*
	D	8	1*	Unknown	Young Adult*, 20–35
	O	9	2	Unknown	Child, 9.5–14.5
			3	Probable Female	Child to Young Adult, 16–25
			4	Unknown	Adult or late teen
	EPISODE 1, TOTAL MNI = *4/5				
Episode 2 (Multiple)	O	11	1	Possible Female	Young Adult, 20–34
			2	Possible Male	Young Adult, 20–34
			3	Possible Male	Young/Middle Adult, 30–40
	EPISODE 2, TOTAL MNI = 3				
Episode 3 (Multiple)	O	13	1	Unknown	Child, 2–4
	O	13	2	Unknown	Young Adult, 20–30
	O	13	3	Unknown	Child, 3–5
	O	13	4	Unknown	Young Adult, 20–34
	O	13	5	Unknown	Child, 3–5
	O	13	6	Unknown	Child , 5–7
	EPISODE 3, TOTAL MNI = 6				

Table 4.7: Dancer Group burials (derived from Saul and Saul 2003; Appendix D).

The skeletal remains in each of these three burial episodes were in extremely poor condition for several reasons. First, the household itself sits on a residential terrace located on the east face of the Rio Bravo escarpment about one-third the way down. Water runs down the face of the post-abandonment escarpment readily during the rainy season. Second, the burial deposits themselves are fairly shallow, all within a meter below the ground surface. Linked to the depth of deposit, these remains are not sealed. No plaster levels were preserved over the top of the burials, if any had existed originally, nor were the burials contained within any tomb architecture. Finally, the matrix in which the burials were subsumed had a high clay content along with gravel. During the annual tropical rainy to dry seasons the clay shrinks and swells making the clay and gravel burial matrix hard shift on a regular basis to the extreme of almost grinding the skeletal remains within the gravel.

Burial Matrix

Before considering each set or episode of the burials and their corresponding offerings it is important to address what the burials are subsumed in, the burial matrix or burial fill, and its composition. Due to the poor preservation of the Dancer Group deposits in general, but the burial deposits specifically, individual strata were difficult to identify visually. Given the ceramic analysis however, it appears that lower portions of the fill under the platform (and therefore under both structures) that was associated with Burial Episodes 2 and 3 dating to the Chicanel phase of the Late Preclassic (400 B.C.–A.D. 250). The upper portions of the strata, associated with Episode 1, had sherds of mixed ages, but the latest ceramics indicate its date as being the Tepeu 2-3 phase of the Late Classic (A.D. 700–900).

Given the chronological assessment, the fill in which the burials were located was likely laid in two stages when each construction phase of the platform and corresponding structures took place. It could be expected that the Late Preclassic construction phase of the platform occurred first then the Late Preclassic burials were placed, though the reverse is also possible. Subsequently, after the Late Preclassic platform was built and burials placed, in either order, (and possibly abandoned for a period of time), the Late Classic phase was built. Burial Episode 1 likely occurred after the construction of this second phase since the placement of it intruded or disturbed Episode 2.

Another element supporting the idea that at least the Late Preclassic construction phase came prior to the placement of the burials is that the fill that I have termed "burial matrix" is nearly identical in composition, texture, and color to all subfloor fill outside of the burial context and in the fill of the terrace units as well. It is clear that this fill was placed for the same purposes in each context originally, as building material. Since the construction fill is comprised in general at the Dancer Group of clay, gravel, and cobble mixed with recycled midden materials, much of the refuse that is contained in the burial matrix is not likely be intentional grave offerings (see Appendix C, Table C.3). I have only included discussions of whole artifacts in the category of grave offerings, excluding whole pieces of debitage which are ubiquitous in all subfloor fill and midden contexts. The freshwater shell, including those that were whole, were also eliminated from the category of grave goods since all other fill found at the group in non-mortuary contexts also had them in high numbers, with one exception. There was a unique deposit of freshwater shell found in association with the burial.

Three informal tools as well as one formal tool were also found in the burial matrix (Appendix C, Table C.3; also Appendix A). The distal fragment of a biface, of unidentifiable type, was well utilized with slight possible haft wear. Given that the flake core, perforator and scraper were well utilized, they may not have been intentional grave goods. Rather all of these tools were likely secondarily deposited, after discard, into the construction fill making up the burial matrix.

Two whole marine shell artifacts were found in the screening of the burial matrix (Appendix C, Table C.3, and C.2). Since they were from the fill documented just under the Late Preclassic burials, and they were found intact, as opposed to spent or unusable, it is likely that they are associated with one of these burial episodes, but which one of the two Late Preclassic episodes is unclear. One of the two marine shell artifacts is a small marine bivalve, unidentified species, with a hole drilled in it for suspension. It is approximately 22 mm at its maximum dimension and has an orange stain on the dorsal side that is presumed to be a natural pigment (Figure 4.14). The second of these is a marine univalve, Marginellidae, *Prunum labiatum,* with two holes punched, into the outer portion of the shell. The species identification is based on the length (24.7 mm) and color of the specimen. It is unclear as to the purpose of the perforations. It is not likely linked to suspension since the two holes do not line up and are also blocked by the spire which is still intact. Andrews (1969) also noted that the perforations in *Prunum* are generally punched as opposed to drilled. It is possible that the animal was removed by one or both perforations. Primarily *Prunum* genera have been listed in the marine shell inventories at Caracol (Cobos 1994), Colha (Buttles 2002), Cuello (McSwain et al. 1991), Kaminaljuyu (Kidder et al. 1946), Mayapan (Proskouriakoff 1962), Pacbitun (Hohmann 2002), and Uaxactun (Kidder 1947) spanning from the Middle Preclassic to the Late Classic. In each case the *Prunum* have an irregular, punched perforation in the nearly identical location as one of the perforations on the Dancer Group specimen (Figure 4.15).

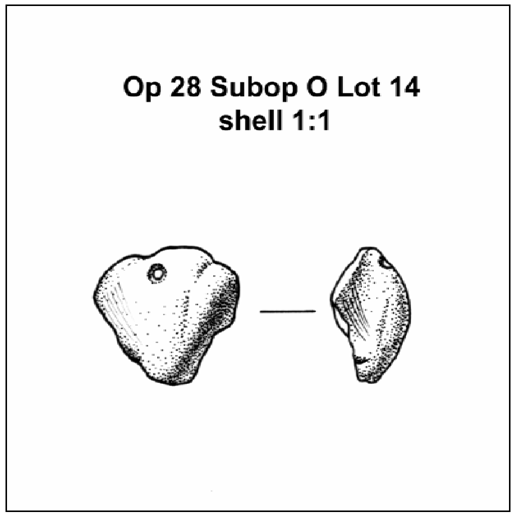

Figure 4.14: Small bivalve pendant (drawn by Dee Turman ; © PfBAP).

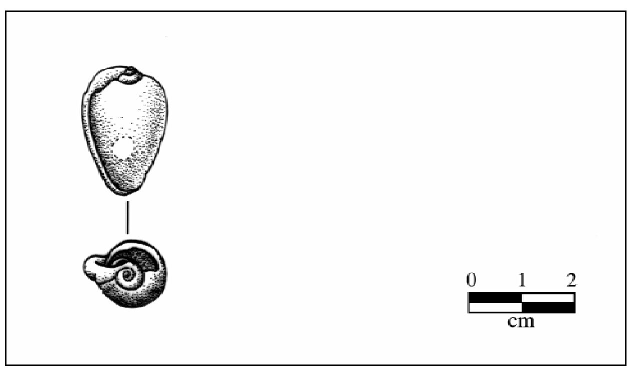

Figure 4.15: *Prunum labiatum* (drawn by Dee Turman ; © PfBAP).

Many of the deposits of punched *Prunum* at other sites as well as the Dancer Group are from caches and burials. Hohman (2002:140) suggests that the punched hole in might preclude suspension since the irregular edges would tend to continue to chip and break. It is also a striking possibility that the punched perforation is related to termination, or the act of terminating the item or shell itself, prior to depositing it in the burial, as a separate symbolic act.

Burial Episode 1

Burial Episode 1 was the first set of burials encountered during the excavations of the platform fill originally being investigated in order to ascertain sequences related to chronology and construction episodes. It was the shallowest of all three episodes, located between 66 cm and 80/82 cm below the ground surface (Figure 4.16). There were two stone alignments on the north and south sides of this burial episode, both running east to west, which may have partially enclosed the burial area.

Burial Episode 1 dates to the Tepeu 2-3 phase (A.D. 700–900) of the Late Classic period (Appendix B; Appendix C, Table C.3). The context was dated according to the latest ceramic sherds found in the burial fill as well as the examination of two whole vessels found in association with it (Appendix B; Appendix C, Table C.3). Sullivan's analysis (2003; Appendix B) assigned different ages the two whole vessels found in Episode 1 (Figure 4.17), one was a Tepeu 2-3 (Late Classic) Kaway Impressed bowl (Figure 4.18), the other was a possible Chicanel (Late Preclassic) Sierra Red dish.

The Chicanel vessel was either an heirloom or was moved from another episode/burial into this later one.

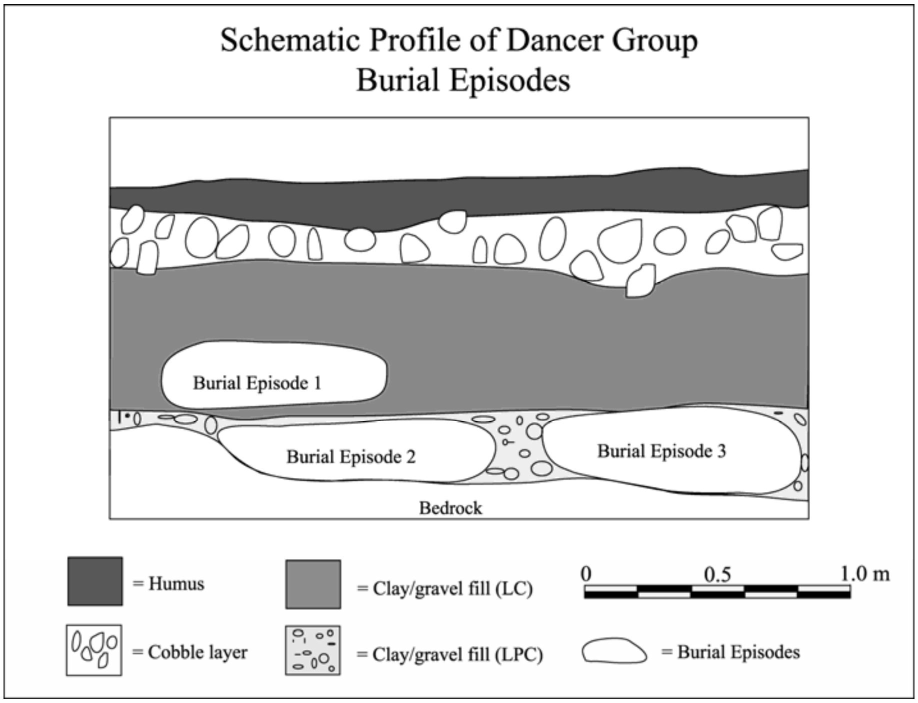

Figure 4.16: Profile of Burial Episodes.

Saul and Saul (2003; Appendix D; also Table 4.7) determined that burial Episode 1 included multiple individuals with a minimum number of individuals (MNI) of four or possibly five represented. First, there were remains inside/under Vessels 1 and 2 and these were classified as an Adult of unknown sex or age (Vessel 1) and a Young Adult (20–35 yrs) based on dental evidence and bone density also of unknown sex (Vessel 2) (Saul and Saul 2003; Appendix D; also Table 4.7). Vessels 1 and 2 were spatially very close to each other, with only 3 cm separating them (Figure 4.17). Therefore the spatial arrangement suggests this may have been the same person (#1). It is also possible that the person that these remains represent was not buried inside the vessels originally, but that the vessels were inverted and placed on them as is a common occurrence. It is highly possible that subsequent to the interment, the vessels settled in the burial matrix and by the time of excavation the remains appeared to be inside the vessels. This is further complicated by the extremely poor preservation conditions and the presence of a third individual (#2; Appendix D; Table 4.7) adjacent to the two vessels on the east side, nearly in between them, positioned very close to the person under Vessels 1 and 2 (Figure 4.17). A child's remains were positioned here of unknown sex, approximately 9 –14 years of age based on dental data (Saul and Saul 2003; Appendix D; also Table 4.7).

Two other individuals were found in burial Episode 1, both flexed and in an east to west orientation. The first (#3) is classified as a probable female child to young adult, approximately 16–25 years of age based on dental analysis (Saul and Saul 2003; Appendix D; also Table 4.7). She is positioned with her head to the west and her hips to the east. The second is a possible female or very small male (#4) and is represented exclusively by long bones and was an adult or late teen at the time of death. This (#4) was likely a long bone bundle that is a secondary interment placed very close to the young female (#3) (Saul and Saul 2003; Appendix D).

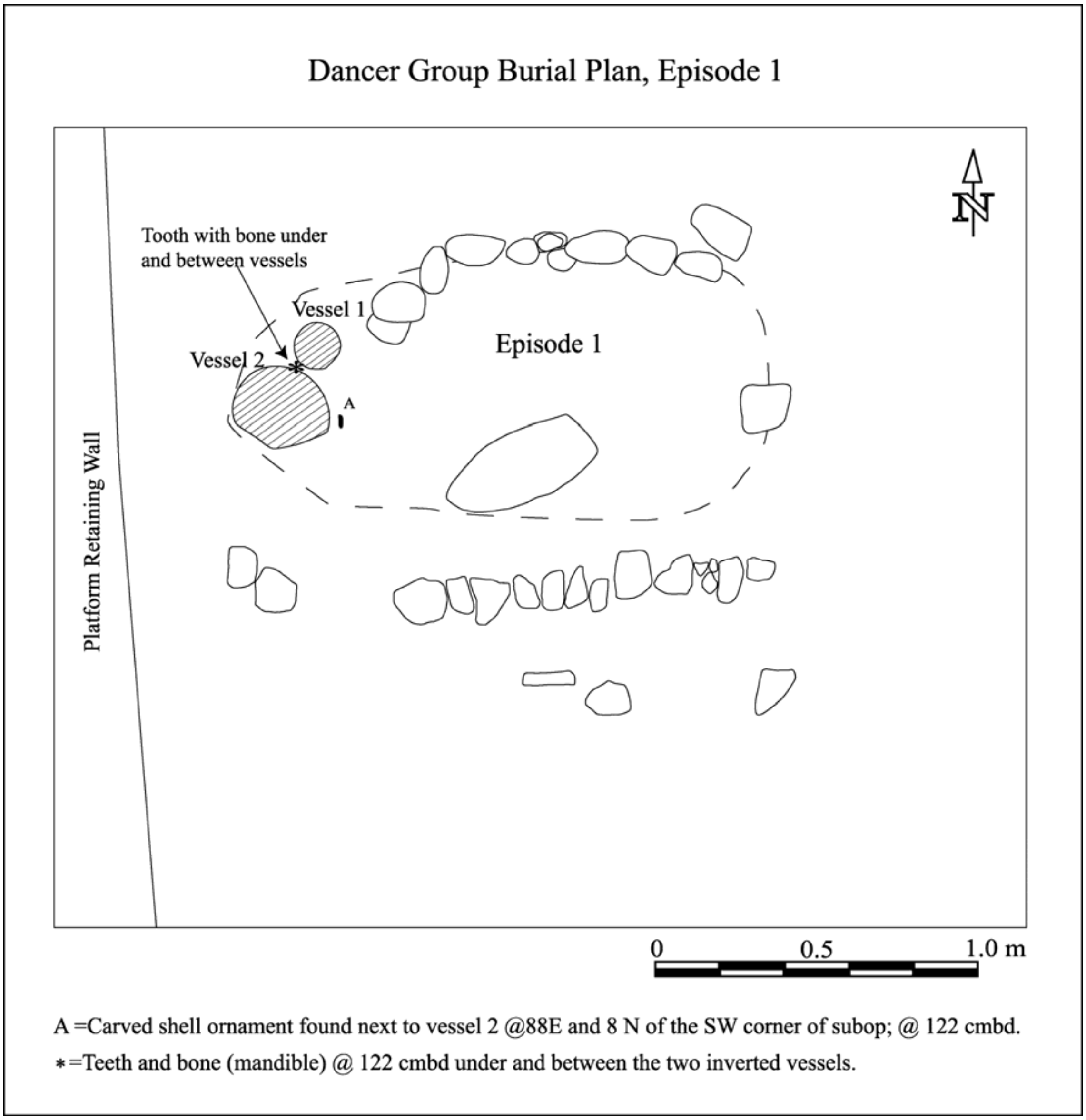

Figure 4.17: Plan of Burial Episode 1.

Figure 4.18: Kaway Impressed vessel (Vessel #1).

Exactly in between the two whole vessels recovered in Episode 1 a shell ornament engraved with human features was recovered (Appendix C, Table C.3, and C.2; Figure 4.19). This is the artifact that the Dancer Group is named for. It is associated with the adult and child's remains found near and under/in Vessels 1 and 2. It is an engraved shell ornament that is a representation of a human body positioned in such a way to evoke the feeling of graceful movement (Figure 4.19). Drill holes are present on the effigy were positioned such that hanging the ornament like a pendant would have been awkward and difficult to position upright (Figure 4.19). The position of the drill holes relative to the imagery indicates that it was probably sewn onto fabric, such as a piece of clothing or blanket, so that the depicted person's head and headdress was upright. The carved image also represents a person with a headdress, but no other clothing and yet no distinct sex anatomy. Other anthropomorphic engraved shell ornaments in different forms have been noted at Colha (Dreiss 1994), Tikal (Moholy-Nagy 1994:164), Piedras Negras (Coe 1959:fig 51), and Uaxactun (Kidder 1947:63).

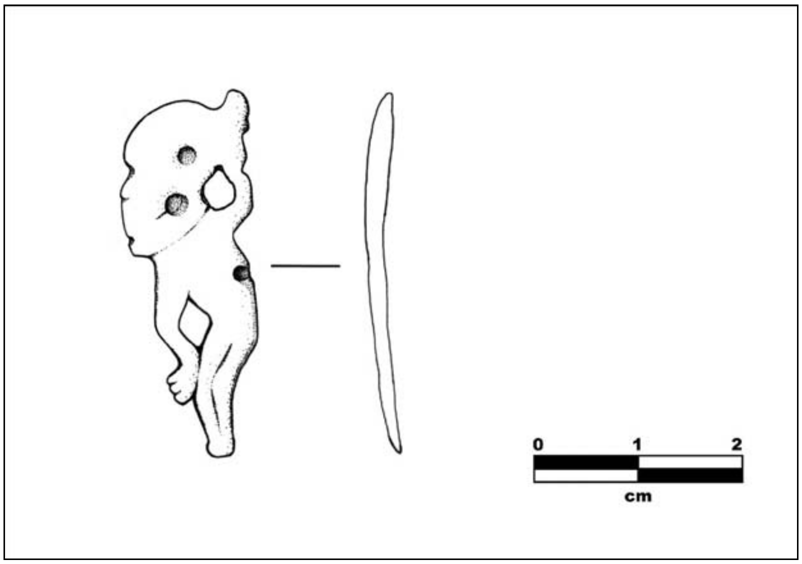

Figure 4.19: Shell dancer (drawn by Dee Turman ; © PfBAP).

In addition to the two whole vessels and engraved shell ornament, two informal tools were also documented in the fill associated with Episode 1, a very large discoid uniface and a perforator (Appendix C, Table C.3; also Appendix A). The discoid uniface is a very distinctive large scraping type of tool. It is unclear as to whether these were intentional grave goods or were secondary midden debris included in the burial fill matrix. The discoid uniface was found whole and in fair condition while the perforator appears to have been utilized.

Burial Episode 2

The depth of level encompassing burial Episode2 was approximately 86–98/100 cm below surface, positioned immediately under Episode 1, vertically or stratigraphically separated by only 4–6 cm. Not only is Episode 2 separate from Episode 1 in vertical depth, but they are chronologically distinct in that Episode 2 is Late Preclassic (Figure 4.16). There was also some indication that the placement of Episode 1 had actually disturbed Episode 2 given the flattening and sliding slightly apart of segments of Vessel 5 (Figure 4.20).

Burial Episode 2 was dated to the Chicanel phase (400 B.C.–A.D. 250) of the Late Preclassic based again on the age of ceramic sherds present in the burial matrix and two whole vessels (Figure 4.20) that were found in association with Episode 2 (Appendix B; Appendix C, Table C.3). Vessel 5 is a Laguna Verde Incised dish, while Vessel 6 is a Sierra Red dish according to Sullivan's analysis (2003; Appendix B).

Saul and Saul (2003; Appendix D; also Table 4.7) determined an MNI of three for burial Episode 2. The first of these (#1) is of possible female sex and a young adult approximately 20–34 years at the time of her death, based on dental analysis (Saul and Saul 2003; Appendix D; also Table 4.7). She was flexed with her head to the west and hips to the east and very fragmented. Vessel 5 was located very near to her head, slightly to the south of it (Figure 4.20). Vessel 6 was to the north and near her chest. The other

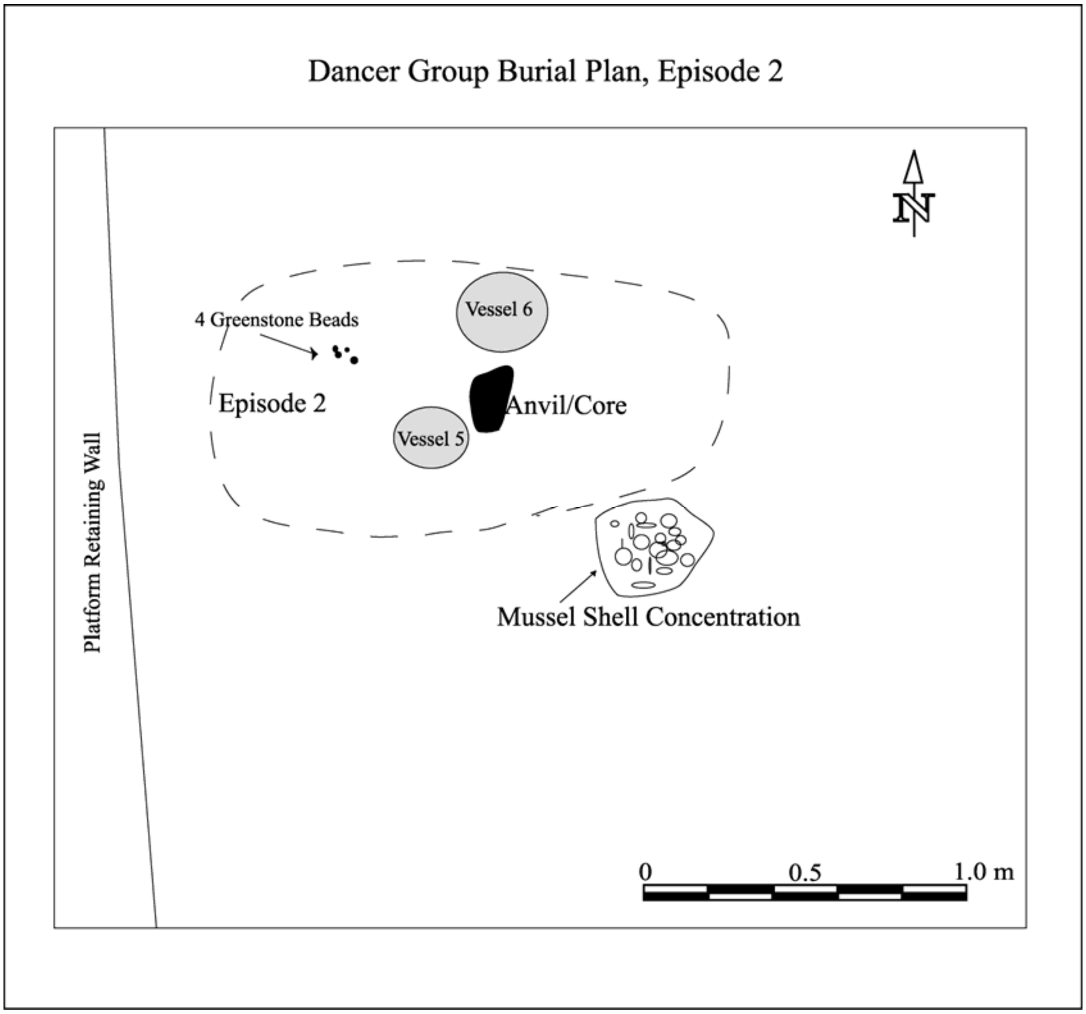

Figure 4.20: Plan of Burial Episode 2.

two individuals included in the MNI are represented solely by teeth, five teeth of a possible young adult male (#2) aged 20–34, and 22 teeth of a possible young/middle adult male (#3) aged 30–40 (Saul and Saul 2003; Appendix D; also Table 4.7). Saul and Saul (2003; Appendix D) suggest that the teeth are grave goods or offerings of some kind. This reference evokes two ways of thinking about the presence of the teeth absent of their corresponding skeletal remains. First, an offering or grave good can be a secondary deposit of a primary interment from another location, i.e. outside the Dancer Group household. A second way of considering the presence of teeth as an offering would be that the teeth actually represented a live person who at the time of interment included some of their own teeth as an offering either by pulling them at that time or storing teeth that had fallen out. The most likely, and most commonly reported around the lowlands, is a secondary deposit of human remains moved from another grave or set of graves. In this case, it was then included with the remains of the primary female in Episode 2.

Four greenstone beads were found near the teeth, mandible, and cranial fragments of the adult female (#1) (Appendix C, Table C.3, also Table C.2). Two of them were tubular beads, one a disc bead, and the fourth was a reworked barrel bead. It had been reworked into a pendant such that the barrel bead itself was split, either intentionally or accidentally, in the direction of the long axis and two holes were then drilled so that it hung as a pendant in this same direction (Figure 4.21).

An interesting deposit was documented also in association with burial Episode 2. It was located in the southeast portion of the burial(s), probably near the knees of the primary female burial (Figure 4.20). A total of 42 freshwater mussel valves *Nephronaias* were stacked and clustered in this location (Figure 4.14; Appendix C, Table C.3; see also Appendix E).

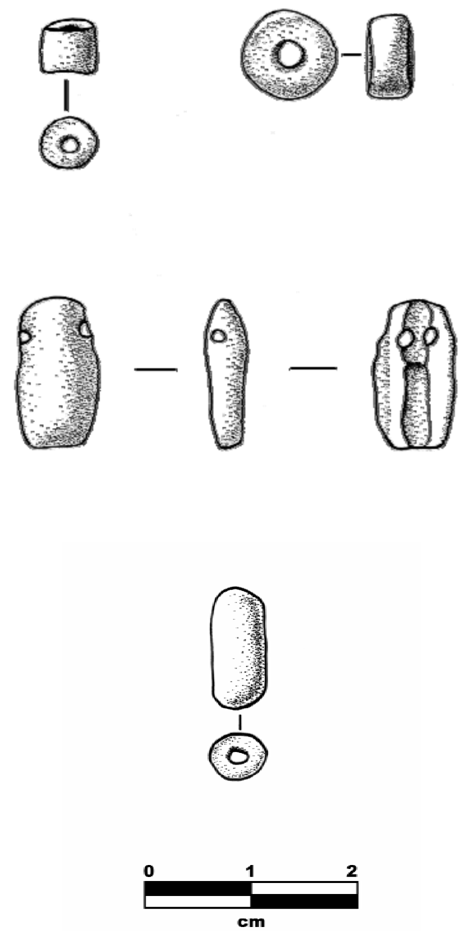

Figure 4.21: Four greenstone beads (drawn by
Dee Turman ; © PfBAP).

One scraper and a miscellaneous reworked biface were also noted in the burial matrix of Episode 2 (Appendix C, Table C.3; also Appendix A). These may have been either secondary midden debris in the burial fill or intentional. Given the snap break and wear on the biface and the wear on the scraper it is more likely they were secondary refuse included in the fill.

Finally, the last artifact found in association with burial Episode 2 may well have been meant as an intentional grave good rather than secondary fill debris. It is the largest single lithic artifact (2,275 g) in the both the lithic assemblage and the burial goods as well (Appendix C, Table C.3; also Appendix A). It is an anvil that probably served multiple purposes at various times, serving first as a flake core and later an anvil. Given its very close proximity to the midsection of the female's body and the fact that it was still quite usable even though anvil wear was clearly identified, it was rather large and heavy and would seem to require a purposeful placement though it is impossible to say with complete certainty.

Burial Episode 3

Burial Episode 3 was in a level at a depth of 80–96/98 cm below surface and approximately 32–53 cm to the south of Episode 2 (west to east distances respectively). Therefore, Episode 3 was spatially segregated from Episodes 1 and 2 in horizontal distance, but at the equivalent level/depth of Episode 2 (Figure 4.16). This is a situation different from Episodes 1 and 2 which were spatially distinct from each other by vertical limits, but not horizontal ones and differed by ceramic chronology. Burial Episode 3 is further spatially delimited from Episode 1 by both horizontal and vertical space along with chronological assessment and the position of the linear stone alignments that bordered its north and south sides.

Burial Episode 3 dates to the early part of the Chicanel phase (400 B.C.–A.D. 100) of the Late Preclassic as evidenced by the ceramic sherds in the burial matrix and four whole vessels associated (Figure 4.22). Three of these vessels are Sierra Red dishes, two of which may date even earlier (possible Middle Preclassic), and the fourth is as of yet unidentified bowl with spikes around the exterior just below the rim, possibly a form of Sapote Striated (Sullivan 2003; Appendix B; Figure 4.23).

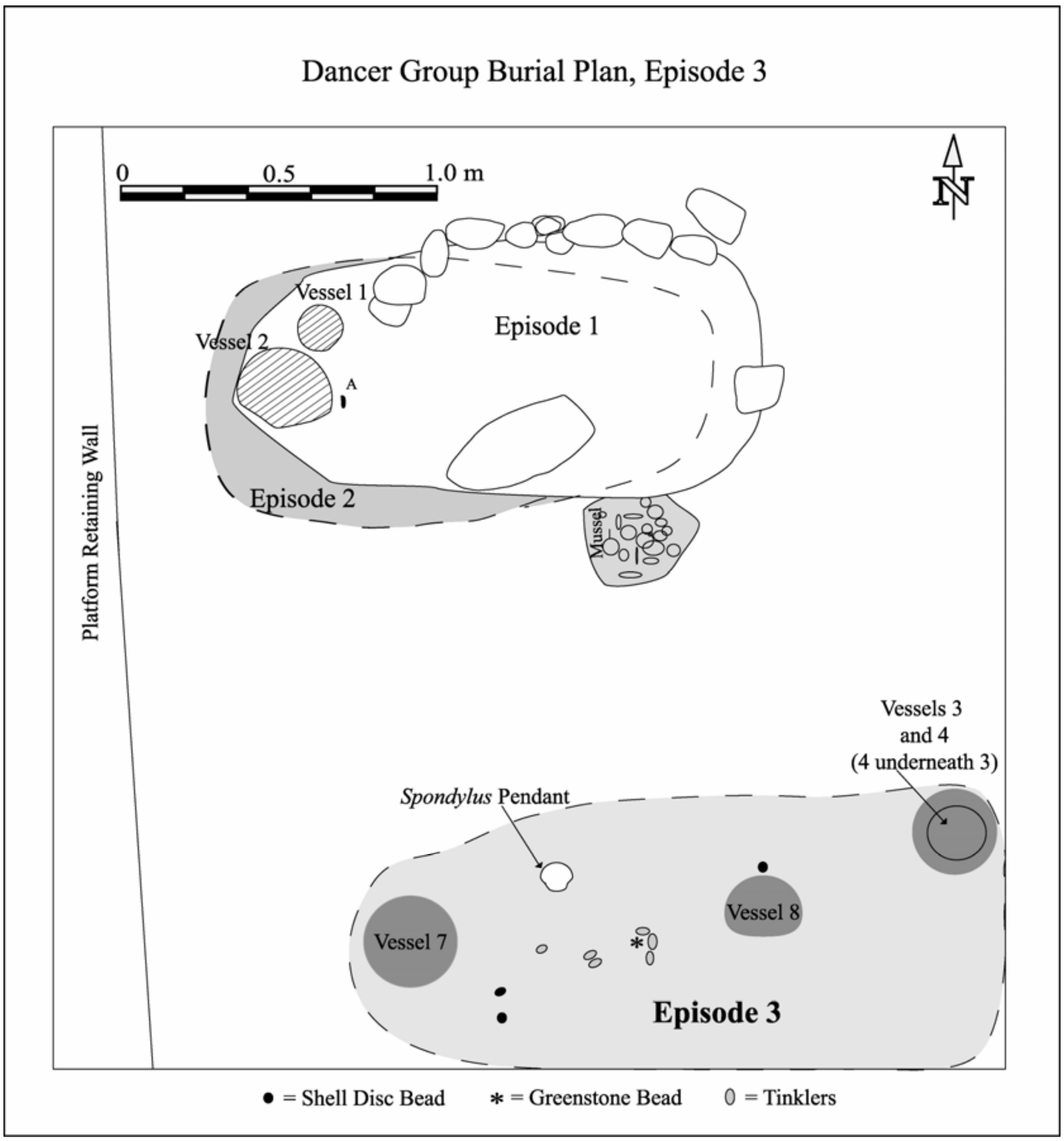

Figure 4.22: Plan of Burial Episode 3.

This episode has the highest MNI with six individuals represented (Saul and Saul 2003; Appendix D; also Table 4.7). Interestingly (and similar to Episode 2) two primary individuals were buried in Episode 3 with each having teeth of two other people associated with them inside or under vessels. A slight difference must be noted however, three of these associated teeth belong to children. Since the preservation was very poor in all three episodes and child bone appears to be absent due simply to preservation, these may actually represent the full remains of these three very young children (Table 4.7).

Figure 4.23: Vessel 4.

The first primary burial (#1) was of a Child aged 2–4 based on dental development of unknown sex. The child was extended with its head west and feet east (Saul and Saul 2003; Appendix D; also Table 4.7). Vessel 7 was located near or possibly over the head (Figure 4.22). The teeth (N=7) of another Child (#3) aged three to five years, of unknown sex, were also located under Vessel 7 with the teeth of the primary child (#1) (Saul and Saul 2003; Appendix D; also Table 4.7). In addition to these, the teeth of a Young Adult (#4) aged 20–34 years of unknown sex were also located under Vessel 7 (Saul and Saul 2003; Appendix D; also Table 4.7). It is possible that the 12 teeth of the Young Adult (#4) were placed secondarily or as grave goods. However, it is not discernible whether the bones the three to five year old child (#3) were at one time interred and were no longer detectable at the time of excavation since the teeth included some permanent dentition (Saul and Saul 2003; Appendix D; also Table 4.7).

A second primary burial of this time of a young adult (#2) aged 20–30 years based on dental analysis and unknown sex was also documented in Episode 3 (Saul and Saul 2003; Appendix D; also Table 4.7). Vessel 8 was found inverted over the face of this person (Figure 4.22). Similarly, the teeth of two children were also located under Vessel 8. There were eight teeth (three fragments) of one child (#5) aged three to five years, of unknown sex, and 13 teeth of a child (#6) aged five to seven (Saul and Saul 2003; Appendix D; also Table 4.7). Since both sets of these children's teeth include permanent dentition it may well be that the children were interred here originally and their bones were too fragmentary to document during excavation.

A number of grave goods were recovered in Episode 3 (Appendix C, Table C.3), possibly related to the number of people interred, supporting the idea that the children's teeth actually represented full children at the time of burial either literally or symbolically. It is not uncommon to find subadult burials completely covered with inverted ceramic vessels, for example at Rio Azul, Op 210 (Hendon 1989) or in Group

BA-34 where the vessel was covering the skull (Grazioso Sierra 2003). A *Spondylus* bivalve (Figure 4.24) with a natural red band present around its rim and two drill holes for hanging as a pendant was documented. Along with the drill holes, two engraved lines on the inside/ventral of the shell rim are present and positioned such that the cord would sink or sit in lines (Figure 4.25). This particular item may specifically be associated with childhood. It may be a gender symbol placed ritually on a cord around a girl's waist that Friar Diego de Landa observed in the 1500's (see Tozzer 1941:102). This interpretation will be discussed in greater detail in Chapter 6 (see also Trachman 2006; Trachman and Valdez 2006). Marine bivalve pendants have been documented at a few specific other sites in association with child burials, and sometimes noted to have been located at or near the pelvis in these burials. In the Preclassic these were reported at Cuello (Robin 1989; Robin and Hammond 1991), and in the Late to Terminal Classic in the northern lowlands at the site of Yaxuna (Ardren 2002; Bennett 1992, 1993, 1994). A juvenile *Spondylus* bivalve pendant was also noted at Colha from a Terminal Late Preclassic (or Protoclassic) burial (Buttles 2002; Dreiss 1994).

Figure 4.24: *Spondylus* pendant.

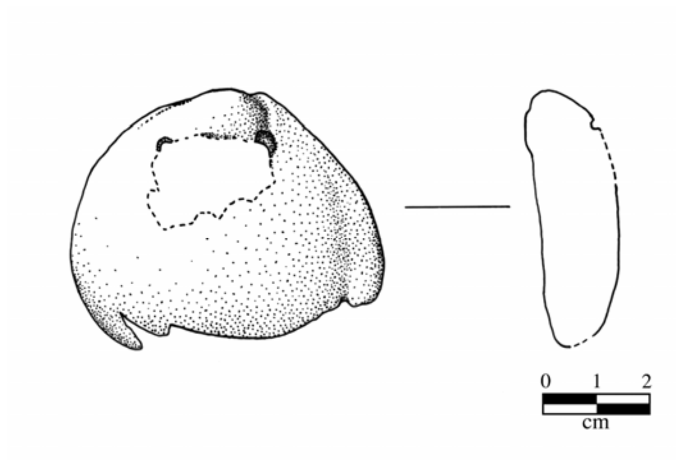

Figure 4.25: *Spondylus* pendant (drawn by Dee Turman ; © PfBAP).

Seven shell beads, called tinklers, were also collected in Episode 3 (Appendix C, Table C.3, and C.2). Their name refers to the characteristic sound that they make when they rattle against each other. The tinklers are made from marine univalve *Oliva reticularis* shells and are produced by removing the spire and sawing or slicing the shoulders off in some cases (see Hohmann 2002 and Buttles 2002). Specifically, in this case the shoulders and spire have been removed from all seven and each has only a single drill hole (Figure 4.26). The holes were apparently drilled by the string method given the remnant striations and groove surrounding the drill hole on each. They were all found in close proximity indicating the likelihood that they were strung all together as a bracelet or anklet. Interestingly they can be arranged in ascending or descending order by size, which is seemingly intentional (Figure 4.26). Tinklers are often found in special contexts, burials and caches and are reported at in the Middle Preclassic at Pacbitun (Hohmann 2002), in the Late Preclassic at Cerros (Garber 1989), Colha (Buttles 2002; Dreiss 1994), Cuello (McSwain et al. 1991), a high number from "early sealed deposits" at Mayapan (Proskouriakoff 1962: 385) as well as Altar de Sacrificios (Willey 1972), Kaminaljuyu (Kidder et al. 1946), Lubaantun (Hammond 1975), San Jose (Thompson 1939), Tikal (Moholy-Nagy 1994), and Seibal in the Terminal Classic (Willey 1978).

Along with these, three shell disk beads, an irregular shell bead or more expressly a bead failure (Figure 4.27), and a tubular greenstone bead were also found in burial Episode 3 (Appendix C, Table C.3, and C.2). Shell disk beads are ubiquitous in the lowlands, found at most every site in various contexts, and often the most abundant bead form found (see Buttles 2002:162; and Hohmann 2002:105).

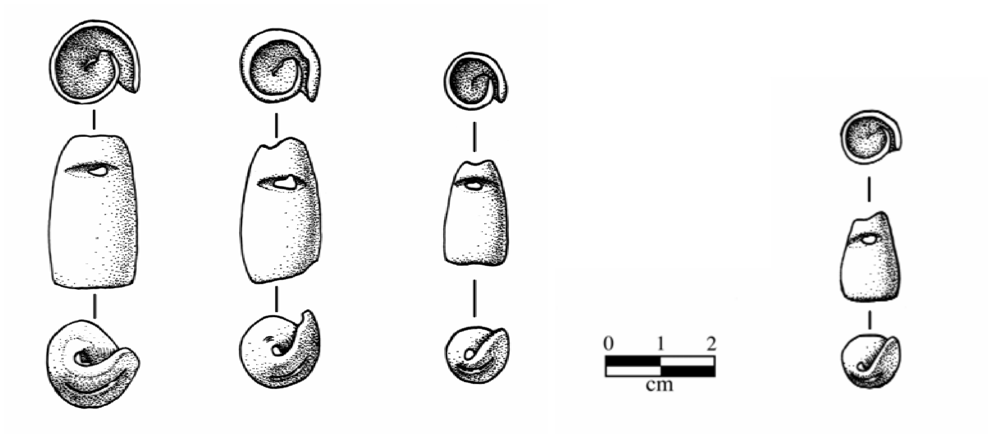

Figure 4.26: Four of the *Oliva* tinklers (drawn by Dee Turman ; © PfBAP).

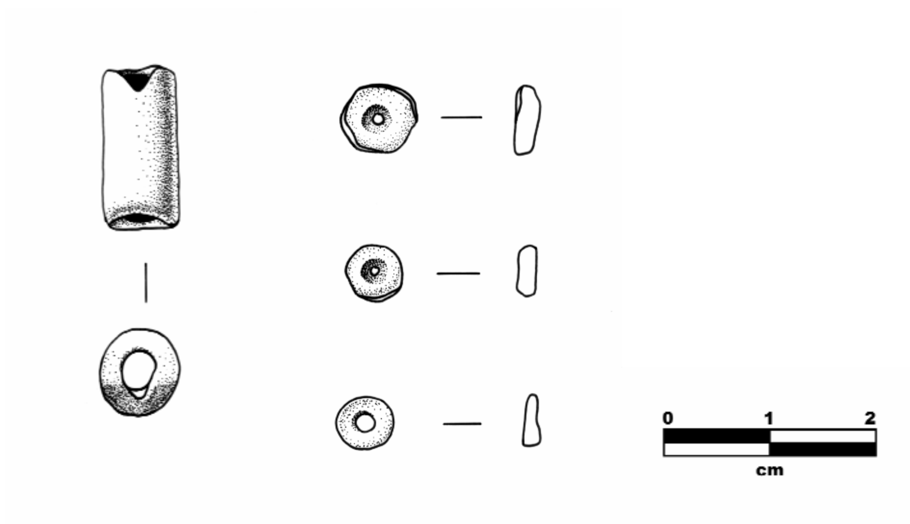

Figure 4.27: Four additional beads from Burial Episode 3 (drawn by Dee Turman ; © PfBAP).

Mortuary Chronology

As noted, a Chicanel phase (Late Preclassic) vessel was documented in Episode 1 along with a Tepeu 2-3 (Late to Terminal Classic) vessel. It is possible that the earlier vessel is either an heirloom artifact or its presence was a result of the Late Classic re-entry into the platform to place more burials. At the time of re-entry clearly Episode 2 would have been exposed since the two episodes were on top of each other and only a few centimeters apart vertically. The Chicanel vessel could have been collected from Episode 2 and then placed as a part of the mortuary goods in Episode 1 possibly as a symbolic gesture. It was also placed into Episode 1 inverted, typical of many Late Preclassic burials, again suggesting its movement from Episode 2 (Late Preclassic) to Episode 1 (Late Classic). Burial Episode 3 is also Late Preclassic (Early-Middle), early in the Chicanel phase and was likely placed earlier than Episode 2. All of the whole vessels from every burial episode were inverted including the Tepeu 2-3 vessel in Episode 1. It is possible that the Late Preclassic mortuary practices were being mimicked in the Late Classic burial Episode 1.

The ceramic chronology of the burial episodes indicates a gap, if not in active occupation, then in mortuary ritual or the active placing of the dead in this location at the Dancer Group (and likely at the Dancer Group in general). The time periods absent from representation in the mortuary data are the Early Classic (Tzakol phases) and the early part of the Late Classic (Tepeu 1 phase). It has been suggested by Sullivan and Valdez (n.d.) that the Early Classic may be underrepresented typologically due to some continuity in style from the Late Preclassic to the Early Classic. As such, there are at least 100 years unaccounted for in the mortuary chronology, representing the Tepeu 1 phase (A.D. 600–700) of the Late Classic.

Non-Mortuary Ritual Activity

No dedication caches or primary evidence of ritual termination were identified at the Dancer Group. Only one other possibility is evident in regards to non-mortuary ritual activity. The presence of post-consumption *Pachychilus* or jute snails may be a secondary indicator or *indirect evidence* (see Pearsall 2000) of ritual activity (Halperin et al 2003) and begs the question of the circumstances surrounding their consumption. Pearsall (2000:499) uses the term *indirect indicators* when referring to evidence found outside the human body itself that indicates the dietary practices of ancient peoples. I would propose that this concept is a useful approach to ritual consumption as well.

The modern Maya as well as other Belizeans in northern Belize are known to consume jute snails in association with weddings (Oscar Garcia, personal communication 1999). Halperin et al. (2003) have discussed their use in Maya rituals. *Pachychilus* spp. have been found in a number of cave sites around the Maya region (Halperin et al. 2003: 209) and specifically in Belize at Actun Nak Beh (Halperin 2002) and Footprint Cave (Graham et al. 1980). Halperin et al.'s (2003:214) ethnoarchaeological study established their use in modern rituals related to rain, health, fertility, and ritual seclusion. Subsequently, the empty shells are used as post-consumption offerings in thanks to the mother earth and placed in caves (Halperin et al. 2003:214). It is this analogy that they (Halperin et al. 2003) use to understand the archaeological cave deposits of expended jute. Healy et al (1990) have suggested the use of jute as a nutritional supplement-protein for the ancient Maya while also noting archaeological evidence of their use in ritual caches and burials at several lowland sites. The means of distinguishing those used as primary offerings is the lack of spire lopping, as opposed to the post-consumption offerings found in caves in which the spires are indeed lopped.

Certainly at the Dancer Group jute shells are found in secondary midden contexts, but these are not likely a post-consumption ritual offering. The spires are lopped in nearly every case. Even those found in the burial matrix are post-consumption. Their presence does, however, indicate that they were consumed in or around the Dancer Group household. If the modern consumption analogies seen in Guatemala and northern Belize are correct, the consumption was associated with ritual events. Stanchly and Ianone (1997) have also proposed their use in ritual feasting events based on their presence in the fill of civic ceremonial structure in fill contexts. The similarity in contextual presence for this non-elite household may suggest that they are possibly a secondary indicator of ritual feasting that occurs in household rituals related to rain, abundance, and health, or also lifecycle rituals that often were practiced in the household such as birthing ceremonies, puberty ceremonies, marriage ceremonies, and death rituals.

Chapter 5: Excavated Households Excavated Lives: The Results at Grupo Agua Lluvia

Operation 29, a household group also located in Block 7 of the Dos Hombres Transect A, was designated in survey as the A-VII-11 group (Figure 3.1). It is located in the seventh survey block of the west transect, straight west of the north end of the ballcourt of Dos Hombres. This group is approximately 1.7 km (1650 m) west of the site center.

As discussed in Chapter 4, four environmental subzones were defined for the Transect A (Lohse 2001:48). Traveling west from the site center of Dos Hombres, the first subzone is the Broken Ridges subzone in which the site center sits (Figure 3.1). The River Floodplain is about 600 m west of the ballcourt, in the vicinity of the Rio Bravo (Lohse 2001:49). The Transitional Uplands subzone is located primarily on the face of the Rio Bravo Escarpment, beginning at around 1400 m west of Dos Hombres (Lohse 2001:49). The final subzone defined for this transect is the Upland Bajo. It is located in the higher elevations west of the Rio Bravo Escarpment face.

The Transitional Uplands is the environmental setting in which Operation 29 of Transect A is located. It has been defined as a steeply sloping area with thin soils and interspersed spots of colluvial soil (Hageman and Lohse 2003:112; Lohse 2001:51). This subzone occupies half of Block 6, all of Block 7, and half of Block 8. Brokaw and Mallory (1993:19) have described an area they identify as Upland Forest, likely the same or similar to this Transitional Upland delineation with a vegetation pattern of primarily hardwoods.

Operation 29 was previously designated the A-VII-11 group by the settlement survey by PfBAP designation standards. I have named this household group *Grupo Agua Lluvia* for ease of identification. Tape-and-compass mapping performed by the settlement surveyors is the only previous work performed at the group. No other research, either mapping or excavation, is known to have taken place at Grupo Agua Lluvia prior to this research project. There were no historic remains found here to indicate any historic occupation or knowledge of the group. However *Chicleros* are known to have passed through this area tapping Chicle (*Manikara zapota*) trees for sap.

The modern vegetation around the Grupo Agua Lluvia today is mostly tall hardwood trees including Ramón or Breadnut (*Brosimum alicastrum*), Copal (*Protium copal*), Cohune palm (*Orbignya cohune*), Allspice (*Pimenta dioica*), Zapote or Chicle (*Manikara zapota*), and Strangler Fig (*Ficus cotinifolia*). Mahogony (*Swietenia macrophylla*) was likely present there historically as well.

Excavation Summary

Summary of Work

Grupo Agua Lluvia is a plazuela group positioned on a modified knoll that extends east from the face of the escarpment (Figure 5.1). The open plaza is formed by the presence of five clustered structures or mounds along with five features. The plaza is partially formed by the modification of the natural knoll with terracing along the north, south, and east sides of the five structures. The plaza group covers an area approximately 2,450 m^2. The overall household lot, which includes the interpreted activity spaces and discard areas, extends over an area of 3,472 m^2.

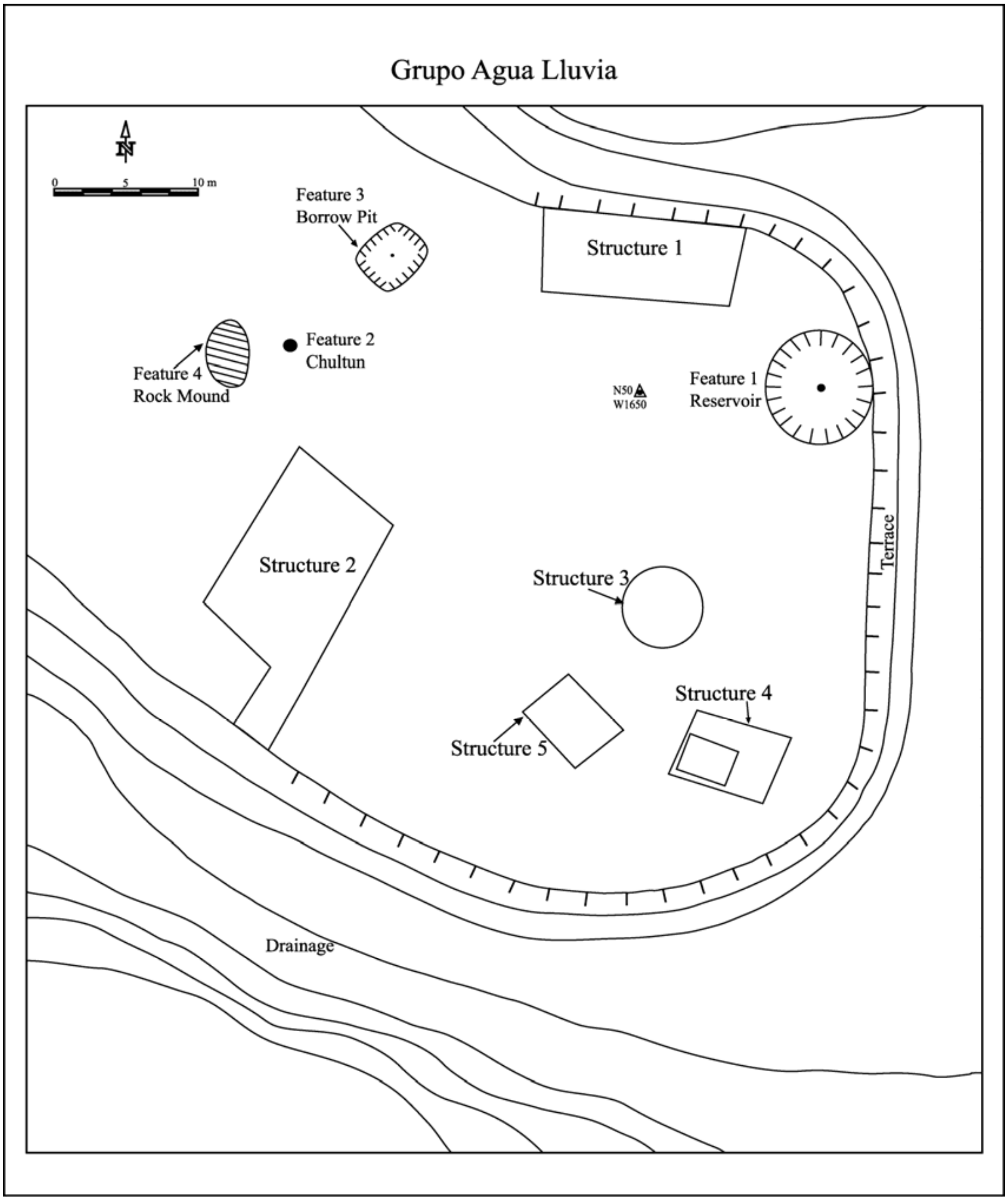

Figure 5.1: Map of Grupo Agua Lluvia.

The investigations presented here took place over the several seasons from 1999 to 2002. Preliminary test units (N=4) were placed at the end of the 1999 summer season. Work resumed in the summer of 2000 and continued over the course of the summer of 2001 and spring and summer of 2002. The long duration of work indicates the level of detail with which this household was investigated. Like the Dancer Group household, Grupo Agua Lluvia was a short walk from the all weather road that runs through the Programme for Belize property. So after a 20–30 minute drive from camp we had only a five to ten minute walk.

A total of 73 excavation units were opened during the course of the fieldwork. Four of five structures were investigated to varying degrees with the structures with more elaborate architecture getting the most attention. Structure 5 was the only structure not excavated due to its current destruction by a large tree growing up through the middle of it with buttressed roots that expand across the entirety of the mound. Four of the five features were also exposed to some degree. Feature 3 was only examined superficially without excavation.

Three types of "off-mound" units were used to investigate the open plaza and surrounding house lot (Figure 5.2). The first type was in the form of 1 x 1 m units placed across the plaza in cardinal directions specifically to assess the construction of the plaza and level of modification of the bedrock in that process. The second type of units located off of features and architecture were midden test pits (1 x 1 m) placed arbitrarily to the north, south, and west of the plaza (further discussed below). Finally, a third experimental type of unit was placed arbitrarily around the plaza in order to 1) find and sample activity areas around the plaza; and 2) to assess the use of this method in doing so, placing 1 x 1 m units that were only and specifically excavated down to the terminal occupation surface.

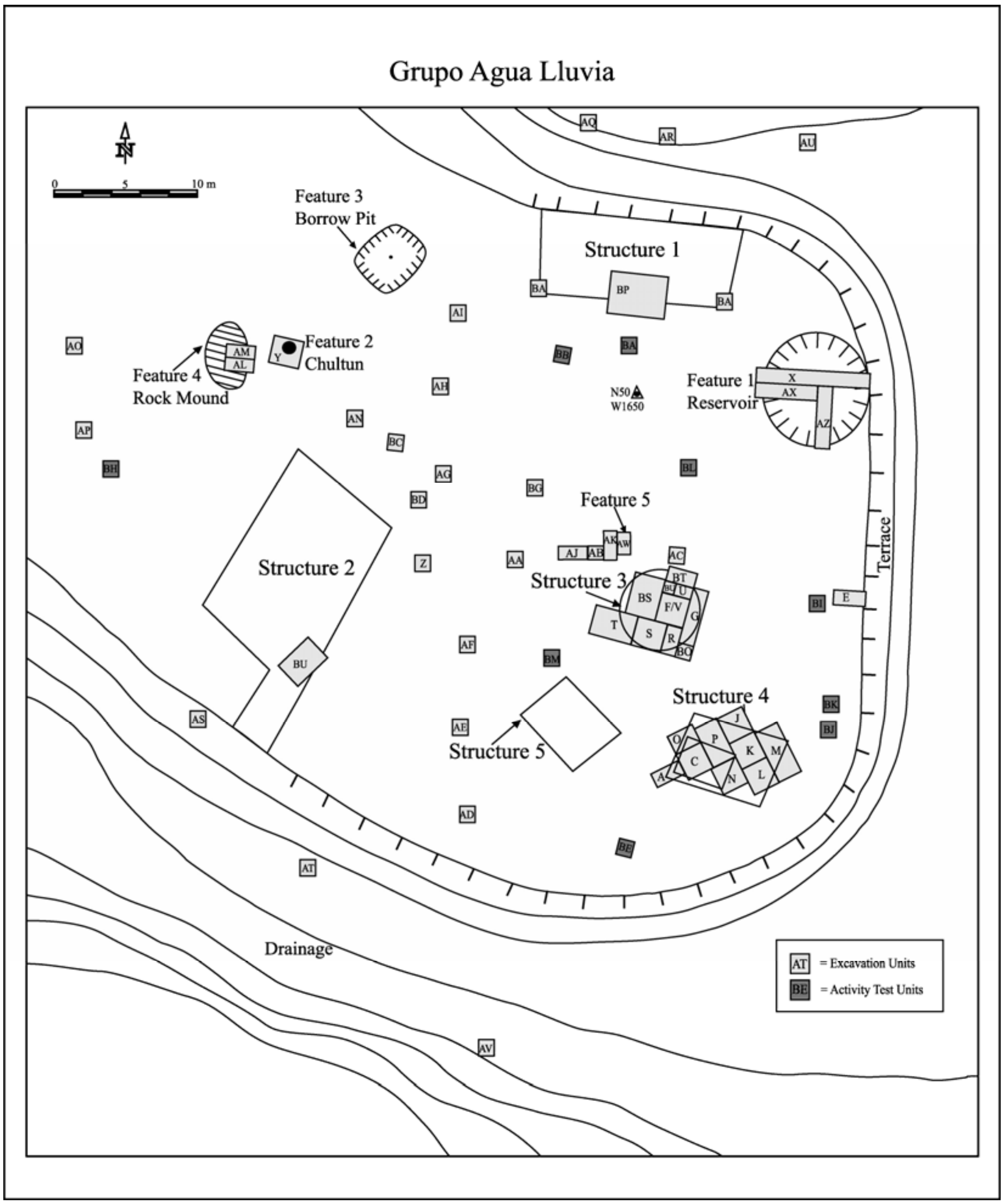

Figure 5.2: Grupo Agua Lluvia excavations.

Landscape Features/Modifications

The open raised and terraced plaza surface of Grupo Agua Lluvia was constructed on top of bedrock using construction pens or cells as evidenced in the plaza excavation program. This an architectural method for building up open spaces, such as platforms or terraces, so that their large mounded linear surfaces remain level and do not sink in the middle much like that seen in monumental architecture around the lowlands (Wernecke 2005:59-61). Construction pens or cells are low informal walls laid out in a grid like pattern creating sections that are then filled (Wernecke 2005:61). Once the construction fill is placed in them, the plaza floor (or platform surfacing material, plaster or otherwise) can be laid out on top of that. The use of construction cells has been widely reported across Mesoamerica (and the ancient southwest US).

The occupation surface of the plaza floor at Agua Lluvia may have been plastered over during occupation, but was not preserved or visible in the excavations. A lower plaster floor was uncovered adjacent to Structure 3, lying close to or on top of the bedrock. The remainder of the plaza, probed with 1 x 1 m units excavated to bedrock (Figure 5.2), revealed little evidence of bedrock modification in the open plaza, excluding the obvious modification in the depression features (Features 1, 2, and 3), nor was the earlier constructed plaster floor evidenced in any other units besides Subops T, AB, and AJ all located adjacent to Structure 3. The plaza test pit program was designed specifically in order to assess construction methods and bedrock modifications there. Ten 1 x 1 m units were placed for this purpose at 5 m intervals in cardinal directions roughly radiating out from the center and avoiding other architecture or features. Four of these subops spanned east to west (Subops Z, AA, AB, and AC) and another six north to south (Subops AD, AE, AF, AG, AH, and AI) (Figure 5.2). An additional unit was placed to additionally test the area to the north of Structure 2. A second purpose to the plaza test units was to determine the horizontal extent of the modifications and of the plaza fill. All of the test pits in the line running east to west encountered plaza fill by the method already discussed and were corroborated by the fill present in Subop E at the east edge of the terrace thereby extending that line. All but one of test pits in the line running north to south across the plaza encountered the same plaza fill. The bedrock in Subop AI was much shallower and no evidence of construction pens was present indicating that the bedrock varied in depth across the knoll and was shallowest in the north to northeast of the group.

The terracing exposed in Subop E, constructed to extend the area of the knoll, matched the terminal plaza floor levels and was likely built at or around the same time. The terracing around the north, south, and east perimeters of the group functions to extend the living/activity surface available to the household rather than to raise the height of the plaza since the knoll was already a natural high point. A second possible function would be to deepen the available ground soils and create a space for household gardening. This is especially relevant in the eastern portion of the group where the terrace fill is the deepest. The soils on the west side of the group, where no terracing exists, are natural deposits and very shallow (see discard section below).

Bedrock was also incorporated into the layout or design of buildings at Grupo Agua Lluvia as well as evident modification, especially visible in Structures 1, 3, and 4.

As already stated, the earlier plaza floor surrounding Structure 3 revealed that plaster was laid partially on top of the bedrock (Figure 5.3). In other words, the bedrock was slightly artificially leveled in this small area around Structure 3, and then a thin level of silty fill was laid on top of the bedrock to complete the leveling process. In the exposure of this section of plaster floor (Subops AJ, AB) it was clear that the plaster was intermittently lying directly on the bedrock (Figure 5.3). Bedrock was clearly quarried and/or excavated in antiquity in both the depression features and the chultun present in the group (Figure 5.2). Finally, bedrock was incorporated into the construction of the Structure 1 platform and of Structure 4 which will be discussed further in the next section. The use of, or modification of, bedrock into domestic construction is also seen at other sites in the lowlands, specifically it has been reported in detail for small residential groups excavated at Tikal (Haviland 1985:114).

Figure 5.3: Earlier plaza floor as exposed in Subops AB and AJ.

Architecture

Three different architectural styles or modes were found during the excavations of the Agua Lluvia group. A residential plazuela group, Agua Lluvia has five architectural structures, five features (both above and below ground features) all sitting on a modified or terraced outcrop or knoll of the escarpment face as discussed above (Figure 5.2). This is a household that grew over time architecturally, occupied from the Tepeu 1-2 phase (A.D. 600-800/850, Late Classic), to the time of abandonment during the Tepeu 2-3 phase (A.D. 700-900, Late to Terminal Classic).

Two of the structures are exclusively platforms, while two other structures were partially masonry with platforms supporting them. Structure 5 was not excavated due to the fact that a tree was growing on the mound with roots extending across the entirety of the mound, presenting the both difficulty in access to any architectural exposure and obvious heavily disturbed deposits. Three of the features located within the boundaries of the group were subsurface, two depressions and one chultun. The remaining two features were very small mounded features visible above the ground surface.

Structure 1 and Structure 2. Both Structures 1 and 2 are Tepeu 2-3 (A.D. 700-900) low lying open platforms with no standing masonry structures on them. Structure 1's dimensions are approximately 13 x 6 m, while Structure 2 measured 18 m on the long axis on the east or front side, but only 11–12 m on the west side with a width of 9 m (Figure 5.2). Structure 1 and Structure 2 both appear to be large cobble platforms with solid block retaining walls (Figure 5.4). No plaster surfacing was found in any of the excavations of either platform. This may be due to poor preservation, or the absence of plaster to begin with, indicating the possibility of an earthen surface on them. The subsurface deposits of Structure 1 were sampled (15% exposure) in excavations and located no earlier construction below the occupation surface. Structure 1, the northernmost structure, is oriented with its long axis running east to west at 96°. Again, construction pens or cells were utilized in the construction of the Structure 1 platform, part of which rested on bedrock. Although no remains of any other masonry architecture or cut stone whatsoever was visible on the platform surface, a perishable structure(s) may have been on top of the platform originally leaving no architectural trace.

Figure 5.4: Structure 1 exposures.

Structure 2 is the westernmost structure oriented with its long axis running north to south at 148° (Figure 5.2). Although the structure's subfloor construction was not sampled, the construction methods are presumed to be similar to Structure 1 given the overall similarity in surface deposits and morphology of the platform. Again there was no evidence of any masonry or cut stone on top of the large platform indicating the presence of a perishable structure. The surface deposits associated with Structure 2 were sampled, approximately 5%, in order to assess potential activities associated with the structure rather than the construction methods. The irregularity of the shape of the Structure 2 platform is related to either natural disturbances post-abandonment, or possibly the platform was in the process of being expanded in size at the time of abandonment. This idea correlates well to the presence of both a borrow pit feature and a rubble mound nearby, but would require further investigation.

Bedrock was incorporated into the foundation of the south side of the Structure 1 platform construction, while the back side or north edge of the platform was incorporated into the terrace construction adjacent to its northeast corner (Figure 5.2). The platform is situated such that a bedrock outcrop is center to the front of the platform and the north retaining wall of the platform is sitting directly on that bedrock portion (Figure 5.4).

Structure 3. The excavations of Structure 3 exposed 85% of the architecture and 40% of the subfloor deposits and clearly revealed a round structure with a round basal platform (Figures 5.5). This structure had masonry walls which were still partly standing at the time of excavation. The structure's circular walls were approximately

45–50 cm thick with a central wall core and large cut stone facing the interior and exterior. Only two to three courses of stone were still in place at the time of excavation, but the collapse debris indicate that the masonry walls were taller originally, possibly as tall as 1.5 m, topped with a perishable roof. Virtually all of the interior room space of the structure was exposed. In the interior of the room only a small area of plaster was preserved delineating the last or terminal floor of the structure (Figure 5.6). It was present only in the western end of the room. No other or earlier plaster floors were discernible, but presumably were simply not preserved given the very poor condition of the one documented. The interior room space measured approximately 3 m in diameter. The doorway to the structure was on the north to northeast side facing the same direction and opened on to a small adjacent platform terrace (Figure 5.5).

Excavations into the floor deposits did not reveal any evidence of any earlier construction, thus as with all other architecture excavated at Agua Lluvia, it was single phase construction. However, a cist burial (Burial 3) was documented under the floor as well as a dedication cache under the doorway of the structure and near the cist. The cache was likely placed during the construction of the structure which was earlier in the Late Classic, during the Tepeu 1-2 phase (A.D. 600-800/850), indicated by the age of the cache vessels (Sullivan 2003, Appendix B). The stratigraphy revealed that an intrusion (Figure 5.7) into the floor occurred in order to place the burial during the Tepeu 2-3 phase, based on the ceramics (A.D. 700-900), indicating it was placed after the building was constructed. Even though the surficial deposits associated with Structure 3 are Tepeu 2-3, the construction of Structure 3 is earlier than any other construction at this household as dated by the cache, indicating that the structure was used continuously.

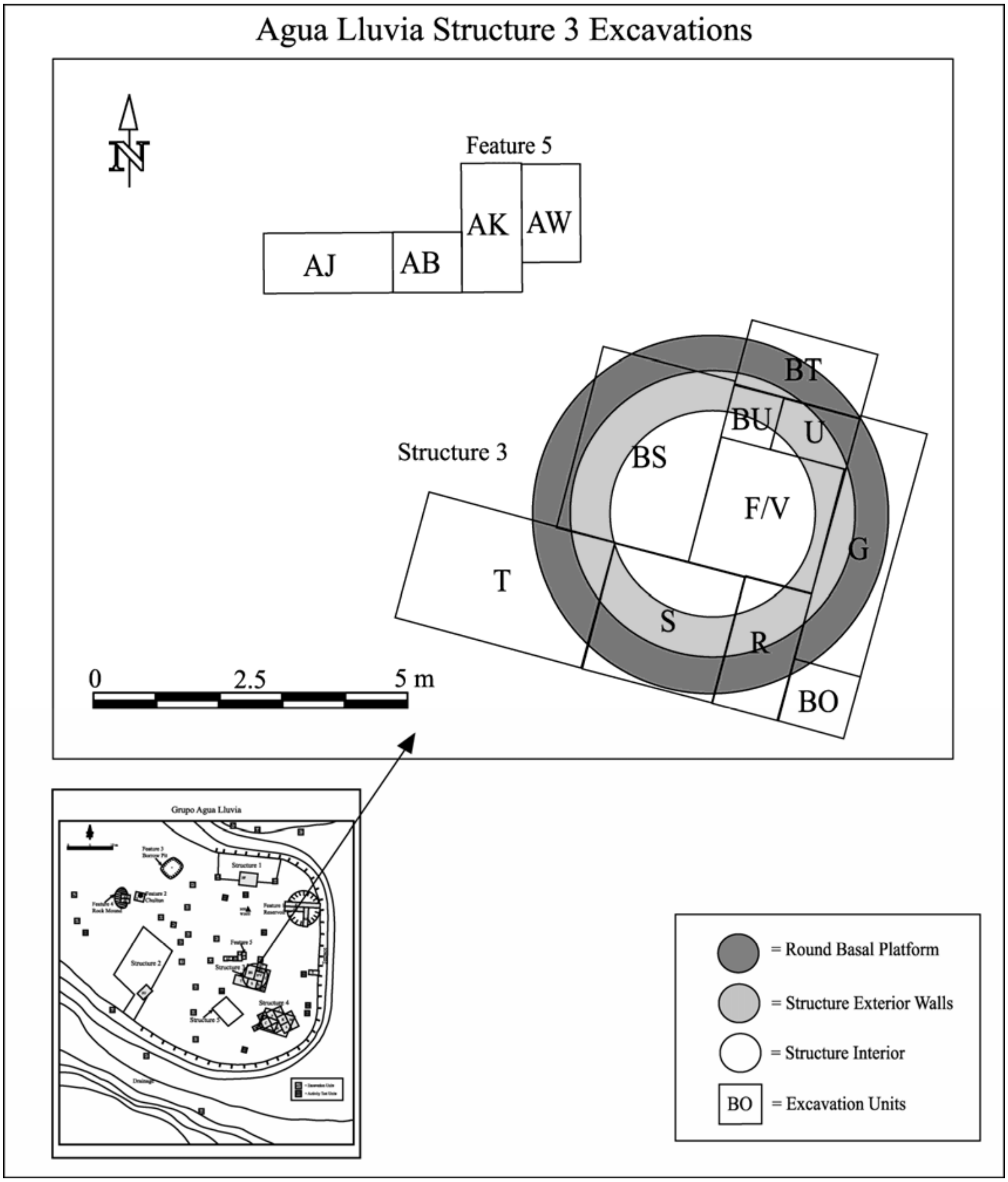

Figure 5.5: Structure 3 excavations.

Figure 5.6: Structure 3 interior.

The Agua Lluvia Late Classic round structure rested on a round basal platform and was documented underneath this round structure (Figure 5.5). The platform was only two to three courses high and sat on a plaster floor seen in Subops T, AB, and AJ. This plaster floor, mentioned above, was obviously adjacent and associated with Structure 3 and its small basal platform. The plaster level below the platform was uncovered during excavations and positioned under the latest plaza floor. This indicates that Structure 3 was built before the plaza floor (terminal surface) was raised and expanded, corroborated by the ceramic dates.

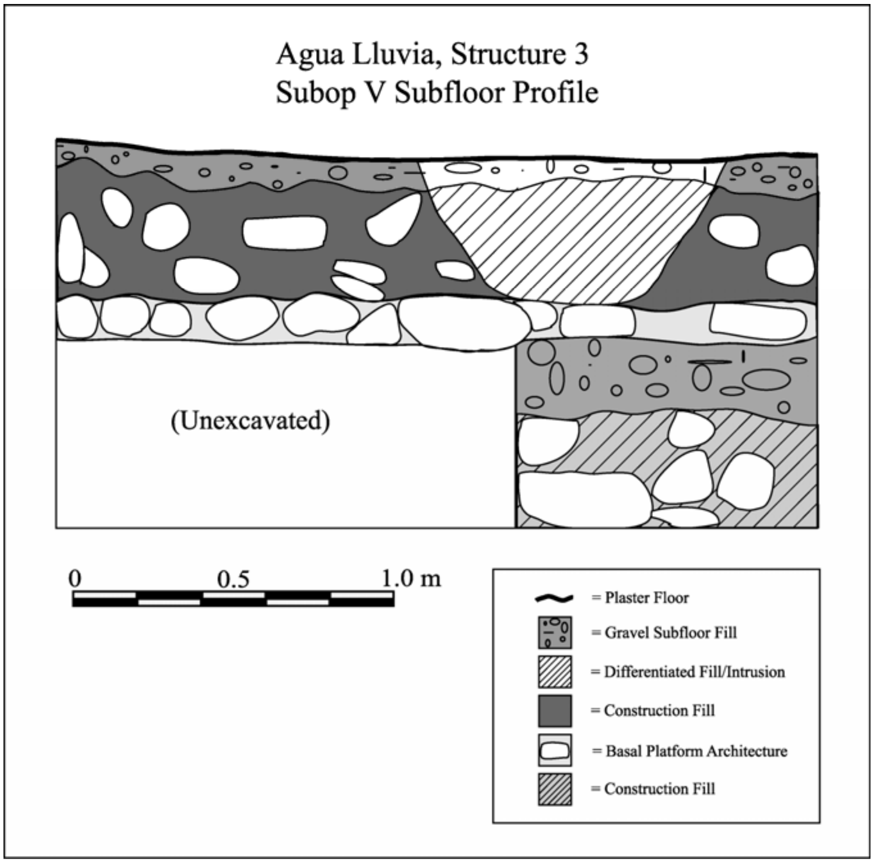

Figure 5.7: Structure 3 subfloor profile.

Round structures with platforms such as this one are somewhat rare in for the Late Classic period in the central lowlands. It is an architectural form more often seen during the Preclassic (Aimers et al 2000; Hendon 1989, 2000a. Many of those documented for the Preclassic in the lowlands are primarily a round platform which is often absent of any masonry structure on top (Aimers et al 2000; Hyde et al 2006). A few Late to Terminal Classic examples have been documented in Belize, one in the Rio Bravo area (Kathryn Reese-Taylor, personal communication 2004), Nohmul, and a few others investigated in the Sibun Valley in central Belize (Harrison-Buck and McAnany 2006).

A stone alignment was also documented next to Structure 3 in Subops AW and AK (Figure 5.2). Designated Feature 5, this slightly curvilinear feature represents a low wall of only a few courses. Its shape may be fortuitous, a result of collapse, or it may be intentional in order to mimic Structure 3. Given the artifacts found and the limited size or amount of architecture indicated by the debris present in the excavation units it is likely that this was a small activity area built, not contemporaneous with the construction of Structure 3, but later with the Tepeu 2-3 (A.D. 700-900) structures and plaza expansion. This feature will be discussed in greater detail later in this chapter.

Structure 4. Structure 4 is the southeastern most of the mounds at Agua Lluvia (Figure 5.2). It is architecturally different than all the other structures excavated at the site. The main architectural components of Structure 4 are a very low basal platform with a very small structure on top (Figure 5.8). The basal platform sits directly on the plaza surface and is only one course of stone high (30–40 cm) and is approximately 6.5 x 6 m in area with the long axis oriented east to west at a 107°. The construction method for this small platform utilizes large flat cut stones placed on end such that the single course of stones forms both a veneer and a sort of retaining wall for the platform construction fill.

Bedrock is also shallow in portions of the configuration and is incorporated into the construction. A small structure, measuring approximately 3 x 3 m, sits on top of the basal platform (Figure 5.8). Portions of the structure were found to be sitting on bedrock, specifically the area near and including the entranceway and just outside of it. The bedrock incorporated in the doorway of Structure 4, which was found facing east, formed the threshold. The structure's walls were mostly perishable along with the roof. They were formed with the use of stone foundation bracings only a few courses of stone high based on the amount of collapse debris present in the excavations. The foundation bracings were about 50–60 cm thick originally, making the interior room dimensions 2.5 x 2.5 m. The upper portions of the structure walls would have been perishable, pole and thatch, along with the roof.

There was no plaster preserved on the interior structure floor. It is not clear if the structure originally had a plaster floor and it did not preserve, or if the floor was originally earth paved. Although no dedicatory cache was found, two burials were discovered underneath the occupation surface in the interior room space (Figure 5.8). The deposits related to both the subfloor fill and the upper occupation surfaces associated with Structure 4 are somewhat mixed, but I interpret them to date Tepeu 2-3. Therefore, the structure's construction is dated to the Tepeu 2-3 phase along with the burials. No intrusion was perceived in the subfloor excavations or stratigraphy that would indicate that either of the burials were placed subsequent to the construction of the structure. However, the poor preservation and shallow depositing of the burials and all subfloor materials would have prevented any perception of an intrusion.

None of the other platforms or structures excavated at the group exhibited this kind of architectural execution. However, it is possible that the unexcavated Structure 5 is very similar to Structure 4 especially given the similarity in the size and shape of these two mounds prior to excavation. Their proximity and arrangement evoke an association between them (Figure 5.2). Whether that spatial association is based on architectural style or activity may never be clearly understood since Structure 5 is completely disturbed.

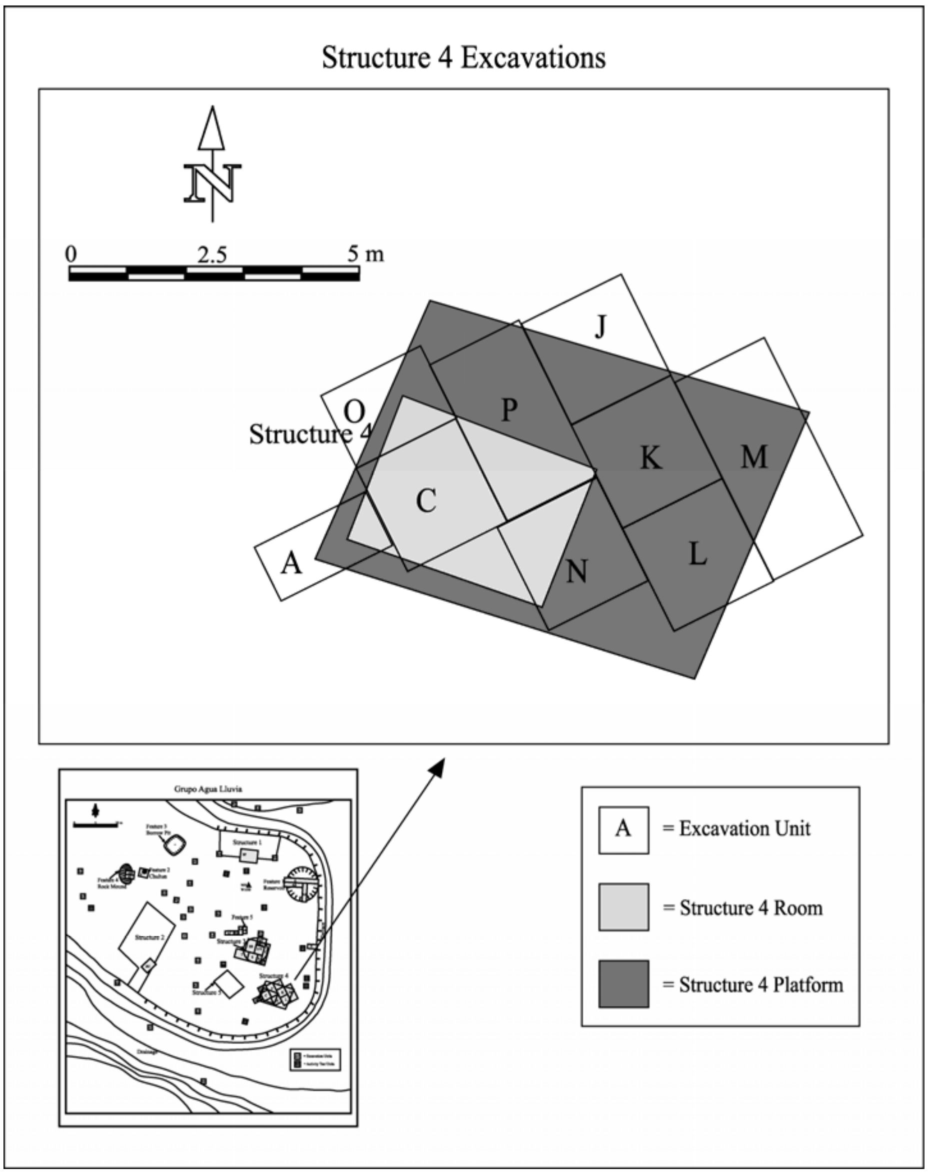

Figure 5.8: Structure 4 excavations.

Subsurface Features

Three total subsurface features were noted at Grupo Agua Lluvia (Figure 5.2). Two of these are depression features and one was clearly a chultun. The largest of the two depression features (Feature 1) was investigated in depth while the smaller depression (Feature 3) was not excavated, but mapped and the surface exposures examined. The chultun (Feature 2) was also not fully excavated, but the humus stripped away from the mouth and a shovel test was taken of the talus.

Water reservoir. The large depression (Feature 1), located in the northeastern portion of Agua Lluvia just inside the terrace, was investigated by sectioning (Figure 5.2). First one long trench (Subop X; 1 x 8 m) was excavated across the center of the depression dividing it in half. Then another trench (Subop AZ; 1 x 4 m) was excavated quartering the southern half (Figure 5.2). A third trench (Subop AX; 1 x 3 m) was placed adjacent to the Subop X in order to expand the exposure in the western end of that subop.

The depression measures approximately 7.5 m in diameter (both east to west and north to south). It measures 2.4 m in maximum depth, calculated from the top of the exposed bedrock cuts around the rim down to the excavated bottom of the feature (Figure 5.9). Much of the rim around Feature 1 was clearly cut bedrock with the exception of the easternmost side. It was discovered in the excavations that this portion of the rim met or joined the terrace wall (Figure 5.2; Figure 5.10). Here there is no cut into the bedrock rather the opposite is true such that there is an artificial rim on the

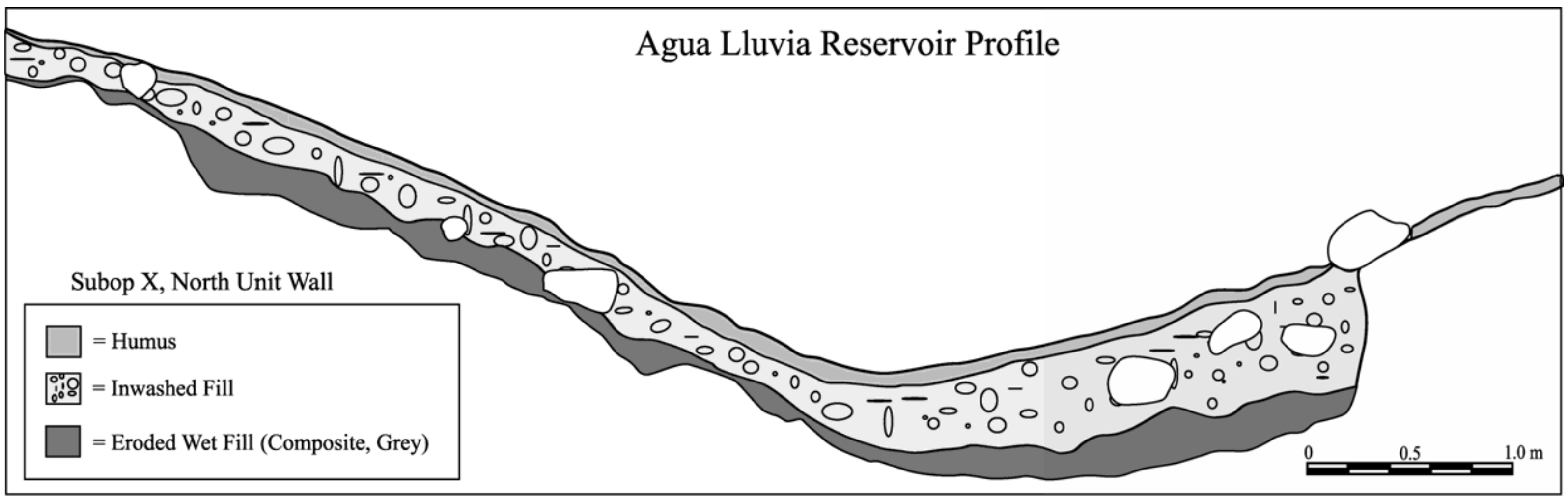

Figure 5.9: Reservoir profile, Subop X.

eastern boundary of the depression created by this portion of the terrace wall (Figure 5.10).

A lining of plaster at one time covered the bottom of the entire feature (Figure 5.11). The feature is interpreted as a small reservoir or open cistern largely due to the discovery of the plaster lining (Figure 5.12). The lining made it possible for the reservoir to hold water especially since a small portion of it was artificially built. The remainder of the reservoir was cut into the bedrock. The bedrock under the lining was found to be a very solid version in contrast to much of the limestone bedrock in the area which can be very porous and degraded. Scarborough (personal communication 2003) suggested that lining reservoirs with plaster or clay would significantly improve the ability for reservoirs to hold water. Others (McAnany 1990; Puleston 1971) have also noted that chultuns in the lowlands were sometimes lined in order to prevent seepage. Three possible post holes were also documented in the exposed plaster lining at the bottom of the reservoir. These were much eroded, but indicate the possibility that a roof structure of thatch once covered the reservoir. A covering might have helped to retard evaporation or to create condensation of evaporation and reclamation (Weiss-Krejci and Sabbas 2002).

A ramp-like feature was built on the west side of the reservoir (Figure 5.11). It was made from large stones and cobble mixed with plaster as a sort of wet fill used to build up this area intentionally. I am proposing that this is a ramp that was used to access the water as the levels receded periodically between each filling by the rains. It had a very shallow grade extending outward (east) for just under 2 m (Figure 5.13). All other exposures of the rim and sidewalls of the reservoir drop steeply to the bottom from the bedrock cuts or rim above (Figure 5.14).

Figure 5.10: Built section of rim adjoined to terrace wall.

Figure 5.11: Overview of reservoir exposures.

Figure 5.12: Close view of plaster lining over bedrock.

Figure 5.13: Reservoir access ramp (on right).

A maximum volume of this reservoir can be calculated using the dimensions, stated above. The exposed *surface area* of a pond is calculated by using the radius (SA=π X radius^2), the formula for the area of a circle then multiplied by the *average depth* (from Masser and Jensen 1991:4). Since the average depth is 1.62 m, the calculated surface area for this reservoir is approximately 44 m^2. The total volume of this reservoir then is 71.569 m^3 (71,569 liters) or almost 19,000 gallons. Today's estimated standard of 64 oz (one-half gallon, based on eight – 8 oz glasses/day) of water per day per person means that this reservoir could contain 38,000 person/day servings maximum. A full reservoir then with no evaporation could provide over 100 people with enough water each day for a year. Nevertheless, arguably the evaporation rates were measurable during the dry season, but difficult to factor in here.

Figure 5.14: South bedrock rim.

The excavations also conclude that the reservoir was open for use at the time of occupation and had not been converted to any secondary use as trash dumps or filled in (terminated) as some reservoirs are (Weiss-Krejci and Sabbas 2002). The evidence for this is the relatively low concentration of artifacts in the excavated matrix above the plaster lining and well as the depth of this matrix. First the matrix in the reservoir was relatively shallow, no more than what might be expected to wash into the reservoir over the course of 1,000+ years from the upper plaza surface and the degrading forest. Also, the total volume of soil excavated from all three units (Subops X, AX, and AZ) is 8.35 m^3 (Figure 5.2). The density of debitage, which is a good indicator of both trash and construction fill, can be estimated from this. A 50% sample of the debitage was analyzed from the reservoir excavations. The total number of pieces of debitage analyzed was 106, making the density overall around 25 pieces per m^3, lower than most midden and construction fill deposits. The reservoir matrix likely from washed in episodically or seasonally over the long period of time since abandonment, comprised mostly of occupation debris and some percentage of loose fill coming in from around the edges of the reservoir.

The two lowest points on the rim of the reservoir is on the eastern side where the rim adjoins the terrace wall opposite the plaza and to the south where the Subop AZ was placed (Figure 5.10). The portion of the rim exposed in Subop AZ was the lowest portion that adjoins the plaza floor and may have been a drainage point for the plaza, a place of water entry into the reservoir. Coincidentally the excavations just below this point uncovered an overturned Tepeu 2-3 (Appendix B) plate embedded in the eroding plaster lining (Figure 5.15). Given its context and the common practice of placing dedication caches in the entryways of buildings, I have interpreted the plate to be a dedication cache for the reservoir in this position honoring the "entryway."

A typological scheme for the function of small depressions has been formulated for the Rio Bravo area in a systematic study of these by Weiss-Krejci and Sabbas (2002). This feature does not fit perfectly into the categories laid out in that analysis. However, with slight modification it may fit into their "small reservoir" category (Weiss Krejci and Sabbas 2002:350), with the additional attribute of the plaster lining. Similar small open cisterns or *pozos* have been found in association with households (e.g. Scarborough et al 2003).

Figure 5.15: Cache vessel in situ.

Chultun. Feature 2 is a chultun located in the northwest portion of the household group. Subop Y was placed on the mouth of the chultun in order to strip away the humus and expose clearly the cuts in the bedrock for more precise documentation (Figure 5.2). I made no provisions to excavate the chultun, although it would have been informative as to what might have been stored in it during the occupation of Agua Lluvia. Chultunes[1] can be difficult and dangerous to excavate as they are ancient storage pits dug into the limestone bedrock. Chultunes vary in subterranean size and shape (Thompson 1897), some being bottle-shaped like that at Ojo de Agua (Clark and Bryant 1997), or bell-shaped as well as sometimes having multiple chambers (Zapata Peraza 1989). Excavating chultunes sometimes requires an excavator to actually fully enter the cavity putting them in danger if the chultun were to collapse during excavation. Openings in the upper portions or ceiling of the chultun can make a post-abandonment home for bats whose decaying guano can causing dangerous spore problems. In these situations special oxygen breathing equipment is needed for the excavations. Needless to say, the choice not to enter the chultun was based primarily on safety.

The Agua Lluvia chultun was open slightly at the top making the mouth and a dark cavity visible (Figure 5.10). Quite a bit of debris had clearly washed into the mouth of the chultun over time forming a talus in the entry that was sampled with a single shovel test. The contents of that shovel test are interpreted here to be in-washed

[1] The word *chultun* is a Maya word and can be made plural by adding *–ob* to the end (*chultunob*) as is sometimes seen. However, since more often researchers have opted to make the word plural using Spanish language rules instead, adding *–es* to the end of the word, I have opted to use the Spanish version.

remains (Tepeu 2-3) from the plaza floor rather than any indication of intentionally stored contents or function of the chultun during the occupation of Agua Lluvia.

Numerous ideas and assertions have been proposed for the use(s) of chultunes, from water containment to secondary refuse receptacles (Clark and Bryant 1997; Matheny 1982; Zapata Peraza 1989) and burial chambers (Turuk et al 2005). Their utility as cisterns is clear in that they would have easily filled with water when it rained both catching and storing it efficiently (Clark and Bryant 1997; Matheny 1982; Zapata Peraza 1989) though argue for their use as food storage or fermenting pits is also convincing (Turuk et al 2005). Puleston (1971) did document several that he believed to be dry storage at Tikal. Matheny (1982:168) suggested that more water storage chultuns have been documented in the northern lowlands than in the Petén as a result of "the development of reservoir systems" in the Petén. Interestingly, both a reservoir and a chultun are clearly present at Grupo Agua Lluvia. It impossible to say confidently without full excavation, but water or food storage primary functions are plausible for the chultun at Grupo Agua Lluvia, and certainly dual/multiple uses over time as well regarding secondary ones.

Borrow pit. Feature 3 is a small depression 2.5 m in diameter located to the east of Structure 1 (Figure 5.2). It was not excavated due to time constraints, but cuts could clearly be seen on exposed bedrock at the surface. The north side of this feature was very shallow and open. A possible clue to the function of this feature may relate to a mound (Feature 4) that was investigated nearby (Figure 5.2). This mound is roughly 2–2.5 m in diameter. The excavations revealed no architecture and little in material culture. What is interesting is these lacking attributes. The two 1 x 2 m units (Subops AL and AM) revealed simply a jumble of quarried stone. A tentative interpretation of the two features might conclude that this pile of rubble (Feature 4) had been quarried from the small depression (Feature 3) for construction material, making it a borrow pit. Woods and Titmus (1997) note that borrow pits, or quarries for construction material are often in very close proximity to the structure being constructed. An examination of the surface exposures of the eastern margin of Structure 2 (Figure 5.2) indicates a possibility that this structure may have been refurbished or was in the process thereof during the last moments of occupation of this household.

Construction Sequence

This subsection combines the excavation data with the ceramic chronologies for each context which are presented in further detail in the next section. It appears that the center of the group is the earliest dated construction at Grupo Agua Lluvia with Tepeu 1-2 deposits, the group grew outward over time, first to the south and east Structures 4 and 5 then to the north and west, Structures 1 and 2 (Figure 5.2). Sequentially this is best exhibited by the deposits around Structure 3, with an earlier plaza floor that is not present in any of the other plaza excavations indicating it was placed prior to the plaza floor raising and terracing. Since the earlier plaza floor is related only to Structure 3 and a dedication cache under the doorway of the structure dates the earliest at the group, Tepeu 1-2, these were likely constructed first.

Structure 4, and possibly Structure 5 as well, was likely built after Structure 3 since it most clearly is associated with the current plaza floor with only subsurface construction fill. The architecture is clearly different from the Structure 3 round construction and dates slightly later than it as well, Tepeu 2-3 primarily.

Both Structure 1 and Structure 2 platforms have solely Tepeu 2-3 deposits associated including the sampling of subfloor fill. The two may have been the most recently constructed, or the final structures added on to the group architecturally. The two platforms with likely perishable structures positioned on them are not only exclusively Tepeu 2-3, but they are also spatially positioned such that they are in the perimeter of the group (Figure 5.2). Architecturally they are distinct from Structure 4 and its small platform and so not likely built at the same time. Lastly, they are positioned near Feature 3, the possible borrow pit that may have still been in use at the time of abandonment, though clearly excavation of the feature would need to be done in order to substantiate or refute this interpretation.

The reservoir dates Tepeu 2-3 as well as the eastern terrace edge and the plaza fill across the group. Since the eastern side of the reservoir is artificial and conjoins the terrace retaining wall, the both the terrace and reservoir would likely have been built simultaneously. It is likely that the reservoir (Feature 1) was built around the same time as Structure 4 or possibly slightly after it just before the latest additions of the group, Structures 1 and 2 (Figure 5.2).

Material Culture Analyses

The ceramic analysis for Grupo Agua Lluvia was also provided by Lauren Sullivan. I performed all other material culture analyses including chipped stone, obsidian, ground stone, small finds, and the raw material assessment as well as the faunal analysis. There were no preserved mammalian remains only freshwater shell species, in this category at the Agua Lluvia household.

Ceramics

The ceramic assemblage totaled 4,371 including sherds, whole vessels, a modified sherd, and a ceramic flute fragment (Sullivan 2003; Appendix B). The interpretations presented here are based on that analysis combined with the excavation data. Given the contextualized ceramic analysis it is apparent that Grupo Agua Lluvia was occupied from the Tepeu 1-2 phase (A.D. 600–800/850) of the Late Classic to the Tepeu 2-3 phase (A.D. 700–900), Late to Terminal Classic Periods (Table 1.1). Considering the sequence of construction within the group, the occupation was likely to have been continuous.

All ceramics associated with both of the Structure 1 and Structure 2 platforms (Figure 5.2) were exclusively Tepeu 2-3 (Appendix B). Both platforms may have final structures to be added to the group evidenced by the lack of any earlier sherds in the subfloor fill. The activity areas associated with both platforms also date Tepeu 2-3 as do all other surficial deposits that were excavated activity, midden, or storage features in the group. Therefore, all terminal occupation dates to Tepeu 2-3 (Appendix B). This includes the Feature 4 mound of rubble, along with the chultun deposits that were sampled.

In addition, the terrace was likely built in the Tepeu 2-3 phase along with the reservoir. As discussed above, the construction of both of these was simultaneous given their amalgamation. The reservoir itself had Tepeu 2-3 deposits above the lining, likely resulting from the in-washing of terminal plaza floor debris over time. The dating of the construction of the reservoir is actually based on the cache vessel (Cache 1) uncovered in the plaster lining. The cache vessel is a Tepeu 2-3 red slipped plate which was found overturned (Table 1.1; Appendix B).

As also discussed above, Structure 3 (Figure 5.2) was probably the first structure to be built at Grupo Agua Lluvia, during the Tepeu 1-2 phase. The timing of the construction of Structure 3 is based on the dating of a dedication cache (Cache 2) excavated below the doorway. Two striated water jars comprised the cache, both dating to Tepeu 1-2 (Table 1.1; Appendix B). The floor and upper strata of Structure 3 have Tepeu 2-3 occupation debris associated with them which indicates that the structure was continuously utilized, and possibly refurbished along with the main plaza, until the abandonment of the group (Tepeu 2-3). Finally, a burial was documented below the floor of this round structure. The fill or matrix exclusively associated with the burial was Tepeu 2-3 corroborating the intrusion. Below the burial, the construction fill dates Tepeu 1-2 correlating with the dedication cache, and the lowest levels of fill have

Chicanel phase sherds mixed in (Table 1.1; Appendix B). This chronological sequence indicates that the burial (Burial 3) was clearly placed after the structure was built.

Feature 5 dates to Tepeu 2-3 (Table 1.1; Appendix B) and was located next to Structure 3 (Figure 5.2) on the terminal plaza occupation surface. The feature was not associated with the earlier constructed plaster surface found below the terminal plaza surface near Structure 3. The deposits associated with this plaster surface, found below the construction fill of the plaza only near Structure 3, were of unknown dates. Therefore, the earlier floor is assumed to be of the same date as the construction of Structure 3 (Tepeu 1-2).

Structure 4, and possibly also Structure 5 though it was not excavated, was likely built in the Tepeu 2-3 phase (Table 1.1; Appendix B). Although no dedicatory caches were uncovered, all of the occupation deposits on the associated platform and the interior room space date to the Tepeu 2-3 phase. Below the floor, inside the structure, a cist burial (Burial 1) and another fragmentary burial (Burial 2) were encountered. The associated fill in and around the burials dates Tepeu 2-3 with some earlier material mixed in as is often the case in construction fill deposits. Structure 5 nearby was not excavated, but may have a similar sequence to Structure 4.

Ceramic forms at Grupo Agua Lluvia are characteristic of most household assemblages. The number and types of forms discussed here, however, are limited by the number of sherds collected in which the form was detectable, N=226 (5%). Bowls significantly dominate the identified forms at 61% (N=138). Jars are the second most common detectable form at 28% (N=64) including the jars found in the dedication cache of Structure 3. Plates and dishes were not very common at Agua Lluvia only comprising 6% (N=13) of the forms.

Two other ceramic finds are notable. A modified ceramic sherd was documented in Subop E. The sherd was notched, shaping it into a possible net weight. These are noted with relative frequency across the lowlands at sites like Barton Ramie (Willey et al 1965), Cerros (Garber 1988), Colha (Buttles 2002), Seibal (Willey 1978) and Tikal (Moholy-Nagy 2003). The context of the net weight was the construction fill of the terrace documented in Subop E. This notched sherd was a side-notched type (see Buttles 2002:128 for type definitions).

Finally, a ceramic flute fragment (Figure 5.16) was recovered from Subop AT, an off-mound midden test pit. The flute fragment is associated with Tepeu 2-3 deposits that have accumulated along the adjacent drainage of the group (Figure 5.2). This fragment is not of the characteristic whistles or ocarinas so commonly found at ancient Maya sites, but that of an actual flute. Flutes are less common than the other forms, and often have six holes producing more complex music than the four holed ocarinas (Bourg 2005:12). A complete Late Classic (A.D. 700) example was found at the site of Jaina (Marti 1968; Payne and Hartley 1992) as well as several found in an elite burial at Pacbitun (Healy 1988).

Figure 5.16: Ceramic flute fragment.

Lithics

A sizeable lithic assemblage was collected during the excavations at Grupo Agua Lluvia. The total of all categories of lithics (except obsidian, discussed separately below) analyzed is 3,191. Of all of the debitage collected three fill contexts were sampled in order to reduce the workload and eliminate redundancy in data in these secondary contexts. Therefore, analysis was performed of a sample of approximately 80% of the total debitage collected. Of the total analyzed lithic assemblage, formal tools (N=50) make up only 1.5 %, while informal tools (N=82) make up only 2.5 % (Table 5.1, Appendix A, Table A.3). Analyzed debitage (N=3,059) makes up the remainder of the collection at 96%. By weight, the debitage also makes up the majority of the analyzed assemblage at 21.96 kg representing 82% of the overall weight.

Lithic Totals			
Household	**Category**	**#each**	**Weight(g)**
Agua Lluvia	Debitage	3,059	21,962
Agua Lluvia	Informal Tools	82	2,502
Agua Lluvia	Formal Tools	50	2,445
Total	**All**	**3,191**	**26,909**

Table 5.1: Chipped stone totals for Grupo Agua Lluvia.

Debitage. At least 80% of the total assemblage of debitage collected was analyzed. Only the repetitive subfloor fill and reservoir fill contexts were sampled rather than analyzed in full. The sampling primarily concerned three fill contexts, the reservoir fill (50% sample), the terrace fill (90% sample), and the subfloor fill of Structure 3 (70% sample). All other contexts, in which debitage was collected, were fully analyzed. As such, 16 different debitage types were recorded for Grupo Agua Lluvia (Table 5.2, Appendix A, Table A.3). As expected, the ubiquitous category of shatter was found in the highest number (N=1,234). Making up 12% of the overall weight of the analyzed debitage, the individual pieces of shatter averaged around 2 g per piece. Shatter occurs in both expedient and formal tool production, in every stage, and is generally small and absent of a bulb of percussion. Along with shatter, chunks are present in the collection (N=144) and also occur nondescriptly during tool production, though they are much larger in size. These weigh a total of 19.66 kg for the Agua Lluvia household.

Flakes of several types were present in the debitage type counts. Primary flakes (N=87), secondary flakes (N=256), and tertiary flakes (N=316), along with biface thinning flakes (N=742) represent some level of biface reduction as well as expedient tool production (Table 5.2, Appendix A, Table A.3). Retouch flakes also were present (N=164) which are often pressure flakes. Lastly, biface reworking flakes were present (N=8), which I have categorized as in intentional removal and therefore debitage resulting from the reworking of a biface already in use. Additionally, one chalcedony overshot (or outrepassé) flake was present in the sampled debitage. Overshot flakes often occur accidentally in biface production (in the Maya Region) and are often considered an error.

Chert percussion blades (N=27) and pressure blades (N=15) also were found in the Agua Lluvia debitage (Table 5.2, Appendix A, Table A.3). These did not exhibit macroscopic use wear and were thusly kept in the debitage category until further microscopic use wear can be accomplished. Blades by definition are at least two times longer then their width. These can also sometimes be fortuitously produced, especially percussion blades, and therefore be the equivalent of a tertiary flake.

Three types of cores were documented in the Grupo Agua Lluvia collection. Blade cores, flake cores, and bifacial flake cores (N=2) along with blade cores (N=2) were the least common, while general flake cores (N=47) were the most common, weighing around 100 g each (Table 5.2, Appendix A, Table A.3). In addition, nine hammerstones were documented, all chert, and all weighing around 100 g each.

Finally, five tested cobbles were also present in this lithic assemblage, all having at least 60% cortex remaining on their exteriors.

Grupo Agua Lluvia Debitage Types									
Provenience							***Material***		
Op	**Subop**	**Lot**	**Debitage Type**	**#each**	**Weight(g)**	**Heat**	**Chert**	**Lime-stone**	**Other**
29	All	All	Biface Reworking Flks	8	104.2	3	8	0	0
29	All	All	Biface Thinning Flakes	742	2,319.9	79	732	0	10
29	All	All	Bifacial Flake Core	2	72.7	1	2	0	0
29	All	All	Blade Core	2	20.7	0	1	0	1
29	All	All	Chunks	144	1,965.8	44	144	0	0
29	All	All	Flake Core	47	4,750.5	16	46	0	1
29	All	All	Hammerstone	9	908.1	3	9	0	0
29	All	All	Overshot Flake	1	36.2	0	0	0	1
29	All	All	Percussion Blade	27	92.6	3	27	0	0
29	All	All	Pressure Blade	15	18.7	1	15	0	0
29	All	All	Primary Flakes	87	1,038.5	17	84	3	0
29	All	All	Retouch/Pressure Flks	164	59.1	36	162	0	2
29	All	All	Secondary Flakes	256	3,915.7	48	254	1	1
29	All	All	Shatter	1,234	2,801.6	318	1232	0	2
29	All	All	Tertiary Flakes	316	2,898.2	87	313	2	1
29	All	All	Tested Cobbles	5	959.2	1	5	0	0
29	**All**	**All**	**TOTAL**	**3,059**	**21,961.7**	**657**	**3034**	**6**	**19**

Table 5.2: Summary of debitage types and quantities at Agua Lluvia.

In terms of the distribution of debitage, almost every context excavated contained some lithic debitage, though occurring in varying numbers (Table 5.3, Appendix A, Table A.3). Even the unanalyzed (or sampled) lots had debitage present in them. Only two excavation units did not have any debitage at all, Subop B located on Structure 3 in southeastern exterior wall and platform collapse debris, and Subop AQ a midden test pit located to the north of Structure 1 (Figure 5.2).

Grupo Agua Lluvia Debitage per Subop								
Op	**Subop**	**Debitage Type**	**#each**	**Weight(g)**	**heat**	**chert**	**Limestone**	**other**
29	A	All	10	40.6	5	10	0	0
29	AA	All	113	306.5	49	113	0	0
29	AB	All	134	441.6	35	134	0	0
29	AC	All	77	467.1	0	76	0	1
29	AD	All	40	157.3	0	40	0	0
29	AE	All	5	7.7	0	5	0	0
29	AF	All	19	59.5	0	19	0	0
29	AG	All	71	233.7	0	71	0	0
29	AH	All	87	616.9	0	86	0	1
29	AI	All	111	430.3	0	110	0	1
29	AJ	All	194	930.0	0	194	0	0
29	AK	All	83	542.8	1	81	2	0
29	AN	All	123	454.5	0	123	0	0
29	AO	All	20	108.5	0	19	0	1
29	AP	All	8	159.5	1	8	0	0
29	AR	All	3	5.8	0	3	0	0
29	AS	All	18	372.6	1	18	0	0
29	AT	All	82	664.4	1	82	0	0
29	AU	All	97	290.6	0	97	0	0
29	AV	All	20	139.0	0	20	0	0
29	AW	All	113	552.9	0	111	0	2
29	AX	All	7	51.7	0	7	0	0
29	AZ	All	13	136.6	1	13	0	0
29	B	All	16	178.9	11	16	0	0
29	BA	All	60	138.9	0	60	0	0
29	BB	All	95	156.2	1	93	0	2
29	BC	All	13	54.1	0	13	0	0
29	BD	All	20	84.8	0	20	0	0
29	BE	All	14	43.3	1	14	0	0
29	BF	All	11	57.6	0	10	0	1
29	BG	All	4	2.1	0	4	0	0
29	BH	All	6	7.6	0	6	0	0
29	BI	All	5	28.5	0	5	0	0
29	BJ	All	4	9.6	0	4	0	0
29	BK	All	15	13.2	0	15	0	0
29	BL	All	21	53.8	0	21	0	0
29	BM	All	11	49.3	0	11	0	0
29	BO	All	1	753.7	0	0	0	1

Grupo Agua Lluvia Debitage per Subop (continued)								
Op	**Subop**	**Debitage Type**	**#each**	**Weight(g)**	**heat**	**chert**	**Limestone**	**other**
29	BP	All	48	1,706.0	0	48	0	0
29	BS	All	50	442.8	0	48	0	2
29	BT	All	6	51.6	0	5	1	0
29	BU	All	59	1,617.4	2	57	0	2
29	C	All	170	2,199.4	84	169	0	1
29	D	All	1	82.6	0	1	0	0
29	E	All	286	1,144.4	101	281	3	2
29	F	All	150	1,092.2	81	149	0	1
29	G	All	3	62.7	1	3	0	0
29	I	All	1	76.9	0	1	0	0
29	J	All	44	601.9	24	44	0	0
29	K	All	17	396.8	8	17	0	0
29	L	All	5	11.3	3	5	0	0
29	M	All	42	329.2	21	42	0	0
29	N	All	48	245.4	28	47	0	1
29	P	All	5	19.4	0	5	0	0
29	Q	All	1	9.6	1	1	0	0
29	R	All	1	5.8	1	1	0	0
29	S	All	26	673.5	17	26	0	0
29	T	All	113	803.2	67	113	0	0
29	U	All	4	41.8	0	4	0	0
29	V	All	60	626.8	25	60	0	0
29	X	All	86	521.5	46	86	0	0
29	Y	All	13	21.7	7	13	0	0
29	Z	All	76	377.1	33	76	0	0

Table 5.3: Quantity of debitage per excavation unit at Agua Lluvia.

Subfloor fill contexts had the highest quantities of debitage at 51% of the analyzed debitage assemblage (Table 5.3, Appendix A, Table A.3). This represents only 80% of all the subfloor debitage since the subfloor fill contexts were specifically sampled as such. It is not surprising that these quantities are highest since construction fill is made up of secondary midden debris. Terrace construction fill along with plaza subfloor fill are both included in the 51% since their composition is identical to that of the construction fill under Structures 1, 3, and 4. A total of 20% of the debitage was found in floor or occupation surface contexts including the activity test units around the plaza. Another 10% was located in collapse debris and 8% in the midden test pits. The remainder of debitage was documented in much lower numbers (and densities) for the reservoir fill (N=106), and burial matrix (N=63).

Informal and Formal Tools. Formal tools (N=50) and informal tools (N=82) were also documented at Grupo Agua Lluvia (Appendix A, Tables A.1 and A.2). Together they make up only 4% of the entire chipped stone assemblage. By volume they are as much as 18% of the lithic collection. Informal tools make up 62% of the total number of tools (N=132), while formal tools make up 38%. Again, the number of informal tools may be slightly lower than reality given the fact that micro use wear analysis was not performed in the field. This specifically affects those informal tools that are not identified by form, but were identified by the presence of wear on flakes at 5x magnification or less, or specifically the category of utilized flakes.

Essentially six types of formal tools were documented at Agua Lluvia. The most common (46%) informal tool type found was the combined category of gravers and/or perforators of varying types (N=38) (Figure 5.17; Appendix A, Table A.2). Four of these were bifurcated and the remainder had a single pointed extremity. The distinction between the category of graver versus perforator is minor (see Chapter 4) and many would consider these as having a similar enough function to categorize together.

Four types of scrapers were also documented (N=29) making up 35% of the informal tools collected (Appendix A, Table A.2). Three of these were discoid scrapers, while five were not unidentifiable due to their fragmentary state. One end scraper, five side scrapers, and 15 end-and-side scrapers comprised the remainder of the 29 scrapers.

Figure 5.17: Gravers and perforators (see scale in Figure 5.25).

Six other informal tools were noted that may have also had a scraping function, but likely had multiple functions or were reworked from other forms (Appendix A, Table A.2). Two were scrapers made by reworking already utilized macroflakes, and four were multi-functional with both a scraping edge and a graver and/or perforator edge. Multi-function tools and recycling of all tools are common amongst the ancient Maya and are noted across the lowlands. Finally, two burins, three choppers and four utilized flakes were also recovered at Grupo Agua Lluvia.

Six contexts had informal tools in them (Appendix A, Table A.2). First the highest number of informal tools was documented for subfloor construction fill (N=42), including the fill under the terminal occupation surface of the plaza and residential terrace as well as the subfloor fill of Structures 1, 2, 3, and 4. Another 10 informal tools were encountered in the in-washed fill of the reservoir, while only three midden test units had informal tool, Subops AO (N=1), AP (N=1), and AT (N=2) (Figure 5.2). Structure 4 (N=5) and Structure 3 (N=7) had a total of 12 in their collapse debris. Five informal tools were collected from the excavations of Feature 5 adjacent and north of Structure 3. Interestingly four of the five were gravers and/or perforators.

The last context with informal tools present is occupation surface or floor deposits (Appendix A, Table A.2). The Structure 1 platform excavations encountered three informal tools, while the Structure 2 platform excavations documented two (Figure 5.2). The Structure 3 units placed in the interior room space did not uncover any informal tools on the floor, but there was a side scraper documented on the interior occupation surface of Structure 4 and a discoid scraper on its associated platform. Finally one graver/perforator was found lying on the plaza occupation surface in Subop AJ near Structure 3 and Feature 5.

Six types of formal tools were found at Grupo Agua Lluvia (Appendix A, Table A.1). The most common formal tool type noted in the analysis was miscellaneous reworked biface (N=14) making up 28% of the formal tools. Two of these that were fragmentary were reworked/recycled, subsequent to their final use/break, into perforators (Appendix A, Table A.1). Reworked bifaces are often so heavily reworked that their original form or type cannot be discerned. Bifacial celts (N=13) were the next most common at 26 %, nearly as frequent as the miscellaneous reworked bifaces. Bifacial celts are the most common type of formal tool found in excavated assemblages across the Maya lowlands (Barrett 2004:370). Eleven bifaces of unknown type were also documented at Agua Lluvia, making up 20% of the tools. As stated in the previous chapter, these are bifaces that are early stage and/or biface blanks that have not yet taken a final form therefore, a type cannot be assigned. Both GUB Type I (N=4) and Type II (N=3) were noted in the group of formal tools.

Two other biface types were found in the formal tool assemblage. Two thin bifaces were present, each being a medial segment. These were found in two locations at Agua Lluvia, one in Subop AC construction fill, near Structure 3 (Figure 5.2). The other was documented on the occupation surface of Structure 2. These thin bifaces are not uncommon for the region and are produced in a similar fashion to the thin oval bifaces that Shafer and Hester (1983, 1991; also Shafer 1994) documented in both in both workshop and domestic contexts at Colha. The final biface types found at Agua Lluvia were possibly used as masonry or agricultural tools. They are two small bi-convex bifaces and one plano-convex (parallel sided) biface (Appendix A, Table A.1). Each of these has the same extreme wear patterns as those discussed in Chapters 3 and 4. Those from Agua Lluvia were found in Subops N, T, and AT. Subops N is on Structure 4 near the entryway, while Subop T is on Structure 3 in collapse debris. Subop AT in which the third of these tools was found was located south of the terraced plaza in the side of the drainage and was a positive midden test unit.

One other formal tool was found in a midden test unit, a bifacial celt documented in Subop AP located to the east (or behind) Structure 2 (Figure 5.2). Subfloor construction fill contexts had the highest relative number of formal tools at 18 total, while the collapse debris on Structures 3 (N=8) and 4 (N=2) collectively had 10 formal tools (Appendix A, Table A.1). Only one formal tool (bifacial celt) was found in the in-washed fill of the reservoir. Feature 5, adjacent to the north side of Structure 3, and Feature 4, the mound of rubble near the chultun each had three formal tools.

Levels with occupation surface debris collectively had eight formal tools at Grupo Agua Lluvia (Appendix A, Table A.1). Structure 1 platform had five formal tools documented on its architectural surface and all were piece-plotted. Structure 2 platform had six formal tools piece-plotted on its terminal occupation surface. Structure 3 had one Bifacial Celt on the occupation floor in its interior room space. Finally, Structure 4 had one GUB- Type II lying on its associated platform surface (Figure 5.2).

Lithic Raw Material. A few raw material types (non-obsidian) were utilized for chipped stone at Agua Lluvia (Table 5.4). The primary lithic resource material utilized was chert, microcrystalline quartz mixed with cryptocrystalline silica. The next most abundant alternative lithic resource was chalcedony (cryptocrystalline silicate). Limestone (non-clastic sedimentary rock) and petrified wood (silicified wood) are also present in the lithic assemblage, though occurring in very small amounts as represented in the excavated sample of this investigation.

Lithic Raw Material								
Household	Type	Chert	Lime-stone	Chalcedony	Quartz-ite	Jasper &Petrif Wood	Unident.	**Total**
Agua Lluvia	Debit.	3,034	6	18		1 pw		**3059**
	Formal	49	1					**50**
	Inform	79		2		1 pw		**82**
Total		**3,162**	**7**	**20**	**0**	**2**	**0**	**3191**

Table 5.4: Concentrations of lithic raw material types.

Obsidian

A total of 46 obsidian artifacts, all blade fragments, were excavated at Grupo Agua Lluvia (Appendix A, Table A.4) for a total weight of 34.56 g. Obsidian blades are very common in domestic contexts even when they are quite a distance away from the original sources. The distance from the source influences primarily the relative density yet in many cases differences in the density, of distribution also has other correlates, such as status. Of the total blades documented, 44 are pressure blade fragments and two are percussion stage blades. The pressure blade fragments are both 2nd series (N=2) and 3rd (N=42) series prismatic blades. The total length of cutting edge for percussion blades is 33.95 mm and for pressure blades the total cutting edge is 998.76 mm or 99.88 cm.

Contextually, the highest concentration of pressure blades were encountered in subfloor construction fill of the plaza, terrace, and Structure 3 (N=15), three proximal, 11 medial, and one distal. One medial percussion blade fragment (Stage III) was also documented in the subfloor fill of Structure 3. Only one proximal pressure blade fragment was noted in the matrix of Burial #3, located under the floor of Structure 3. The in-washed fill of the reservoir contained five pressure blades, two proximal and three medial.

One proximal pressure blade fragment was documented on the occupation surface of the Structure 2 platform, while two proximal pressure blades were found in the collapse debris of Structure 3. One of these is a 2nd series pressure blade. Six pressure blade fragments, three proximal and three medial, were documented on the interior space occupation floor (interior) of Structure 3. Two of these are fitters, one proximal and one medial. These may have broken as a result of depositional processes since they were encountered broken, but articulated in situ. One proximal percussion blade fragment (Stage III) was also recovered from occupation floor of the interior of Structure 3.

The excavations of the feature just to the north of Structure 3 also contained obsidian artifacts. Three pressure blade fragments were documented in the occupation debris of the feature, two proximal and one medial. The excavation of the earlier plaza plaster floor near the feature and just to the northwest of Structure 3 also produced one medial pressure blade fragment. Therefore, a total of 17 obsidian blade fragments were documented for those contexts associated with Structure 3 including the subfloor fill, occupation surfaces and the feature adjacent to it.

The collapse debris of Structure 4 also had two pressure blade fragments, one proximal and one medial. Two additional medial pressure blade fragments were documented in association with Structure 4. Interestingly, these two fit together yet they are from separate levels of Subop C separated by only 4–6 cm vertically. Since they are within the same square meter of soil horizontally, they may have been broken by natural site formation processes after abandonment of the group. One additional pressure blade fragment was also found on the occupation surface just outside of Structure 4's west wall. It is a 2nd series medial fragment.

Only one medial pressure blade fragment was documented from a midden test unit, Subop AU. One medial pressure blade fragment was also found in the excavation of the terrace construction on the terrace occupation surface. Finally three pressure blade fragments were recovered from the activity test units, one proximal and two medial.

Almost alll of the blade fragments show evidence of use-wear visible by eye and with the assistance of a 5x hand lens. One exception is a proximal pressure blade fragment form the occupation surface of Structure 2 that did not show any macroscopic wear. All of the wear documented on the other 43 obsidian blade fragments is consistent with that found in other domestic contexts. None of the blade fragments exhibited notching or any other evidence of hafting. Any more specific understanding of the function of these obsidian blades will require a microscopic use wear analysis.

Groundstone

Groundstone occurs at Grupo Agua Lluvia in three categories, manos (N=8), metates (N=3), and bark beaters (N=1) (Appendix C, Table C.1). Only one complete mano, made of limestone, was collected (Subop E) from the occupation surface of the terrace edge (Figure 5.2). All other manos collected were fragments. Only one limestone mano fragment was found in construction fill, this one in the terrace fill. Two quartzite mano fragments were excavated in Subop AW, the upper levels associated with the terminal occupation and collapse debris near Structure 3. Two mano fragments were documented in Subop BU located on the Structure 2 platform. One of these was made from limestone and not collected. The other was of "sugary" quartzite and both were associated with the occupation surface of the platform. Lastly, a chert mano fragment (or possible burnisher) was encountered in the collapse debris of Structure 4.

Three metate fragments were collected and all three were found in association with Structure 3 (round structure) and the feature excavated adjacent to it (Figure 5.2). One made of quartzite was found in collapse debris on the southwest area of the platform edge (Subop T). Another made from gray granite was recovered near the south wall (Subop S). The last of the metates was documented in Subop AW, just off the north side of Structure 3, and made of pink granite. Interestingly, granite is known to be imported from central Belize where it occurs in the granite shales geologic formation (see Abramiuk and Meurer 2006; Graham 1987).

The final piece of groundstone was a bark beater fragment made of quartzite and documented in the plaza construction fill of Subop AA (Figure 5.2). As noted in Chapter 4, bark beaters generally are hand-held carefully shaped stone with ridges on the ventral surface like the one documented at Agua Lluvia. Since this fragment is a lateral fragment it is not possible to determine whether it is from a rectangular or ovoid shaped one originally. Bark beaters have been commonly reported around the Maya lowlands at sites like Altar de Sacrificios (Willey 1972), Barton Ramie (Willey et al 1965), Cerros (Garber 1989:25), Chan Chich (Glaab and Valdez 2000), Colha (Buttles 2002), Cuello (McSwain et al. 1991), La Libertad (Clark 1988), Lubaantun (Hammond 1975), Piedras Negras (Coe 1959), Seibal (Willey 1978), Tikal (Moholy-Nagy 2003), Uaxactun (Kidder 1947).

Small Finds

Artifacts related to personal adornment were the primary type of small finds documented (N=9, 75%) at Group Agua Lluvia and none of these were in mortuary contexts. All of the small finds documented (N=12) there were recovered from two primary areas, Structure 1 and activity surfaces adjacent and in front of it as well as Structure 3 and an associated feature adjacent to it (Figure 5.2). Both shell and greenstone beads were among the small finds in these two contexts in various forms (Appendix C, Table C.2).

First, 2 finished shell disk beads (Figure 5.18), likely *Strombus,* were documented from Subop AB, a unit clustered in group of units clustered near Structure 3. The fill is just over an earlier plaza floor, the only earlier floor noted in the excavations. In an adjacent unit, within the same level of fill and again associated with the earlier remnant of plaza occupation, were documented five beads. Four of the beads are sometimes referred to as *irregular beads* (Figure 5.18). Irregular shell beads (see Buttles 2002; Hohmann 2002) are beads that have a rough-shaped or irregular perimeter, sometimes four or five sided, and a drill hole near the center. Several of these from Agua Lluvia are also made from the shoulders of marine univalves, possibly *Strombus*, and therefore have a bit of topography on the dorsal surfaces. These have been documented at both Colha

(Buttles 2002; Dreiss 1994) in northern Belize and the site of Pacbitun in the Belize Valley (Hohmann 2002).

Figure 5.18: Shell disc beads (top row) and irregular shell beads (bottom 2 rows).

An additional disk bead of greenstone (fuchsite) (Figure 5.19) was also found in Subop AJ for a total of five beads in that one context, as well as a piece of ochre found in the same level as all of the beads in this unit (Appendix C, Table C.2). Another irregular shell bead was documented in the collapse debris of Subop U located in the interior space of Structure 3 (Figure 5.2). All of the irregular shell beads appear to be from the same shell species, yet that specie was unidentifiable. Two other items were found in the excavation units associated with the Structure 3 exterior feature, both mineral fragments (Appendix C, Table C.2). Another small piece of ochre (Subop AB) and a fragment of grey granite (Subop AK) were recorded in these associated units as well (Figure 5.2).

A final shell artifact (Figure 5.20) was recovered from one of the activity surface test units in front of (south of) Structure 1 (Figure 5.2). Documented on the occupation surface, the unknown species (possibly *Strombus*) was discoid in shape, but clearly an attempt had been made to drill a hole in the disk. During that process, the shell broke, but had not yet been discarded making this artifact a production failure. Shell bead failures such as this are often considered shell detritus or debitage and are not often reported separately at other lowland sites. Associated also with the occupation surface, but actually on the Structure 1 platform surface, was a piece of marine coral (Anthozoa), species unknown, was recovered (Appendix C, Table C.2). The coral artifact showed indications of wear and possible use as an abrader (Figure 5.21).

Figure 5.19: Greenstone bead.

Figure 5.20: Shell bead production failure.

Figure 5.21: Marine coral fragment.

Faunal Remains

Only one class of faunal remains was recovered from Grupo Agua Lluvia, freshwater mollusks. Freshwater snails and mussels are common in the faunal assemblages of sites in the Maya lowlands (see Andrews 1969; Moholy-Nagy 1978, 1994; Halperin et al 2003, Willey et al 1965) as early as the early Middle Preclassic (1000–600 B.C.) as seen at Cahal Pech (Awe et al 1990).

Freshwater mollusk shells were documented in relatively high numbers for the household group, though in less density than at the Dancer Group some 150 m away (Table 5.56.; see also Appendix E, Table E.1). *Pachychilus* spp. shells, often referred to as *jute* in the region, may have supplemented the dietary protein needs of the ancient Maya (Healy et al 1990). Jute snails may have been consumed in rituals both as a foodstuff in feasting as well as the ceremonial deposit of their remains or shells, either post-consumed or complete with the animal inside, as has been observed at various sites

(Healy et al 1990) and caves around the Maya Region (Halperin et al 2003). Contemporary use of ground *Pachychilus* shells for lime is known among the Lacandon (Nations 1979), while in the Toledo District of Belize modern Maya grind and use jute shells as a tempering agent for pottery clays (Healy et al 1990).

The predominant species found at Grupo Agua Lluvia is *P. glaphyrus* (Morelet) which has distinctive shell sculpturing (Figure 4.10) (Healy et al. 1990) as opposed to the smooth shelled species found in fewer numbers, *P. indiorum* (Morelet) (Figure 4.10). At least 80–90% of the *Pachychilus* found at Agua Lluvia are *P. glaphyrus*. The *Pachychilus* specimens typically preserve very well and exhibit only one ancient modification in the form of spire lopping. Spire lopping, removing a small bit of the tail of the shell, helps after it is cooked to remove the animal for eating (Halperin et al. 2003: 214). Jute was the most common freshwater mollusk at Grupo Agua Lluvia comprising 96% (N=992) of the faunal assemblage (Table 5.56.; see also Appendix E, Table E.1). Each shell then is primarily whole with the shell body intact and the MNI is figured on full shell bodies. However, there are a few fragments recorded, but they amount to less than 1 % of the specimens in the count (N=7) spread over three excavation units. Therefore, each count reflected in the spatial distribution represents an MNI for that context. The total MNI of *Pachychilus* for the faunal assemblage is 988.

The bulk (68%) of *Pachychilus* specimens were documented in subfloor construction fill contexts which includes both terrace and plaza fill (N=674) (Appendix E, Table E.1). Only six jute shells were documented in burial fill/matrix. Five were collected in the rubble mound near the chultun, ancient back dirt/stone from either the borrow pit excavation or the chultun excavation. Forty-six came from the washed-in fill matrix in the water reservoir, while another 46 were documented in off-mound or off-plaza midden test units (Subops AS, AT, AU, and AV) (Figure 5.2). As many as 74 jute shells were documented on activity surface test units (Subops BA, BB, BE, BF, BJ, BH, and BMF) placed around the plaza. Interestingly, only one *Pachychilus* was found around the mouth/opening of the chultun. Eighty-five jute specimens were recovered from collapse debris while 55 were from occupation floors on structures.

Like the Dancer Group the burial matrix is in essence subfloor construction fill, since all three burials were encountered below the terminal occupation floor of Structures 3 and 4. Given that subfloor construction fill in the Late Classic is made up of quarry debris along with recycled midden debris, it is clear that most of the *Pachychilus* recovered are post-consumption deriving from the construction fill in the terrace, plaza, and burial units (69%). The presence of high numbers of jute in secondary fill contexts does not support the idea that they were utilized for other purposes such as lime or temper. However, the evidence for those uses would be very difficult to detect archaeologically from macro-remains.

Pomacea flagellata (Say) or "apple snails" (Figure 4.11) have been documented in many archaeological assemblages in both the lowlands of Belize and Guatemala (Hohmann 2002; Moholy-Nagy 1978, 1994) and still occupy freshwater niches in these same areas today (Meerman 2002). The primary context in which *Pomacea* specimens, primarily fragmentary, were excavated was again subfloor fill (N=14), while only one was documented with an occupation surface, two in the in-washed fill of the reservoir and one in collapse debris of Structure 3 (Figure 5.2). Much fewer *Pomacea* (N=18, >2%) were documented at Grupo Agua Lluvia than *Pachychilus* (Table 5.5; see also Appendix E, Table E.1). The proportion is not unusual given the aquatic environments for which they are best suited. Agua Lluvia, like the Dancer Group, is located near high energy aquatic settings, like the spring fed stream at the base of the Rio Bravo Escarpment just 300–400 m east of the household group, and the Rio Bravo itself 450 m east of the creek.

Nephronaias spp., freshwater mussels that are also primarily adapted to rivers and streams or more swiftly moving water (Awe et al 1990; Hohmann 2002: 100), occur in the same niches as *Pachychilus* and were the only species of freshwater mussel identified at Grupo Agua Lluvia. *Nephronaias* spp. occurred with much less frequency (N=19, >2%) than *Pachychilus*, but in equivalent numbers to *Pomacea* (Table 5.5). Since these mussels are post-consumption, they were in separated valves and primarily found in subfloor fill contexts (N=17) (Appendix E, Table E.1). Another was documented in the occupation surface of the small platform attached to Structure 4 (Figure 5.2), while the last was excavated from the in-washed fills of the reservoir (Appendix E, Table E.1). Freshwater mussels were notably absent from midden deposits and they were only found in one of the activity areas.

Freshwater Shell Inventory					Phylum:Mollusca	
Household	**Class:Family**	**Genus**	**Species**	**Habitat**	**N=x**	**Wt (g)**
Pak'il Nah	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	2.1
Pak'il Nah	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	0	0.0
Pak'il Nah	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	0	0.0
Pak'il Nah	***Total***	***All***	***All***	***Freshwater***	***1***	***2.1***
Dancer Group	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1,393	6,764.1
Dancer Group	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	36	112.2
Dancer Group	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	82	172.4
Dancer Grp	***Total***	***All***	***All***	***Freshwater***	***1,511***	***7,048.7***
Agua Lluvia	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	992	3,876.6
Agua Lluvia	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	18	93.1
Agua Lluvia	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	19	26.3
Agua Lluvia	***Total***	***All***	***All***	***Freshwater***	***1,029***	***3,996.0***
All	**GRAND TOTALS**	**All**	**All**	**Freshwater**	**2,541**	**11,046.8**

Table 5.5: Faunal remains per household.

Grupo Agua Lluvia Household Activity

Primarily three contexts reveal the most about activity at Grupo Agua Lluvia. Two of these are a result of test pitting programs designed specifically for this purpose. First, 1 x 1m test pits, excavated to bedrock, were laid out in order to test off-mound (and off-plaza) areas for midden potential. The second test pitting program was an experimental one designed to detect activity on the plaza surface itself. The plaza activity surface test pits were excavated down to the terminal occupation surface only in order to sample the debris associated with occupation as discussed above. The remaining activity areas assessed in this section are based on debris found associated with platform or structure surfaces and features.

Discard

Eight midden test pits were placed in off-mound and off-plaza contexts, Subops AO, AP, AQ, AR, AS, AT, AU, and AV (Figure 5.2). Since the terrace edge to the east marks the eastern boundary and all trash that might have been dumped there would have continued rolling down the face of the escarpment, no midden test pits were placed in that area. The assumption being that the Maya who were living at Agua Lluvia were considerate conservators of their trash. Midden test pits were placed in all other directions just outside the perimeter of the architecture or plaza. The boundaries of the household can really be considered to extend to the outside of the refuse deposits found there. Careful consideration of the deposits in the units was necessary in order to avoid confusing secondary construction fill contexts with discard areas. Therefore, unit placement was crucial as well as an examination of the composition of the matrix in each unit and its profile. Luckily in this case, all the units were comprised of natural clay to clay loam soils.

All but one of the midden test pits was found to test positive for areas of discard. Subop AQ is the one exception and had only three ceramic sherds in it formulating an extremely low artifact density and a negative test for midden deposits (Table 5.6; see also Appendix F, Tables F.5 and F.6). Subop AQ was placed behind, or north of Structure 1, where two other midden units were also placed, Subops AR and AU (Figure 5.2). Subop AQ was the westernmost of the three located there. Subop AR tested positive for midden debris, but had only a moderate density of material (Table 5.6; see also Appendix F, Table F.6). Subop AU however had a very high density of artifacts, actually the second highest of all the midden test pits with an overall density calculated at 326 artifacts per cubic meter (Appendix F, Table F.6). Included in the material found in Subop AU were ceramic sherds (N=22), lithic debitage (N=97), one utilized obsidian pressure blade fragment, and freshwater jute (*Pachychilus*; N=17) (Table 6.7).

The highest concentration of midden material was encountered in Subop AV which was located to the south of the group just off the southern side of the plaza terrace along the drainage there (Figure 5.2). Subop AV probably had the most potential for runoff deposits given its location, but much of that debris likely is from Agua Lluvia nevertheless. Subop AV had a density of 335 artifacts per cubic meter of soil excavated (Table 5.6; see also Appendix F, Table F.6). Included in the artifacts found in the unit were ceramic sherds (N=35), lithic debitage (N=-20), and jute (N=2) (Table 5.6). Although the overall number of artifacts found in Supob AV was much lower than that of Subop AU, the depth of the soil was much shallower hence the volume of soil excavated from Subop AV was significantly lower resulting in a higher overall density.

Two other midden test pits were located along the slope of this same drainage off the south side of the household group (Figure 5.2). Subops AS and AT both had artifacts present in them, but Subop AT had the third highest density of artifacts of all the midden test pits at Agua Lluvia. Subop AT had an overall density of 319 artifacts per cubic meter of soil (Table 5.6; see also Appendix F, Table F.6). In addition to having one of the highest densities, it also had the highest number of artifacts as well as the greatest variety of artifacts irrespective of the depth of the soil (Appendix F, Tables F.5). Subop AT contained ceramic sherds (N=45), lithic debitage (N=82), *Pachychilus* (N=21), a fragment of a ceramic flute, two perforator/gravers, and a small bi-convex biface (Appendix F, Tables F.5).

The nearby Subop AS had the second lowest density of artifacts of all the midden test units with only 52 artifacts per cubic meter of soil. What is more interesting about this subop is that it had the deepest deposits of soil documented in the midden test pits. The unit was also the only midden test pit with more than one natural level in its soil stratigraphy. The stratigraphic deposits did not necessarily correlate to the potential for discard. Rather it was more indicative of long term soil deposition for the region. There were three levels of stratigraphy which from the bottom was first a layer of dark brown clay just above the bedrock, then a light tan gravel layer above that, followed by a dark brown clay loam (Figure 5.22). This stratigraphy actually represents a depositional history for the Maya occupied eastern Petén recording deforestation and soil denuding beginning in the Late Preclassic to Early Classic period with the lowest buried clay, then the Late Classic again with the occupation indicated by the light colored gravels (Tim Beach, personal communication 2002; 4/17/02).

Finally, two other midden test pits were placed to the west of the Agua Lluvia plaza (Figure 5.2). Subops AO and AP both had moderate amounts of material documented in them. Subop AO had an overall artifact density of 194 per cubic meter, while Subop AP had 233 artifacts per cubic meter of density (Appendix F, Table F.6). Both units had primarily ceramics and lithics with Subop AP additionally containing a scraper and a bifacial celt fragment (Table 5.6; and Appendix F, Tables F.5). The thin, but somewhat dense material indicates the presence of a sheet midden here.

Figure 5.22: Subop AS stratigraphy.

Artifact Densities for Aqua Midden Tests									
Subop	**Unit Size**	**Unit Depth cmbs (Avg)**	**Soil Vol. in m^3**	**Ceramics N=x**	**Ceramics D=N/m^3**	**Lithics N=x**	**Lithics D=N/m^3**	**Faunal/ Freshwater Snail N=x**	**Faunal D=N/m^3**
AO	1 x 1 m	32 cm	0.32	41	128.13	21	65.63	0	0.00
AP	1 x 1 m	12 cm	0.12	18	150.00	10^	83.33	0	0.00
AQ	1 x 1 m	22 cm	0.22	3	13.64	0	0.00	0	0.00
AR	1 x 1 m	23 cm	0.23	14	60.87	3	13.04	0	0.00
AS	1 x 1 m	79 cm	0.79	17	21.52	18	22.78	6	7.59
AT	1 x 1 m	47 cm	0.47	45	95.74	84^	178.72	21	44.68
AU	1 x 1 m	42 cm	0.42	22	52.38	97	230.95	17	40.48
AV	1 x 1 m	17 cm	0.17	35	205.88	20	117.65	2	11.76
^ includes biface									

Table 5.6: Summary of off-mound midden test unit artifact densities (Appendix F, Tables F.5 and F.6).

The midden test pitting program was certainly revealing. It indicated that the areas that the residents of Grupo Agua Lluvia deposited their trash were primarily off the plaza to the north and south, with some trash also having been deposited to the east, though in somewhat smaller quantities. Both the north and south discard areas had material concentrated in the central or eastern units out of the three subops in each with Subops AT, AU, and AV having the highest densities as well as overall quantity of discarded artifacts (Figure 5.2). To the east of the plaza Subops AO and AP have the next highest densities and are also positive tests probably for the presence of a sheet midden. The lowest densities were in Subops AQ, AR, and AS and are at least a full 62% lower than Subops AO and AP. This suggests that habitual discard was not present in those locations (Figure 5.2).

Activity Areas

The first set of activity areas are located on the terminal plaza floor, but off the structures and platforms. As mentioned previously, a series of 1 x 1 m units were laid out arbitrarily around the plaza. The arbitrary nature of the unit placement allowed for a more realistic sampling, but was also biased by time and labor availability. As a result, limited information as to potential activity areas at Grupo Agua Lluvia, was garnered. Since the arbitrary sampling was admittedly uneven a gap exists spatially in the data. The spatial gap is the area between Structure 5 and Structure 2 (Figure 5.2). All comments here are made with that caveat.

The excavation units (N=13) placed for this testing program were excavated only down to the terminal occupation surface, an average of 10.5 cm below the ground surface (Table 5.7; see also Appendix F, Tables F.8). Two units clearly stand out in terms of the number, density, and types of artifacts found on the occupation surface in them, Subops BA and BB (Table 5.7). Both of these were placed in front of (south of) Structure 1 (Figure 5.2). The density of each calculates to over 1,000 artifacts per cubic meter (Appendix F, Table F.8). Combined they had ceramic sherds (N=46), lithic debitage (N=155), jute (N=53), one *Pomacea* shell, and the shell bead blank failure discussed above (Table 5.7; Appendix F, Table F.7). What is notable about this collection of debris in front of Structure 1 is the high quantity of both debitage and jute shells. It is possible that this was an area that freshwater jute snails were processed using expedient tools that were quickly knapped in the same location. Other foods could also have been processed near this structure as well.

Subops BD, BH, BL, and BM had fair densities of artifacts collected in them, but significantly lower than BA and BB, lower by 60–70% (Table 5.7; Appendix F, Table F.8). All these, and all other activity test units did not provide much in terms of conclusive evidence when considering the quantity and types of artifacts.

Areas with the potential to inform about household activities located on features and structures were also located with the analysis of the excavation data. The feature (Feature 5) next to Structure 3 may at first glance appear to be a provisional discard area and one may well be associated with it. Subop AW primarily exposed this feature, while Subop AK adjoined it to Subops AB and AJ. Subop AK was placed in order to see if the feature had any relationship to the earlier plaster floor exposed in AB and AJ. They were found to have no relationship sequentially, but the analysis of the materials excavated from Subop AW are revealing as to the nature of Feature 5. The deposits associated with this super surface feature were primarily found in the first 30-35 cm below the modern ground surface. The density of artifacts found in the excavations of the feature is high (663 / m^3) (Appendix F, Table F.9). However, a closer examination of both the curvilinear alignment along with not only the density, but the types of artifacts found in association proves important.

Aqua Lluvia Artifact Densities for Activity Area Tests

Sub op	Unit Size	Unit Depth cmbs(Avg)	Soil Vol. in m^3	Ceramics N=x	Ceramics D=N/m^3	Lithics N=x	Lithics D=N/m^3	Faunal/ Freshwater Snail N=x	Faunal D=N/m^3
BA	1 x 1 m	9 cm	0.09	9	100.00	60	666.67	25	277.78
BB*	1 x 1 m	12 cm	0.12	37	308.33	95	791.67	29	241.67
BC	1 x 1 m	16 cm	0.16	21	131.25	13	81.25	0	0.00
BD	1 x 1 m	8 cm	0.08	12	150.00	20	250.00	0	0.00
BE	1 x 1 m	13 cm	0.13	12	92.31	14	107.69	8	61.54
BF	1 x 1 m	14 cm	0.14	26	185.71	11	78.57	3	21.43
BG	1 x 1 m	11 cm	0.11	9	81.82	4	36.36	0	0.00
BH	1 x 1 m	4 cm	0.04	9	225.00	6	150.00	1	25.00
BI	1 x 1 m	7 cm	0.07	6	85.71	5	71.43	0	0.00
BJ	1 x 1 m	9 cm	0.09	5	55.56	4	44.44	1	11.11
BK	1 x 1 m	12 cm	0.12	28	233.33	15	125.00	0	0.00
BL	1 x 1 m	14 cm	0.14	35	250.00	21	150.00	0	0.00
BM	1 x 1 m	7 cm	0.07	12	171.43	11	157.14	7	100.00
^ includes two bifaces									
* one shell bead also found in unit but not reflected in table.									

Table 5.7: Summary of off-mound activity area test unit artifact densities (Appendix F, Tables F.7 and F.8).

As already noted this feature is Tepeu 2-3 contemporaneous with the latest construction and occupation at Agua Lluvia. A curvilinear alignment was exposed in Subop AW with a cobble pavement associated with it found in Subop AK (Figure 5.23). The cobble pavement was to the west of the alignment in Subop AW. The vast majority of the artifacts documented in Subop AW were found on the opposite side of the alignment, to the east of it (Figure 5.23).

Figure 5.23: Feature 5 as exposed in Subops AK and AW.

The artifacts found inside the feature were comprised of high concentrations of ceramic sherds (N=213) and lithic debitage (N=113) in the relatively small volume of soil (0.5 m^3). However, in addition to this, there were two perforating tools, two bifaces, a mano fragment, and a metate fragment. It is highly possible that this feature is both a locus of food processing activity and a provisional discard area all in one. In other words, the tools and broken mano and metate, along with the abundance of ceramic material, may indicate food processing had taken place on one side of the alignment (west). To the opposite side of the alignment (east) trash may have been thrown temporarily and later moved to one of the areas to the outside of the household (north, south, or west).

Subops AL and AM were located on a very small mound in the western portion of the Grupo Agua Lluvia household (Figure 5.2). It was discovered in excavation that there were no alignments visible in the feature (Figure 5.24). All indications, including the low concentration of artifacts were that it was just a pile of rubble (Appendix F, Table F.9). I suggested above that this feature is the rubble collected from the borrow pit (Feature 3) based on this same evidence. If this assessment is correct then the pile itself indicates construction activity around the household. Or at the very least the stone set aside here could easily have been used for household maintenance. All of the construction at Agua Lluvia no matter the age would need periodic maintenance, possibly even annually following the seasonal rains. Two bifacial tool fragments and one complete bifacial celt were documented along the surface of the feature. At least one of the tools left on the pile could have still been in use and may relate secondarily to these construction or maintenance activities, possibly used to cut wood or other organic materials for making pole and thatch.

Another productive activity at the Grupo Agua Lluvia household may have had to do with shell beads. At least three shell disc beads were documented along with five irregular shell beads and one production failure. It is the production failure that is significant in the shell bead assemblage. It was found in Subop BB of the activity surface tests (Figure 5.2). With the aid of a hand lens it is clear that when the piece of shell broke, it was in production and a hole was being drilled into it to perforate it for suspension (Figure 5.20). The presence of this specimen along with fully finished shell disc beads, irregular shell beads, and a plethora of perforating tools (N=38; 46% of all informal tools) found in a number of contexts around the group would suggest that this household was engaged in making shell beads (Figure 5.25). The scale of production probably did not extend beyond this household, or at least it is very difficult to determine.

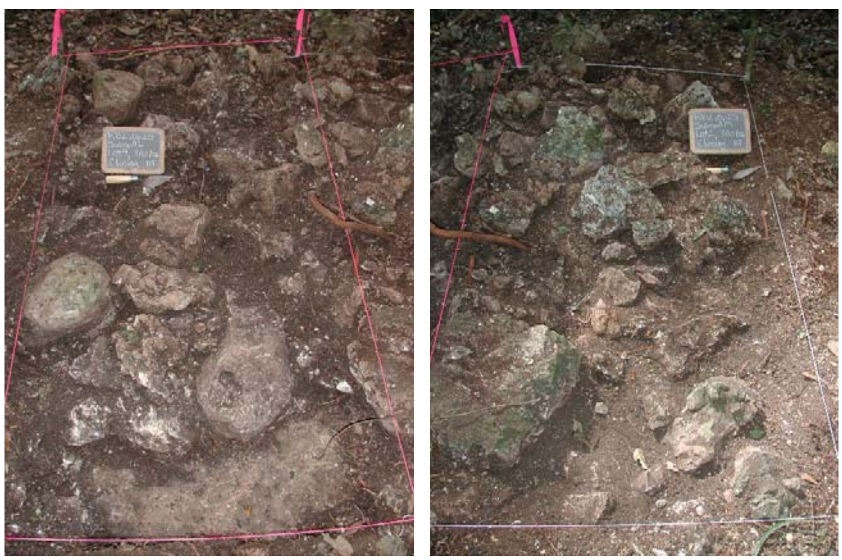

Figure 5.24: Feature 4 rock mound as exposed in Subop AL (left) and Subop AM (right).

Interestingly, six graver/perforators were found lying in various locations on the surface of the platform associated with Structure 4 (Figure 5.2). Another five perforators were associated with Feature 5 while six of them had washed in to the reservoir. Both large units sampling the occupation surfaces of Structures 1 and 2 had one perforator each, one was found in the western sheet midden and two in the southern midden deposits (Subop AT). The 18 remaining specimens were found in construction fill or mixed contexts. The distribution of perforating tools suggests that the activity took place in a few different areas around the group.

Figure 5.25: Assortment of shell beads and perforators.

Household activity is also evident outside and/or inside structures (Figure 5.2). The Structure 1 platform had a number of artifacts (N=64) documented on its occupation surface, all of which were piece plotted during excavation (Appendix F, Table F.9). An additional few jute shells and pieces of debitage were collected for a grand total of 69 artifacts collected on the occupation surface of Structure 1. Ceramic sherds (N=41), lithic debitage (N=26), and a few jute shells (N=6) were included along with a perforator, scraper, bifacial celt (distal fragment), two miscellaneous reworked bifaces (one whole, one distal fragment), and a piece of marine coral. The marine coral had wear on it that looks like it was possibly used as an abrading tool (Figure 5.21). Either these tools were being used directly in a household activity, or this portion of the platform served as a storage area between for the tools.

A similar deposit was found in Subop BU of the Structure 2 platform (Figure 5.2). In this case, at least 50% of the artifacts found were piece plotted in situ, but altogether quite a bit more ceramic sherds were collected (N=117), along with debitage (N=59), jute shells (N=3), a mano fragment, an obsidian pressure blade (proximal fragment), a perforator, scraper and thin biface as well as two miscellaneous reworked bifaces, and unknown biface, and a both a GUB- Type I and Type II (Appendix F, Table F.9). The amount of ceramic material, which included a ceramic cluster that was piece plotted in situ, is significant along with not only the amount of lithic tools, but the greater variety (Figures 5.2 and 5.4). Again these tools could have been used at this location in an activity, but given the abundance of ceramic material it is very likely that this was a storage area on the platform of Structure 1. There may have been a perishable structure also located on the platform to house items of domestic use.

Only a few artifacts were found in the occupation deposits of Structure 3 (Appendix F, Table F.9). In the combined interior room space exposure of Structure 3, almost 2 x 3 m in size, a number of artifacts were found in association with the occupation surface (Figure 5.5). Those documented included seven total obsidian blade fragments, two that fit together and a lateral fragment of a bifacial celt piece-plotted near the floor along with ceramic sherds and debitage only a few that were actually associated with the floor deposits (Appendix F, Table F.9). The collapse debris of Subop T on the southwestern portion of the structures exterior also had a bi-convex biface fragment, the possible agricultural or masonry tools discussed above.

As for Structure 4, the platform under the structure proved important in assessing activities, beginning with the perforators found there as already discussed (Figure 5.2). Along with these was a fragment of a plano-convex biface similar in wear patterns to the other possible agricultural or masonry tools and a fragment of a possible polishing stone were all found near the entryway to the structure. Over the large surface area of the platform many items were collected and some of these were piece-plotted in situ. Along with debitage (N=118) and ceramic sherds (N=184), items that were collected on the platform include a chert hammerstone made from a modified flake core, two obsidian pressure blade fragments, a GUB- Type II, discoid scraper, jute shells (N=27), and a freshwater muscle shell (Appendix F, Table F.9). Altogether it seems that this platform may have supported food processing given the presence of faunal remains, container fragments, and processing tools. The interior floor space of Structure 4 had a side scraper, two obsidian pressure blade fragments, jute shells (N=28) and *Pomacea* shells (N=4). The items inside the structure are interestingly similar to those found outside on the platform. Again, it is indicative of food processing associated with the architecture of Structure 4.

Storage and Provisional Discard

Two obvious and significant storage features at Grupo Agua Lluvia were the domestic reservoir and the chultun (Figure 5.2). Unfortunately, what might have been stored in the chultun, food, water, or something else altogether is not known at this time. It does, however, seem unlikely that the chultun was utilized as a water storage device since the reservoir was present. The domestic reservoir was investigated fully and it is clear that this feature did catch and store water, minimally enough for this household's domestic uses. At various times it may have even collected and stored more water than the Agua Lluvia household could use, possibly supplying one or more additional households nearby.

As for the chultun, Clark and Bryant (1997) felt that it might have been difficult to prevent chultunes from filling with water. That might actually depend on two factors, both where and how the chultun is built. The Agua Lluvia example is built on relatively high ground as the group is, but also in the immediate plaza the ground slopes upward towards the west. Turuk et al (2005) noticed that chultunes investigated in central Belize are often located on higher ground as well and the presence of capstones in many would also have aided in keeping them dry. The upper portions of the chultun could have been constructed or excavated in such a way that they stayed dry such that the mouth of the chultun was above the ground surface. Puleston's (1971) study revealed that some foods would store better than others. The ramón nut was one that lasted well in a chultun (Puleston 1971; see also Schlesinger 2001:36). It is also plausible that the usage for these varied not only from site to site and over time, but regionally within the lowlands, north to central and southern. Until the Agua Lluvia chultun is fully investigated it will be impossible to say conclusively whether it was wet or dry storage.

Temporary storage of tools may be indicated on Feature 4 (Subops AL and AM), which has been discussed above as an area indicative of the gathering and storing of construction and maintenance materials (Figure 5.2). Granted that the pile or mound is also storage of this material, there is evidence that a few tools also may have been stored there temporarily or between uses. The tools could have been used in some aspect of construction around the household. The tools found there were two fragments, unknown biface type, and one complete bifacial celt (Appendix F, Table F.9). The two fragments may be ready to discard and the one complete celt may have still been in use.

Other than the sheet midden already mentioned above, another location of provisional discard deserves consideration. However, the purpose for placing discarded items in this location may have played a different role than that of temporary storage. Along the eastern side of the plaza (also the south side) the soil is deep, built up artificially by the raising and extension of the plaza with the aid of the terrace. Subop E was placed along the eastern edge of the terrace in order to assess the terrace architecture and depth of soils (Figure 5.2).

The density and type of material placed here might reveal more about life at Agua Lluvia. There is a fairly large open space, absent of features or architecture along the east side of Structure 3 extending from the south edge of the reservoir to the north edge of the Structure 4 platform. The total depth of fill inside the terrace wall in this portion of the plaza is significantly deeper than in the open plaza units. This is to be expected given that this is a terrace edge and is artificially built out and up. The average depth here is 104 cm below ground surface. On the top, the two levels interpreted to be occupation debris in all other units around the plaza, there were ceramic sherds (N=181) in high concentration and a few pieces of debitage (N=20; comparatively much lower than in other discard areas) (Appendix F, Table F.9). The density of material is over 550 artifacts per cubic meter at the top of the unit. Another potential line of evidence is the presence of three discarded tools may have been used for agriculture (see Valdez et al n.d.) related activities. One each were found in association with the midden deposit in Subop AT, collapse debris of Structure 3, and near the entryway of Structure 4 on the platform.

I propose that these elements indicate the practice of household gardening in this area of the terrace. It is certainly deep enough soil, and since the terrace is absent of architecture it is a very suitable open space. In addition, the presence of the ceramic sherds may indicate that organic trash was being deposited on the top of the soil in order to compost and boost soil productivity. Further chemical analysis might be needed to solidify the interpretation along with an in-depth study of the residential terraces across this portion of the Rio Bravo Escarpment.

Mortuary Analysis

Three primary burials were uncovered during the course of excavation at Grupo Agua Lluvia. Two of these were documented under the floor of Structure 4 (Burials 1 and 2) and one under the floor of Structure 3 (Burial 3) (Figure 5.2). Each of these burials was discrete with a single individual per burial. Burials 1 and 2 were excavated by the project osteology crew headed up by Julie Saul and Frank Saul (2003; Appendix D). Burial 3 was begun by Julie Saul, however she had to leave the country at which time I completed the excavations. The Sauls also analyzed all osteological remains. Any comments here regarding their analysis are based on their report (2003; Appendix D).

The burial matrix in all three burials had the same composition as subfloor fill deposits often do with a mixture of midden debris, gravel, and soils. A number of sherds (N=58) and debitage (N=63) were mixed into the burial matrix of all three burials and are considered the secondary refuse similar to that of construction fill rather than burial goods. One well utilized, and possibly exhausted obsidian blade fragment was also found in the burial matrix of Burial 3 and is also considered part of the fill debris rather than a burial offering. The ceramic sherd material immediately surrounding the burial, in the burial matrix, is however a good indicator of the timing of the burial.

Burial 1

Burial 1 (Table 6.9) was discovered in the western portion of the interior of Structure 4 (Figure 5.8) under the floor, where the burial was encountered inside a cist.

The top of the burial cist was approximately 20 cm below the floor and the skeletal remains just 20 cm below the top of the cist stones essentially lying on unmodified bedrock. The bedrock was sloped in the subfloor exposure and shallowest in the western portion of the unit. The cist did not have a capstone, but was made of large flat stones placed on end in a vertically oriented fashion, one course high. Possibly as many as seven stones formed the perimeter of the cist which was very small in horizontal dimensions (Figure 5.26). The size of the cist can be considered to relate to the postmortem treatment of the person interred. The person interred was very tightly flexed, indicated by the position or orientation of the bones in situ, indicating a binding or bundling treatment of the body. Binding is supported by the fact that the bones were in close proximity in the small cist, but also anatomically oriented as though upon placement they were still articulated to each other. No grave goods or offerings were present in the cist or anywhere else near this burial.

Burial 1 chronology is slightly problematic, though I understand these deposits to indicate a Tepeu 2-3 (A. D. 700–900) cist burial and subfloor context (Sullivan 2003; Appendix B). The subfloor construction fill is clearly mixed but predominately Tepeu 2-3 sherds are present except for the very lowest level of construction fill. Chicanel sherds are present in the lowest level (Subop C, Level 13), a 15 cm thick layer above bedrock located primarily in the central to eastern portions of the unit. However, the remainder (55-60 cm thick) above C-13 is Tepeu 2-3, still indicating the Late to Terminal Classic construction of the building. Inside the cist there were 24 sherds. Tepeu 2-3 sherds were located across the top of the cist, while Chicanel sherds were in the lower part of the cist.

This matches the subfloor stratigraphy outside the cist as well where the lowest lot, just above bedrock, also had Chicanel sherds. As a result both the structure and its subfloor context are Tepeu 2-3 along with the cist since some Tepeu 2-3 material was found in it, albeit nearer the top of it. No intrusion was discernible in the stratigraphy. Therefore it is unclear whether Burial 1 was placed at or after the structure's construction.

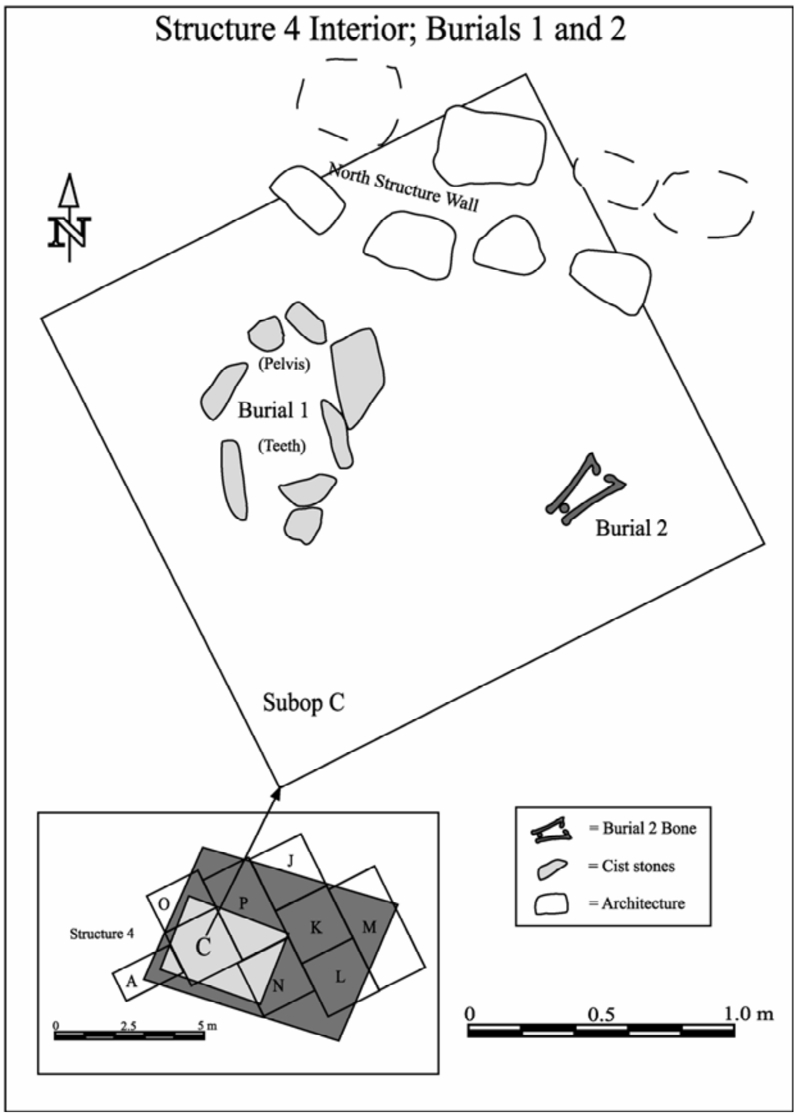

Figure 5.26: Burials 1 and 2.

At the time of excavation it was clear that, although this is clearly a primary burial, the remains of the individual were very poorly preserved and fragmentary (Saul and Saul 2003; Appendix D). The person buried in the cist of Burial 1 was not able to be sexed given the level of preservation, but was found to be a middle adult 35-50 years of age at death based on dental attrition (Saul and Saul 2003; Appendix D; also Table 6.9). One maxillary incisor showed possible decoration of the Romero B5 form as well (Saul and Saul 2003; Appendix D). The body was tightly flexed and lying on his/her left side, head to the south and pelvis to the north (Saul and Saul 2003; Appendix D).

Grupo Agua Lluvia Burials							
Burial	**Subop**	**Lot**	**Location**	**Burial Type**	**Person**	**Sex**	**Age at Death (yrs)**
Burial 1	C	10	Structure 4	Single, Cist	1	Unknown	Middle Adult, 35–50
Burial 2	C	12	Structure 4	Single	1	Possible Female	Adult
Burial 3	O	11	Structure 3	Single, Cist	1	Female	Middle Adult, 35–50

Table 5.8: Grupo Agua Lluvia burials (see also Appendix D).

Burial 2

Burial 2 (Table 5.8) was also located below the floor of Structure 4 (Figure 5.8). Burial 2 was found approximately 45 cm below the interior floor of Structure 4 in the easternmost portion of the unit (Figure 5.26). It was slightly deeper than Burial 1, however, the bedrock slopes downward significantly from west to east within the excavation unit, so that the burial is essentially in a similar portion of the subfloor construction fill. As such, the chronological assessment is very similar to Burial 1, slightly problematic because the fill around the burial is mixed, but I again interpret this to be a function of mixed construction fill and date the deposit Tepeu 2-3. In this case, there was no cist present containing the person interred nor were any grave goods found in or near it. Rather, it was a simple tightly flexed primary burial that was poorly preserved and very fragmentary (Saul and Saul 2003; Appendix D). Again, possibly the body was bound or bundled.

The person buried in Burial 2 is possibly an adult female based on long bone measurements and density (Saul and Saul 2003; Appendix D). No teeth were found with the remains, but this may be due to antemortem tooth loss. It is a primary burial in which she is tightly flexed lying on her back with her head to the west and knees to her chin (Saul and Saul 2003; Appendix D).

Burial 3

Burial 3 was found in the subfloor deposits of Structure 3 (Figure 5.5). It was documented from 32–57 cm below the floor contained inside a cist. The top of the cist was found 32 cm below the floor, while the bone began at 41 cm below the floor or 9 cm below the top of the cist stones found around the skull. The cist had been formed much like that in Burial 1 with large flat stones standing on end oriented vertically for a single course forming the perimeter of the cist except the area around the skull. The cist had a very large capstone on top covering primarily the skull of the individual with three stones placed around the perimeter of the head that were not flat or on end, but rectangular. As a result of the shape of these stones the cist around the skull along with the capstone did not collapse and the skull was encountered mostly complete. At the time of excavation the cist had long collapsed with the stones falling over and onto the skeletal remains (Figure 5.27). Some of the more fragile bones such as the ribs and vertebrae were damaged as a result of the collapse, but the relative preservation was actually much greater than that found in Burials 1 and 2 (Figure 5.28). This may be a result of a slightly deeper depth of this burial and the protection of the collapsed cist stones lying on top of the bones, a paradoxical situation. Additionally, the interior floor of Structure 3 was originally plastered, though at the time of excavation no plaster was found preserved in the area over the part of the floor located above the cist.

Figure 5.27: Collapsed cist stones.

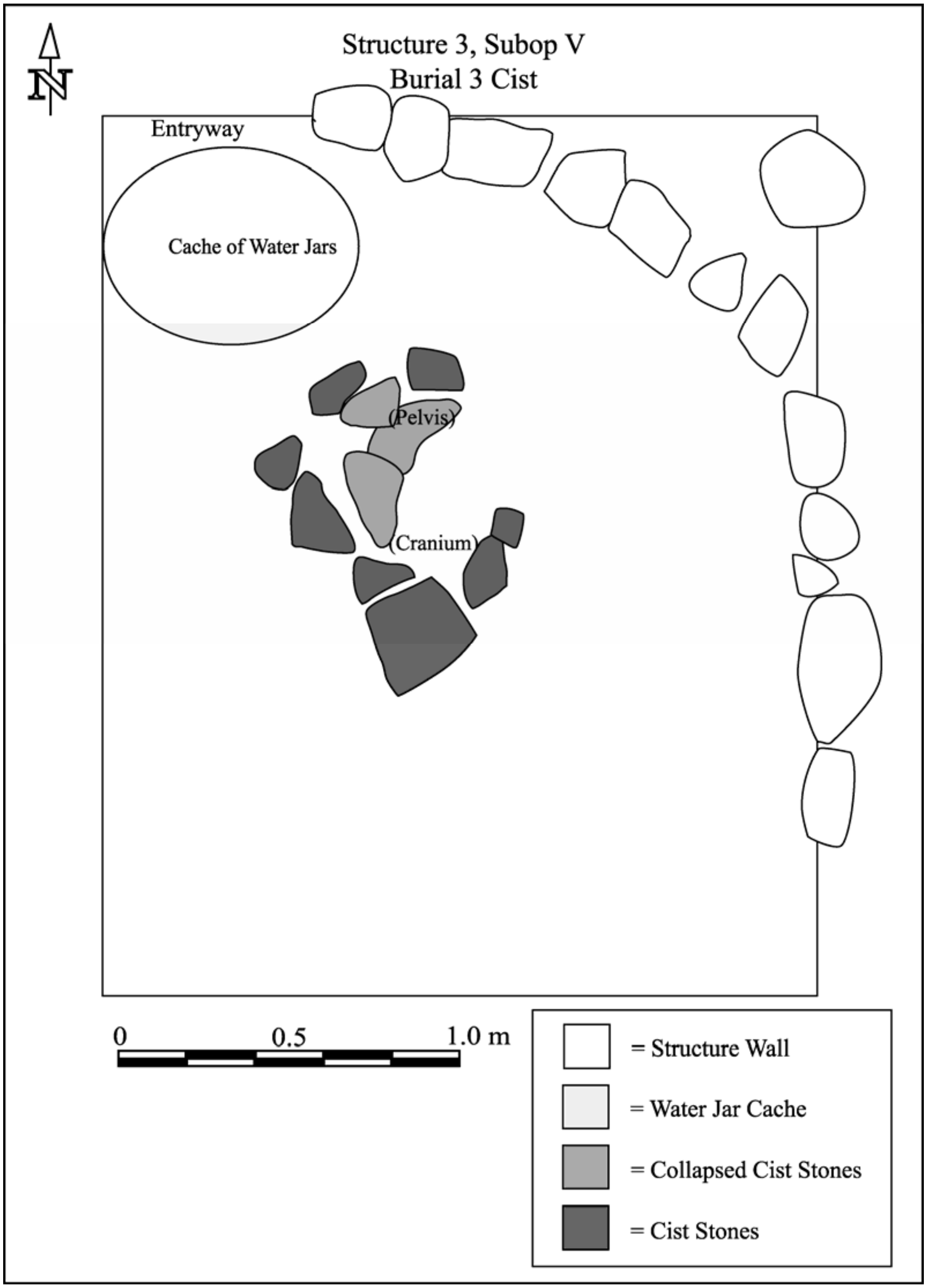

Figure 5.28: Burial 3 with cist.

Again, no grave goods were found in the cist or associated, although a dedication cache was documented under the doorway nearby. The dedication cache was Tepeu 1-2 (A. D. 600–800/850) along with the majority of the subfloor fill (Sullivan 2003; Appendix B). The only other ceramic material located in this exposure under the floor was in the cist itself and the fill directly above it, which dated Tepeu 2-3 (A. D. 700–900). An intrusion was detectable in the stratigraphy and the matrix that correlates with the later Tepeu 2-3 material (Figure 5.7). Both the stratigraphy and the ceramic material indicate that the floor was penetrated well after the structure was built in order to place this primary cist burial.

The person in the Burial 3 cist was sexed as a definite female based on pelvic and cranial morphology corroborated by long bone measurements and density (Saul and Saul 2003; Appendix D). She was a middle adult, 35-50 years of age at the time of her death, assessed on the basis of antemortem tooth loss combined with atrophy and resorption of the mandibular bone (Saul and Saul 2003; Appendix D). She was tightly flexed, perhaps bundled prior to interment. With her head to the south and hips to the north, she faced west positioned on her left side (Saul and Saul 2003; Appendix D). Her left arm was bent at the elbow with her hand in front of her face and her right hand meeting it (Saul and Saul 2003; Appendix D).

Non-Mortuary Ritual Activity

As previously noted, two dedication caches were found during the excavations at Grupo Agua Lluvia. These both serve as the primary evidence of non-mortuary ritual activity that was carried out at this household. There may have been other non-mortuary ritual that took place. These were the only visible indications of other ritual practice. Certainly life cycle rituals were likely to have taken place, though these were more visible at the Dancer Group (see Chapter 7 for complete discussion of evidence life cycle ritual at the Dancer household).

Cache 1 was a dedication cache that was found during the reservoir excavations. It was positioned in “entryway” or the lowest point of altitude of the rim in the areas where it adjoined the plaza. Rainwater running across the plaza would enter the reservoir at this point. The cache was comprised of a Tepeu 2-3 red slipped plate that was overturned and lying on the bedrock embedded in the plaster of the reservoir lining (Figure 5.15). Enough plaster had eroded off of the plate to expose it such that it was detected without penetrating the plaster. No other artifacts were found near it or under it.

Cache 2 was a dedication cache encountered under doorway of Structure 3 during excavations (Figure 5.28). It was positioned immediately inside (south) of the doorway under the floor between 37 and 49 cm below the floor. Both vessels that formed the cache had long collapsed in place by the time they were encountered in the excavations. These two vessels were reconstructable Tepeu 1-2 (A. D. 600–800/850) striated water jars. No artifacts were found inside or otherwise associated with the two jars, although it does not preclude the possibility that they were originally filled with perishable items as offerings. Since the vessels had collapsed and matrix had filled in the spaces around them, it was not feasible to collect any residues from inside the jars.

The practice of placing entryway dedication offerings by the ancient Maya has been well documented across the lowlands in the Late and Terminal Classic for both monumental and domestic architecture (Haviland 1985; Coe 1959; Smyth 2006). No comprehensive study of caching behavior has been done in order to understand the diverse rituals and activities that may be associated with the practice. Becker (1992) provides caution in regards to the categorical differentiation between caches and burials, each of which evokes particular meaning and both of which may contain human remains. This is further complicated by the use of the term *offering* by some. I have interpreted the caches found at Agua Lluvia (both absent of human remains) to be dedication caches based on my assumptions about their placement and symbolism. It should be understood that all caches are not necessarily dedicatory in nature across the lowlands. I acknowledge that I am assigning meaning by terming it such. Many other examples do exist however of dedicatory caches found in subfloor contexts in both domestic and public structures in the central lowlands at sites like Colha (Hyde 2006), Piedras Negras (Coe 1959), Rio Azul (Adams 2000; Adams and Valdez 2003; Ellis and Dodt-Ellis 2000; Ponciano and Foncea 2000; Valdez 2003; Walling et al 2000), Tikal (Haviland 1985) and others as well as the northern lowlands (see Smyth 2006). Accompanying dedicatory ceremonies are also visible in glyphic and iconographic representations (Krochock 1991).

Chapter 6: The Practice of Daily Maya Life: Identities, Ideologies and Communities

As may be clear from the previous chapters, each household not only differs in its spatial arrangement, size, and architecture, but each also has some important other material differences. While many of the basic domestic activities are echoed at each household, the materiality of those activities is somewhat diverse. Available resources, access to resources, service to community, and political ties for all three households Pak'il Nah, the Dancer Group, and Grupo Agua Lluvia differs to some degree and may contribute to this phenomenon. However, identity, ideology, and ritual are each also a key contributor to how each household conveys its position within the Maya universe.

Household Materiality in Northern Belize

As already stated the three households in this investigation have some diversity apparent in their material assemblages, though each part of each assemblage correlates to material culture found at other sites across the lowlands. This illustrates that each household is certainly a part of the larger Maya universe or society sharing its ideology and cultural identity. The culturally embedded nature of each household was clearly demonstrated by the fact that the material culture found in each has been documented at other sites around the Maya region. What are most interesting are the material differences between them, the fact that each household appears to express its Maya identity somewhat differently. With the following interpretations I propose that these ancient households participated in Maya society fluidly based on a number of considerations including their own social positioning, resources, needs, and obligations.

Making and Using Things

All three household excavations revealed several ways in which each household participated in productive activities. Given my interest in establishing the most straightforward definition of production for households possible, I have very simply defined it as the making of things at a very basic level. Without qualifiers for the type of items made, the type of knowledge required, nor the amount of time taken to make them, I have also included the perspective of food processing (and food production) into household production, since it is also an incredibly important social function in and between households, so important that I have given it a subsection all its own.

As a result of a broadened perspective of how households make things, there are several scales of productive activity to consider, from architecture or buildings on one end of the spectrum to foods on the other. The making of things often requires that tools or other implements be utilized in that activity, or consumed. The two concepts often overlap making it difficult to tease them apart at this level. Food is produced and processed and at some point is then consumed. Ceramics, chipped stone, groundstone, and other items are also used during both of those activities as well as for many other activities in and around the household. Architecture can also be considered to be consumed or used as material culture. This section will deal with materiality in a very general way in order to exemplify both productive and consumptive activities along with their interplay.

Architecture. First, the largest and most obvious item produced at each household was architecture. Each household had architectural styles clearly related to the rest of the region as seen in the Late to Terminal Classic. However, each household had a somewhat different architectural assemblage or configuration. Both the similarities and differences are significant considering that the architecture at each site was produced by the people living there and consequently has something to do with their identity (Hendon 1999; Johnston and Gonlin 1998).

The Pak'il Nah household was a constructed plazuela group with three cobble platforms that probably supported perishable structures and one masonry vaulted structure. The cobble platforms at Pak'il Nah were actually very similar to many Late to Terminal Classic examples that have been found across northwest Belize. The construction is very informal with cobble retaining walls holding in cobble and fill. Interestingly, though vaulted structures are primarily found in the Dos Hombres center and Group D, associated with much larger construction efforts. Based on this and the previous work in-and-around Dos Hombres they are rare in household settlement contexts in the area (Aylesworth 2005, Houk 1996, Lohse 2001, Robichaux 1995, Walling et al 2005; Walling et al 2006).

The Dancer Group household built space was comprised of a platform courtyard group situated on a residential terrace of the Rio Bravo Escarpment face. The Late to Terminal Classic L-shaped platform held two small structures with low stone walls and partial perishable walls and roofs. The platform was a typical cobble platform with informal cobble and fill held in by cobble retaining walls, similar to the platforms at Pak'il Nah, though these held a different type of structure. There was an earlier identifiable architectural component as evidenced by buried earlier material, as well as one definite buried linear stone alignment under Structure 2.

Agua Lluvia is also a plazuela group located on a residential terrace built on a natural knoll that juts out from the face of the Rio Bravo Escarpment. The configuration of the built space is around the central open plaza space with two linear platforms marking the north and west perimeters and the terrace edge marking the south and east. The platforms in this case are slightly more formally built than most in the area with the use of construction pens and large cut stone for the retaining walls holding a mixture of cobble and fill matrix. The platforms themselves likely supported perishable structures. Three other structures were located to the south and east of the platforms. One of these is of unknown construction and style as it was unexcavated (Structure 5), but Structure 4 was a small rectilinear structure with walls that were partially stone supported by a basal platform. Finally Structure 3, the round structure, had formally constructed walls supported by a round basal platform, the earliest construction at this household.

Evidence for the household directed construction efforts is visible in Features 3 and 4. Feature 3, a probable borrow pit, was unexcavated but it likely relates to Feature 4. Feature 4 appeared to be stored or pile construction material. This brings up an important point for these households especially on the escarpment, Agua Lluvia and the

Dancer Group, in the consideration of the water management features found in and around these households. The quarrying efforts necessary to build or create water features like reservoirs, diversion canals, or wet or dry chultunes would produce construction material.

The spatial arrangements for the three households are similar, with open spaces to use for domestic activities and structures that were likely reserved for sleeping and storage. Certainly space was also set aside at each household that might have been used for gardening, though for both Dancer and Agua Lluvia the gardening space is incorporated into the house lot. At Pak'il Nah garden space is not as clearly defined physically. The soil is too shallow in the open plaza for gardening. However, the area adjacent to the east side of the group could have sufficed, though this is purely speculative.

Shell Bead Making. The Grupo Agua Lluvia apparently practiced some level of bead making. Beads in several forms (N=7), a bead blank failure and the presence of a number of perforating tools, suggests this. There is not enough evidence to suggest that they were making beads for much more than their own use. There is also no evidence that this productive effort was directed by any political or community forces outside the household. The scale of production itself seems to support the idea that the people at Agua Lluvia were making beads for their own use and possibly minimal exchanges within their community or among their immediate neighbors. The interesting element of the productive practice of perforating pieces of shell at Grupo Agua Lluvia is that ultimately the resultant beads were most likely used for personal adornment or decoration. As ornaments they would have evoked a symbolic meaning or understanding about the wearer by the people who encountered them.

Lithics. The chipped stone assemblages at each household exemplify the issue described above in which productive activities grade into consumptive ones. Tools are often made in order to produce another item. That tool is then consumed during that productive activity. For example in the case of making or perforating shell to make beads, the perforator is consumed. There is also significant evidence to suggest that all three households recycled lithic and obsidian tools for secondary uses and for construction fill. At Agua Lluvia, considerable recycling is clear even for the production of informal tools. Finally, chipped stone tools, from formal tools to the most informal utilized flakes, can and often did serve more than one use function. All of this paints a complex picture of the ways in which these Maya households made and used things.

The total of chipped stone for all three households is 8,250 with a total weight of 104.3 kg (Table 6.1; see also Appendix A). Given the sampling strategy (with the debitage only), the amount of lithic artifacts across each household was comparable to the excavated volume of matrix at each. Pak'il Nah had 25% of the overall total (N=2,030; 21.6 kg). The Dancer Group household had 37% of the total (N=3,029; 55.9 kg). And Grupo Agua Lluvia had 39% overall (N=3,191; 26.9 kg). It is noticeable that although Agua Lluvia had a higher number overall of chipped stone artifacts, the total weight was lower. This is likely due to the fact that there were fewer large cores found in the excavations, which were all analyzed from each household. The Dancer Group generally had the largest cores, for example the anvil found in Burial Episode 2 was exceptionally large, slightly skewing the sample.

Formal and Informal Tool Totals			
Household	**Category**	**#each**	**Weight(g)**
Pak'il Nah	Informal Tools	52	3,175
Pak'il Nah	Formal Tools	21	1,398
Pak'il Nah	Debitage	1,,957	16,980
Pak'il Nah	Total	2,030	21,553
Dancer Group	Informal Tools	64	4,392
Dancer Group	Formal Tools	77	5,612
Dancer Group	Debitage	2,888	45,850
Dancer Group	Total	3,029	55,854
Agua Lluvia	Informal Tools	82	2,502
Agua Lluvia	Formal Tools	50	2,445
Agua Lluvia	Debitage	3,059	21,962
Agua Lluvia	Total	3,191	26,909
Total	**Informal Tools**	**198**	**10,070**
Total	**Formal Tools**	**148**	**9,454**
Total	**Debitage**	**7,904**	**84,792**

Table 6.1: Lithic assemblage totals for all three households.

The overall total amount of debitage analyzed in the samples was 7,904 (84.8 kg) (Table 6.1; also Appendix A). Although each household's debitage was sampled rather than analyzed in entirety, the debitage types present across each household is similar and the amount of debitage is comparable given the number of units (i.e. volume of soil) excavated at each. There was obviously not enough debitage at any of the three households to suggest that specialized production or even cottage industry production of formal tools. There is enough debitage to suggest that each household made some of their own bifaces and possibly most of the informal tools that they needed as well. Not only is the quantity found at each sufficient, but the types represented in the debitage are sufficient to represent the full range of reduction debris for at least some bifaces and most of the informal tools each household might have needed.

As is expected from the volume of work at each household, Pak'il Nah had the lowest number both of formal tools (N=21) and informal tools (N=52) of all three households, and Agua Lluvia had the most tools in general. The Dancer group had the most formal tools (N=77), also helping to account for the higher overall chipped stone weight as compared to the others. Agua Lluvia had highest number of informal tools (N=82) which is probably related to the high number of perforators being used there.

Formal tool types are comparable, with each household having similar (formal) tool kits. One slight difference is that Dancer has more GUBs (Type I and II) that may indicate more cutting or chopping of wood as an activity at the Dancer group. As for informal tool types again there is a lot of similarity among types across the three households, but each household also seemed to have its favorite. Pak'il Nah preferred utilized flakes, while the Dancer Group household had a preference for scrapers. Agua Lluvia preferred perforators, as already addressed.

Ceramics. No evidence for making ceramic vessels was identified in any of the three households. Ceramic production locales are an ongoing enigma in the Maya lowlands. The apparent lack of evidence may be related to the context in which ceramics were fired. Lowland Maya ceramics may have been fired above ground, without a kiln, defying our archaeological expectations (Rice 2005:20). Whether or not they were made in these specific households, they were certainly utilized by them.

The Pak'il Nah household had the forms and quantities expected in a domestic context. The total number of ceramic sherds excavated was 3,500, or 29% of the total for all three households (N=12,118) (Appendix B). Bowls and jars were the predominate forms with very few plates or cylinders represented. The time period(s) represented in the Pak'il Nah ceramic assemblage is primarily the Terminal Classic, Tepeu 2-3 (A.D. 700-900), with some limited surficial finds of Tepeu 3. Obviously the household's primary occupation was the Terminal Classic (Sullivan 2003; Appendix B).

A few ceramics at Pak'il Nah may have been imported from the Irish Creek Marsh area as already noted. To be clear, two things are possible. Either the clay was brought in from that area or the already made ceramics. It is not possible at this point to say which happened since the forms and styles are the same as the other ceramics found at Pak'il Nah. Another unique ceramic find at Pak'il Nah is the five fitting fragments, found together, of a Tepeu 2-3 orange polychrome cylinder vessel with painted imagery and hieroglyphs. This is a common Late Classic style of cylinder vase found around the Maya lowlands (Kerr 1989a, 1989b; also Coe 1978; Moholy-Nagy 1994; Robicsek 1981). It is only the second painted hieroglyphic (preserved) ceramic find associated with the Dos Hombres transect survey or the civic ceremonial center. One Palmar Orange Polychrome plate fragment with hieroglyphs was found by Houk in the C-7 courtyard of the southern Acropolis (Houk 1996:202).

Lastly, just a brief note about the very small ceramic “gunshot” sherds as mentioned in Chapter 3. The density of gunshot at Pak’il Nah was higher relative to the other groups (N=673). The Dancer Group had twice this many at 1,397 while Agua Lluvia had the exact same number (N=673) as Pak’il Nah. Therefore, the Pak’il Nah household excavations produced a much higher density of these small bits of ceramics than at Agua Lluvia given the greater amount of excavated soil there. Contextually, the gunshot excavated at Pak’il Nah was mostly located in the midden contexts between the kitchen structure (Structure 4) and the large masonry structure (Structure 1). As discussed in Chapter 3 this may indicate that the ceramics were trampled during occupation by the resident such that a walkway or pathway between the structures was present.

Most of the gunshot found at the Dancer Group was found in subfloor fill. The gunshot in those excavations may be the result of deposition, gravel and clay which shrinks and swells seasonally creating an almost grinding of the material mixed in. Or the gunshot could have been an indicator of trampling when the debris was in its primary context, which is unknown. The gunshot found at Agua Lluvia was found in both occupation and subfloor fill contexts, with a slight majority in subfloor fill. The subfloor fill soils did not have the same high content of clay as that of the Dancer Group. I find this to possibly indicate that probably all the gunshot was created by day–to-day discard and activity, but cannot be traced to a single location in the same way exemplified at Pak’il Nah.

The overall ceramic assemblage at the Dancer Group totaled 4,239 sherds and eight whole vessels representing two primary phases of occupation, the Late Preclassic and the Late Classic (Appendix B). There is also the possibility that the temporal assignations do not represent fully the occupation, as discussed in Chapter 4. As Sullivan and Valdez (n.d) have observed, the Late Preclassic types and forms may have continued into the Early Classic. If so, the occupation may not have abruptly come to a halt as initially suggested. Bowls and jars were again the most common forms. There were also, however, a few more plates and dishes (N=43 represented) than at either of the other two households. This may be skewed by the mortuary deposits which had a total of six dishes and two bowls collectively. The six were Late Preclassic which matched the earliest occupation at the Dancer Group. Even so, plates and dishes only represent 11% of all the ceramics in which form was detectable at the Dancer Group (Sullivan 2003; Appendix B).

Ceramic forms at Grupo Agua Lluvia are characteristic for domestic assemblages again having mostly bowls and jars spanning the Late and Terminal Classic Periods, Tepeu 1-3 (A.D. 600–900). A total of 4,368 ceramic sherds plus three whole vessels were collected during the excavations at Agua Lluvia (Appendix B). The whole vessels were distributed across two dedicatory caches. Two jars were found in the entryway cache of Structure 3 dating to the earliest construction at this household in the Tepeu 1-2 phase, while the third whole vessel was a Tepeu 2-3 plate uncovered in the reservoir cache matching the last occupation at Agua Lluvia.

Foods

In terms of a productive activity, foods provide an important perspective of everyday life at the household level. Chapters 4, 5, and 6 have given detailed information about areas that food processing likely took place at each household. There were clear indications of these locations at each household. The areas were not difficult to determine, what is difficult to determine in household deposits is the types of foods that were collected, grown, or imported for processing in the household. Each household also had the opportunity, and the space, for household gardening. In this light, gardening is certainly food production, even at a small scale. Killion's (1990) ethnoarchaeological study showed that small gardens, sometimes within the house lot itself or infield, were often planted with multiple kinds of plants including small amounts of staple foods like maize, also tomatoes, squash, chilies, herbs and condiments. The lack of preservation of botanical remains have hindered direct evidence towards food productions within the house lot as well as plant foods processed in the household but grown in fields further away. Certainly plant foods were processed in these households as well as faunal sources of food.

Very little faunal material was recovered as mentioned in the previous chapters. As a result the only line of direct evidence concerning animal food sources for these households was from freshwater snails and mussels. Only the Dancer Group and Grupo Agua Lluvia had these remains in and around the household. These two households are located on the Rio Bravo escarpment face, near each other and near moving freshwater sources. The freshwater mollusks were found in midden, activity, and subfloor construction fill contexts.

The greatest number of freshwater mollusks in any of the three categories of species found overall was found at the Dancer Group household (see Chapter 4; and Table 6.2). However, at Agua Lluvia the overall freshwater mollusks collected in excavation are only slightly lower, to that of the Dancer group (Table 6.2). The seemingly slight difference in overall numbers found at each of these two households is more significant when considering the overall density at each. The density of freshwater mollusks at the Dancer Group was far greater since only 24 units were excavated at the Dancer Group versus that at Agua Lluvia, 73 excavation units. Agua Lluvia is located only 150 m southwest of the Dancer Group on the escarpment (Figure 3.1).

At both households, jute (*Pachychilus*) snails far outnumbered *Pomacea* and *Nephronaias* (Table 6.2). The reason that jute appears to be the dominant snail used at both households is related to the proximity of the moving water sources. As for the much fewer freshwater mussels (*Nephronaias)* compared to jute snails, the answer is not as clear. They seem to be more common in the Late Preclassic component at the Dancer Group, so there is some possibility that this species may have been more sensitive to the impact of population growth demands on the environment in the Late to Terminal Classic seen across the lowlands. It was also clear during excavation that the mussel shells themselves also do not preserve as well as jute shells do. Many of the bivalves would crumble to dust during excavation and lab processing.

Freshwater Shell					Phylum:Mollusca	
Household	**Class:Family**	**Genus**	**Species**	**Habitat**	**N=x**	**Wt (g)**
Pak'il Nah	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	2.1
Pak'il Nah	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	0	0.0
Pak'il Nah	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	0	0.0
Pak'il Nah	**Total**	**All**	**All**	**Freshwater**	**1**	**2.1**
Dancer Group	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1,393	6,764.1
Dancer Group	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	36	112.2
Dancer Group	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	82	172.4
Dancer Grp	**Total**	**All**	**All**	**Freshwater**	**1,511**	**7,048.7**
Agua Lluvia	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	992	3,876.6
Agua Lluvia	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	18	93.1
Agua Lluvia	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	19	26.3
Agua Lluvia	**Total**	**All**	**All**	**Freshwater**	**1,029**	**3,996.0**
All	***GRAND TOTALS***	***All***	***All***	***Freshwater***	***2,541***	***11,046.8***

Table 6.2: Faunal remains per household.

Freshwater mollusks were, however, only one potential source of protein and fat among several. Since there is no real direct evidence towards food sources for the three households in this study, it is necessary to consult a few additional sources of *indirect* evidence to add to the picture of foods or possible food sources for these households. The concepts of direct and indirect indicators of household and community diet have been outlined by Pearsall (2000).

Specifically, there are three other promising avenues in which to gather this indirect evidence, deriving both faunal and floral information. First, the investigations in Group D (Aylesworth 2005) near the Dos Hombres civic ceremonial center may shed light on a few possible faunal resources available in the immediate area of the Dancer Group and Agua Lluvia households, west of Dos Hombres. As stated in Chapter 1, Group D is a large hilltop plaza group with 12 structures and Aylesworth (2005) suggest that the group is of the Plaza Plan 2 layout (Figure 1.4). The layout and architecture as well as much of the material culture of this group are very different from any of the household excavated in this study. Group D is obviously elite and possibly housed a ruling lineage or corporate group (Lohse 1999). What it does have is the benefit of hefty architecture with very thick sequential layers of plaster from long term occupation in the deeply stratified plaza that provide for sealed contexts and therefore much preservation than any of the three households under consideration in this study. Therefore, there were preserved faunal remains recovered at Group D that may at least suggest which animal species might have been locally available for food (Aylesworth 2005).

It is not surprising given the surrounding environment that Shaw's analysis of the Group D material revealed that the locally available species of white tailed deer, ocellated turkey, turtles, and domestic dog were all utilized at Group D (Aylesworth 2005). This is not to suggest a direct correlation to the Dancer Group and Agua Lluvia households necessarily. Rather, it is presented here in order to acknowledge what animal species were available and culturally acceptable sources of food in this area west of the Dos Hombres center. This evidence brings up an issue of possible sampling bias concerning the Dos Hombres Group D faunal remains relating to the high status context. It is possible that preservation is not the limiting factor in the presence or absence of faunal remains for the three households in this study, but rather status.

As for indirect evidence of plant foods that may have been used in this same area west of Dos Hombres, a good source of information comes from a pollen core taken from a small lake located within the Dos Hombres transect survey by John G. Jones (Dunning et al 2003). Laguna de Juan Piojo is located between the Rio Bravo Escarpment and the Rio Bravo within the Rio Bravo Embayment (Dunning et al 2003). A number of cultigens were identified by Jones (1999) from the sediment core taken there along with a radiocarbon date situating the deposit of compressed clay from which the pollen correlates to span from the Late Preclassic to the Terminal Classic (Dunning et al 2003; Jones 1999; Lohse 2001). These data (Figure 6.1) show the cultivation of maize, cheno-ams, and aster species along with disturbance species of grasses and weeds (Dunning et al 2003; Jones 1999). Again the Laguna de Juan Piojo pollen core simply gives indirect evidence of food sources for the immediate area. It is not unlikely though that these were common among households, given our current understanding about the consistent consumption of maize in Maya society. On this basis along with the context of the sample (locations conducive to agricultural production, absent of architecture) this sample is not likely to be biased towards status or necessarily restricted to any particular group.

A similar condition is apparent in a pollen core that may be much farther removed from the Pak'il Nah household in linear space, but can be consulted for possible foods to the east of the Dos Hombres center (Figure 1.2). Indirect evidence from a pollen core taken from a small aguada in the area of Ojos de Agua, again by John G. Jones, an area with ancient channelized fields, shows that both maize and manioc were cultivated during the Late Classic this area (Figure 6.2; Dunning et al 2003:22). Many of the other species found in the pollen data were similar to that found

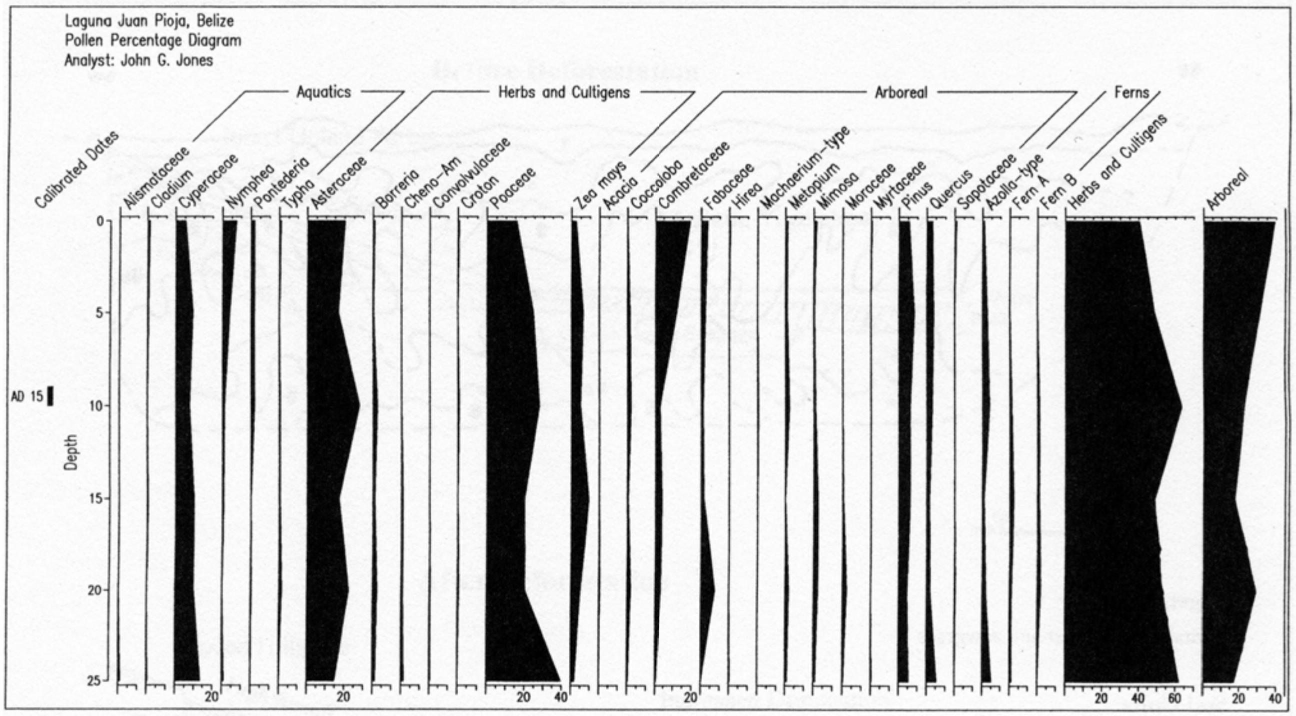

Figure 6.1: Pollen percentage diagram from Laguna Juan Pioja (after Dunning et al 2003, Figure 2.8).

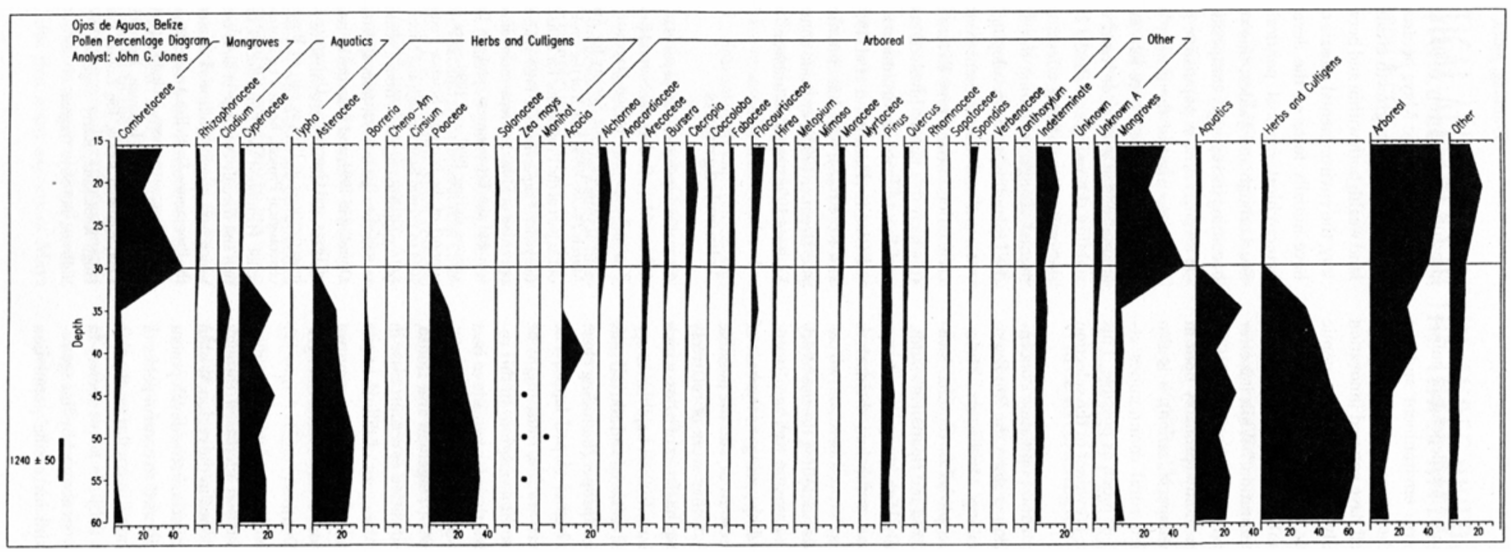

Figure 6.2: Pollen percentage diagram from Ojos de Agua (after Dunning et al 2003, Figure 2.9).

on the west side of Dos Hombres. One issue to be noted with the Ojos de Agua core is that the location of this aguada and ditched fields (Figure 6.3; Baker 2003) is very near the Irish Creek area and Sierra de Agua site (Figure 1.2), a fair distance south to southeast of Pak'il Nah, at least 30 km. However, the Pak'il household had some ceramic material that at least preliminarily appears to have been traded in from this very area (see below; Sullivan 2003). As such it is not unimaginable that manioc or other foods that may or may not have been grown immediately near Pak'il Nah could also have been brought in from another area. Again, this is very indirect evidence towards some possible food sources since no direct evidence has yet been gathered towards cultigens in the immediate area of Pak'il Nah.

Figure 6.3: Irish Creek Marsh *channelized* or *ditched* fields (after Baker 2003).

Local Resource Utilization

Chert is the most common lithic resource utilized at each of the households in this study. Varying graininess could be seen throughout the assemblages, from very fine grained to a level of graininess that might match high grade limestone. The variability was probably due to the availability of chert locally versus the importation of better quality chert from short and long distances. As for shorter distances, Barrett (2004) defined at least eight locales of raw material outcrops in northwest Belize, where there was a wide range of quality in the materials found spanning the outcrops. Materials as high in quality as chalcedony to varying quality cherts, quartzite, dolomite, and limestone can all be found within 20–30 km of each household (see Barrett 2004). It is also highly probable that many more outcrops of lithic raw materials are located within the Rio Bravo area. Most of the area has not been surveyed for this type of resource specifically.

While chert is by far the most common or primary chipped stone resource at each household, it is not the only lithic resource utilized at each household. Several other types of stone were knapped and all of these may have been available within 30 km or less. The most common alternatives to chert were limestone, quartzite, and chalcedony. Additionally, three examples of petrified wood used as chipped stone were found at the two households on the Rio Bravo escarpment, one at the Dancer Group and two at Grupo Agua Lluvia. Of the most common secondary lithic resources, limestone, quartzite and chalcedony, there is an interesting pattern of use per household (Table 6.3). At Pak'il Nah, east of the Dos Hombres center near the aguada, limestone was used most often as the secondary lithic resource during its Late to Terminal Classic occupation (Tepeu 2-3 phase; A.D. 700-900) (Table 6.3; Figure 6.4).

Lithic Raw Material								
Household	Type	Chert	Lime-stone	Chalcedony	Quartz-ite	Jasper &Petrif Wood	Un-identified	**Total**
Pak'il Nah	Debit.	1,934	20	2	1			1,957
	Formal	19	2					21
	Inform	49	1	2				52
Total		**2,002**	**23**	**4**	**1**	**0**	**0**	**2,030**
Dancer Group	Debit.	2,852	15		18	1 jasp.	2	2,888
	Formal	74	1			1 pw		76
	Inform	60	2	3				65
Total		**2,986**	**18**	**3**	**18**	**2**	**2**	**3,029**
Agua Lluvia	Debit.	3,034	6	18		1 pw		**3,059**
	Formal	49	1					**50**
	Inform	79		2		1 pw		**82**
Total		**3,162**	**7**	**20**	**0**	**2**	**0**	**3,191**

Table 6.3: Concentrations of lithic raw material types per household.

Both quartzite and limestone were the secondary lithic resource of choice used at the Dancer Group up on the Rio Bravo Escarpment. Interestingly, the distribution of these two alternative materials chronologically between the occupation phases, the Late Preclassic (Chicanel phase; 400 B.C.–A.D. 250) and Late Classic (Tepeu 2-3 phase; A.D. 700-900), were different. Quartzite occurred equally in both, while limestone occurred more often in the Late Classic component. At Grupo Agua Lluvia, also located on the Rio Bravo Escarpment, chalcedony was the preferred secondary resource during the Late Classic (Tepeu 1 and Tepeu 2-3; A.D. 600-900) occupation duration at the household (Table 6.3; Figure 6.4).

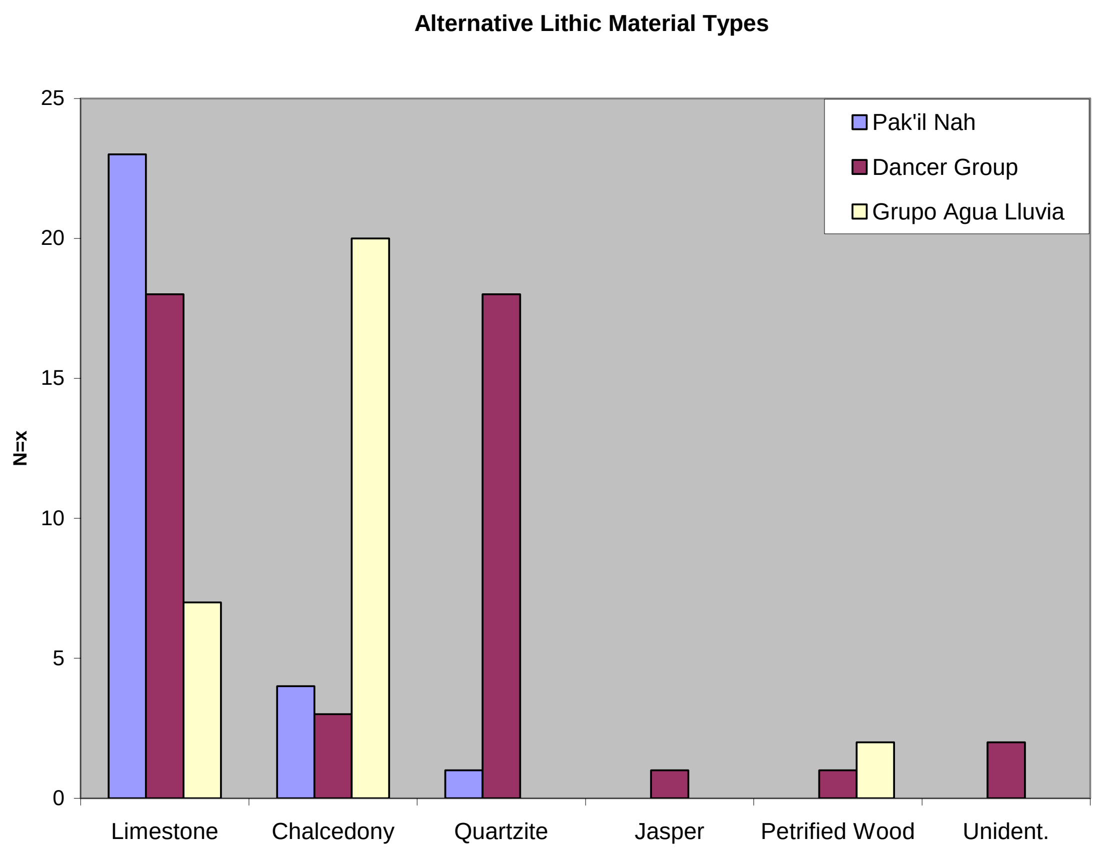

Figure 6.4: Bar graph of secondary lithic resource material per household.

An interesting observation comes as a result of the comparison of non-chert raw material types. Both the Dancer Group and Agua Lluvia are located on the face of the escarpment within 150 m of each other. The secondary lithic resource used by each in the Late Classic is very different for the two households however. Chalcedony, a very high quality of lithic material occurs in highest quantities at Agua Lluvia while limestone is preferred at the Dancer Group household in the Late Classic. This may speak to differential economic relationships formulated by each household individually with the distributors of chalcedony for the area. These relationships would likely have also changed over time which would account for the change from quartzite in the Late Preclassic at the Dancer Group to limestone in the Late Classic. Interestingly, limestone also is the next most common raw material at Pak'il Nah as well in the Late Classic. However, this may be for different reasons which will be addressed further below.

Items of Exchange

Since obsidian is not native geologically to northern Belize or anywhere within the Maya lowlands, it was imported into the area. Most Maya obsidian originates in the highland volcanic zones of Southern Guatemala and northern El Salvador. Three primary sources (along with several minor source locations) for the Maya Region are located in this area (Figure 6.5). There is another volcanic zone that has a number of obsidian sources located in central Mexico. None of the obsidian was sourced from the households excavated, though much of it, if not all of it can be assumed to come from the sources in Southern Guatemala at least tentatively. Visual attributes were noted for each obsidian artifact and no green obsidian was observed. Green obsidian is the only obsidian that can be securely sourced visually. Green obsidian (along with "gold sheen" obsidian) originates from the ancient Pachuca obsidian source in central Mexico.

Since no Pachuca obsidian was found in any of the households then it is likely that all of the obsidian is from the Maya highlands, though a sourcing study is needed to confirm this.

Even given the possibility that the majority of the obsidian likely originates within the Maya Region, it is still transported some distance by the time it reaches the Dos Hombres area, ca. 300 km away. It is possible that someone at Dos Hombres had access to the trade network running through the lowlands, though exactly at what level is difficult to say and it probably varied over the time that Dos Hombres was occupied. Certainly in the Early Classic there was a significant level of access in the trade network from the El Chayal obsidian source (Trachman 1997b). Obsidian was coming into the site as preformed Macroblade Stage II cores and then further reduced at Dos Hombres as evidenced by the production debris found in the Group B-4 household (Figure 1.4) (Trachman 2002; Trachman and Titmus 2003). Given the evidence available for Late Classic domestic contexts all over the Rio Bravo area, it appears that obsidian prismatic blades (pressure blades, 3rd Series) may have come into northwestern Belize households, small sites, and communities in finished form. Although there is evidence that obsidian prismatic blades were being produced at the large site of Lamanai in the Late Classic (personal observation). Economic access to obsidian as well as access to the technological knowledge regarding blade production is apparently increasingly centralized through time until the Terminal Classic period for this area. As a result, there is little evidence to suggest any direct relationship to the larger scale long distance trade network for these households. They certainly acquired obsidian through economic exchange relationships forged probably directly, but more locally based possibly at Dos Hombres in the Early Classic to the Terminal Classic. The difference would be that earlier in time people at Dos Hombres were actually making pressure blades themselves and later they were simply trading or distributing it to the households who used it on a daily basis.

One important aspect that cannot be understated concerns access to obsidian in domestic contexts. Based on my own research and that of others all over the Maya Region, obsidian is found in every household. It is ubiquitous in the Maya Region, and also is found in elite, royal, and ritual contexts. By the Late Preclassic the knowledge of obsidian prismatic blade production had spread throughout the region (Clark 1987). From that time on, obsidian assemblages across the region are overwhelmingly dominated by obsidian prismatic blades. Obsidian blades were the most efficient use of the (incredibly sharp when flaked) obsidian resource providing the greatest amount of cutting edge per volume of actual material (Sheets 1972). In this one seemingly singular form, obsidian prismatic blades had a multitude of functions including fully domestic uses on one end of the continuum, to ritual bloodletting and violence (or warfare) on the other. Context is the best indicator of the range of possible functions. The obsidian found in all three households, given their contexts, were likely general domestically used tools.

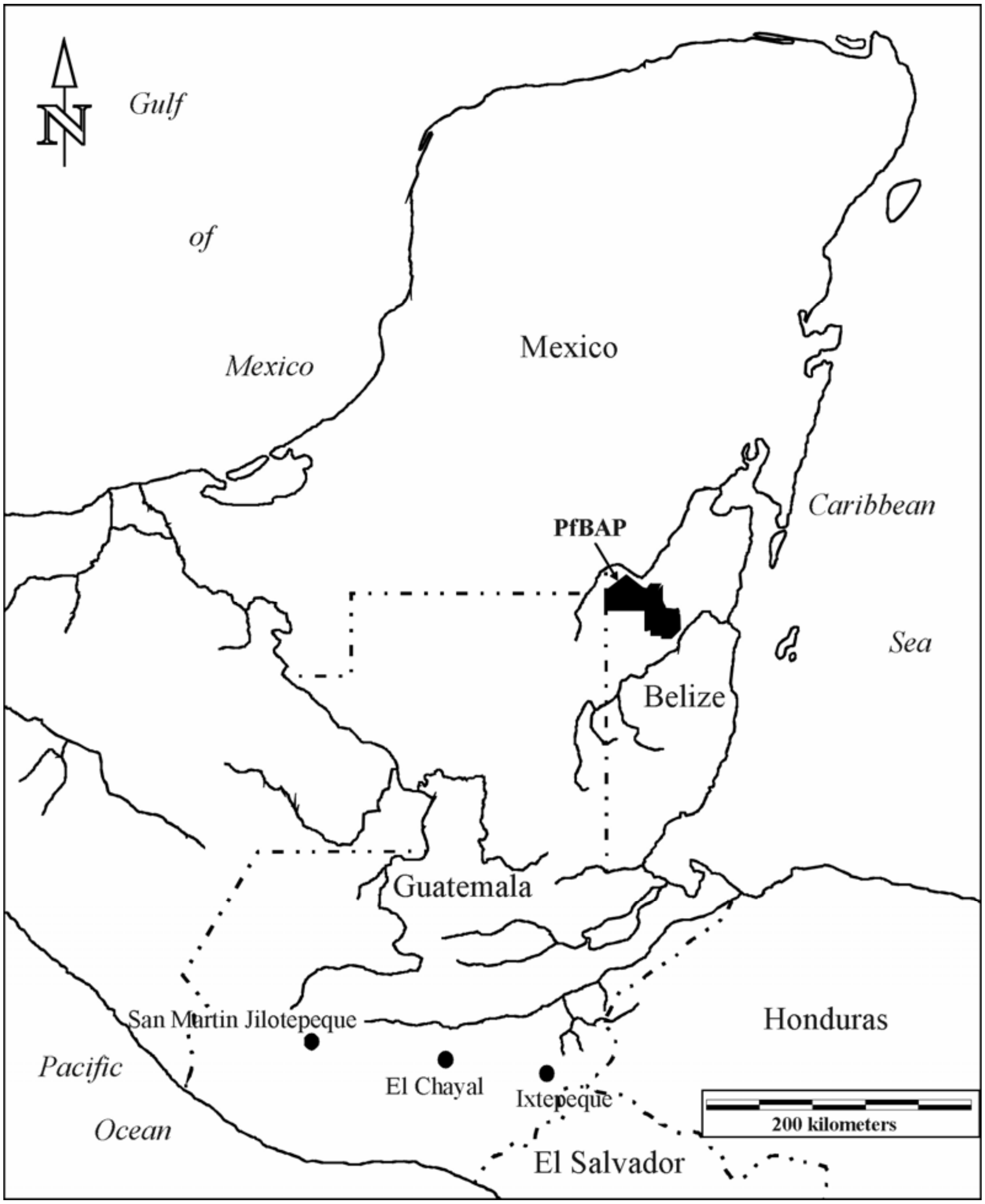

Figure 6.5: Map of the Maya Region, note obsidian sources.

Interestingly, the amount of obsidian in the form of prismatic blades mostly, measured in length of cutting edge (see Sheets 1972), follows a general density that would be expected given a somewhat even distribution of blades to each household. In other words, the density of obsidian is fairly equivalent to the intensity of excavation at each household (Table 6.4). The total amount of cutting edge of obsidian is 172.43 cm for all three households (Appendix A, Table A.4; Table 6.4 again).

Obsidian Distribution per Household			
Household	*N=x*	*Cutting Edge: mm*	*cm*
Pak'il Nah	8	175.19	17.519
Dancer Group	25	526.35	52.635
Grupo Agua Lluvia	46	1,032.71	103.271
Total	79	1,734.25	173.425

Table 6.4: Length of cutting edge of obsidian per household.

Given the distribution of obsidian, in terms of both amount of cutting edge and total number of artifacts, there appears to be an even distribution between the three households. I take this to indicate that even though each of these houses is a different size and they have significant differences in architecture and other materials, the access to obsidian by each of these households may not have been hierarchical. It is highly possible that blade access was based on domestic need.

Three other materials found in one or more of these households may tell us about their exchange relationships in social context. First, shell and/or greenstone artifacts and other mineral items were found at all three households. However, the distribution was not as equal as that seen with obsidian. All of the small finds were likely to have been imported since most of them were shell or greenstone minerals (Appendix C, Table C.2). The distribution may tell something about the level of centralization with these kinds of artifacts, so I will discuss that first. Given the species identified most of the shell came in from the Caribbean coast with one notable exception. The *Spondylus* bivalve found at the Dancer Group household associated with Burial Episode 3, was actually a *princeps* species which is known from the Pacific, rather than the Caribbean, meaning that it was likely imported from the west coast of Guatemala. Greenstone minerals such as jadeite and fuchsite may come from the Motagua Valley in Guatemala, though all the known sources of variant minerals that formed much of the greenstone found in the lowlands may not be known (Buttles 2002:240).

The Dancer Group had by far the greatest number of shell and greenstone artifacts (Appendix C, Table C.2). It had almost two times that found at Grupo Agua Lluvia nearby and fully 12 times that found at Pak'il Nah located some 3 km away. Of the 24 small finds items found at the Dancer Group household, only two, the greenstone earflare and the one piece of shell detritus, were found in subfloor fill contexts. The remaining 22 were very intentionally placed with 21 in mortuary contexts and one found in association with the floor of Structure 2. Out of those in mortuary contexts, 19 (79%) of the marine shell and greenstone artifacts were from the Late Preclassic. The Late Preclassic mortuary contexts removed, and the distribution of small finds as an artifact category is fairly even, given the intensity of excavation, between each household across all other various contexts: Pak'il Nah having two, the Dancer Group then having five, and Grupo Agua Lluvia having 13.

The Dancer Group household's Late Preclassic component may be an extension of something that Hendon (1999) observed for the Middle Preclassic. She (1999:114) observed that beginning in the Middle Preclassic there is a visible emphasis on bodily modification and personal adornment and noted that some of this does not seem to have been hierarchically driven. Hendon (1999: 114) also suggests that personal adornment as a means of social differentiation began to emerge in the Middle Preclassic along with architectural variation for household to household differentiation. The sample in this study is from the Late Preclassic, and as such it is clear that differentiation continued to develop further during this period. However, the element of hierarchy, though clearly present, is not as starkly stratified as what can be observed for the Late Classic. The households in this study exemplify the increasing stratification, but also a greater overall economic access in the Late Preclassic compared to the Late Classic to trade goods, an important point for the Dancer Group given its comparatively small size. This suggests that Late Preclassic households may have been able to negotiate economically more directly. It may have also been a similar case with obsidian, but there is not as clear a correlation of the evidence since no Preclassic obsidian workshop deposits have been found in northern Belize.

As for the Late Classic in relation to marine shell, greenstone, mineral, and other marine artifacts at these three Maya households, most of them are still personal ornaments. While personal ornaments continue to be used in most Maya households, there seem to be greater limits to their access. Again, this may indicate a stronger centralized trade network or conversely it could indicate a lesser emphasis on personal ornaments or both. It may well be that many personal ornaments in the Late Classic were made of perishable material for the everyday purpose if access to marine and greenstone elements was more difficult. Given Late Classic imagery from sites like Yaxchilan (Tate 1992) personal adornment was still important at least with regards to the ritual and historic events these monuments celebrate. I will address this issue again (below) in relation to identity formation in child socialization.

Finally, the last artifactual evidence for non-local economic relationships is visible specifically in the ceramic assemblage at the Pak'il Nah household. As mentioned, a specific deposit of ceramics found in possible storage or provisional discard context. The ceramics in this deposit are of the same forms and types as the other ceramics found in the household and the area in general however Sullivan (2003; Appendix B) noted that the pastes were different. The pastes actually resemble pastes in the ceramics found in the Irish Creek Marsh area located near the site of Sierra de Agua and an agricultural ditched field system (Baker 2003). Sierra de Agua is located ca. 30 km south to southeast of Pak'il Nah below the Booth's River Escarpment (Figure 1.2). This is not to say that these ceramics are the only trade wares at any of the households as no clay sourcing study has yet been performed. They are the only known ceramics so far traded into the area. It is also of some importance that Pak'il Nah and the Sierra de Agua fields are not in immediate proximity. It implies some social significance between these groups as is interestingly visible in the Pak'il Nah household.

Politics and Communities

The three households presented in this work appear to have two primary organizing forces at the community level. This is partially related to their spatial separation from each other (Figure 3.1). In other words, two of the households (Agua Lluvia and the Dancer Group) are within 200 m of each other while the third (Pak'il Nah) is as much as 3 km away from the other two and on the opposite side of the Dos Hombres center in a different environmental subzone. Some of the differences seen between these households may have been related to different community affiliations. The community affiliations themselves existed at different scales. One alliance was between Pak'il Nah and the relatively large site of Dos Hombres. The other organizing factor was another community that the Dancer Group and Agua Lluvia were likely members that may have been much more removed from the Dos Hombres political influence. That is not to say though that there was no relationship between the escarpment community and Dos Hombres. Certainly they had some relationship in the broader community social structure.

Political Ties

There are several elements at the Pak'il Nah household that I believe demonstrate its connectedness to the Dos Hombres social and political sphere. All of them have been discussed above or in Chapter 3 as well. First the architecture, Structure 1 clearly had a vaulted ceiling which is unusual for a household in this area. The same structure, even more incriminating, was terminated. The ritual termination of a structure is usually reserved for structures in site centers, some of which are domestic, but elite certainly (Freidel et al 1998, Garber et al 1998, Mock 1998, Walker 1998). Along with architecture and ritual termination, there are ceramic correlates seen in the hieroglyphic sherds, and tradeware.

Ritual termination of Structure 1 was evidenced by the deconstruction of the upper portion of the room, ritual burning inside the room, ochre spread near the ritual hearth, and the sealing of the entranceway with cement. The timing of this event so far is dated by ceramic assessment, though radiocarbon dating will soon be carried out. Ceramics indicate that the termination took place in the Terminal Classic. This termination is contemporaneous to a ritual termination of the acropolis at the site center of Dos Hombres, the C-Group and subsequent abandonment of the site (Houk 1996:236). The termination is primarily marked in the acropolis by a sealing of the entranceway to it (Houk 1996:236).

Ritual termination of structures marks the end of the life or use life of that structure (see Mock 1998). There is one distinction that can also be made in terms of termination, which is a differentiation between a ritual event, and the termination of a single artifact or item (Trachman 1999b). The difference is important because sometimes an item, usually portable, can be terminated just before discard. That may, however, be a more discrete sort of event. For example, a stone tool or vessel might be smashed marking the ending of its use life just before discard. What is exhibited at Pak'il Nah is both the termination of the structure and a ritual event. Structure 1's life ended marked with the ritual and the dismantling or destruction of it.

Pak'il Nah and Dos Hombres also have some ceramics in common, specifically the hieroglyphic sherds. As already mentioned, these are the only two painted hieroglyphic ceramics of their kind found to date in or around Dos Hombres. The styles and timing are very similar. Other ceramics of interest at Pak'il Nah are the tradewares. The clays or ceramics imported from the Irish Creek Marsh area are not matched at the Dos Hombres site center, but they do indicate that there was an ability held at Pak'il Nah to extend its economic interaction further distances. The ability to do so, does not necessarily fit with a rigid view of Pak'il Nah's attachment to the Dos Hombres center, but it may be an indication that there was a sort of "rural elite" presence in the area east of Dos Hombres that was certainly allied or supervised by the central political authority. The idea of a rural elite class or rural complexity has been proposed in the Belize Valley by Iannone and Connell (2003; see also Bullard 1960). This perspective was developed by them (Iannone and Connell 2003) in order to explain the diversity of site form in supposed rural areas creating a much more complex model of social organization to mirror the complexity of forms seen in settlement across the area.

Another element to consider is the environmental setting between Dos Hombres and Pak'il Nah. Pak'il Nah is situated 1.2 km east of Dos Hombres, but almost no settlement has been documented in that 1.2 km of space between them (Figure 3.1). The open space between the center and this household is known as an Escoba Bajo. As such it is a very low lying area that becomes very wet during the rainy season. There is a smaller bajo similarly on the west side of Dos Hombres between the B-4 Group and Group D, which sits atop a hill above it. It is highly possible that both of these bajos were used for agriculture during the Late to Terminal Classic. If the eastern bajo was an agricultural field it was likely managed by Dos Hombres or its controlling influence. The residents at Pak'il Nah may also have had some role in those endeavors which might help to explain the alliance.

For whatever reason, the considerable expense for the masonry and vaulted architecture seen in Structure 1 along with its termination, the overall size of the group, the presence of tradewares, and hieroglyphic sherds are all elements that Pak'il Nah has in common with Dos Hombres. They are also elements not seen in any of the other household excavations in this study or in the transect areas. I interpret this to indicate a social, political, and economic affiliation with the highly organized site of Dos Hombres.

One interesting observation for this politically charged household, and arguably a higher status one, is that no evidence for gender ideology or age status was found there. Certainly identity was expressed symbolically and ritually with regards to its association with the Dos Hombres ruling group. It seems, however, that the desire or freedom to express gendered beliefs and identity, or age related symbolism was not as visible in this household.

Escarpment Community and Communal Labor

Community ties for the Dancer Group and Grupo Agua Lluvia are just as distinct west of Dos Hombres. Both of these households are a part of a different community organization up on the escarpment from that seen at Dos Hombres, 2 km away from these two households, or even 3 km away at Pak'il Nah. There are a number of reasons to believe that these households are a part of another community. First, there is an enormous amount of settlement along this portion of the escarpment as has been documented for Transect A (Lohse 2001) and the area adjacent and south of Block 7 (Walling et al 2005; Walling et al 2006). A distinct clustering of settlement is evident on the escarpment along with a number of physical features that also connect the settlement into a cohesive group.

Many of the landscape features that modify the escarpment face are not distinguishable or clearly separated from one household to another. Examples of these features are subsurface walls, some of the residential terracing and at least one water management feature. A bedrock canal, estimated at roughly a meter in width, that is an obvious intentional modification, hugs the face of the escarpment horizontally near the Dancer Group household. It runs perpendicular to the slope for a distance of approximately 25–30 m spanning the distance between three households ending just adjacent to the southern limits of the Dancer Group household. I believe this feature served two purposes, both to divert sheet wash down the face of the slope away from the residences there, and consequently, it also would catch and store water during the rainy season.

Another example of features that connect households to each other in this area is visible in some sections of residential terracing. The residential terrace that the Dancer Group is resting on is connected to two other households south of it. Both of these features are singular examples of a more systematic patterning of cooperatively built landscapes. Not only do they require cooperative labor, but they also require some sort of management for long term maintenance.

There seems to be two levels of management in effect during the Late to Terminal Classic. First, the reservoir at Grupo Agua Lluvia is clearly in domestic context. The residential location suggests that the household itself managed the resource reflecting decentralized domestic control (Weiss-Krejci and Sabbas 2002; see also Scarborough 1998). This same level of management is expected in the landscape features within the boundaries of this household as well. The second level of management along the escarpment settlement is reflected in communal or contiguous water and landscape features that connect households. Here cooperative labor is likely responsible for both the creation of and maintenance of them. As a result there is likely a combination of communally directed management and household directed management both of which are outside the control of a centralized political authority.

Finally, Walling et al (2005; also Walling et al 2006), have reported some important finds for the settlement adjacent to Block 5, less than 300 m south. The settlement there is very similarly structured with regards to ground and subsurface features (Walling et al 2006). In addition to this a very important discovery has been made there, that of a ballcourt (Walling et al 2005; Walling et al 2006). That single architectural feature is a symbolic indication that a community identity was felt and ritualized on the escarpment face.

Socially Reproducing Identity

Ritual and symbolism were clearly significant household practices and important aspects of life around the household. Beginnings and endings are important occasions for ritual in the Maya world, but various landmarks or milestone along the way are also marked with ritual. These important events are related to life, the lifecycle, and death. For the ancient Maya ritual marks of time are made or honored for people and for things. People, buildings, objects, and events all have a lifecycle and corresponding ritual events. Symbolic communication is often uninterrupted, especially when embodied in objects. Therefore, by nature, it is a part of daily life. Arguably, whether or not ritual took place on a daily basis, it was also very meaningful aspect of household everyday life and was based in beliefs held and lived daily. Ritual practice, even as a formal exercise, did not likely exist outside of the framework of daily life. Ritual was planned for, anticipated, and repeated within the household.

Symbolic expression was clearly an important means of identity formation and social reproduction. A vast body of imagery has emphasized this point in the Maya world. Imagery is often considered to be somewhat lacking at the household level. In this way households and their members have often been considered homogenous (Yaeger and Robin 2004). I hope to demonstrate in that both ritual and symbolic expression are important practices in daily life at the household level. They are practices that serve as both a means of expressing identity and ideology, while simultaneously reinforcing or reproducing identity, ideology, daily practice, and society for households in the settlement areas addressed in this northwestern Belize study. The remainder of this chapter will focus on social reproduction as reflected in ritual and symbolic expression.

Symbol of Gender, Hallmark of Childhood

Material culture often is/was imbued with cultural information and meaning, as was discussed in Chapter 2. As a result material objects can be instrumental in reproducing society by reinforcing tradition from generation to generation (Sørensen 2000:9). The materials that symbolically express these various ideologies are found at diverse scales of measure from buildings and monuments to much more personal and intimate portable items. Personal adornment is a very evocative way to express identity and reproduce ideology (Dietler and Herbich 1998:242; Joyce 1999, 2000a, 2000b; Sørensen 2000).

The Dancer Household. The mortuary deposits at the Dancer Group household held three different episodes of multiple burials (see Chapter 4). These burials along with their offerings illustrate something of the people who lived there during the Late Preclassic and again in the Late Classic. The individuals in these burials were of various ages and included children. Late Preclassic Burial Episode 3 had the remains of three children, from two to five years of age at the time of their death, along with one child aged five to seven years (Saul and Saul 2003; Appendix D). Two adults were also interred in Burial Episode 3, both young adults of unknown sex between the ages of 20–34 years (Saul and Saul 2003; Appendix D). Included in the grave goods were several shell beads, tinklers, and a *Spondylus* bivalve pendant (see Figures 4.24, 4.25, 4.26 and 4.27).

Spondylus bivalve pendants have also been found in the Preclassic at Cuello in two child burials, ages two to four and eight to nine, located near the pelvis in each case (Robin 1989; Robin and Hammond 1991). A Terminal Late Preclassic child burial at Colha also contained a *Spondylus* bivalve pendant. They have also been found with seven buried children in the Terminal Classic at the site of Yaxuna (Ardren 2002; Bennett 1992, 1993, 1994). In at least four of these the *Spondylus* bivalve pendants were clearly documented at the pelvis, with a possible fifth (Bennett 1992, 1993, 1994). These five children fell into the cumulative age range of four to seven years.

The sample is small and seemingly insignificant, however many other child burials may have been found with this same pattern but have not been reported in such a way as to be able to identify them (Trachman and Valdez 2006). Welsh (1988:247) compiled burial data for a number of lowland sites and submitted that in many cases the recording of the number and type of artifacts with the burials "should only be considered as approximate for some burials because the precise number…was not always provided by the original excavators." Adding to the complicated issue is the fact that child bones do not preserve well in the tropical environment. Often sexing child remains is also difficult, especially under the age of 12 since none of the bony attributes related to sexual difference have not yet developed.

Ethnohistory of Maya Child Gender. There is also ethnohistoric documentation supporting the practice of female children wearing a *Spondylus* bivalve pendant as a symbol of their gender. Landa (Tozzer 1941:159) documented a variety of life cycle rituals for the Maya of Yucatan, including the placement of gendered symbols on children which were later removed during the *caput sihil* or "baptism" ceremony.

> They had then this custom in preparing for baptism: the Indian women brought up the children till they were three years old, and in the case of the little boys they used always to put on their heads a little white bead, stuck to the hair on the top of the head. And the little girls wore a thin cord about their loins, very low, and to this was fastened a small shell which hung just over the sexual parts; and it was thought a sin and a very dishonorable thing to take off these two things from the little girls before their baptism, which was always administered between the ages of three and twelve, and they were never married before being baptized [Tozzer 1941:102].

The actual age(s) that the gender specific ornaments were initially placed on children is not clear from this passage, but it seems it may have been at or near three years of age. The lack of clarity comes from Landa's statement that once these symbolic adornments were placed on children they were not removed until the "baptism" ceremony, or known by the Maya to be the *caput sihil*. Literally translated *caput sihil* means "to be born anew" (Tozzer 1941:102), which Landa documents to have taken place between the ages of three and 12. The earliest of the age range in his text is the same age at which he implies the age to be for placing the items.

One of Tozzer's (1941) footnotes also acknowledges that there was some discrepancy Landa's account in regards to the age this ceremony would have taken place. While Landa reported that it took place between the ages of three and 12, the *Relación* of Motul suggests that the *caput sihil* may have taken place at the ages of 14 to 15 (Tozzer 1941:102). Other Maya researchers have interpreted the various accounts to mean that children received their gender symbolic items at a very early age possibly at an earlier ceremony near the age of three and removed at the *caput sihil* ceremony around the age of 12 (see Sharer 1994:482; 1996:118).

Landa's writings are problematic yet they are one of the few sources that discussed contact period Maya children, symbolism, and life cycle rituals. Tozzer's translation of Diego de Landa's memoirs also cannot be taken as unproblematic or unbiased in nature (Restall and Chuchiak 2002).

Sex, Gender, and Material Culture. The recent discovery of the San Bartolo murals may shed further light on this topic (Saturno et al 2006). Taube et al (2004) recently interpreted the Preclassic murals found at San Bartolo to possibly be one of the earliest representations of the Maya creation myth in which the north wall mural depicts the maize god in his resurrection coming out of the flower mountain accompanied by several young women. One of the young women accompanying the maize god depicted on the north wall also appears to be wearing a cord or belt around her waist with a red shell hanging in the front of her pelvis (Figure 6.6). She may be a young pubescent or prepubescent female, or she could be performing and costumed as one. In terms of symbolic expression in the mural, the shell she is wearing may not only be a symbol of her gender, but also her age.

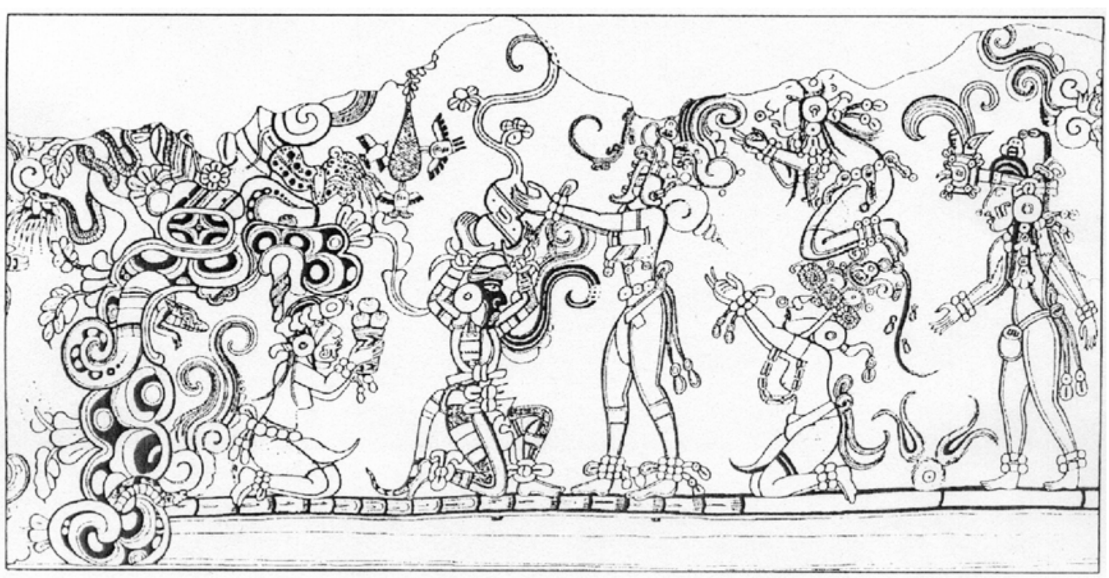

Figure 6.6: North wall panel of San Bartolo murals (after Taube et al 2004, Figure 3), note the female on the far right with shell.

Determining the sex of child skeletal material is very difficult, especially in the poor conditions found in the tropical forests of the Maya lowlands. There is also the problematic assumption that sex equals gender. Given the possibility that the ancient

Maya used material culture as a media of identity construction then it may be possible to reveal the gender of children in mortuary contexts using symbols like these. I was unfortunately not able to address the male gender symbols reported by Landa. The symbols themselves make it difficult since "little white [beads]" as Landa (Tozzer 1941:102) described, are ubiquitous in Maya burials, come numerous different forms found all around the body, in the mouth, and near the head, neck, arms, and feet. These could indicate several possibilities for costume elements related to both children and adults.

Even so, the Dancer Household mortuary remains come to life when viewed in light of these lines of evidence from the ethnohistoric record, comparative archaeological data, and the San Bartolo murals. Since the long enduring continuity suggested by the time periods represented is very difficult to confirm, I do not suggest that an indiscriminate continuity existed from the ethnohistoric record back to the Late Preclassic. Instead, I propose a measure of continuity with this specific practice, the symbolic gender costume ornaments for children. The practice of engendering children with material culture symbols took place in the Late Preclassic. If the Dancer Group and Cuello mortuary data combined with San Bartolo murals suggest also that this practice of socializing gendered identity/ies was not restricted by socio-economic position and was visible at multiple scales of society. In addition, it may also indicate that the practice may have originated in the Preclassic in the Maya heartland Petén forest of the central lowlands.

Symbolic Landscapes

Ancient Maya feminine symbolism often includes watery symbols. The occurrence of *Spondylus* bivalve pendants in female child burials is an important example. Ardren (2002) suggested that this may represent an association of the power of the primordial sea with the power of female reproduction. Yaxchilan Lintel 26 (Figure 6.7; Tate 1992:71) depicts a woman with patterned repetitive frog imagery on her clothing. Frog imagery has also been observed as graffiti, etched on vessels and walls. Many of these images have an outlined open space in the abdomen of the frog, and some have a pattern or object filling the space in the abdomen. Entire vessels have also been found in the shape of a frog with the open container positioned at the frog's abdomen. This suggests that frogs as a water related symbol may be associated with female fertility such that the open space represents a womb.

Along with these, water lily headdresses are also common in the Yaxchilan imagery (Tate 1992). Depicted on both men and women, these headdresses have been associated with rulership and deity alliance. An image from Tikal Temple III, Lintel 2 (Jones and Satterthwaite 1982; Figure 72) may also be an example of the association of fertility with water symbols. The image depicts a pregnant actor (or in the performance of pregnancy), as suggested by the enlarged abdomen, wearing a jaguar costume and a belt of shell tinklers.

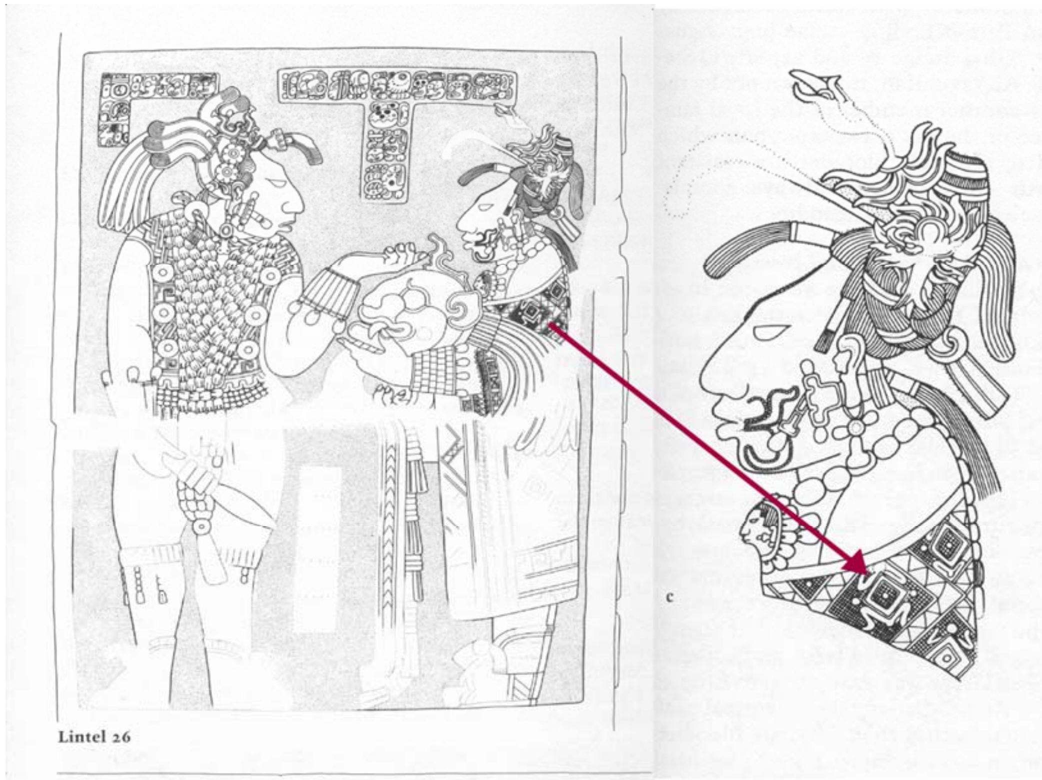

Figure 6.7: Yaxchilan Lintel 26 (after Tate 1992; left Figure 99; right Figure 30).

Symbolic Identity Expression at Agua Lluvia. As addressed in Chapter 5, Structure 3 at Grupo Agua Lluvia was built as the first episode of construction, during the Tepeu 1-2 phase. Ceramic data suggest that the reservoir was built slightly later, in the second phase of construction at Agua Lluvia, during Tepeu 2-3, but contemporaneous to the female burial being placed under the floor of Structure 3. She was placed in a cyst, next to the earlier dedication cache of water jars in the entry. The round domestic water reservoir nearby also had a dedication cache comprised of a Tepeu 2-3 dish embedded in the plaster lining in its “entryway.”

I am explicitly correlating the reservoir and the female burial, also arguably an elder burial, with the round reservoir in a symbolic expression of feminine ideology. This interpretation stems from the notion that all members and scales of society participate in the sharing of ideology in a very active way. In this case gendered ideology is expressed in the domestic sphere in ways that are as palpable as those expressions in civic ceremonial and elite contexts. The primary difference is that the media of expression is household space or the domestic landscape as opposed to the sculptor's stone.

Harrison-Buck and McAnany (2006) have interpreted the Late Classic round structures in the Sibun Valley, Belize to be shrines that are architecturally related to the stylistic modes found in the northern Yucatan. My suggestion about the symbolic significance of the round structure at Agua Lluvia, in conjunction with the reservoir and the use of the landscape to express gender ideology, does not preclude the possibility of shrine use for this or any other contemporaneous round structures. On the contrary, the nature of the structure evokes a similar impression, although the round structures found in the Sibun are chronologically slightly later than that of Agua Lluvia. As such it may of a different stylistic derivation than the Sibun examples.

Nonetheless, once the burial was placed under the floor in the later part of the structure's life, it may have then become a shrine such that the function of the structure changed over time. This also suggests that the woman in the burial was an important person in this household, associated with water symbolism, and possibly venerated. She is placed in the cist and contained there with a capstone. Her cist is associated with the dedicatory cache of water jars, inside a round structure. The round structure and the round reservoir both contain water and the cist contains her body. The symbolism of water containment is unavoidable. It is also embodied within the "womb" (in both cache and burial) of Structure 3, located near the reservoir, a place of water collection and containment.

The symbolic landscape suggested by this spatial and symbolic arrangement is not meant to suggest a pattern, but simply an example of symbolic expression of identity at the household. The expression of gendered ideology can take many forms. At Agua Lluvia it may have been expressed with water symbolism in the domestic space, using the media of the household landscape in the same way as one would use the sculptor's stone.

Concluding Thoughts

Each of these northwest Belize Maya households has a clear and direct connectedness materially, symbolically, and ritually to the larger Maya universe. Each of these households, however, expresses that connection somewhat differently. There is diversity in architecture, portable material culture, domestic activity, and both mortuary and non-mortuary ritual. Hence, each household is definitely a part of the larger Maya universe, but experiences flexibility in the way it participates in it.

Some of the multiplicity can be attributed to their existence in two different environmental subzones, differential positioning and access to resources, and political or community organization. These variables are only a part of the solution to the disparate identity seen among the three households. I believe there is yet another factor, a mechanism that allows or legitimizes the fluidity of the expression of Maya-ness at the household level.

Households reproduce society and thereby also reproduce ideology. I propose that the ability to express cultural identity materially and symbolically differentially may be an ideological concept that both originates and is legitimized within the household. This sort of household born ideology would allow them to practice or express Maya identity more fluidly and pragmatically. Household needs would have been relieved based on economic and social status, identity, and available resources. These same factors also influence how people might have participated in Maya social ideology.

There are three main points to this idea. First, it allows for fluid participation from household to household as evidenced in the ancient Maya households of northwestern Belize. Second, it also allows for fluid or changing cultural expression within and between households through time, both within a given generation and from generation to generation. Finally, since it is an ideological belief conceived at the household which also exists in the realm of Maya culture, it could be viewed as a form of *household-based ideology*. This notion provides for a more complex perception of Maya social organization. It reflects not simply a top-down or bottom-up distribution of power, but rather, an a ideological relationship between scales of society based on the diverse needs of households and their members and the socially reproductive needs of that society.

Appendices

Formal Tool Analysis

Analysis Date(s): 8/2/02 - 1/19/04 **Analyst: R. Trachman**

	Provenience				Measurements							Raw Material			
Ref #	**Op**	**Subop**	**Lot**	**Artifact**	**L(mm)**	**W(mm)**	**T(mm)**	**Wt(g)**	**Breakage**	**Form**	**Stage**	**Mat**	**Grain**	**Color**	**Edge ∠**
145	26	AC	1	Misc Reworked Biface	36.52	47.78	21.50	25.28	8	4	4	2	1	tan	n/a
156	26	AI	7	Bifacial Celt	71.41	63.16	26.20	126.54	2	2	4	2	1-3	gr-brnish	45-86
124	26	B	4	Bifacial Celt	94.73	55.03	27.59	127.10	1	1	4	2	1-2	gr-tan	66-75
270	26	B	6	Unknown Biface Type	24.39	47.18	16.62	9.99	9	2	4	2	1	tan-grey	49-65
271	26	B	6	Bifacial Celt	70.34	49.72	23.06	93.30	9/2	3	4	2	3-4	prpl-grey	n/a
272	26	B	6	Oval Biface	55.53	60.93	21.02	90.91	2/2	3	4	2	2-3	gr,pnk-tan	n/a
274	26	F	4	Unknown Biface Type	27.76	52.14	16.66	16.53	7	2	4	2	2	tan-honey	61-73
275	26	F	8	Misc Reworked Biface	53.34	46.30	18.17	40.04	2/9	3	4	2	3-4	tan-honey	66
276	26	F	8	Bifacial Celt	59.56	61.59	21.45	78.79	2/9	2	4	2	3-4	tan-pink	51-59
277	26	F	13	Misc Reworked Biface	25.38	37.78	16.39	16.99	2/2	2	4	2	3	tan	54-60
128	26	I	6	Bifacial Celt	64.63	48.44	20.31	71.62	8	2	4	2	2-3	white	n/a
135	26	I	7	GUB-type 1/Graver	51.1	57.28	49.64	51.43	2?/8	1	4	2	3-4	yellowish	42-74
126	26	I	7	Bifacial Celt	50.01	41.94	19.47	28.18	2	4	4	3	1	tan	n/a
127	26	I	7	Bifacial Celt	50.18	47.91	23.67	44.15	7	4	4	2	2-3	gr-white	n/a
133	26	I	7	Unknown Biface Type	62.22	35.98	23.75	33.65	3/3	7	4	2	3	gr-tan	n/a
136	26	N	3	Misc Reworked Biface	55.26	51.33	24.01	68.32	5	2	4	2	2-3	grey	58-73
137	26	O	4	Bifacial Celt	101.45	75.00	28.27	161.64	7	4	4	2	0-2	tan-crm	n/a
139	26	O	6	Misc Reworked Biface	57.15	54.30	32.87	57.09	7/7	7	4	3	1	tanish org	n/a
140	26	O	6	Bifacial Celt	53.29	61.46	24.76	88.14	3/8	3	4	2	2-3	prpl-grey	n/a
141	26	O	6	Misc Reworked Biface	88.47	60.34	29.27	156.10	1	1	4	2	2-3	pnk,gr-tan	55-71
142	26	O	6	Small Bi-Convex Biface	41.82	26.79	11.66	11.75	2	6	4	2	4	yell-pnk,org	n/a
	28	C	2	Misc Reworked Biface	61.4	30.4	30.4	27.4	5	4	4	2	3	tan	
269	28	D	2	Misc Reworked Biface	33.20	30.10	16.20	16.30	9/5	3	4	2	3	pink-gr	n/a
279	28	D	3	Misc Reworked Biface	48.17	36.27	22.09	32.63	9/2	3	4	2	2	gr-white	n/a
284	28	D	4	Bifacial Celt	73.92	49.90	25.56	105.67	2	2	4	2	2	tan-grey	69-84
287	28	D	4	Misc Reworked Biface	38.66	31.99	16.75	16.92	3	4	4	2	3	tan-pink	n/a
294	28	E	2	Bifacial Celt	56.72	50.09	21.11	54.96	7	4	4	2	2	tan-grey	n/a
157	28	G	4	Unknown Biface Type	120.89	49.23	23.36	154.43	1	1	4	2	0-2	tan	44-60
295	28	G	4	Bifacial Celt	69.86	53.31	28.02	119.62	2	2	4	3	1	tan	56-72
296	28	H	3	Bifacial Celt	37.53	47.98	21.70	35.74	2/8	3	4	2	2	tan	n/a
297	28	H	3	Misc Reworked Biface	87.73	48.71	22.85	103.19	1	1	4	2	3	gr w/blk spts	56-71
299	28	H	3	Misc Reworked Biface	30.19	25.83	17.89	11.53	7	4	4	2	2-3	pink	n/a
304	28	I	1	Small Bi-convex Biface	27.97	26.44	13.70	9.80	2/9	6	4	2	3-4	tan-pink	n/a
302	28	I	1	Bifacial Celt	64.66	58.19	24.24	105.95	2/8	3	4	2	2-3	tan-grey	n/a
305	28	I	4	GUB- Type II	74.59	57.70	33.14	189.21	2/2	3	4	2	2	tan-white	n/a
161	28	I	5	Bifacial Celt	111.32	67.51	24.61	175.42	1	1	4	2	2-3	gr-tan	60-70

	Provenience				Measurements							Raw Material			
Ref #	Op	Subop	Lot	Artifact	L(mm)	W(mm)	T(mm)	Wt(g)	Breakage	Form	Stage	Mat	Grain	Color	Edge ∢
162	28	I	5	GUB- Type I	127.23	67.48	37.71	260.90	1	1	4	2	1-2	banded tans	65-77
160	28	J	2	GUB- Type I	63.26	63.16	49.54	187.20	6	2	4	2	0-2	tan	85-105
307	28	J	2	GUB- Type II	70.05	58.64	27.97	120.76	2	2	4	2	2	tan-grey	61-82
306	28	J	2	Misc Reworked Biface	49.37	26.80	19.97	19.33	7	4	4	2	3	tan	n/a
308	28	J	3	Bifacial Celt	37.07	41.72	18.61	27.89	2	4	4	2	2-3	tan-pink	n/a
312	28	K	1	Misc Reworked Biface	32.08	23.00	12.79	9.70	2	4	4	2	4	tan	n/a
313	28	K	1	Misc Reworked Biface	51.39	33.54	16.19	29.57	2/4	3	4	2	4	tan-grey	n/a
171	28	L	2	Projectile Point	58.47	33.70	19.14	30.76	1	1	4	2	3-4	tan	64-80
172	28	L	2	Misc Reworked Biface	77.47	28.64	15.77	35.08	1	1	4	2	2	tan	
314	28	L	2	Misc Reworked Biface	57.83	34.42	26.08	56.24	2/4	3	4	2	2-3	tan-yellow	n/a
174	28	M	1	Bifacial Celt	106.30	57.43	31.15	158.22	1	1	4	2	0-1	gr-crm	58-75
178	28	M	2	GUB- Type II	58.94	52.71	42.53	127.11	5	4	3	2	2	grey	85-93
183	28	M	2	Misc Reworked Biface	61.38	31.62	18.22	31.99	1	1	4	2	3	cream	66-74
324	28	M	2	Misc Reworked Biface	55.85	46.03	19.78	57.52	2/8	3	4	2	3	tan	n/a
325	28	M	2	Misc Reworked Biface	23.04	39.01	16.48	8.47	2	4	4	2	3	crm-wht	n/a
326	28	M	2	Misc Reworked Biface	53.47	37.92	17.23	36.21	2	4	4	2	3-4	pnk mottled	n/a
327	28	M	2	Misc Reworked Biface	39.32	37.13	19.17	24.73	2	4	4	2	1	tan-pink	n/a
328	28	N	1	Misc Reworked Biface	32.64	41.83	26.69	42.99	all 2	7	4	2	2-3	crm-wht	n/a
332	28	N	2	Small Bi-convex Biface	28.66	24.61	19.95	10.68	2/8	3	4	2	3	crm-wht	n/a
331	28	N	2	Bifacial Celt	43.02	45.59	20.34	35.05	2	4	4	2	2-3	gr-tan	n/a
330	28	N	2	GUB- Type II	99.41	54.52	29.61	187.03	8	4	4	2	1	grey	n/a
335	28	N	3	Misc Reworked Biface	73.13	36.04	26.14	63.83	8?	4	4	2	3	pink-crm	n/a
341	28	O	10	Misc Reworked Biface	40.62	28.79	20.33	22.25	2	4	4	2	2	tan-yellow	n/a
185	28	O	14	Unknown Biface Type	30.95	24.37	12.74	9.32	2	4	4	2	2	yellowish	n/a
197	28	P	3	Bifacial Celt	77.86	58.24	23.12	119.42	8	4	4	2	2	cream	75-90
196	28	P	3	Misc Reworked Biface	65.50	46.31	23.78	84.96	2/8	3	4	2	2	tan	n/a
199	28	P	4	Bifacial Celt	32.25	46.32	18.29	25.92	8	4	4	2	3	tan	n/a
206	28	P	4	GUB- Type II	54.77	37.98	33.67	60.55	2/2	7	3	2	2	gr-crm	70-78
198	28	P	4	Misc Reworked Biface	69.54	41.65	18.92	64.75	1	1	4	2	2-3	gr-crm	59-82
202	28	P	4	Misc Reworked Biface	41.47	55.52	24.63	61.32	7	2	4	2	2-3	pink	69-89
205	28	P	4	Misc Reworked Biface	40.52	36.03	16.95	23.66	2/2	3	3?	2	2-3	gr-tan	n/a
212	28	Q	1	GUB- Type II	84.65	65.16	46.23	212.60	8	4	4	2	2-3	tan	n/a
214	28	Q	3	Misc Reworked Biface	68.96	48.28	27.78	74.54	8	2	4	2	1-2	pink	66-85
221	28	R	1	GUB- Type I	67.51	50.89	46.33	107.80	8/8	8	4	2	1-2	yell,org-pnk	58-71
224	28	R	1	Misc Reworked Biface	25.72	43.07	24.99	33.98	8/8	6	5	2	2	grey	n/a
226	28	V	1	Bifacial Celt	56.28	58.23	29.27	107.96	2	4	4	3	1	brn-tan	n/a
346	28	W	4	Bifacial Celt	68.21	47.85	29.30	114.88	2/2	3	4	6?	1	org banded	n/a
230	28	W	4	Misc Reworked Biface	73.33	53.94	30.00	124.40	3	4	4	2	2-3	tan	n/a

	Provenience				Measurements							Raw Material			
Ref #	Op	Subop	Lot	Artifact	L(mm)	W(mm)	T(mm)	Wt(g)	Breakage	Form	Stage	Mat	Grain	Color	Edge ∢
347	28	W	4	Misc Reworked Biface	29.74	44.84	19.90	16.56	9	4	4	2	3	gr-tan	n/a
348	28	W	4	Misc Reworked Biface	25.82	44.82	19.08	15.20	2	4	4	2	4	pink	n/a
233	28	W	6	Bifacial Celt	113.80	53.37	30.52	165.44	1	1	4	2	1-3	gr-tan	61-78
349	28	W	6	Bifacial Celt	47.53	36.72	22.27	34.03	2/5	3	4	2	2	tan-crm	n/a
351	28	W	6	Misc Reworked Biface	49.83	31.86	21.79	26.71	3	4	4	2	3	tan	n/a
355	28	W	7	Oval Biface	83.92	43.81	21.29	71.37	7	4	4	2	3	tan-lt brn	n/a
354	28	W	7	Bifacial Celt	43.37	44.66	20.51	48.36	2	2	4	2	2	gr-tan	69-81
356	28	X	5	Small Bi-convex Biface	42.11	29.92	14.15	18.43	2/8	3	4	2	4	crm,yell bnds	48-55
357	28	X	5	Bifacial Celt	53.42	56.92	22.80	77.86	5	2	4	2	2-3	crm-tan	50-64
358	28	X	5	Bifacial Celt	53.49	47.42	24.96	71.54	2	2	4	2	2	cream	53-71
359	28	X	5	Misc Reworked Biface	32.78	13.59	16.29	7.14	2/9/2	7	4	2	2	pink	n/a
253	28	X	6	Unknown Biface Type	20.22	39.97	19.00	8.02	9	2	4	2	3	white	59-71
250	28	X	6	Bifacial Celt	101.05	59.74	23.01	155.72	1	1	4	2	2-3	tan-pink	50-73
368	28	X	6	Bifacial Celt	75.15	62.84	25.04	131.73	2	2	4	2	1	tan	46-59
370	28	X	6	GUB- Type II	67.60	23.50	29.21	41.89	2/8	7	4	2	2	cream	n/a
369	28	X	6	GUB- Type I	54.59	51.27	31.17	73.38	7/3	3	4	2	2-3	tan	n/a
371	28	X	6	GUB- Type I	61.81	57.13	29.64	76.37	8	6	4	2	2	tan	n/a
252	28	X	6	GUB- Type II	74.33	49.11	34.58	110.51	2	4	4	2	1-2	tan	n/a
251	28	X	6	Misc Reworked Biface	96.15	50.30	33.12	138.15	1	1	4	2	1-2	yellowish	66-82
372	28	X	6	Misc Reworked Biface	32.10	40.46	17.34	14.08	8	6	4	2	4	yellowish	n/a
373	28	X	6	Misc Reworked Biface	56.88	40.68	19.34	49.73	1	1	4	2	3	cream	59-71
264	28	Y	2	Bifacial Celt	47.43	60.14	21.98	63.02	2	2	4	2	2	tan-yellow	58-74
266	28	Y	3	Bifacial Celt	79.53	52.23	32.29	160.65	2/8	3	4	2	1-2	cream	n/a
50	29	AB	1	Bifacial Celt	66.87	54.67	26.31	104.97	2	2	4	2	1	gr-yell	69-76
54	29	AC	1	Misc Reworked Biface	40.22	54.10	18.33	43.25	2	2	4	2	1	gr-tan	53-72
53	29	AC	1	Thin Biface	22.24	28.70	9.47	6.23	2/2	3	4	2	4	orange	n/a
55	29	AD	1	Unknown Biface Type	37.62	33.73	17.87	22.90	7	4	4	2	1	orange	n/a
60	29	AI	1	Misc Reworked Biface, Perforator	31.98	34.09	17.82	18.73	2	4	4	2	4	pnk-org	n/a
61	29	AI	1	Unknown Biface Type	12.94	21.30	9.34	2.25	2	4	4	2	3	cream	n/a
64	29	AJ	4	Bifacial Celt	38.49	31.72	17.14	17.89	2	4	4	2	3	gr brn-crm	n/a
69	29	AK	3	GUB- Type I	40.71	50.70	25.06	40.73	2	4	4	2	2	pink-tan	n/a
71	29	AL	2	Unknown Biface Type	44.62	51.34	18.12	54.04	9	3	4	2	4	brn-crm	n/a
72	29	AL	3	Unknown Biface Type	45.74	12.62	23.27	8.90	8	7?	2-3	2	3	gr-crm	n/a
73	29	AM	1	Bifacial Celt	62.74	53.22	23.15	70.50	1	1	4	2	4	reddish brn	66-76
74	29	AN	1	Unknown Biface Type	46.61	37.30	20.13	30.59	2	4	4	2	2-3	pnk-yell	n/a
83	29	AP	1	Bifacial Celt	46.31	29.99	22.46	25.08	2	4	4	2	1	orange	n/a
86	29	AT	1	Small Bi-convex Biface	50.33	25.56	14.90	15.87	8	2	4	2	1	org-tan	n/a
90	29	AW	2	Misc Reworked Biface	26.99	48.40	20.37	24.01	3	2	4	2	2	tan	63-76

	Provenience				Measurements							Raw Material			
Ref #	Op	Subop	Lot	Artifact	L(mm)	W(mm)	T(mm)	Wt(g)	Breakage	Form	Stage	Mat	Grain	Color	Edge ∢
89	29	AW	2	Unknown Biface Type	29.56	23.43	16.49	5.93	2	4	4	2	3	yell-tan	n/a
92	29	AX	1	Bifacial Celt	77.63	56.91	26.15	116.08	2	2	4	2	1	tan	66-75
103	29	BP	1	Bifacial Celt	65.02	57.59	30.72	118.24	7	2	4	2	0-2	gr-tan	50-77
104	29	BP	1	Misc Reworked Biface	77.63	45.17	23.42	73.56	2	2	4	2	2	lt prp-tan	66-82
105	29	BP	1	Misc Reworked Biface	63.41	37.81	27.62	57.34	1	1	4	2	2-3	gr-pink	56-82
118	29	BP	3	Bifacial Celt	73.26	57.56	29.26	143.98	8	2	4	2	2	tan	66-76
119	29	BP	3	Bifacial Celt	81.33	64.76	30.45	172.51	2	2	4	2	2	tan-brn	65-81
120	29	BP	3	Bifacial Celt	56.9	55.72	24.12	80.37	2	2	4	2	3	cream	62-73
107	29	BR	1	Misc Reworked Biface	58.13	42.28	22.00	52.55	1	1	4	2	3	pnk-brn	63-68
108	29	BR	1	Unknown Biface Type	40.65	40.65	18.71	49.71	1	1	4	2	3	tan-brn	65-87
109	29	BT	2	GUB- Type I	43.16	35.25	18.50	32.82	2	4	4	2	4	crm-wht	n/a
111	29	BU	1	GUB- Type I	73.08	45.11	29.28	76.37	1	1	4	2	2	yellish org	61-73
112	29	BU	1	Misc Reworked Biface	51.26	42.34	27.07	58.84	2	2	4	2	2-3	pkish org	74-87
110	29	BU	1	Unknown Biface Type	40.58	37.81	28.08	51.98	2/2/2?	7	4	2	0	pink-crm	n/a
113	29	BU	2	GUB- Type II	61.43	47.33	22.20	65.55	2	4	4	2	0-2	red-tan	n/a
115	29	BU	2	Misc Reworked Biface	49.21	41.50	14.67	30.79	1	1	4	2	2-3	white	69-82
114	29	BU	2	Thin Biface	28.76	40.42	18.78	25.69	2/2	3	4	2	2-3	red-tan	n/a
2	29	C	1	Bifacial Celt	74.58	44.91	22.26	69.02	8	1	4	2	3	tan/honey	60-74
267	29	C	7	Misc Reworked Biface	64.12	45.28	34.21	92.32	1	1	4	2	2	gr-tan	74-80
5	29	C	8	Misc Reworked Biface	52.58	44.01	22.93	42.99	8	1	4	2	4	gr-tan	68-81
4	29	C	8	Unknown Biface Type	30.46	32.19	16.83	12.11	2	4	4	2	3	pink-org	n/a
268	29	C	13	Misc Reworked Biface	53.31	52.64	20.23	59.35	8/3	3	4	2	3-4	gr-tan	n/a
13	29	F	4	Bifacial Celt	41.67	30.92	20.36	20.78	7	4	4	2	2	gr-tan	n/a
15	29	F	7	Bifacial Celt	38.87	28.79	15.36	18.81	5	4	4	2	2	pink-gr	n/a
16	29	H	1	GUB- Type II	57.17	40.88	24.31	64.82	2/5	3	4	2	2	crm-tan	n/a
21	29	N	2	Plano-convex, parallel sided	46.76	23.48	17.37	25.42	2/8	2	4	2	4	pink-gr	76
29	29	S	2	Bifacial Celt	65.21	67.17	28.42	126.65	6	2	4	3	0-1	tan	58-76
32	29	S	2	Misc Reworked Biface, Perforator	66.79	39.42	21.53	46.13	5	1/2	4	2	2-3	gr-pink	46-66
33	29	T	2	Unknown Biface Type	33.98	30.00	18.47	13.86	2	4	4	2	3	tan	n/a
34	29	T	3	GUB- Type II	40.29	45.89	22.49	22.88	2?	4	4	2	2	pink-org	n/a
35	29	T	3	GUB- Type I	17.80	52.00	10.84	3.91	9	2	4	2	2-3	pink-gr	62-76
36	29	T	3	Misc Reworked Biface	73.54	41.55	26.26	72.28	2	2	4	2	2-3	gr-tan	64-80
37	29	T	3	Small Bi-convex Biface	28.08	21.73	11.39	5.68	4	4	4	2	3	lt orgish	n/a
45	29	Z	1	Misc Reworked Biface	58.45	38.03	19.85	44.94	5	1?	4	2	1	gr-tan	n/a
44	29	Z	1	Unknown Biface Type	26.06	18.83	15.38	4.72	3/3	7	4	2	3	grey	n/a

Legend for Table A.1

Breakage	Form	Stage	Material Types	Grain/Material Quality
1=None	1=Complete	1=Early	1= chalcedony	0=very very grainy
2=Snap	2=Distal Frag	2=Middle	2= chert	1= very grainy
3=Perverse	3=Medial Frag	3=Late	3= limestone	2= grainy
4=Snap and Perverse	4=Proximal Frag	4=Finished/Used	4= quartzite	3= medium
5=Unknown	5= Cobble	5=Unknown	5= granite	4= fine
6=Material Flaw	6=unknown	6=Exhausted	6= petrified wood	5= very fine
7=Snap and Inclusions	7=Lateral			
8=Impact	8=Lateral and Distal			
9=Heat Fracture	9=Almost complete* (*minor portion of lateral edge missing only)			

				Informal Tools							**Analyst: R. Trachman**			
					Analysis Date: June 02-Jan 04								***Material***	
Op	***Subop***	***Lot***	***Ref#***	***Type***	***form***	***#each***	***Weight(g)***	***L***	***W***	***Th***	***heat***	***chert***	***Limest***	***other***
26	A	2		Utilized Flake	tert. flake	1	8.40	28.00	38.00	9.70	0	1		
26	AB	1		Utilized Flake	secondary	1	36.56	43.08	48.05	15.51	0	1		
26	AI	3	147	Scraper	end	1	39.13	54.16	17.89	30.70	0	1		
26	AI	3	148	Utilized Flake	tert. flake	1	46.40	29.51	10.56	12.49	0	1		
26	AI	4	149	Scraper	end and side	1	43.04	41.97	18.52	27.20	0	1		
26	AI	4	150	Scraper	end	1	39.51	69.06	14.90	30.44	0	1		
26	AI	4		Utilized Flake	tert. flake	1	32.69	51.54	41.88	21.82	0	1		
26	AI	6	151	Graver/Perforator		1	32.83	59.03	15.74	15.39	1	1		
26	AI	6	153	Scraper	end and side	1	62.45	52.28	20.37	63.92	0	1		
26	AI	7		Utilized Flake	secondary	1	54.35	44.02	65.28	23.53	0	1		
26	AI	7		Utilized Flake	tert. flake	1	9.64	26.76	42.18	16.32	1	1		
26	AI	7	155	Chopper?	utilized flake core	1	62.71	53.56	29.82	100.14	0	1		
26	B	4	1	Chopper	hammerstone	1	511.20	105.50	84.10	54.70	0	1		
26	B	4	2	Utilized Flake	tert. flake	1	24.30	33.20	57.60	14.20	0	0	1	
26	B	6	273	Scraper	end and side	1	67.94	67.25	32.43	136.76	0	1		
26	F	2		Utilized Flake	tert. flake	1	48.80	46.90	76.60	26.10	0	1		
26	F	7		Utilized Flake	tert. flake	1	67.00	81.10	45.30	18.50	0	1		
26	F	8		perforator	tert. flake	1	9.80	36.20	24.80	10.60	0	1		
26	F	8		Utilized Flake	bif. thin.	1	5.40	42.80	25.70	5.30	0	1		
26	F	8		Utilized Flake	bif. thin.	1	1.50	27.10	18.70	4.00	0	1		
26	F	8		Utilized Flake	core frag	1	79.00	62.80	56.50	27.10	0	1		
26	F	8		Utilized Flake	primary	1	27.40	n/a			1	1		
26	F	8		Utilized Flake	secondary	1	10.80	31.20	48.00	9.40	0	1		
26	F	8		Utilized Flake	secondary	1	28.00	54.30	37.00	11.60	0	1		
26	F	12	3	Utilized Flake	perc blade	1	1.80	32.60	15.70	3.40	0	0		1 chalcedony
26	F	12	1	Utilized Flake	tert. flake	1	25.00	37.10	37.60	16.80	0	1		
26	F	12	2	Utilized Flake	tert. flake	1	4.10	18.80	27.80	8.80	0	1		
26	F	13		Utilized Flake	bif. thin.	1	5.30	30.50	30.10	4.60	0	0		1 chalcedony
26	F	14		Burin		1	2.80	47.90	9.20	9.80	0	1		
26	F	14		Burin		1	1.90	35.80	8.60	8.00	0	1		
26	G	7		Chopper	flake core	1	162.70	64.20	100.70	32.70	0	1		
26	G	7		Chopper	uniface	1	201.70	64.00	79.60	40.40	0	1		
26	G	9	125	Scraper	end	1	92.46	53.99	21.88	89.41	0	1		
26	H	2		Utilized Flake	tert. flake	1	3.10	21.10	25.90	6.80	0	1		
26	I	3	1	Scraper	end and side	1	25.95	25.70	14.98	12.02	0	1		
26	I	6		Utilized Flake	primary	1	112.68	89.28	80.02	22.98	0	1		
26	I	7	132	Graver		1	61.81	65.69	28.01	83.29	0	1		
26	I	7	131	Perforator		1	57.03	38.30	15.13	25.40	0	1		
26	I	7	130	Scraper	end and side	1	56.04	32.76	18.76	27.87	0	1		
26	I	7		Utilized Flake	lateral	1	12.50	46.90	23.72	14.32	0	1		

Op	Subop	Lot	Ref#	Type	form	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
26	I	7		Utilized Flake	medial	1	15.27	38.11	28.28	14.66	1	1		
26	J	4		Chopper	hammerstone	1	194.51	83.39	68.21	37.89	0	1		
26	K	3		Scraper	end	1	4.90	26.47	20.88	10.25	0	1		
26	N	3		Chopper	tested cobble	1	497.50	148.14	92.47	81.59	0	1		
26	N	3		Utilized Flake	tert. flake	1	34.37	30.62	66.70	20.22	0	1		
26	O	6	144	Perforator		1	46.34	42.29	18.26	27.72	0	1		
26	O	6	143	Scraper	end and side	1	50.43	67.07	24.77	92.51	0	1		
26	O	6		Utilized Flake	secondary	1	24.76	50.41	60.95	9.56	0	1		
26	O	6		Utilized Flake	tert. flake	1	12.13	37.56	40.76	5.82	0	1		
26	O	6		Utilized Flake	tert. flake	1	25.52	55.13	36.52	15.36	0	1		
26	Q	1		Utilized Flake	bif. thin.	1	28.61	37.96	43.57	21.06	0	1		
26	Q	1		Utilized Flake	bif. thin.	1	65.31	56.21	65.48	22.11	0	1		
28	B	5	278	Scraper	end and side	1	54.58	52.26	43.86	23.12	0	1		
28	D	4	8	Perforator		1	1.20	31.60	20.70	4.10	0	1		
28	D	4	285	Scraper	end and side	1	12.40	27.75	32.36	16.16	0	1		
28	D	4	286	Scraper	side	1	119.54	51.93	64.97	27.13	0	1		
28	D	4	288	Scraper*?	side	1	16.76	41.15	36.41	16.12	0	1		
28	D	5	293	Discoid Uniface		1	747.50	96.44	99.19	59.59	0		1	
28	H	3	298	Graver		1	13.22	41.08	48.36	8.26	0	1		
28	I	1	303	Perforator*		1	1.34	25.91	14.24	4.21	0	1		
28	I	3	2	Perforator		1	22.30	45.80	41.40	16.60	1	1		
28	J	1	4	Scraper	side	1	69.50	56.60	39.80	29.60	0	1		
28	J	3	310	Graver/perforator?		1	38.91	53.41	46.04	24.59	0	1		
28	K	1	311	Scraper	end and side	1	38.31	52.67	38.07	21.09	0	1		
28	L	1	163	Chopper	utilized core	1	63.38	54.54	55.30	24.26	1	1		
28	L	1	164	Scraper	end and side	1	63.92	54.74	49.24	24.33	0	1		
28	L	2	168	Chopper	utilized core	1	206.08	69.90	112.24	24.79	0	1		
28	L	2	169	Chopper	utilized core	1	478.10	89.13	112.02	46.33	0	1		
28	L	2	170	Chopper	utilized core	1	61.86	31.97	56.81	35.77	0	1		
28	L	2	315	Scraper	end and side	1	88.11	51.42	61.56	29.33	0	1		
28	L	2	316	Scraper	end and side	1	64.50	38.50	48.37	32.46	0	1		
28	L	2	173	Scraper	side	1	219.50	65.50	91.10	35.21	0		1	
28	M	1	319	Chopper	utilized core	1	158.90	70.53	69.31	38.52	0	1		
28	M	2	322	Scraper	end and side	1	31.06	39.53	43.53	21.04	0	1		
28	M	2	182	Perforator		1	8.83	43.82	30.95	8.25	0	1		
28	M	2	321	Perforator		1	3.09	36.25	18.29	6.48	0	1		
28	M	2	323	Discoid Uniface		1	150.56	81.26	68.79	28.89	0	1		
28	N	3	339	Chopper?	utilized core	1	94.84	69.41	62.35	22.48	0	1		
28	N	3	336	Scraper	end and side	1	37.80	62.30	35.33	22.08	0	1		
28	N	3	337	Scraper*?	side	1	51.96	20.42	59.45	33.18	0	1		
28	N	3	333	Graver		1	22.33	45.53	53.11	12.55	0	1		
28	N	3	334	Graver/perforator?		1	22.14	45.64	46.02	13.15	0	1		
28	O	5		Perforator		1	0.80	25.80	9.40	4.10	1	1		

Op	Subop	Lot	Ref#	Type	form	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	O	10	340	Scraper	end and side	1	12.61	34.81	31.16	15.73	1	1		
28	O	14	186	Scraper	end and side	1	10.43	36.95	19.54	15.94	0	1		
28	O	14	187	Perforator		1	5.46	31.49	24.13	10.11	0	1		
28	O	14	188	Perforator		1	11.65	45.12	30.06	15.59	0	1		
28	P	1	194	Utilized Flake	macroflake	1	3.90	35.31	32.19	4.13	0			1 chalcedony
28	P	4	200	Chopper	utilized core	1	106.23	56.34	70.99	34.01	0	1		
28	P	4	201	Scraper	end and side	1	43.75	28.69	47.02	33.47	0			1 chalcedony
28	Q	1	213	Utilized Flake	macroflake	1	20.65	39.17	52.41	12.25	0	1		
28	Q	3	215	Scraper	end and side	1	71.18	61.75	58.37	19.36	0	1		
28	Q	3	216	Scraper	end and side	1	38.48	51.51	46.51	19.49	0	1		
28	Q	3	217	Scraper	end and side	1	39.11	53.73	47.03	19.04	0	1		
28	R	1	222	Chopper	utilized core	1	110.01	44.97	71.93	29.94	0	1		
28	R	1	220	Graver/perforator?	util macroflake	1	56.54	52.44	69.41	20.67	0	1		
28	W	4	228	Scraper	end and side	1	35.65	53.20	43.51	18.69	0	1		
28	W	4	344	Scraper*	end and side	1	66.02	65.98	33.45	38.57	0	1		
28	W	4	345	Scraper*?	end and side	1	45.65	40.37	54.18	23.36	0	1		
28	W	4	229	Graver		1	35.88	52.82	42.24	16.62	0	1		
28	W	4	342	Perforator		1	1.66	33.88	12.36	5.21	0			1 chalcedony
28	W	6	350	Scraper*	end	1	25.74	30.21	43.51	17.47	0	1		
28	W	6	232	Discoid Uniface		1	222.30	85.00	75.23	39.95	0	1		
28	W	7	352	Scraper	end	1	21.26	35.88	52.75	14.18	0	1		
28	X	5	364	Scraper	end and side	1	22.33	34.56	49.15	17.95	0	1		
28	X	5	365	Scraper	end and side	1	31.24	32.19	37.60	27.49	0	1		
28	X	5	366	Scraper	end and side	1	98.90	60.99	51.05	27.77	0	1		
28	X	5	363	Scraper*	end and side	1	7.52	28.78	27.60	10.95	0	1		
28	X	5	367	Scraper*?	end and side	1	17.16	45.53	35.96	12.27	0	1		
28	X	5	362	Graver		1	50.13	59.16	48.76	16.94	1	1		
28	X	5	360	Utilized Flake*	macroflake	1	56.66	51.43	64.73	14.86	0	1		
28	X	6	254	Chopper	utilized core	1	99.90	45.08	65.00	40.19	0	1		
28	X	6	374	Scraper*	end and side	1	37.69	61.61	38.33	17.99	0	1		
28	X	6	377	Scraper*?	end and side	1	8.88	33.03	39.79	6.37	0	1		
28	X	6	376	Scraper*?	side	1	12.55	37.91	32.44	10.34	0	1		
28	Y	2	378	Perforator		1	1.72	38.98	14.30	6.89	0	1		
29	AB	1	49	Scraper	end and side	1	31.39	28.56	54.11	23.34	0	1		
29	AB	1	48	Scraper	side	1	62.58	44.30	45.50	29.22	0	1		
29	AB	1	47	Unknown Scraper Type		1	7.46	32.02	16.08	12.89	0	1		
29	AC	1	51	Scraper	end and side	1	347.65	76.35	82.66	46.63	0	1		
29	AC	1	52	Scraper, Graver/Perforator	side	1	72.60	47.63	57.18	18.10	0	1		
29	AH	1	57	Graver/Perforator		1	7.81	27.85	33.44	16.66	0	1		
29	AH	1	56	Perforator		1	7.93	42.78	22.11	10.28	0	1		
29	AI	1	58	Perforator		1	0.83	19.88	20.07	2.90	1	1		
29	AI	1	59	Scraper	end and side	1	19.31	40.38	30.51	17.97	1	1		
29	AJ	2	62	Graver/Perforator		1	1.25	17.14	16.88	6.32	0	1		

Op	Subop	Lot	Ref#	Type	form	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	AJ	4	63	Utilized Flake	macroflake	1	4.35	23.47	34.43	5.38	0	1		
29	AJ	4	65	Perforator		1	21.37	47.58	46.08	15.04	0	1		
29	AJ	4	66	Perforator		1	13.70	43.70	33.94	9.24	1	1		
29	AJ	4	67	Perforator		1	2.93	30.64	15.46	7.41	0	1		
29	AJ	4	68	Perforator		1	0.51	18.56	8.15	4.02	0	1		
29	AK	2		Graver/Perforator	bif. thin.	1	1.18	22.34	21.46	3.65	0	1		
29	AK	2		Graver/Perforator	bif. thin.	1	1.28	21.09	15.50	4.87	0	1		
29	AK	3	70	Perforator		1	3.04	31.82	22.06	6.71	0	1		
29	AN	1	79	Graver/Perforator		1	5.97	38.91	27.75	9.54	0	1		
29	AN	1	76	Scraper: end and side	utilized macroflk	1	2.07	29.41	19.44	5.10	0	1		
29	AN	1	75	Scraper: side only	utilized macroflk	1	67.77	66.82	57.69	20.48	0	1		
29	AN	1	77	Perforator		1	0.65	20.43	12.13	3.78	0	1		
29	AN	1	78	Perforator		1	2.58	23.79	24.52	7.66	0	1		
29	AO	1	80	Perforator		1	4.58	25.26	23.94	9.25	0	1		
29	AP	1	82	Scraper	side	1	22.08	50.63	34.51	12.69	0	1		
29	AT	1	85	Bifurcated Graver/Perforator		1	13.09	37.52	43.81	8.73	0	1		
29	AT	1	84	Perforator		1	11.45	41.95	27.34	15.70	0	1		
29	AW	1	87	Bifurcated Graver/Perforator		1	3.16	21.54	26.30	7.43	0	0		1 chalcedony
29	AW	2	88	Perforator	utilized macroflk	1	5.77	44.73	22.23	7.20	0	1		
29	AX	1	91	Graver/Perforator		1	7.84	35.26	25.49	10.18	0	1		
29	AZ	1	94	Graver/Perforator		1	1.38	23.43	19.76	4.22	0	1		
29	AZ	1	97	Graver/Perforator		1	6.95	28.76	34.38	8.93	0	1		
29	AZ	1	95	Perforator		1	1.73	23.53	14.56	5.84	0	1		
29	AZ	1	96	Perforator		1	27.13	49.19	37.11	13.42	0	1		
29	AZ	1	98	Scraper, Graver/Perforator	side	1	6.31	25.30	32.53	13.15	0	1		
29	AZ	1	93	Chopper	utilized core	1	69.27	44.81	49.63	34.76	0	1		
29	BP	1	100	Perforator		1	62.77	75.86	59.39	20.73	0	1		
29	BP	1	101	Scraper	end and side	1	28.25	46.71	34.78	15.72	0	1		
29	BP	3	123	Perforator		1	11.12	43.49	19.87	15.20	0	1		
29	BP	3	121	Scraper	end and side	1	235.60	85.32	54.35	46.26	0	1		
29	BP	3	122	Scraper	end and side	1	34.44	42.54	40.01	20.29	0	1		
29	BR	1	106	Utilized Flake	macroflake	1	18.70	48.22	25.52	16.47	0	1		
29	BU	2	116	Perforator		1	49.59	62.32	35.22	22.04	0	0		1 chalcedony
29	BU	2	117	Scraper	end and side	1	11.95	41.74	33.61	8.80	0	1		
29	C	2	3	Chopper	utilized core	1	88.38	61.32	52.01	28.17	0	1		
29	C	3		Scraper	side, lateral frag	1	30.40	47.08	34.29	19.83	1	1		
29	C	13		Burin		1	0.35	22.23	6.75	3.42	1	1		
29	E	5		Burin	distal	1	0.73	26.54	6.85	5.25	0	1		
29	E	5		Graver/Perforator	bifurcated?	1	2.36	21.95	20.95	5.12	1	1		
29	E	5		Graver/Perforator	flake frag	1	14.15	40.05	38.56	11.48	0	1		
29	E	5		Perforator	flake frag	1	7.28	26.98	26.79	9.80	0	1		
29	E	5		Scraper	end and side	1	18.69	43.23	28.23	14.58	0	1		
29	E	5	9	Bifurcated Graver/Perforator		1	25.84	62.15	45.19	14.71	0	1		

Op	Subop	Lot	Ref#	Type	form	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	E	5	8	Discoid Scraper?		1	35.47	42.84	41.56	18.73	0	0		1 petrif. wood
29	E	5	10	Perforator		1	19.23	47.42	35.75	12.03	0	1		
29	E	5	6	Scraper	end and side	1	27.66	36.77	38.47	18.20	0	1		
29	E	5	7	Scraper	end and side	1	16.08	33.78	34.11	16.77	0	1		
29	F	7	14	Utilized Flake	macroflake	1	8.02	31.62	21.40	13.05	0	1		
29	H	1	17	Graver/Perforator		1	9.67	33.14	32.60	12.29	0	1		
29	M	2	20	Discoid Scraper		1	84.84	57.77	65.13	24.75	0	1		
29	N	3	22	Graver/Perforator		1	31.52	52.55	42.11	19.31	0	1		
29	O	2	23	Scraper, Graver	end and side	1	57.31	65.66	41.38	33.49	0	1		
29	O	3	24	Discoid Scraper		1	66.61	55.46	52.01	26.66	0	1		
29	Q	2	26	Unknown Scraper Type		1	6.92	38.15	17.87	13.10	0	1		
29	S	1	28	Chopper	utilized core	1	101.19	70.17	53.47	28.22	0	1		
29	S	2		Scraper		1	16.93	33.41	45.43	11.01	0	1		
29	S	2	30	Utilized Flake	macroflake	1	41.25	55.31	46.14	14.67	1	1		
29	S	2	31	Scraper, Graver	end and side	1	5.21	20.94	31.33	8.18	0	1		
29	T	4		Scraper	end and side	1	42.02	48.00	46.80	23.68	0	1		
29	T	4		Scraper	frag	1	21.90	23.18	54.70	15.45	0	1		
29	T	5		Graver	bif. thin.	1	9.61	37.73	59.02	6.06	0	1		
29	U	1	42	Scraper	end and side	1	19.33	45.42	26.17	15.68	0	1		
29	V	14	38	Graver/Perforator	utilized macroflk	1	13.40	35.67	36.06	11.06	0	1		
29	V	15	40	Graver		1	4.19	33.11	17.83	8.37	0	1		
29	V	15	39	Scraper	end	1	78.82	60.29	45.61	28.79	0	1		
29	V	15	41	Scraper	end and side	1	8.19	27.17	25.15	10.69	0	1		
29	X	5		Scraper	side	1	182.76	63.91	58.28	33.74	0	1		
29	X	6		Scraper	frag	1	11.82	30.24	38.77	15.31	0	1		
29	X	6		Scraper	side	1	23.96	45.70	38.39	14.35	0	1		
29	Z	1		Bifurcated Graver	tert. flake	1	15.11	51.74	37.43	14.34	1	1		
29	Z	1	43	Scraper	end and side	1	16.54	34.73	39.04	13.49	1	1		
29	Z	1	46	Scraper	end and side	1	18.82	39.63	32.29	20.83	0	1		

				CORE AND DEBITAGE ANALYSIS FORM				Analyst: R. Trachman						
RB_2_/Ops26, 28, 29_/Year(s) _1999-2002___						Analysis Date: ___June 02-Jan 04_							Material	
Op	*Subop*	*Lot*	*Ref#*	*Debitage Type*	*subtype*	*#each*	*Weight(g)*	*L*	*W*	*Th*	*heat*	*chert*	*Limest*	*other*
26	A	1		chunks		7	14.70	n/a			5	7		
26	A	1		secondary flakes		1	8.30	n/a			0	1		
26	A	1		shatter		12	5.90	n/a			12	12		
26	A	1		tertiary flakes		9	9.10	n/a			9	9		
26	A	2		chunks		7	22.40	n/a			4	7		
26	A	2		primary flakes		2	62.30	n/a			1	2		
26	A	2		retouch/pressure flakes		7	2.80	n/a			7	7		
26	A	2		secondary flakes		5	18.40	n/a			5	5		
26	A	2		shatter		21	5.90	n/a			21	21		
26	A	3		chunks		2	40.20	n/a			2	2		
26	A	3		shatter		5	14.20	n/a			0	5		
26	A	3		tertiary flakes	frags	7	4.60	n/a			0	7		
26	AA	1		primary flakes		5	10.74	n/a			1	5		
26	AA	1		secondary flakes		1	5.89	n/a			1	1		
26	AA	1		shatter		6	10.04	n/a			3	6		
26	AA	1		tertiary flakes		1	1.20	n/a			1	1		
26	AB	1		biface thinning flakes		2	1.13	n/a			0	2		
26	AB	1		chunks		1	5.54	n/a			1	1		
26	AB	1		primary flakes		1	10.14	n/a			0	1		
26	AB	1		retouch/pressure flakes		1	0.14	n/a			1	1		
26	AB	1		secondary flakes		2	0.91	n/a			0	2		
26	AB	1		shatter		14	17.52	n/a			11	14		
26	AB	1		tertiary flakes		1	7.37	n/a			1	1		
26	AC	1		biface thinning flakes		3	4.34	n/a			2	3		
26	AC	1		primary flakes		1	1.57	n/a			1	1		
26	AC	1		shatter		4	6.42	n/a			2	4		
26	AC	1		tertiary flakes		4	5.54	n/a			2	4		
26	AD	1		secondary flakes		2	19.35	n/a			0	2		
26	AE	1		biface thinning flakes		1	10.84	n/a			0	1		
26	AE	1		primary flakes		1	2.01	n/a			1	1		
26	AE	1		secondary flakes		3	40.82	n/a			2	3		
26	AE	1		shatter		1	0.28	n/a			1	1		
26	AE	1		tertiary flakes		1	0.68	n/a			1	1		
26	AE	3		primary flakes		1	33.83	n/a			0	1		
26	AE	3		tertiary flakes		1	0.41	n/a			1	1		
26	AG	1		biface thinning flakes		1	5.77	n/a			n/a	1		
26	AI	3		chunks		2	85.44	n/a			n/a	2		
26	AI	3	146	flake core	multi-dir	1	76.65	38.96	51.58	43.44	0	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
26	AI	3		secondary flakes		1	29.15	n/a			n/a	1		
26	AI	3		shatter		1	4.82	n/a			n/a	1		
26	AI	3		tertiary flakes		1	6.70	n/a			n/a	1		
26	AI	4		chunks		2	59.53	n/a			n/a	2		
26	AI	4		secondary flakes		1	39.65	n/a			n/a	1		
26	AI	4		tested cobble		1	147.71	n/a			n/a	1		
26	AI	5		chunks		1	8.21	n/a			n/a	1		
26	AI	5		tertiary flakes		2	27.63	n/a			n/a	2		
26	AI	6		chunks		2	95.43	n/a			n/a	2		
26	AI	6	152	hammerstone	flake core	1	32.70	42.09	45.67	20.43	0	1		
26	AI	6		secondary flakes		2	57.84	n/a			n/a	2		
26	AI	6		tertiary flakes		2	46.39	n/a			n/a	2		
26	AI	7		chunks		5	205.13	n/a			n/a	5		
26	AI	7	154	flake core	multi-dir	1	120.48	60.31	45.23	45.28	1	1		
26	AI	7		secondary flakes		1	28.22	n/a			n/a	1		
26	AI	7		tertiary flakes		2	75.96	n/a			n/a	2		
26	AI	7		tested cobble		1	342.20	n/a			n/a	1		
26	AI	7		tested cobble		1	101.14	n/a			n/a	1		
26	B	1		biface thinning flakes		3	6.50	n/a			0	3		
26	B	1		chunks	corefrags?	2	42.80	n/a			0	2		
26	B	1		chunks		12	75.90	n/a			0	12		
26	B	1		shatter		20	9.00	n/a			0	20		
26	B	1		tertiary flakes		6	13.00	n/a			0	6		
26	B	2		biface thinning flakes		3	9.50	n/a			0	3		
26	B	2		chunks	corefrags?	12	199.50	n/a			9	12		
26	B	2	1	flake core	multi-dir	1	67.90	48.87	45.40	31.20	1	1		
26	B	2	2	hammerstone	flake core	1	123.00	70.10	50.90	40.50	1	1		
26	B	2		primary flakes		3	7.90	n/a			3	3		
26	B	2		secondary flakes		5	62.30	n/a			2	5		
26	B	2		shatter		13	7.40	n/a			0	13		
26	B	2		tertiary flakes		9	28.40	n/a			0	9		
26	B	2		tested cobble		1	277.00	n/a			0	1		
26	B	3		chunks		4	12.00	n/a			0	4		
26	B	3		primary flakes		4	20.80	n/a			4	4		
26	B	3		shatter		5	4.00	n/a			0	5		
26	B	3		tertiary flakes		8	19.90	n/a			6	8		
26	B	4		biface thinning flakes		6	21.60	n/a			2	6		
26	B	4		chunks		8	50.50	n/a			2	8		
26	B	4		flake core	multi-dir	1	69.00	55.00	37.00	34.20	1	1		
26	B	4		flake core	multi-dir	1	65.70	59.10	42.30	31.80	1	1		
26	B	4		primary flakes		7	160.30	n/a			0	7		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
26	B	4		secondary flakes		6	57.50	n/a			3	6		
26	B	4		shatter		52	37.30	n/a			0	52		
26	B	4		tertiary flakes		18	64.90	n/a			7	18		
26	B	4		tested cobble		1	151.00	n/a			0	1		
26	B	6		biface thinning flakes		2	19.70	n/a			0	2		
26	B	6		chunks		5	98.20	n/a			3	5		
26	B	6		primary flakes		6	40.60	n/a			1	6		
26	B	6		secondary flakes		5	152.40	n/a			2	5		
26	B	6		shatter		7	24.70	n/a			2	7		
26	B	6		tertiary flakes		6	59.10	n/a			1	6		
26	C	1		chunks		6	60.60	n/a			5	6		
26	C	1		shatter		26	14.70	n/a			20	26		
26	C	1		tertiary flakes		3	7.50	n/a			0	3		
26	C	2		chunks		3	32.30	n/a			1	3		
26	C	2		secondary flakes		2	6.80	n/a			2	2		
26	C	2		shatter		27	21.20	n/a			24	27		
26	C	2		tertiary flakes		3	5.40	n/a			2	3		
26	C	3		chunks		8	31.90	n/a			3	8		
26	C	3		retouch/pressure flakes		3	1.20	n/a			1	3		
26	C	3		secondary flakes		2	13.80	n/a			2	2		
26	C	3		shatter		36	25.80	n/a			28	36		
26	D	1		chunks		13	123.20	n/a			5	13		
26	D	1		primary flakes		5	67.30	n/a			1	5		
26	D	1		secondary flakes		2	11.60	n/a			1	2		
26	D	1		shatter		34	49.90	n/a			25	34		
26	D	1		tertiary flakes		11	29.20	n/a			5	11		
26	E	1		primary flakes		2	30.80	n/a			2	2		
26	E	1		secondary flakes		1	7.40	n/a			0	1		
26	E	1		shatter		4	3.90	n/a			4	4		
26	E	1		tertiary flakes		5	26.10	n/a			0	5		
26	F	1		chunks		9	33.10	n/a			7	9		
26	F	1		primary flakes		3	7.00	n/a			1	3		
26	F	1		secondary flakes		2	7.80	n/a			2	2		
26	F	1		shatter		32	28.00	n/a			28	32		
26	F	1		tertiary flakes		7	35.90	n/a			3	7		
26	F	2		chunks		3	21.50	n/a			2	3		
26	F	2		flake core	bi-dir	1	54.20	42.80	48.80	29.70	0	1		
26	F	2		secondary flakes		1	3.50	n/a			0	1		
26	F	2		shatter		3	5.24	n/a			2	3		
26	F	2		tertiary flakes		3	26.10	n/a			2	3		
26	F	3		chunks		7	149.80	n/a			0	7		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
26	F	3		primary flakes		1	29.20	n/a			0	1		
26	F	3		tertiary flakes		3	16.70	n/a			0	3		
26	F	4		biface thinning flakes		2	2.20	n/a			0	2		
26	F	4		chunks		9	210.40	n/a			2	9		
26	F	4		primary flakes		2	88.40	n/a			0	2		
26	F	4		secondary flakes		2	21.40	n/a			0	2		
26	F	4		tested cobble	chopper?	1	138.30	n/a			0	1		
26	F	5		chunks		2	7.20	n/a			2	2		
26	F	5		primary flakes		4	30.30	n/a			1	4		
26	F	5		secondary flakes		5	48.10	n/a			1	5		
26	F	5		shatter		29	19.00	n/a			25	29		
26	F	5		tertiary flakes		14	45.20	n/a			5	14		
26	F	6		secondary flakes		1	18.50	n/a			0	1		
26	F	7		biface thinning flakes		2	8.60	n/a			0	2		
26	F	7		chunks		9	137.30	n/a			2	9		
26	F	7		primary flakes		5	208.50	n/a			1	4	1	
26	F	7		secondary flakes		10	227.30	n/a			1	10		
26	F	7		shatter		10	15.30	n/a			5	10		
26	F	7		tertiary flakes		6	52.50	n/a			4	6		
26	F	7		tested cobble		1	119.00	n/a			1	1		
26	F	7		tested cobble		1	185.00	n/a			1	1		
26	F	8		biface thinning flakes		3	15.40	n/a			1	3		
26	F	8		chunks		5	46.70	n/a			1	5		
26	F	8		primary flakes		8	111.60	n/a			4	8		
26	F	8		secondary flakes		7	85.70	n/a			3	7		
26	F	8		shatter		6	13.70	n/a			1	6		
26	F	8		tertiary flakes		4	65.70	n/a			2	4		
26	F	9		chunks		4	70.60	n/a			0	4		
26	F	9		primary flakes		3	21.70	n/a			2	3		
26	F	9		secondary flakes		5	90.70	n/a			1	5		
26	F	9		tertiary flakes		5	79.70	n/a			4	5		
26	F	11		chunks		1	47.30	n/a			0	1		
26	F	11		primary flakes		4	72.70	n/a			1	4		
26	F	11		shatter		3	4.40	n/a			3	3		
26	F	12		biface thinning flakes		2	12.40	n/a			2	2		
26	F	12		chunks		21	259.90	n/a			21	21		
26	F	12		flake core	bi-dir	1	304.10	96.40	70.70	45.80	0	1		
26	F	12		flake core	multi-dir	1	25.20	31.20	26.90	28.50	1	1		
26	F	12		flake core	multi-dir	1	21.90	28.60	35.20	24.80	1	1		
26	F	12		flake core	multi-dir	1	88.20	46.50	52.30	36.80	1	1		
26	F	12		primary flakes		6	70.90	n/a			1	6		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
26	F	12		secondary flakes		7	78.80	n/a			1	7		
26	F	12		shatter		31	53.40	n/a			25	31		
26	F	12		tertiary flakes		7	43.80	n/a			1	7		
26	F	13		chunks		9	146.70	n/a			5	9		
26	F	13		primary flakes		2	25.80	n/a			0	2		
26	F	13		secondary flakes		3	40.00	n/a			2	3		
26	F	13		shatter		13	24.60	n/a			11	13		
26	F	13		tertiary flakes		3	67.80	n/a			1	3		
26	F	14		biface thinning flakes		10	45.50	n/a			6	10		
26	F	14		chunks		14	186.20	n/a			10	14		
26	F	14		flake core	bi-dir	1	67.70	65.80	44.70	31.90	1	1		
26	F	14		flake core	multi-dir	1	39.90	47.70	33.50	27.40	1	1		
26	F	14		flake core	multi-dir	1	78.90	52.90	43.00	40.00	1	1		
26	F	14		flake core	multi-dir	1	77.30	54.00	43.20	35.90	0	1		
26	F	14		flake core	multi-dir	1	47.20	45.00	35.00	26.40	0	1		
26	F	14		primary flakes		4	31.60	n/a			1	4		
26	F	14		secondary flakes		7	136.10	n/a			3	7		
26	F	14		shatter		23	49.50	n/a			21	23		
26	G	1		shatter		1	0.60	n/a			1	1		
26	G	1		tertiary flakes		1	3.00	n/a			0	0	1	
26	G	2		biface thinning flakes		1	2.90	n/a			1	1		
26	G	2		primary flakes		2	5.00	n/a			0	2		
26	G	2		secondary flakes		1	26.70	n/a			0	1		
26	G	2		shatter		4	16.80	n/a			3	4		
26	G	2		tested cobble		1	136.80	n/a			0	1		
26	G	3		chunks		5	78.40	n/a			5	5		
26	G	3		flake core	multi-dir	1	257.30	55.30	109.40	57.70	1	1		
26	G	3		primary flakes		3	41.70	n/a			1	3		
26	G	3		secondary flakes		3	9.10	n/a			2	3		
26	G	3		shatter		15	20.30	n/a			12	15		
26	G	3		tertiary flakes	1 perc.bl	3	7.30	n/a			1	2	1	
26	G	4		chunks		1	52.70	n/a			1	1		
26	G	4		flake core	bi-dir	1	111.60	81.60	60.80	33.00	1	1		
26	G	4		flake core	bi-dir	1	133.70	49.00	60.40	47.20	1	1		
26	G	4		flake core	multi-dir	1	88.20	32.50	70.70	40.40	1	1		
26	G	4	1	hammerstone	flake core	1	157.90	49.50	72.50	57.70	0	1		
26	G	4		shatter		4	2.50	n/a			4	4		
26	G	5		chunks		2	22.30	n/a			1	2		
26	G	6		biface thinning flakes		1	2.30	n/a			0	1		
26	G	6		secondary flakes		1	6.10	n/a			0	1		
26	G	7		chunks		4	342.00	n/a			6	4		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
26	G	7		primary flakes		8	232.00	n/a			5	8		
26	G	7	1	secondary flakes		9	162.60	n/a			2	9		
26	G	7		shatter		20	59.40	n/a			9	20		
26	G	7	2,3,4	tertiary flakes		14	128.70	n/a			5	12	2	
26	G	8		shatter		2	9.80	n/a			0	2		
26	G	9		biface thinning flakes		1	0.82	n/a			0	0	1	
26	G	9		chunks		1	26.80	n/a			1	1		
26	G	9		pressure blade	proximal	1	0.20	12.70	8.60	1.78	0	1		
26	G	9		primary flakes		3	11.83	n/a			0	3		
26	G	9		secondary flakes		3	12.09	n/a			0	3		
26	G	9		shatter		6	7.09	n/a			2	6		
26	G	9		tertiary flakes		3	13.87	n/a			1	3		
26	H	1		secondary flakes		1	3.60	n/a			0	1		
26	H	1		shatter		4	9.80	n/a			1	4		
26	H	2		chunks		6	65.90	n/a			3	6		
26	H	2		secondary flakes		7	125.70	n/a			5	7		
26	H	2		shatter		15	18.10	n/a			9	15		
26	H	2		tertiary flakes		5	30.90	n/a			3	5		
26	H	3		chunks		2	21.71	n/a			2	2		
26	H	3		primary flakes		6	14.33	n/a			0	5	1	
26	H	3		secondary flakes		5	24.01	n/a			1	5		
26	H	3		shatter		6	15.85	n/a			3	6		
26	H	3		tertiary flakes		4	12.98	n/a			1	4		
26	I	2		chunks		2	19.95	n/a			0	2		
26	I	2		secondary flakes		2	7.44	n/a			2	2		
26	I	2		shatter		3	2.29	n/a			1	3		
26	I	2		tertiary flakes		2	2.44	n/a			0	2		
26	I	3		chunks		1	5.88	n/a			1	1		
26	I	3		primary flakes		1	6.89	n/a			1	1		
26	I	3		secondary flakes		1	2.58	n/a			0	1		
26	I	3		shatter		9	15.23	n/a			6	9		
26	I	3		tertiary flakes		4	14.95	n/a			2	3	1	
26	I	4		biface thinning flakes		2	2.72	n/a			0	2		
26	I	4		primary flakes		1	2.31	n/a			0	1		
26	I	4		retouch/pressure flakes		2	0.34	n/a			1	2		
26	I	4		secondary flakes		3	9.48	n/a			3	3		
26	I	4		shatter		3	1.60	n/a			3	3		
26	I	4		tertiary flakes		3	12.02	n/a			1	2	1	
26	I	6		biface thinning flakes		4	26.53	n/a			0	4		
26	I	6		chunks		1	12.69	n/a			0	1		
26	I	6		primary flakes		1	5.68	n/a			1	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
26	I	6		retouch/pressure flakes		1	0.39	n/a			0	1		
26	I	6		secondary flakes		8	49.89	n/a			0	8		
26	I	6		shatter		35	64.16	n/a			13	35		
26	I	6	1	tertiary flakes		1	109.82	115.20	65.60	22.76	0	0	1	
26	I	6		tertiary flakes		1	11.17	n/a			0	0	1	
26	I	7	134	flake core	multi-dir	1	59.64	50.02	43.79	29.41	0	1		
26	I	7	129	hammerstone	flake core	1	241.80	68.45	75.45	58.74	0	1		
26	I	7		secondary flakes		1	34.34	n/a			0	1		
26	I	7		tested cobble		1	106.63	n/a			0	1		
26	I	7		tested cobble		1	129.32	n/a			0	1		
26	J	2		chunks		1	32.15	n/a			1	1		
26	J	2		tertiary flakes		1	4.26	n/a			0	0	1	
26	J	3		biface thinning flakes		1	1.47	n/a			0	1		
26	J	3		chunks		2	111.21	n/a			0	2		
26	J	3		secondary flakes		2	11.25	n/a			0	2		
26	J	3		shatter		5	7.28	n/a			4	5		
26	J	3		tertiary flakes		3	4.94	n/a			3	3		
26	J	4		biface thinning flakes		3	12.32	n/a			2	3		
26	J	4		flake core	multi-dir	1	133.63	66.72	50.35	33.13	1	1		
26	J	4		secondary flakes		1	0.99	n/a			0	1		
26	J	4		shatter		8	16.00	n/a			7	8		
26	J	5		biface thinning flakes		2	6.02	n/a			0	2		
26	J	5		chunks		3	13.84	n/a			1	3		
26	J	5		percussion blade	whole	1	4.09	49.16	13.49	6.81	0	1		
26	J	5		primary flakes		3	19.72	n/a			1	3		
26	J	5		secondary flakes		2	7.42	n/a			0	2		
26	J	5		shatter		13	25.52	n/a			7	13		
26	J	5		tertiary flakes		4	110.81	n/a			1	4		
26	J	6		chunks		1	7.78	n/a			0	1		
26	J	6		retouch/pressure flakes		1	0.68	n/a			0	1		
26	J	6		shatter		3	9.00	n/a			1	3		
26	J	6		tested cobble		1	79.70	n/a			0	1		
26	J	7		biface thinning flakes		1	1.33	n/a			0	1		
26	J	7		shatter		2	1.09	n/a			1	2		
26	K	1		biface thinning flakes		2	9.28	n/a			0	2		
26	K	1		chunks		2	16.47	n/a			1	2		
26	K	1		secondary flakes		2	7.94	n/a			1	2		
26	K	1		shatter		11	7.56	n/a			9	11		
26	K	1		tertiary flakes		1	6.79	n/a			0	1		
26	K	2		secondary flakes		2	2.79	n/a			0	2		
26	K	3		primary flakes		1	2.54	n/a			0	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
26	K	3		secondary flakes		3	12.04	n/a			1	3		
26	K	3		shatter		7	24.72	n/a			6	7		
26	K	3		tertiary flakes		1	4.45	n/a			1	1		
26	L	1		shatter		1	4.46	n/a			1	1		
26	L	2		shatter		2	4.93	n/a			2	2		
26	L	3		secondary flakes		2	3.31	n/a			1	2		
26	L	3		shatter		1	3.63	n/a			1	1		
26	L	3		tertiary flakes		4	13.37	n/a			1	4		
26	L	4		biface thinning flakes		1	3.86	n/a			0	1		
26	L	4		chunks		1	5.92	n/a			0	1		
26	L	4		primary flakes		1	1.01	n/a			0	1		
26	L	4		retouch/pressure flakes		3	0.69	n/a			1	3		
26	L	4		secondary flakes		3	14.40	n/a			3	3		
26	L	4		shatter		6	7.62	n/a			3	6		
26	L	4		tertiary flakes		2	14.30	n/a			1	1	1	
26	L	5		chunks		1	2.81	n/a			0	1		
26	L	5		secondary flakes		2	30.03	n/a			0	2		
26	L	5		shatter		1	0.66	n/a			0	1		
26	M	1		shatter		1	1.45	n/a			0	1		
26	M	2		shatter		3	2.28	n/a			2	3		
26	M	2		tertiary flakes		1	10.14	n/a			0	0	1	
26	M	3		biface thinning flakes		3	8.11	n/a			2	3		
26	M	3		chunks		3	13.13	n/a			2	3		
26	M	3		retouch/pressure flakes		4	0.88	n/a			0	3		1 chalcedony
26	M	3		secondary flakes		1	1.51	n/a			1	1		
26	M	3		shatter		15	22.98	n/a			10	15		
26	M	4		chunks		4	4.01	n/a			1	4		
26	M	4		shatter		5	94.80	n/a			2	5		
26	N	1		shatter		1	0.11	n/a			1	1		
26	N	2		primary flakes		2	25.29	n/a			0	2		
26	N	2		secondary flakes		1	3.90	n/a			0	1		
26	N	2		shatter		5	9.62	n/a			4	5		
26	N	2		tertiary flakes		1	0.47	n/a			0	1		
26	N	3		biface thinning flakes		1	0.81	n/a			1	1		
26	N	3		secondary flakes		3	63.29	n/a			1	3		
26	N	3		shatter		6	6.87	n/a			4	6		
26	N	3		tertiary flakes		2	5.98	n/a			1	1		1 quartzite
26	N	4		biface thinning flakes		1	2.72	n/a			0	1		
26	N	4		retouch/pressure flakes		1	0.40	n/a			1	1		
26	N	4		shatter		2	1.87	n/a			2	2		
26	N	4		tertiary flakes		1	2.48	n/a			0	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
26	N	5		biface thinning flakes		1	3.83	n/a			0	1		
26	N	5		secondary flakes		1	45.36	n/a			1	1		
26	N	5		tertiary flakes		3	6.44	n/a			0	3		
26	O	1		percussion blade	whole	1	3.98	39.54	19.30	5.71	0	1		
26	O	1		primary flakes		1	3.37	n/a			0	1		
26	O	1		secondary flakes		2	2.28	n/a			1	1		1 chalcedony
26	O	1		shatter		4	10.36	n/a			1	4		
26	O	1		tested cobble		1	62.46	n/a			1	1		
26	O	2		chunks		1	26.60	n/a			1	1		
26	O	2		chunks		1	16.24	n/a			1	1		
26	O	2		flake core	multi-dir	1	154.48	65.43	58.02	48.63	1	1		
26	O	2		primary flakes		2	2.32	n/a			1	2		
26	O	2		retouch/pressure flakes		2	0.57	n/a			1	2		
26	O	2		secondary flakes		2	8.38	n/a			0	1	1	
26	O	2		shatter		4	4.47	n/a			2	4		
26	O	2		tertiary flakes		2	2.72	n/a			0	0	2	
26	O	3		biface thinning flakes		4	11.58	n/a			1	4		
26	O	3		primary flakes		1	6.73	n/a			1	1		
26	O	3		retouch/pressure flakes		4	0.93	n/a			4	4		
26	O	3		secondary flakes		2	15.17	n/a			0	2		
26	O	3		shatter		28	41.72	n/a			22	28		
26	O	3		tertiary flakes		5	11.88	n/a			3	5		
26	O	4		biface thinning flakes		1	1.96	n/a			0	1		
26	O	4		flake core	multi-dir	1	85.69	65.36	46.44	36.71	0	1		
26	O	4		primary flakes		2	23.89	n/a			1	2		
26	O	4		secondary flakes		3	60.31	n/a			3	3		
26	O	4		shatter		14	29.62	n/a			6	14		
26	O	4		tertiary flakes		8	90.71	n/a			1	8		
26	O	5		tertiary flakes		1	6.41	n/a			0	1		
26	O	6		biface thinning flakes		2	19.13	n/a			0	2		
26	O	6	138	flake core	bifacial	1	762.55	173.85	90.98	46.15	0	1		
26	O	6		percussion blade	proximal	1	2.76	25.49	18.71	4.74	0	0	1	
26	O	6		secondary flakes		1	9.05	n/a			0	1		
26	P	2		biface thinning flakes		1	7.08	n/a			0	0	1	
26	P	2		secondary flakes		2	13.60	n/a			1	2		
26	P	2		shatter		2	1.66	n/a			1	2		
26	P	2		tertiary flakes		1	2.95	n/a			0	0	1	
26	P	3		biface thinning flakes		1	1.47	n/a			0	1		
26	P	3		primary flakes		1	5.48	n/a			1	1		
26	P	3		shatter		5	9.53	n/a			1	5		
26	P	4		biface thinning flakes		2	3.19	n/a			0	2		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
26	P	4		secondary flakes		1	1.62	n/a			1	1		
26	P	4		shatter		1	0.83	n/a			1	1		
26	Q	1		biface thinning flakes		10	66.27	n/a			3	10		
26	Q	1		chunks		9	120.57	n/a			7	9		
26	Q	1		flake core	bi-dir	1	26.98	50.63	25.06	19.44	1	1		
26	Q	1		flake core	multi-dir	1	55.53	44.15	37.80	31.68	1	1		
26	Q	1		primary flakes		6	147.22	n/a			2	6		
26	Q	1		secondary flakes		5	138.93	n/a			3	5		
26	Q	1		shatter		13	31.03	n/a			12	13		
26	Q	1		tertiary flakes		11	164.47	n/a			3	11		
26	Q	1		tested cobble		1	76.19	n/a			0	1		
26	R	1		biface thinning flakes		7	9.47	n/a			3	7		
26	R	1		chunks		3	13.18	n/a			2	3		
26	R	1		percussion blade	distal	1	0.92	27.40	11.22	2.57	0	1		
26	R	1		percussion blade	whole	1	4.03	37.94	17.07	8.86	0	1		
26	R	1		primary flakes		1	1.63	n/a			1	1		
26	R	1		retouch/pressure flakes		6	1.20	n/a			3	6		
26	R	1		secondary flakes		1	3.24	n/a			0	1		
26	R	1		shatter		37	40.32	n/a			34	37		
26	R	1		tertiary flakes		5	7.44	n/a			5	5		
26	S	1		biface thinning flakes		9	9.04	n/a			6	9		
26	S	1		chunks		5	26.37	n/a			2	5		
26	S	1		percussion blade	distal	1	4.52	28.53	23.56	5.66	0	1		
26	S	1	2	percussion blade	medial	1	1.02	19.59	14.62	3.03	0	1		
26	S	1	1	percussion blade	proximal	1	1.16	22.62	16.13	2.69	0	1		
26	S	1		pressure blade	whole	1	0.34	16.05	7.39	3.34	0	1		
26	S	1		retouch/pressure flakes		3	1.07	n/a			1	3		
26	S	1		secondary flakes		5	18.65	n/a			2	5		
26	S	1		shatter		40	55.83	n/a			32	40		
26	S	1		tertiary flakes		8	34.30	n/a			5	8		
26	T	1		biface thinning flakes		7	20.93	n/a			2	7		
26	T	1		chunks		5	54.50	n/a			3	5		
26	T	1		secondary flakes		3	27.75	n/a			1	3		
26	T	1		shatter		19	30.68	n/a			14	19		
26	T	1		tertiary flakes		4	9.09	n/a			2	4		
26	U	1		biface thinning flakes		1	7.98	n/a			0	1		
26	U	1		primary flakes		1	25.56	n/a			0	1		
26	U	1		secondary flakes		1	4.47	n/a			1	1		
26	W	1		secondary flakes		3	8.35	n/a			1	3		
26	W	1		shatter		10	6.84	n/a			8	10		
26	Y	1		biface thinning flakes		2	4.50	n/a			1	2		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
26	Y	1		chunks		2	17.17	n/a			2	2		
26	Y	1		secondary flakes		2	10.47	n/a			0	2		
26	Y	1		shatter		12	20.70	n/a			8	12		
26	Y	1		tertiary flakes		2	3.03	n/a			2	2		
26	Z	1		biface thinning flakes		8	12.53	n/a			4	8		
26	Z	1		chunks		4	20.78	n/a			3	4		
26	Z	1		percussion blade	distal	1	1.02	23.20	10.05	4.91	1	1		
26	Z	1		percussion blade	proximal	1	1.48	15.07	17.53	5.55	0	1		
26	Z	1		primary flakes		2	2.56	n/a			1	2		
26	Z	1		retouch/pressure flakes		1	0.10	n/a			1	1		
26	Z	1		secondary flakes		4	16.70	n/a			2	4		
26	Z	1		shatter		25	19.98	n/a			19	25		
26	Z	1		tertiary flakes		5	25.61	n/a			1	5		
28	A	2		biface thinning flakes		17	39.80	n/a			8	17		
28	A	2		chunks		3	27.90	n/a			2	3		
28	A	2		primary flakes		3	29.80	n/a			3	3		
28	A	2		secondary flakes		3	43.80	n/a			1	3		
28	A	2		shatter		38	36.50	n/a			15	38		
28	A	2		tertiary flakes		10	28.20	n/a			6	10		
28	A	3		chunks		3	35.00	n/a			3	3		
28	A	3		secondary flakes		3	162.50	n/a			1	3		
28	A	3		shatter		6	5.60	n/a			3	6		
28	A	3		tertiary flakes		7	25.80	n/a			3	7		
28	B	2		biface thinning flakes		7	12.70	n/a			2	7		
28	B	2		chunks		3	31.20	n/a			2	3		
28	B	2		flake core	uni-dir	1	125.40	58.60	51.30	48.50	1	1		
28	B	2		secondary flakes		2	7.10	n/a			0	2		
28	B	2		shatter		17	12.30	n/a			14	17		
28	B	2		tertiary flakes		3	20.90	n/a			2	3		
28	B	3		biface thinning flakes		3	6.40	n/a			1	3		
28	B	3		chunks		2	39.90	n/a			0	2		
28	B	3		flake core	multi-dir	1	95.40	80.20	58.80	30.80	0	1		
28	B	3		primary flakes		3	9.60	n/a			2	3		
28	B	3		secondary flakes		2	7.60	n/a			2	2		
28	B	3		shatter		1	1.50	n/a			1	1		
28	B	4		biface thinning flakes		5	8.90	n/a			3	5		
28	B	4		chunks		5	86.60	n/a			4	5		
28	B	4		flake core	multi-dir	1	284.80	88.20	62.90	48.20	0	1		
28	B	4		flake core	multi-dir	1	18.40	34.10	29.40	19.00	1	1		
28	B	4		primary flakes		5	146.30	n/a			2	5		
28	B	4		secondary flakes		5	34.10	n/a			3	5		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	B	4		shatter		27	33.70	n/a			18	27		
28	B	4		tertiary flakes		1	15.40	n/a			1	0	1	
28	B	4		tertiary flakes		19	49.70	n/a			13	19		
28	B	4		tested cobble		1	352.20	n/a			0	1		
28	B	5		biface thinning flakes		3	6.40	n/a			1	3		
28	B	5		chunks		1	4.90	n/a			0	1		
28	B	5		flake core	multi-dir	1	207.30	75.80	73.10	66.70	0	1		
28	B	5		primary flakes		4	43.70	n/a			1	4		
28	B	5		secondary flakes		5	42.00	n/a			2	5		
28	B	5		shatter		16	11.30	n/a			11	16		
28	B	5		tertiary flakes		5	8.70	n/a			4	5		
28	C	1		chunks		2	10.30	n/a			0	2		
28	C	1		primary flakes		2	52.80	n/a			0	2		
28	C	1		secondary flakes		3	14.90	n/a			1	3		
28	C	1		shatter		2	8.70	n/a			2	2		
28	C	1		tertiary flakes		2	13.10	n/a			0	2		
28	C	2		chunks		3	42.10	n/a			3	3		
28	C	2		primary flakes		2	26.00	n/a			1	2		
28	C	2		secondary flakes		4	32.20	n/a			3	4		
28	C	2		shatter		19	38.80	n/a			8	19		
28	C	2		tertiary flakes		18	67.50	n/a			9	18		
28	C	2		tested cobble		1	85.00	n/a			0	1		
28	C	3		biface thinning flakes		2	4.30	n/a			1	2		
28	C	3		chunks		1	8.10	n/a			1	1		
28	C	3		chunks		1	58.90	n/a			0	1		
28	C	3		flake core	multi-dir	1	64.50	51.20	54.20	30.30	0	1		
28	C	3		flake core	multi-dir	1	37.20	51.60	36.50	23.60	0	1		
28	C	3		secondary flakes		6	238.30	n/a			3	6		
28	C	3		shatter		19	51.10	n/a			13	19		
28	C	3		tertiary flakes		5	81.90	n/a			2	5		
28	D	1		biface thinning flakes		2	6.70	n/a			1	2		
28	D	1		chunks		1	11.20	n/a			0	1		
28	D	1		secondary flakes		1	18.20	n/a			0	1		
28	D	1		shatter		2	3.10	n/a			1	2		
28	D	2	1	micro flake core	multi-dir	1	3.10	18.80	16.20	13.70	1	1		
28	D	2		biface thinning flakes		4	10.10	n/a			4	4		
28	D	2		chunks		1	18.70	n/a			0	1		
28	D	2		flake core	bi-dir	1	34.60	46.70	53.30	19.60	1	1		
28	D	2		primary flakes		2	94.10	n/a			1	2		
28	D	2		secondary flakes		3	121.40	n/a			2	2	1	
28	D	2		shatter		8	21.50	n/a			4	8		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	D	2		tertiary flakes		5	24.10	n/a			0	5		
28	D	3		flake core	multi-dir	1	89.20	66.00	51.70	26.70	1	1		
28	D	3		flake core	bi-dir	1	307.90	60.80	94.90	60.40	0	1		
28	D	3		flake core	multi-dir	1	137.00	57.00	79.80	38.80	0	1		
28	D	3		primary flakes		5	101.40	n/a			2	5		
28	D	3		secondary flakes		7	140.30	n/a			4	7		
28	D	3		shatter		6	18.90	n/a			2	6		
28	D	3		tertiary flakes		8	145.90	n/a			8	8		
28	D	4	1	flake core	multi-dir	1	122.60	63.50	52.60	42.70	0	1		
28	D	4	3	micro blade core	uni-dir	1	26.70	39.70	35.90	22.90	0	1		
28	D	4	4	micro blade core	uni-dir	1	18.70	32.10	31.70	18.80	1	1		
28	D	4	5	micro blade core	uni-dir	1	70.20	33.30	52.50	36.30	0	1		
28	D	4	6	biface reworking flakes	tert. flake	5	43.60	n/a			4	5		
28	D	4	7	percussion blade	whole	1	6.10	40.60	22.80	7.00	0	1		
28	D	4	7	percussion blade	whole	1	6.00	47.80	17.80	10.80	1	1		
28	D	4	7	pressure blade	whole	1	0.40	22.10	8.40	3.00	0	1		
28	D	4	7	pressure blade	whole	1	1.10	30.50	14.00	2.70	0	1		
28	D	4	280	hammerstone	modified core	1	31.38	43.60	34.74	28.05	1	1		
28	D	4	281	hammerstone	modified core	1	24.77	41.22	33.15	19.22	0	1		
28	D	4	282	hammerstone frag	modified core	1	8.33	36.96	25.07	13.08	1	1		
28	D	4	283	hammerstone frag	modified core	1	7.69	29.41	18.58	15.13	1	1		
28	D	4	289	flake core	bifacial	1	17.47	43.20	26.72	18.49	1	1		
28	D	4	290	flake core	bifacial	1	35.31	53.45	30.74	22.83	1	1		
28	D	4		biface thinning flakes		33	105.00	n/a			14	33		
28	D	4		chunks		19	278.00	n/a			8	19		
28	D	4		flake core	bi-dir	1	133.40	64.10	57.20	41.40	0	1		
28	D	4		flake core	multi-dir	1	130.50	48.10	76.80	40.60	0	1		
28	D	4		flake core	multi-dir	1	91.40	48.00	39.50	38.50	0	1		
28	D	4		flake core	unknown	1	78.50	60.20	54.10	28.70	0	1		
28	D	4		flake core	unknown	1	102.80	52.30	68.90	30.50	0	1		
28	D	4		micro blade core	uni-dir	1	18.30	25.70	35.90	19.20	0	1		
28	D	4		primary flakes		1	8.50	n/a			0	0		1 quartzite
28	D	4		primary flakes		26	433.60	n/a			11	26		
28	D	4		secondary flakes		2	91.90	n/a			0	0		2 quartzite
28	D	4		secondary flakes		1	75.10	n/a			0	0	1	
28	D	4		secondary flakes		57	731.80	n/a			15	57		
28	D	4		shatter		89	171.80	n/a			41	89		
28	D	4		tertiary flakes		73	382.20	n/a			30	73		
28	D	5	291	hammerstone	modified core	1	31.25	40.67	33.77	26.25	1	1		
28	D	5	292	flake core	bifacial	1	27.46	46.90	29.30	25.76	1	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	D	5		chunks		5	69.30	n/a			5	5		
28	D	5		percussion blade	proximal	1	2.50	32.20	16.40	6.30	0	0		1 jasper?
28	D	5		percussion blade	whole	1	1.50	26.20	14.20	4.80	0	1		
28	D	5		primary flakes		3	9.20	n/a			2	3		
28	D	5		secondary flakes		11	89.20	n/a			5	11		
28	D	5		shatter		29	46.90	n/a			18	29		
28	D	5		tertiary flakes		25	58.30	n/a			11	25		
28	D	5		tertiary flakes	plat rejuv fl?	1	4.10	n/a			1	1		
28	D	6		primary flakes		2	80.40	n/a			1	2		
28	D	6		secondary flakes		2	41.90	n/a			2	2		
28	D	6		shatter		14	19.60	n/a			9	14		
28	D	6		tertiary flakes		10	16.20	n/a			2	10		
28	D	7		shatter		3	0.20	n/a			1	3		
28	D	7		tertiary flakes		4	3.20	n/a			1	4		
28	D	8		biface thinning flakes		1	0.65	n/a			n/a	1		
28	D	8		chunks		1	22.06	n/a			n/a	1		
28	D	8		primary flakes		1	10.89	n/a			n/a	1		
28	D	8		shatter		5	1.24	n/a			n/a	5		
28	E	1		chunks		1	5.20	n/a			1	1		
28	E	1		primary flakes		1	4.80	n/a			0	0		1 quartzite
28	E	1		secondary flakes		5	216.90	n/a			2	5		
28	E	1		shatter		4	3.90	n/a			2	4		
28	E	1		tertiary flakes		1	34.00	n/a			1	1		
28	E	2		blade core	uni-dir	1	21.70	35.60	25.50	22.90	0	1		
28	E	2		chunks		9	243.20	n/a			7	9		
28	E	2		flake core	multi-dir	1	70.00	56.80	46.00	29.80	0	1		
28	E	2		flake core	multi-dir	1	124.40	68.40	60.30	35.20	0	1		
28	E	2		flake core	multi-dir	1	90.80	69.60	36.50	29.60	0	1		
28	E	2		flake core	multi-dir	1	110.30	56.40	47.30	36.40	0	1		
28	E	2		primary flakes		7	94.90	n/a			1	6		1 quartzite
28	E	2		secondary flakes		6	40.90	n/a			3	6		
28	E	2		shatter		16	27.60	n/a			3	16		
28	E	2		tertiary flakes		12	63.90	n/a			3	12		
28	E	2		tested cobble		1	76.60	n/a			1	1		
28	E	5??		shatter		1	2.70	n/a			0	1		
28	E	5??		tertiary flakes		2	1.40	n/a			0	2		
28	G	1		secondary flakes		1	8.00	n/a			1	1		
28	G	1		shatter		2	2.70	n/a			2	2		
28	G	1		tertiary flakes		2	2.90	n/a			1	2		
28	G	2		biface thinning flakes		2	1.10	n/a			0	2		
28	G	2		chunks		1	53.90	n/a			0	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	G	2		secondary flakes		1	2.60	n/a			0	1		
28	G	2		shatter		5	3.70	n/a			4	5		
28	G	3		chunks		4	112.70	n/a			2	4		
28	G	3		percussion blade	whole	1	4.40	40.80	20.20	6.10	0	1		
28	G	3		primary flakes		2	6.60	n/a			0	1		1 quartzite
28	G	3		secondary flakes		6	226.90	n/a			1	6		
28	G	3		shatter		5	20.10	n/a			3	5		
28	G	3		tertiary flakes		6	35.20	n/a			1	5		1 quartzite
28	G	4	1	flake core	multi-dir	1	198.80	59.00	69.40	45.00	0	1		
28	G	4		chunks		3	75.00	n/a			3	3		
28	G	4		primary flakes		6	48.90	n/a			5	6		
28	G	4		secondary flakes		14	147.10	n/a			5	14		
28	G	4		shatter		28	65.50	n/a			12	28		
28	G	4		tertiary flakes		17	70.70	n/a			3	17		
28	H	1		primary flakes		1	5.60	n/a			1	1		
28	H	1		secondary flakes		1	4.20	n/a			1	1		
28	H	1		shatter		4	1.10	n/a			3	4		
28	H	1		tertiary flakes		1	0.40	n/a			1	1		
28	H	2	1	flake core	multi-dir	1	49.50	43.20	36.00	32.70	0	1		
28	H	2		chunks		1	27.50	n/a			1	1		
28	H	2		primary flakes		1	20.70	n/a			1	0	1	
28	H	2		secondary flakes		6	231.70	n/a			5	6		
28	H	2		shatter		3	22.90	n/a			2	3		
28	H	3		chunks		1	87.90	n/a			0	1		
28	H	3		secondary flakes		4	72.60	n/a			2	4		
28	H	3		shatter		5	15.60	n/a			2	5		
28	H	4		chunks		2	73.30	n/a			1	2		
28	H	4		secondary flakes		2	75.40	n/a			2	2		
28	H	4		tested cobble		1	183.80	n/a			0	1		
28	H	5	1	blade core	uni-dir	1	121.90	51.80	62.10	42.50	0	1		
28	H	5		primary flakes		1	13.90	n/a			0	1		
28	H	5		secondary flakes		2	54.30	n/a			1	1	1	
28	H	5		shatter		2	4.90	n/a			1	2		
28	H	5		tertiary flakes		1	46.80	n/a			0	1		
28	H	6	4	biface reworking flakes	tert. flake	1	29.60	44.70	47.70	19.30	0	1		
28	H	6		blade core	distal	1	17.20	31.30	45.80	23.90	1	1		
28	H	6		primary flakes		2	7.70	n/a			1	2		
28	H	6		secondary flakes		3	154.30	n/a			1	2		1 quartzite
28	H	6		shatter		8	8.20	n/a			4	8		
28	H	6		tertiary flakes		3	6.40	n/a			2	3		
28	I	1	2	flake core	uni-dir	1	189.00	54.80	73.70	43.90	0	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	I	1	3	flake core	multi-dir	1	310.60	87.50	55.10	57.10	0	0	1	
28	I	1	4	flake core	multi-dir	1	51.30	59.60	38.20	28.30	0	1		
28	I	1	5	biface reworking flakes	tert. flake	3	25.60	n/a			1	3		
28	I	1	300	hammerstone	modified core	1	10.06	24.53	23.99	17.90	0	1		
28	I	1	301	hammerstone	modified core	1	90.59	71.51	55.90	27.61	0	1		
28	I	1		biface thinning flakes		7	22.30	n/a			2	6	1	
28	I	1		chunks		4	30.80	n/a			4	4		
28	I	1		flake core	multi-dir	1	13.60	48.30	23.70	17.60	1	1		
28	I	1		flake core	multi-dir	1	93.80	74.40	57.70	27.90	0	1		
28	I	1		primary flakes		7	169.50	n/a			2	5	1	1 red slate?
28	I	1		secondary flakes		20	232.30	n/a			9	18		2 quartzite
28	I	1		secondary flakes		1	35.70	n/a			0	1		
28	I	1		shatter		17	48.20	n/a			9	17		
28	I	1		tertiary flakes		13	46.40	n/a			6	13		
28	I	2	1	pressure blade	whole	1	1.90	31.10	17.50	5.30	0	1		
28	I	2	2	pressure blade	proximal	1	3.00	27.90	15.90	6.60	1	1		
28	I	2	3	percussion blade	medial	1	7.00	43.10	21.00	8.10	0	1		
28	I	2	5	flake core	multi-dir	1	77.00	48.90	54.30	36.90	0	1		
28	I	2	6	flake core	multi-dir	1	17.80	33.80	34.90	23.00	1	1		
28	I	2	7	flake core	multi-dir	1	811.50	98.70	96.00	84.30	0	1		
28	I	2	8	flake core	bi-dir	1	104.30	77.50	50.00	35.50	1	1		
28	I	2	9	flake core	uni-dir	1	41.10	42.60	35.00	38.70	0	1		
28	I	2	10	flake core	uni-dir	1	330.00	49.80	86.10	61.50	0	1		
28	I	2		chunks		5	108.40	n/a			1	4		1 quartzite
28	I	2		flake core	multi-dir	1	71.30	55.30	44.50	37.10	1	1		
28	I	2		flake core	multi-dir	1	249.50	91.80	64.50	46.60	1	1		
28	I	2		primary flakes		6	171.80	n/a			4	6		
28	I	2		secondary flakes		18	598.60	n/a			8	18		
28	I	2		secondary flakes		1	16.90	n/a			0	1		
28	I	2		shatter		9	18.00	n/a			5	8	1	
28	I	2		tertiary flakes		11	106.20	n/a			4	11		
28	I	2		tertiary flakes		1	40.10	n/a			0	1		
28	I	3		chunks		1	12.30	n/a			1	1		
28	I	3		primary flakes		2	46.30	n/a			1	1	1	
28	I	3		secondary flakes		3	41.70	n/a			1	3		
28	I	3		tertiary flakes		4	64.50	n/a			2	4		
28	I	4	1	percussion blade	whole	1	0.60	25.00	12.60	2.65	0	1		
28	I	4		chunks		7	115.80	n/a			5	7		
28	I	4		flake core	multi-dir	1	82.50	58.20	58.40	29.40	0	1		
28	I	4		primary flakes		6	248.70	n/a			2	6		
28	I	4		secondary flakes		14	141.40	n/a			8	14		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	I	4		shatter		29	70.30	n/a			16	29		
28	I	4		tertiary flakes		15	78.90	n/a			5	15		
28	I	4		tested cobble		1	956.20	n/a			1	1		
28	I	5	1	biface reworking flakes	tert. flake	1	17.60	n/a			1	1		
28	I	5	3	flake core	multi-dir	1	205.10	79.10	52.80	44.50	1	1		
28	I	5		flake core	multi-dir	1	861.00	121.90	90.00	82.90	0	1		
28	I	5		shatter		3	8.00	n/a			2	3		
28	I	5		tertiary flakes		3	48.70	n/a			0	3		
28	I	6??		shatter		3	6.40	n/a			0	3		
28	J	1	1	primary flakes		13	127.20	n/a			9	13		
28	J	1	3	biface reworking flakes	tert. flake	1	18.70	33.20	39.10	18.40	1	1		
28	J	1	158	hammerstone	modified core	1	85.18	43.69	53.57	54.11	0	1		
28	J	1	159	hammerstone	modified core	1	162.98	61.97	57.82	44.50	0	1		
28	J	1		biface thinning flakes		1	3.10	n/a			0	1		
28	J	1		chunks		2	40.80	n/a			2	2		
28	J	1		flake core	multi-dir	1	78.70	50.70	59.90	23.90	0	1		
28	J	1		flake core	multi-dir	1	19.00	30.20	27.70	23.00	1	1		
28	J	1		secondary flakes		3	66.50	n/a			2	3		
28	J	1		shatter		8	43.50	n/a			5	8		
28	J	1		tertiary flakes		6	28.60	n/a			2	6		
28	J	2	1	biface thinning flakes		5	20.90	n/a			0	4	1	
28	J	2	3	flake core	multi-dir	1	43.00	52.50	33.60	22.80	1	1		
28	J	2	4	flake core	multi-dir	1	28.60	38.30	32.50	23.90	1	1		
28	J	2	5	secondary flakes		3	60.70	n/a			0	2		1 quartzite
28	J	2		chunks		4	84.10	n/a			2	4		
28	J	2		chunks		1	37.19	n/a			0	1		
28	J	2		flake core	multi-dir	1	80.40	57.00	68.00	22.80	0	0	1	
28	J	2		flake core	multi-dir	1	104.70	52.00	63.00	38.70	0	1		
28	J	2		flake core	multi-dir	1	87.00	48.20	45.40	33.00	1	1		
28	J	2		primary flakes		4	120.80	n/a			2	4		
28	J	2		shatter		7	43.00	n/a			3	7		
28	J	2		tertiary flakes		1	15.90	n/a			0	1		
28	J	3	1	biface thinning flakes		6	19.10	n/a			2	6		
28	J	3	2	retouch/pressure flakes		1	1.10	n/a			0	1		
28	J	3	3	tertiary flakes		8	91.60	n/a			3	8		
28	J	3	4	flake core	multi-dir	1	94.60	53.30	47.60	41.30	0	1		
28	J	3	309	flake core	bifacial	1	21.38	33.02	44.10	24.03	0	1		
28	J	3		chunks		3	81.70	n/a			1	3		
28	J	3		chunks		1	12.40	n/a			1	1		
28	J	3		flake core	multi-dir	1	54.70	74.90	37.00	27.40	0	1		
28	J	3		flake core	multi-dir	1	244.20	74.40	74.20	42.40	0	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	J	3		primary flakes		6	191.70	n/a			1	5		1 quartzite
28	J	3		secondary flakes		6	177.30	n/a			4	6		
28	J	3		shatter		10	29.10	n/a			5	10		
28	J	4	1	biface thinning flakes		6	19.10	n/a			3	6		
28	J	4	2	retouch/pressure flakes		2	2.40	n/a			1	2		
28	J	4	3	tertiary flakes		6	102.90	n/a			3	5		1 red slate?
28	J	4	4	flake core	multi-dir	1	882.70	116.10	85.50	77.70	0	1		
28	J	4	6	flake core	multi-dir	1	77.40	43.40	38.10	36.70	1	1		
28	J	4	7	biface reworking flakes	tert. flake	1	9.10	26.50	36.70	11.60	0	1		
28	J	4		chunks		5	83.80	n/a			4	4		1 quartzite
28	J	4		flake core	multi-dir	1	208.60	75.90	59.20	54.20	0	1		
28	J	4		flake core	multi-dir	1	114.80	51.20	51.00	42.80	0	1		
28	J	4		flake core	multi-dir	1	131.40	53.50	51.80	41.60	0	1		
28	J	4		primary flakes		7	98.50	n/a			2	5	1	1 quartzite
28	J	4		secondary flakes		8	186.80	n/a			3	8		
28	J	4		shatter		22	54.00	n/a			15	22		
28	K	1	1	flake core	multi-dir	1	506.20	70.30	77.10	70.80	0	1		
28	K	1	2	flake core	multi-dir	1	10.10	26.00	22.00	22.00	0	1		
28	K	1	3	flake core	multi-dir	1	15.00	29.40	25.60	20.60	1	1		
28	K	1	4	flake core	multi-dir	1	20.00	34.50	30.10	27.70	1	1		
28	K	1	6	blade core	uni-dir	1	13.10	36.90	19.40	19.60	0	1		
28	K	1		biface thinning flakes		3	4.80	n/a			0	3		
28	K	1		chunks		8	233.40	n/a			3	8		
28	K	1		flake core	multi-dir	1	60.10	49.80	44.00	32.70	0	1		
28	K	1		flake core	multi-dir	1	53.50	60.00	36.70	25.40	1	1		
28	K	1		flake core	multi-dir	1	286.70	77.20	60.20	64.70	0	1		
28	K	1		flake core	multi-dir	1	198.00	74.10	52.00	42.60	0	1		
28	K	1		flake core	multi-dir	1	138.60	73.30	52.90	31.50	1	1		
28	K	1		primary flakes		9	256.50	n/a			3	9		
28	K	1		secondary flakes		11	222.60	n/a			4	10		1 quartzite
28	K	1		shatter		12	63.00	n/a			6	12		
28	K	1		tertiary flakes		2	21.20	n/a			1	2		
28	K	1		tested cobble		1	496.80	n/a			0	1		
28	K	1		tested cobble		1	178.20	n/a			0	0	1	
28	L	1		chunks		1	13.46	n/a			n/a	1		
28	L	1		secondary flakes		1	22.10	n/a			n/a	1		
28	L	2	165	flake core	multi-dir	1	234.80	81.81	72.95	38.81	1	1		
28	L	2	166	flake core	multi-dir	1	243.40	68.86	67.27	55.46	0	1		
28	L	2	167	flake core	multi-dir	1	25.98	31.75	55.97	19.09	0	1		
28	L	2	317	flake core	bifacial	1	56.24	52.43	56.82	24.96	0	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	L	2	318	flake core	multi-dir	1	75.39	54.23	53.59	36.46	0	1		
28	L	2		chunks		1	22.43	n/a			n/a	1		
28	L	2		secondary flakes		1	1.33	n/a			n/a	1		
28	L	2		tertiary flakes		1	193.43	n/a			n/a	1		
28	L	2		tested cobble		1	61.63	n/a			n/a	1		
28	M	2	175	flake core	multi-dir	1	58.92	25.86	63.63	48.35	0	1		
28	M	2	176	flake core	multi-dir	1	65.23	29.97	59.16	44.45	0	1		
28	M	2	177	flake core	multi-dir	1	157.53	76.55	68.18	42.37	0	1		
28	M	2	179	flake core	multi-dir	1	234.80	66.82	60.79	45.16	0	1		
28	M	2	180	flake core	multi-dir	1	245.30	73.17	54.93	51.17	0	1		
28	M	2	181	flake core	multi-dir	1	241.40	73.37	67.45	59.75	0	1		
28	M	2	320	flake core	multi-dir	1	29.36	42.96	32.27	30.77	0	1		
28	M	2		biface thinning flakes		2	2.70	n/a			n/a	2		
28	M	2		percussion blade	proximal	1	2.19	35.78	18.03	3.67	0	1		
28	M	2		percussion blade	medial	1	1.25	20.44	16.45	3.51	1	1		
28	M	2		percussion blade	medial	1	2.18	28.29	15.00	5.96	1	1		
28	M	2		shatter		1	0.83	n/a			n/a	1		
28	N	1		biface thinning flakes		2	3.10	n/a			0	2		
28	N	1		chunks		2	78.90	n/a			2	2		
28	N	1		flake core	multi-dir	1	49.20	43.50	43.40	24.00	1	1		
28	N	1		flake core	multi-dir	1	127.20	52.20	55.60	39.20	1	1		
28	N	1		flake core	multi-dir	1	50.40	48.90	39.80	27.80	0	1		
28	N	1		primary flakes		1	139.60	n/a			1	1		
28	N	1		secondary flakes		4	141.70	n/a			2	4		
28	N	1		shatter		1	2.10	n/a			1	1		
28	N	1		tertiary flakes		1	3.40	n/a			0	1		
28	N	1		tested cobble		1	760.70	n/a			0	0		1 quartzite
28	N	2		biface thinning flakes		4	12.70	n/a			1	4		
28	N	2		chunks		1	52.10	n/a			1	1		
28	N	2		primary flakes		4	194.70	n/a			2	4		
28	N	2		secondary flakes		3	39.20	n/a			2	3		
28	N	2		shatter		4	12.40	n/a			3	3		1 quartzite
28	N	2		tertiary flakes		1	19.20	n/a			1	1		
28	N	3	338	flake core	bifacial	1	46.82	48.74	40.28	24.26	0	1		
28	N	3		biface thinning flakes		15	68.20	n/a			3	15		
28	N	3		biface thinning flakes		1	2.90	n/a			0	1		
28	N	3		biface thinning flakes		1	15.70	n/a			0	1		
28	N	3		chunks		3	93.40	n/a			0	3		
28	N	3		flake core	multi-dir	1	10.80	21.80	24.50	22.80	1	1		
28	N	3		flake core	uni-dir	1	327.00	52.90	81.20	69.30	1	1		

Op	*Subop*	*Lot*	*Ref#*	*Debitage Type*	*subtype*	*#each*	*Weight(g)*	*L*	*W*	*Th*	*heat*	*chert*	*Limest*	*other*
28	N	3		flake core	multi-dir	1	136.10	74.30	51.30	43.10	0	1		
28	N	3		flake core	uni-dir	1	119.90	55.10	65.10	43.50	0	1		
28	N	3		flake core	multi-dir	1	325.50	65.70	68.70	49.00	0	1		
28	N	3		flake core	multi-dir	1	129.30	42.10	74.50	39.30	1	1		
28	N	3		flake core	multi-dir	1	165.60	60.30	48.10	41.00	0	1		
28	N	3		flake core	multi-dir	1	204.30	68.20	52.80	44.50	0	1		
28	N	3		percussion blade	medial	1	10.40	44.80	24.10	10.40	1	1		
28	N	3		percussion blade	whole	1	3.20	36.10	10.90	11.40	1	1		
28	N	3		primary flakes		8	322.30	n/a			2	8		
28	N	3		retouch/pressure flakes		4	1.60	n/a			1	4		
28	N	3		secondary flakes		7	149.30	n/a			5	7		
28	N	3		secondary flakes		2	274.60	n/a			0	2		
28	N	3		shatter		27	65.00	n/a			13	27		
28	N	3		tertiary flakes		15	173.00	n/a			6	15		
28	O	5		biface thinning flakes		72	132.40	n/a			31	72		
28	O	5		blade core	uni-dir	1	12.00	30.50	38.30	12.60	1	1		
28	O	5		burin		1	2.40				0	1		
28	O	5		blades	assorted	7	38.40	n/a			3	7		
28	O	5		chunks		8	45.90	n/a			7	8		
28	O	5		primary flakes		9	143.30	n/a			3	9		
28	O	5		retouch/pressure flakes		33	9.40	n/a				33		
28	O	5		secondary flakes		19	102.60	n/a			13	19		
28	O	5		shatter		119	93.80	n/a			48	119		
28	O	5		tertiary flakes		27	93.30	n/a			18	27		
28	O	5		tertiary flakes		1	11.50	n/a			0	1		
28	O	9		biface thinning flakes		12	24.30	n/a			4	12		
28	O	9		blade core	uni-dir	1	50.00	71.20	40.70	26.20	1	1		
28	O	9		flake core	multi-dir	1	44.40	39.50	39.90	31.70	0	1		
28	O	9		retouch/pressure flakes		9	2.80	n/a				9		
28	O	9		secondary flakes		5	27.70	n/a			5	5		
28	O	9		shatter		19	20.50	n/a			3	19		
28	O	9		tertiary flakes		2	28.40	n/a			0	2		
28	O	10		biface reworking flakes		1	9.20	31.00	34.00	13.70	1	1		
28	O	10		biface reworking flakes		1	5.70	26.50	32.60	11.80	0	1		
28	O	10		biface thinning flakes		61	112.90	n/a			21	61		
28	O	10		biface thinning flakes		1	10.92	n/a			0	1		
28	O	10		bifacial flake core	multi-dir	1	18.30	38.00	31.60	16.70	0	1		
28	O	10		chunks		10	51.60	n/a			9	10		
28	O	10		percussion blade	assorted	9	179.00	n/a	l context)		3	9		
28	O	10		pressure blade	assorted	2	0.30	n/a	l context)		0	2		
28	O	10		primary flakes		4	27.60	n/a			3	4		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	O	10		retouch/pressure flakes		50	13.70	n/a				50		
28	O	10		secondary flakes		13	107.20	n/a			7	13		
28	O	10		shatter		120	112.70	n/a				120		
28	O	10		tertiary flakes		29	158.70	n/a			11	29		
28	O	11	1	anvil/flake core	hammerstone	1	2275.10	160.30	112.30	100.70	1	1		
28	O	11		biface thinning flakes		1	12.13	n/a			0	1		
28	O	11		chunks		4	20.50	n/a			2	4		
28	O	11		flake core	multi-dir	1	429.90	88.90	80.90	56.50	1	1		
28	O	11		flake core	multi-dir	1	64.80	39.50	61.00	30.10	1	1		
28	O	11		flake core	multi-dir	1	9.80	40.30	20.40	15.20	1	1		
28	O	11		flake core	multi-dir	1	11.40	25.80	25.30	24.20	1	1		
28	O	11		primary flakes		8	91.80	n/a			5	8		
28	O	11		secondary flakes		14	57.60	n/a			10	14		
28	O	11		shatter		85	48.10	n/a			37	85		
28	O	12		shatter		1	2.00	n/a			1	1		
28	O	13	189	flake core	multi-dir	1	788.30	89.24	87.89	84.99	0	1		
28	O	13	190	flake core	multi-dir	1	10.79	26.95	22.82	19.86	0	1		
28	O	13	191	flake core	multi-dir	1	5.59	17.76	17.83	12.60	1	1		
28	O	13	192	blade core	uni-dir	1	19.74	44.02	35.83	25.82	0	1		
28	O	13		biface thinning flakes		43	60.00	n/a			15	43		
28	O	13		chunks		3	21.40	n/a			2	3		
28	O	13		percussion blade	assorted	6	7.20	n/a			3	6		
28	O	13		primary flakes		9	57.70	n/a			3	9		
28	O	13		retouch/pressure flakes		41	11.10	n/a				41		
28	O	13		secondary flakes		20	119.70	n/a			9	20		
28	O	13		secondary flakes		1	16.36	n/a			n/a	1		
28	O	13		shatter		112	112.80	n/a				112		
28	O	13		shatter		2	3.44	n/a			n/a	2		
28	O	13		tertiary flakes		23	82.60	n/a			13	23		
28	O	13		tertiary flakes		1	23.12	n/a			n/a	1		
28	O	14	184	flake core	multi-dir	1	53.55	43.87	41.85	34.59	1	1		
28	O	14		biface thinning flakes		2	13.81	n/a			n/a	2		
28	P	1	193	flake core	multi-dir	1	246.50	57.51	79.15	55.15	0	1		
28	P	2	195	flake core	uni-dir	1	158.94	57.44	61.33	40.91	0	1		
28	P	2		biface thinning flakes		1	12.52	n/a			n/a	1		
28	P	3		biface thinning flakes		2	9.00	n/a			n/a	2		
28	P	3		biface thinning flakes		1	22.63	n/a			n/a	1		
28	P	3		percussion blade	medial	1	6.13	38.53	20.16	7.85	1	1		
28	P	3		secondary flakes		1	30.52	n/a			n/a	1		
28	P	3		tertiary flakes		1	33.42	n/a			n/a	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	P	4	203	flake core	multi-dir	1	34.43	42.12	30.47	28.50	0	1		
28	P	4	204	blade core	uni-dir	1	18.81	40.19	30.96	33.15	0	1		
28	P	4	207	flake core	multi-dir	1	148.61	84.61	41.78	35.49	0	1		
28	P	4	208	flake core	multi-dir	1	87.17	58.37	40.96	35.23	0	1		
28	P	4	209	flake core	uni-dir	1	126.27	56.58	62.03	37.62	1	1		
28	P	4	210	flake core	multi-dir	1	100.00	62.21	47.76	37.12	0	1		
28	P	4	211	flake core	multi-dir	1	90.48	63.71	49.96	36.42	0	1		
28	P	4		biface thinning flakes		2	42.06	n/a			n/a	2		
28	P	4		chunks		1	20.91	n/a			n/a	1		
28	P	4		percussion blade	medial	1	2.54	26.35	19.67	3.83	1	1		
28	P	4		tertiary flakes		2	64.07	n/a			n/a	2		
28	Q	3	218	flake core	multi-dir	1	95.80	35.18	64.41	54.11	0	1		
28	Q	3	219	flake core	multi-dir	1	78.62	73.95	66.54	28.83	0	1		
28	Q	3		biface thinning flakes		1	16.17	n/a			n/a	1		
28	Q	3		secondary flakes		1	35.32	n/a			n/a	1		
28	R	1	223	flake core	multi-dir	1	74.64	51.89	52.76	31.39	0	1		
28	R	1	225	blade core	uni-dir	1	4.50	24.05	14.08	12.38	0	1		
28	R	1		percussion blade	proximal	1	1.10	29.08	11.85	4.59	1	1		
28	R	1		percussion blade	medial	1	1.83	41.84	13.80	3.91	0	1		
28	S	1		biface thinning flakes		2	2.50	n/a			0	2		
28	S	1		shatter		1	2.40	n/a			0	1		
28	U	1		flake core	??	1	13.35	25.55	23.00	18.60	1	1		
28	U	1		retouch/pressure flakes		1	0.40	n/a			0	1		
28	U	1		secondary flakes		2	9.20	n/a			1	2		
28	U	1		shatter		1	6.80	n/a			1	1		
28	U	1		tertiary flakes		2	7.30	n/a			2	2		
28	U	1		tertiary flakes		1	4.37	n/a			n/a	1		
28	V	1	227	flake core	multi-dir	1	52.04	42.74	60.07	20.66	0	1		
28	V	1		biface thinning flakes		8	17.20	n/a			4	8		
28	V	1		biface thinning flakes		2	35.72	n/a			n/a	1	1	
28	V	1		chunks		3	24.00	n/a			3	3		
28	V	1		percussion blade	proximal	1	3.25	38.99	19.45	4.64	0	1		
28	V	1		primary flakes		10	92.20	n/a			4	10		
28	V	1		retouch/pressure flakes		3	1.20	n/a			2	3		
28	V	1		secondary flakes		8	202.10	n/a			5	8		
28	V	1		secondary flakes		1	20.84	n/a			n/a	1		
28	V	1		shatter		28	39.60	n/a			15	28		
28	V	1		shatter		1	2.81	n/a			n/a	1		
28	V	1		tertiary flakes		9	28.30	n/a			6	9		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	W	4	231	flake core	multi-dir	1	341.00	92.91	64.47	62.44	0	1		
28	W	4	343	blade core	uni-dir	1	14.98	43.11	21.33	21.35	0	1		
28	W	4		biface thinning flakes		1	7.46	n/a			n/a	1		
28	W	4		percussion blade	distal	1	2.68	33.45	19.95	6.05	0	1		
28	W	4		percussion blade	proximal	1	5.38	36.33	20.14	7.70	0	1		
28	W	4		pressure blade	whole	1	7.23	56.82	22.16	7.65	0	1		
28	W	4		pressure blade	whole	1	2.32	33.67	13.50	9.25	0	1		
28	W	4		secondary flakes		1	81.84	n/a			n/a	1		
28	W	6	234	flake core	multi-dir	1	221.80	72.62	88.85	43.35	0	1		
28	W	6	235	flake core	multi-dir	1	9.33	25.55	20.56	14.52	1	1		
28	W	6	236	flake core	multi-dir	1	59.12	54.76	44.98	29.57	0	1		
28	W	6	237	flake core	multi-dir	1	260.40	70.92	69.28	58.41	0	1		
28	W	6	238	flake core	multi-dir	1	171.69	62.11	60.07	49.54	0	1		
28	W	7	353	hammerstone	modified core	1	157.49	70.35	71.20	31.20	0	1		
28	X	5	239	flake core	multi-dir	1	610.90	79.63	81.32	84.83	0	1		
28	X	5	240	flake core	multi-dir	1	421.80	85.16	78.90	70.91	0	1		
28	X	5	241	flake core	multi-dir	1	27.68	37.71	31.40	23.84	0	1		
28	X	5	242	flake core	multi-dir	1	24.00	36.13	33.67	26.19	0	1		
28	X	5	243	flake core	multi-dir	1	54.98	56.04	33.02	28.43	0	1		
28	X	5	244	flake core	multi-dir	1	99.52	82.40	42.60	36.24	0	1		
28	X	5	245	flake core	multi-dir	1	119.35	68.45	54.39	43.67	0	1		
28	X	5	246	flake core	multi-dir	1	129.21	59.28	50.02	32.47	0	1		
28	X	5	247	flake core	multi-dir	1	150.39	60.54	67.60	37.37	0	1		
28	X	5	248	flake core	uni-dir	1	263.80	46.80	75.05	62.78	0	1		
28	X	5	249	flake core	multi-dir	1	179.09	68.43	63.04	40.57	0	1		
28	X	5	361	flake core	multi-dir	1	32.30	20.01	46.06	33.39	1	1		
28	X	6	255	flake core	uni-dir	1	167.61	66.88	56.72	40.08	0	1		
28	X	6	256	flake core	uni-dir	1	36.64	37.90	57.58	30.90	0	1		
28	X	6	257	flake core	multi-dir	1	34.81	35.97	41.36	20.30	0	1		
28	X	6	258	flake core	multi-dir	1	102.03	59.00	57.24	33.92	0	1		
28	X	6	259	flake core	multi-dir	1	65.66	51.52	46.35	31.59	0	1		
28	X	6	260	flake core	multi-dir	1	285.40	75.93	65.41	53.22	0	1		
28	X	6	261	flake core	multi-dir	1	245.10	82.33	62.59	43.70	0	1		
28	X	6	262	flake core	multi-dir	1	286.60	79.54	65.62	51.97	0	1		
28	X	6	263	flake core	multi-dir	1	226.40	72.67	65.93	58.18	0	1		
28	X	6	375	flake core	bifacial	1	32.72	45.67	43.68	22.38	0	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
28	Y	2	265	flake core	multi-dir	1	158.32	55.10	62.33	38.06	0	1		
28	Y	2		tertiary flakes		1	11.65	n/a			1	1		
29	A	1		biface reworking flakes	tert. flake	1	11.17	26.72	42.82	13.61	0	1		
29	A	1		secondary flakes		1	9.55	n/a			1	1		
29	A	2		biface reworking flakes	bif. thin.	1	8.97	26.75	38.06	9.84	0	1		
29	A	2		biface thinning flakes		2	4.00	n/a			1	2		
29	A	2		primary flakes		1	1.06	n/a			1	1		
29	A	2		secondary flakes		2	3.56	n/a			1	2		
29	A	2		shatter		2	2.27	n/a			1	2		
29	AA	1		biface thinning flakes		22	53.02	n/a			7	22		
29	AA	1		chunks		5	39.07	n/a			4	5		
29	AA	1		flake core	undetectable	1	20.01	dly burned			1	1		
29	AA	1		flake core	undetectable	1	54.38	dly burned			1	1		
29	AA	1		percussion blade	whole	1	3.67	36.17	17.14	5.95	0	1		
29	AA	1		percussion blade	distal	1	5.00	44.47	21.80	5.90	0	1		
29	AA	1		primary flakes		1	4.20	n/a			1	1		
29	AA	1		retouch/pressure flakes		11	2.07	n/a			5	11		
29	AA	1		secondary flakes		5	36.12	n/a			2	5		
29	AA	1		shatter		60	72.90	n/a			26	60		
29	AA	1		tertiary flakes		5	16.10	n/a			2	5		
29	AB	1		biface thinning flakes		47	147.59	n/a			8	47		
29	AB	1		chunks		5	31.93	n/a			3	5		
29	AB	1		percussion blade	whole	1	4.40	38.74	16.18	8.28	0	1		
29	AB	1		percussion blade	whole	1	3.40	44.50	12.13	8.69	0	1		
29	AB	1		percussion blade	medial	1	0.39	22.25	9.86	2.54	0	1		
29	AB	1		primary flakes		2	5.84	n/a			0	2		
29	AB	1		retouch/pressure flakes		11	3.71	n/a			2	11		
29	AB	1		secondary flakes		9	65.03	n/a			2	9		
29	AB	1		shatter		49	75.02	n/a			16	49		
29	AB	1		tertiary flakes		8	104.31	n/a			4	8		
29	AC	1		biface reworking flakes		1	9.25	32.13	34.99	11.96	0	1		
29	AC	1		biface thinning flakes		18	63.64	n/a			n/a	18		
29	AC	1		chunks		5	104.52	n/a			n/a	5		
29	AC	1		flake core	multi-dir	1	116.97	66.47	45.81	36.13	0	1		
29	AC	1		percussion blade	proximal	1	0.31	19.34	7.21	2.16	0	1		
29	AC	1		primary flakes		2	1.68	n/a			n/a	2		
29	AC	1		retouch/pressure flakes		9	3.05	n/a			n/a	8		1 chalcedony
29	AC	1		secondary flakes		2	62.57	n/a			n/a	2		
29	AC	1		shatter		35	63.86	n/a			n/a	35		
29	AC	1		tertiary flakes		3	41.25	n/a			n/a	3		
29	AD	1		biface thinning flakes		13	23.48	n/a			n/a	13		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	AD	1		retouch/pressure flakes		2	0.77	n/a			n/a	2		
29	AD	1		secondary flakes		2	8.55	n/a			n/a	2		
29	AD	1		shatter		14	48.30	n/a			n/a	14		
29	AD	1		tertiary flakes		9	76.15	n/a			n/a	9		
29	AE	1		biface thinning flakes		2	2.53	n/a			n/a	2		
29	AE	1		shatter		3	5.24	n/a			n/a	3		
29	AF	1		biface thinning flakes		3	5.82	n/a			n/a	3		
29	AF	1		primary flakes		1	4.44	n/a			n/a	1		
29	AF	1		secondary flakes		1	1.86	n/a			n/a	1		
29	AF	1		shatter		10	12.84	n/a			n/a	10		
29	AF	1		tertiary flakes		4	34.51	n/a			n/a	4		
29	AG	1		biface thinning flakes		16	52.74	n/a			n/a	16		
29	AG	1		chunks		5	35.96	n/a			n/a	5		
29	AG	1		flake core	multi-dir	1	39.00	54.25	38.10	21.82	0	1		
29	AG	1		percussion blade	whole	1	2.78	39.15	21.07	4.51	0	1		
29	AG	1		retouch/pressure flakes		4	2.40	n/a			n/a	4		
29	AG	1		secondary flakes		3	19.23	n/a			n/a	3		
29	AG	1		shatter		37	68.44	n/a			n/a	37		
29	AG	1		tertiary flakes		4	13.14	n/a			n/a	4		
29	AH	1		biface thinning flakes		17	49.98	n/a			n/a	17		
29	AH	1		chunks		2	23.20	n/a			n/a	2		
29	AH	1		flake core	multi-dir	1	37.16	81.34	27.83	19.50	0	1		
29	AH	1		flake core	multi-dir	1	82.56	67.42	44.86	28.94	0	1		
29	AH	1		flake core	multi-dir	1	67.42	47.51	43.03	29.96	0	1		
29	AH	1		percussion blade	distal	1	2.51	32.13	18.46	5.94	0	1		
29	AH	1		retouch/pressure flakes		1	0.42	n/a			n/a	0		1 chalcedony
29	AH	1		secondary flakes		8	137.68	n/a			n/a	8		
29	AH	1		shatter		46	162.07	n/a			n/a	46		
29	AH	1		tertiary flakes		9	53.90	n/a			n/a	9		
29	AI	1		biface thinning flakes		45	132.58	n/a			n/a	45		
29	AI	1		chunks		4	37.32	n/a			n/a	4		
29	AI	1		percussion blade	medial	1	1.38	23.52	14.54	4.15	0	1		
29	AI	1		percussion blade	medial	1	1.40	30.43	14.48	3.86	0	1		
29	AI	1		primary flakes		4	42.30	n/a			n/a	4		
29	AI	1		retouch/pressure flakes		1	0.38	n/a			n/a	1		
29	AI	1		secondary flakes		8	41.85	n/a			n/a	8		
29	AI	1		shatter		37	79.00	n/a			n/a	36		1 chalcedony
29	AI	1		tertiary flakes		10	94.09	n/a			n/a	10		
29	AJ	1		biface thinning flakes		2	2.57	n/a			n/a	2		
29	AJ	2		biface thinning flakes		4	21.51	n/a			n/a	4		
29	AJ	2		chunks		1	6.83	n/a			n/a	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	AJ	2		shatter		4	6.89	n/a			n/a	4		
29	AJ	3		biface thinning flakes		18	63.37	n/a			n/a	18		
29	AJ	3		chunks		3	14.74	n/a			n/a	3		
29	AJ	3		percussion blade	proximal	1	3.92	47.39	16.63	5.61	0	1		
29	AJ	3		primary flakes		1	19.43	n/a			n/a	1		
29	AJ	3		retouch/pressure flakes		4	0.88	n/a			n/a	4		
29	AJ	3		secondary flakes		5	88.05	n/a			n/a	5		
29	AJ	3		shatter		18	27.57	n/a			n/a	18		
29	AJ	3		tertiary flakes		8	75.49	n/a			n/a	8		
29	AJ	4		biface thinning flakes		42	159.44	n/a			n/a	42		
29	AJ	4		chunks		3	15.59	n/a			n/a	3		
29	AJ	4		flake core	uni-dir	1	35.38	47.60	35.43	30.00	0	1		
29	AJ	4		primary flakes		2	2.98	n/a			n/a	2		
29	AJ	4		retouch/pressure flakes		7	1.69	n/a			n/a	7		
29	AJ	4		secondary flakes		6	110.24	n/a			n/a	6		
29	AJ	4		shatter		51	57.68	n/a			n/a	51		
29	AJ	4		tertiary flakes		8	197.46	n/a			n/a	8		
29	AJ	5		primary flakes		2	15.04	n/a			n/a	2		
29	AJ	5		shatter		2	2.84	n/a			n/a	2		
29	AJ	6		shatter		1	0.42	n/a			n/a	1		
29	AK	2		biface thinning flakes		6	8.23	n/a			n/a	6		
29	AK	2		bifacial flake core	multi-dir	1	28.74	50.95	35.89	19.77	1	1		
29	AK	2		chunks		1	10.91	n/a			n/a	1		
29	AK	2		primary flakes		5	44.56	n/a			n/a	4	1	
29	AK	2		secondary flakes		5	33.20	n/a			n/a	5		
29	AK	2		shatter		6	6.74	n/a			n/a	6		
29	AK	2		tertiary flakes		4	26.09	n/a			n/a	4		
29	AK	3		biface thinning flakes		7	23.04	n/a			n/a	7		
29	AK	3		percussion blade	whole	1	4.32	39.21	15.20	7.01	0	1		
29	AK	3		primary flakes		1	5.86	n/a			n/a	1		
29	AK	3		shatter		4	3.06	n/a			n/a	4		
29	AK	3		tertiary flakes		1	9.67	n/a			n/a	1		
29	AK	4		biface thinning flakes		3	4.96	n/a			n/a	3		
29	AK	4		retouch/pressure flakes		2	0.37	n/a			n/a	2		
29	AK	4		secondary flakes		1	27.02	n/a			n/a	1		
29	AK	4		shatter		5	11.19	n/a			n/a	5		
29	AK	4		tertiary flakes		1	17.44	n/a			n/a	1		
29	AK	5		biface thinning flakes		4	6.70	n/a			n/a	4		
29	AK	5		chunks		1	11.76	n/a			n/a	1		
29	AK	5		primary flakes		2	29.86	n/a			n/a	2		
29	AK	5		secondary flakes		2	137.13	n/a			n/a	1	1	

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	AK	5		shatter		10	20.42	n/a			n/a	10		
29	AK	5		tertiary flakes		1	4.25	n/a			n/a	1		
29	AK	6		biface thinning flakes		2	3.92	n/a			n/a	2		
29	AK	6		percussion blade	medial	1	1.23	25.26	12.95	4.26	0	1		
29	AK	6		pressure blade	whole	1	1.23	30.46	15.25	4.05	0	1		
29	AK	6		pressure blade	proximal	1	3.96	47.19	18.84	4.40	0	1		
29	AK	6		shatter		2	6.79	n/a			n/a	2		
29	AK	6		tertiary flakes		2	50.17	n/a			n/a	2		
29	AN	1		biface thinning flakes		44	148.71	n/a			n/a	44		
29	AN	1		chunks		6	37.73	n/a			n/a	6		
29	AN	1		retouch/pressure flakes		4	1.25	n/a			n/a	4		
29	AN	1		secondary flakes		14	109.10	n/a			n/a	14		
29	AN	1		shatter		49	122.70	n/a			n/a	49		
29	AN	1		tertiary flakes		6	35.02	n/a			n/a	6		
29	AO	1	81	Overshot Flake (Outrepassé)		1	36.18	58.31	42.16	19.09	0	0		1 chalcedony
29	AO	1		biface thinning flakes		6	13.50	n/a			n/a	6		
29	AO	1		chunks		1	15.61	n/a			n/a	1		
29	AO	1		shatter		11	39.38	n/a			n/a	11		
29	AO	1		tertiary flakes		1	3.76	n/a			n/a	1		
29	AP	1		bifacial flake core	multi-dir	1	43.99	55.10	40.49	27.16	0	1		
29	AP	1		chunks		2	45.84	n/a			n/a	2		
29	AP	1		flake core	multi-dir	1	22.38	45.84	32.97	17.83	1	1		
29	AP	1		flake core	multi-dir	1	30.00	53.95	28.10	18.92	0	1		
29	AP	1		primary flakes		1	9.14	n/a			n/a	1		
29	AP	1		shatter		2	8.17	n/a			n/a	2		
29	AR	1		biface thinning flakes		1	0.95	n/a			n/a	1		
29	AR	1		shatter		2	4.83	n/a			n/a	2		
29	AS	1		biface thinning flakes		5	30.19	n/a			n/a	5		
29	AS	1		chunks		2	22.38	n/a			n/a	2		
29	AS	1		flake core	multi-dir	1	240.60	72.73	53.97	54.44	0	1		
29	AS	1		flake core	multi-dir	1	36.10	47.59	40.48	25.45	1	1		
29	AS	1		primary flakes		2	15.50	n/a			n/a	2		
29	AS	1		secondary flakes		1	3.78	n/a			n/a	1		
29	AS	1		shatter		4	11.97	n/a			n/a	4		
29	AS	1		tertiary flakes		2	12.10	n/a			n/a	2		
29	AT	1		biface thinning flakes		18	57.25	n/a			n/a	18		
29	AT	1		chunks		4	48.82	n/a			n/a	4		
29	AT	1		flake core	multi-dir	1	35.98	56.02	27.51	27.21	1	1		
29	AT	1		flake core	multi-dir	1	57.07	45.67	36.72	34.06	0	1		
29	AT	1		primary flakes		2	53.43	n/a			n/a	2		
29	AT	1		secondary flakes		12	214.19	n/a			n/a	12		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	AT	1		shatter		32	78.38	n/a			n/a	32		
29	AT	1		tertiary flakes		12	119.27	n/a			n/a	12		
29	AU	1		biface thinning flakes		28	51.10	n/a			n/a	28		
29	AU	1		chunks		2	76.74	n/a			n/a	2		
29	AU	1		primary flakes		2	2.90	n/a			n/a	2		
29	AU	1		retouch/pressure flakes		2	0.64	n/a			n/a	2		
29	AU	1		secondary flakes		5	30.09	n/a			n/a	5		
29	AU	1		shatter		48	75.73	n/a			n/a	48		
29	AU	1		tertiary flakes		10	53.39	n/a			n/a	10		
29	AV	1		biface thinning flakes		6	9.06	n/a			n/a	6		
29	AV	1		secondary flakes		5	105.90	n/a			n/a	5		
29	AV	1		shatter		8	14.53	n/a			n/a	8		
29	AV	1		tertiary flakes		1	9.49	n/a			n/a	1		
29	AW	1		biface thinning flakes		1	1.66	n/a			n/a	1		
29	AW	2		biface thinning flakes		28	74.96	n/a			n/a	27		1 chalcedony
29	AW	2		chunks		6	50.09	n/a			n/a	6		
29	AW	2		flake core	multi-dir	1	41.92	47.03	30.60	28.64	0	1		
29	AW	2		primary flakes		4	65.94	n/a			n/a	4		
29	AW	2		retouch/pressure flakes		7	3.25	n/a			n/a	7		
29	AW	2		secondary flakes		7	87.05	n/a			n/a	7		
29	AW	2		shatter		52	140.38	n/a			n/a	51		1 chalcedony
29	AW	2		tertiary flakes		7	87.64	n/a			n/a	7		
29	AX	1		biface thinning flakes		2	2.17	n/a			n/a	2		
29	AX	1		percussion blade	medial	1	5.05	36.45	22.55	4.71	0	1		
29	AX	1		secondary flakes		1	27.47	n/a			n/a	1		
29	AX	1		shatter		1	0.51	n/a			n/a	1		
29	AX	1		tertiary flakes		2	16.46	n/a			n/a	2		
29	AZ	1	1	hammerstone		1	70.79	69.84	36.12	249.60	0	1		
29	AZ	1		biface thinning flakes		2	14.42	n/a			n/a	2		
29	AZ	1		chunks		1	20.38	n/a			n/a	1		
29	AZ	1		percussion blade	proximal	1	4.71	46.83	21.85	5.46	0	1		
29	AZ	1		percussion blade	whole	1	2.52	35.12	15.26	4.68	0	1		
29	AZ	1		percussion blade	whole	1	1.96	33.78	13.01	5.78	1	1		
29	AZ	1		secondary flakes		1	3.69	n/a			n/a	1		
29	AZ	1		shatter		3	11.70	n/a			n/a	3		
29	AZ	1		tertiary flakes		2	6.15	n/a			n/a	2		
29	B	1		biface thinning flakes		1	3.30	n/a			0	1		
29	B	1		tertiary flakes		2	19.59	n/a			1	2		
29	B	2	1	hammerstone	flake core	1	63.33	52.84	39.49	31.94	1	1		
29	B	2	2	hammerstone	flake core	1	50.60	53.08	27.09	32.07	1	1		
29	B	2		secondary flakes		1	4.77	n/a			1	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	B	2		shatter		5	8.59	n/a			3	5		
29	B	2		tertiary flakes		5	28.71	n/a			4	5		
29	BA	1		biface thinning flakes		1	1.48	n/a			n/a	1		
29	BA	1		chunks		1	10.15	n/a			n/a	1		
29	BA	1		shatter		3	8.24	n/a			n/a	3		
29	BA	2		biface thinning flakes		15	41.57	n/a			n/a	15		
29	BA	2		chunks		2	15.01	n/a			n/a	2		
29	BA	2		percussion blade	whole	1	0.40	37.66	10.19	5.85	0	1		
29	BA	2		pressure blade	whole	1	0.60	22.50	9.35	4.09	0	1		
29	BA	2		retouch/pressure flakes		4	0.78	n/a			n/a	4		
29	BA	2		secondary flakes		1	6.96	n/a			n/a	1		
29	BA	2		shatter		27	43.57	n/a			n/a	27		
29	BA	2		tertiary flakes		4	10.14	n/a			n/a	4		
29	BB	1		biface thinning flakes		2	5.92	n/a			n/a	2		
29	BB	1		shatter		2	0.84	n/a			n/a	2		
29	BB	2		biface thinning flakes		29	59.87	n/a			n/a	27		2 chalcedony
29	BB	2		chunks		2	7.22	n/a			n/a	2		
29	BB	2		percussion blade	whole	1	0.44	25.88	7.46	3.04	1	1		
29	BB	2		percussion blade	proximal	1	7.56	49.61	21.65	7.68	0	1		
29	BB	2		primary flakes		4	9.03	n/a			n/a	4		
29	BB	2		retouch/pressure flakes		9	3.39	n/a			n/a	9		
29	BB	2		secondary flakes		3	6.78	n/a			n/a	3		
29	BB	2		shatter		37	28.37	n/a			n/a	37		
29	BB	2		tertiary flakes		5	26.75	n/a			n/a	5		
29	BC	1		shatter		1	0.89	n/a			n/a	1		
29	BC	2		biface thinning flakes		2	1.66	n/a			n/a	2		
29	BC	2		chunks	hammerst ?	1	20.65	n/a			n/a	1		
29	BC	2		primary flakes		1	1.39	n/a			n/a	1		
29	BC	2		secondary flakes		1	18.73	n/a			n/a	1		
29	BC	2		shatter		7	10.75	n/a			n/a	7		
29	BD	1		biface thinning flakes		1	0.92	n/a			n/a	1		
29	BD	2		biface thinning flakes		6	8.62	n/a			n/a	6		
29	BD	2		retouch/pressure flakes		1	0.32	n/a			n/a	1		
29	BD	2		secondary flakes		1	52.41	n/a			n/a	1		
29	BD	2		shatter		11	22.55	n/a			n/a	11		
29	BE	1		biface thinning flakes		2	5.54	n/a			n/a	2		
29	BE	1		percussion blade	whole	1	1.63	30.47	13.34	3.41	0	1		
29	BE	2		biface thinning flakes		4	7.76	n/a			n/a	4		
29	BE	2		chunks		1	1.02	n/a			n/a	1		
29	BE	2		flake core	multi-dir	1	8.65	29.96	16.65	16.00	1	1		
29	BE	2		secondary flakes		3	12.96	n/a			n/a	3		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	BE	2		tertiary flakes		2	5.73	n/a			n/a	2		
29	BF	1		biface thinning flakes		1	0.78	n/a			n/a	0		1 chalcedony
29	BF	2		biface thinning flakes		3	12.92	n/a			n/a	3		
29	BF	2		flake core	multi-dir	1	30.70	37.49	331.22	25.09	0	1		
29	BF	2		primary flakes		1	4.39	n/a			n/a	1		
29	BF	2		secondary flakes		1	3.89	n/a			n/a	1		
29	BF	2		shatter		4	4.89	n/a			n/a	4		
29	BG	2		biface thinning flakes		1	1.30	n/a			n/a	1		
29	BG	2		retouch/pressure flakes		1	0.39	n/a			n/a	1		
29	BG	2		shatter		2	0.36	n/a			n/a	2		
29	BH	1		shatter		4	5.10	n/a			n/a	4		
29	BH	1		tertiary flakes		1	2.16	n/a			n/a	1		
29	BH	2		shatter		1	0.33	n/a			n/a	1		
29	BI	2		biface thinning flakes		2	1.88	n/a			n/a	2		
29	BI	2		chunks		1	6.84	n/a			n/a	1		
29	BI	2		shatter		1	1.16	n/a			n/a	1		
29	BI	2		tertiary flakes		1	18.58	n/a			n/a	1		
29	BJ	2		biface thinning flakes		3	7.55	n/a			n/a	3		
29	BJ	2		shatter		1	1.99	n/a			n/a	1		
29	BK	1		retouch/pressure flakes		1	0.22	n/a			n/a	1		
29	BK	2		biface thinning flakes		5	7.84	n/a			n/a	5		
29	BK	2		retouch/pressure flakes		1	0.36	n/a			n/a	1		
29	BK	2		shatter		8	4.80	n/a			n/a	8		
29	BL	2		biface thinning flakes		9	31.54	n/a			n/a	9		
29	BL	2		primary flakes		1	12.80	n/a			n/a	1		
29	BL	2		retouch/pressure flakes		3	0.51	n/a			n/a	3		
29	BL	2		shatter		8	8.90	n/a			n/a	8		
29	BM	1		biface thinning flakes		1	2.73	n/a			n/a	1		
29	BM	2		biface thinning flakes		5	26.41	n/a			n/a	5		
29	BM	2		primary flakes		1	5.01	n/a			n/a	1		
29	BM	2		shatter		3	3.86	n/a			n/a	3		
29	BM	2		tertiary flakes		1	11.32	n/a			n/a	1		
29	BO	1	99	flake core	multi-dir	1	753.70	96.27	90.42	75.67	0	0		1 petrif. wood
29	BP	1	24	secondary flakes		1	19.82	n/a			n/a	1		
29	BP	1	27	secondary flakes		1	37.29	n/a			n/a	1		
29	BP	1	41	biface thinning flakes		1	8.65	n/a			n/a	1		
29	BP	1	45	primary flakes		1	39.38	n/a			n/a	1		
29	BP	1	52	chunks		1	43.68	n/a			n/a	1		
29	BP	1	56	chunks		1	77.85	n/a			n/a	1		
29	BP	1	58	tertiary flakes		1	53.65	n/a			n/a	1		
29	BP	1	67	tertiary flakes		1	89.88	n/a			n/a	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	BP	1	102	hammerstone	modified core	1	208.00	61.69	63.53	53.25	0	1		
29	BP	1	?	primary flakes		1	25.74	n/a			n/a	1		
29	BP	1	?	retouch/pressure flakes		1	0.46	n/a			n/a	1		
29	BP	1	?	shatter		2	3.56	n/a			n/a	2		
29	BP	1	?	tested cobble		1	472.50	n/a			n/a	1		
29	BP	1		biface thinning flakes		3	11.87	n/a			n/a	3		
29	BP	1		chunks		1	8.74	n/a			n/a	1		
29	BP	1		flake core	multi-dir	1	86.35	58.42	44.43	42.09	0	1		
29	BP	1		secondary flakes		2	24.58	n/a			n/a	2		
29	BP	1		shatter		5	5.89	n/a			n/a	5		
29	BP	2		biface thinning flakes		1	1.00	n/a			n/a	1		
29	BP	2		primary flakes		1	111.15	n/a			n/a	1		
29	BP	2		shatter		2	12.13	n/a			n/a	2		
29	BP	2		tertiary flakes		1	52.29	n/a			n/a	1		
29	BP	3		biface thinning flakes		7	108.28	n/a			n/a	7		
29	BP	3		chunks		2	18.82	n/a			n/a	2		
29	BP	3		secondary flakes		3	124.07	n/a			n/a	3		
29	BP	3		shatter		3	18.46	n/a			n/a	3		
29	BP	3		tertiary flakes		2	41.95	n/a			n/a	2		
29	BS	1		biface thinning flakes		2	4.63	n/a			n/a	2		
29	BS	1		chunks		1	16.81	n/a			n/a	1		
29	BS	1		primary flakes		2	16.96	n/a			n/a	2		
29	BS	2		biface thinning flakes		8	31.69	n/a			n/a	8		
29	BS	2		chunks		3	41.45	n/a			n/a	3		
29	BS	2		hammerstone	frag	1	18.05	28.32	35.03	30.01	0	1		
29	BS	2		hammerstone	frag	1	37.90	37.41	39.93	20.40	0	1		
29	BS	2		retouch/pressure flakes		1	0.49	n/a			n/a	1		
29	BS	2		secondary flakes		3	76.36	n/a			n/a	3		
29	BS	2		shatter		21	68.44	n/a			n/a	21		
29	BS	2		tertiary flakes		2	27.96	n/a			n/a	2		
29	BS	2		tertiary flakes	distal rejuv	3	82.74	n/a			n/a	3		
29	BS	3		biface thinning flakes		2	19.32	n/a			n/a	0		2 chalcedony
29	BT	2		chunks		4	32.06	n/a			n/a	4		
29	BT	2		primary flakes		1	9.46	n/a			n/a	1		
29	BT	2		tertiary flakes		1	10.06	n/a			n/a	0	1	
29	BU	1		biface thinning flakes	65	1	4.99	n/a			n/a	1		
29	BU	1		biface thinning flakes		1	22.78	n/a			n/a	1		
29	BU	1		biface thinning flakes		1	17.40	n/a			n/a	1		
29	BU	1		chunks		1	11.43	n/a			n/a	1		
29	BU	1		chunks		1	39.33	n/a			n/a	1		
29	BU	1		flake core	multi-dir	1	22.38	39.65	29.09	27.06	0	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	BU	1		primary flakes		2	3.83	n/a			n/a	2		
29	BU	1		secondary flakes		1	3.51	n/a			n/a	1		
29	BU	1		shatter		1	14.13	n/a			n/a	1		
29	BU	1		shatter		1	16.07	n/a			n/a	1		
29	BU	1		tertiary flakes		1	15.55	n/a			n/a	1		
29	BU	1		tertiary flakes		1	68.48	n/a			n/a	1		
29	BU	2		biface thinning flakes		11	53.73	n/a			n/a	10		1 chalcedony
29	BU	2		chunks		8	151.40	n/a			n/a	8		
29	BU	2		flake core	multi-dir	1	505.60	95.73	76.89	66.73	0	1		
29	BU	2		flake core	bi-dir	1	185.20	63.53	60.08	48.51	0	1		
29	BU	2		flake core	multi-dir	1	109.47	57.87	53.43	32.80	0	1		
29	BU	2		flake core	multi-dir	1	20.28	30.06	29.79	17.68	1	1		
29	BU	2		flake core	??	1	27.08	49.47	32.07	21.90	1	1		
29	BU	2		primary flakes		2	110.52	n/a			n/a	2		
29	BU	2		secondary flakes		3	60.61	n/a			n/a	2		1 chalcedony
29	BU	2		shatter		12	34.64	n/a			n/a	12		
29	BU	2		tertiary flakes		5	119.00	n/a			n/a	5		
29	C	1		biface thinning flakes		1	11.98	n/a			0	1		
29	C	1		flake core	multi-dir	1	843.50	119.13	93.08	78.63	0	1		
29	C	1		secondary flakes		1	6.54	n/a			0	1		
29	C	1		shatter		4	6.79	n/a			3	4		
29	C	1		tertiary flakes		2	7.24	n/a			2	2		
29	C	2		hammerstone	flake core	1	13.23	41.00	28.63	12.87	1	1		
29	C	2		primary flakes		1	5.89	n/a			1	1		
29	C	2		secondary flakes		1	6.97	n/a			0	1		
29	C	2		tested cobble		1	202.17	n/a			0	1		
29	C	3		biface reworking flakes	tert. flake	1	25.78	33.31	44.83	18.96	1	1		
29	C	3		biface thinning flakes		7	19.45	n/a			2	7		
29	C	3		chunks		3	32.22	n/a			2	3		
29	C	3		flake core	multi-dir	1	20.15	38.30	31.86	25.56	0	1		
29	C	3		flake core	multi-dir	1	10.98	32.32	30.44	19.41	1	1		
29	C	3		flake core	multi-dir	1	15.42	36.40	27.49	16.49	1	1		
29	C	3		percussion blade	proximal	1	2.83	26.16	15.94	7.46	0	1		
29	C	3		primary flakes		1	11.60	n/a			1	1		
29	C	3		retouch/pressure flakes		1	0.68	n/a			0	1		
29	C	3		secondary flakes		3	85.99	n/a			0	3		
29	C	3		shatter		13	23.01	n/a			11	13		
29	C	3		tertiary flakes		4	42.44	n/a			2	4		
29	C	4		biface thinning flakes		3	8.61	n/a			3	3		
29	C	4		secondary flakes		3	79.10	n/a			2	3		
29	C	4		shatter		4	21.33	n/a			3	4		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	C	4		tertiary flakes		2	15.86	n/a			2	2		
29	C	7		retouch/pressure flakes		1	0.56	n/a			0	1		
29	C	7		secondary flakes		1	14.06	n/a			0	1		
29	C	7		tertiary flakes		2	2.90	n/a			1	1		1 chalcedony
29	C	8		biface thinning flakes		2	9.83	n/a			1	2		
29	C	8		chunks		2	26.58	n/a			1	2		
29	C	8		flake core	multi-dir	1	70.90	47.32	37.98	36.31	1	1		
29	C	8		flake core	multi-dir	1	74.77	68.53	44.19	35.02	0	1		
29	C	8		primary flakes		2	25.43	n/a			1	2		
29	C	8		secondary flakes		3	47.05	n/a			1	3		
29	C	8		shatter		1	3.62	n/a			1	1		
29	C	8		tertiary flakes		2	32.51	n/a			0	2		
29	C	8		tested cobble		1	78.00	n/a			0	1		
29	C	9		biface thinning flakes		1	4.44	n/a			0	1		
29	C	9		chunks		2	56.00	n/a			2	2		
29	C	9		secondary flakes		2	11.62	n/a			1	2		
29	C	9		shatter		3	10.84	n/a			2	3		
29	C	10		chunks		1	23.50	n/a			1	1		
29	C	10		retouch/pressure flakes		6	1.35	n/a			4	6		
29	C	10		shatter		12	5.80	n/a			8	12		
29	C	11		shatter		3	1.78	n/a			2	3		
29	C	12		biface thinning flakes		3	2.23	n/a			3	3		
29	C	12		primary flakes		1	5.59	n/a			0	1		
29	C	12		retouch/pressure flakes		2	0.47	n/a			0	2		
29	C	12		secondary flakes		2	6.05	n/a			0	2		
29	C	12		shatter		6	7.39	n/a			5	6		
29	C	12		tertiary flakes		3	32.47	n/a			0	3		
29	C	13		biface thinning flakes		11	19.83	n/a			2	11		
29	C	13		pressure blade	medial	1	0.23	17.89	7.02	1.73	0	1		
29	C	13		primary flakes		1	33.92	n/a			0	1		
29	C	13		retouch/pressure flakes		8	2.82	n/a			2	8		
29	C	13		secondary flakes		4	28.45	n/a			1	4		
29	C	13		shatter		16	16.30	n/a			6	16		
29	C	13		tertiary flakes		1	22.30	n/a			0	1		
29	D	1		secondary flakes		1	82.58	n/a			0	1		
29	E	1		biface thinning flakes		6	24.72	n/a			3	6		
29	E	1		retouch/pressure flakes		3	1.03	n/a			2	3		
29	E	1		secondary flakes		1	17.43	n/a			1	1		
29	E	1		shatter		6	6.40	n/a			4	6		
29	E	1		tertiary flakes		3	17.76	n/a			1	2	1	
29	E	2		percussion blade	whole	1	18.64	65.00	27.74	13.07	0	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	E	3		biface thinning flakes		4	10.08	n/a			1	4		
29	E	3		chunks		1	9.90	n/a			1	1		
29	E	3		primary flakes		2	7.91	n/a			1	0	2	
29	E	3		secondary flakes		1	23.36	n/a			0	1		
29	E	3		shatter		10	10.40	n/a			4	10		
29	E	3		tertiary flakes		2	1.32	n/a			1	2		
29	E	4		biface thinning flakes		14	41.75	n/a			4	14		
29	E	4		chunks		1	17.54	n/a			0	1		
29	E	4		primary flakes		1	4.90	n/a			1	1		
29	E	4		retouch/pressure flakes		5	2.48	n/a			2	5		
29	E	4		secondary flakes		4	66.07	n/a			0	4		
29	E	4		shatter		9	17.74	n/a			5	9		
29	E	4		tertiary flakes		4	13.91	n/a			1	4		
29	E	5	11	blade core	multi-dir	1	7.38	21.33	33.74	11.58	0	0		1 chalcedony
29	E	5	12	flake core	multi-dir	1	73.90	54.04	41.93	30.48	0	1		
29	E	5		biface thinning flakes		53	131.32	n/a			12	52		1 chalcedony
29	E	5		chunks		6	73.17	n/a			6	6		
29	E	5		flake core	multi-dir	1	53.45	61.75	41.91	19.03	0	1		
29	E	5		flake core	multi-dir	1	60.78	54.00	45.69	29.43	1	1		
29	E	5		flake core	multi-dir	1	20.83	38.48	37.03	15.86	0	1		
29	E	5		flake core	multi-dir	1	16.98	36.92	32.59	15.26	1	1		
29	E	5		flake core	bi-dir	1	9.15	21.12	35.03	18.13	0	1		
29	E	5		pressure blade	proximal	1	1.36	27.45	13.22	3.59	0	1		
29	E	5		pressure blade	proximal	1	1.07	23.45	13.13	4.45	0	1		
29	E	5		pressure blade	distal	1	1.04	29.62	15.91	3.42	0	1		
29	E	5		pressure blade	whole	1	0.63	27.81	10.91	3.49	0	1		
29	E	5		pressure blade	whole	1	0.62	22.35	11.95	3.02	0	1		
29	E	5		primary flakes		3	8.73	n/a			1	3		
29	E	5		retouch/pressure flakes		23	8.78	n/a			6	23		
29	E	5		secondary flakes		8	117.62	n/a			2	8		
29	E	5		shatter		86	157.92	n/a			36	86		
29	E	5		tertiary flakes		17	86.26	n/a			4	17		
29	F	1		biface thinning flakes		2	1.82	n/a			1	2		
29	F	1		chunks		2	33.96	n/a			2	2		
29	F	1		flake core	multi-dir	1	55.08	53.48	37.29	28.60	1	1		
29	F	1		secondary flakes		4	13.59	n/a			1	4		
29	F	1		shatter	159	4	10.58	n/a			3	4		
29	F	2		biface thinning flakes		2	2.38	n/a			0	1		1 chalcedony
29	F	2		biface thinning flakes		1	6.89	n/a			1	1		
29	F	2		chunks		3	12.73	n/a			0	3		
29	F	2		chunks		2	56.42	n/a			1	2		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	F	2		pressure blade	whole	1	0.75	24.51	10.38	2.63	0	1		
29	F	2		secondary flakes		3	30.14	n/a			1	3		
29	F	2		shatter		11	22.57	n/a			7	11		
29	F	2		shatter		2	3.56	n/a			1	2		
29	F	2		tertiary flakes		5	22.31	n/a			5	5		
29	F	3		primary flakes		1	11.73	n/a			1	1		
29	F	3		secondary flakes		2	11.78	n/a			1	2		
29	F	3		shatter		3	3.28	n/a			2	3		
29	F	4		biface thinning flakes		2	4.36	n/a			2	2		
29	F	4		secondary flakes		2	24.20	n/a			1	2		
29	F	4		shatter		9	12.95	n/a			8	9		
29	F	6		shatter		3	4.04	n/a			0	3		
29	F	7		biface thinning flakes		8	22.85	n/a			3	8		
29	F	7		chunks		2	34.24	n/a			1	2		
29	F	7		retouch/pressure flakes		1	0.84	n/a			0	1		
29	F	7		secondary flakes		6	114.17	n/a			3	6		
29	F	7		shatter		15	58.16	n/a			13	15		
29	F	7		tertiary flakes		8	52.80	n/a			3	8		
29	F	7		tested cobble		1	99.40	n/a			0	1		
29	F	8		biface thinning flakes		9	19.04	n/a			1	9		
29	F	8		chunks		1	57.94	n/a			1	1		
29	F	8		flake core	multi-dir	1	52.77	61.98	37.72	22.79	1	1		
29	F	8		primary flakes		1	2.31	n/a			0	1		
29	F	8		retouch/pressure flakes		2	0.52	n/a			2	2		
29	F	8		secondary flakes		1	40.13	n/a			0	1		
29	F	8		shatter		18	57.73	n/a			10	18		
29	F	8		tertiary flakes		5	128.58	n/a			1	5		
29	F	9		shatter		6	5.57	n/a			3	6		
29	G	1		chunks		2	21.88	n/a			1	2		
29	G	1		flake core	multi-dir	1	40.77	39.38	35.77	27.98	0	1		
29	I	1	18	flake core	multi-dir	1	76.90	56.94	43.72	34.53	0	1		
29	J	2		shatter		4	8.56	n/a			3	4		
29	J	3	19	hammerstone	modified core	1	250.20	61.57	62.69	57.08	0	1		
29	J	3		biface thinning flakes		5	16.26	n/a			2	5		
29	J	3		chunks		1	9.41	n/a			1	1		
29	J	3		flake core	multi-dir	1	246.50	73.70	69.90	52.08	0	1		
29	J	3		retouch/pressure flakes		2	1.12	n/a			2	2		
29	J	3		secondary flakes		3	6.90	n/a			1	3		
29	J	3		shatter		18	9.82	n/a			10	18		
29	J	3		tertiary flakes		9	53.13	n/a			5	9		
29	K	1		biface thinning flakes		1	4.87	n/a			1	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	K	1		secondary flakes		1	36.24	n/a			0	1		
29	K	1		shatter		2	15.62	n/a			2	2		
29	K	2		primary flakes		2	62.74	n/a			0	2		
29	K	2		secondary flakes		2	224.06	n/a			0	2		
29	K	2		shatter		4	30.52	n/a			2	4		
29	K	2		tertiary flakes		5	22.79	n/a			3	5		
29	L	1		shatter		4	10.24	n/a			3	4		
29	L	2		shatter		1	1.06	n/a			0	1		
29	M	1		biface thinning flakes		2	1.30	n/a			2	2		
29	M	1		percussion blade	whole	1	6.61	44.31	21.61	6.90	0	1		
29	M	1		secondary flakes		2	25.88	n/a			1	2		
29	M	1		shatter		5	6.91	n/a			2	5		
29	M	1		tertiary flakes		1	3.53	n/a			1	1		
29	M	2		biface thinning flakes		6	18.64	n/a			2	6		
29	M	2		chunks		1	9.02	n/a			1	1		
29	M	2		pressure blade	whole	1	2.56	36.78	18.90	3.76	0	1		
29	M	2		retouch/pressure flakes		2	1.09	n/a			0	2		
29	M	2		secondary flakes		6	210.11	n/a			2	6		
29	M	2		shatter		5	7.67	n/a			3	5		
29	M	2		tertiary flakes		10	35.85	n/a			7	10		
29	N	1		chunks		1	12.00	n/a			1	1		
29	N	1		primary flakes		1	6.47	n/a			0	1		
29	N	1		tertiary flakes		3	28.44	n/a			0	3		
29	N	2		biface thinning flakes		2	13.29	n/a			0	1		1 chalcedony
29	N	2		chunks		1	26.94	n/a			1	1		
29	N	2		shatter		4	11.89	n/a			3	4		
29	N	2		tertiary flakes		2	8.01	n/a			1	2		
29	N	3		biface thinning flakes		4	7.60	n/a			2	4		
29	N	3		chunks		3	56.29	n/a			2	3		
29	N	3		primary flakes		4	13.31	n/a			1	4		
29	N	3		retouch/pressure flakes		2	0.84	n/a			0	2		
29	N	3		secondary flakes		1	14.02	n/a			0	1		
29	N	3		shatter		16	25.52	n/a			12	16		
29	N	3		tertiary flakes		4	20.77	n/a			2	4		
29	P	1		secondary flakes		1	4.79	n/a			1	1		
29	P	1		shatter		3	13.57	n/a			2	3		
29	P	1		tertiary flakes		1	1.00	n/a			0	1		
29	Q	2	25	chunks		1	9.58	15.35	30.83	18.61	1	1		
29	R	1	27	chunks		1	5.83	16.45	26.69	15.63	1	1		
29	S	1		biface thinning flakes		2	8.75	n/a			0	2		
29	S	1		chunks		1	44.98	n/a			0	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	S	1		hammerstone	flake core	1	195.96	67.25	50.44	51.35	0	1		
29	S	1		primary flakes		1	8.93	n/a			1	1		
29	S	1		secondary flakes		2	91.64	n/a			1	2		
29	S	1		shatter		4	17.34	n/a			4	4		
29	S	1		tertiary flakes		3	15.79	n/a			3	3		
29	S	2		biface reworking flakes		1	21.45	42.24	35.25	17.53	0	1		
29	S	2		biface thinning flakes		2	14.71	n/a			1	2		
29	S	2		flake core	multi-dir	1	138.35	51.17	41.23	42.72	0	1		
29	S	2		secondary flakes		3	68.46	n/a			2	3		
29	S	2		shatter		4	12.26	n/a			4	4		
29	S	2		tertiary flakes		1	34.89	n/a			1	1		
29	T	2		biface thinning flakes		1	1.54	n/a			1	1		
29	T	2		chunks		3	35.56	n/a			3	3		
29	T	2		primary flakes		1	27.30	n/a			0	1		
29	T	2		secondary flakes		2	10.28	n/a			0	2		
29	T	2		shatter		5	5.06	n/a			5	5		
29	T	2		tertiary flakes		4	28.57	n/a			1	4		
29	T	3		biface thinning flakes		6	24.50	n/a			3	6		
29	T	3		chunks		3	67.49	n/a			1	3		
29	T	3		flake core	multi-dir	1	24.07	32.43	29.62	23.57	1	1		
29	T	3		percussion blade	whole	1	1.56	29.79	12.69	5.58	0	1		
29	T	3		primary flakes		3	43.81	n/a			1	3		
29	T	3		retouch/pressure flakes		3	2.39	n/a			0	3		
29	T	3		secondary flakes		9	116.87	n/a			5	9		
29	T	3		shatter		14	36.63	n/a			10	14		
29	T	3		tertiary flakes		12	84.81	n/a			7	12		
29	T	3		tested cobble		1	107.14	n/a			1	1		
29	T	4		biface reworking flakes		1	7.67	22.53	33.56	12.18	0	1		
29	T	4		biface thinning flakes		5	18.03	n/a			1	5		
29	T	4		secondary flakes		4	11.85	n/a			3	4		
29	T	4		shatter		10	20.95	n/a			9	10		
29	T	4		tertiary flakes		8	32.23	n/a			6	8		
29	T	5		biface thinning flakes		4	8.73	n/a			2	4		
29	T	5		primary flakes		2	16.36	n/a			1	2		
29	T	5		secondary flakes		2	34.76	n/a			1	2		
29	T	5		shatter		6	29.30	n/a			4	6		
29	T	5		tertiary flakes		2	5.70	n/a			1	2		
29	U	1		biface thinning flakes		1	20.23	n/a			n/a	1		
29	U	1		percussion blade	medial	1	1.83	21.66	9.95	7.11	0	1		
29	U	1		secondary flakes		1	10.74	n/a			n/a	1		
29	U	1		tertiary flakes		1	8.98	n/a			n/a	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	V	10		chunks		3	13.87	n/a			2	3		
29	V	10		primary flakes		1	2.96	n/a			1	1		
29	V	10		retouch/pressure flakes		5	1.51	n/a			3	5		
29	V	10		secondary flakes		3	36.50	n/a			1	3		
29	V	10		shatter		20	22.70	n/a			9	20		
29	V	10		tertiary flakes		6	17.50	n/a			3	6		
29	V	12		shatter		2	12.28	n/a			1	2		
29	V	12		tertiary flakes		6	63.00	n/a			1	6		
29	V	13		flake core	uni-dir	1	78.01	42.96	51.44	40.65	0	1		
29	V	13		retouch/pressure flakes		3	1.22	n/a			2	3		
29	V	13		secondary flakes		2	24.32	n/a			0	2		
29	V	13		shatter		3	324.00	n/a			2	3		
29	V	14		chunks		1	2.94	n/a			n/a	1		
29	V	14		shatter		3	13.26	n/a			n/a	3		
29	V	15		secondary flakes		1	12.72	n/a			n/a	1		
29	X	2		secondary flakes		1	15.58	n/a			0	1		
29	X	2		shatter		1	4.13	n/a			1	1		
29	X	3		biface thinning flakes		1	1.81	n/a			1	1		
29	X	3		secondary flakes		1	7.36	n/a			0	1		
29	X	3		shatter		6	12.89	n/a			4	6		
29	X	4		flake core	multi-dir	1	57.60	63.75	38.96	24.12	0	1		
29	X	4		flake core	multi-dir	1	43.28	43.81	39.16	24.25	0	1		
29	X	4		secondary flakes		3	8.70	n/a			1	3		
29	X	4		shatter		3	1.89	n/a			3	3		
29	X	5		biface thinning flakes		4	7.95	n/a			1	4		
29	X	5		chunks		1	26.60	n/a			0	1		
29	X	5		pressure blade	whole	1	1.30	28.83	11.98	6.22	0	1		
29	X	5		pressure blade	whole	1	0.91	23.88	10.14	4.61	0	1		
29	X	5		secondary flakes		1	45.37	n/a			0	1		
29	X	5		shatter		6	13.06	n/a			4	6		
29	X	5		tertiary flakes		1	8.23	n/a			0	1		
29	X	6		biface thinning flakes		10	39.25	n/a			4	10		
29	X	6		chunks		3	24.20	n/a			3	3		
29	X	6		pressure blade	whole	1	0.63	19.53	12.47	3.41	1	1		
29	X	6		pressure blade	whole	1	1.82	24.61	10.45	8.69	0	1		
29	X	6		primary flakes		3	51.64	n/a			2	3		
29	X	6		retouch/pressure flakes		3	1.52	n/a			1	3		
29	X	6		secondary flakes		6	74.88	n/a			1	6		
29	X	6		shatter		17	27.97	n/a			12	17		
29	X	6		tertiary flakes		9	42.88	n/a			7	9		
29	Y	1		biface reworking flakes		1	4.88	27.30	30.30	10.30	1	1		

Op	Subop	Lot	Ref#	Debitage Type	subtype	#each	Weight(g)	L	W	Th	heat	chert	Limest	other
29	Y	1		retouch/pressure flakes		1	0.19	n/a			1	1		
29	Y	1		shatter		7	5.91	n/a			4	7		
29	Y	1		tertiary flakes		2	9.64	n/a			1	2		
29	Y	2		shatter		2	1.06	n/a			0	2		
29	Z	1		biface reworking flakes		1	15.06	30.98	36.95	17.75	1	1		
29	Z	1		biface thinning flakes		12	23.85	n/a			1	12		
29	Z	1		blade core	proximal	1	13.29	15.95	44.64	26.00	0	1		
29	Z	1		chunks		2	13.09	n/a			1	2		
29	Z	1		percussion blade		1	2.17	35.98	13.32	5.44	1	1		
29	Z	1		primary flakes		2	13.18	n/a			1	2		
29	Z	1		retouch/pressure flakes		4	1.91	n/a			2	4		
29	Z	1		secondary flakes		15	181.11	n/a			6	15		
29	Z	1		shatter		31	61.44	n/a			17	31		
29	Z	1		tertiary flakes		7	51.97	n/a			3	7		
				Total Debitage		**7904**	**84791.19**				**2789**	**7820**	**41**	**43**

		OBSIDIAN ANALYSIS							
Analyst: _R. Trachman___					**Year(s) of Excavation:1999-2002**				
Excavator:__R. Trachman___					**Date of Analysis: 8/4/99 and 7/31/02_**				
Site: Dos Hombres; RB2, Ops 26, 28, and 29					**(in millimeters, grams and max. values)**				
Prov.	*Spec.*	*Category*	*Type*	*Length*	*Width*	*Thickn.*	*Wear Type*	*Platform*	*Weight*
26-B-4	1	Press Blade Frag	Proximal/3rd	14.64	6.53	2.36	nick/ventr tr	multi facet	0.22
26-B-4	2	Press Blade Frag	Proximal/3rd	30.33	23.18	8.92	ventr/dors tr	single, abr	4.96
26-C-2	1	Press Blade Frag	Proximal/3rd	17.37	10.34	2.83	nicking	single, abr	0.55
26-I-6	1	Press Blade Frag	Proximal/3rd	37.77	13.17	3.05	dors/ventr tr	single, abr	1.84
26-K-1	1	Press Blade Frag	Medial/3rd	11.10	9.59	1.61	dors tr	n/a	0.23
26-S-1	1	Press Blade Frag	Medial/3rd	23.27	9.56	2.97	dors/ventr tr	n/a	0.85
26-S-1	2	Press Blade Frag	Medial/3rd	23.30	11.05	3.98	dors/ventr tr	n/a	0.97
26-T-1	1	Press Blade Frag	Medial/3rd	17.41	8.84	1.60	sl ventr tr	n/a	0.32
28-C-2	1	Press Blade Frag	Medial/3rd	8.99	9.16	2.85	ventr tr	n/a	0.21
28-C-2	2	Press Blade Frag	Medial/3rd	20.03	8.32	2.99	nicking	n/a	0.54
28-C-2	3	Press Blade Frag	Medial/3rd	13.85	11.09	2.47	sl nicking	n/a	0.48
28-C-2	4	Press Blade Frag	Medial/3rd	15.42	7.00	2.24	nicking	n/a	0.20
28-D-4	1	Press Blade Frag	Distal/3rd	22.63	11.40	2.54	dors/ventr tr	n/a	0.73
28-D-4	2	Press Blade Frag	Medial/3rd	9.43	11.45	2.66	dors/ventr tr	n/a	0.36
28-D-4	3	Press Blade Frag	Medial/3rd	7.78	10.02	2.83	dors/ventr tr	n/a	0.18
28-E-2	1	Press Blade Frag	Medial/3rd	24.80	8.68	3.00	nicking	n/a	0.62
28-E-2	2	Press Blade Frag	Medial/3rd	12.24	8.47	2.19	nicking	n/a	0.31
28-I-1	1	Press Blade Frag	Medial/3rd	33.55	9.47	2.76	dors/ventr tr	n/a	1.00
28-I-2	1	Press Blade Frag	Medial/3rd	17.80	7.95	1.92	sl ventr tr	n/a	0.34
28-I-3	1	Press Blade Frag	Proximal/3rd	10.44	8.11	3.07	sl ventr tr	single, abr	0.23
28-J-1	1	Press Blade Frag	Proximal/3rd	31.91	10.00	2.54	dors/ventr tr	single, abr	0.95
28-J-4	1	Press Blade Frag	Medial/3rd	19.40	9.25	2.44	dors/ventr tr	n/a	0.46
28-L-2	1	Press Blade Frag	Medial/3rd	21.85	8.33	2.69	v sl nicking	n/a	0.48
28-L-2	2	Press Blade Frag	Medial/3rd	10.84	10.04	1.97	nicking	n/a	0.20
28-N-1	1	Percussion Flake	Whole/?	23.56	15.13	4.99	dors/ventr tr	multi facet	1.68
28-R-1	1	Press Blade Frag	Proximal/3rd	18.63	12.11	2.57	dors/ventr tr	single, abr	0.72
28-R-1	2	Press Blade Frag	Medial/3rd	20.22	12.00	3.08	dors/ventr tr	n/a	0.93
28-W-4	1	Press Blade Frag	Proximal/3rd	46.92	9.87	2.97	sl nicking	single, abr	1.45
28-W-4	2	Press Blade Frag	Medial/3rd	23.29	8.40	1.88	dors tr	n/a	0.41

Site: Dos Hombres; RB2, Ops 26, 28, and 29					(in millimeters, grams and max. values)				
Prov.	*Spec.*	*Category*	*Type*	*Length*	*Width*	*Thickn.*	*Wear Type*	*Platform*	*Weight*
28-W-4	3	Press Blade Frag	Proximal/3rd	56.80	11.72	3.93	v sl nicking	multi facet	2.31
28-W-5	1	Press Blade Frag	Medial/3rd	30.67	9.09	2.26	dors/ventr tr	n/a	0.72
28-X-6	1	Press Blade Frag	Medial/3rd	15.51	7.12	2.08	notching	n/a	0.30
28-Y-2	1	Press Blade Frag	Medial/3rd	9.79	9.98	2.28	nicking	n/a	0.27
29-A-2	1	Press Blade Frag	Proximal/3rd	34.45	12.27	3.02	dors/ventr tr	single, abr	1.45
29-C-1	1	Press Blade Frag	Medial/3rd	18.25	9.68	2.00	nicking	n/a	0.42
29-C-2	1	Press Blade Frag	Medial/3rd	19.13	11.02	2.36	sl ventr tr	n/a	0.60
29-E-2	1	Press Blade Frag	Medial/3rd	19.39	10.48	2.57	nicking	n/a	0.71
29-F-2	1	Press Blade Frag	Prox/ 2nd	46.30	15.03	2.94	dors/ventr tr	multi, abr	1.82
29-F-3	1	Press Blade Frag	Proximal/3rd	40.98	11.04	2.96	dors/ventr tr	single, abr	1.37
29-F-3	2	Press Blade Frag	Medial/3rd	20.00	14.63	2.73	dors/ventr tr	n/a	1.12
29-F-3	3	Perc Blade Frag	Prox/ III	18.35	13.73	6.61	dors/ventr tr	multi, abr	1.63
29-F-8	1	Press Blade Frag	Medial/3rd	10.54	13.13	2.14	ventr tr	n/a	0.25
29-L-2	1	Press Blade Frag	Medial/3rd	15.64	13.42	2.70	v sl nicking	n/a	0.69
29-O-3	1	Press Blade Frag	Med/ 2nd	30.53	13.90	1.88	sl nicking	n/a	0.70
29-S-2	1	Press Blade Frag	Proximal/3rd	55.24	12.13	3.11	nicking	single, abr	2.27
29-U-1	1	Perc Blade Frag	Med/ III	15.60	18.08	5.08	dors/ventr tr	n/a	1.25
29-V-10	1	Press Blade Frag	Proximal/3rd	29.13	11.76	2.83	dors/ventr tr	single, abr	1.12
29-V-14	1	Press Blade Frag	Medial/3rd	10.32	13.16	2.95	ventr tr	n/a	0.41
29-X-6	1	Press Blade Frag	Medial/3rd	33.97	14.49	3.94	dors/ventr tr	n/a	2.22
29-Z-1	1	Press Blade Frag	Medial/3rd	12.82	8.57	2.08	nicking	n/a	0.30
29-Z-1	2	Press Blade Frag	Distal/3rd	17.95	9.32	3.96	dors/ventr tr	n/a	0.66
29-AA-1	1	Press Blade Frag	Medial/3rd	19.96	9.44	1.93	dors/ventr tr	n/a	0.41
29-AA-1	2	Press Blade Frag	Medial/3rd	17.92	7.44	2.51	dors/ventr tr	n/a	0.33
29-AB-1	1	Press Blade Frag	Medial/3rd	25.28	10.44	2.79	dors/ventr tr	n/a	0.81
29-AC-1	1	Press Blade Frag	Medial/3rd	16.07	10.97	1.68	sl nicking	n/a	0.33
29-AC-1	2	Press Blade Frag	Medial/3rd	29.70	10.69	2.27	dors/ventr tr	n/a	0.86
29-AF-1	1	Press Blade Frag	Proximal/3rd	22.36	7.70	2.19	dors/ventr tr	single, abr	0.41
29-AJ-2	1	Press Blade Frag	Medial/3rd	17.12	7.55	2.75	ventr tr	n/a	0.36
29-AJ-4	1	Press Blade Frag	Proximal/3rd	16.82	6.99	1.86	nicking	single, abr	0.20
29-AJ-5	1	Press Blade Frag	Medial/3rd	19.28	9.71	2.69	dors/ventr tr	n/a	0.48
29-AK-2	1	Press Blade Frag	Proximal/3rd	17.14	9.86	2.78	dors/ventr tr	Single	0.57

Site: Dos Hombres; RB2, Ops 26, 28, and 29					(in millimeters, grams and max. values)				
Prov.	*Spec.*	*Category*	*Type*	*Length*	*Width*	*Thickn.*	*Wear Type*	*Platform*	*Weight*
29-AK-3	1	Press Blade Frag	Proximal/3rd	14.96	9.54	3.27	nicking	single, abr	0.42
29-AK-6	1	Press Blade Frag	Proximal/3rd	31.09	11.57	2.35	dors tr	single, abr	1.12
29-AK-6	2	Press Blade Frag	Medial/3rd	14.14	9.76	2.10	nicking	n/a	0.33
29-AN-1	1	Press Blade Frag	Medial/3rd	18.30	12.69	2.59	dors/ventr tr	n/a	0.67
29-AN-1	2	Press Blade Frag	Medial/3rd	10.42	12.00	2.37	fract, d/v tr.	n/a	0.33
29-AU-1	1	Press Blade Frag	Medial/3rd	13.36	9.95	1.36	sl nicking	n/a	0.20
29-AX-1	1	Press Blade Frag	Medial/3rd	8.97	4.81	1.29	dors tr	n/a	0.07
29-AZ-1	1	Press Blade Frag	Proximal/3rd	29.07	9.52	2.74	dors/ventr tr	single, abr	0.82
29-AZ-1	2	Press Blade Frag	Proximal/3rd	13.85	9.80	3.36	sl nicking	single, abr	0.40
29-AZ-1	3	Press Blade Frag	Medial/3rd	5.66	7.58	2.25	dors tr	n/a	0.10
29-BA-2	1	Press Blade Frag	Medial/3rd	15.92	8.04	2.99	sl dors tr	n/a	0.40
29-BL-2	1	Press Blade Frag	Proximal/3rd	13.22	9.16	2.74	sl nicking	single, abr	0.34
29-BL-2	2	Press Blade Frag	Medial/3rd	16.52	11.31	2.56	nicking	n/a	0.48
29-BS-2	1	Press Blade Frag	Medial/3rd	42.68	11.36	3.01	dors/ventr tr	n/a	1.36
29-BS-2	2	Press Blade Frag	Proximal/3rd	25.52	7.43	2.66	v sl nicking	single, abr	0.61
29-BS-2	3	Press Blade Frag	Medial/3rd	30.95	7.36	2.11	v sl nicking	n/a	0.58
29-BS-2	4	Press Blade Frag	Proximal/3rd	57.82	12.09	3.35	dors/ventr tr	single, abr	2.35
29-BU-2	1	Press Blade Frag	Proximal/3rd	20.02	6.07	2.08	no wear	single, abr	0.23

					Ceramic Data					**Analyst: Lauren A. Sullivan**				
	Provenience					**Forms**					**Counts**			
RB#	**Op**	**Subop**	**Lot**	**Time Period**	**Type:Variety**	**Plate**	**Bowl**	**Jar**	**Cylinder**	**Other**	**Rim**	**Body**	**Base**	**Total**
RB2	26	A	1	Tepeu 2-3	Red Slipped							1		1
RB2	26	A	1	Tepeu 2-3	Subin Red		1				1			1
RB2	26	A	1	Tepeu 2-3	Tinaja Red							3		3
RB2	26	A	1	Tepeu 2-3	Unidentified							4		4
RB2	26	A	2	Tepeu 2-3	Achote Black ?							1		1
RB2	26	A	2	Tepeu 2-3	Cubeta Incised		1				1			1
RB2	26	A	2	Tepeu 2-3	Red Slipped							2		2
RB2	26	A	2	Tepeu 2-3	Unidentified							3		3
RB2	26	A	3	Tepeu 2-3	Achote Black							1		1
RB2	26	AA	1	Tepeu 2-3	Achote Black		2				1	2		3
RB2	26	AA	1	Tepeu 2-3	Gunshot							8		8
RB2	26	AA	1	Tepeu 2-3	Subin Red		1				1			1
RB2	26	AA	1	Tepeu 2-3	Unidentified							2		2
RB2	26	AB	1	Tepeu 2-3	Achote Black		2				2	21		23
RB2	26	AB	1	Tepeu 2-3	Cayo Unslipped			2				2		2
RB2	26	AB	1	Tepeu 2-3	Gunshot							20		20
RB2	26	AB	1	Tepeu 2-3	Tinaja Red?							12		12
RB2	26	AC	1	Tepeu 2-3	Achote Black		2				2	15		17
RB2	26	AC	1	Tepeu 2-3	Garbutt Creek Red		1				1			1
RB2	26	AC	1	Tepeu 2-3	Gunshot							30		30
RB2	26	AC	1	Tepeu 2-3	Meditation Black		1				1			1
RB2	26	AC	1	Tepeu 2-3	Striated							3		3
RB2	26	AC	1	Tepeu 2-3	Tinaja Red?							10		10
RB2	26	AC	1	Tepeu 2-3	Unidentified							2		2
RB2	26	AD	1	Tepeu 2-3?	Unidentified							3		3
RB2	26	AE	1	Tepeu 2-3										
RB2	26	AE	1	Tepeu 2-3	Brown Slipped							1	1	2
RB2	26	AE	1	Tepeu 2-3	Dolphin Head Red		1					1		1
RB2	26	AE	1	Tepeu 2-3	Red Slipped							1		1
RB2	26	AE	1	Tepeu 2-3	Thin Late Classic Buff							15		15
RB2	26	AE	1	Tepeu 2-3	Tinaja Red							10		10
RB2	26	AE	1	Tepeu 2-3	Unidentified		2				2			2

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	AE	3	Tepeu 2-3	Gunshot							1		1
RB2	26	AE	3	Tepeu 2-3	Subin Red		1				1			1
RB2	26	AE	3	Tepeu 2-3	Thin Late Classic Buff							1		1
RB2	26	AE	3	Tepeu 2-3	Unidentified							1		1
RB2	26	AF	1	Tepeu 2-3	Achote Black		2				2	13		15
RB2	26	AF	1	Tepeu 2-3	Cayo Unslipped							5		5
RB2	26	AF	1	Tepeu 2-3	Chilar Fluted						1	3		4
RB2	26	AF	1	Tepeu 2-3	Gunshot							20		20
RB2	26	AF	1	Tepeu 2-3	Striated							5		5
RB2	26	AF	1	Tepeu 2-3	Subin Red?							3		3
RB2	26	AF	1	Tepeu 2-3	Tinaja Red							35		35
RB2	26	AF	1	Tepeu 2-3	Unidentified							6		6
RB2	26	AG	1	Tepeu 2-3	Achote Black		9				6	3		9
RB2	26	AG	1	Tepeu 2-3	Cayo Unslipped							1		1
RB2	26	AG	1	Tepeu 2-3	Cubeta Incised				1		1	1		2
RB2	26	AG	1	Tepeu 2-3	Gunshot							10		10
RB2	26	AG	1	Tepeu 2-3	Striated							2		2
RB2	26	AG	1	Tepeu 2-3	Striated							3		3
RB2	26	AG	1	Tepeu 2-3	Subin Red							1		1
RB2	26	AG	1	Tepeu 2-3	Unidentified							4		4
RB2	26	AH	1	Tepeu 2-3	Achote Black							4		4
RB2	26	AH	1	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	26	AH	1	Tepeu 2-3	Daylight Orange: Darknight variety	1					1			1
RB2	26	AH	1	Tepeu 2-3	Striated						2			2
RB2	26	AH	1	Tepeu 2-3	Subin Red							1		1
RB2	26	AI	2	Tepeu 2-3	Achote Black?							2		2
RB2	26	AI	2	Tepeu 2-3	Tres Mujeras Mottled							1		1
RB2	26	AI	3	Tepeu 2-3	Achote Black		4				2	7		9
RB2	26	AI	3	Tepeu 2-3	Gunshot							30		30
RB2	26	AI	3	Tepeu 2-3	Meditation Black							2		2
RB2	26	AI	3	Tepeu 2-3	Striated							6		6
RB2	26	AI	3	Tepeu 2-3	Tinaja Red						1	12		13
RB2	26	AI	4	Tepeu 2-3	Achote Black							20		20

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	AI	4	Tepeu 2-3	Meditation Black		1				1			1
RB2	26	AI	4	Tepeu 2-3	Red and Black Mottled							3		3
RB2	26	AI	4	Tepeu 2-3	Striated							20		20
RB2	26	AI	4	Tepeu 2-3	Tinaja Red			2			1	15		16
RB2	26	AI	4	Tepeu 2-3	Unslipped							1		1
RB2	26	AI	5	Tepeu 2-3?	Unidentified							4		4
RB2	26	AI	5	Tepeu 2-3?	Unslipped							1		1
RB2	26	AI	6	Chicanel?	Cream Polychrome				2?			2		2
RB2	26	AI	6	Chicanel?	Sierra Red						1			1
RB2	26	AI	7	Tepeu 2-3	Black Slipped							10		10
RB2	26	AI	7	Tepeu 2-3	Palmar Orange polychrome			2			2	10		12
RB2	26	AI	7	Tepeu 2-3	Striated			1			1	5		6
RB2	26	AI	7	Tepeu 2-3	Thin Late Classic Buff							18		18
RB2	26	AI	7	Tepeu 2-3	Unidentified							50		50
RB2	26	AJ	1	Tepeu 2-3	Achote Black		4				1	3		4
RB2	26	AJ	1	Tepeu 2-3	Cayo Unslipped							2		2
RB2	26	AJ	1	Tepeu 2-3	Red Slipped						1	3		4
RB2	26	AJ	1	Tepeu 2-3	Striated							2		2
RB2	26	AJ	1	Tepeu 2-3	Subin Red							1		1
RB2	26	AJ	1	Tepeu 2-3	Tinaja Red							10		10
RB2	26	AJ	1	Tepeu 2-3	Unidentified		1				1			1
RB2	26	B	1	Tepeu 2-3	Achote Black		1				1	5	1	7
RB2	26	B	1	Tepeu 2-3	Subin Red		1				1			1
RB2	26	B	1	Tepeu 2-3	Unidentified							8		8
RB2	26	B	2	Tepeu 2-3	Achote Black						1	26	2	29
RB2	26	B	2	Tepeu 2-3	Gunshot							19		19
RB2	26	B	2	Tepeu 2-3	Striated							1		1
RB2	26	B	2	Tepeu 2-3	Subin Red		1				1			1
RB2	26	B	2	Tepeu 2-3	Unidentified							5		5
RB2	26	B	3	Tepeu 2-3	Striated							1		1
RB2	26	B	3	Tepeu 2-3	Thin Late Classic Buff							1		1
RB2	26	B	3	Tepeu 2-3	Unidentified							2		2
RB2	26	B	4	Tepeu 2-3	Achote Black							5		5

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	B	4	Tepeu 2-3	Cayo Unslipped						2			2
RB2	26	B	4	Tepeu 2-3	Meditation Black		1				1			1
RB2	26	B	4	Tepeu 2-3	Striated							3		3
RB2	26	B	4	Tepeu 2-3	Subin Red		1				1			1
RB2	26	B	4	Tepeu 2-3	Unidentified							8		8
RB2	26	B	5	Tepeu 2-3	Red Slipped							1		1
RB2	26	B	5	Tepeu 2-3	Thin Late Classic Buff							1		1
RB2	26	B	6	Tepeu 2-3	Achote Black						4	37		41
RB2	26	B	6	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	26	B	6	Tepeu 2-3	Chilar Fluted		1				2	3		5
RB2	26	B	6	Tepeu 2-3	Gunshot							26		26
RB2	26	B	6	Tepeu 2-3	Meditation Black						2	6		8
RB2	26	B	6	Tepeu 2-3	Red Slipped							17		17
RB2	26	B	6	Tepeu 2-3	Striated							7		7
RB2	26	B	6	Tepeu 2-3	Subin Red		2				2			2
RB2	26	B	6	Tepeu 2-3	Subin Red		1				1			1
RB2	26	B	6	Tepeu 2-3	Thin Late Classic Buff						2	13		15
RB2	26	B	6	Tepeu 2-3	Tinaja Red			1				2		2
RB2	26	B	6	Tepeu 2-3	Tinaja Red			1			1	30		31
RB2	26	B	6	Tepeu 2-3	Unidentified							9		9
RB2	26	B	6	Tepeu 2-3	Unidentified							2		2
RB2	26	B	7	Tepeu 2-3	Thin Late Classic Buff			1				1		1
RB2	26	B	7	Tepeu 2-3	Unidentified							2		2
RB2	26	C	1	Tepeu 2-3	Black Slipped ?							2		2
RB2	26	C	1	Tepeu 2-3	Thin Late Classic Buff							1		1
RB2	26	C	2	Tepeu 2-3	Achote Black							1		1
RB2	26	C	2	Tepeu 2-3	Black Slipped ?							1		1
RB2	26	C	2	Tepeu 2-3	Striated							1		1
RB2	26	C	2	Tepeu 2-3	Thin Late Classic Buff							1		1
RB2	26	C	2	Tepeu 2-3	Unidentified							6		6
RB2	26	C	3	Tepeu 2-3	Tinaja Red							1		1
RB2	26	C	3	Tepeu 2-3	Unidentified							3		3
RB2	26	D	1	Tepeu 2-3	Achote Black		1				1	4		5

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	D	1	Tepeu 2-3	Black Slipped							2		2
RB2	26	D	1	Tepeu 2-3	Red Slipped							2		2
RB2	26	D	1	Tepeu 2-3	Striated							1		1
RB2	26	D	1	Tepeu 2-3	Subin Red		1				1			1
RB2	26	D	1	Tepeu 2-3	Tinaja Red						1			1
RB2	26	D	1	Tepeu 2-3	Unidentified							19		19
RB2	26	D	1	Tepeu 2-3	Unidentified							25		25
RB2	26	E	1	Tepeu 2-3	Achote Black							1		1
RB2	26	E	1	Tepeu 2-3	Tinaja Red							6		6
RB2	26	E	1	Tepeu 2-3	Unidentified							2		2
RB2	26	F	1	Tepeu 2-3	Achote Black						1	1		2
RB2	26	F	1	Tepeu 2-3	Censor frag ?							1		1
RB2	26	F	1	Tepeu 2-3	Striated							1		1
RB2	26	F	1	Tepeu 2-3	Tinaja Red							2		2
RB2	26	F	1	Tepeu 2-3	Unidentified						1	5		6
RB2	26	F	2	Tepeu 2-3	Achote Black		1				1	4		5
RB2	26	F	2	Tepeu 2-3	Garbutt Creek Red: Variety Unspecified		1				1			1
RB2	26	F	2	Tepeu 2-3	Striated ?							1		1
RB2	26	F	2	Tepeu 2-3	Tinaja Red							3		3
RB2	26	F	2	Tepeu 2-3	Unidentified							2		2
RB2	26	F	3	Tepeu 2-3	Achote Black						1	4	1	6
RB2	26	F	3	Tepeu 2-3	Red Slipped							1		1
RB2	26	F	3	Tepeu 2-3	Subin Red		1				1			1
RB2	26	F	3	Tepeu 2-3	Thin Late Classic Buff							6		6
RB2	26	F	3	Tepeu 2-3	Roaring Creek Red ?	1					1			1
RB2	26	F	3	Tepeu 2-3	Unidentified		1				1			1
RB2	26	F	3	Tepeu 2-3	Unidentified							14		14
RB2	26	F	3	Tepeu 2-3	Unidentified							1		1
RB2	26	F	4	Tepeu 2-3	Achote Black							3		3
RB2	26	F	4	Tepeu 2-3	Black Slipped ?		1				1	1		2
RB2	26	F	4	Tepeu 2-3	Gunshot							11		11
RB2	26	F	4	Tepeu 2-3	Red Slipped ?							1		1

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	F	4	Tepeu 3	Slateware			5			1	4		5
RB2	26	F	4	Tepeu 2-3	Striated							3		3
RB2	26	F	4	Tepeu 2-3	Subin Red		1				1			1
RB2	26	F	4	Tepeu 2-3	Thin Late Classic Buff			1			1	1		2
RB2	26	F	4	Tepeu 2-3	Tres Mujeras Mottled						1	1		2
RB2	26	F	4	Tepeu 2-3	Unidentified							6		6
RB2	26	F	5	Tepeu 2-3	Achote Black		1				1	4		5
RB2	26	F	5	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	26	F	5	Tepeu 2-3	Red Slipped							5		5
RB2	26	F	5	Tepeu 2-3	Striated							4		4
RB2	26	F	5	Tepeu 2-3	Thin Late Classic Buff							8		8
RB2	26	F	5	Tepeu 2-3	Tinaja Red							2		2
RB2	26	F	5	Tepeu 2-3	Unidentified							11		11
RB2	26	F	7	Tepeu 2-3	Achote Black							2		2
RB2	26	F	7	Tepeu 2-3	Brown Slipped							2		2
RB2	26	F	7	Tepeu 2-3	Cayo Unslipped			2			2			2
RB2	26	F	7	Tepeu 2-3	Meditation Black							1		1
RB2	26	F	7	Tepeu 2-3	Red Slipped							3		3
RB2	26	F	7	Tepeu 2-3	Striated							6		6
RB2	26	F	7	Tepeu 2-3	Thin Late Classic Buff							6		6
RB2	26	F	7	Tepeu 2-3	Tinaja Red			1			1	7		8
RB2	26	F	7	Tepeu 2-3	Unidentified								1	1
RB2	26	F	7	Tepeu 2-3	Unidentified							18		18
RB2	26	F	8	Tepeu 1-3/Tzakol and Chicanel trace	Black Slipped						1	7		8
RB2	26	F	8	Tepeu 1-3/Tzakol and Chicanel trace	Gunshot							6		6
RB2	26	F	8	Tepeu 1-3/Tzakol and Chicanel trace	Red Slipped							5		5
RB2	26	F	8	Tepeu 1-3/Tzakol and Chicanel trace	Sierra Red							2		2
RB2	26	F	8	Tepeu 1-3/Tzakol and Chicanel trace	Socotz Striated (buff)						1			1

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	F	8	Tepeu 1-3/Tzakol and Chicanel trace	Striated							10		10
RB2	26	F	8	Tepeu 1-3/Tzakol and Chicanel trace	Subin Red						1			1
RB2	26	F	8	Tepeu 1-3/Tzakol and Chicanel trace	Thin Late Classic Buff							12		12
RB2	26	F	8	Tepeu 1-3/Tzakol and Chicanel trace	Tinaja Red ?							8		8
RB2	26	F	8	Tepeu 1-3/Tzakol and Chicanel trace	Unidentified							2		2
RB2	26	F	8	Tepeu 1-3/Tzakol and Chicanel trace	Zibal Unslipped			1			1			1
RB2	26	F	9	Tepeu 2-3/Chicanel trace	Red Slipped							1		1
RB2	26	F	9	Tepeu 2-3/Chicanel trace	Sierra Red					1	4			4
RB2	26	F	9	Tepeu 2-3/Chicanel trace	Striated			2			2			2
RB2	26	F	9	Tepeu 2-3/Chicanel trace	Subin Red		2				2			2
RB2	26	F	9	Tepeu 2-3/Chicanel trace	Thin Late Classic Buff			2			2			2
RB2	26	F	9	Tepeu 2-3/Chicanel trace	Unidentified							3		3
RB2	26	F	11	Tepeu 2-3/Chicanel trace	Sierra Red							1		1
RB2	26	F	11	Tepeu 2-3/Chicanel trace	Subin Red						3			3
RB2	26	F	11	Tepeu 2-3/Chicanel trace	Thin Late Classic Buff ?							4		4
RB2	26	F	11	Tepeu 2-3/Chicanel trace	Tres Mujeras Mottled						1	1		2
RB2	26	F	11	Tepeu 2-3/Chicanel trace	Unidentified							1		1
RB2	26	F	12	Tepeu 2-3/Chicanel trace	Achote Black ?							2		2
RB2	26	F	12	Tepeu 2-3/Chicanel trace	Cayo Unslipped			5			2	3		5
RB2	26	F	12	Tepeu 2-3/Chicanel trace	Sierra Red							9		9
RB2	26	F	12	Tepeu 2-3/Chicanel trace	Slipped							3		3
RB2	26	F	12	Tepeu 2-3/Chicanel trace	Thin Late Classic Buff							9		9
RB2	26	F	12	Tepeu 2-3/Chicanel trace	Unidentified							11		11
RB2	26	F	13	Tepeu 2-3 ?	Buff Slipped							1		1
RB2	26	F	13	Tepeu 2-3 ?	Red Slipped							9		9
RB2	26	F	13	Tepeu 2-3 ?	Unidentified							4		4
RB2	26	F	14	Tepeu 2-3	Encanto Striated			2				7		7

	Provenience					Forms					Counts			
RB#	**Op**	**Subop**	**Lot**	**Time Period**	**Type:Variety**	**Plate**	**Bowl**	**Jar**	**Cylinder**	**Other**	**Rim**	**Body**	**Base**	**Total**
RB2	26	F	14	Tepeu 2-3	Meditation Black		2				2			2
RB2	26	F	14	Tepeu 2-3	Thin Late Classic Buff							25		25
RB2	26	F	14	Tepeu 2-3	Unidentified							20		20
RB2	26	F	14	Tepeu 2-3	Unidentified						1			1
RB2	26	G	1	Tepeu 2-3	Red Slipped?							1		1
RB2	26	G	1	Tepeu 2-3	Subin Red		1				1			1
RB2	26	G	1	Tepeu 2-3	Unidentified							1		1
RB2	26	G	2	Tepeu 2-3	Cayo Unslipped					handle		1		1
RB2	26	G	2	Tepeu 2-3	Red Slipped							5		5
RB2	26	G	2	Tepeu 2-3	Striated							1		1
RB2	26	G	2	Tepeu 2-3	Thin Late Classic Buff							1		1
RB2	26	G	2	Tepeu 2-3	Unidentified							2		2
RB2	26	G	3	Tepeu 3	Drum Fragment					drum	2	5		7
RB2	26	G	3	Tepeu 3	Cayo Unslipped			1			1			1
RB2	26	G	3	Tepeu 3	Achote Black		1				1			1
RB2	26	G	3	Tepeu 3	Black Slipped						1			1
RB2	26	G	3	Tepeu 3	Striated							5		5
RB2	26	G	3	Tepeu 3	Unidentified							1		1
RB2	26	G	4	Tepeu 3	Brown Slipped							1		1
RB2	26	G	4	Tepeu 3	Red Slipped		1				1			1
RB2	26	G	4	Tepeu 3	Slate-like							1		1
RB2	26	G	4	Tepeu 3	Unidentified							1		1
RB2	26	G	4	Tepeu 3	Unidentified						1	2		3
RB2	26	G	4	Tepeu 3	Zibal Unslipped ?			1			1			1
RB2	26	G	5	?	Unidentified							3		3
RB2	26	G	7	Tepeu 2-3/Chicanel trace	Black Slipped							4		4
RB2	26	G	7	Tepeu 2-3/Chicanel trace	Brown Slipped							1		1
RB2	26	G	7	Tepeu 2-3/Chicanel trace	Cayo Unslipped			1			2	2		4
RB2	26	G	7	Tepeu 2-3/Chicanel trace	Red Slipped							2		2
RB2	26	G	7	Tepeu 2-3/Chicanel trace	Sierra Red	2					2			2
RB2	26	G	7	Tepeu 2-3/Chicanel trace	Striated							7		7
RB2	26	G	7	Tepeu 2-3/Chicanel trace	Thin Late Classic Buff							12		12
RB2	26	G	7	Tepeu 2-3/Chicanel trace	Unidentified							4		4

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	G	8	Tepeu 2-3	Striated							1		1
RB2	26	G	8	Tepeu 2-3	Thin Late Classic Buff							1		1
RB2	26	G	8	Tepeu 2-3	Unidentified							3		3
RB2	26	G	9	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	26	G	9	Tepeu 2-3	Gunshot							7		7
RB2	26	G	9	Tepeu 2-3	Meditation Black							1		1
RB2	26	G	9	Tepeu 2-3	Striated							2		2
RB2	26	G	9	Tepeu 2-3	Thin Late Classic Buff			19				19		19
RB2	26	G	9	Tepeu 2-3	Unidentified							3		3
RB2	26	H	1	Tepeu 2-3	Achote Black							1		1
RB2	26	H	1	Tepeu 2-3	Unidentified							2		2
RB2	26	H	2	Tepeu 2-3	Red Slipped							1		1
RB2	26	H	2	Tepeu 2-3	Thin Late Classic Buff							3		3
RB2	26	H	2	Tepeu 2-3	Unidentified							10		10
RB2	26	H	3	Tepeu 2-3	Achote Black		2				2	10		12
RB2	26	H	3	Tepeu 2-3	Slipped							2		2
RB2	26	H	3	Tepeu 2-3	Thin Late Classic Buff							1		1
RB2	26	H	3	Tepeu 2-3	Tinaja Red							12		12
RB2	26	H	3	Tepeu 2-3	Unidentified							6		6
RB2	26	I	1	Tepeu 2-3	Achote Black							2		2
RB2	26	I	1	Tepeu 2-3	Red Slipped							3		3
RB2	26	I	1	Tepeu 2-3	Tinaja Red							3		3
RB2	26	I	2	Tepeu 2-3	Achote Black		3				1	10		11
RB2	26	I	2	Tepeu 2-3	Achote Black?							1		1
RB2	26	I	2	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	26	I	2	Tepeu 2-3	Thin Late Classic Buff							3		3
RB2	26	I	2	Tepeu 2-3	Tinaja Red							7		7
RB2	26	I	2	Tepeu 2-3	Unidentified								1	1
RB2	26	I	2	Tepeu 2-3	Unidentified							3		3
RB2	26	I	3	Tepeu 2-3	Achote Black							6		6
RB2	26	I	3	Tepeu 2-3	Tinaja Red							10		10
RB2	26	I	4	Tepeu 2-3	Achote Black		3				1	6		7
RB2	26	I	4	Tepeu 2-3	Gunshot							10		10

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	I	4	Tepeu 2-3	Red Slipped							1		1
RB2	26	I	4	Tepeu 2-3	Striated							2		2
RB2	26	I	4	Tepeu 2-3	Tinaja Red							7		7
RB2	26	I	5	Tepeu 2-3	Achote Black?		1				1			1
RB2	26	I	5	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	26	I	5	Tepeu 2-3	Red/Maroon Slipped							1		1
RB2	26	I	6	Tepeu 2-3	Achote Black							5		5
RB2	26	I	6	Tepeu 2-3	Gunshot							12		12
RB2	26	I	6	Tepeu 2-3	Meditation Black							1		1
RB2	26	I	6	Tepeu 2-3	Red Slipped							4		4
RB2	26	I	6	Tepeu 2-3	Striated							5		5
RB2	26	I	6	Tepeu 2-3	Thin Late Classic Buff							3		3
RB2	26	I	6	Tepeu 2-3	Thin Late Classic Buff							16		16
RB2	26	I	6	Tepeu 2-3	Tinaja Red							3		3
RB2	26	I	6	Tepeu 2-3	Tres Mujeras Mottled							1		1
RB2	26	I	6	Tepeu 2-3	Unslipped							5		5
RB2	26	I	7	Tepeu 2-3	Orange Polychrome				5			5		5
RB2	26	J	1	Tepeu 2-3	Achote Black							1		1
RB2	26	J	1	Tepeu 2-3	Tinaja Red							2		2
RB2	26	J	1	Tepeu 2-3	Unslipped							1		1
RB2	26	J	2	Tepeu 2-3; poss. Chicanel trace	Achote Black							4		4
RB2	26	J	2	Tepeu 2-3; poss. Chicanel trace	Black Slipped							1		1
RB2	26	J	2	Tepeu 2-3; poss. Chicanel trace	Black Slipped	1					1			1
RB2	26	J	2	Tepeu 2-3; poss. Chicanel trace	Gunshot							6		6
RB2	26	J	2	Tepeu 2-3; poss. Chicanel trace	Tinaja Red							3		3
RB2	26	J	2	Tepeu 2-3; poss. Chicanel trace	Unslipped				1			5		5
RB2	26	J	3	Tepeu 2-3	Black Slipped							3		3

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	J	3	Tepeu 2-3	Red Slipped							2		2
RB2	26	J	3	Tepeu 2-3	Striated							3		3
RB2	26	J	3	Tepeu 2-3	Striated			2				2		2
RB2	26	J	3	Tepeu 2-3	Unidentified							4		4
RB2	26	J	4	Tepeu 2-3	Achote Black							1		1
RB2	26	J	4	Tepeu 2-3	Red Slipped							2		2
RB2	26	J	4	Tepeu 2-3	Red to Orange Slipped							1		1
RB2	26	J	4	Tepeu 2-3	Slipped							3		3
RB2	26	J	4	Tepeu 2-3	Striated							4		4
RB2	26	J	4	Tepeu 2-3	Subin Red							1		1
RB2	26	J	4	Tepeu 2-3	Thin Late Classic Buff							1		1
RB2	26	J	4	Tepeu 2-3	Unidentified							13		13
RB2	26	J	5	Tepeu 2-3	Achote Black?							7		7
RB2	26	J	5	Tepeu 2-3	Gunshot							15		15
RB2	26	J	5	Tepeu 2-3	Slipped							3		3
RB2	26	J	5	Tepeu 2-3	Striated							6		6
RB2	26	J	5	Tepeu 2-3	Subin Red		1				1			1
RB2	26	J	5	Tepeu 2-3	Thin Late Classic Buff							9		9
RB2	26	J	5	Tepeu 2-3	Tinaja Red							2		2
RB2	26	J	6	Chicanel?	Red Slipped							1		1
RB2	26	J	6	Chicanel?	Sierra Red		2					6	1	7
RB2	26	J	6	Chicanel?	Slipped							1		1
RB2	26	J	6	Chicanel?	Unidentified							1		1
RB2	26	J	7	Chicanel	Polvero Black							4		4
RB2	26	J	7	Chicanel	Unidentified							1		1
RB2	26	K	1	Tepeu 2-3	Achote Black							4		4
RB2	26	K	1	Tepeu 2-3	Cayo Unslipped			1				1		1
RB2	26	K	1	Tepeu 2-3	Gunshot							20		20
RB2	26	K	1	Tepeu 2-3	Subin Red		2				2			2
RB2	26	K	1	Tepeu 2-3	Tinaja Red			1			1	8		9
RB2	26	K	1	Tepeu 2-3	Unidentified							4		4
RB2	26	K	2	Tepeu 2-3?	Unidentified							4		4
RB2	26	K	3	Tepeu 2-3	Achote Black							5		5

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	K	3	Tepeu 2-3	Cayo Unslipped							3		3
RB2	26	K	3	Tepeu 2-3	Gunshot							12		12
RB2	26	K	3	Tepeu 2-3	Striated							3		3
RB2	26	K	3	Tepeu 2-3	Thin Late Classic Buff							7		7
RB2	26	K	3	Tepeu 2-3	Tinaja Red			2				14		14
RB2	26	K	3	Tepeu 2-3	Unidentified							4		4
RB2	26	K	3	Tepeu 2-3	Zibal Unslipped			1			1			1
RB2	26	L	1	Tepeu 2-3?	Unidentified							1		1
RB2	26	L	1	Tepeu 2-3?	Unidentified							1		1
RB2	26	L	2	Tepeu 2-3?	Slipped							3		3
RB2	26	L	3	Tepeu 2-3	Achote Black		1				1	4	1	5
RB2	26	L	3	Tepeu 2-3	Brown Slipped?							1		1
RB2	26	L	3	Tepeu 2-3	Cayo Unslipped			2			2	4		6
RB2	26	L	3	Tepeu 2-3	Red Slipped							3		3
RB2	26	L	3	Tepeu 2-3	Thin Late Classic Buff							2		2
RB2	26	L	3	Tepeu 2-3	Tinaja Red							5		5
RB2	26	L	3	Tepeu 2-3	Unidentified							1		1
RB2	26	L	4	Tepeu 2-3?	Unslipped							4		4
RB2	26	L	5	Tepeu 2-3	Achote Black							1	1	2
RB2	26	L	5	Tepeu 2-3	Subin Red							1		1
RB2	26	M	1	Tepeu 2-3	Achote Black		1				1			1
RB2	26	M	1	Tepeu 2-3	Tinaja Red							1		1
RB2	26	M	1	Tepeu 2-3	Unidentified							3		3
RB2	26	M	1	Tepeu 2-3	Unidentified							1		1
RB2	26	M	2	Tepeu 2-3	Achote Black		1				1	6		7
RB2	26	M	2	Tepeu 2-3	Gunshot							10		10
RB2	26	M	2	Tepeu 2-3	Subin Red							2		2
RB2	26	M	2	Tepeu 2-3	Tinaja Red							12		12
RB2	26	M	3	Tepeu 2-3	Achote Black							7		7
RB2	26	M	3	Tepeu 2-3	Black Slipped							3		3
RB2	26	M	3	Tepeu 2-3	Cayo Unslipped			11				11		11
RB2	26	M	3	Tepeu 2-3	Gunshot							20		20
RB2	26	M	3	Tepeu 2-3	Striated							5		5

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	M	3	Tepeu 2-3	Thin Late Classic Buff							19		19
RB2	26	M	3	Tepeu 2-3	Tinaja Red							15		15
RB2	26	M	3	Tepeu 2-3	Unidentified							7		7
RB2	26	M	4	Chicanel?	Black Slipped							1		1
RB2	26	M	4	Chicanel?	Sierra Red							2		2
RB2	26	M	4	Chicanel?	Unidentified								1	1
RB2	26	M	4	Chicanel?	Unslipped							1		1
RB2	26	N	1	Tepeu 2-3	Tinaja Red							1		1
RB2	26	N	1	Tepeu 2-3	Unidentified							1		1
RB2	26	N	2	Tepeu 2-3	Achote Black							4		4
RB2	26	N	2	Tepeu 2-3	Cayo Unslipped			1				1		1
RB2	26	N	2	Tepeu 2-3	Red Slipped							3		3
RB2	26	N	2	Tepeu 2-3	Subin Red		1					1		1
RB2	26	N	2	Tepeu 2-3	Thin Late Classic Buff							5		5
RB2	26	N	2	Tepeu 2-3	Tinaja Red			1			1	9		10
RB2	26	N	2	Tepeu 2-3	Unidentified							4		4
RB2	26	N	3	Tepeu 2-3	Achote Black		1				1	8		9
RB2	26	N	3	Tepeu 2-3	Brown Slipped							1		1
RB2	26	N	3	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	26	N	3	Tepeu 2-3	Gunshot							20		20
RB2	26	N	3	Tepeu 2-3	Meditation Black							3		3
RB2	26	N	3	Tepeu 2-3	Red Slipped	1					1			1
RB2	26	N	3	Tepeu 2-3	Striated			1				1		1
RB2	26	N	3	Tepeu 2-3	Striated							6		6
RB2	26	N	3	Tepeu 2-3	Subin Red							4		4
RB2	26	N	3	Tepeu 2-3	Tinaja Red			1			1	17		18
RB2	26	N	3	Tepeu 2-3	Unidentified							7		7
RB2	26	N	4	Tepeu 2-3	Achote Black							5		5
RB2	26	N	4	Tepeu 2-3	Red Slipped							1		1
RB2	26	N	4	Tepeu 2-3	Striated							3		3
RB2	26	N	4	Tepeu 2-3	Thin Late Classic Buff							6		6
RB2	26	N	4	Tepeu 2-3	Tinaja Red							4		4
RB2	26	N	4	Tepeu 2-3	Unidentified							2		2

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	N	5	Tepeu 2-3	Cubeta Incised							1		1
RB2	26	N	5	Tepeu 2-3	Striated							2		2
RB2	26	N	5	Tepeu 2-3	Subin Red		2					2		2
RB2	26	N	5	Tepeu 2-3	Thin Late Classic Buff							1		1
RB2	26	N	5	Tepeu 2-3	Unidentified							3		3
RB2	26	O	1	Tepeu 2-3	Achote Black							4		4
RB2	26	O	1	Tepeu 2-3	Cayo Unslipped							3		3
RB2	26	O	1	Tepeu 2-3	Gunshot							5		5
RB2	26	O	1	Tepeu 2-3	Subin Red		2					2		2
RB2	26	O	1	Tepeu 2-3	Thin Late Classic Buff							2		2
RB2	26	O	1	Tepeu 2-3	Tinaja Red			1			1	6		7
RB2	26	O	1	Tepeu 2-3	Unidentified							2		2
RB2	26	O	2	Tepeu 2-3	Gunshot							5		5
RB2	26	O	2	Tepeu 2-3	Mount Maloney Black			1			1			1
RB2	26	O	2	Tepeu 2-3	Red Slipped							2		2
RB2	26	O	2	Tepeu 2-3	Subin Red							1		1
RB2	26	O	2	Tepeu 2-3	Thin Late Classic Buff							5		5
RB2	26	O	3	Tepeu 2-3	Achote Black		5				1	4		5
RB2	26	O	3	Tepeu 2-3	Subin Red							1		1
RB2	26	O	3	Tepeu 2-3	Thin Late Classic Buff							10		10
RB2	26	O	3	Tepeu 2-3	Tinaja Red							4		4
RB2	26	O	4	Tepeu 2-3	Cayo Unslipped			1			1	2		3
RB2	26	O	4	Tepeu 2-3	Garbutt Creek Red		1				1			1
RB2	26	O	4	Tepeu 2-3	Gunshot							10		10
RB2	26	O	4	Tepeu 2-3	Meditation Black		2				2	3		5
RB2	26	O	4	Tepeu 2-3	Striated							5		5
RB2	26	O	4	Tepeu 2-3	Subin Red		2				2	1		3
RB2	26	O	4	Tepeu 2-3	Thin Late Classic Buff							28		28
RB2	26	O	4	Tepeu 2-3	Tinaja Red			1			1			1
RB2	26	O	4	Tepeu 2-3	Unidentified							1		1
RB2	26	O	4	Tepeu 2-3	Unidentified							3		3
RB2	26	O	4	Tepeu 2-3	Zibal Unslipped			1			1			1
RB2	26	O	5	Tepeu 2-3	Achote Black		1				1			1

	Provenience					Forms					Counts			
RB#	**Op**	**Subop**	**Lot**	**Time Period**	**Type:Variety**	**Plate**	**Bowl**	**Jar**	**Cylinder**	**Other**	**Rim**	**Body**	**Base**	**Total**
RB2	26	O	5	Tepeu 2-3	Achote Black		1				1			1
RB2	26	O	5	Tepeu 2-3	Meditation Black							1		1
RB2	26	O	5	Tepeu 2-3	Subin Red		1					1		1
RB2	26	O	5	Tepeu 2-3	Unidentified			10				10		10
RB2	26	P	1	Tepeu 2-3	Striated							3		3
RB2	26	P	1	Tepeu 2-3	Subin Red							3		3
RB2	26	P	1	Tepeu 2-3	Tinaja Red							1		1
RB2	26	P	1	Tepeu 2-3	Zibal Unslipped			1			1			1
RB2	26	P	2	Tepeu 2-3	Achote Black		1					4	1	5
RB2	26	P	2	Tepeu 2-3	Meditation Black							1		1
RB2	26	P	2	Tepeu 2-3	Red Slipped	2					2			2
RB2	26	P	2	Tepeu 2-3	Red Slipped							2		2
RB2	26	P	2	Tepeu 2-3	Rubber Camp Brown?							1		1
RB2	26	P	2	Tepeu 2-3	Thin Late Classic Buff							6		6
RB2	26	P	2	Tepeu 2-3	Tinaja Red							7		7
RB2	26	P	2	Tepeu 2-3	Unidentified	1					1			1
RB2	26	P	3	Tepeu 2-3	Achote Black							1		1
RB2	26	P	3	Tepeu 2-3	Meditation Black							1		1
RB2	26	P	3	Tepeu 2-3	Red Slipped							1		1
RB2	26	P	3	Tepeu 2-3	Tinaja Red							10		10
RB2	26	P	3	Tepeu 2-3	Unidentified					1		1		1
RB2	26	P	4	Tepeu 2-3	Achote Black		1				1			1
RB2	26	P	4	Tepeu 2-3	Striated							1		1
RB2	26	P	4	Tepeu 2-3	Subin Red							1		1
RB2	26	P	4	Tepeu 2-3	Unidentified							2		2
RB2	26	R	1	Tepeu 2-3	Achote Black		10				3	43		46
RB2	26	R	1	Tepeu 2-3	Cayo Unslipped			1			2	3		5
RB2	26	R	1	Tepeu 2-3	Gunshot							30		30
RB2	26	R	1	Tepeu 2-3	Meditation Black							2		2
RB2	26	R	1	Tepeu 2-3	Striated							5		5
RB2	26	R	1	Tepeu 2-3	Thin Late Classic Buff							27		27
RB2	26	R	1	Tepeu 2-3	Tinaja Red			2			2	56		58
RB2	26	R	1	Tepeu 2-3	Unidentified		1				1			1

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	R	1	Tepeu 2-3	Unidentified (Dolphin Head Red?)		1						1	1
RB2	26	S	1	Tepeu 2-3	Achote Black		20				8	110		118
RB2	26	S	1	Tepeu 2-3	Cayo Unslipped			1			1	19		20
RB2	26	S	1	Tepeu 2-3	Chilar Fluted							2		2
RB2	26	S	1	Tepeu 2-3	Gunshot							150		150
RB2	26	S	1	Tepeu 2-3	Red Slipped							20		20
RB2	26	S	1	Tepeu 2-3	Striated							51		51
RB2	26	S	1	Tepeu 2-3	Subin Red		1				1			1
RB2	26	S	1	Tepeu 2-3	Thin Late Classic Buff			2			1	43		44
RB2	26	S	1	Tepeu 2-3	Tinaja Red			3			3	82		85
RB2	26	S	1	Tepeu 2-3	Unidentified							11		11
RB2	26	Surf Coll.		Tepeu 3	Unidentified					1				1
RB2	26	T	1	Tepeu 2-3	Achote Black		10				10	68		78
RB2	26	T	1	Tepeu 2-3	Cayo Unslipped							6		6
RB2	26	T	1	Tepeu 2-3	Cubeta Incised							3		3
RB2	26	T	1	Tepeu 2-3	Garbutt Creek Red		4				4			4
RB2	26	T	1	Tepeu 2-3	Gunshot							80		80
RB2	26	T	1	Tepeu 2-3	Red Slipped							14		14
RB2	26	T	1	Tepeu 2-3	Striated							18		18
RB2	26	T	1	Tepeu 2-3	Subin Red		9				8	7		15
RB2	26	T	1	Tepeu 2-3	Thin Late Classic Buff							25		25
RB2	26	T	1	Tepeu 2-3	Tinaja Red			1			1	94		95
RB2	26	T	1	Tepeu 2-3	Unidentified			1			1	10		11
RB2	26	U	1	Tepeu 2-3	Achote Black							1		1
RB2	26	U	1	Tepeu 2-3	Cubeta Incised							1		1
RB2	26	U	1	Tepeu 2-3	Gunshot							5		5
RB2	26	U	1	Tepeu 2-3	Striated							5		5
RB2	26	V	1	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	26	V	1	Tepeu 2-3	Tinaja Red							1		1
RB2	26	V	1	Tepeu 2-3	Unidentified							2		2
RB2	26	X	1	Tepeu 2-3	Achote Black							1		1
RB2	26	X	1	Tepeu 2-3	Tinaja Red?							3		3

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	26	X	1	Tepeu 2-3	Unidentified							2		2
RB2	26	Y	1	Tepeu 2-3	Achote Black		2				2	10		12
RB2	26	Y	1	Tepeu 2-3	Black Slipped							1		1
RB2	26	Y	1	Tepeu 2-3	Gunshot							15		15
RB2	26	Y	1	Tepeu 2-3	Tinaja Red							7		7
RB2	26	Y	1	Tepeu 2-3	Unidentified							1		1
RB2	26	Z	1	Tepeu 2-3	Achote Black							26		26
RB2	26	Z	1	Tepeu 2-3	Chilar Fluted							2		2
RB2	26	Z	1	Tepeu 2-3	Gunshot							60		60
RB2	26	Z	1	Tepeu 2-3	Tinaja Red							30		30
RB2	26	Z	1	Tepeu 2-3	Unidentified								1	1
RB2	26	Z	1	Tepeu 2-3	Unidentified							1		1
RB2	26	Z	1	Tepeu 2-3	Unidentified							5		5
RB2	28	A	2	Tepeu 2-3	Achote Black		1				1	2		3
RB2	28	A	2	Tepeu 2-3	Gunshot							10		10
RB2	28	A	2	Tepeu 2-3	Slipped							2		2
RB2	28	A	2	Tepeu 2-3	Tinaja Red							1		1
RB2	28	A	3	Tepeu 2-3	Achote Black							3		3
RB2	28	A	3	Tepeu 2-3	Gunshot							6		6
RB2	28	A	3	Tepeu 2-3	Slipped							3		3
RB2	28	A	3	Tepeu 2-3	Subin Red							1		1
RB2	28	A	3	Tepeu 2-3	Tinaja Red							1		1
RB2	28	B	2	Tepeu 2-3	Achote Black ?							1		1
RB2	28	B	2	Tepeu 2-3	Gunshot							12		12
RB2	28	B	2	Tepeu 2-3	Subin Red		1				1			1
RB2	28	B	2	Tepeu 2-3	Tinaja Red							1		1
RB2	28	B	3	Tepeu 2-3	Subin Red ?		1				1			1
RB2	28	B	3	Tepeu 2-3	Unidentified							5	1	6
RB2	28	B	4	Tepeu 2-3	Achote Black						1	3		4
RB2	28	B	4	Tepeu 2-3	Gunshot							3		3
RB2	28	B	4	Tepeu 2-3	Red Slipped							1		1
RB2	28	B	4	Tepeu 2-3	Tinaja Red							4		4
RB2	28	B	4	Tepeu 2-3	Unidentified							5		5

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	28	B	4	Tepeu 2-3	Unidentified							3		3
RB2	28	B	5	Tepeu 2-3/Chicanel trace	Achote Black							7		7
RB2	28	B	5	Tepeu 2-3/Chicanel trace	Brown Slipped							1		1
RB2	28	B	5	Tepeu 2-3/Chicanel trace	Roaring Creek Red							1		1
RB2	28	B	5	Tepeu 2-3/Chicanel trace	Sierra Red							1		1
RB2	28	B	5	Tepeu 2-3/Chicanel trace	Tinaja Red							6		6
RB2	28	B	5	Tepeu 2-3/Chicanel trace	Unidentified							5		5
RB2	28	C	1	Tepeu 2-3	Achote Black						2			2
RB2	28	C	1	Tepeu 2-3	Cayo Unslipped							3		3
RB2	28	C	1	Tepeu 2-3	Red Slipped							1		1
RB2	28	C	1	Tepeu 2-3	Unidentified							5		5
RB2	28	C	2	Tepeu 2-3	Achote Black		1					3	8	11
RB2	28	C	2	Tepeu 2-3	Gunshot							19		19
RB2	28	C	2	Tepeu 2-3	Meditation Black	1							1	1
RB2	28	C	2	Tepeu 2-3	Slipped ?							6	1	7
RB2	28	C	2	Tepeu 2-3	Striated							1		1
RB2	28	C	2	Tepeu 2-3	Subin Red		1				2			2
RB2	28	C	2	Tepeu 2-3	Tinaja Red							17		17
RB2	28	C	2	Tepeu 2-3	Unidentified							3		3
RB2	28	C	2	Tepeu 2-3	Unidentified			1			1			1
RB2	28	C	2	Tepeu 2-3	Unidentified			2			2			2
RB2	28	C	3	Tepeu 2-3/Tzakol trace	Achote Black						3	7		10
RB2	28	C	3	Tepeu 2-3/Tzakol trace	Cayo Unslipped			1			1			1
RB2	28	C	3	Tepeu 2-3/Tzakol trace	Gunshot							10		10
RB2	28	C	3	Tepeu 2-3/Tzakol trace	Roaring Creek Red ?							4		4
RB2	28	C	3	Tepeu 2-3/Tzakol trace	Slipped							5		5
RB2	28	C	3	Tepeu 2-3/Tzakol trace	Subin Red		1				2	3		5
RB2	28	C	3	Tepeu 2-3/Tzakol trace	Tinaja Red			3			3			3
RB2	28	C	3	Tepeu 2-3/Tzakol trace	Unidentified			2			3		1	4
RB2	28	C	3	Tepeu 2-3/Tzakol trace	Unidentified							3		3
RB2	28	C	3	Tepeu 2-3/Tzakol trace	Unidentified							6		6
RB2	28	D	1	Tepeu 2-3	Achote Black?							1		1
RB2	28	D	1	Tepeu 2-3	Subin Red							1		1

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	28	D	1	Tepeu 2-3	Tinaja Red							4		4
RB2	28	D	1	Tepeu 2-3	Unidentified						1	1		2
RB2	28	D	2	Tepeu 2-3	Achote Black							2		2
RB2	28	D	2	Tepeu 2-3	Cream Slipped							2		2
RB2	28	D	2	Tepeu 2-3	Red Slipped							3		3
RB2	28	D	2	Tepeu 2-3	Tinaja Red							1		1
RB2	28	D	2	Tepeu 2-3	Unidentified							4		4
RB2	28	D	3	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	28	D	3	Tepeu 2-3	Red Slipped							3		3
RB2	28	D	3	Tepeu 2-3	Tinaja Red							3		3
RB2	28	D	3	Tepeu 2-3	Unidentified	1					1	8		8
RB2	28	D	4	Chicanel	Black Slipped							6		6
RB2	28	D	4	Chicanel	Gunshot							45		45
RB2	28	D	4	Chicanel	Paila Unslipped?			1			1			1
RB2	28	D	4	Chicanel	Polvero Black							1		1
RB2	28	D	4	Chicanel	Red and Black Mottled							3		3
RB2	28	D	4	Chicanel	Sierra Red		4	2			7	24		31
RB2	28	D	4	Chicanel	Sierra Red: Variety Unspecified (maroon)						1			1
RB2	28	D	4	Chicanel	Sierra Red: Variety Unspecified (red-and-black)		3				3			3
RB2	28	D	4	Chicanel	Striated							6		6
RB2	28	D	4	Chicanel	Unidentified							8		8
RB2	28	D	4	Chicanel	Unidentified						1	4		5
RB2	28	D	5	Early Chicanel (FV)	Gunshot							20		20
RB2	28	D	5	Early Chicanel (FV)	Polvero Black							12		12
RB2	28	D	5	Early Chicanel (FV)	Sierra Red						6	26		32
RB2	28	D	5	Early Chicanel (FV)	Unidentified								1	1
RB2	28	D	5	Early Chicanel (FV)	Unidentified							7		7
RB2	28	D	6	Chicanel	Gunshot							85		85
RB2	28	D	6	Chicanel	Polvero Black						1			1
RB2	28	D	6	Chicanel	San Antonio Golden Brown?							2		2
RB2	28	D	6	Chicanel	Sierra Red						5	28		33

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	28	D	7	Tepeu 2-3	Kaway Impressed (*Whole Vessel #**1***)		1							
RB2	28	D	7	Tepeu 2-3	Unidentified	17					1	16		17
RB2	28	D	8	Chicanel	Sierra Red? (*Whole Vessel #**2***)		1							
RB2	28	E	1	Tepeu 2-3	Achote Black?		1				1			1
RB2	28	E	1	Tepeu 2-3	Subin Red		1				1			1
RB2	28	E	1	Tepeu 2-3	Unidentified							9		9
RB2	28	E	2	Tepeu 2-3; Chicanel trace	Achote Black							12		12
RB2	28	E	2	Tepeu 2-3; Chicanel trace	Black Slipped							2		2
RB2	28	E	2	Tepeu 2-3; Chicanel trace	Sierra Red							4		4
RB2	28	E	2	Tepeu 2-3; Chicanel trace	Striated							7		7
RB2	28	E	2	Tepeu 2-3; Chicanel trace	Tinaja Red			1			1	28		29
RB2	28	E	2	Tepeu 2-3; Chicanel trace	Unidentified							6		6
RB2	28	E	2	Tepeu 2-3; Chicanel trace	Zibal Unslipped			1			1			1
RB2	28	F	1	Tepeu 2-3	Achote Black							2		2
RB2	28	F	1	Tepeu 2-3	Tinaja Red?							2		2
RB2	28	F	1	Tepeu 2-3	Unidentified							3		3
RB2	28	G	1	Tepeu 2-3?	Unidentified							2		2
RB2	28	G	2	Tepeu 2-3?	Black Slipped?							1		1
RB2	28	G	2	Tepeu 2-3?	Unidentified							3		3
RB2	28	G	3	Tepeu 2-3	Achote Black		1				1			1
RB2	28	G	3	Tepeu 2-3	Unidentified							2		2
RB2	28	G	4	Chicanel	Gunshot							24		24
RB2	28	G	4	Chicanel	Polvero Black							6		6
RB2	28	G	4	Chicanel	Sierra Red						3	12	1	16
RB2	28	G	4	Chicanel	Unidentified							3		3
RB2	28	H	1	Tepeu 2-3	Achote Black							2		2
RB2	28	H	1	Tepeu 2-3	Cream Slipped							2		2
RB2	28	H	1	Tepeu 2-3	Tinaja Red							3		3
RB2	28	H	1	Tepeu 2-3	Unidentified	1							1	1
RB2	28	H	2	Tepeu 2-3	Gunshot							18		18
RB2	28	H	2	Tepeu 2-3	Red Slipped							2		2
RB2	28	H	2	Tepeu 2-3	Unidentified							3		3
RB2	28	H	3	Tepeu 2-3	Achote Black							3		3

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	28	H	3	Tepeu 2-3	Striated							2		2
RB2	28	H	3	Tepeu 2-3	Tinaja Red							6		6
RB2	28	H	4	Tepeu 2-3	Achote Black		1				1			1
RB2	28	H	4	Tepeu 2-3	Cream Slipped?							2		2
RB2	28	H	4	Tepeu 2-3	Red Slipped							2		2
RB2	28	H	4	Tepeu 2-3	Unidentified							3		3
RB2	28	H	5	Tepeu 2-3	Red Slipped							1		1
RB2	28	H	5	Tepeu 2-3	Tinaja Red							5		5
RB2	28	H	6	Tepeu 2-3	Black Slipped?							3		3
RB2	28	H	6	Tepeu 2-3	Red Slipped	1					1			1
RB2	28	H	6	Tepeu 2-3	Striated							2		2
RB2	28	H	6	Tepeu 2-3	Tinaja Red							5		5
RB2	28	H	6	Tepeu 2-3	Unidentified								2	2
RB2	28	I	1	Tepeu 2-3; Chicanel trace	Achote Black		4				1	26		27
RB2	28	I	1	Tepeu 2-3; Chicanel trace	Cayo Unslipped			3			3			3
RB2	28	I	1	Tepeu 2-3; Chicanel trace	Cream Slipped							2		2
RB2	28	I	1	Tepeu 2-3; Chicanel trace	Garbutt Creek Red		2				2			2
RB2	28	I	1	Tepeu 2-3; Chicanel trace	Red Slipped							6		6
RB2	28	I	1	Tepeu 2-3; Chicanel trace	Sierra Red							3		3
RB2	28	I	1	Tepeu 2-3; Chicanel trace	Striated w/ red wash							3		3
RB2	28	I	1	Tepeu 2-3; Chicanel trace	Subin Red		1				1			1
RB2	28	I	1	Tepeu 2-3; Chicanel trace	Tinaja Red							47		47
RB2	28	I	1	Tepeu 2-3; Chicanel trace	Unidentified							5		5
RB2	28	I	1	Tepeu 2-3; Chicanel trace	Unidentified		1				1	30		31
RB2	28	I	1	Tepeu 2-3; Chicanel trace	Zibal Unslipped			1			1			1
RB2	28	I	2	Tepeu 2-3	Achote Black		5				3	14	1	18
RB2	28	I	2	Tepeu 2-3	Belize Red							1		1
RB2	28	I	2	Tepeu 2-3	Cayo Unslipped			1			1	3		4
RB2	28	I	2	Tepeu 2-3	Meditation Black							6		6
RB2	28	I	2	Tepeu 2-3	Red Slipped	2					2	4		6
RB2	28	I	2	Tepeu 2-3	Subin Red		1				1			1
RB2	28	I	2	Tepeu 2-3	Tinaja Red							33		33
RB2	28	I	2	Tepeu 2-3	Tinaja Red?							21		12

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	28	I	2	Tepeu 2-3	Unidentified							1		1
RB2	28	I	2	Tepeu 2-3	Unidentified							15		15
RB2	28	I	3	Tepeu 2-3	Sierra Red						1	4		5
RB2	28	I	3	Tepeu 2-3	Striated							4		4
RB2	28	I	3	Tepeu 2-3	Unidentified			2			2	6		8
RB2	28	I	3	Tepeu 2-3	Unidentified							26		26
RB2	28	I	3	Tepeu 2-3	Zibal Unslipped			1			1			1
RB2	28	I	4	Chicanel	Gunshot							20		20
RB2	28	I	4	Chicanel	Red Slipped							1		1
RB2	28	I	4	Chicanel	San Antonio Golden Brown							1		1
RB2	28	I	4	Chicanel	Sierra Red							6	1	7
RB2	28	I	4	Chicanel	Striated							12		12
RB2	28	I	4	Chicanel	Unidentified							6		6
RB2	28	I	4	Chicanel	Unidentified (same vessel as sherd B?)	1							1	1
RB2	28	I	6	Mixed Lot (Tepeu 1-3; Tzakol and Chicanel	Aguila Orange?							17		17
RB2	28	I	6	Mixed Lot (Tepeu 1-3; Tzakol and Chicanel	Black Slipped			1				7		7
RB2	28	I	6	Mixed Lot (Tepeu 1-3; Tzakol and Chicanel	Garbutt Creek Red		4				4			4
RB2	28	I	6	Mixed Lot (Tepeu 1-3; Tzakol and Chicanel	Gunshot							38		38
RB2	28	I	6	Mixed Lot (Tepeu 1-3; Tzakol and Chicanel	Red Slipped	3	2				5			5
RB2	28	I	6	Mixed Lot (Tepeu 1-3; Tzakol and Chicanel	Red to Orange Slipped		9				3	47	8	58
RB2	28	I	6	Mixed Lot (Tepeu 1-3; Tzakol and Chicanel	Sierra Red						10	26		36
RB2	28	I	6	Mixed Lot (Tepeu 1-3; Tzakol and Chicanel	Subin Red		6				6			6
RB2	28	I	6	Mixed Lot (Tepeu 1-3; Tzakol and Chicanel	Tinaja Red			1			1			1

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	28	I	6	Mixed Lot (Tepeu 1-3; Tzakol and Chicanel	Unslipped							14		14
RB2	28	I	6	Mixed Lot (Tepeu 1-3; Tzakol and Chicanel	Unslipped			6			6			6
RB2	28	I	6	Mixed Lot (Tepeu 1-3; Tzakol and Chicanel	Zibal Unslipped			4			4			4
RB2	28	J	1	Tepeu 2-3	Subin Red		2				2			2
RB2	28	J	1	Tepeu 2-3	Tinaja Red							12		12
RB2	28	J	1	Tepeu 2-3	Unidentified							4		4
RB2	28	J	2	Tepeu 2-3; Tzakol trace?	Achote Black		1				1	6		7
RB2	28	J	2	Tepeu 2-3; Tzakol trace?	Aguila Orange?							1		1
RB2	28	J	2	Tepeu 2-3; Tzakol trace?	Tinaja Red							10		10
RB2	28	J	2	Tepeu 2-3; Tzakol trace?	Unidentified							3		3
RB2	28	J	2	Tepeu 2-3; Tzakol trace?	Zibal Unslipped			1			1			1
RB2	28	J	3	Tepeu 2-3; Chicanel trace	Cayo Unslipped			1			1			1
RB2	28	J	3	Tepeu 2-3; Chicanel trace	Red Slipped							5		5
RB2	28	J	3	Tepeu 2-3; Chicanel trace	Sierra Red							1		1
RB2	28	J	3	Tepeu 2-3; Chicanel trace	Tinaja Red							17		17
RB2	28	J	3	Tepeu 2-3; Chicanel trace	Unidentified							6		6
RB2	28	J	3	Tepeu 2-3; Chicanel trace	Zibal Unslipped			3			3			3
RB2	28	K	1	Tepeu 2-3	Achote Black		3				3	32		35
RB2	28	K	1	Tepeu 2-3	Cayo Unslipped							2		2
RB2	28	K	1	Tepeu 2-3	Red Slipped							2		2
RB2	28	K	1	Tepeu 2-3	Striated							3		3
RB2	28	K	1	Tepeu 2-3	Subin Red		2				2			2
RB2	28	K	1	Tepeu 2-3	Tinaja Red							19		19
RB2	28	L	1	Tepeu 2-3	Red Slipped	2						2		2
RB2	28	L	1	Tepeu 2-3	Striated							2		2
RB2	28	L	1	Tepeu 2-3	Unidentified							2		2
RB2	28	L	1	Tepeu 2-3	Unidentified							3		3
RB2	28	L	1	Tepeu 2-3	Zibal Unslipped			1			1			1
RB2	28	L	2	Tzakol? and Chicanel	Aguila Orange?		3				3	6		9
RB2	28	L	2	Tzakol? and Chicanel	Black Slipped							15		15

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	28	L	2	Tzakol? and Chicanel	Gunshot							20		20
RB2	28	L	2	Tzakol? and Chicanel	Sierra Red						4	35	2	41
RB2	28	L	2	Tzakol? and Chicanel	Striated							20		20
RB2	28	L	2	Tzakol? and Chicanel	Unidentified							10		10
RB2	28	M	1	Tepeu 2-3	Garbutt Creek Red		2				2			2
RB2	28	M	1	Tepeu 2-3	Orange Slipped?							1		1
RB2	28	M	1	Tepeu 2-3	Subin Red		1				1			1
RB2	28	M	1	Tepeu 2-3	Tinaja Red?							5		5
RB2	28	M	1	Tepeu 2-3	Unidentified					lid	1			1
RB2	28	M	1	Tepeu 2-3	Unidentified	1						6	1	7
RB2	28	M	2	Chicanel	Black Slipped							17		17
RB2	28	M	2	Chicanel	Red and Buff Slipped							1		1
RB2	28	M	2	Chicanel	Sierra Red	2					3	38		41
RB2	28	M	2	Chicanel	Sierra Red		3				4	7		11
RB2	28	M	2	Chicanel	Unidentified							26		26
RB2	28	N	1	Tepeu 2-3	Achote Black		6				5	26		31
RB2	28	N	1	Tepeu 2-3	Cayo Unslipped			9			7	4		11
RB2	28	N	1	Tepeu 2-3	Red Slipped	4					1	3		4
RB2	28	N	1	Tepeu 2-3	Striated							8		8
RB2	28	N	1	Tepeu 2-3	Subin Red		6				6			6
RB2	28	N	1	Tepeu 2-3	Tinaja Red							35		35
RB2	28	N	2	Tepeu 2-3; Chicanel trace	Achote Black		6				6	35		41
RB2	28	N	2	Tepeu 2-3; Chicanel trace	Cayo Unslipped			4			4	5		9
RB2	28	N	2	Tepeu 2-3; Chicanel trace	Red Slipped							16		16
RB2	28	N	2	Tepeu 2-3; Chicanel trace	Sierra Red							5		5
RB2	28	N	2	Tepeu 2-3; Chicanel trace	Slate			1			1			1
RB2	28	N	2	Tepeu 2-3; Chicanel trace	Striated							17		17
RB2	28	N	2	Tepeu 2-3; Chicanel trace	Thin Late Classic Buff							5		5
RB2	28	N	2	Tepeu 2-3; Chicanel trace	Tinaja Red?							26		26
RB2	28	N	2	Tepeu 2-3; Chicanel trace	Tres Mujeras Mottled							3		3
RB2	28	N	2	Tepeu 2-3; Chicanel trace	Unidentified							30	1	31
RB2	28	N	2	Tepeu 2-3; Chicanel trace	Zibal Unslipped			1			1			1
RB2	28	N	3	Chicanel	Orange Slipped?							4		4

	Provenience					Forms					Counts			
RB#	**Op**	**Subop**	**Lot**	**Time Period**	**Type:Variety**	**Plate**	**Bowl**	**Jar**	**Cylinder**	**Other**	**Rim**	**Body**	**Base**	**Total**
RB2	28	N	3	Chicanel	Paila Unslipped			2			2			2
RB2	28	N	3	Chicanel	Polvero Black							25		25
RB2	28	N	3	Chicanel	Sierra Red		2	1			6	33		39
RB2	28	N	3	Chicanel	Striated			3				26		26
RB2	28	N	3	Chicanel	Unidentified			2			2		1	3
RB2	28	O	11	Chicanel	Gunshot							200		200
RB2	28	O	11	Chicanel	Laguna Verde Incised? (*Whole Vessel #**5***)		1							
RB2	28	O	11	Chicanel	Sierra Red (*Whole Vessel #**6***)		97				27	70		
RB2	28	O	12	Chicanel (includes some potential Mamom too)	may be special form of Sapote Striated - I will get you a type name asap (*Whole Vessel #**4***)		1							
RB2	28	O	12	Chicanel (includes some potential Mamom too)	Sierra Red? (*Whole Vessel #**3***)		1							
RB2	28	O	13	Chicanel?	Sierra Red? (*Whole Vessel #**8***)									
RB2	28	O	13	Chicanel	Sierra Red						2	2		4
RB2	28	O	13	Chicanel	Unidentified							2		2
RB2	28	O	13	Chicanel	Sierra Red?		1				1	20		21
RB2	28	O	13	Chicanel	Gunshot							205		205
RB2	28	O	13	Chicanel	Sierra Red (*Whole Vessel #**7***)									
RB2	28	O	13	Chicanel	Gunshot							150		150
RB2	28	O	14	Chicanel	Orange Slipped?							4		4
RB2	28	O	14	Chicanel	Polvero Black							37		37
RB2	28	O	14	Chicanel	Sierra Red							35		35
RB2	28	O	14	Chicanel	Unidentified							68		68
RB2	28	O	14	Chicanel	Unidentified							3		3
RB2	28	P	1	Tepeu 2-3	Achote Black		5				2	3		5
RB2	28	P	1	Tepeu 2-3	Black Slipped							3		3
RB2	28	P	1	Tepeu 2-3	Tinaja Red?							10		10
RB2	28	P	1	Tepeu 2-3	Unidentified							3	1	4
RB2	28	P	1	Tepeu 2-3	Zibal Unslipped			1			1			1
RB2	28	P	2	Tepeu 2-3	Achote Black							6		6
RB2	28	P	2	Tepeu 2-3	Cayo Unslipped			2			2	3		5

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	28	P	2	Tepeu 2-3	Garbutt Creek Red		1				1			1
RB2	28	P	2	Tepeu 2-3	Red Slipped							2		2
RB2	28	P	2	Tepeu 2-3	Tinaja Red							10		10
RB2	28	P	2	Tepeu 2-3	Unidentified			1			1			1
RB2	28	P	3	Tepeu 2-3; Chicanel trace	Black Slipped							3		3
RB2	28	P	3	Tepeu 2-3; Chicanel trace	Gunshot							10		10
RB2	28	P	3	Tepeu 2-3; Chicanel trace	Sierra Red							1		1
RB2	28	P	3	Tepeu 2-3; Chicanel trace	Striated							2		2
RB2	28	P	3	Tepeu 2-3; Chicanel trace	Subin Red		1				1			1
RB2	28	P	3	Tepeu 2-3; Chicanel trace	Tinaja Red							5		5
RB2	28	P	3	Tepeu 2-3; Chicanel trace	Unidentified							7		7
RB2	28	P	4	Tepeu 2-3; Tzakol trace?	Achote Black		3				1	17		18
RB2	28	P	4	Tepeu 2-3; Tzakol trace?	Cayo Unslipped							6		6
RB2	28	P	4	Tepeu 2-3; Tzakol trace?	Orange Polychrome		2				2			2
RB2	28	P	4	Tepeu 2-3; Tzakol trace?	Quintal Unslipped						1			1
RB2	28	P	4	Tepeu 2-3; Tzakol trace?	Striated							3		3
RB2	28	P	4	Tepeu 2-3; Tzakol trace?	Subin Red		4				4			4
RB2	28	P	4	Tepeu 2-3; Tzakol trace?	Thin Late Classic Buff						6			6
RB2	28	P	4	Tepeu 2-3; Tzakol trace?	Tinaja Red			4			2	21		23
RB2	28	P	4	Tepeu 2-3; Tzakol trace?	Unidentified							16	1	17
RB2	28	Q	1	Tepeu 2-3	Achote Black?							6		6
RB2	28	Q	1	Tepeu 2-3	Red Slipped							7		7
RB2	28	Q	1	Tepeu 2-3	Striated							4		4
RB2	28	Q	1	Tepeu 2-3	Subin Red		2				2			2
RB2	28	Q	1	Tepeu 2-3	Thin Late Classic Buff							11		11
RB2	28	Q	1	Tepeu 2-3	Tinaja Red			1			1	23		24
RB2	28	Q	1	Tepeu 2-3	Unidentified							20		20
RB2	28	Q	2	Tepeu 2-3	Achote Black							2		2
RB2	28	Q	2	Tepeu 2-3	Cayo Unslipped			6			3	3		6
RB2	28	Q	2	Tepeu 2-3	Garbutt Creek Red		1				1			1
RB2	28	Q	2	Tepeu 2-3	Gunshot							20		20
RB2	28	Q	2	Tepeu 2-3	Red Slipped	2					2			2
RB2	28	Q	2	Tepeu 2-3	Striated							2		2

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	28	Q	2	Tepeu 2-3	Subin Red		2				2	2		4
RB2	28	Q	2	Tepeu 2-3	Tinaja Red			1			1	20		21
RB2	28	Q	2	Tepeu 2-3	Unidentified							10		10
RB2	28	Q	3	Tepeu 2-3; Tzakol trace?	Achote Black							7		7
RB2	28	Q	3	Tepeu 2-3; Tzakol trace?	Aguila Orange?							2		2
RB2	28	Q	3	Tepeu 2-3; Tzakol trace?	Gunshot							20		20
RB2	28	Q	3	Tepeu 2-3; Tzakol trace?	Striated							6		6
RB2	28	Q	3	Tepeu 2-3; Tzakol trace?	Thin Late Classic Buff							10		10
RB2	28	Q	3	Tepeu 2-3; Tzakol trace?	Tinaja Red?							37		37
RB2	28	Q	3	Tepeu 2-3; Tzakol trace?	Unidentified							9		9
RB2	28	R	1	Tepeu 2-3; Tzakol and Chicanel trace	Achote Black						6	51		57
RB2	28	R	1	Tepeu 2-3; Tzakol and Chicanel trace	Aguila Orange?							6		6
RB2	28	R	1	Tepeu 2-3; Tzakol and Chicanel trace	Gunshot							350		350
RB2	28	R	1	Tepeu 2-3; Tzakol and Chicanel trace	Sierra Red		2				2	1		3
RB2	28	R	1	Tepeu 2-3; Tzakol and Chicanel trace	Unidentified		1	1			2	30	1	33
RB2	28	R	1	Tepeu 2-3; Tzakol and Chicanel trace	Unslipped							7		7
RB2	28	S	1	Tepeu 2-3	Achote Black?							1		1
RB2	28	S	1	Tepeu 2-3	Subin Red		1				1			1
RB2	28	S	1	Tepeu 2-3	Unidentified							2		2
RB2	28	T	1	Tepeu 2-3?	Unidentified							3		3
RB2	28	U	1	Tepeu 2-3	Gunshot							20		20
RB2	28	U	1	Tepeu 2-3	Thin Late Classic Buff							1		1
RB2	28	U	1	Tepeu 2-3	Unidentified	1					2	6		8
RB2	28	V	1	Tepeu 2-3	Achote Black							20		20
RB2	28	V	1	Tepeu 2-3	Cayo Unslipped			2			2	1		3
RB2	28	V	1	Tepeu 2-3	Gunshot							20		20
RB2	28	V	1	Tepeu 2-3	Subin Red		2				2			2

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	28	V	1	Tepeu 2-3	Tinaja Red							15		15
RB2	28	V	1	Tepeu 2-3	Unidentified							3		3
RB2	28	W	4	Chicanel to Mamom	Consejo Red						1	4		5
RB2	28	W	4	Chicanel to Mamom	Polvero Black							7		7
RB2	28	W	4	Chicanel to Mamom	Sierra Red						2	38		40
RB2	28	W	4	Chicanel to Mamom	Striated							6		6
RB2	28	W	4	Chicanel to Mamom	Unidentified		1				1			1
RB2	28	W	4	Chicanel to Mamom	Unidentified							1		1
RB2	28	W	4	Chicanel to Mamom	Unidentified (Black paste)			1			1	17		18
RB2	28	W	4	Chicanel to Mamom	Unidentified (Orange paste)							45		45
RB2	28	W	5	Tzakol?	Unidentified							3		3
RB2	28	W	5	Tzakol?	Unslipped			1			1			1
RB2	28	W	6	Chicanel	Buff Slipped							2		2
RB2	28	W	6	Chicanel	Gunshot							40		40
RB2	28	W	6	Chicanel	Polvero Black							15		15
RB2	28	W	6	Chicanel	Sierra Red		2				2	23		25
RB2	28	W	6	Chicanel	Striated							2		2
RB2	28	W	6	Chicanel	Unidentified							6		6
RB2	28	W	7	Chicanel	Chan Pond Unslipped?		1				1			1
RB2	28	W	7	Chicanel	Sierra Red		3				1	26		27
RB2	28	W	7	Chicanel	Unidentified		1					1		1
RB2	28	W	7	Chicanel	Unidentified		2				2			2
RB2	28	W	7	Chicanel	Unslipped			3			3			3
RB2	28	X	5	Tepeu 1-2; Chicanel	Black Slipped							14		14
RB2	28	X	5	Tepeu 1-2; Chicanel	Sierra Red							31		31
RB2	28	X	5	Tepeu 1-2; Chicanel	Striated							27		27
RB2	28	X	5	Tepeu 1-2; Chicanel	Subin Red		3				3			3
RB2	28	X	5	Tepeu 1-2; Chicanel	Unidentified							12		12
RB2	28	X	5	Tepeu 1-2; Chicanel	Zibal Unslipped			7			7			7
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Black on Orange polychrome							3		3
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Buff Slipped							3		3

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Meditation Black		1				1			1
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Red and Black Mottled	1					1			1
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Red Slipped								2	2
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Red Slipped?			1			1			1
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Red to Orange Slipped	3					1	3		3
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Sierra Red		1	1			2	6		8
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Subin Red		4				4	1		5
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Tinaja Red			1			1	17		18
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Unidentified					lid	1			1
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Unidentified							12		12
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Unslipped			3			3			3
RB2	28	X	6	Mixed Lot (T. 2-3; Tzakol? Chicanel and Floral Park)	Zibal Unslipped						1			1
RB2	28	Y	1	Tepeu 2-3	Gunshot							2		2
RB2	28	Y	1	Tepeu 2-3	Slipped							1		1
RB2	28	Y	1	Tepeu 2-3	Striated							2		2
RB2	28	Y	1	Tepeu 2-3	Tinaja Red							6		6
RB2	28	Y	3	Tepeu 2-3?/Chicanel	Gunshot							30		30
RB2	28	Y	3	Tepeu 2-3?/Chicanel	Red Slipped							4		4

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	28	Y	3	Tepeu 2-3?/Chicanel	Sierra Red							2		2
RB2	28	Y	3	Tepeu 2-3?/Chicanel	Striated			1				1		1
RB2	28	Y	3	Tepeu 2-3?/Chicanel	Unidentified					handle		1		1
RB2	29	A	1	Tepeu 2-3	Achote Black		3				1	2		3
RB2	29	A	1	Tepeu 2-3	Tinaja Red							2		2
RB2	29	A	1	Tepeu 2-3	Unidentified							4		4
RB2	29	A	2	Tepeu 2-3	Achote Black		1				1	6		7
RB2	29	A	2	Tepeu 2-3	Striated							3		3
RB2	29	A	2	Tepeu 2-3	Tinaja Red?							18		18
RB2	29	A	2	Tepeu 2-3	Unidentified		1				1			1
RB2	29	AA	1	Tepeu 2-3	Achote Black?							90		90
RB2	29	AA	1	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	29	AA	1	Tepeu 2-3	Gunshot							50		50
RB2	29	AA	1	Tepeu 2-3	Striated							1		1
RB2	29	AA	1	Tepeu 2-3	Thin Late Classic Buff							17		17
RB2	29	AA	1	Tepeu 2-3	Tinaja Red?							75		75
RB2	29	AA	1	Tepeu 2-3	Unslipped			1			1	3		4
RB2	29	AB	1	Tepeu 2-3	Achote Black		2				2	115		117
RB2	29	AB	1	Tepeu 2-3	Garbutt Creek Red		1				1			1
RB2	29	AB	1	Tepeu 2-3	Subin Red		1				1			1
RB2	29	AB	1	Tepeu 2-3	Subin Red		2				2	5		7
RB2	29	AB	1	Tepeu 2-3	Tinaja Red							60		60
RB2	29	AB	1	Tepeu 2-3	Unslipped							3		3
RB2	29	AC	1	Tepeu 2-3	Achote Black		3				3	45		48
RB2	29	AC	1	Tepeu 2-3	Cayo Unslipped			4				4		4
RB2	29	AC	1	Tepeu 2-3	Kaway Impressed						1			1
RB2	29	AC	1	Tepeu 2-3	Tinaja Red							17		17
RB2	29	AC	1	Tepeu 2-3	Unidentified	1					1	3		4
RB2	29	AD	1	Tepeu 2-3	Achote Black		3				3	30		33
RB2	29	AD	1	Tepeu 2-3	Cayo Unslipped							3		3
RB2	29	AD	1	Tepeu 2-3	Gunshot							15		15
RB2	29	AD	1	Tepeu 2-3	Tinaja Red							12		12
RB2	29	AE	1	Tepeu 2-3	Achote Black?							4		4

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	AE	1	Tepeu 2-3	Tinaja Red?							2		2
RB2	29	AF	1	Tepeu 2-3	Achote Black							9		9
RB2	29	AF	1	Tepeu 2-3	Tinaja Red							11		11
RB2	29	AF	1	Tepeu 2-3	Unidentified							1		1
RB2	29	AF	1	Tepeu 2-3	Unslipped							2		2
RB2	29	AG	1	Tepeu 2-3; Mamom trace	Red Slipped					spout	1			1
RB2	29	AG	1 (Bag1)	Tepeu 2-3; Mamom trace	Achote Black							29		29
RB2	29	AG	1 (Bag1)	Tepeu 2-3; Mamom trace	Red Slipped								1	1
RB2	29	AG	1 (Bag1)	Tepeu 2-3; Mamom trace	Tinaja Red							27		27
RB2	29	AG	1 (Bag2)	Tepeu 2-3; Mamom trace	Achote Black							17		17
RB2	29	AG	1 (Bag2)	Tepeu 2-3; Mamom trace	Red Slipped					bottle	1			1
RB2	29	AG	1 (Bag2)	Tepeu 2-3; Mamom trace	Sierra Red							1		1
RB2	29	AG	1 (Bag2)	Tepeu 2-3; Mamom trace	Tinaja Red							3		3
RB2	29	AG	1 (Bag2)	Tepeu 2-3; Mamom trace	Unidentified							8		8
RB2	29	AG	1 (Bag2)	Tepeu 2-3; Mamom trace	Unslipped							5		5
RB2	29	AH	1	Chicanel	Gunshot							10		10
RB2	29	AH	1	Chicanel	Sierra Red		1				1	3		4
RB2	29	AH	1	Chicanel	Unidentified		1				1	15		16
RB2	29	AH	1	Chicanel	Unslipped						1			1
RB2	29	AI	1	Tepeu 2-3; Mamom trace	Achote Black?		1				1	88		89
RB2	29	AI	1	Tepeu 2-3; Mamom trace	Cayo Unslipped			2			2			2
RB2	29	AI	1	Tepeu 2-3; Mamom trace	Consejo Red?		1				1			1
RB2	29	AI	1	Tepeu 2-3; Mamom trace	Gunshot							50		50
RB2	29	AI	1	Tepeu 2-3; Mamom trace	Red Slipped	2					2	2		4

	Provenience					Forms					Counts			
RB#	**Op**	**Subop**	**Lot**	**Time Period**	**Type:Variety**	**Plate**	**Bowl**	**Jar**	**Cylinder**	**Other**	**Rim**	**Body**	**Base**	**Total**
RB2	29	AI	1	Tepeu 2-3; Mamom trace	Unidentified							95		95
RB2	29	AI	1	Tepeu 2-3; Mamom trace	Unslipped					tecomate	1			1
RB2	29	AJ	2	Tepeu 2-3	Achote Black							15		15
RB2	29	AJ	2	Tepeu 2-3	Cayo Unslipped							2		2
RB2	29	AJ	2	Tepeu 2-3	Tinaja Red?							5		5
RB2	29	AJ	3	Tepeu 2-3	Achote Black							26		26
RB2	29	AJ	3	Tepeu 2-3	Cayo Unslipped			3				3		3
RB2	29	AJ	3	Tepeu 2-3	Tinaja Red							13		13
RB2	29	AJ	4	Tepeu 2-3: Chicanel trace	Achote Black		3				3	55		58
RB2	29	AJ	4	Tepeu 2-3: Chicanel trace	Cayo Unslipped							7		7
RB2	29	AJ	4	Tepeu 2-3: Chicanel trace	Sierra Red		1				1	2		2
RB2	29	AJ	4	Tepeu 2-3: Chicanel trace	Unidentified							9		9
RB2	29	AJ	4	Tepeu 2-3: Chicanel trace	Unslipped			1			1			1
RB2	29	AJ	6	?	Unidentified							3		3
RB2	29	AK	1	?	Unidentified							2	1	3
RB2	29	AK	1	?	Unslipped							1		1
RB2	29	AK	2	Tepeu 2-3	Achote Black							12		12
RB2	29	AK	2	Tepeu 2-3	Cubeta Incised							1		1
RB2	29	AK	2	Tepeu 2-3	Subin Red		1				1			1
RB2	29	AK	2	Tepeu 2-3	Tinaja Red							5		5
RB2	29	AK	2	Tepeu 2-3	Unidentified							1		1
RB2	29	AK	2	Tepeu 2-3	Unidentified	1					1	6		7
RB2	29	AK	3	Tepeu 2-3	Achote Black?							10		10
RB2	29	AK	3	Tepeu 2-3	Tinaja Red							7		7
RB2	29	AK	3	Tepeu 2-3	Unslipped							8		8
RB2	29	AK	4	Tepeu 2-3	Achote Black		1				1	15		16
RB2	29	AK	4	Tepeu 2-3	Unidentified							3		3
RB2	29	AK	4	Tepeu 2-3	Unslipped							2		2
RB2	29	AK	6	Tepeu 2-3	Garbutt Creek Red		1				1			1
RB2	29	AK	6	Tepeu 2-3	Gunshot							25		25
RB2	29	AK	6	Tepeu 2-3	Tinaja Red							13		13
RB2	29	AK	6	Tepeu 2-3	Unidentified	1					1	1		2
RB2	29	AL	1	Tepeu 2-3	Achote Black		1				1	2		3

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	AL	1	Tepeu 2-3	Cayo Unslipped			1				3		3
RB2	29	AL	1	Tepeu 2-3	Subin Red		1				1			1
RB2	29	AL	2	Tepeu 2-3	Black Slipped							3		3
RB2	29	AL	2	Tepeu 2-3	Cayo Unslipped							3		3
RB2	29	AL	2	Tepeu 2-3	Subin Red		1				1			1
RB2	29	AL	2	Tepeu 2-3	Tinaja Red							4		4
RB2	29	AL	2	Tepeu 2-3	Unidentified							2		2
RB2	29	AL	3	Tepeu 2-3	Achote Black		1				1	5		6
RB2	29	AL	3	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	29	AL	3	Tepeu 2-3	Cayo Unslipped							3		3
RB2	29	AL	3	Tepeu 2-3	Subin Red							1		1
RB2	29	AL	3	Tepeu 2-3	Unidentified							1		1
RB2	29	AL	4	Tepeu 2-3	Achote Black		1				1	12		13
RB2	29	AL	4	Tepeu 2-3	Tinaja Red							5		5
RB2	29	AM	1	Tepeu 2-3	Achote Black		1				1	8		9
RB2	29	AM	1	Tepeu 2-3	Cayo Unslipped							3		3
RB2	29	AM	1	Tepeu 2-3	Tinaja Red							4		4
RB2	29	AN	1	Tepeu 2-3	Achote Black		4				4	58		62
RB2	29	AN	1	Tepeu 2-3	Striated							2		2
RB2	29	AN	1	Tepeu 2-3	Tinaja Red							25		25
RB2	29	AN	1	Tepeu 2-3	Unidentified					handle		1		1
RB2	29	AN	1	Tepeu 2-3	Unidentified							1		1
RB2	29	AN	1	Tepeu 2-3	Unidentified							6		6
RB2	29	AN	1	Tepeu 2-3	Zibal Unslipped			1			1			1
RB2	29	AO	1	Tepeu 2-3	Cayo Unslipped							2		2
RB2	29	AO	1	Tepeu 2-3	Unidentified	1						12	1	13
RB2	29	AO	1	Tepeu 2-3	Unidentified							26		26
RB2	29	AP	1	Tepeu 2-3; Tzakol trace	Achote Black?		1				1			1
RB2	29	AP	1	Tepeu 2-3; Tzakol trace	Gunshot							8		8
RB2	29	AP	1	Tepeu 2-3; Tzakol trace	Unidentified							1		1
RB2	29	AP	1	Tepeu 2-3; Tzakol trace	Unidentified							8		8
RB2	29	AQ	1	Tepeu 2-3	Achote Black		1						1	1
RB2	29	AQ	1	Tepeu 2-3	Chilar Fluted							1		1

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	AQ	1	Tepeu 2-3	Tinaja Red							1		1
RB2	29	AR	1	Tepeu 2-3	Achote Black							5		5
RB2	29	AR	1	Tepeu 2-3	Cayo Unslipped		2					2		2
RB2	29	AR	1	Tepeu 2-3	Tinaja Red							6		6
RB2	29	AR	1	Tepeu 2-3	Unidentified	1							1	1
RB2	29	AS	1	Tepeu 2-3	Cayo Unslipped			1				1		1
RB2	29	AS	1	Tepeu 2-3	Gunshot							10		10
RB2	29	AS	1	Tepeu 2-3	Unidentified							3		3
RB2	29	AS	1	Tepeu 2-3	Unidentified		1					2	1	3
RB2	29	AT	1	Tepeu 2-3	Black Slipped							7		7
RB2	29	AT	1	Tepeu 2-3	Ceramic flute fragment					flute		1		1
RB2	29	AT	1	Tepeu 2-3	Gunshot							15		15
RB2	29	AT	1	Tepeu 2-3	Tinaja Red							23		23
RB2	29	AU	1	Tepeu 2-3	Achote Black							5		5
RB2	29	AU	1	Tepeu 2-3	Cayo Unslipped							1		1
RB2	29	AU	1	Tepeu 2-3	Striated							2		2
RB2	29	AU	1	Tepeu 2-3	Tinaja Red							14		14
RB2	29	AV	1	Tepeu 2-3	Cayo Unslipped							2		2
RB2	29	AV	1	Tepeu 2-3	Meditation Black							1		1
RB2	29	AV	1	Tepeu 2-3	Subin Red		1				1	3		4
RB2	29	AV	1	Tepeu 2-3	Tinaja Red							28		28
RB2	29	AW	1	Tepeu 2-3	Meditation Black							1		1
RB2	29	AW	1	Tepeu 2-3	Tinaja Red							2		2
RB2	29	AW	1	Tepeu 2-3	Unidentified							2		2
RB2	29	AW	2	Tepeu 2-3	Achote Black						2	100		102
RB2	29	AW	2	Tepeu 2-3	Belize Red		1					1		1
RB2	29	AW	2	Tepeu 2-3	Cayo Unslipped			2			2			2
RB2	29	AW	2	Tepeu 2-3	Gunshot							20		20
RB2	29	AW	2	Tepeu 2-3	Tinaja Red			1			1	65		66
RB2	29	AW	2	Tepeu 2-3	Unidentified							17		17
RB2	29	AX	1	Tepeu 2-3	Achote Black							35		35
RB2	29	AX	1	Tepeu 2-3	Cayo Unslipped			1			4			4
RB2	29	AX	1	Tepeu 2-3	Red Slipped							6		6

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	AX	1	Tepeu 2-3	Tinaja Red							20		20
RB2	29	AX	1	Tepeu 2-3	Unidentified					1 handle		8		8
RB2	29	AX	1	Tepeu 2-3	Unidentified							1		1
RB2	29	AX	1	Tepeu 2-3	Unslipped					handle		1		1
RB2	29	AZ	3	Tepeu 2-3	Red Slipped?									
RB2	29	B	1	Tepeu 2-3	Achote Black?							4		4
RB2	29	B	1	Tepeu 2-3	Tinaja Red?							4		4
RB2	29	B	1	Tepeu 2-3	Unidentified							5		5
RB2	29	B	2	Tepeu 2-3	Achote Black							19		19
RB2	29	B	2	Tepeu 2-3	Subin Red		2				2			2
RB2	29	B	2	Tepeu 2-3	Unidentified							1		1
RB2	29	BA	1	Tepeu 2-3	Achote Black							1		1
RB2	29	BA	1	Tepeu 2-3	Unidentified							1		1
RB2	29	BA	2	Tepeu 2-3	Cayo Unslipped							2		2
RB2	29	BA	2	Tepeu 2-3	Tinaja Red							4		4
RB2	29	BA	2	Tepeu 2-3	Unidentified					1 handle		1		1
RB2	29	BB	1	Tepeu 2-3	Achote Black							1		1
RB2	29	BB	1	Tepeu 2-3	Cayo Unslipped							1		1
RB2	29	BB	1	Tepeu 2-3	Tinaja Red							2		2
RB2	29	BB	2	Tepeu 2-3	Achote Black		1				1			1
RB2	29	BB	2	Tepeu 2-3	Cayo Unslipped							1		1
RB2	29	BB	2	Tepeu 2-3	Gunshot							20		20
RB2	29	BB	2	Tepeu 2-3	Red Slipped							7		7
RB2	29	BB	2	Tepeu 2-3	Unidentified							4		4
RB2	29	BC	1	Tepeu 2-3	Achote Black							2		2
RB2	29	BC	1	Tepeu 2-3	Tinaja Red							1		1
RB2	29	BC	1	Tepeu 2-3	Unidentified							1		1
RB2	29	BC	2	Tepeu 2-3	Achote Black		2					10	1	11
RB2	29	BC	2	Tepeu 2-3	Cayo Unslipped							2		2
RB2	29	BC	2	Tepeu 2-3	Tinaja Red							4		4
RB2	29	BD	1	Tepeu 2-3	Achote Black							1		1
RB2	29	BD	2	Tepeu 2-3	Achote Black							3		3
RB2	29	BD	2	Tepeu 2-3	Cayo Unslipped			1			1			1

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	BD	2	Tepeu 2-3	Unidentified							4		4
RB2	29	BD	2	Tepeu 2-3	Unidentified							3		3
RB2	29	BE	2	Tepeu 2-3	Achote Black							3		3
RB2	29	BE	2	Tepeu 2-3	Striated							1		1
RB2	29	BE	2	Tepeu 2-3	Tinaja Red							4		4
RB2	29	BE	2	Tepeu 2-3	Unidentified							4		4
RB2	29	BF	1	Tepeu 2-3	Tinaja Red							1		1
RB2	29	BF	1	Tepeu 2-3	Unidentified							1		1
RB2	29	BF	2	Tepeu 2-3	Achote Black		1				1	2		3
RB2	29	BF	2	Tepeu 2-3	Tinaja Red							15		15
RB2	29	BF	2	Tepeu 2-3	Unidentified							3		3
RB2	29	BF	2	Tepeu 2-3	Unslipped							3		3
RB2	29	BG	2	Tepeu 2-3	Achote Black							1		1
RB2	29	BG	2	Tepeu 2-3	Gunshot							6		6
RB2	29	BG	2	Tepeu 2-3	Unidentified							2		2
RB2	29	BH	1	Tepeu 2-3	Subin Red		1				1	2		3
RB2	29	BH	1	Tepeu 2-3	Unidentified							4		4
RB2	29	BH	2	Tepeu 2-3?	Unidentified							2		2
RB2	29	BI	2	Tepeu 2-3	Meditation Black							2		2
RB2	29	BI	2	Tepeu 2-3	Tinaja Red							1		1
RB2	29	BI	2	Tepeu 2-3	Unidentified							3		3
RB2	29	BJ	2	Tepeu 2-3	Achote Black							3		3
RB2	29	BJ	2	Tepeu 2-3	Cayo Unslipped			1			1	1		2
RB2	29	BK	2	Tepeu 2-3	Achote Black							14		14
RB2	29	BK	2	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	29	BK	2	Tepeu 2-3	Subin Red							2		2
RB2	29	BK	2	Tepeu 2-3	Tinaja Red							11		11
RB2	29	BL	1	Tepeu 2-3?	Unidentified							1		1
RB2	29	BL	2	Tepeu 2-3	Achote Black?							6		6
RB2	29	BL	2	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	29	BL	2	Tepeu 2-3	Gunshot							15		15
RB2	29	BL	2	Tepeu 2-3	Striated							2		2
RB2	29	BL	2	Tepeu 2-3	Tinaja Red?							10		10

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	BM	1	Tepeu 2-3	Tinaja Red							2		2
RB2	29	BM	2	Tepeu 2-3	Achote Black							3		3
RB2	29	BM	2	Tepeu 2-3	Tinaja Red?							3		3
RB2	29	BM	2	Tepeu 2-3	Unidentified							4		4
RB2	29	BN	1	Tepeu 2-3	Cayo Unslipped							2		2
RB2	29	BN	1	Tepeu 2-3	Striated							14		14
RB2	29	BN	1	Tepeu 2-3	Subin Red		1				1	1		2
RB2	29	BN	1	Tepeu 2-3	Tinaja Red?							6		6
RB2	29	BN	1	Tepeu 2-3	Unidentified							3		3
RB2	29	BO	1	?	Unidentified							10		10
RB2	29	BP	2	Tepeu 2-3	Achote Black							3		3
RB2	29	BP	2	Tepeu 2-3	Cayo Unslipped							1		1
RB2	29	BP	2	Tepeu 2-3	Striated							1		1
RB2	29	BP	2	Tepeu 2-3	Tinaja Red							7		7
RB2	29	BP	3	Tepeu 2-3	Achote Black		2				2	8		10
RB2	29	BP	3	Tepeu 2-3	Cayo Unslipped			2			2			2
RB2	29	BP	3	Tepeu 2-3	Chilar Fluted		1				1			1
RB2	29	BP	3	Tepeu 2-3	Striated							3		3
RB2	29	BP	3	Tepeu 2-3	Subin Red		1				1	2		3
RB2	29	BP	3	Tepeu 2-3	Tinaja Red			3				7		7
RB2	29	BP	3	Tepeu 2-3	Unidentified						2	1		3
RB2	29	BQ	1	?	Unidentified							1		1
RB2	29	BR	1	Tepeu 2-3	Achote Black?							4		4
RB2	29	BR	1	Tepeu 2-3	Striated							2		2
RB2	29	BR	1	Tepeu 2-3	Unidentified							7		7
RB2	29	BS	1	Tepeu 2-3	Achote Black		1				1	1		2
RB2	29	BS	1	Tepeu 2-3	Striated							1		1
RB2	29	BS	1	Tepeu 2-3	Tinaja Red							3		3
RB2	29	BS	2	Tepeu 2-3	Achote Black							30		30
RB2	29	BS	2	Tepeu 2-3	Subin Red							2		2
RB2	29	BS	2	Tepeu 2-3	Tinaja Red			2			2	75		77
RB2	29	BS	2	Tepeu 2-3	Unidentified							7		7
RB2	29	BS	3	Tepeu 2-3	Achote Black							4		4

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	BS	3	Tepeu 2-3	Cayo Unslipped							1		1
RB2	29	BS	3	Tepeu 2-3	Subin Red		1				1	1		2
RB2	29	BS	3	Tepeu 2-3	Tinaja Red?							6		6
RB2	29	BS	3	Tepeu 2-3	Unidentified							2		2
RB2	29	BT	2	Tepeu 2-3	Achote Black							2		2
RB2	29	BT	2	Tepeu 2-3	Cayo Unslipped							1		1
RB2	29	BT	2	Tepeu 2-3	Subin Red?		1					1		1
RB2	29	BT	2	Tepeu 2-3	Unidentified							7		7
RB2	29	BU	1	Tepeu 2-3	Achote Black		4				4	55		59
RB2	29	BU	1	Tepeu 2-3	Cayo Unslipped			1			1	5		6
RB2	29	BU	1	Tepeu 2-3	Gunshot							20		20
RB2	29	BU	1	Tepeu 2-3	Subin Red		1				1	6		7
RB2	29	BU	1	Tepeu 2-3	Tinaja Red			1			1	20		21
RB2	29	BU	1	Tepeu 2-3	Unidentified							4		4
RB2	29	C	1	Tepeu 2-3	Gunshot							10		10
RB2	29	C	1	Tepeu 2-3	Subin Red		2				2			2
RB2	29	C	1	Tepeu 2-3	Unidentified							1		1
RB2	29	C	2	Tepeu 2-3	Gunshot							17		17
RB2	29	C	2	Tepeu 2-3	Tinaja Red							1		1
RB2	29	C	3	Tepeu 2-3	Achote Black		3				3	25		28
RB2	29	C	3	Tepeu 2-3	Cayo Unslipped							1		1
RB2	29	C	3	Tepeu 2-3	Gunshot							50		50
RB2	29	C	3	Tepeu 2-3	Striated							2		2
RB2	29	C	3	Tepeu 2-3	Subin Red		2				2			2
RB2	29	C	3	Tepeu 2-3	Tinaja Red			1			1	18		19
RB2	29	C	4	Tepeu 2-3	Cubeta Incised							1		1
RB2	29	C	4	Tepeu 2-3	Gunshot							35		35
RB2	29	C	4	Tepeu 2-3	Striated							1		1
RB2	29	C	4	Tepeu 2-3	Subin Red		1				1			1
RB2	29	C	4	Tepeu 2-3	Unidentified							4		4
RB2	29	C	4	Tepeu 2-3	Zibal Unslipped			1			1			1
RB2	29	C	6	Tepeu 2-3	Achote Black							2		2
RB2	29	C	6	Tepeu 2-3	Tinaja Red							1		1

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	C	6	Tepeu 2-3	Unidentified							2		2
RB2	29	C	7	Tepeu 2-3	Achote Black?							1		1
RB2	29	C	7	Tepeu 2-3	Gunshot							3		3
RB2	29	C	7	Tepeu 2-3	Unidentified							2		2
RB2	29	C	9	Tepeu 2-3; Chicanel trace	Black Slipped								1	1
RB2	29	C	9	Tepeu 2-3; Chicanel trace	Gunshot							5		5
RB2	29	C	9	Tepeu 2-3; Chicanel trace	Red Slipped	1					1	5		6
RB2	29	C	9	Tepeu 2-3; Chicanel trace	Sierra Red							3		3
RB2	29	C	9	Tepeu 2-3; Chicanel trace	Tinaja Red							4		4
RB2	29	C	9	Tepeu 2-3; Chicanel trace	Unidentified							3		3
RB2	29	C	10	Chicanel	Black Slipped							1		1
RB2	29	C	10	Chicanel	Gunshot							15		15
RB2	29	C	10	Chicanel	Sierra Red?							1		1
RB2	29	C	10	Chicanel	Striated							1		1
RB2	29	C	10	Chicanel	Unidentified							1		1
RB2	29	C	11	?	Black Slipped							1		1
RB2	29	C	11	?	Gunshot							2		2
RB2	29	C	12	Tzakol and Chicanel	Black Slipped							3		3
RB2	29	C	12	Tzakol and Chicanel	Sierra Red							2		2
RB2	29	C	12	Tzakol and Chicanel	Unidentified								2	2
RB2	29	C	12	Tzakol and Chicanel	Unidentified							1		1
RB2	29	C	13	Chicanel	Polvero Black							3		3
RB2	29	C	13	Chicanel	Sierra Red		1				1	10		11
RB2	29	C	13	Chicanel	Slipped							3		3
RB2	29	C	13	Chicanel	Unidentified		1				1			1
RB2	29	D	1	Tepeu 2-3; Tzakol trace	Unidentified							1		1
RB2	29	D	1	Tepeu 2-3; Tzakol trace	Tinaja Red ?							5		5
RB2	29	E	1	Tepeu 2-3; Chicanel trace	Achote Black		4				4	45		49
RB2	29	E	1	Tepeu 2-3; Chicanel trace	Achote Black?		1						1	1
RB2	29	E	1	Tepeu 2-3; Chicanel trace	Gunshot							40		40
RB2	29	E	1	Tepeu 2-3; Chicanel trace	Meditation Black							2		2
RB2	29	E	1	Tepeu 2-3; Chicanel trace	Sierra Red							3		3
RB2	29	E	1	Tepeu 2-3; Chicanel trace	Thin Late Classic Buff							3		3

	Provenience					Forms					Counts			
RB#	**Op**	**Subop**	**Lot**	**Time Period**	**Type:Variety**	**Plate**	**Bowl**	**Jar**	**Cylinder**	**Other**	**Rim**	**Body**	**Base**	**Total**
RB2	29	E	1	Tepeu 2-3; Chicanel trace	Tinaja Red							30		30
RB2	29	E	1	Tepeu 2-3; Chicanel trace	Unidentified								1	1
RB2	29	E	1	Tepeu 2-3; Chicanel trace	Unidentified							2		2
RB2	29	E	2	Tepeu 2-3	Achote Black		1				1	18		19
RB2	29	E	2	Tepeu 2-3	Gunshot							20		20
RB2	29	E	2	Tepeu 2-3	Subin Red		1				1			1
RB2	29	E	2	Tepeu 2-3	Tinaja Red			1			1	12		13
RB2	29	E	2	Tepeu 2-3	Unidentified							6		6
RB2	29	E	3	Tepeu 2-3	Achote Black		2				2	10		12
RB2	29	E	3	Tepeu 2-3	Gunshot							10		10
RB2	29	E	3	Tepeu 2-3	Tinaja Red							7		7
RB2	29	E	3	Tepeu 2-3	Zibal Unslipped			1			1			1
RB2	29	E	4	Tepeu 2-3	Achote Black		2				2	15		17
RB2	29	E	4	Tepeu 2-3	Gunshot							20		20
RB2	29	E	4	Tepeu 2-3	Rubber Camp Brown							1		1
RB2	29	E	4	Tepeu 2-3	Tinaja Red							3		3
RB2	29	E	4	Tepeu 2-3	Tinaja Red							10		10
RB2	29	E	4	Tepeu 2-3	Unidentified							2		2
RB2	29	E	5	Tepeu 2-3?	Net weight					weight		1		1
RB2	29	F	1	Tepeu 2-3	Achote Black							10		10
RB2	29	F	1	Tepeu 2-3	Cayo Unslipped			1				4		4
RB2	29	F	1	Tepeu 2-3	Gunshot							15		15
RB2	29	F	1	Tepeu 2-3	Subin Red		1				1			1
RB2	29	F	1	Tepeu 2-3	Tinaja Red			1			1	12		13
RB2	29	F	2	Tepeu 2-3	Achote Black		2				2	25	1	28
RB2	29	F	2	Tepeu 2-3	Cayo Unslipped							3		3
RB2	29	F	2	Tepeu 2-3	Garbutt Creek Red		1				1			1
RB2	29	F	2	Tepeu 2-3	Gunshot							5		5
RB2	29	F	2	Tepeu 2-3	Subin Red							3		3
RB2	29	F	2	Tepeu 2-3	Tinaja Red							18		18
RB2	29	F	2	Tepeu 2-3	Unidentified							10		10
RB2	29	F	3	Tepeu 2-3	Achote Black		3				3	15		18
RB2	29	F	3	Tepeu 2-3	Cayo Unslipped			1			1			1

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	F	3	Tepeu 2-3	Cayo Unslipped							2		2
RB2	29	F	3	Tepeu 2-3	Cayo Unslipped?							1		1
RB2	29	F	3	Tepeu 2-3	Gunshot							10		10
RB2	29	F	3	Tepeu 2-3	Thin Late Classic Buff							8		8
RB2	29	F	3	Tepeu 2-3	Tinaja Red							20		20
RB2	29	F	7	Tepeu 2-3	Black Slipped						1			1
RB2	29	F	7	Tepeu 2-3	Meditation Black		2				1	1		2
RB2	29	F	7	Tepeu 2-3	Striated							2		2
RB2	29	F	7	Tepeu 2-3	Striated							1		1
RB2	29	F	7	Tepeu 2-3	Unidentified							2		2
RB2	29	F	7	Tepeu 2-3	Unidentified							1		1
RB2	29	F	7	Tepeu 2-3	Unidentified							1		1
RB2	29	F	7	Tepeu 2-3	Unslipped							1		1
RB2	29	F	8	Tepeu 2-3; Chicanel trace	Achote Black							7		7
RB2	29	F	8	Tepeu 2-3; Chicanel trace	Sierra Red							1		1
RB2	29	F	8	Tepeu 2-3; Chicanel trace	Striated							3		3
RB2	29	F	8	Tepeu 2-3; Chicanel trace	Tinaja Red							14		14
RB2	29	F	8	Tepeu 2-3; Chicanel trace	Unidentified			1			1			1
RB2	29	F	8	Tepeu 2-3; Chicanel trace	Unidentified							2		2
RB2	29	F	9	Chicanel	Sierra Red							1		1
RB2	29	F	9	Chicanel	Unidentified							1		1
RB2	29	F	10	Chicanel?	Red Slipped?							1		1
RB2	29	F	10	Chicanel?	Unidentified							1		1
RB2	29	G	1	Tepeu 2-3	Achote Black		1				1	3		4
RB2	29	G	1	Tepeu 2-3	Cayo Unslipped							1		1
RB2	29	G	1	Tepeu 2-3	Meditation Black							1		1
RB2	29	G	1	Tepeu 2-3	Tinaja Red							6		6
RB2	29	H	1	Tepeu 2-3	Achote Black		4				1	3		4
RB2	29	H	1	Tepeu 2-3	Gunshot							10		10
RB2	29	H	1	Tepeu 2-3	Tinaja Red?							10		10
RB2	29	H	1	Tepeu 2-3	Unidentified							2		2
RB2	29	I	1	Tepeu 2-3?	Gunshot							25		25
RB2	29	J	1	Tepeu 2-3	Tinaja Red						1			1

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	J	1	Tepeu 2-3	Unidentified							2		2
RB2	29	J	2	Tepeu 2-3	Achote Black							2		2
RB2	29	J	2	Tepeu 2-3	Tinaja Red?							2		2
RB2	29	J	2	Tepeu 2-3	Unidentified							1		1
RB2	29	J	3	Tepeu 2-3	Achote Black							15		15
RB2	29	J	3	Tepeu 2-3	Achote Black?						2			2
RB2	29	J	3	Tepeu 2-3	Tinaja Red					jar neck		38		38
RB2	29	J	3	Tepeu 2-3	Unidentified					1	1	7	1	9
RB2	29	K	1	Tepeu 2-3?	Achote Black?							1		1
RB2	29	K	1	Tepeu 2-3?	Unidentified							2		2
RB2	29	K	2	Tepeu 2-3	Achote Black							2		2
RB2	29	K	2	Tepeu 2-3	Black Slipped							1		1
RB2	29	K	2	Tepeu 2-3	Tinaja Red							6		6
RB2	29	K	2	Tepeu 2-3	Unidentified							3		3
RB2	29	L	1	Tepeu 2-3	Achote Black		3				3			3
RB2	29	L	1	Tepeu 2-3	Gunshot							5		5
RB2	29	L	1	Tepeu 2-3	Tinaja Red							2		2
RB2	29	L	1	Tepeu 2-3	Unidentified							6		6
RB2	29	L	2	Tepeu 2-3	Achote Black		1				1	1		2
RB2	29	L	2	Tepeu 2-3	Cayo Unslipped							1		1
RB2	29	L	2	Tepeu 2-3	Gunshot							5		5
RB2	29	L	2	Tepeu 2-3	Tinaja Red							3		3
RB2	29	M	1	Tepeu 2-3	Tinaja Red							6		6
RB2	29	M	1	Tepeu 2-3	Unidentified							3		3
RB2	29	M	2	Tepeu 2-3	Achote Black							10		10
RB2	29	M	2	Tepeu 2-3	Gunshot							15		15
RB2	29	M	2	Tepeu 2-3	Tinaja Red							14		14
RB2	29	N	1	Tepeu 2-3	Achote Black		2				2	4		6
RB2	29	N	1	Tepeu 2-3	Subin Red		1				1			1
RB2	29	N	1	Tepeu 2-3	Tinaja Red							2		2
RB2	29	N	1	Tepeu 2-3	Unidentified							3		3
RB2	29	N	2	Tepeu 2-3	Meditation Black							2		2
RB2	29	N	2	Tepeu 2-3	Tinaja Red							3		3

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	N	2	Tepeu 2-3	Tinaja Red?							3		3
RB2	29	N	2	Tepeu 2-3	Unidentified							4		4
RB2	29	N	3	Tepeu 2-3	Achote Black		3				3	10		13
RB2	29	N	3	Tepeu 2-3	Gunshot							10		10
RB2	29	N	3	Tepeu 2-3	Sierra Red?						1	3		4
RB2	29	N	3	Tepeu 2-3	Tinaja Red							15		15
RB2	29	N	3	Tepeu 2-3	Unidentified	1					1	4		5
RB2	29	O	3	Tepeu 2-3	Achote Black		1				1	4		5
RB2	29	O	3	Tepeu 2-3	Unidentified							3		3
RB2	29	P	1	Tepeu 2-3	Achote Black							1		1
RB2	29	P	1	Tepeu 2-3	Unidentified							2		2
RB2	29	Q	2	Tepeu 2-3	Achote Black		4				2	12	2	16
RB2	29	Q	2	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	29	Q	2	Tepeu 2-3	Striated							2		2
RB2	29	Q	2	Tepeu 2-3	Subin Red	1					1			1
RB2	29	Q	2	Tepeu 2-3	Tinaja Red			1			1	7		8
RB2	29	Q	2	Tepeu 2-3	Unslipped							2		2
RB2	29	R	1	Tepeu 2-3	Subin Red		1				1	1		2
RB2	29	R	1	Tepeu 2-3	Unidentified							3		3
RB2	29	S	1	Tepeu 2-3	Achote Black							6		6
RB2	29	S	1	Tepeu 2-3	Meditation Black							1		1
RB2	29	S	1	Tepeu 2-3	Subin Red		1				1			1
RB2	29	S	1	Tepeu 2-3	Tinaja Red							13		13
RB2	29	S	1	Tepeu 2-3	Unidentified							3		3
RB2	29	S	2	Tepeu 2-3	Achote Black		1				1	10		11
RB2	29	S	2	Tepeu 2-3	Black Slipped							2		2
RB2	29	S	2	Tepeu 2-3	Striated							2		2
RB2	29	S	2	Tepeu 2-3	Tinaja Red			3				3		3
RB2	29	S	2	Tepeu 2-3	Unidentified							1		1
RB2	29	S	2	Tepeu 2-3	Unidentified		1				1			1
RB2	29	S	2	Tepeu 2-3	Unidentified		1					1		1
RB2	29	T	1	Tepeu 2-3	Achote Black		3				1	2		3
RB2	29	T	1	Tepeu 2-3	Meditation Black		1				1			1

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	T	1	Tepeu 2-3	Tinaja Red							1		1
RB2	29	T	2	Tepeu 2-3	Achote Black							8		8
RB2	29	T	2	Tepeu 2-3	Cayo Unslipped							3		3
RB2	29	T	2	Tepeu 2-3	Red Slipped							6		6
RB2	29	T	2	Tepeu 2-3	Tinaja Red							6		6
RB2	29	T	2	Tepeu 2-3	Unidentified		1				1			1
RB2	29	T	3	Tepeu 2-3	Achote Black							17		17
RB2	29	T	3	Tepeu 2-3	Belize Red			2			2			2
RB2	29	T	3	Tepeu 2-3	Cayo Unslipped			1			1			1
RB2	29	T	3	Tepeu 2-3	Cayo Unslipped			2			2			2
RB2	29	T	3	Tepeu 2-3	Gunshot							10		10
RB2	29	T	3	Tepeu 2-3	Tinaja Red							29		29
RB2	29	T	3	Tepeu 2-3	Unslipped							6		6
RB2	29	T	4	Tepeu 2-3	Achote Black		1				1	13		14
RB2	29	T	4	Tepeu 2-3	Gallinero Fluted: Gallinero variety							1		1
RB2	29	T	4	Tepeu 2-3	Tinaja Red							4		4
RB2	29	T	4	Tepeu 2-3	Unslipped					handle		4		4
RB2	29	T	5	Tepeu 2-3	Achote Black							7		7
RB2	29	T	5	Tepeu 2-3	Tinaja Red?							9		9
RB2	29	T	5	Tepeu 2-3	Unidentified							6		6
RB2	29	T	5	Tepeu 2-3	Unslipped							1		1
RB2	29	U	1	Tepeu 2-3	Achote Black		2				2	36		38
RB2	29	U	1	Tepeu 2-3	Red Slipped	1					1			1
RB2	29	U	1	Tepeu 2-3	Striated							12		12
RB2	29	U	1	Tepeu 2-3	Tinaja Red							23		23
RB2	29	U	1	Tepeu 2-3	Unslipped							6		6
RB2	29	V	10	Tepeu 2-3?	Black Slipped							2		2
RB2	29	V	10	Tepeu 2-3?	Cubeta Incised?				1		1			1
RB2	29	V	10	Tepeu 2-3?	Gunshot							7		7
RB2	29	V	10	Tepeu 2-3?	Red Slipped							4		4
RB2	29	V	10	Tepeu 2-3?	Striated							3		3
RB2	29	V	10	Tepeu 2-3?	Unidentified							1		1
RB2	29	V	10	Tepeu 2-3?	Unslipped							10		10

	Provenience					Forms					Counts			
RB#	**Op**	**Subop**	**Lot**	**Time Period**	**Type:Variety**	**Plate**	**Bowl**	**Jar**	**Cylinder**	**Other**	**Rim**	**Body**	**Base**	**Total**
RB2	29	V	11	Tepeu 1-2?	Cubeta Incised							1		1
RB2	29	V	11	Tepeu 1-2?	Red Slipped							1		1
RB2	29	V	11	Tepeu 1-2?	Red Slipped	1					1			1
RB2	29	V	11	Tepeu 1-2?	Striated									
RB2	29	V	11	Tepeu 1-2?	Striated			1			1			1
RB2	29	V	11	Tepeu 1-2?	Striated							1		1
RB2	29	V	11	Tepeu 1-2?	Striated							1		1
RB2	29	V	11	Tepeu 1-2?	Striated							2		2
RB2	29	V	11	Tepeu 1-2?	Striated							1		1
RB2	29	V	11	Tepeu 1-2?	Striated							14		14
RB2	29	V	11	Tepeu 1-2?	Striated							5		5
RB2	29	V	11	Tepeu 1-2?	Striated							4		4
RB2	29	V	11	Tepeu 1-2?	Striated			1			1			1
RB2	29	V	11	Tepeu 1-2?	Striated							14		14
RB2	29	V	11	Tepeu 1-2?	Striated							14		14
RB2	29	V	11	Tepeu 1-2?	Striated							1		1
RB2	29	V	11	Tepeu 1-2?	Striated			7				7		7
RB2	29	V	11	Tepeu 1-2?	Striated							1		1
RB2	29	V	11	Tepeu 1-2?	Striated							10		10
RB2	29	V	11	Tepeu 1-2?	Striated							4		4
RB2	29	V	11	Tepeu 1-2?	Unslipped							1		1
RB2	29	V	12	Tepeu 1-2/ Chicanel	Sierra Red		1				1			1
RB2	29	V	12	Tepeu 1-2/ Chicanel	Striated							6		6
RB2	29	V	12	Tepeu 1-2/ Chicanel	Unslipped							3		3
RB2	29	V	13	Tepeu 1-2?	Black to Brown Slipped							2		2
RB2	29	V	13	Tepeu 1-2?	Striated							30		30
RB2	29	V	14	Chicanel?	Gunshot							20		20
RB2	29	V	14	Chicanel?	Sierra Red							6		6
RB2	29	V	14	Chicanel?	Slipped?							3		3
RB2	29	V	15	Chicanel?	Sierra Red		1				1	6		7
RB2	29	V	15	Chicanel?	Sierra Red?							4		4
RB2	29	V	15	Chicanel?	Unidentified					handle		2		2
RB2	29	V	15	Chicanel?	Unidentified							3		3

	Provenience					Forms					Counts			
RB#	Op	Subop	Lot	Time Period	Type:Variety	Plate	Bowl	Jar	Cylinder	Other	Rim	Body	Base	Total
RB2	29	X	1	Tepeu 2-3	Achote Black							1		1
RB2	29	X	1	Tepeu 2-3	Red Slipped							2		2
RB2	29	X	1	Tepeu 2-3	Striated							1		1
RB2	29	X	1	Tepeu 2-3	Tinaja Red							4		4
RB2	29	X	2	Tepeu 2-3	Achote Black							7		7
RB2	29	X	2	Tepeu 2-3	Gunshot							5		5
RB2	29	X	2	Tepeu 2-3	Unidentified							3		3
RB2	29	X	3	Tepeu 2-3	Tinaja Red			1			1	15		16
RB2	29	X	3	Tepeu 2-3	Unidentified							4		4
RB2	29	X	4	?	Black Slipped							4		4
RB2	29	X	4	?	Unidentified							6		6
RB2	29	X	4	?	Unidentified							7		7
RB2	29	X	4	?	Unidentified							2		2
RB2	29	X	5	?	Gunshot							6		6
RB2	29	X	5	?	Slipped							1		1
RB2	29	X	5	?	Unidentified							3		3
RB2	29	X	6	Tepeu 2-3?	Achote Black?		1				1	17		18
RB2	29	X	6	Tepeu 2-3?	Subin Red						1	1		2
RB2	29	X	6	Tepeu 2-3?	Unslipped			2			1	1		2
RB2	29	X	6	Tepeu 2-3?	Red Slipped?							12		12
RB2	29	X	6	Tepeu 2-3?	Unidentified		1					6	1	7
RB2	29	Y	1	Tepeu 2-3	Tinaja Red							7		7
RB2	29	Y	1	Tepeu 2-3	Unidentified							3		3
RB2	29	Y	2	Tepeu 2-3	Gunshot							4		4
RB2	29	Y	2	Tepeu 2-3	Red Slipped							1		1
RB2	29	Z	1	Tepeu 2-3	Achote Black?							76		76
RB2	29	Z	1	Tepeu 2-3	Gunshot							30		30
RB2	29	Z	1	Tepeu 2-3	Meditation Black		6					6		6
RB2	29	Z	1	Tepeu 2-3	Red Slipped	1					1	4		5
RB2	29	Z	1	Tepeu 2-3	Tinaja Red?							45		45
RB2	29	Z	1	Tepeu 2-3	Unslipped			1			1			1

GROUNDSTONE DATA									
Op	**Subop**	**Lot**	**Alt.**	**Item**	**Material/Mineral**	**L (mm)**	**W (mm)**	**Th (mm)**	**Wt (g)**
28	I	5	1	Mano Fragment	Limestone	57.36	45.83	37.98	158.22
28	I	5	2	Mano Fragment	Quartzite?	49.13	37.20	45.29	114.24
28	J	2	1	Mano Fragment	"Sugary" Quartzite	29.20	28.15	32.58	21.69
28	L	2	1	Bark Beater Fragment (oval)	Limestone	43.18	31.52	43.46	61.96
28	M	2	1	Mano Fragment	Limestone	49.08	34.14	25.29	43.94
28	N	2	329	Plaster Burnisher Frag *	Cryptocrystalline Silicate (Chert)	42.51	55.64	31.22	67.57
28	R	1	1	Discoidal Hammerstone	Quarzite	71.75	67.30	53.48	424.40
29	E	2	1	?Mano	Limestone	102.18	53.78	34.52	430.10
29	E	5	1	Mano Fragment	Limestone	43.23	58.39	49.74	195.00
29	H	1	1	?Mano Fragment	Cryptocrystalline Silicate (Chert)	46.54	34.99	37.28	82.89
29	Q	1	1	Mano Fragment	Limestone	68.31	70.15	41.48	284.60
29	S	1	1	Metate Fragment	?Grey Granite?	98.97	53.30	29.14	127.14
29	T	3	1	Metate Fragment	Quarzite	140.90	127.30	77.34	1772.00
29	AA	1	1	Bark Beater Fragment (rect.)	Quartzite?	41.12	23.60	39.20	52.90
29	AW	2	1	Metate Fragment	Pink Granite	61.90	56.23	49.31	217.70
29	AW	2	2	Mano Fragment	Quarzite	n/a	n/a	n/a	84.23
29	AW	2	3	Mano Fragment	Quarzite	n/a	n/a	n/a	34.93
29	BU	2	1	Mano Fragment	"Sugary" Quartzite	40.57	48.58	33.09	92.88
29	BU	Surf	1	Mano Fragment	Limestone	n/a	n/a	n/a	n/a
				*=recycled or reused					

Small Finds										
Op	**Subop**	**Lot**	**Artifact Type**	**Material/Mineral/Species**	**L (mm)**	**W (mm)**	**Th (mm)**	**Diam**	**PD**	**Wt (g)**
26	AI	3	Inlay/ Cabochon	Peach Aventurine?	13.74	11.56	7.58	n/a	n/a	1.08
26	K	3	Inlay/ Cabochon	Jadeite?, Greenstone	10.13	8.08	3.78	n/a	n/a	0.42
28	D	6	Ornament, Anthropomorphic	Gastropoda:Strombidae, *Strombus* ?	39.94	13.05	2.76	n/a	n/a	1.28
28	N	2	Carved Disc/Adorno	Gastropoda:Strombidae, *Strombus* ?	11.01	10.78	1.45	11.01	n/a	0.27
28	O	5	Pendant	Pelecypoda:Spondylidae,*Spondylus princeps*	48.82	58.76	9.00	n/a	n/a	16.29
28	O	11	Reworked Barrel Bead, Pendant	Unknown Greenstone	15.59	8.45	4.31	n/a	n/a	0.78
28	O	11	Disk Bead	Aventurine Quartz w/ Fuchsite	n/a	n/a	4.54	9.92	3.17	0.63
28	O	11	Tubular Bead	Greenstone w/ Fuchsite	5.42	n/a	n/a	5.62	1.86	0.28
28	O	11	Tubular Bead	Greenstone w/ Fuchsite	12.03	n/a	n/a	5.74	2.46	0.51
28	O	13	Disk Bead	Gastropoda:Strombidae, *Strombus* ?	n/a	n/a	2.94	7.03	0.68	0.15
28	O	13	Disk Bead	Gastropoda:Strombidae, *Strombus* ?	n/a	n/a	2.50	5.60	0.86	0.13
28	O	13	Disk Bead	Gastropoda:Strombidae, *Strombus* ?	n/a	n/a	2.19	5.42	1.56	0.07
28	O	13	Tubular Bead	Greenstone w/ Fuchsite	14.72	n/a	n/a	8.93	3.61	1.71
28	O	13	Bead Blank, Failure	Gastropoda:Strombidae, *Strombus* ?	10.75	10.37	3.61	n/a	1.17	0.54
28	O	13	Tinkler	Gastropoda:Olividae,*Oliva reticularis*	28.68	17.04	14.75	n/a	n/a	4.66
28	O	13	Tinkler	Gastropoda:Olividae,*Oliva reticularis*	26.74	15.46	13.41	n/a	n/a	4.21
28	O	13	Tinkler	Gastropoda:Olividae,*Oliva reticularis*	18.75	12.98	11.05	n/a	n/a	2.03
28	O	13	Tinkler	Gastropoda:Olividae,*Oliva reticularis*	19.29	11.94	9.80	n/a	n/a	1.84
28	O	13	Tinkler	Gastropoda:Olividae,*Oliva reticularis*	16.93	11.76	9.63	n/a	n/a	1.44
28	O	13	Tinkler	Gastropoda:Olividae,*Oliva reticularis*	16.83	10.58	9.26	n/a	n/a	1.26
28	O	13	Tinkler	Gastropoda:Olividae,*Oliva reticularis*	16.21	9.98	8.62	n/a	n/a	0.94
28	O	14	Perforated Gastropod	Gastropoda:Marginellidae, *Prunum labiatum*	24.74	16.75	12.93	n/a	n/a	2.98
28	O	14	Pendant	Marine Shell, Pelecypod, unidentified	21.87	21.44	7.34	n/a	n/a	3.19
28	V	1	Disk Bead	Gastropoda:Strombidae, *Strombus* ?	n/a	n/a	3.10	8.52	1.80	0.27
28	W	4	Earflare	Jadeite?	23.75	19.54	8.75	n/a	n/a	2.98
28	X	6	Shell Detritus	Marine Shell	29.95	8.05	2.22	n/a	n/a	0.69
29	AB	1	Disk Bead	Gastropoda:Strombidae, *Strombus* ?	n/a	n/a	1.90	8.41	1.46	0.21
29	AB	1	Disk Bead	Gastropoda:Strombidae, *Strombus* ?	n/a	n/a	2.05	9.35	1.13	0.25
29	AB	1	Mineral Fragment	Ochre/Hematite/Fe2O3	21.91	18.03	3.98	n/a	n/a	1.38
29	AJ	4	Irreg. Shell Bead	Marine Shell	12.44	7.69	3.90	n/a	1.57	0.39
29	AJ	4	Irreg. Shell Bead	Marine Shell	13.08	11.98	1.01	n/a	2.03	0.24
29	AJ	4	Irreg. Shell Bead	Marine Shell	11.10	9.84	1.14	n/a	1.92	0.20
29	AJ	4	Irreg. Shell Bead	Marine Shell	13.74	9.10	0.92	n/a	2.07	0.18
29	AJ	4	Disk Bead	Greenstone w/ Fuchsite	n/a	n/a	6.57	9.76	1.81	0.94
29	AJ	4	Mineral Fragment	Ochre/Hematite/Fe2O3	58.85	56.11	32.78	n/a	n/a	127.72
29	AK	2	Mineral Fragment	Grey Granite	n/a	n/a	n/a	n/a	n/a	0.50

Small Finds										
Op	**Subop**	**Lot**	**Artifact Type**	**Material/Mineral/Species**	**L (mm)**	**W (mm)**	**Th (mm)**	**Diam**	**PD**	**Wt (g)**
29	BB	2	Bead Blank, Failure	Marine Shell	22.32	19.56	2.98	n/a	2.23	1.04
29	BP	1	Abrader?	Anthozoa: (Marine Coral), species unknown	40.43	38.68	16.60	n/a	n/a	16.32
29	U	1	Irreg. Shell Bead	Marine Shell	11.28	10.14	1.76	n/a	1.85	0.33

Dancer Group Mortuary Data by Burial Episode										
Burial	**Artifact Class**	**Artifact Type**	**Time Period**	**Context**	**Rim**	**Body**	**Base**	**Total #**	**Length (mm)**	**Wt (g)**
Episode 1	Ceramics	Sherds	Mixed, Chicanel, Tepeu 2-3	Burial Matrix	13	196	1	210	n/a	n/a
	Vessel 1	Kaway Impressed, bowl	Tepeu 2-3	Grave Good	n/a	n/a	n/a	1	n/a	n/a
	Vessel 2	Sierra Red?, bowl	Chicanel	Grave Good	n/a	n/a	n/a	1	n/a	n/a
	Debitage	All Types		Burial Matrix	n/a	n/a	n/a	168	n/a	675.40
	Informal Tools	Hammerstone		Burial Matrix	n/a	n/a	n/a	1	n/a	31.25
	Informal Tools	Flake Core, bifacial		Burial Matrix	n/a	n/a	n/a	1	n/a	27.46
	Informal Tools	Discoid Uniface		Grave Good	n/a	n/a	n/a	1	n/a	747.50
	Marine Shell	Anthropomorphic Shell Ornament		Grave Good	n/a	n/a	n/a	1	n/a	1.28
	Freshwater Shell	*Pachychilus*		Burial Matrix	n/a	n/a	n/a	136	n/a	140.60
	Freshwater Shell	*Pomacea*		Burial Matrix	n/a	n/a	n/a	2	n/a	0.80
	Freshwater Shell	*Nepronaias*		Burial Matrix	n/a	n/a	n/a	2	n/a	2.60
Episode 2	Ceramics	Sherds	Chicanel	Burial Matrix	0	200	0	200	n/a	n/a
	Vessel 5	Laguna Verde Incised?	Chicanel	Grave Good	n/a	n/a	n/a	1	n/a	n/a
	Vessel 6	Sierra Red	Chicanel	Grave Good	n/a	n/a	n/a	1	n/a	n/a
	Debitage	All Types		Burial Matrix	n/a	n/a	n/a	413	n/a	1019.70
	Informal Tools	Bifacial Flake Core, multi-dir		Burial Matrix	n/a	n/a	n/a	1	n/a	18.30
	Informal Tools	Chert Anvil		Grave Good	n/a	n/a	n/a	1	n/a	2275.10
	Informal Tools	Flake Core, multi-dir		Burial Matrix	n/a	n/a	n/a	4	n/a	515.90
	Informal Tools	Scraper		Burial Matrix	n/a	n/a	n/a	1	n/a	15.73
	Formal Tools	Misc Reworked Biface		Burial Matrix	n/a	n/a	n/a	1	n/a	22.25
	Greenstone Bead	Reworked Barrel Bead/Pendant		Grave Good	n/a	n/a	n/a	1	n/a	0.78
	Greenstone Bead	Disk Bead		Grave Good	n/a	n/a	n/a	1	n/a	0.63
	Greenstone Bead	Tubular Bead		Grave Good	n/a	n/a	n/a	1	n/a	0.28
	Greenstone Bead	Tubular Bead		Grave Good	n/a	n/a	n/a	1	n/a	0.51
	Freshwater Shell	*Pachychilus*		Burial Matrix	n/a	n/a	n/a	104	n/a	594.20
	Freshwater Shell	*Nephronaias*, clustered together near burial		Grave Good	n/a	n/a	n/a	42	n/a	102.70
Episode 3	Ceramics	Sherds	Chicanel	Burial Matrix	3	379	0	382	n/a	n/a
	Vessel 3	Sierra Red?, bowl	Chicanel	Grave Good	n/a	n/a	n/a	1	n/a	n/a
	Vessel 4	?, bowl	Chicanel	Grave Good	n/a	n/a	n/a	1	n/a	n/a
	Vessel 7	Sierra Red	Chicanel	Grave Good	n/a	n/a	n/a	1	n/a	n/a
	Vessel 8	Sierra Red?	Chicanel?	Grave Good	n/a	n/a	n/a	1	n/a	n/a
	Debitage	All Types		Burial Matrix	n/a	n/a	n/a	262	n/a	517.40
	Informal Tools	Flake Core, multi-dir		Burial Matrix	n/a	n/a	n/a	3	n/a	804.68
	Informal Tools	Blade Core, uni-dir		Burial Matrix	n/a	n/a	n/a	1	n/a	19.74
	Greenstone Bead	Tubular Bead		Grave Good	n/a	n/a	n/a	1	n/a	1.71
	Marine Shell	Bivalve Shell Pendant, *Spondylus princeps*		Grave Good	n/a	n/a	n/a	1	n/a	16.29
	Marine Shell Bead	Disk Bead		Grave Good	n/a	n/a	n/a	1	n/a	0.15
	Marine Shell Bead	Disk Bead		Grave Good	n/a	n/a	n/a	1	n/a	0.13
	Marine Shell Bead	Disk Bead		Grave Good	n/a	n/a	n/a	1	n/a	0.07
	Marine Shell Bead	Bead Blank, Failure		Burial Matrix	n/a	n/a	n/a	1	n/a	0.54

Dancer Group Mortuary Data by Burial Episode										
Burial	**Artifact Class**	**Artifact Type**	**Time Period**	**Context**	**Rim**	**Body**	**Base**	**Total #**	**Length (mm)**	**Wt (g)**
	Marine Shell Bead	Tinkler, *Oliva reticularis*		Grave Good	n/a	n/a	n/a	1	n/a	4.66
Episode 3 continued	Marine Shell Bead	Tinkler, *Oliva reticularis*		Grave Good	n/a	n/a	n/a	1	n/a	4.21
	Marine Shell Bead	Tinkler, *Oliva reticularis*		Grave Good	n/a	n/a	n/a	1	n/a	2.03
	Marine Shell Bead	Tinkler, *Oliva reticularis*		Grave Good	n/a	n/a	n/a	1	n/a	1.84
	Marine Shell Bead	Tinkler, *Oliva reticularis*		Grave Good	n/a	n/a	n/a	1	n/a	1.44
	Marine Shell Bead	Tinkler, *Oliva reticularis*		Grave Good	n/a	n/a	n/a	1	n/a	1.26
	Marine Shell Bead	Tinkler, *Oliva reticularis*		Grave Good	n/a	n/a	n/a	1	n/a	0.94
	Freshwater Shell	*Pachychilus*		Burial Matrix	n/a	n/a	n/a	58	n/a	240.60
	Freshwater Shell	*Nephronaias*		Burial Matrix	n/a	n/a	n/a	5	n/a	11.00
Mixed Episodes 2 and 3	Ceramics	Sherds	Chicanel	Burial Matrix	0	147	0	147	n/a	n/a
	Debitage	All Types		Burial Matrix	n/a	n/a	n/a	2	n/a	13.80
	Informal Tools	Flake Core, multi-dir		Burial Matrix	n/a	n/a	n/a	1	n/a	53.55
	Informal Tools	Perforator		Burial Matrix	n/a	n/a	n/a	3	n/a	29.80
	Informal Tools	Scraper		Burial Matrix	n/a	n/a	n/a	1	n/a	15.94
	Formal Tools	Unknown Biface Type		Burial Matrix	n/a	n/a	n/a	1	n/a	9.32
	Marine Shell	Perforated Gastropod, *Prunum labiatum*	(likely Episode 3)	Grave Good	n/a	n/a	n/a	1	n/a	2.98
	Marine Shell	Bivalve Shell Pendant, Pelecypod, unidentified	(likely Episode 3)	Grave Good	n/a	n/a	n/a	1	n/a	3.19
	Freshwater Shell	*Pachychilus*		Burial Matrix	n/a	n/a	n/a	132	n/a	539.80
	Freshwater Shell	*Nephronaias*		Burial Matrix	n/a	n/a	n/a	5	n/a	11.80
	Freshwater Shell	*Pomacea*		Burial Matrix	n/a	n/a	n/a	2	n/a	6.30

APPENDIX D:

OSTEOLOGICAL REPORT:
Preliminary Analysis of the RB 2, Operations 28 and 29 Burials

Julie Mather Saul and Frank P. Saul

Operation 28 (Dancer Group)

RB 2 - 28 - O (9, 11, 12, 13)
RB 2-28-D (7, 8)

What follows is a complicated conglomeration of burials with possible human "grave goods"

This apparently represents three more or less separate "BURIAL EPISODES"

BURIAL EPISODE 1:
Minimum Number of Individuals represented (MNI) is 4 (could be 5)
In platform construction fill just above bedrock

RB 2-28-D-7
Inside Vessel 1

Sex: Unknown (?)
Age: Adult
Based on size and cortical thickness of long bone fragments and cranial fragments of adult density and thickness
Position: Probable secondary burial or offering of a few small fragments of cranial and long bone contained within Vessel 1

RB 2-28-D-8
Inside Vessel 2

Sex: Unknown (?)
Age: 20-35 years (young adult)
Based on dental attrition and adult bone fragments
Dental Decoration: None in the maxillary central incisors or maxillary canines recovered
Dental Findings:
Caries: No caries cavities on the 8 complete crowns recovered (0/8)
LEH: 2 episodes between the ages of 2-4 years
LSAMAT: ++ on both maxillary canines and central incisors (lateral incisors not recovered)
Position: Probable secondary burial (grave offering) consisting of small fragments of cranial bone, including maxillary fragments, plus 8 tooth crowns and a

few small crown fragments. Could have been a skull offering, as no postcranial bone was noted.

Note: Since Vessel 1 and Vessel 2 both contain cranial bone fragments, these may represent two separate individuals. However, it is possible that skeletal remains of one individual were divided up between the two Vessels, as both are adults.

RB 2-28-O-9 (3 Individuals)
Late Classic

Individual 1
Between Vessel 1 and Vessel 2

Sex: Unknown, (imm)

Age: 9 1/2 - 14 1/2 years
Based on dental development (Max C root 7/8 complete, Max M3 no root formed, Max M1 or M2 root 1/2 complete) and small size of long bone shaft fragments

Dental Findings:
- Caries: O in 4 teeth recovered (0/4)
- LEH: None
  Nothing else could be determined

Position: Unknown. Four teeth and a few long bone fragments of small diameter found on surface between Vessel 1 and Vessel 2. These remains are not part of either the individual found in Vessel 1 or Vessel 2.

2 flexed individuals in an E-W orientation:
Individual 2 - Main Individual?

Sex: Probable female (F?)
Based on gracility of long bones, small mandible with central prominence
small tooth crown size, small zygomatic arch root and lack of supramastoid crest.

Age: 16-25 years (late teens to early twenties)
Based on very slight dental attrition, lack of closure of apices of maxillary
2^{nd} molar roots, unerupted appearance of maxillary 3^{rd} molar crown with partial root

Dental Decoration: Unknown

Cranial Shaping: Unknown

Dental Findings:
- Caries: 3 carious teeth in 10 teeth recovered (3/10) all cervical and interproximal
- LEH; None
- Calculus: None

Periodontoclasia: slight
Antemortem Tooth Loss: Unknown
LSAMAT: Unknown
Attrition: + slight
Other: Uneven attrition suggests that this individual probable chewed more on left side than right side

Skeletal Findings: Too fragmentary and eroded
Position: Flexed, head West and hips East
Condition: Very fragmentary crushed and eroded consisting of cranial and mandible fragments, 10 teeth and long bone fragments

Individual 3 - Secondary Burial or Just Incomplete?
Sex: ??? (female or small male)
Based on very crushed long bone size
Age: Adult or late teen
Based on bone size and cortex thickness
Position: Postcranial remains of at least one other individual on/under/in main burial (Individual 2) Probably also flexed due to space and oriented in an E-W manner

BURIAL EPISODE 2:
RB 2-28-O-11
Late Preclassic
(underneath RB 2-28-O-9)

MNI = 3. Loose teeth of 3 individuals, long bone and cranial fragments of probably 1 individual. All loose teeth found within square between 95N and 145 N and 75 E and 145 E which is West of Vessels 5 and 6 (except for those found in screen)

Teeth of Individuals 2 and 3 may be "offerings" or grave goods for Primary Individual 1

Individual 1 - Primary Individual
Sex: F?? (Possible Female)
Based on small bone and tooth crown size
Age: 20-34 Young Adult
Based on slight dental attrition
Cranial Shaping: Unknown
Dental Decoration: Unknown
Dental Findings:

Caries: 2 carious teeth in 10 teeth recovered (2/10) both cervical
LEH: + (One episode between 3-5 years of age)
Calculus: Trace
Periodontoclasia: Unknown
Antemortem Tooth Loss: Unknown
Attrition: + (slight)
LSAMAT: Probably None based on teeth available (left Canine, right lateral Incisor)
Crown size: smaller than Individuals 2 and 3

Position: Probably flexed, head West, hips East. Teeth plus cranial fragments all found at West end of bone arrangement. Long bone fragments are very much crushed and embedded in clay mixed with gravel but all consistent with being from small person ie female.
One vessel on or near chest of Individual 1 and one vessel beside or over head of Individual 1.

Individual 2 (5 teeth only)- Offering? Grave Goods?

Sex: M??? (Possible Male)
Based on large tooth crown size
Age: 20-34 Young Adult
Based on slight attrition
Dental Findings:
Caries: O carious teeth of 5 teeth recovered (0/5)
LEH: + (One episode between 3-5 years)
Attrition: + (slight)

Individual 3 (22 teeth only) - Offering? Grave Goods?

Sex: M??? (Possible Male)
Based on large tooth crown size
Age: 30-40 (Young/Middle Adult)
Based on more attrition than Individuals 1 and 2
Dental Findings:
Caries: 0 in 22 teeth recovered (0/22)
LEH: None
Attrition: slight + (more than Individuals 1 and 2)
LSAMAT: None

BURIAL EPISODE 3:
RB 2-28-O-12
RB 2-28-O-13
Late Preclassic
MNI = 6
South of Episode 2. All bone is crushed and in poor condition.

There appear to be two Primary Burials, with the teeth of four more individuals as "grave goods" or "offerings."

Individual 1 - Primary Burial:
Extended **Child** (2-4 years) head West, Feet East with **Vessel 7** at or over head. Teeth of three individuals in/under/around **Vessel 7** (2-4 year old child [Individual 1], 20-34 year old young adult, 3-5 year old child)

Individual 2 - Primary Burial
At the same level as Individual 1 (the 2-4 year old Child), and overlapping the feet/lower legs of this child, is a tightly flexed burial of a **Young Adult** (20's) with head to East and hips to West. One or both arms are bent to bring lower arm(s) to head. **Vessel 8** is over the upper chest/neck/lower face of this Young Adult. **Vessel 4 (RB 2-28-O-12)** is East of **Vessel 8,** probably covering the skull of the flexed Young Adult, whose cranial vault fragments and fragments of long bone (lower arm-radius and/or ulna) are in/under/around **Vessel 4**. Teeth of the Young Adult and 2 children (5-7 year old, 3-5 year old) are in/under/around **Vessel 8.**

Details of individuals below:

RB 2-28-O-12
Vessel 4 (inside Vessel 3)
Contains fragments of cranial vault bone and smaller but adult long bone (ie radius, ulna)
Age: Adult (based on size, density etc of bone fragments)

Vessel 4 is East of Vessel 8 and probably covered the skull and lower arm bone(s) of the flexed young adult (Individual 2) whose arms were bent to bring lower arm(s) by head.

RB 2-28-O-13
(At the same level but South of RB 2-28-O-11)

Individual 1 - Primary Burial
Sex: unknown
Age: 2-4 years

Based on dental development (Permanent Dentition: Maxillary central Incisor crowns 1/2 complete, Canine crowns 1/4 complete, lateral Incisor crowns 1/3 complete, max and mand 1st molars crowns almost complete. Deciduous Dentition: Maxillary 2nd molar roots 1/2 complete))

Dentition recovered: Permanent: 13 crowns and partial crowns; Deciduous: 9

Position: Extended with Head West and Feet East. Vessel 7 is at/over head. Dentition found in/under/around Vessel 7.

Vessel 7 (at/over head of Individual 1) covers teeth of 3 individuals: those of Individual 1 (2-4 years), Individual 2 (another child 3-5 years) and Individual 3 (a young Adult):

Individual 3 (teeth only) Offering? Grave Goods?

Sex: Unknown

Age: 3-5 years (slightly older that Individual 1)

Based on dental development (Permanent dentition: Maxillary: central Incisor crown 7/8 complete, canines 1/3 complete, 1st molar crown complete; Mandibular: central and lateral incisor crowns 7/8 complete, 1st molar crown complete)

Dentition recovered: 7 permanent crowns and partial crowns

Position: "grave goods?" or "offering?" in/under/around Vessel 7

Individual 4 (teeth only) Offering? Grave Goods?

Sex: Unknown

Age: 20-34 years (Young Adult)

Based on slight attrition

Dental Decoration: Unknown

Dental Findings:

Caries: 0 carious teeth in 12 teeth recovered (0/12)

LEH: ++ (2 episodes at around 2-4 and 4-6 years of age)

Calculus: None

Attrition: + slight

LSAMAT: Unknown

Dentition Recovered: 12 loose tooth crowns with broken roots

Position: "grave goods?" or "offering?" in/under/around Vessel 7

Individual 2 - Primary Burial

Sex: Unknown

Age: 20-30 (Young Adult)

Based on very slight dental attrition and maxillary molar tooth root with apex open

Dental Decoration: Unknown

Cranial Shaping: Unknown

Dental Findings:

Caries: Unknown (none found in 3 intact tooth crowns recovered)

LEH: Unknown

LSAMAT: + on right C (other teeth missing)

Skeletal Findings: Too fragmentary and eroded and crushed

Dentition Recovered: 3 intact tooth crowns, 2 crown fragments, 5 tooth roots

Position: Tightly flexed with head to West and hips to East. At or overlapping feet/lower legs of child primary burial. Teeth found in/under/around Vessel 8 which probably rested over the upper chest/neck/lower face of Individual 2.

Vessel 8 (over upper chest/neck/face of Individual 2) covering teeth of Individual 2 (20-30 years), Individual 5 (3-5 years) and Individual 6 (5-7 years)

Individual 5 (teeth only) Offering? Grave Goods?

Sex: unknown

Age: 3-5 years

Based on development of permanent dentition (Maxillary: Central Incisor crown 3/4 complete, lateral Incisor crown 2/3 complete, Canine crown 1/3 complete, 1st molar crown complete; Mandibular: 1st Molar crown7/8 complete, lateral Incisor crown 3/4 complete)

Dentition Recovered: 5 intact tooth crowns and fragments of 3 crowns - all permanent dentition

Position: "grave goods?" or "offering?" in/under/around Vessel 8 which is located over the upper chest/neck/lower face of Primary Burial Individual 2

Individual 6 (teeth only) Offering? Grave Goods?

Sex: Unknown

Age: 5-7 years

Based on development of permanent dentition (Maxillary: central Incisors roots 1/2 complete, lateral Incisor crown complete, Canine crown 1/2 complete, 2nd Premolar crown 7/8 complete, 2nd Molar crown complete; Mandibular: 2nd Molar crown complete, 1st Molar roots 2/3 complete, Canine crown 3/4 complete, 1st and 2nd Premolars crowns 7/8 complete, lateral Incisor crown complete)

Dentition Recovered: 13 permanent tooth crowns/teeth with incomplete roots

Position: "grave goods?"or "offerings?" in/under/around Vessel 8 which is located over the upper chest/neck/lower face of Primary Burial Individual 2

Operation 29 (Grupo Agua Lluvia)

RB 2-29-C-10
Structure 4

Sex: Unknown (too fragmentary and incomplete)
Age: 35-50 years (Middle Adult)
Based on moderate -severe dental attrition on all teeth
Cranial Shaping: Unknown
Dental Decoration: ?? Possible ??
Left maxillary lateral incisor either chipped or Romero B5 plus moderate-severe attrition. All other maxillary incisors and the one maxillary canine present, however, appear to be undecorated.
Dental Findings:
Caries: 7 carious teeth in 14 teeth present (cervical, some large)
Plus one tooth root with carie on crown end of root
LEH: ++ (two episodes at around 3 and 5 years of age)
Calculus: unknown
Periodontoclasia: ++
Antemortem tooth loss; Unknown
Attrition: ++/+++ moderate to severe
LSAMAT: +++ unusual pattern
Present on right canine, right lateral incisor and right mesial incisor only -
left side does not have LSAMAT. Possibly is due to use of teeth as tools
Skeletal Findings: Too eroded, fragmentary, incomplete to tell
Body Build and Activity:
Small individual
Position: Cist burial under non-plaster floor, resting on bedrock.
Primary, tightly flexed with head South and hips North lying on left side (facing to west). Left side of head rests on the left humerus (upper arm). The elbow end of humerus points in general direction of hips/feet. Upper body/chest has slumped toward bedrock. Right humerus is east of left with the distal or elbow end also pointing toward hips/feet. Both arms are bent to bring hands to chin/head region.
Condition: Very fragmentary, eroded and incomplete, but was a primary burial to begin with based on representation of body by fragments.

RB 2-29-C-12
Structure 4

Sex: Female?? (Possible female)
Based on long bone robusticity and size only (maximum femoral A-P diameter measured in situ: R=26.5mm. L=25mm)
Age: Adult
Based on size, thickness, density of long bones
Due to being very fragmentary and incomplete, no information could be gathered other than the above plus body position.

Position: No cist or other rock arrangement is present: burial rests in a dip in the bedrock.
Primary burial, flexed, on back with head West and hips East (based on location and orientation of fragments of cranium, femora, tibiae, fibulae, ribs and unidentifiable smaller long bone fragments.

RB 2-29-V-10
Structure 3

Sex: Female
Based on pelvic morphology (wide open right and left greater sciatic notches), cranial morphology 9small rounded supramastoid crest, small/medium supraorbital ridges in region of glabella, rounded nuccal region), very gracile, small bones (right femur maximum A-P diameter=25mm) although very small, mandible has somewhat "square", bilobate chin ("square" chin usually is associated with maleness)
Age: 35-50 years (Middle Adult)
Based on degree of antemortem tooth loss in mandible with severe atrophy and resorption of mandibular bone, however there is no apparent osteoarthritic lipping of cervical vertebrae #2 articulation.
Dental Findings:
No dentition recovered, no maxilla recovered
Antemortem tooth loss: ++++

Skeletal Findings:
Treponemal Disease: No
Due to fragmentation and incompleteness, nothing else could be determined.
Position: Cist burial about 50 cm below terminal occupation surface. At least 3 of the stones forming the cist had collapsed onto the burial, crushing bone. The skull was still surrounded by 3 stones with one large flat stone over it. All bone fragmentary and eroded.

Primary burial. Tightly flexed, head to South, hips to North, facing West (on left side: left greater sciatic notch fragment is directly underneath right greater sciatic notch fragment, therefore hips are turned perpendicular to ground surface). Left upper arm (humerus) is at side with arm bent at elbow to bring hand to face. Right upper arm (humerus) is perpendicular to the left, with the elbow in front of the body, bent to bring hand together with left hand in front of face.

Report Glossary

Linear Enamel Hypoplasia (LEH)
Linear enamel hypoplasia represents a developmental arrest in the formation of enamel or underlying tissue during the process of tooth crown formation. As the tooth crown is formed, the arrest line becomes a permanent record of a nonspecific systemic disturbance, such as malnutrition, infection, and/or various other disease processes that occur during childhood. Since the timing of enamel formation has been studied in modern populations, the location of the arrest line on the crown serves as a clue to the timing of the disturbance.

These arrest lines are common among the ancient Maya, usually occurring on permanent teeth in a location that represents 3-4 years of age. This coincidentally is the traditional time of weaning among many "primitive" peoples, and indeed, at the time of European contact, Bishop De Landa wrote that the Maya weaned their children at 3-4 years of age. At the time of weaning, the young Maya child would lose the protein-rich, anti-infectious disease agent staple of mother's milk, and be put on the maize dependent, protein deficient diet. Such a drastic change, leading to protein deficiency and malnutrition, also lessens one's immunity to infectious disease. It is possible, but not by any means certain, that the rigors of weaning might have contributed to this developmental arrest..

Periodontoclasia (PDC)
Periodontoclasia is a form of soft tissue inflammation followed by bone inflammation and degeneration resulting in the destruction of tooth sockets and the subsequent loss of teeth. This may involve a number of factors, including mechanical irritation, infection, and tissue breakdown due to deficiency of vitamin C.

Antemortem Tooth Loss (AMTL)

Antemortem tooth loss, as determined by the presence of jaws or jaw fragments with root socket resorption, is common among the ancient Maya. In fragmentary and incomplete remains its presence can be more definitely determined than its absence. AMTL is the end result of periodontoclasia, a common form of alveolar soft tissue inflammation resulting in degeneration of tooth sockets with consequent tooth loss. It can be produced by a variety of interacting factors such as mechanical irritation, infection and tissue fragility and breakdown. The most commonly lost teeth are mandibular molars, followed by mandibular premolars. AMTL is not limited to older individuals and has been found in Young Adults. Even high status individuals are not immune to AMTL.

LSAMAT (Lingual Surface Attrition of the Maxillary Anterior Teeth)

Dental wear, or attrition, is not usually considered to be a cultural modification. However, the presence and degree of oblique lingual attrition of the maxillary anterior teeth points to a specific, somewhat unusual activity (although presumably not a deliberate attempt to modify the teeth) resulting in a distinctive dental modification not found in all groups. LSAMAT, with lower anterior teeth showing "normal" horizontal wear, was first described by Turner and Machado (1983) as seen in an Archaic Brazilian site, and then by Irish and Turner (1987) in Prehistoric Panamanians. Found in combination with a high incidence of caries, Turner, Irish and Machado theorize that the use of the maxillary incisors and tongue to manipulate a high carbohydrate, gritty food such as manioc root (much as we eat artichokes) might acount for this unusual wear. As organic materials are rarely preserved, the presence or absence of LSAMAT may give us the only clues we will find to the use of such a specific foodstuff over time and through space.

Spongy or Porotic Hyperostosis Cranii (S/PH): Anemia

Spongy or Porotic Hyperostosis Cranii is characterized by expansion of marrow tissue within the diploe between the inner and outer tables of the skull. The accompanying reorientation of the diploe produces an erosion of the outer table resulting in a seive-like pattern of porosities. This lesion is possibly associated with several varieties of anemia, especially iron deficiency anemia, perhaps in conjunction with protein deficiency. Underlying factors in the Maya area include iron deficient soil, the high-carbohydrate, low-protein, maize-dependent Maya diet, absorption problems resulting from the introduction of chelating agents into the gut from the grinding stones used in food preparation and the effects of intestinal parasites and chronic diarrhea. This is compounded by increased iron requirements in the tropics and the fact that an anemic mother will produce an infant with low iron stores. This lesion was a common and often severe finding in both Preclassic and Classic peoples of Altar de Sacrificios and Seibal (Saul 1977). The coastal population of Tancah (Classic) shows a seemingly lower incidence and lessened severity, and it appears to be virtually absent in the Preclassic population of Cuello, both sites with access to marine protein.

Treponemal Disease?

The pre-Columbian presence of syphilis in the New World is somewhat controversial and uncertain. Several authorities suggest that Columbus and his men brought syphilis to the Old World upon their return, while others claim that syphilis did not exist in the New World and was therefore unavailable for such a transmittal. The treponemal diseases of syphilis and yaws are virtually indistinguishable from each other, particularly in dry bone. Gummatous lesions suggestive of syphilis or yaws have been found on pre-Columbian crania from Altar de Sacrificios, and tibiae with the characteristic anterior-posterior bowing (while maintaining a straight and vertical interosseous crest), cortical expansion, medullary canal narrowing and periosteal reaction striations typical of treponemal disease have been found at Altar, Seibal and Cuello. However, at Cuello, some tibiae lack the osteitis and cortical expansion, showing only the anterior-posterior bowing or "sabering." This bowing may be unrelated to treponemal disease, but instead due to a variety of factors such as nutrition, postural habits, stress, etc.

FAUNAL MATERIAL: Freshwater Shell Inventory								
Op	**Subop**	**Lot**	**Class:Family**	**Genus**	**Species**	**Habitat**	**Number**	**Weight (g)**
26	Q	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	2.10
28	A	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	38	103.70
28	A	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	38	157.10
28	B	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	1.90
28	B	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	0.40
28	B	4	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	20	95.30
28	B	5	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	1	3.70
28	B	5	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	17	104.30
28	C	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	13.80
28	C	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	11	69.80
28	C	3	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	4	50.00
28	C	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	17	117.60
28	D	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	13.80
28	D	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	16.70
28	D	4	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	56	323.40
28	D	4	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	1	2.20
28	D	5	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	61	347.60
28	D	5	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	1	1.60
28	D	6	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	11	56.10
28	D	6	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	1	1.30
28	D	8	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	10	5.90
28	D	8	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	2	0.80
28	E	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	10.20
28	G	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	4.50
28	G	4	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	4	15.40
28	H	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	3.90
28	H	5	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	2.10
28	I	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	15	86.10
28	I	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	14	70.10
28	I	3	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	1	2.20
28	I	4	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	10	56.70
28	I	4	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	1	1.60
28	I	5	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	6.20
28	J	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	19.20
28	J	4	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	7	39.60
28	K	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	8	36.60
28	L	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	4	16.30
28	L	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	23	152.80
28	L	2	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	1	4.30
28	M	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	4	6.40
28	M	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	57	400.90
28	M	2	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	4	7.60
28	N	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	5.20
28	N	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	14.90
28	O	5	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	37	147.90
28	O	9	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	17	78.60
28	O	9	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	1	1.30
28	O	10	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	71	321.40
28	O	10	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	42	102.70
28	O	11	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	33	124.90
28	O	12	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	14	14.80
28	O	13	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	1	2.20
28	O	13	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	44	225.80

Op	Subop	Lot	Class:Family	Genus	Species	Habitat	Number	Weight (g)
28	O	13	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	4	8.80
28	O	14	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	2	6.30
28	O	14	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	5	11.80
28	O	14	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	132	539.80
28	P	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	8.00
28	P	4	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	8	39.60
28	Q	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	16.10
28	Q	1	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	1	1.60
28	Q	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	7	35.60
28	R	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	163	586.50
28	R	1	Gastropoda:Ampullariidae	*Pomacea*	flagellata	Freshwater	24	32.40
28	R	1	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	13	17.30
28	T	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	4.80
28	V	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	15	54.30
28	W	4	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	53	259.17
28	W	5	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	4.10
28	W	6	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	54	274.40
28	W	6	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	2	3.20
28	W	7	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	1	1.30
28	W	7	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	77	474.60
28	X	5	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	13	54.50
28	X	6	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	184	1,024.40
28	X	6	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	2	1.40
28	Y	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	9	57.60
28	Y	2	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	2	15.70
28	Y	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	7	42.70
28	Y	3	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	1	3.30
29	A	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	4.60
29	AA	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	20	71.90
29	AB	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	61	195.20
29	AB	1	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	5	6.10
29	AC	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	9	33.10
29	AD	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	14	65.30
29	AF	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	19.40
29	AG	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	14	50.00
29	AG	1	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	1	9.00
29	AG	1	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	2	2.00
29	AH	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	24	148.05
29	AI	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	167	694.70
29	AI	1	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	2	27.00
29	AJ	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	0.90
29	AJ	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	5	20.00
29	AJ	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	31	151.70
29	AJ	4	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	64	224.40
29	AJ	4	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	6	24.60
29	AJ	4	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	6	9.60
29	AJ	5	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	5	7.10
29	AJ	6	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	12.30
29	AK	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	4	15.10
29	AK	5	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	5	13.20
29	AK	6	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	3.90
29	AL	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	3.20
29	AL	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	3.10
29	AL	4	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	4.90

Op	Subop	Lot	Class:Family	Genus	Species	Habitat	Number	Weight (g)
29	AM	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	4.50
29	AN	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	80	260.20
29	AS	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	6	47.80
29	AT	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	21	90.30
29	AU	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	17	51.80
29	AV	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	9.10
29	AW	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	5	24.30
29	AX	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	11	34.50
29	AX	1	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	1	1.80
29	AX	1	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	2	3.60
29	AZ	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	23	140.60
29	B	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	9.00
29	BA	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	3.40
29	BA	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	22	69.40
29	BB	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	4	9.30
29	BB	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	25	72.60
29	BB	2	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	1	4.20
29	BE	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	8.60
29	BE	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	5	12.80
29	BF	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	5.30
29	BH	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	1.20
29	BJ	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	5.10
29	BM	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	7	17.70
29	BO	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	7.50
29	BP	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	6	29.23
29	BP	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	12.10
29	BP	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	11	51.30
29	BP	3	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	1	4.20
29	BS	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	16	80.50
29	BU	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	7.80
29	BU	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	7.10
29	C	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	6.40
29	C	8	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	8.73
29	C	13	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	4	8.40
29	E	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	12.60
29	E	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	9.20
29	E	4	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	22.40
29	E	5	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	4	5.70
29	E	5	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	29	170.00
29	F	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	22.20
29	F	1	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	1	5.80
29	F	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	3.00
29	F	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	6.40
29	F	4	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	9.10
29	F	7	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	20.40
29	F	8	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	4	29.50
29	J	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	11	52.40
29	K	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	7.00
29	L	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	3.80
29	M	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	19.60
29	M	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	5	25.30
29	M	2	Pelecypoda:Unionidae	*Nephronaias*	spp.	Freshwater	1	1.10
29	N	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	4	15.80
29	Q	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	5.50

Op	Subop	Lot	Class:Family	Genus	Species	Habitat	Number	Weight (g)
29	S	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	3	23.50
29	T	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	1.00
29	T	2	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	6	34.90
29	T	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	22	75.00
29	T	4	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	22	98.10
29	T	5	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	13	38.00
29	U	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	6	23.30
29	V	10	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	6	10.00
29	V	12	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	2	8.30
29	V	13	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	4	10.00
29	V	14	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	6	29.00
29	V	15	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	63	62.60
29	V	15	Gastropoda:Ampullariidae	*Pomacea*	*flagellata*	Freshwater	4	14.70
29	X	3	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	4	6.10
29	X	5	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	3.20
29	X	6	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	7	37.70
29	Y	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	1	4.10
29	Z	1	Gastropoda:Pleuroceridae	*Pachychilus*	spp.	Freshwater	26	130.00

Pak'il Nah Off-Mound Artifacts													
Site	**Op**	**Subop**	**Lot**	**Unit Size**	**Artifact Class**	**Artifact Type**	**Time Period**	**Rim**	**Body**	**Base**	**Total #**	**Length (mm)**	**Wt (g)**
RB2	26	A	All	1 x 2 m	Ceramics	All Sherds	Tepeu 2-3	2	15	0	17	n/a	n/a
RB2	26	A	All	1 x 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	86	n/a	217.20
RB2	26	C	All	1 x 2 m	Ceramics	All Sherds	Tepeu 2-3	0	17	0	17	n/a	n/a
RB2	26	C	All	1 x 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	119	n/a	221.20
RB2	26	C	All	1 x 2 m	Obsidian	Pressure Blade Frag	Tepeu 2-3	n/a	n/a	n/a	1	17.37	0.55
RB2	26	D	1	1 x 2 m	Ceramics	All Sherds	Tepeu 2-3	3	53	0	56	n/a	n/a
RB2	26	D	1	1 x 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	65	n/a	281.20
RB2	26	E	1	1 x 2 m	Ceramics	All Sherds	Tepeu 2-3	0	9	0	9	n/a	n/a
RB2	26	E	1	1 x 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	12	n/a	68.20
RB2	26	R	1	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	8	166	1	175	n/a	n/a
RB2	26	R	1	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	62	n/a	81.40
RB2	26	S	1	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	14	488	0	502	n/a	n/a
RB2	26	S	1	1 x 1 m	Obsidian	Pressure Blade Frag	Tepeu 2-3	n/a	n/a	n/a	2	56.57	1.82
RB2	26	S	1	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	74	n/a	152.30
RB2	26	T	1	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	24	325	0	349	n/a	n/a
RB2	26	T	1	1 x 1 m	Obsidian	Pressure Blade Frag	Tepeu 2-3	n/a	n/a	n/a	1	17.41	0.32
RB2	26	T	1	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	38	n/a	143.00
RB2	26	U	1	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	12	0	12	n/a	n/a
RB2	26	U	1	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	3	n/a	38.00
RB2	26	V	1	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	1	3	0	4	n/a	n/a
RB2	26	W	1	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	13	n/a	15.20
RB2	26	X	1	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	6	0	6	n/a	n/a
RB2	26	Y	1	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	2	34	0	36	n/a	n/a
RB2	26	Y	1	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	20	n/a	55.90
RB2	26	Z	1	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	124	1	125	n/a	n/a
RB2	26	Z	1	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	51	n/a	100.80
RB2	26	AA	1	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	2	12	0	14	n/a	n/a
RB2	26	AA	1	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	13	n/a	27.90
RB2	26	AB	1	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	2	55	0	57	n/a	n/a
RB2	26	AB	1	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	23	n/a	79.30
RB2	26	AC	1	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	4	60	0	64	n/a	n/a
RB2	26	AC	1	1 x 1 m	Formal Tools	Reworked Biface	Tepeu 2-3	n/a	n/a	n/a	1	36.52	25.28
RB2	26	AC	1	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	12	n/a	17.90
RB2	26	AD	1	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	3	0	3	n/a	n/a
RB2	26	AD	1	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	2	n/a	19.40

Artifact Denisites for Off-Mound Test Excavations at Pak'il Nah

Prov.			Artifact Densities												
Site	Op	Subop	Unit Size	Unit Depth cmbs (Avg)	Soil Vol. in m^3	Ceramics N=x	Ceramics D=N/m^3	Lithics N=x	Lithics D=N/m^3	Lithics mass (g)	Lithics D=g/m^3	Obsidian N=x	Obsidian** D=mm/m^3	Overall Density	Rank
RB 2	26	A	1 x 2 m	25 cm	0.50	17	34.00	86	172.00	217.20	434.40	0	0.00	206.00	7
RB 2	26	AA	1 x 1 m	33 cm *	0.33	14	42.42	13	39.39	27.90	84.55	0	0.00	81.82	12
RB 2	26	AB	1 x 1 m	33 cm *	0.33	57	172.73	23	69.70	79.30	240.30	0	0.00	242.42	6
RB 2	26	AC	1 x 1 m	48 cm	0.48	64	133.33	^13	27.08	53.18	110.79	0	0.00	160.42	8
RB 2	26	AD	1 x 1 m	24 cm *	0.24	3	12.50	2	8.33	19.40	80.83	0	0.00	20.83	15
RB 2	26	C	1 x 2 m	24 cm	0.48	17	35.42	119	247.92	221.20	460.83	1	36.19	285.42	5
RB 2	26	D	1 x 2 m	65 cm	1.30	56	43.08	65	50.00	281.20	216.31	0	0.00	93.08	11
RB 2	26	E	1 x 2 m	11 cm	0.22	9	40.91	12	54.55	68.20	310.00	0	0.00	95.45	10
RB 2	26	R	1 x 1 m	42 cm	0.42	175	416.67	62	147.62	81.40	193.81	0	0.00	564.29	3
RB 2	26	S	1 x 1 m	41 cm	0.41	502	1224.39	74	180.49	152.30	371.46	2	137.98	1409.76	1
RB 2	26	T	1 x 1 m	41 cm	0.41	349	861.73	38	93.83	143.00	353.09	1	42.99	958.02	2
RB 2	26	U	1 x 1 m	32 cm *	0.32	12	38.10	3	9.52	38.00	120.63	0	0.00	47.62	13
RB 2	26	V	1 x 1 m	31 cm *	0.31	4	12.90	0	0.00	0.00	0.00	0	0.00	12.90	17
RB 2	26	W	1 x 1 m	33 cm *	0.33	0	0.00	13	39.39	15.20	46.06	0	0.00	39.39	14
RB 2	26	X	1 x 1 m	43 cm *	0.43	6	14.12	0	0.00	0.00	0.00	0	0.00	14.12	16
RB 2	26	Y	1 x 1 m	48 cm	0.48	36	75.00	20	41.67	55.90	116.46	0	0.00	116.67	9
RB 2	26	Z	1 x 1 m	50 cm	0.50	125	250.00	51	102.00	100.80	201.60	0	0.00	352.00	4

^ includes biface
* stopped at sterile soil, bedrock not reached in all parts of unit
** obsidian density is measured in length (mm) of blade cutting edge

Dancer Group Off-Mound Artifacts													
Site	Op	Subop	Lot	Unit Size	Artifact Class	Artifact Type	Time Period	Rim	Body	Base	Total #	Length	Wt (g)
RB2	28	A	All	1 x 2 m	Ceramics	All Sherds	Tepeu 2-3	1	29	0	30	n/a	n/a
RB2	28	A	All	1 x 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	93	n/a	434.90
RB2	28	A	All	1 x 2 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	76	n/a	260.80
RB2	28	B	1 & 2	1 x 2 m	Ceramics	All Sherds	Tepeu 2-3	2	19	1	15	n/a	n/a
RB2	28	B	1 & 2	1 x 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	33	n/a	209.60
RB2	28	B	1 & 2	1 x 2 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	1	n/a	1.90
RB2	28	S	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	1	3	0	4	n/a	n/a
RB2	28	S	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	3	n/a	4.90
RB2	28	T	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	3	0	3	n/a	n/a
RB2	28	T	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	0	n/a	0.00
RB2	28	T	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	1	n/a	4.80
RB2	28	U	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	2	27	0	29	n/a	n/a
RB2	28	U	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	8	n/a	41.40
RB2	28	V	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	4	59	0	63	n/a	n/a
RB2	28	V	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	75	n/a	519.26
RB2	28	V	All	1 x 1 m	Formal Tools	Bifacial Celt	Tepeu 2-3	n/a	n/a	n/a	1	n/a	107.96
RB2	28	V	All	1 x 1 m	Small Finds	Shell Disk Bead	Tepeu 2-3	n/a	n/a	n/a	1	n/a	0.27
RB2	28	V	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	15	n/a	54.30

Artifact Densities for Off-Mound Test Excavations at the Dancer Group																	
Prov.				Artifact Densities													
Site	Op	Subop	Lot	Unit Size	Unit Depth cmbs (Avg)	Soil Vol. in m^3	Ceramics N=x	Ceramics D=N/m^3	Lithics N=x	Lithics D=N/m^3	Lithics mass (g)	Lithics D=g/m^3	Faunal/ Freshwater Snail N=x	Faunal D=N/m^3	Overall Density	Rank
RB 2	28	A	All	1 x 2 m	20 cm	0.40	30	75.00	93	232.50	434.90	1087.25	76	190.00	497.50	1
RB 2	28	B	1 & 2	1 x 2 m	15 cm	0.30	15	50.00	33	110.00	209.60	698.67	1	3.33	163.33	4
RB 2	28	S	All	1 x 1 m	9 cm	0.09	4	44.44	3	33.33	4.90	54.44	0	0.00	77.78	5
RB 2	28	T	All	1 x 1 m	34 cm	0.34	3	8.82	0	0.00	0.00	0.00	1	2.94	11.76	6
RB 2	28	U	All	1 x 1 m	12 cm	0.12	29	241.67	8	66.67	41.40	345.00	0	0.00	308.33	3
RB 2	28	*V	All	1 x 1 m	37 cm	0.37	63	170.27	^76	205.41	627.22	1695.19	15	40.54	416.22	2

^ includes 1 biface

* 1 shell bead also found but not reflected in table

Agua Lluvia Off-Mound Midden Test Artifacts													
Site	**Op**	**Subop**	**Lot**	**Unit Size**	**Artifact Class**	**Artifact Type**	**Time Period**	**Rim**	**Body**	**Base**	**Total #**	**Length (mm)**	**Wt (g)**
RB2	29	AO	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	40	1	41	n/a	n/a
RB2	29	AO	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	20	n/a	108.40
RB2	29	AO	All	1 x 1 m	Informal Tools	Perforator	Tepeu 2-3	n/a	n/a	n/a	1	n/a	4.58
RB2	29	AP	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	1	17	0	18	n/a	n/a
RB2	29	AP	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	8	n/a	159.50
RB2	29	AP	All	1 x 1 m	Informal Tools	Scraper	Tepeu 2-3	n/a	n/a	n/a	1	n/a	22.08
RB2	29	AP	All	1 x 1 m	Formal Tools	Bifacial Celt	Tepeu 2-3	n/a	n/a	n/a	1	n/a	25.08
RB2	29	AQ	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	2	1	3	n/a	n/a
RB2	29	AQ	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	0	n/a	0.00
RB2	29	AR	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	13	1	14	n/a	n/a
RB2	29	AR	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	3	n/a	5.80
RB2	29	AS	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	16	1	17	n/a	n/a
RB2	29	AS	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	18	n/a	372.60
RB2	29	AS	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	6	n/a	47.80
RB2	29	AT	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	45	0	45	n/a	n/a
RB2	29	AT	All	1 x 1 m	Ceramics	Flute Fragment	Tepeu 2-3	0	1	0	1	n/a	0.00
RB2	29	AT	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	82	n/a	664.40
RB2	29	AT	All	1 x 1 m	Formal Tools	Small Bi-convex Biface	Tepeu 2-3	n/a	n/a	n/a	1	n/a	15.87
RB2	29	AT	All	1 x 1 m	Informal Tools	Bifurcated Graver/Perforator	Tepeu 2-3	n/a	n/a	n/a	1	n/a	13.09
RB2	29	AT	All	1 x 1 m	Informal Tools	Perforator	Tepeu 2-3	n/a	n/a	n/a	1	n/a	11.45
RB2	29	AT	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	21	n/a	90.30
RB2	29	AU	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	22	0	22	n/a	n/a
RB2	29	AU	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	97	n/a	290.60
RB2	29	AU	All	1 x 1 m	Obsidian	Pressure Blade Frags	Tepeu 2-3	n/a	n/a	n/a	1	13.36	0.20
RB2	29	AU	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	17	n/a	51.80
RB2	29	AV	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	1	34	0	35	n/a	n/a
RB2	29	AV	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	20	n/a	139.00
RB2	29	AV	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	2	n/a	9.10

Artifact Densities for Aqua Midden Tests

Prov.			Artifact Densities															
Site	Op	Subop	Unit Size	Unit Depth cmbs (Avg)	Soil Vol. in m^3	Ceramics N=x	Ceramics $D=N/m^3$	Lithics N=x	Lithics $D=N/m^3$	Lithics mass (g)	Lithics $D=g/m^3$	Faunal/ Freshwater Snail N=x	Faunal $D=N/m^3$	Obsidian** $D=mm/m^3$	Overall Density	Rank
RB 2	29	AO	1 x 1 m	32	0.32	41	128.13	21	65.63	112.98	353.06	0	0.00	0.00	193.75	5
RB 2	29	AP	1 x 1 m	12	0.12	18	150.00	^10	83.33	206.66	1722.17	0	0.00	0.00	233.33	4
RB 2	29	AQ	1 x 1 m	22	0.22	3	13.64	0	0.00	0.00	0.00	0	0.00	0.00	13.64	8
RB 2	29	AR	1 x 1 m	23	0.23	14	60.87	3	13.04	5.80	25.22	0	0.00	0.00	73.91	6
RB 2	29	AS	1 x 1 m	79	0.79	17	21.52	18	22.78	372.60	471.65	6	7.59	0.00	51.90	7
RB 2	29	AT	1 x 1 m	47	0.47	45	95.74	^84	178.72	704.81	1499.60	21	44.68	0.00	319.15	3
RB 2	29	AU	1 x 1 m	42	0.42	22	52.38	97	230.95	290.60	691.90	17	40.48	5.61	326.19	2
RB 2	29	AV	1 x 1 m	17	0.17	35	205.88	20	117.65	139.00	817.65	2	11.76	0.00	335.29	1

^ includes biface
** obsidian density is measured in length (mm) of blade cutting edge

Artifacts from Agua Lluvia Activity Surface Tests													
Site	**Op**	**Subop**	**Lot**	**Unit Size**	**Artifact Class**	**Artifact Type**	**Time Period**	**Rim**	**Body**	**Base**	**Total #**	**Length (mm)**	**Wt (g)**
RB2	29	BA	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	9	0	9	n/a	n/a
RB2	29	BA	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	60	n/a	138.90
RB2	29	BA	All	1 x 1 m	Obsidian	Pressure Blade Frags	Tepeu 2-3	n/a	n/a	n/a	1	15.92	0.40
RB2	29	BA	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	25	n/a	72.80
RB2	29	BB	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	1	36	0	37	n/a	n/a
RB2	29	BB	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	95	n/a	156.20
RB2	29	BB	All	1 x 1 m	Small Finds	Bead blank/Failure	Tepeu 2-3	n/a	n/a	n/a	1	n/a	1.04
RB2	29	BB	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	29	n/a	81.90
RB2	29	BB	All	1 x 1 m	Faunal	*Pomacea*	Tepeu 2-3	n/a	n/a	n/a	1	n/a	4.20
RB2	29	BC	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	20	1	21	n/a	n/a
RB2	29	BC	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	13	n/a	54.10
RB2	29	BD	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	1	11	0	12	n/a	n/a
RB2	29	BD	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	20	n/a	84.80
RB2	29	BE	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	12	0	12	n/a	n/a
RB2	29	BE	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	14	n/a	43.30
RB2	29	BE	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	8	n/a	21.40
RB2	29	BF	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	1	25	0	26	n/a	n/a
RB2	29	BF	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	11	n/a	57.60
RB2	29	BF	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	3	n/a	5.30
RB2	29	BG	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	9	0	9	n/a	n/a
RB2	29	BG	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	4	n/a	2.10
RB2	29	BH	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	1	8	0	9	n/a	n/a
RB2	29	BH	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	6	n/a	7.60
RB2	29	BH	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	1	n/a	1.20
RB2	29	BI	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	6	0	6	n/a	n/a
RB2	29	BI	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	5	n/a	28.50
RB2	29	BJ	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	1	4	0	5	n/a	n/a
RB2	29	BJ	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	4	n/a	9.60
RB2	29	BJ	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	1	n/a	5.10
RB2	29	BK	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	1	27	0	28	n/a	n/a
RB2	29	BK	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	15	n/a	13.20
RB2	29	BL	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	1	34	0	35	n/a	n/a
RB2	29	BL	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	21	n/a	53.80
RB2	29	BL	All	1 x 1 m	Obsidian	Pressure Blade Frags	Tepeu 2-3	n/a	n/a	n/a	2	29.74	0.82
RB2	29	BM	All	1 x 1 m	Ceramics	All Sherds	Tepeu 2-3	0	12	0	12	n/a	n/a
RB2	29	BM	All	1 x 1 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	11	n/a	49.30
RB2	29	BM	All	1 x 1 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	7	n/a	17.70

Aqua Lluvia Artifact Densities for Activity Area Tests																	
Prov.			Artifact Densities														
Site	Op	Subop	Unit Size	Unit Depth cmbs (Avg)	Soil Vol. in m^3	Ceramics N=x	Ceramics $D=N/m^3$	Lithics N=x	Lithics $D=N/m^3$	Lithics mass (g)	Lithics $D=g/m^3$	Faunal/ Freshwater Snail N=x	Faunal $D=N/m^3$	Ground-stone	Obsidian** $D=mm/m^3$	Overall Density
RB 2	29	BA	1 x 1 m	9	0.09	9	100.00	60	666.67	138.90	1543.33	25	277.78	0.00	1.43	1055.56
RB 2	29	*BB	1 x 1 m	12	0.12	37	308.33	95	791.67	156.20	1301.67	29	241.67	0.00	0.00	1341.67
RB 2	29	BC	1 x 1 m	16	0.16	21	131.25	13	81.25	54.10	338.13	0	0.00	0.00	0.00	212.50
RB 2	29	BD	1 x 1 m	8	0.08	12	150.00	20	250.00	84.80	1060.00	0	0.00	0.00	0.00	400.00
RB 2	29	BE	1 x 1 m	13	0.13	12	92.31	14	107.69	43.30	333.08	8	61.54	0.00	0.00	261.54
RB 2	29	BF	1 x 1 m	14	0.14	26	185.71	11	78.57	57.60	411.43	3	21.43	0.00	0.00	285.71
RB 2	29	BG	1 x 1 m	11	0.11	9	81.82	4	36.36	2.10	19.09	0	0.00	0.00	0.00	118.18
RB 2	29	BH	1 x 1 m	4	0.04	9	225.00	6	150.00	7.60	190.00	1	25.00	0.00	0.00	400.00
RB 2	29	BI	1 x 1 m	7	0.07	6	85.71	5	71.43	28.50	407.14	0	0.00	0.00	0.00	157.14
RB 2	29	BJ	1 x 1 m	9	0.09	5	55.56	4	44.44	9.60	106.67	1	11.11	0.00	0.00	111.11
RB 2	29	BK	1 x 1 m	12	0.12	28	233.33	15	125.00	13.20	110.00	0	0.00	0.00	0.00	358.33
RB 2	29	BL	1 x 1 m	14	0.14	35	250.00	21	150.00	53.80	384.29	0	0.00	0.00	4.16	414.29
RB 2	29	BM	1 x 1 m	7	0.07	12	171.43	11	157.14	49.30	704.29	7	100.00	0.00	0.00	428.57
RB 2	29	E	1 x 2 m	19	0.38	190	500.00	20	52.63	86.00	226.32	5	13.16	1.00	7.37	571.05

* 1 shell bead also found but not reflected in table
** obsidian density is measured in length (mm) of blade cutting edge

Agua Lluvia Activity Area Artifacts: Feature/Structure Associated													
Site	Op	Subop	Lot	Unit Size	Artifact Class	Artifact Type	Time Period	Rim	Body	Base	Total #	Length	Wt (g)
RB2	29	E	1-2	1 X 2 m	Ceramics	All Sherds	Tepeu 2-3	7	181	2	190	n/a	n/a
RB2	29	E	1-2	1 X 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	20	n/a	86.00
RB2	29	E	1-2	1 X 2 m	Obsidian	Pressure Blade Frags	Tepeu 2-3	n/a	n/a	n/a	1	19.39	0.71
RB2	29	E	1-2	1 X 2 m	Groundstone	Mano fragment	Tepeu 2-3	n/a	n/a	n/a	1	n/a	430.10
RB2	29	E	1-2	1 X 2 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	5	n/a	21.80
RB2	29	J	1-3	2 X 2 m	Ceramics	All Sherds	Tepeu 2-3	4	67	1	72	n/a	n/a
RB2	29	J	1-3	2 X 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	43	n/a	351.70
RB2	29	J	1-3	2 X 2 m	Lithics (chert)	Hammerstone (modified core)	Tepeu 2-3	n/a	n/a	n/a	1	62.69	250.20
RB2	29	J	1-3	2 X 2 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	11	n/a	52.40
RB2	29	K	1-2	2 X 2 m	Ceramics	All Sherds	Tepeu 2-3	0	15	0	15	n/a	n/a
RB2	29	K	1-2	2 X 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	17	n/a	396.80
RB2	29	K	1-2	2 X 2 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	1	n/a	7.00
RB2	29	L	1-2	2 X 2 m	Ceramics	All Sherds	Tepeu 2-3	4	23	0	27	n/a	n/a
RB2	29	L	1-2	2 X 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	5	n/a	11.30
RB2	29	L	1-2	2 X 2 m	Obsidian	Pressure Blade Frags	Tepeu 2-3	n/a	n/a	n/a	1	15.64	0.69
RB2	29	L	1-2	2 X 2 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	1	n/a	3.80
RB2	29	M	1-2	1.5 X 4 m	Ceramics	All Sherds	Tepeu 2-3	0	48	0	48	n/a	n/a
RB2	29	M	1-2	1.5 X 4 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	42	n/a	329.20
RB2	29	M	1-2	1.5 X 4 m	Informal Tools	Discoid Scraper	Tepeu 2-3	n/a	n/a	n/a	1	n/a	84.84
RB2	29	M	1-2	1.5 X 4 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	8	n/a	44.90
RB2	29	M	1-2	1.5 X 4 m	Faunal	*Nephronaias*	Tepeu 2-3	n/a	n/a	n/a	1	n/a	1.10
RB2	29	AJ	1-2	1 X 2 m	Ceramics	All Sherds	Tepeu 2-3	0	22	0	22	n/a	n/a
RB2	29	AJ	1-2	1 X 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	11	n/a	37.80
RB2	29	AJ	1-2	1 X 2 m	Informal Tools	Graver/Perforator	Tepeu 2-3	n/a	n/a	n/a	1	n/a	1.25
RB2	29	AJ	1-2	1 X 2 m	Obsidian	Pressure Blade Frags	Tepeu 2-3	n/a	n/a	n/a	1	17.12	0.36
RB2	29	AJ	1-2	1 X 2 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	6	n/a	20.90
RB2	29	AK	1-5	1 X 2 m	Ceramics	All Sherds	Tepeu 2-3	3	73	1	77	n/a	n/a
RB2	29	AK	1-5	1 X 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	74	n/a	475.50
RB2	29	AK	1-5	1 X 2 m	Informal Tools	Graver/Perforator	Tepeu 2-3	n/a	n/a	n/a	1	n/a	1.2
RB2	29	AK	1-5	1 X 2 m	Informal Tools	Graver/Perforator	Tepeu 2-3	n/a	n/a	n/a	1	n/a	1.3
RB2	29	AK	1-5	1 X 2 m	Informal Tools	Perforator	Tepeu 2-3	n/a	n/a	n/a	1	n/a	3.04
RB2	29	AK	1-5	1 X 2 m	Obsidian	Pressure Blade Frags	Tepeu 2-3	n/a	n/a	n/a	2	32.1	0.99
RB2	29	AK	1-5	1 X 2 m	Small Find	Granite fragment	Tepeu 2-3	n/a	n/a	n/a	1	n/a	0.50
RB2	29	AK	1-5	1 X 2 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	9	n/a	28.30
RB2	29	AL	1-4	1 X 2 m	Ceramics	All Sherds	Tepeu 2-3	6	44	0	50	n/a	n/a
RB2	29	AL	1-4	1 X 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	0	n/a	0.00
RB2	29	AL	1-4	1 X 2 m	Formal Tools	Unknown Biface Type	Tepeu 2-3	n/a	n/a	n/a	1	medial	54.04
RB2	29	AL	1-4	1 X 2 m	Formal Tools	Unknown Biface Type	Tepeu 2-3	n/a	n/a	n/a	1	lateral	8.90
RB2	29	AL	1-4	1 X 2 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	4	n/a	11.20
RB2	29	AM	1	1 X 2 m	Ceramics	All Sherds	Tepeu 2-3	1	15	0	16	n/a	n/a
RB2	29	AM	1	1 X 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	0	n/a	0.00
RB2	29	AM	1	1 X 2 m	Formal Tools	Bifacial Celt	Tepeu 2-3	n/a	n/a	n/a	1	complete	70.50
RB2	29	AM	1	1 X 2 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	1	n/a	4.50

Agua Lluvia Activity Area Artifacts: Feature/Structure Associated													
Site	**Op**	**Subop**	**Lot**	**Unit Size**	**Artifact Class**	**Artifact Type**	**Time Period**	**Rim**	**Body**	**Base**	**Total #**	**Length**	**Wt (g)**
RB2	29	AW	1-2	1 X 1.5 m	Ceramics	All Sherds	Tepeu 2-3	5	208	0	213	n/a	n/a
RB2	29	AW	1-2	1 X 1.5 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	113	n/a	552.90
RB2	29	AW	1-2	1 x 1.5 m	Informal Tools	Bifurcated Graver/Perforator	Tepeu 2-3	n/a	n/a	n/a	1	n/a	3.16
RB2	29	AW	1-2	1 x 1.5 m	Informal Tools	Perforator	Tepeu 2-3	n/a	n/a	n/a	1	n/a	5.77
RB2	29	AW	1-2	1 x 1.5 m	Formal Tools	Misc Reworked Biface	Tepeu 2-3	n/a	n/a	n/a	1	n/a	24.01
RB2	29	AW	1-2	1 x 1.5 m	Formal Tools	Unknown Biface Type	Tepeu 2-3	n/a	n/a	n/a	1	n/a	5.93
RB2	29	AW	1-2	1 x 1.5 m	Groundstone	Mano fragment	Tepeu 2-3	n/a	n/a	n/a	2	n/a	119.16
RB2	29	AW	1-2	1 x 1.5 m	Groundstone	Metate fragment	Tepeu 2-3	n/a	n/a	n/a	1	n/a	217.70
RB2	29	AW	1-2	1 x 1.5 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	5	n/a	24.30
RB2	29	BP	1	3 x 4 m	Ceramics	All Sherds	Tepeu 2-3	?	?	?	41	n/a	n/a
RB2	29	BP	1	3 x 4 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	26	n/a	1217.90
RB2	29	BP	1	3 x 4 m	Informal Tools	Perforator	Tepeu 2-3	n/a	n/a	n/a	1	n/a	62.77
RB2	29	BP	1	3 x 4 m	Informal Tools	Scraper	Tepeu 2-3	n/a	n/a	n/a	1	n/a	28.25
RB2	29	BP	1	3 x 4 m	Formal Tools	Bifacial Celt	Tepeu 2-3	n/a	n/a	n/a	1	n/a	118.24
RB2	29	BP	1	3 x 4 m	Formal Tools	Misc Reworked Biface	Tepeu 2-3	n/a	n/a	n/a	1	n/a	73.56
RB2	29	BP	1	3 x 4 m	Formal Tools	Misc Reworked Biface	Tepeu 2-3	n/a	n/a	n/a	1	n/a	57.34
RB2	29	BP	1	3 x 4 m	Small Find	Marine Coral (Anthozoa)	Tepeu 2-3	n/a	n/a	n/a	1	n/a	16.32
RB2	29	BP	1	3 x 4 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	6	n/a	29.20
RB2	29	BS	2	2 x 3 m	Ceramics	All Types	Tepeu 2-3	2	114	0	116	n/a	n/a
RB2	29	BS	2	2 x 3 m	Obsidian	Pressure Blade Frags	Tepeu 2-3	n/a	n/a	n/a	4	156.97	4.90
RB2	29	BS	2	2 x 3 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	43	n/a	353.70
RB2	29	BS	2	2 x 3 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	16		80.50
RB2	29	F	3	2 x 2 m	Ceramics	All Types	Tepeu 2-3	4	41	0	60	n/a	n/a
RB2	29	F	3	2 x 2 m	Obsidian	Pressure Blade Frags	Tepeu 2-3	n/a	n/a	n/a	3	79.33	4.12
RB2	29	F	3	2 x 2 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	19	n/a	68.30
RB2	29	F	4	2 x 2 m	Formal Tools	Bifacial Celt	Tepeu 2-3	n/a	n/a	n/a	1	n/a	20.78
RB2	29	F	3	2 x 2 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	5	n/a	18.50
RB2	29	BU	1-2	2 x 3 m	Ceramics	All Sherds	Tepeu 2-3	7	110	0	117	n/a	n/a
RB2	29	BU	1-2	2 x 3 m	Debitage	All Types	Tepeu 2-3	n/a	n/a	n/a	59	n/a	1617.40
RB2	29	BU	1-2	2 x 3 m	Informal Tools	Perforator	Tepeu 2-3	n/a	n/a	n/a	1	n/a	49.59
RB2	29	BU	1-2	2 x 3 m	Informal Tools	Scraper	Tepeu 2-3	n/a	n/a	n/a	1	n/a	11.95
RB2	29	BU	1-2	2 x 3 m	Faunal	*Pachychilus*	Tepeu 2-3	n/a	n/a	n/a	3	n/a	14.90
RB2	29	BU	1-2	2 x 3 m	Groundstone	Mano fragment	Tepeu 2-3	n/a	n/a	n/a	1	n/a	92.88
RB2	29	BU	1-2	2 x 3 m	Obsidian	Pressure Blade Frags	Tepeu 2-3	n/a	n/a	n/a	1	20.02	0.23
RB2	29	BU	1-2	2 x 3 m	Formal Tools	GUB- Type I	Tepeu 2-3	n/a	n/a	n/a	1	n/a	76.37
RB2	29	BU	1-2	2 x 3 m	Formal Tools	Misc Reworked Biface	Tepeu 2-3	n/a	n/a	n/a	1	n/a	58.84
RB2	29	BU	1-2	2 x 3 m	Formal Tools	Unknown Biface Type	Tepeu 2-3	n/a	n/a	n/a	1	n/a	51.98
RB2	29	BU	1-2	2 x 3 m	Formal Tools	GUB- Type II	Tepeu 2-3	n/a	n/a	n/a	1	n/a	65.55
RB2	29	BU	1-2	2 x 3 m	Formal Tools	Misc Reworked Biface	Tepeu 2-3	n/a	n/a	n/a	1	n/a	30.79
RB2	29	BU	1-2	2 x 3 m	Formal Tools	Thin Biface	Tepeu 2-3	n/a	n/a	n/a	1	n/a	25.69

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