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# EXCAVATIONS OF THE YAXTUN GROUP AT BAKING POT, BELIZE



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2000

### **PRINCETON UNIVERSITY**

# **EXCAVATIONS OF THE YAXTUN GROUP AT BAKING POT, BELIZE**

by

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#### ABSTRACT

The objectives of the research at the Yaxtun Group were (1) to ascertain whether Structures 198 and 199 at Baking Pot functioned as units of a household group; (2) to determine the chronological development of the household; (3) to establish the status and wealth of the occupants; and (4) to investigate the type of activities that occurred at the settlement.

Investigations at Structures 198 and 199 at Baking Pot, revealed that the function of the Yaxtun Group was primarily residential in nature. Comparisons with ethnohistoric and ethnographic examples of Maya households revealed similar patterns in structural configuration, structure size, and construction techniques. The assemblage of artifacts found at the Yaxtun Group are also utilitarian in nature and reflect the artifact assemblages of other ancient Maya residential groups excavated in the Belize Valley.

The data recovered during the first season of investigation revealed that the group was first occupied during the Barton Creek phase of the Late Preclassic. Slight modifications were made to the structure during the Early Classic period. However, it was during the Spanish Lookout phase of the Late Classic that major construction occurred, including the addition of two new structures to the group and major modifications to the existing structure. Occupation of the group continued into the Early Postclassic period, when the residence was abandoned.

The architecture and artifacts found at Structures 198 and 199 revealed that the occupants had access to objects limited to people of high status and wealth. High status markers included the remains of three Pabellon Molded Carved vessels, objects produced from exotic material (i.e. jadeite) and large, cutstone architecture.

The remains of activities performed at the Yaxtun Group are residential in nature. Evidence for fishing, hunting, cooking and weaving were found at both Structures 198 and 199. Extensive remains of both marine shell and animal bone were uncovered in middens on plaza areas and provide evidence for food procurement, processing, and consumption.

In addition, the evidence uncovered at the Yaxtun Group increases our understanding of households at the site of Baking Pot and those within the larger context of the Belize Valley. Because households have traditionally been neglected in the study of Lowland Maya prehistory, the study at Yaxtun contributes to our knowledge of patio groups and of the ancient Maya who resided in them.

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iv

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I dedicate this thesis to you.

#### **Table of Contents**

ABSTRACTii
ACKNOWLEDGEMENTSiv
TABLE OF CONTENTSvii
LIST OF FIGURESix
LIST OF TABLESxi
CHAPTER 1: HOUSEHOLD ARCHAEOLOGY: PROBLEMS AND ARCHAEOLOGICAL EVIDENCE
1.1 Introduction.       1         1.2 Theoretical Approach.
1.4 Previous Research in the Belize Valley

2.1 Location and environmental setting.232.2 Cultural setting.252.3 History of archaeological research.272.4 Site description.352.5 Description of the Yaxtun Group.37

 3.1 Excavations: Sampling Techniques and Procedures.
 42

 3.2 Excavations at Structure 198.
 44

 3.3 Excavations at Structure 199.
 60

 3.4 Construction History and Chronology.
 63

4.1 Introduction..734.2 The Ceramic Industry..744.3 The Modified Ceramic Sherd Industry..1014.4 The Modeled Clay Industry..1064.5 The Ground Stone Industry..1094.6 The Polished Stone Industry..1194.7 The Chipped Stone Industry..1204.8 The Worked Shell Industry..1364.9 The Worked Bone Industry..1384.10 Miscellaneous Objects..139

CHAPTER 2: CULTURAL AND ENVIRONMENTAL SETTING OF BAKING POT

CHAPTER 3: RESEARCH METHODS; EXCAVATIONS AT THE YAXTUN GROUP

**CHAPTER 4: ANALYSIS AND DESCRIPTION OF ARTIFACTS** 

	٠	•
1/	1	1
v	L	1

## **CHAPTER 5: CONCLUSIONS**

5.1 Introduction	141
5.2 Evidence of Household Activity at the Yaxtun Group	142
5.3 Occupation of the Yaxtun Group	149
5.4 Status Indicators at the Yaxtun Group	156
5.5 Daily Life and Activities Performed at the Yaxtun Group	159
5.6 Size and Configuration of the Yaxtun Group	163
5.7 Conclusions	165
REFERENCES CITED	.168

.

# List of Figures

Figure 1 Map of the Maya area	2
Figure 2 Map showing the location of major sites in Belize	24
Figure 3 Distribution of Archaeological Sites Along the Upper Belize River Valley	26
Figure 4 Map of Baking Pot and surrounding settlement	28
Figure 5 Map of Baking Pot and immediate settlement	34
Figure 6 Map of Group I with Yaxtun Group highlighted	38
Figure 7 North-South Profile of Yaxtun Group,	39
Figure 8 Plan of Yaxtun Group with excavation units	43
Figure 9 Plan of Yaxtun Group with excavation units numbered	45
Figure 10 Profile of Units 1, 3, and 7, Structure 198	46
Figure 11 Profile of penultimate architecture, Structure 198	47
Figure 11 Profile of termination feature, Unit 1, Level 3, Lot 22 Structure 198	49
Figure 12 Plan of hearth feature, Unit 1, Level 3, Lot 22, Structure 198	49
Figure 13 Plan of terminal phase architecture, Structure 198	52
Figure 14 Plan of penultimate phase architecture, Structure 198	54
Figure 15 Plan of plaza floor #2, in front of Str. 198	56
Figure 16 Plan of plaza floor #3, in front of Str. 198	
Figure 17 Plan of terminal phase architecture, Structure 199	58
Figure 18 Profile of Structure 199	59
Figure 19 Chronological phases for the Belize Valley	76
Figure 20a Reforma Incised	77
Figure 20b Sapote Striated	77
Figure 21a Sierra Red	79
Figure 21b Laugna Verde Incised	.79
Figures 22a,b Never Delay Impressed	. 80
Figure 23 Minanha Red	82
Figure 24 Lucha Incised	. 83
Figure 25 Rosario Incised	. 82
Figure 26 Platon Punctated Incised	83
Figure 27 Martins Incised	. 87
Figure 28 Martins Incised	. 87
Figure 29 McRae Impressed	. 87
Figure 30 Kaway Impressed	. 88
Figure 31 Platon Punctated Incised	88
Figure 32 Belize Red.	. 88
Figure 33 Cayo Unslipped	90
Figure 34 Cayo Unslipped	90
Figure 35a, b Alexanders Unslipped	. 90
Figure 36a,b Tu-Tu Camp Striated	91
Figure 37 Late Classic torch holder	93
Figure 38 Pabellon Molded Carved	. 94
Figure 39 Pabellon Molded Carved	. 95
Figure 40a,b,c Augustine Red Supports	97
Figure 41a,b Augustine Red Supports	. 98
Figure 41c Papacal Incised	. 98

Figure 42a,b,c,d,e Paxcaman Red supports	99
Figure 42f Ixpop Polychrome support	99
Figure 43a,b,d Paxcaman Red supports	100
Figure 43c,e More Force Unslipped	100
Figure 44a Tohil Plumbate	102
Figure 44b SF 187 Spindle whorl	102
Figure 44c SF 49 Spindle whorl	102
Figure 45 SF 243 Ceramic Lid	102
Figure 46 SF 38 Ceramic Net Sinker	104
Figure 47 SF 79 Ceramic Net Sinker	104
Figure 48 SF 66 Ceramic Net Sinker	104
Figure 49 SF 67 Ceramic Net Sinker	104
Figure 50 SF 147 Ceramic Net Sinker	104
Figure 51 SF 121 Ceramic Net Sinker	104
Figure 52 SF 110 Ceramic Net Sinker	104
Figure 53 Whistle fragment (foot)	104
Figure 54 Mano Rectangular thick	112
Figure 55 Metate (turtleback)	112
Figure 56 Metate (turtleback)	114
Figure 57 Limestone Spindle whorl	114
Figure 58 Limestone Bark beater	114
Figure 59 Grooved Stone	118
Figure 60a,b,c,d,e jadeite beads	118
Figure 61 SF 218 Chert, stemmed biface	122
Figure 62 SF 181 Utility biface chopper	126
Figure 63a-t SF 28, 65, 213, 112, 24, 16, 111, 161, 214, 216, 206, 132, 133, 131, 1	34,
135, 207, 230, 39, 19 Obsidian blades	132
Figure 64 SF 238 Notched obsidian point	134
Figure 65 SF 13 Notched obsidian point	134
Figure 66 SF 226 Obsidian Laurel Leaf Blade	134
Figure 67 SF 200 Shell pendant	134
Figure 68 SF 235 Shell pendant	134
Figure 69 SF 105 Tinkler Shell pendant	134
Figure 70 SF 124 Antler hairpin/ pendant	134

34

#### CHAPTER 1

# HOUSEHOLD ARCHAEOLOGY: PROBLEMS AND ARCHAEOLOGICAL EVIDENCE

#### **1.1 Introduction**

During the 1999 field season, the Belize Valley Archaeological Reconnaissance Project (B.V.A.R.) continued excavations at plazuela groups in the Belize Valley. Previously, B.V.A.R. has focused on the excavations of several of these plazuela groups at Cahal Pech, Xual Canil, and Baking Pot. The focus of these investigations includes an attempt to learn about settlement morphology, and to understand household organization at the intra-site level (Awe 1999 personal communication). This report presents the results of preliminary investigations of the Yaxtun plazuela group, found 80 meters to the south east of Group I at Baking Pot. The purpose for undertaking excavations at this group included gaining a chronology of occupation, understanding the relationships between the structures, determining the status and wealth of the occupants, and gaining insight into activities undertaken at this residential group.

Although the author is a great proponent of complete horizontal excavation of household sites, excavations of the Yaxtun group were not excavated in this manner for a variety of reasons. The most important limitations during the 1999 field season were time and personnel. Because this senior thesis was due during the spring of 2000, we were forced to gain as much information as possible in a short amount of time. Despite the limited nature of our research, the investigations provided a wealth of data concerning the



evolution of the patio group, the social status of its inhabitants, and new information on Postclassic Maya communities in the Belize Valley.

Within the last 50 years, archaeologists have expended considerable effort on the study of Prehispanic Maya settlement patterns, on the excavation of the monumental architecture of civic centers, and on the analysis of ancient Maya social structure. Despite the many advances made by these studies, however, few researchers have concentrated on the detailed analysis of Maya households or the relationships between individual structures within smaller courtyard groups in site peripheries. Several reasons account for this research focus. Primarily, most settlement pattern studies have traditionally been biased towards macroscale analysis at both the site and intra-site level. The manner in which households have generally been excavated (test pitting) has, with the exception of chronology, yielded scant data regarding the occupation, status and function of peripheral populations. Maya archaeology has traditionally also concentrated on the fortunes and lifestyles of the elite while ignoring the "drab majority" (Rathje 1983). As a result, the value of household archaeology has yet to be fully appreciated by Maya archaeologists, and considerable work must yet be done if we are to improve our knowledge on the majority of the ancient Maya populace.

In order to understand household archaeology it is crucial that we first examine the theoretical paradigms related to this topic and review the ethnographic analogies that have been applied in archaeological interpretations of both single and multiple dwelling units at Maya sites. This chapter will therefore provide a short history of anthropological theory on households, and it will discuss the ethnographic evidence used in both the development of these theories and in the practical comparison of the cultural remains uncovered by archaeologists. Because archaeological investigations for this thesis were conducted in the Belize Valley, a review of previous household research in this subregion of the Maya area will provide a general background of past and present concepts of prehistoric households in this area.

#### **1.2 Theoretical Approach**

Anthropologists and ethnographers have formulated various theories about households in the Prehispanic past. Murdock (1949) believed that certain "rules" governed households and that these rules were influenced by economic and ecological factors. Unfortunately when his theory was applied to ethnographic studies (i.e., Eggan 1934 and Spoehr 1947), it could not be validated. Although his theory was determined to be fatally flawed, he was able to raise the question of "how the rules affecting households change- as opposed to how households change" (Ashmore and Wilk 1988:2).

In the 1950's, Fortes described households as entities along a fixed developmental trajectory determined by relations produced by factors, such as kinship, descent, marriage and citizenship (Fortes 1958:3). This development cycle model emerged as an attempt to explain why there was such a great deal of disparity in household organization attributing this variation to the social norms of a given culture (Ashmore and Wilk 1988). Ashmore and Wilk further note that "the importance of ordering households into cycles per se still does not explain the deeper origin of all observed variability, it does distinguish...the proximal factor of social and economic relations" (Ashmore and Wilk 1988:3).

Several different theories concerning household archaeology emerged between the 1950's and the 1980's although none were eventually accepted as adequate explanations. In 1955, for example, Chapman proposed that households were a reflection of social relationships that could be used to better understand social status. In a similar vein, Wolf (1968) maintained that the house is an indicator of political ties and ethnicity as well as social divisions within the household. Errington (1979), however, developed a much more hermeneutical theory. He saw the house as a text that archaeologists could read, and that these houses reflected the worldview of the culture in which it belonged.

One of the first definitions of households still used today was developed by Wilk and Rathje in 1982. They outline the term "household archaeology" as a focus on the domestic co-residential groups and attempts to reconstruct the activities occurring at these sites. These activities include (1) the production of food, artifacts, etc., (2) sharing and redistribution, (3) reproduction of people (biologically) as well as their culture and society, (4) transmission of goods and property to the next generation (Wilk and Rathje 1982). These four functions can be studied at a single point in time (synchronic) or through time (diachronic) (Sheets 1992). This attempt to focus on the activities of the members of a household would continue from the 1990's into the 21<sup>st</sup> century in the Belize Valley

In 1984, Wilk and Netting continue to change the theory of households towards the study of specific functions. They cited the commonly held belief that the household is not necessarily a "social unit bound together by kinship or other social ties" (Ashmore and Wilk 1988:3) but is fundamentally an activity group. Given this tenet, Wilk and Netting concluded that the entire notion of trying to understand households on the basis of their social structure is inherently wrong. Households should instead be studied with a focus on the activities of the group, not on the relations between particular individuals (Ashmore and Wilk 1988).

Ashmore and Wilk (1988) define the term "household" specifically as an activity group. They believe that a household is a "social unit, specifically the group of people that shares in a maximum definable number of activities, including... production, consumption, pooling of resources, reproduction, coresidence..." (Ashmore and Wilk 1988:7). With this recent shift in focus, archaeologists are now able to define households via the various functions members perform. Unfortunately, this type of study requires both extensive excavation of the platform and its surrounding area, as well as relying on the assumption that the activities that define a household can be found in the archaeological record.

In 1994, Richard Blanton's comparative study of households in Southwest Asia, Southeast Asia and Mesoamerica outlined a definition of households that is partly bound by all members engaging in specific activities and in part bound by correspondence, whether in a plaza group or in a single dwelling. His definition is simple and direct:

By *household* I refer to a group of people coresiding in a dwelling or residential compound, and who, to some degree, share householding activities and decision making (Blanton 1994:5).

Using this simple definition, Blanton's initial goal was to

develop and evaluate new methods for the measurement and comparison of wealth (or "standard of living") differences, applicable in social settings where monetarily based measures of income and per capita output cannot be derived" (Blanton 1994:186) Blanton's attempt to develop a specific understanding of "social indicators" indicates an important issue in household archaeology today. Inter- and intra- site comparison of households status through both construction of household platforms (and masonry architecture if found) and artifacts, has become a prevalent goal of archaeologists in the 1990's (see Moore 1999; Conlon 1993).

Blanton's definition challenges Ashmore and Wilk's belief that members of a household do not necessarily reside together. It should be noted however, that it is difficult, if not impossible to project a Western-constructed definition of households upon unknown people, given that at any time, a household's self-definition probably varied greatly among households and time periods. However, such attempts should not be abandoned in entirety. Understanding households as members that perform specific activities is very useful when studying ancient cultures where our only direct evidence of such groups lies in the remnants of these occupations. But archaeologists must proceed with the knowledge that this explanation is artificially constructed, partially for the convenience of understanding cultures where the most conclusions about such groups relies on the interpretation of excavated material.

Along with the definition offered by Blanton, a second view of households has been applied in the understanding of my research. This definition is offered by Hammel (also see Goldsmith 1993). He suggests that:

> A household, in fact, is the next bigger thing on the social map after an individual. It is a level in a taxonomy of social inclusion, more or less finely graded, according to the society. One can think of no society in which there is no level intermediate between the individual and the total society... thus the family is never the society, and the individual is never (by expectation) the household. Most often there is a range of social groups, more or less institutionalized between the individual and the community. ... The household in any society, I

suggest, is that social group larger than the individual that does not fail to control for its members all those resources that any (adult) member could expect to control for himself (Hammel 1984:40-41)

Goldsmith believes that Hammel's definition contains a single vital element, that of the individual being the smallest and most central component of a household. Goldsmith also suggests that understanding the "nature of societal activity thus becomes a question of analyzing the flow of information and material" (Goldsmith 1993) outwards from the individual toward society or from society towards the individual. In this situation, the household becomes the link between the individual and the greater society.

This theory generates a concept that is not merely an analytic tool for anthropologists but is a cultural entity with value to the participants themselves (Goldsmith 1993). Often contrary to previous theories, this image presents households as units with importance to the culture, not simply to create a convenient tool for the archaeologist in reconstructing past households. Goldsmith suggests that this point is important "because it means that in the archaeological record, household remains represent real statements (whether consciously expressed or not) of the relationship between individuals and their cultural surroundings" (Goldsmith 1993:14).

In the neighboring Peten Province of Guatemala, Tourtellot (1988a and 1988b) conducted extensive research at Seibal, focusing specifically on developing predictable patterns of development for housemounds that he excavated. Recalling Fortes' belief that differences between housemounds are a result of each house being at a different stage in their developmental trajectory, Tourtellot's theoretical approach was not unique but did prove useful.

Despite broad similarities with Fortes, however, Tourtellot developed three hypotheses to attempt to explain variability in plazuela groups at Seibal. The first theory (eventually discarded) was the explanation that plazuelas with more structures were the areas with greater functional diversity (Tourtellot 1988b: 99). His second hypothesis suggested that the variability of structures in plazuelas reflected social status among the occupants. Once again, Tourtellot believed that the archaeological evidence did not support this hypothesis. Tourtellot's third hypothesis argued that variability among plazuelas was probably a result of different developmental processes. His tests for this explanation incorporated factors such as an expectancy that larger plazuelas would be older than smaller ones, and that some structures within a plazuela would have a longer history than others (Tourtellot 1988b). This hypothesis was supported by the data, and continues to be in use.

In their study of household archaeology Wilk and Ashmore (1988) recently suggested that the terms household and dwelling should be considered separate entities. They argue that a dwelling can include a number of households or a household can be dispersed across a number of dwellings. The key to their approach is the idea that households should be looked at as activity areas, diverging from the traditional view of the importance of relationships between household members. By viewing households as activity areas, Wilk and Ashmore create a definition that is favorable to archaeologists. Using activity areas to define households creates the possibility for archaeologists to determine what functional relationships occurred between the occupants.

Goldsmith (1993) suggests households should be defined as communication areas as well as activity areas. He argues that communication refers to two slightly distinct notions. He believes that households are planned, "both physically and ideologically, in ways that serve to channel or restrict the flow of information into and out of the domestic locus" (Goldsmith 1993:39). Communication also refers to the meaning of material aspects of the household moving outward towards the rest of society. Although not a new concept, Goldsmith suggests that when archaeologists attempt to determine social complexity, they are examining the material correlates of these abstract ideas. He believes that we can interpret the messages that the Maya sent through "the built environment" to the occupants of the dwelling and visitors alike (Goldsmith 1993:39).

Ashmore and Wilk note two trends that have emerged as a result of attempts to define behavioral units and the ways in which they formed larger entities. The first is a move towards "seeking regularities and recurring types in the material remains of archaeology" (Ashmore and Wilk 1988:9). The second is a trend toward the application of ethnography and ethnohistory to aid in our understanding of the "kinds of units recognized by the cultures that originally occupied the sites" (Ashmore and Wilk 1988:9).

Any theory of household archaeology is difficult to apply to practical archaeological situations. How does the archaeologist read the "real statements" left by the Maya? Ceramic, obsidian, and chert caches are common, and according to this theory they can, and therefore should, be understood by the archaeologist. However, given our limited understanding of such finds, such a task is monumental. Instead of focusing solely on general theories, the archaeologist turns to ethnographic information to try to understand the messages left by the ancient Maya.

#### **1.3 Ethnographic Evidence**

One of the first ethnographic studies conducted in a conscious attempt to help archaeologists better understand household remains was the work done in the 1930's by Wauchope. According to Wauchope (1938:1),

> ...excavation of house mounds at the ruins of Uaxactun, Guatemala, in 1932 made it clear that very little information, except upon certain features of the substructures, could be gleaned from excavation without some examination having first been made of modern houses and the way in which they fall to pieces.

Wauchope subsequently produced a very detailed description of the materials and techniques necessary to build a typical Yucatan house. While he did not discuss questions of social structure, his most important contribution to household archaeology lies in his comparison of modern Maya houses with those from the archaeological record. He also noted that one of the most challenging problems in household archaeology had to do with determining chronology. He cautioned that houses might have been used for less time than we are able to determine on the basis of ceramic typologies that often remain unchanged for hundreds of years. This criticism further questions the validity of population estimates that rely on chronologies that are predominantly based on the relative dating of ceramics. This critique remains as valid today as it did sixty years ago and has yet to be adequately addressed by the settlement archaeologist.

More recent ethnographic research has been done in the highlands of Chiapas by Evon Vogt (1990, 1967) in a 30-year study of the Zinacantecos. Although Vogt's work is not focused on households, his observations can contribute to our knowledge of modern Maya dwellings and household groups. He makes many observations of the materials used in the building of houses, and of the activities that occur in the direct vicinity of the dwelling. He notes that corn is still ground with the *mano* and *matate* and that these grinding stones are relatively valuable in this region. As a result of the lack of granite in the area, each household typically had only one set.

Vogt also describes the activities that join the members of a household. He claims that the defining feature of a household among the Zinacantecos is the dependence of the members on one source of maize. All the male members of the household would cultivate one field together and the maize would stored for use throughout the year. Each person within a group has a specific job and although it is common for a household to consist of a single dwelling with only a nuclear family, it is equally common for a household to consist of more than one structure around a plazuela group, with extended family sharing in family activities (Vogt 1990). Although it is impossible for archaeologists to determine if an ancient Maya household all depended on one source of maize, it provides a new possibility for those studying household archaeology in the Maya area.

Michael Deal (1985) has also undertaken research in the highlands of Chiapas. Deal's work is unique in that it involves his analysis of household artifact assemblages as well as house structures and distribution. He focuses on documenting patterns of behavior which result in the deposition of cultural materials in predictable ways. Deal anticipates that by determining these behavioral patterns, it will allow archaeologists to determine what triggered particular materials and caches in prehistoric times.

Deal suggests that his ethnographic evidence points to much of the deposition occurring at points outside of the main building and that archaeologists are erring in placing their focus so squarely on the physical dwelling. He recommends that more excavations should be placed in patios and other adjacent areas where he believes most of the diagnostic material will be found.

Ethnographic analogies can be used to better understand many patterns of settlement in the prehistoric past, but they must be used with certain cautions. Ethnologists have noted that households display regional variation in contemporary settings, as they presumably did in the prehistoric times. As important as spatial variation, is the change that occurs throughout time. Studies of Maya households must focus not simply on the area these dwellings are located, but on the periods that they were occupied.

#### 1.4 Previous Household Research in the Maya Lowlands

Household archaeology has its roots in settlement archaeology, which studies the distribution of archaeological remains across the landscape (Willey 1953). The study of settlement archaeology "arose from cultural ecological anthropology in the Americas, and environmental and landscape archaeology in Europe" (Ashmore and Wilk 1988:7). This research led archaeologists to note that temples and palaces were not the only important architectural remains left from the ancient Maya and that by only studying the elite, they were acquiring a lopsided view of the prehistoric past. Equally important, were "studies of the smaller but more numerous places where people lived, worked, and died" (Ashmore and Wilk 1988:7).

It has been suggested that household archaeology in the Maya area began in the 1960's, with Gordon Willey's (1965) settlement research in the Belize Valley. However, it should be noted that research focusing on households actually began in the late

nineteenth century. Willey notes that in the 1890's, E. H. Thompson concluded that the hundreds of small mounds surrounding Labna were housemounds (Willey 1965:7). Others began to excavate housemounds in small numbers at the end of the nineteenth century and in the early part of the twentieth century. Byron Gordon (1891) excavated a housemound at Copan, Eduard Seler (1901) described household platforms from Uaxac Canal, and Hewlett (1912) noted households near the site core at Quirigua (Willey et al 1965:7). Clearly, however, these excavations and observations were neither systematic nor thorough.

The first detailed settlement survey in the Maya lowlands was conducted by J. E. S. Thompson in 1928-1929 in the Southern Cayo District of Belize. Although by no means exhaustive, Thompson was one of the first to note the research potential of household archaeology to the study of Maya archaeology. Working in central Belize, Thompson attempted to explain the spatial and temporal similarities he noted among several small sites in the area. Contrary to the focus of excavating large monumental architecture at that time, Thompson argued that "the small residential mounds offer much greater possibilities of a reconstruction of Maya history than do the ceremonial centres" (1931:336). This notion that the study of these housemounds was important was a first step in creating an interest in what was thought to be an unrewarding topic of study.

Specifically important to this thesis is a domestic arrangement or group of mounds that were referred to as "plazuelas" by Thompson,

They are as a rule roughly square in shape, and are in most cases located on the tops of small natural hillocks. The original builders appear to have chosen these small hilltops and extended them by piling round them masses of stone and rubble up to two or three feet higher than the natural level of the summit. The whole was then leveled off, forming, on a small scale, a typical Maya plaza... On top of these platforms were erected small oblong or square mounds, which were invariably placed on the edges of the platforms. In some cases the mounds occupy all four sides of the platform. On other cases only two sides or three sides are thus treated... There is no evidence as to the purpose these mounds served, but presumably wood and thatch buildings formerly stood on top, and they were nothing more than house substructures. (Thompson 1931:233-237)

This type of group has been documented at archaeological sites throughout the Maya Lowlands and is commonly found in modern Maya communities. There is also a general assumption that the structures in a modern Maya community reflect similar counterparts in ancient settlements. Although Thompson's definition of a plazuela group provided one of the first physical descriptions of this settlement unit, it nevertheless left many questions unanswered (e.g. did all structures in a plazuela serve similar functions?). These questions are addressed by Ashmore (1981) where she more clearly defines these dwellings. In her work (to be discussed later in this chapter) she defines these "patio groups" based on the size, number and function of each mound.

The 1950's saw a gradual increase in settlement surveys in the Maya lowlands. The Carnegie Institution project at Mayapán (Smith 1962:264-269), for example, noted that "dwelling" structures occurred as "single, isolated structures, but many were in groups of two, three or more, arranged around little plazas or plazuelas" (in Willey et al. 1965:11). Unfortunately, limited information regarding specific construction techniques, or about the artifacts associated with the housemounds, was provided by the excavators.

Bullard (1960:357) was perhaps the first to suggest "the great abundance of the small ruins which, as a group, are classed as house ruins leaves no doubt that the majority were, in fact, the residences of the common people." This statement has been severely

criticized as being far too simplistic (e.g. Goldsmith 1993; Haviland 1985:98; Tourtellot 1988:264) since it overlooks two fundamental problems. 1) It can not be assumed that all mounds are residences (as opposed to kitchens, shrines etc.); and 2) it can not be assumed that all residences were built on raised platforms. Although Bullard received such criticism for his statement, he was not entirely incorrect.

The "principle of abundance" is based on the premise that the large number of small mounds in the Maya area must have served as residences. Although archaeologists no longer believe that all of these small mounds are residences, most probably did serve some residential function (e.g. kitchens, family shrines). Currently it is believed that the truth lies somewhere between the two extremes (Goldsmith 1993:22).

It was with this limited knowledge of households, that Willey, Bullard, Glass and Gifford began to define their goals for a settlement survey in the Belize Valley in the 1950's. Willey and his colleagues subsequently performed one of the first systematic excavations of housemounds in the Maya lowlands, attempting to "open the way to more realistic interpretations of the intangible aspects of old Maya life" (Willey et al. 1965:5). To achieve this goal, Willey et al. (1965) set out with a number of "problems" including current questions of interest to household archaeologists. They hoped to ascertain "the relationship of aboriginal occupation to natural environments; the nature and function of buildings composing habitation communities... Fundamental to all of this is, of course, the consideration of all of these problems in chronological perspective" (Willey et al. 1965:15).

Although many of population estimates for sites in the Belize Valley produced by Willey et al. have since proved to be inaccurate, their research contributed greatly to the study of household archaeology. Particularly commendable were their compilation of a household artifact assemblage and their new perspective on the nature of demographic growth and decline in the Maya lowlands. Through their work at Barton Ramie and Benque Viejo, Willey and colleagues were able to propose when populations increased dramatically (during the Late Classic at Barton Ramie) and when the settlements began to undergo decline. As noted by Goldsmith (1993) "Suddenly our developmental view of the Classic Maya became significantly altered, but only as a result of a shift in our perspective... Willey's survey suggested strongly that there were social data (diachronic or otherwise) *not* visible using traditional sources". Willey, Bullard, Glass, and Gifford's (1965) comprehensive study of the Belize Valley has withstood the test of time and is still a benchmark for understanding the Belize Valley today.

Since the 1960's, the study of household archaeology has continued to gain momentum in the Belize Valley. More meticulous excavations, covering greater areas in and around the structures have, at the very least, become the objective. In 1986 Ball and Taschek championed the theory of extensive excavations. Working at the residential suburb of Guerra, located at the site of Buena Vista, they conducted complete horizontal excavations of one isolated mound and six plazuela groups, all with associated middens and plazas, as well as testing fifty other mounds in the site. Their excavations were so thorough that seventy-three percent of visible surface features were sampled (Ball and Taschek, 1986). Such clearance should be commended, as far too often limited resources and funding prevent such comprehensive excavations. Due to their large-scale excavations of households, Ball and Taschek were able to designate certain artifacts as status indicators (i.e. olive-shell "tinklers," pendants, medallions, jadeite etc.). Such information is indispensable in the determination of the status of households in the preliminary stages of investigation.

Much of this research methodology provides the basis on which current research in household archaeology is conducted. In the 1990's there has been an increase of household investigations in the Belize Valley, including research conducted by the Belize Valley Archaeological Reconnaissance Project (B.V.A.R.) and the Xunantunich Archaeological Project (X.A.P.) These projects are currently using and perfecting the theories and approaches developed during the past thirty years.

#### 1.5 Current Research in Household Archaeology

The Belize Valley Archaeological Reconnaissance Project has been investigating households along the Belize River for a decade. Beginning in 1990, Awe and his colleagues (1990, 1991, 1992, 1993, 1994, 1995, 1999) conducted the excavation of six patio groups at Cahal Pech, and three at Baking Pot. They note that most formal plazuela groups represent, to a large degree, microcosms of site cores. They add that patio groups with four or more mounds are generally composed of one or more structures that probably functioned as residential units, a structure (generally located on the east) representing family shrines and other low lying structures that served as kitchens, workshops or for storage. Another research interest of the BVAR project is an attempt to determine the status of households that occupied formal patio groups. Does quality of architecture, access to exotic materials and proximity to the site core reflect wealth, status and levels of autonomy? Other interests address reasons for the variability among

plazuela groups in terms of spatial configuration, structure type, structure size and function.

Elsewhere in the Belize Valley, Anabel Ford's (1992) BRASS project has been analyzing settlements between the large center of El Pilar and the Belize River since 1983. The BRASS project focuses attention on settlement patterns and the relationship between sites and the natural terrain (Ford and Fedick 1992). Ford also has excavated trash middens and a random sample of residential structures. She contends that the Belize Valley was more densely populated than the central Peten lakes region and the Tikal core areas, but that settlements of the Belize Valley differ in their configuration. Ford and Fedick note that 80% of the housemounds they surveyed in the Belize Valley were solitary mounds, while in the Tikal core areas, only 30% of mounds are solitary. Ford and Fedick have also used labor estimates to suggest the overall wealth of the occupants of each structure, based on the area and the height of the mound. Although this procedure is not without its criticisms (see Goldsmith 1993), the attempt to determine the status of household occupants has been a goal of many projects in the 1990's.

In contrast to the use of survey and sampling data to determine the status of households, Joel Palka (1997) believes that the only way to retrieve data about a dwelling is to complete extensive excavations of such mounds. At Dos Pilas, residential mounds were chosen according to size and structural configuration. Such selection (on the basis of ethnographic information) was done to ensure stratified artifactual information to reconstruct different socio-cultural segments of Maya society. The results of the excavation at Dos Pilas led Palka to suggest "the existence of a dynamic and multifaceted Maya social inequality, and not a two/three class/strata model" (Palka 1997).

Such evidence leads household archaeologists to be wary of using such words as "elite" and "commoner," particularly because these terms are constructions of western society and may not apply to the Maya.

Possibly the most ambitious household project in the 1990's was the Xunantunich Archaeological Project (XAP) co-directed by Wendy Ashmore and Richard Leventhal. XAP's research goals are incredibly far-reaching and yet very focused, given that Ashmore was attempting to gain the "broadest feasible understanding of ancient Maya settlement and society in and around Xunantunich" (Ashmore 1997). To achieve these goals, excavations were conducted at the San Lorenzo group (Yaeger 1994, 1995, 1996 and Chase 1992, 1993) over a 5-year period. Yaeger, who is using this information for fulfillment of his Ph.D. research, is attempting to understand the internal divisions with this small ancient village, and to understand how this small grouping related to the site of Xunantunich. Much of his focus is on the interrelations and divisions during the Late and Terminal Classic transitional period at the site of Xunantunich.

Following the investigations at San Lorenzo, Cynthia Robin (1996, 1997) began to focus on the "rural hinterland" during the 1995 field season. While surveying this area, she found remains of what appeared to be a large number of single-period sites. Curious about the nature of these structures, she began a long-term project to determine what residential activities took place at these structures. Ashmore suggests that the quick halt to the development of these structures could shed light on the viability of the development and function of this area (Ashmore 1996).

Both groups of excavations bring different questions to the study of Xunantunich, but both continue to focus particularly at the household level. Such specific projects can provide examples of a variety of household groups (including artifacts) which are essential for understanding the Maya of the Belize Valley. This increase of understanding has aided researchers in planning excavations and in lab analysis of household artifacts. The increased attention on households will only aid archaeologists in better understanding the Maya, from the lowliest commoner to the ruling elite class.

#### Conclusion

The proceeding discussion has noted that despite the major strides in the study of Maya household archaeology there is still considerable work left to be done in our effort to understand the majority of the people that made up this Precolumbian civilization. The research conducted at the Yaxtun group at Baking Pot reflects new efforts to this end. It is our hope that a thorough assessment of the artifact assemblage, architecture, and settlement patterns we will be able us to determine not just the function of individual structures but also the status of the inhabitants and their relation to the general populace at Baking Pot.

Chronological data should also shed light on the evolution of formal patio groups. In particular it should help us ascertain whether the formal groups began as single structures and later formed courtyards groups by the subsequent construction of additional structures. In particular, comparison will be made with two other excavated patio groups at the site of Baking Pot.

Although many of the theories discussed in this chapter have been challenged or refuted in totality, the contribution of all work focusing on household archaeology should be applauded. Instead of focusing research on temple/pyramids that would certainly yield polychrome vases for museums and monumental architecture for consolidation and tourism, these researchers are focusing on life experiences of the "everyday" Maya commoner. Through some of the earliest conclusions and theories may no longer be considered valid, such research provided both a platform for others to work from, and inspiration for a new generation of Maya archaeologists.

#### **CHAPTER 2**

#### **CULTURAL AND ENVIRONMENTAL SETTING OF BAKING POT**

#### 2.1 Site Location and Environmental Setting

#### Location

The site of Baking Pot is located on the southern bank of the Belize River, 8 kilometers northeast of San Ignacio town and five kilometers upstream from Barton Ramie (Figs. 2 and 3). It is one of several civic centers found along the upper Belize River valley (Willey et al. 1965) and is relatively equidistant from Cahal Pech to the southwest and Blackman Eddy to the east. Unlike most other sites in the area, however, its location on grazing land owned by the Belize Government has protected the site from looting.

#### Environment

Baking Pot is situated on a relatively flat alluvial plain, overlooking the banks of the Belize River. At the height of the rainy season (July to November), and particularly during tropical storms and hurricanes, the river can rise up to 10 meters above dry season levels (Awe 2000, personal communication). On these occasions low-lying areas around Baking Pot become inundated. That this may have occurred in the past is suggested by a system of ditches that appear to have served as water management systems around patio groups such as Bedran (Awe 2000 personal communication). It should be noted however that the actual prehistoric channels of the river are unknown (Willey et al 1965:23), thus



Figure 2: Map showing the location of major sites in Belize.
it is possible that the river may have been farther north of the site beyond its present location.

Under natural conditions, Baking Pot would be surrounded by tropical forest. Because of the proximity of the river, the site would nevertheless contain specific species of plant and animal life not found in the hilly limestone country to the south. The plants specific to this alluvial plain include cacao (*Theobroma cacao*), bribri (*Inga edulis*), and fig (*Ficus radula*) (Awe 1992:51). All of these plants are water-loving and are known to have been exploited by the Maya for local consumption and (in the case of cacao) for trade. Specific species of terrestrial animals that are found along the river banks include howler monkeys (*Alouta villosa*) and tapirs (*Tapirella bairdi*). The aquatic animals include large and small fish, freshwater molluscs, crustacea, iguanas (*Iguana rahinolopha*), turtles, and crocodiles (*Crocodylus moreletii*) (Awe 1992:51-52).

## 2.2 Cultural Setting

The Upper Belize Valley "exhibits relatively high settlement density" (Ford 1990a:7) compared to other sub-regions of the central Maya Lowlands (Awe 1992:53). Indeed, the valley contains a large number of major and minor centers with both dense and dispersed settlements surrounding the site cores (Awe 1992). The large centers around Baking Pot are Black Man Eddy to the east, and Pacbitun, Cahal Pech, El Pilar, Buena Vista, and Xunantunich to the west (Awe 1992:53). With the exception of El Pilar, most sites in the Upper Belize Valley are similar in size and site core layout (Awe



Figure 3: Distribution of Archaeological Sites Along the Upper Belize River Valley (After Awe 1992)

1992:53). Like Baking Pot, these sites include multiple site cores that contain nondomestic structures built in clusters around plaza areas (Awe 1992:53).

The closest major centers to Baking Pot are Pacbitun, Black Man Eddy and Cahal Pech. Baking Pot and Cahal Pech are only 10 kilometers apart, but if water transportation was relied on, the sites would be approximately 15 kilometers apart (Awe 1992:54). The site of Black Man Eddy is approximately 11 kilometers from Baking Pot, but because both sites are along the Belize River, it would probably have been easier to travel by river for 14 kilometers. The site of Pacbitun is 12 kilometers from Baking Pot, but if communication between these sites relied on both river and land travel the actual distance separating them could have been about 22 kilometers.

#### 2.3 History of Archaeological Research at Baking Pot

The first significant archaeological investigations at Baking Pot were led by Oliver Ricketson of the Carnegie Institution in 1924. Focusing entirely on Group 1 (Fig. 1), Ricketson trenched Structure G in an attempt to find cut stone architecture, ceramics to date the site, and grave goods fit for display in an American museum. He also cleared the adjoining structures, M and J, and placed a few small units in Structure B and Structure E. A small mound (Mound I) was also excavated because Ricketson (1931:5) felt that the workmen needed some archaeological experience prior to excavating the larger structures.

Mound I was found to "reveal nothing of importance" (Ricketson 1931:5). Although a cutstone retaining wall about 60cm high surrounded the building, no



limestone floors were found and few artifacts were recovered. Ricketson further noted that "trenches through the retaining walls into the center of the mound revealed no burials or other features of importance" (Ricketson 1931:5). Instead of the "quality" artifacts he hoped to recover, he discovered "a broken maul, a few course sherds, and a few flints" (Ricketson 1931:5). Failing to recover the types of materials he sought, Ricketson shifted his attention to the larger mounds in Group 1.

During the initial trenching of Mound B, no masonry architecture was found. This held true for all of the structures excavated by Ricketson at Baking Pot, with the exception of Structure G, (Ricketson 1931:5). His investigations of the latter mound led Ricketson to suggest that Structure G was a burial mound because of the numerous burials he encountered and not "a substructure for a building, [as] is indicated by the even slope of its sides up to a maximum height at the center, and by the absence of worked stone or any evidence of building foundations on the top" (Ricketson 1931:7).

Although Ricketson believed that Baking Pot had a large population from the "almost innumerable house-mounds with which the clearing is dotted" (Ricketson 1931:24), he maintained that Baking Pot was never a major Maya center. He came to this conclusion based on what he thought was the lack of stelae at the site (an assessment recently proven incorrect) and because of the "relatively small size of the plazas, when compared to those of the more important Peten sites; and also the general absence of cut stone either for temples or veneering" (Ricketson 1931:25). Because of the limited nature of his work, Ricketson was also unable to establish the temporal extent of occupation at the site. Unfortunately, he also failed to backfill his excavation trenches thereby allowing rain and the elements to hasten the erosion of already fragile structures.

In 1949, in response to reports that the monumental structures in Group II were being threatened by construction crews in search of road fill, A. H. Anderson cleared the retaining walls of the primary structure in the southern section of the site core. Unfortunately, Anderson never published any information on his work so we know little of the information he may have collected at Baking Pot.

Several years later, Gordon Willey of Harvard University conducted limited research at Baking Pot during the spring of 1956. Willey's investigations, however, did not focus primarily on the site but were part of a larger regional (Belize Valley) settlement study with primary interests in small site of Barton Ramie. Willey's research at Baking Pot consisted of four test excavations for the purpose of "obtaining stratigraphic pottery samples and examining the vertical structure of some of the small, house-type mounds which in outward appearance are identical with those at Barton Ramie" (Willey et al. 1965:305). Three of the test units were in housemounds, about 100 to 200m west of Group 1. The fourth test unit was placed in the center of Plaza 1 in Group 1 (Willey et al. 1965). In contrast to Ricketson's efforts, Willey was able to propose a chronology for prehistoric Maya occupation of the site. He noted that ceramic remains suggested that the site was occupied from the Late Preclassic Period through the Early Postclassic (300 B.C. – A.D. 1200), with most of the monumental construction occurring during the Late Classic (600-800 A.D.) period (Willey et al. 1965).

Following Willey's limited excavations at the site, William and Mary Bullard of the Royal Ontario Museum conducted a single season of investigation at Baking Pot in 1961. At this time the Bullard's focused specific attention on Group II of the site core, excavating on Structure II-A, Structure II-D, and the Group II ball-court (Bullard and Bullard, 1965). The aims of the 1961 excavations were threefold. First, they sought to "obtain a collection of exhibitable artifacts well documented by provenience" (Bullard and Bullard, 1965:11). Secondly, Bullard and Bullard wanted to excavate Structure A, to determine the construction of the building and to "test the mound core …in the hope of bringing to light any buried construction or caches" (Bullard and Bullard 1965:11). The third goal of the 1961 excavations was to clarify the wall lines of Structure A, but this goal was thwarted due to complex rebuilding phases as well as the fact that some portions of the temple had been removed by the quarrying operations in 1949 (Bullard and Bullard 1965).

The Bullard's excavations noted that Structure A rose 17 meters above the plaza floor and that it probably did not support a vaulted superstructure. Excavations also revealed two rooms near the base of the pyramidal structure. Bullard and Bullard refer to these rooms as "small shrine or oratory rooms" (Bullard and Bullard 1965:12). Room one was built at the base of the structure, while room two is slightly above room one, at the base of the main stairway (Bullard and Bullard 1965). The Bullards suggested that the rooms may have been buried by modifications during the last occupation phase (Bullard and Bullard 1965). They further suggested that although Structure A was modified often, it was exclusively built in the Late Classic, primarily during the Spanish Lookout phase (A.D. 700-900).

Almost thirty years after the Royal Ontario Museum's research, the Belize Valley Archaeological Reconnaissance Project began investigations at Baking Pot in 1992. The project initially focused attention on a peripheral plazuela group, known as Bedran, located about two kilometers west of the site core (Conlon 1993). The primary goals of this operation were to acquire data that could be used for studying the development of the plazuela group and secondly, "provide a basis for intragroup comparison" (Conlon 1993:188). During these investigations, Conlon found evidence for occupation aspanning from the Early Classic to the Late Classic period, after which the site was abandoned (Conlon 1993).

Other investigations at Bedran focused specifically on the eastern mound of the settlement in an effort to determine the function of the structure (Powis 1993:212). The discovery of several burials and caches along the primary axis of the mound subsequently led Powis to suggest that the structure may have served as a family shrine. Beside the burials and caches this possible function was also supported by the presence of "rare architecture in the form of a round platform, the number of associated features, and the quantity and quality of ritually deposited artifacts" (Powis 1993:220). The location of family shrines on the eastern side of plazuela groups is a relatively common feature in the Maya lowlands (Powis 1993) thus suggesting that the configuration of the Bedran Group reflected this lowland tradition. The eastern shrine, along with the other structures in the plazuela, appear to have been initially constructed during the Early Classic with modifications and use extending into the Late Classic period.

Work at Bedran continued during the 1993 field season, and in 1994 the causeway connecting Group I and Group II of the site core was tested in an effort to determine it's date of construction. Excavations by Cheetham (1995) suggested that the causeway was built during the Spanish Lookout phase of the Late Classic. In 1995, Conlon tested two mounds flanking the southern entrance of Plaza 2 in Group I to ascertain whether the two structures (Mounds E and F) formed a ballcourt (Conlon 1996). Previous research had

noted two courts at the site, one to the north of Group 1 and another at the western entrance to Group II. During preliminary investigations by the BVAR Project in 1994, Awe (personal communication) noted that the southern access to Group I appeared to be flanked by two structures of similar size and north/south orientation and suspected that the structures probably represented a previously unrecognized ball court. Conlon's investigations were an attempt to validate Awe's assumption. Following his investigations, Conlon concluded that the two structures did indeed appear to form a ballcourt, but due to the limited nature of the excavations, little could be said about the actual style of the architecture.

During the 1996 field season, research focused on the monumental architecture in Plaza 2 of Group 1 (Awe 1997; Aimers 1997) and on another formal patio cluster known as the Atalaya Group (Moore 1997). Since that time, work at Baking Pot has continued, with the focus of excavations shifting from monumental architecture to the study of household archaeology. In 1997 Moore conducted a second season of study at Atalaya (Moore 1999), and during the 1997 and 1998 field seasons, Piehl focused on excavating two separate housemounds at the site (Piehl 1998, 1999). Both found evidence for cultural activity spanning from the Early Classic to the Late Classic periods.

Currently, excavations at Baking Pot are focusing on settlement and households in the periphery of the site. The work at Baking Pot has provided investigators with a taste of what could be discovered if large scale excavations were undertaken. Continued excavation of plazuela and single house mounds will continue in the coming years, and perhaps in the future, investigations of the monumental architecture will be undertaken.



Figure 5: Map of Baking Pot

## 2.4 Site Description

Baking Pot shares several general similarities with other centers in the Belize Valley (Willey et al. 1965:301). The site core is composed of two main groupings that "follow the familiar Maya pattern of large temple-pyramids and range structures defining interconnected plazas" (Aimers 1996:21). Group I is on the northern side of the site, and is closer to the banks of the Belize River. Group I is comprised of three main plazas surrounded by relatively small structures. Group II has only a single plaza area, but the buildings are taller (Structure A is 17m tall) and more imposing (Aimers 1996:21). Both groups are also connected by a sacbe (or causeway) that is approximately 15 meters wide and 300 meters long and are surrounded by numerous housemounds (Ricketson 1931).

Although smaller than the major sites in the Maya lowlands, Baking Pot is one of the larger sites in the Belize Valley (Willey et al 1965:301). Within Group I, Plaza I is at the western most side is the lowest, with Plaza II approximately three meters higher while Plaza III is slightly higher than Plaza II (Ricketson 1931:3). All plaza levels correspond to the general contour of the land indicating that they were not built up a great deal (Ricketson 1931).

Plaza I is comprised of two mounds; Structures A and B. Located on the western edge of the courtyard, Structure A stands 7 meters tall. On the eastern edge of Plaza I (western edge of Plaza II), Structure B stands 13 meters high (Ricketson 1931:3). Plaza II is enclosed by Structure C on its northern side and Structue B on its western edge. Structure C is a long-range building that is lower on its eastern side than on the west. The southern side of the plaza is restricted by Structure F, a long rectangular mound (Ricketson 1931:4). The eastern side of the plaza is bounded by Structures E, M, and an undesignated structure to the south. Together it is possible that these three interconnected mounds may represent an E-Group configuration.

An E Group is defined as a single pyramidal structure, often quadrilaterally symmetrical, faces a tripartite structure to the east. The orientation of the assemblages is hypothesized to be such that the sun rises behind the southern structure on the winter solstice, behind the northern structure on the winter solstice, and behind the central eastern structure on the summer solstice. (Aimers 1996:24)

Plaza III contains six structures, three on the north, one on the east, and two on the southern edge of the plaza. On the northern, eastern and southern edges of the plaza, low terraces lead to the natural ground level. Structure E is located on the western edge of the plaza and is a relatively high mound measuring 13 meters tall. Three low structures were located on the northern side of the plaza, Structures M, G, and J respectively. Structure H is a long range building on the southern edge of the plaza, while Structure I is found attached to the eastern end of Structure H, off the main plaza area (Fig. 6).

Group II is made up of a single plaza grouping, although the structures are larger and more dominating. The largest structure at Group II is Structure A on the eastern edge of the plaza. The mound stands 17 meters high. To the north of Structure A is Mound B and to the south is a long range building (Structure F) that extends the length of the plaza. Structure D connects Structures A and E and together with Structure B enclose a small elevated patio with restricted access (Fig. 5).

Three structures are located at the western edge of the plaza. These include Mound C, a long range structure, and two smaller mounds that form the Group II ball court. Two other ball courts are located at the site. One of these is situated in Group I, between Structure F and Structure E and may have also served as one of two entrances to Plaza II. The third ball court is located approximately 50 meters north of Group I. Interestingly, both of the Group I ball courts have a north-south orientation while that in Group II is oriented east to west.

Five reservoirs (four large and one small) were found near the site core at Baking Pot. One large reservoir (approximately 100 m in length) was located directly south of Group I, while two (80 m and 40 m in length) were located near Group II. A fourth large reservoir (50 m in length) was found about 200 meters southeast of Group II. The small reservoir (less than 20 m in length) was located less than 60 meters southeast of Group I.

## 2.5 Description of the Yaxtun Group

During the 1999 field season, excavations focused on the Yaxtun Group. The Yaxtun Group is located approximately 80 m southeast of Group I (Figure 6). This group consists of three, possibly four, structures oriented in a north-south direction. Structures 198 (to the north) and 199 (to the west) were the focus of the investigations during the 1999 Field Season. The three structures are laid out in a U-shaped, partially enclosed arrangement. This configuration is noted by Deal in ethnographic studies (1985:247). He notes that "the basic household compound consists of a house, kitchen, and sweatbath arranged around a patio work area." Although our excavations did not reveal the remains of either a specific kitchen or a sweatbath, the configuration of structures is the same as at the Yaxtun Group. Sutro and Downing note that "as buildings are added to a house lot, dwelling structures will tend to form a U-shaped or enclosed patio configuration." (1988:39 cited in Goldsmith 1993:143).

Because of the limited nature of excavations at the group, the only structure for which we have architectural dimensions is Structure 199. The length of the structure was



Figure 6: Map of the Northern Periphery of Baking Pot, including Group I and the Yaxtun Group



# Figure 7: North-South Profile of Yaxtun Group

8.4 meters, and the width was 6 meters, although the actual platform the house stood on was 6.4 meters in length and 6 meters in wide. Structures 198 and 199 joined at the northwestern corner of the group, limiting access to those coming from Group I.

The Yaxtun group is approximately 80 meters southeast of Group I and 300 meters northeast of Group II. It is possible that there is a causeway between Group I and the Yaxtun Group (it was initially surveyed as connected to one) but upon careful examination of the area, it appears that it may be simply be an old river channel. Regardless of whether the causeway linked the Yaxtun Group and Group I, the size of the group and its Classic period architecture reveal that the occupants of the house probably enjoyed a great deal of status.

The two other residential groups that have been previously investigated at the site of Baking Pot are farther away from the site core, and both are slightly larger. The Bedran Group is located approximately two kilometers west of Group II. The architecture was larger and more elaborate than the Yaxtun Group, and the artifacts uncovered were of more elite status. Objects such as eccentric flints and polychrome vessels were uncovered in the eastern shrine structure. The Atalaya Group, similar in style and size to the Yaxtun Group, is about 250 meters south of Group II. The Atalaya Group contained similar artifacts to the Yaxtun Group, with both groups appearing to be occupied by members of the upper class.

# Summary

Located on the Belize River, the site of Baking Pot was a medium sized Maya center that flourished during the Late Classic period. Although limited investigations of Baking Pot have been conducted, much is known about both the site core and some surrounding residential mounds. The Yaxtun Group is one of the largest residential groups at the site, and investigations uncovered a wealth of information. In the next chapter, these investigations will be discussed in greater detail. Excavations revealed the dates of occupation, the wealth of the occupants, and enabled investigators to determine the construction techniques of both structures studied.

#### **CHAPTER 3**

# **RESEARCH METHODS: EXCAVATIONS AT THE YAXTUN GROUP**

#### **3.1 Excavations: Sampling Techniques and Procedures**

During the 1999 field season, two structures and the plaza area of the Yaxtun Group were excavated by the Belize Valley Archaeological Reconnaissance Project. The two mounds that were excavated were chosen because they appeared to have less disturbance from modern activities such as plowing and because surface collection suggested that they may have evidence of Postclassic activity. Because they were the largest mounds in the patio group it was also hoped that these structures would produce a long sequence of occupation which could shed light on the temporal development of formal patios at the site of Baking Pot.

The Yaxtun Group (or plazuela) is located approximately 80 meters southeast of Group I (Fig 8). The plazuela consists of three, possibly four, structures, roughly aligned with the cardinal directions. Structures 198, 199, and 200 all resemble large building platforms. After clearing the foliage over the mounds it was noted that a fourth, very low platform was very likely located at the eastern end of the patio. Because time did not permit confirmation of the presence of this structure by excavations, no numerical designation has been given to this possible mound. Only the northern and western structures were tested during the 1999 season, with the southern structure and the possible eastern structure left unexcavated.

A few weeks before the field season began, both the Yaxtun Group and the surrounding area were plowed for the planting of papaya. Fearful that damage had been



Figure 8: Map showing the placement of excavation units.

done to the terminal phases of the larger structures in the area, we decided to place excavation units on Structure 199 to strip humus and collapse debris that covered the front of the architecture. These investigations served to provide information that could be used to understand the terminal phase architecture. Also, to gather data regarding the chronology of the group, a trench was extended from the plaza area into Structure 198, and one "telephone booth" style unit was placed in Structure 199.

Several other excavation units were subsequently opened at each of the two mounds in an effort to recover a maximum amount of data in the one field season (Fig 9). In each structure and the plaza, a single unit (ranging in size from 1x1m in Str. 199 to 2x2m in 198) was excavated until sterile soil was reached to gain a better understanding of the plazuela chronology. Other units were placed to clear the terminal and penultimate phases of architecture but did not continue to sterile levels. Most units were initially excavated to expose as much architecture of the structure as possible. Levels were defined by cultural layers such as plaster surfaces or clay tamped floors. The results of this research are presented below.

#### 3.2 Excavations at Structure 198

This range-type structure is 2.8m in height and represents the tallest mound at the Yaxtun Group. Located at the northern end of the plazuela, its location contrasts with that of the largest structures both at the Bedran Group and at the Atalaya Group. At both of these previously-excavated formal plazuela groups at Baking Pot, the largest structure was located at the southern edge of their respective patios.

Our initial survey of the Yaxtun group (at the beginning of the season) suggested that there may have been some damage to Structure 198 on its eastern side. This area had



Figure 9: Map showing excavation units on Structures 198 and 199



Scale I cm i to cm



**Plaster Plaza Floor** 

Scale 1 cm : 30 cm

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Figure 11: Profile of penultimate phase architecture, Units 1, 3, and 7, Structure 198

recently been plowed, so in hope of unearthing well-preserved terminal architecture, excavation units were located towards the western half of the structure.

#### **Unit 1: Description**

Unit 1 was placed slightly west of the central axis of Str. 198 in an attempt to ascertain the construction history of the structure. The unit measured 2 meters by 2 meters and was oriented along north/south cardinal directions. The excavation descended for 3 meters until reaching sterile soil.

The first architecture encountered in this unit was a poorly preserved plaster floor that disappeared near the southern end of the unit (Fig 10). Exposure and the recent plowing of the area probably contributed to the destruction of this floor, as it was less than 10 cm below the surface. The artifacts found in the disturbed level above this floor include fragments of daub, ceramic sherds, chert and obsidian tools, animal bones, shell, and a ceramic net sinker. The ceramics from this level are highly eroded and most of the slips have been washed away, leaving paste and form as the major classification indicators.

The second floor uncovered was well preserved, with the plaster floor ranging from 3 cm - 8 cm thick. A wall found at the northern end of the unit extended in an east-west line. It was resting on the second floor, and possibly represents a wall which served to divide rooms within the penultimate building.

Cached directly below the second floor, in the southeastern corner of the unit, was the rounded base of an olla or jar. Although broken during excavations, this modified



Figure 12a: Profile of termination feature, Unit 1, Level 3, Structure 198

Scale 1 cm : 20 cm





Figure 12b: Plan of hearth feature, Unit 1 Level 3, Structure 198

vessel was relatively flat and unslipped. No other artifacts were found in association with this cache. In the fill, numerous ceramic sherds, chert and obsidian blades, mano and metate fragments, freshwater and saltwater shells, and animal bones were found. Also uncovered in the fill was the remains of a possible feature, with intrusive fill surrounded by a layer of burnt clay and charcoal (Fig 12a). The feature may have been the remains of a hearth that was associated with the penultimate platform. Unfortunately, because only a small section of the feature was exposed by the excavation, this will have to await confirmation by future investigations.

Ninety centimeters below the second floor, another hearth associated with a poorly preserved plaster floor (Floor #3) was uncovered (Fig 12b). This feature also extended beyond the northern limits of the unit, thus only the southern portion was excavated. Based on measurements from the exposed area it is estimated that the diameter of the hearth is approximately 1.8 meters. The hearth consisted of a 2 cm thick layer of burnt clay, covered by a 4 cm – 6 cm layer of charcoal. The center of the hearth was covered in a thick layer of plaster. Despite careful excavation, no ceramics or animal bones were found in association with the hearth. Charcoal was collected for radiocarbon dating, but results are not yet available.

In the fill below Floor # 3, very few artifacts were discovered. No obsidian or chert tools were found, and few of the ceramics uncovered were diagnostic. The poor quality and overall quantity of ceramic remains has made dating of this construction phase difficult. It is possible that the construction may have been done in the Early Classic period but here again confirmation will have to await radiocarbon dating of the charcoal from the hearth.

Forty centimeters below the  $3^{rd}$  floor excavators uncovered the only tamped clay floor (floor #4) found so far at the Yaxtun Group. It was approximately 4 cm – 6 cm thick. No ballast (river cobbles used to create a level floor) was uncovered below Floor #4, only a clay/sand matrix. Ceramics, chert debitage, a single mano fragment, daub, fresh water mussel shells, and a shell pendent were uncovered in the fill.

Fifty centimeters below the 4<sup>th</sup> floor, the 5<sup>th</sup> floor was uncovered in Unit 1. Made of poorly preserved plaster, this floor was the last floor found in Unit 1. Below Floor #5, a relatively thin layer of small river cobbles was used as ballast, followed by alluvial soil. Sterile soil was encountered below the alluvial fill and the excavation was discontinued sixty centimeters below this last floor.

#### Units 3 and 7- Description

Units 3 and 7 were placed adjacent to each other and both measured 1m x 4m long. The units also bordered Unit 1 to the north and extended from the southern base of the structure into the plaza area. Because the structure and the plaza appear to have been modified at different times from each other, they are described separately below.

## Units 3 and 7 on Structure 198

Units 3 and 7 exposed the terminal and penultimate phases of construction on Structure 198. The terminal phase architecture has a series of terrace walls, extending in east-west lines, from the top of the structure to the plaza. Four such terraces were found. The uppermost terrace was 70 cm from the plaza surface, with the last terrace resting



Scale 1 cm : 20 cm

Figure 13: Plan of Terminal Phase Architecture, Structure 198

directly on the plaza floor (Fig 13). The terraces were constructed with both large limestone blocks (30 cm to 40 cm long) and with smaller river boulders and cobbles (10 cm - 20 cm long). Any plaster that may have covered the flat surfaces of the terraces had disintegrated, and only a layer of ballast was left on the terrace floors.

Numerous artifacts associated with the terminal phase architecture were collected in Units 3 and 7, including daub fragments, ceramics, obsidian and chert tools, net sinkers, quartz, slate, and a mano fragment. Similar to the ceramics found in the terminal phase of Unit 1, the pottery unearthed in level 1 of Units 3 and 7 was highly eroded. Form and paste characteristics were often relied upon in the analysis of these sherds. Tapir (*Tapirus bairdii*), gibnut (*Agouti paca*), hispid pocket gopher (*Heterogeomys hispidus*), red brocket deer (*Mazama americana*), white tailed deer, armadillo (*Dasypus novemcinctus*), turtle, crocodile, jaguar, and water possum were all found in the terminal phase.

Once the terminal phase architecture was removed, excavations subsequently uncovered the penultimate architecture. Directly under the third terrace of the terminal architecture, excavators found the remains of a well-preserved, cut limestone wall. The section of wall uncovered was part of a stair outset that appeared to be similar, in both construction and design, to the terminal phase construction of Structure 199. The wall ranged between one and seven courses high. The best preserved section of the wall was found towards the eastern half of the unit, before the outset of the wall began (fig. 14). It appears that the upper section of the outset was purposely destroyed during the construction of the terminal phase, and that many of the limestone blocks that were removed were subsequently used for the construction of the penultimate phase platform.



Figure 14: Plan of penultimate phase architecture, Structure 198

Scale 1 cm : 20 cm

This "scavenging" of cut stones from earlier buildings has been noted at Baking Pot and may reflect a widespread pattern during the Postclassic period (J. Awe, personal communication).

Cached directly above the plaza floor in front of the penultimate structure were several objects, including numerous censor fragments, half of a Tohil Plumbate vessel and a quartz bead. Because the front of the penultimate structure was covered over and quite well preserved, a thick layer of daub was found on the plaza floor where it likely fell during the demolition of an earlier wattle and daub house that was situated at the top of the platform.

In the fill of the terminal structure, above the cultural remains described above, various other artifacts were recovered. These artifacts include ceramics, chert and obsidian tools, daub, a jadeite bead, mano fragments, shell, and animal bones. Excavations were halted at the penultimate construction phase because of future plans to reconstruct the patio group at this level.

## Units 3 and 7 on the Plaza Area

Three levels of construction were noted in the section of Units 3 and 7 that penetrated the plaza area. The units descended until sterile soil was reached, approximately 3.3 m below the surface. The first plaza floor was encountered 30 cm below the modern surface. This floor (Floor #1) was composed of a thin layer of plaster. Artifacts retrieved from the first level included ceramics, obsidian and chert tools, shell and animal bone, fragments of daub, and ceramic net sinkers.





**Figure 15:** Plan of plaza floor #2



**Figure 14**: Plan of plaza floor #3

Scale 1 cm : 20 cm

The fill below the first floor was composed of small river cobbles used for ballast and alluvial fill. The artifacts found in the fill were typical of other units and levels (i.e. ceramics, obsidian and chert tools, shell, animal bone and daub) along with a single mano fragment.

Twenty centimeters below the first plaza floor, a second plaster floor was uncovered. Badly preserved, this floor contained evidence of two postholes that extended approximately 15 cm below the floor (fig 15). At the northern end of the unit were the remains of two limestone blocks, possibly part of an earlier dwelling. No other cut stones, however, were exposed by the excavation.

Thirty centimeters below the second floor, the third and last plaza floor was discovered. Originally topped with plaster, this floor was constructed over densely packed river cobbles (fig. 16). In the fill excavators found a ceramic cache, consisting of eight partially complete vessels, with well-preserved slips and decoration. The vessels in the cache all dated to the Late Preclassic period (300 B.C. – A.D. 250) and provide good evidence to suggest that the earliest construction phase dates to this time frame.

#### Units 13, 14 and 15- Description

Units 13, 14 and 15 were all placed in the front of Structure 198 in an attempt to locate the dimensions of the outset. Unit 13 measured 1.5 m long by 0.5 m wide. Unit 14 and Unit 15 both measured .5 m by .5 m. Unfortunately the wall was never located but the excavations did yield important information. A large fragment of a Pabellon Molded-carved sherd and a chert, stemmed biface, tool were uncovered. Both objects aid with the



Figure 17: Plan of terminal phase architecture, Structure 199



Unit 12

Scale 1 cm : 25 cm

Figure 18: Profile of Units 4, 8, 9, 10, 11 and 12. Structure 199

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dating of the terminal phase of architecture and suggest that its construction occurred during the Early Postclassic period.

## 3.3 Excavations of Structure 199

Structure 199 is located on the western edge of the patio group. Smaller than Structure 198, this mound is raised about 2m above the modern ground level. The mound is 8.4 meters long and 6 meters wide, and is joined, at its northern point with Structure 198. During the 1999 season a total of eight excavations were conducted on Structure 199 (Fig 17).

## Units 2, 4, 8, 9, 10, 11, 16- Description

Units 2, 4, 8, 9, 10, 11, and 16 were placed on and in front of Structure 199 to expose as much of the terminal architecture as possible. With the exception of Unit 2, all the excavations were confined to either the exposure of the terminal phase architecture or with clearing the plaza area in front of the structure. Especially important in these investigations was the separation of the artifacts found lying on the plaza floor from those mixed in the humus over the structure. This distinction can enable investigators to differentiate between the artifacts the Maya deposited as part of termination rituals and artifacts that are in the humus layer and that have accumulated through site formation processes and periodic ploughing of the area. The study of these artifacts also provides information about both the ritual activity of the occupants and of the wealth and status of the inhabitants of the group at the time of abandonment.
In the humus/ collapse level, many of the artifact types found in other areas investigated at the Yaxtun Group were uncovered. These include obsidian and chert tools, shell, animal bone, ceramics, a whole mano, and daub. Many unique artifacts, however, were found lying directly on the plaza floor in front of the structure. These artifacts include a ceramic jar lid, three spindlewhorls, an *Olivella* "tinkler" shell, three jadeite beads, a rounded fragment of obsidian, mano and metate fragments, and a grooved stone.

Several animal bones were found in front of Structure 199. Tapir (*Tapirus bairdii*), gibnut (*Agouti paca*), hispid pocket gopher (*Heterogeomys hispidus*), red brocket deer (*Mazama americana*), white tailed deer, armadillo (*Dasypus novemcinctus*), turtle (?), bush rabbit (*Dasypracta punctata*), jaguar, and parrot fish bones were all found in the collapse of Str. 199. The large number of bones and variety of animal species available suggests that those living at the Yaxtun Group were eating very well.

Excavations of these units continued until the terminal plaza floor was cleared. Only Unit 2 continued below the plaza floor. Artifacts found in the fill of the plaza floor included ceramics, chert and obsidian tools, freshwater shell, animal bone, and daub fragments. The animal remains found are similar to those found in the previous level, and included Mexican Musk turtle (*Kinocternon leucostomum*), Central American river turtle, white tailed deer, Red brocket deer, armadillo and unidentified bird bones.

Clearing the front of Structure 199 allowed investigators to determine the design and construction of the architecture, including the length of the structure. It also provided a comparison with Structure 198, where we were unable to uncover the entire terminal or penultimate architecture. From our initial excavations, it appears that the penultimate phase construction of Structure 198 is contemporary with the terminal phase construction of Structure 199.

#### **Unit 12 – Description**

Unit 12 was a 1 m by 1 m excavation unit placed in the center of Structure 199 with the purpose of uncovering chronological information about the construction of the structure. The humus/abandonment phase of occupation located in level one revealed Terminal Classic ceramics, including Belize Red, Roaring Creek Red and Cayo Unslipped. A shell pendent, three mano fragments and a single metate fragment. The terminal phase architecture encountered included a plaster floor and a single line of limestone blocks. This wall extends in a north-south line and was probably an internal wall divider. In the terminal structure fill, Late Classic ceramics were uncovered. Also found in the fill was a shell adorno and a few broken obsidian blades.

# Unit 17 - Description

Unit 17 was placed at the northwest corner of Structure 199 with the purpose of locating the northern and western retaining walls of the structure. This information would aid in determining the size of the building platform.

Excavations of Unit 17 revealed a side wall, 7.5 meter long. This wall was made of cut limestone blocks and ranged from one to two courses high. Although we were primarily interested in finding the back wall, the northern side wall proved to be quite interesting. Instead of joining with the front of the structure at the junction between Structure 198 and 199, the wall joined with the front of the structure 2.2 meters from that point. This suggests that the platform is smaller than previously thought. It is possible that a later wall (that extends northward) was subsequently added to the platform in an effort to restrict access into the patio group, as the corner between Structure 198 and Structure 199 points in the direction of Group 1.

The western edge of Structure 199 was not as well preserved as the front of the structure, leading excavators to remove some of the fill of the terminal structure. Within the fill, an intact ceramic torch holder was discovered. Surprisingly rare in the archaeological record, particularly at surface sites, this torch holder is the first to be found at the site of Baking Pot. The only torch holders presently known from Belize have been found at cave sites (Tiger Bay Cave, J. Awe personal communication) but even here they are relatively rare.

#### **Construction History and Chronology**

#### Structure 198

# **Preclassic Occupation**

Excavations during the 1999 field season uncovered at least 5 construction phases in Structure 198. The two earliest platforms were built during the late Preclassic period (BC 300-1 AD). Both of these structures were represented by low building platforms. Fragments of daub associated with these construction phases suggest that they supported perishable superstructures such as wattle and daub buildings. The two platforms were dated using the ceramics found in the fill of both levels. The ceramic remains include fragments of 13 Sierra Red, two Paila Unslipped and three Polvero Black vessels. The fact that no ceramic types later than Gifford's (1976) Barton Creek ceramic complex were found in the first two levels confirms this temporal placement. The architecture also reflects that of peripheral Late Preclassic households in the Belize Valley (Awe 1992, Willey et al. 1965).

# **Early Classic Occupation**

Evidence of an Early Classic construction phase is tenuous at the Yaxtun Group. This is not surprising, however, because developments during this period still remain poorly understood in the Belize Valley (Awe personal communication). Awe (1992) has noted that researchers traditionally have attempted to identify Early Classic occupation in the Belize Valley on the basis of Petén-centric ceramic types because most ceramic analyses originally were performed on pottery from the Petén region of Guatemala. The absence of the latter has often led researchers to suggest that there is limited activity during this time. Awe (1992) argues that it is possible that the Belize Valley Maya may have continued producing Late Preclassic types into the Early Classic period and that they are eventually replaced by ceramics diagnostic of the early facet of the Late Classic period. This may account for the paucity of Peten-like Early Classic ceramics and the mis-identification of Early Classic phases of occupation.

At the Yaxtun Group we found that the ceramics from the third construction phase to be frequently from what Gifford (1976) defines as the Preclassic period, but a small number of Early Classic period sherds were uncovered as well. The sherds found in this construction phase include Paila Unslipped, Sierra Red, Hillbank Red, Polvero Black and Pucte Brown. The presence of these ceramic types and the fact that the subsequent construction phase is Late Classic in date supports Awe's (1992) contention and strongly suggests that Structure 198/3<sup>rd</sup> was constructed during the Early Classic period. Built into the Early Classic floor of the Structure 198 platform was a hearth. Characterized by a layer of red clay covered by 2- 4cm of thick charcoal, the hearth was filled in with limestone blocks before the subsequent rebuilding. Samples of charcoal were taken from the hearth, but results of the dates are not yet available. The hearth, and the presence of daub fragments suggest that the platform supported a wattle and daub building and that it likely served some domestic function.

# Late Classic Occupation

Structure 198 reached its maximum height during the Late Classic period. During this time, over 80 cm was added to the fill, and the original architecture was substantially modified. The best preserved plaster floor from the structure was also located at this level, measuring 4 cm thick in some areas. In this rebuilding phase some Early Classic sherds are noted, though most of the ceramics pertain to the Late Classic, Spanish Lookout Complex. Within the floor of the platform, excavators noted an interesting feature consisting of a intrusive pit. The outside layer of this intrusive feature included a band of burnt clay with charcoal lining the inner side. Unfortunately, the charcoal was not abundant and a good sample could not be obtained. Within this feature, however, a few early Classic painted sherds were uncovered.

Within the fill of the penultimate phase, sherds from the Barton Creek ceramic complex to the Spanish Lookout ceramic complex were noted, with the most falling between the Hermitage ceramic complex and the Spanish Lookout ceramic complex. The sherds that dated from the Late to Terminal Classic periods include Belize Red, Cayo Unslipped, Alexanders Unslipped, Garbutt Creek Red, Roaring Creek Red, Yalbac Smudged Brown, Vaca Falls Red, and Mount Maloney Black.

Architectural data uncovered during the 1999 season suggests that the penultimate phase of construction consisted of a large rectilinear building platform. The retaining walls of the platform were made of finely cut limestone blocks which were likely imported from the limestone foothills approximately two to three kilometers to the south. At the center of the southern retaining wall there was an outset with an axially located stairway that provided access to the summit of the platform. The presence of substantial daub fragments suggests that a relatively large perishable (wattle and daub) building crown the top of the platform.

The size of the platform, its style, and quality of the raw materials used (cut limestone blocks) all indicate that the occupants of Structure 198 may have enjoyed fairly high status and some degree of wealth in the Baking Pot community. This interpretation is further supported by the presence of other objects made from exotic materials such as jade and marine shell, and the relatively frequent occurrence of decorated pottery.

#### **Postclassic Occupation**

The last phase of construction consists of a very poorly preserved plaster floor, approximately 10 cm above the surface of the penultimate floor. It is possible that this construction was only a re-plastering of the earlier surface. The sherds found in the fill of this floor are of a very late date, ranging from the Spanish Lookout to New Town phases (Terminal Classic to Early Postclassic periods). The diagnostic sherds included a Cayo Unslipped Pie Crust olla, a cached Plumbate vessel and a large fragment of a Pabellon Molded-carved vessel. The latter and the Plumbate vessel are particularly interesting because they provide further support to the suggestion that the inhabitants of Structure 198 were of relatively high status. Contextual analysis of Pabellon Molded-carved vessels by Helmke (1999) have noted that this ceramic type consistently occurs in household groups with high status in the Belize Valley. Plumbate pottery, which is a diagnostic of the Postclassic period, is an import from the highland Guatemala-El Salvador region and also shares a similar contextual distribution with the Molded-carved pottery.

In contrast to the penultimate structure, the terminal phase architecture is quite crude. The walls and terraces of the platform were constructed of river boulders with the occasional cut limestone block. At the summit, only a single line of limestone blocks also lined the outside of the building and most of the limestone appears to have been scavenged from earlier constructions. It is possible that during this phase the occupants of the plaza group may not have had the power to coerce others to provide them with quality raw materials, or it may simply reflect social changes during a period of great instability in the Maya lowlands.

# Abandonment occupation

The abandonment of Str. 198 occurred during the Postclassic period. Seven Scroll feet from Augustine and Paxcaman Red vessels have been found, along with eight other vessel feet from the early Postclassic period. Although we were greatly concerned about the plowing in the pasture where these structures were found, this activity actually served to uproot abundant Postclassic material that we would not otherwise have found. Some of the Postclassic ceramics were recovered during excavation, while others were surface

finds. Other artifacts indicating a Postclassic abandonment phase include notched obsidian blade arrow points and net sinkers. The former are believed to have been introduced from Mexico. The latter are common at Postclassic coastal and riverine sites in the Maya lowlands.

#### Structure 199

# Late Classic Occupation

Structure 199 has a much shorter history of occupation than Structure 198. The earliest occupation layer has been dated to the Late Classic, with some Late Preclassic and Early Classic period sherds found in the fill of all levels. The majority of the pottery recovered represent types from the Spanish Lookout ceramic phase, and include Belize Red, Garbutt Creek Red, Benque Viejo Polychrome, Vaca Falls Red, Roaring Creek Red, Rubber Camp Brown and Cayo Unslipped.

The terminal phase architecture was entirely uncovered in the front of the structure during the 1999 season. The architecture was similar to the penultimate phase of 198, and it is possible that the two structure were modified simultaneously at this time. The building platform of Structure 199 was approximately .75 m in height and was constructed of large cut limestone blocks six courses high. Like 198, this building platform may have also supported a large wattle and daub building that served domestic purposes. Although the structure was not modified during the Postclassic period, it is clear from the artifacts on the surface of the structure that the dwelling was in use during that time.

# **Abandonment Occupation**

The abandonment phase of Structure 199 is, not surprisingly, of the same period as Str. 198. Postclassic ceramics are found on top and in front of that structure, but unlike Structure 198, no Postclassic modifications were made to the dwelling. Jade beads and jaguar teeth were found on the plaza floor in front of the structure, as were two Pabellon Molded-carved sherds, testifying to the relatively high status of the occupants. One of the jade pieces was a small ear spool, while the other two jadeite beads were probably from a necklace. A curious trend of Belize (or Paxcaman) Red and Roaring Creek Red pedestal bases lying on the plaza floor was noted when we began to clear the collapsed architectural debris. It is possible that these vessel bases were purposely cached during time of abandonment.

Structures 198 and 199 were apparently joined by a narrow wall sometime after the construction of Structure 198. The walls connecting the structures are in excellent states of preservation, with limestone blocks exceeding 6 courses high in some areas. At the junction of these two structures, there was a cache of highly eroded, ash tempered sherds, probably dating to the Terminal Classic period. It is possible that the two structures were joined to limit access, as this juncture faces directly toward Group I of the site core where markets and other public rituals may have been held.

The Plaza (in front of Structure 198)

# Plaza Area

# Late Preclassic Occupation

Located in front of Structure 198, excavations of the plaza revealed three periods of construction. The first floor consists of exclusively late Preclassic sherds and includes the largest cache of ceramic vessels found at either structure. Discovered approximately 1.6 meters below the modern surface, these vessels were is an almost perfect state of preservation. With six partially reconstructable vessels, the cache was instrumental in dating this level. The ceramics found in the cache include types such as Sierra Red, Laguna Verde Incised, Never Delay Impressed, Hillbank Red, Sapote Striated, Paila Unslipped, Happy Home Orange and Polvero Black, all from the Barton Creek ceramic complex dating to the Late Preclassic period.

# Late Classic Occupation

The second and third plaza floors date to the Late Classic and were constructed in the typical ballast-and-plaster method. The majority of ceramics uncovered dated to the Spanish Lookout ceramic complex, including Belize Red, Platon Punctated- Incised, Roaring Creek Red, Vaca Falls Red, Cayo Unslipped, Alexanders Unslipped, Yaha Creek Cream, Rubber Camp Brown, McRae Impressed, Gallinero Fluted, Tu-Tu Camp Striated, Meditation Black, and Achote Black.

# Abandonment Occupation

The sherds found above the terminal plaza floor date to the same period as do the abandonment assemblage from both structures. The Postclassic sherds located at this level include Paxcaman Red and Augustine Red from the New Town ceramic complex, as well as a number of Pabellon sherds from the Terminal Classic/Early Postclassic period.

Above the terminal plaza floor we encountered several concentrations of animal bones and approximately 375 land and marine shells. It appears that these materials were

simply thrown out of the house into the plaza area, a common occurrence in abandonment periods (Awe 1999 personal communication).

# 3.4 Classic Period Architecture

Architecture built during the Late Classic period was uncovered on both Structure 198 and Structure 199. The construction of both structures with large cut limestone blocks suggests that the occupants of the patio group were of relatively high status, wealth or both. Limestone was a precious commodity at the site of Baking Pot, with the dwelling structures of the poorest often containing few limestone blocks (Piehl 1999). The nearest source of limestone was in the foothills, over two miles from the site. As the Maya did not possess beasts of burden, each block had to be carried this distance by humans.

The limestone blocks used in the construction of the Classic period architecture was well shaped and dressed. Originally, each wall was seven to eight courses high. Structure 199 appears to have been built in an L shape. Structure 198 was rectangular and had an outset near the center of the structure.

#### 3.5 Postclassic Period Architecture

The architecture of the Postclassic period stands in stark contrast to its Classic period predecessor. Only Structure 198 was modified during the Postclassic period, and the modifications indicate a drop in status of the residents of the Yaxtun Group. No longer could the residence muster the man power to carry the limestone blocks from two kilometers away. They had to be satisfied with both small numbers of limestone blocks and the crude shaping of those that were available. Large fragments of limestone blocks were used for the retaining wall for the third terrace (Fig.13), while other large river boulders, cobbles and assorted shapes of limestone blocks were used to create the first, second and fourth terraces. According to Marilyn Masson (1999 personal communication) this type of construction is characteristic of the Postclassic period at sites in northern Belize.

# **Summary**

Although excavations at the Yaxtun Group were limited, they exposed a great wealth of information about the people living there. Architecture exposed provided a great deal of information about the original structures and the status of the people that lived on them. Features such as fire hearths, spindlewhorls and utilitarian ceramics indicate that these structures were indeed used as households, as the cooking and weaving took place there.

Through analysis of both ceramic caches and ceramics found in the fill, all levels of construction were dated. The information uncovered corresponds directly to other dated material at the site of Baking Pot. Through detailed analysis of the artifacts found at the Yaxtun Group presented in the next chapter, a more complete understanding of the people that lived there will emerge.

# Chapter 4

# <u>Analysis of the Artifacts and Caches from the Yaxtun Group,</u> <u>Baking Pot</u>

# 4.1 Introduction

The objectives of the artifact analysis are: 1) to provide descriptions of the artifacts from the Preclassic to Postclassic phases of occupation at the Yaxtun Group at Baking Pot; 2) to conduct inter- and intra-site comparisons of the assemblage; and 3) to determine which materials represent trade items. This information will subsequently be employed (in Chapter 5) to determine temporal changes within the settlement, to examine the cultural relationships between the Yaxtun Group and other settlements at Baking Pot, and to understand the cultural relationship between the Yaxtun Group and household groups in the Belize Valley.

The system of analysis follows those employed by Awe (1992) at Cahal Pech and by Garber (1989) at Cerros in northern Belize. In this methodology, artifacts are organized into several categories on the basis of the raw material from which they were produced. The major raw material categories identified in the Yaxtun assemblage include clay, stone, shell and bone. After the artifacts were divided into these categories they were later subdivided according to the technology (or industry) used in their production. Except for the ceramic artifacts, all other cultural remains were then classified according to form. Information on the frequency, dating, and context of all forms and sub-forms, plus regional comparisons and possible function of artifact types is also included under each category.

The industries recorded in the artifact assemblage from the Yaxtun group include: ceramic, modified ceramic-sherd, modeled clay, ground stone, polished stone, chipped stone, worked shell, and worked bone. Dates for the artifacts were determined by relative chronology and relied primarily on intra- and inter-site comparisons, regional ceramic sequences, and the stratigraphic context of the materials. Artifacts from the Early Postclassic period are given special attention because little is known for this phase of Maya occupation in the Belize Valley.

# 4.2 The Ceramic Industry

The ceramic industry is represented by both vessels and modified sherds. Excavations at the Yaxtun Group in the summer of 1999 recovered over 13, 000 sherds. After removal from the field the artifacts were first sorted according to their stratigraphic context, and were subsequently classified on the basis of their stylistic attributes. The ceramic analysis was conducted by the author with assistance from Dr. Jaime Awe of the University of New Hampshire. The system of analysis employed follows that of Gifford (1976) at Barton Ramie. This type:variety method of classification is traditionally used by Mayanists, thus its application facilitated comparison of the Yaxtun collection with other ceramic assemblages from the Belize Valley.

Of the approximately 13,000 sherds recovered at Yaxtun, 9,233 (71%) were nondiagnostic, and 3,767 (29%) were classified as diagnostic. The latter included types that date between the Middle Preclassic (600-300 BC) and the Early Postclassic (AD 9001200) periods. The Middle Preclassic ceramics are part of the Jenney Creek ceramic complex (600 –300 BC) established by Gifford (1976). Late Preclassic ceramics are placed within the Barton Creek (300-100 BC) ceramic complex. The Protoclassic (100 BC – AD 250) is represented by the Mount Hope (100 BC – 250 AD) and Floral Park Ceramic Complexes (AD 1- 250). Early Classic sherds are grouped into the Hermitage Ceramic Complex (AD 300- 580). Late and Terminal Classic period pottery is divided into early and late facets. The early part of the Late Classic is represented by the Tiger Run Ceramic Complex (AD 580- 680) and the later segment of the Late Classic is classified as the Spanish Lookout Ceramic Complex (AD 680-880). Finally, Early Postclassic material falls into the first half of the New Town Ceramic Complex (AD 880-1492). A summary of the analysis of the ceramics from the Yaxtun Group is provided below, with details regarding type/variety designations and illustrations.

# The Jenny Creek Ceramic Complex

The earliest sherds found at the Yaxtun Group belong to the Jenney Creek ceramic complex, dating from 600-300 BC. Only 10 sherds from this complex were discovered, but none were isolated stratigraphically or derived from pure Middle Preclassic contexts. The unslipped pottery of the Jenney Creek Ceramic Complex is dominated by the wide-mouth jars of the Jocote group (Awe 1993). Two such jar sherds were found at Yaxtun, along with four sherds of Mars Orange ware from the Savanna group; one Reforma Incised (Fig. 20a) and three Joventud Red fragments. Throughout the years of excavation at Baking Pot, investigators have yet to uncover an isolated Middle Preclassic level. Nearby sites, such as Cahal Pech, display a much longer history of



Figure 19: Barton Creek Ceramic Sequence (after Gifford 1976)



Figure 20a: Reforma Incised



Figure 20b: Sapote Striated

occupation beginning from about 1200-1000 B.C. (Awe 1992). At Baking Pot there has been limited evidence of late Middle Preclassic (600-300 B.C.) pottery found at the site but no settlements or architecture predating the Late Preclassic has been uncovered. Perhaps future investigations within the site core may yield evidence for earlier occupation but at present we only know for certain that the site did not become a major center until the Late Classic period (Bullard and Bullard 1963).

# The Barton Creek Ceramic Complex

The earliest ceramics found in secure and isolated contexts at the Yaxtun Group belong to the Late Preclassic (300-100 BC) Barton Creek Complex. The Barton Creek pottery is represented at the Yaxtun Group by six partial vessels and 438 sherds that were discovered in a cache located under the first plaza floor. Other Barton Creek ceramics were found in various occupation levels, but were only statigraphically isolated in the first 3 phases of construction in Str. 198 and in the first construction of the plaza floor.

Gifford (1976:85) notes that the most "striking thing about the Barton Creek Ceramic Complex is the overwhelming dominance of red slipped pottery, almost entirely in bowl form...". Ball and Taschek (1986:20) note that this period (which they define as the Xakal Complex ) "is dominated by red, black, and cream-slipped types" which belong to what Ball previously defined as Paso Caballo-Flores Polished Ware. At the Yaxtun Group, these waxy wares are represented by a limited quantity of red and black slipped pottery, with a smaller number of cream types. The red wares include specimens of Sierra Red (Fig.21a) and Laguna Verde-Incised (Fig.21b) of the Sierra Group as well as Hillbank Red (Hillbank Variety) of the Hillbank Group. These vessels are most commonly in the form of dishes, with ridges or flanges near the rim. The black wares are



Figure 21b: Laguna Verde Incised



Figure 22 a, b: Never Delay Impressed

represented by the Polvero Group and include Polvero Black and Never Delay Impressed (Fig.22a,b). Creams are represented by Flor Cream and Accordian Incised of the Flor Ceramic Group. The unslipped pottery consists primarily of Paila Unslipped and Sapote Striated (Fig.20b) types.

Of the six partially complete vessels, three were dishes and three were jars. Two of the dishes had flaring and everted-thickened rims, characteristic of Barton Creek dishes. The jars have low necks and wide mouths, and two are decorated with mid and lower body striations (one with handles). The black slipped jar is impressed from the middle to lower sections.

#### The Hermitage Ceramic Complex

The Hermitage Ceramic Complex dates between AD 300 and 580 and co-relates to the Early Classic period. At the Yaxtun Group, one partially complete vessel and 78 Hermitage Ceramic Complex sherds were recovered during excavations. Ball and Taschek (1986) note that the majority of types produced during the Early Classic include "Balanza Black, Lucha Incised, and Dos Arroyos Orange Polychrome" and Mopan Striated (Ball and Taschek 1986:22). They also note that basal-flanged dishes and bowls are the dominant Hermitage Complex forms, and the evidence at the Yaxtun Group supports this conclusion. Unfortunately, none of the 78 Hermitage Complex sherds were found in pure Early Classic stratigraphy, therefore provide no clear evidence for Early Classic activity at the settlement. Jaime Awe (personal communication 2000) notes that the absence of clearly defined Early Classic architecture and occupation levels is a Belize Valley-wide phenomena. He suggests that unlike the adjacent Peten, the Belize Valley



Figure 23: Minanha Red



Figure 25:Rosario Incised



Figure 26: Platon Punctated-Incised



# Figure 24: Lucha Incised

Maya may have likely continued to produce Late Preclassic type pottery during this time. Because the Early Classic is traditionally defined by ceramic types established in the Peten, this has led some to suggest that sites in the Belize Valley may have been abandoned during this time (Willey 1965; Gifford 1976). Awe (1992) disagrees and argues that limited quantities of Peten-like Early Classic pottery are present but they are generally found intermixed with Late Preclassic types, or they are only occasionally found isolated in special deposits such as in caches or burials. This intermixing of Classic period sherds with ceramics that have been traditionally been classified as Late Preclassic sherds suggests that much of what is considered late Preclassic in the Belize Valley may continue into the Early Classic period.

Early Classic pottery at the Yaxtun Group included basal flanged dishes of Minanha Red (Minanha Variety) (Fig.23) and Dos Hermanos Red (Variety Unspecified). A large number of black slipped sherds from the Balanza Ceramic Group were also recovered, including one partially reconstructable Lucha Incised vessel cached below the 4<sup>th</sup> floor of Structure 198 (Fig.24). Other Balanza Black sherds were discovered throughout various levels of floor fill. Brown Slipped Sherds were represented marginally by the Pucte Ceramic Group with three Pucte Brown sherds. Dos Arroyos Orange Polychrome sherds were rare at the Yaxtun group, contrasting with Ball and Taschek's (1986) discoveries elsewhere in the Belize Valley. Unslipped sherds from the Hermitage Group included specimens of the Mopan and Socotz Striated Ceramic Groups as well as a limited number of Hewlett Bank Unslipped fragments.

# The Tiger Run Ceramic Complex

Representing the early half of the Late Classic (580-680), the Tiger Run Ceramic Complex was represented by 92 sherds at the Yaxtun Group. Ball suggests that this complex is important because:

...it signals a break with and reorientation away from the Peten ceramic tradition in which the pottery of the Buenavista area had previously participated. This break ultimately culminated in the emergence of a separate and distinct Late Classic ceramic industry in the Belize Valley, the Spanish Lookout ceramic sphere (Ball and Taschek 1986:).

According to Gifford, understanding the Tiger Run Ceramic Complex is difficult for two reasons. The first is that "Tiger Run deposits are concentrated in a few of the largest mounds while most other occurrences are just barely sufficient to postulate an occupation" (Gifford 1976:192). The second problem is that the Tiger Run Ceramic Complex is a "transitional one and most of the local pottery types involved are simply intermediary between easily recognizable and well-defined ceramic units occurring before and after" (Gifford 1976:192).

Pottery corresponding to the Tiger Run Ceramic Complex is present in limited quantities at the Yaxtun Group. Found in all levels of Structure 199 and in the first three levels of Structure 198, the Tiger Run Pottery is represented by many different types. The most frequent types (47%) are from the Mountain Pine Ceramic Group. These red wares included Mountain Pine Red, Mount Pleasant Red and Rosario Incised (Fig.25). The Mountain Pine red vessels have a medial ridge and often have ring bases.

Teakettle Bank Black is the only black slipped pottery from this phase at Yaxtun, and comprises 17% of the total number of Tiger Tun sherds. Polychrome pottery is the most limited in frequency (4%) and includes specimens of Saturday Creek Polychrome and Saxche Orange-Polychrome. Red-Brown slipped ceramics are also found in small quantities and are represented by Sotero Red-Brown, generally in the form of thin vertical-walled bowls. Three unslipped types round off the Tiger Run pottery at Yaxtun. These include Zibal Unslipped, Mopán Striated and Jones Camp Striated and account for 14% of the total Tiger Run diagnostic sherds.

#### The Spanish Lookout Ceramic Complex

The Spanish Lookout Ceramic Complex is dated from AD 680 to AD 880. At the Yaxtun Group the Spanish Lookout phase pottery consists of 2,604 sherds, which account for 69% of the total number of diagnostic ceramics. With the exception of the three earliest construction phases of Structure 198 and the first construction phase of the plaza, Spanish Lookout ceramics pervaded all stratigraphic levels of the patio group.

The population increase toward the end of the Late Classic saw the beginning of volcanic ash beginning used as one of the primary tempers in the ceramics. Previously, calcite and clays were used as temper, and these ceramics were less prone to breakage. Why volcanic ash was suddenly used in the making of ceramics at this time is unknown, but all of the types associated with Late Classic ash tempered ceramics have disappeared by the beginning of the Early Postclassic period (Willey et al. 1965:373).

Red slipped sherds accounted for 90% of the diagnostic sherds classified as belonging to the Spanish Lookout phase. The most common types present include Belize Red, Platon Punctated-Incised (Fig.26,31), Martins Incised (Fig.27,28) and Gallinero Fluted of the Belize Ceramic group. These types account for 81% of the total number of Spanish Lookout pottery. The Vaca Falls ceramic group (6% of the Spanish





Figure 27



Figure 28





Figure 29: McRae Impressed



Figure 30: Kaway Impressed



Figure 32: Belize Red

Lookout sherds) is represented by Vaca Falls Red, Roaring Creek Red and Kaway Impressed (Fig.30). Modally the Vaca Falls group includes large dishes or basins with incurving sides, incurving rims and flattened lips. Bases are generally ringed or flat and normally unslipped. Only 2% of Spanish Lookout sherds are represented by pottery of the Dolphin Head ceramic group and include Dolphin Head Red and Silver Creek Impressed. The smallest number of red slipped sherds (1% of total) include Garbutt Creek Red and Rubber Camp Brown types of the Garbutt Creek ceramic group. Both types are similar in form to Mount Maloney Black types and are represented by bowls with slightly incurving or ring bases, incurving rims, and squared lips

Three black slipped types were identified at Yaxtun, including Mount Maloney Black, Meditation Black and Achote Black. Combined, these three types equaled only 1% of the total Spanish Lookout sherds recovered. The Cream slipped sherds accounted for less than 1% (15 sherds in total) of all the diagnostic pottery, and consist solely of Yaha Creek Cream of the Yaha Creek ceramic group. Brown slipped, Spanish Lookout, pottery was also limited to a single type, Yalbac Smudged Brown, and it too accounted for less than 1% of the total diagnostic sherds recovered.

Polychrome pottery was scarce in the Spanish Lookout assemblage, with only a single type, Benque Viejo Polychrome, represented. The limited frequency of polychrome pottery may either be the result of poor preservation of the ceramics close to the surface, or it may actually reflect temporal changes in ceramic styles.

Three common unslipped jar types, all related to the Cayo ceramic group, round off the pottery of the Spanish Lookout Phase. These jars include specimens of Cayo Unslipped (Fig.33,34), Alexanders Unslipped (Fig.35a,b), and large numbers of Tu-Tu











Figure 35a,b: Alexanders Unslipped

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Figure 36 a, b: Tu-Tu Camp Striated

Camp Striated types (Fig. 36a,b). Jar sherds actually occurred in high frequency among non-diagnostic materials and also account for 10% of the diagnostic sherds discovered. Vessel forms among both Cayo Unslipped and Alexanders Unslipped consist predominantly of large globular jars with high necks and squared and slightly pointed lips. Vessel exteriors are generally plain but a few specimens have appliqued fillets and/or incised decorations around the shoulder of the vessels. Tu-tu Camp striated vessels are primarily represented by jars but these are generally slightly smaller in size than either Alexanders or Cayo Unslipped types. The Tu-tu Camp vessels are furthermore decorated with horizontal and/or vertical striations that extend from the shoulders to the bases of vessels. Many of the jar sherds fall into what Gifford describes as Terminal Classic modes that become prevalent at the end of the Spanish Lookout phase (Gifford 1976:278). The presence of these vessel forms thus suggests a very Late/Terminal Classic construction date for much of Structures 198 and 199.

A single torch holder was located in the fill of the terminal phase of Structure 199. This torch was slipped black, and the body is about 0.5 cm thick. The torch is one of few found in the Belize Valley, with the few others having been found in caves (Fig. 37).

The fragments of two, possibly three, Pabellon Molded Carved vessels with primary standard sequences are an example of a very Late/Terminal Classic to Early Postclassic ceramic type. The potters carved two distinct scenes, but on each is the depiction of a captive kneeling before an elite warrior, with the captive about to be sacrificed. Functional glyph bands are also found on Pabellon Molded Carved vessels and these vessels have primarily been recovered in high status dwellings at lowland sites (Figs. 38,39).







B





D



 $\mathbf{F}$ 





Figures 39 a, b: Pabellon Molded-Carved Vessel Fragments

# The New Town Ceramic Complex

Ceramics dating to the Early Postclassic period are considered rare in the Upper Belize Valley (Ball and Taschek 1986). Ball suggests that at most sites they just do not exist, suggesting a dwindling number of Maya in the region at this time (Ball and Taschek 1986). In contrast, Jaime Awe (personal communication 2000) believes that they are more common than actually reported, but their low representation at sites in the valley probably reflects the fact that they are often misidentified as Late Classic. At Barton Ramie, just down river from the Yaxtun Group, (Willey et al.1965) recovered a substantial collection of Early Postclassic pottery which they later used to establish the New Town Complex. Gifford (1976:288) notes that "this sequence position is believed to be Postclassic, and presumably Early Postclassic; hence, New Town should be contemporaneous with the period of the decline and abandonment of the lowland ceremonial centers."

The Early Postclassic material from the Yaxtun Group represents one of the largest collections of New Town ceramics yet found at Baking Pot. Although only 72 diagnostic New Town sherds were actually identified, this data can, nevertheless, help improve our understanding of the early Postclassic period in the region.

As is typical of ceramics in general at the Yaxtun Group, the greatest number of New Town pottery consisted of red slipped types. Augustine Red (Augustine Variety and Varieties Unspecified) are among the most common types found and are characterized by flaring dishes with scroll feet (Figs. 40a,b,c; 41a,b). A total of 22 Augustine Red sherds were recovered, all from level one. Other red slipped pottery included 29 fragments of Paxcaman Red which were found in level one from both surface collections


Figure 40 a, b, c: Augustine Red supports



Figure 41 a, b: Augustine Red supports Figure 41 c: Papacal Incised



Figure 42 a, b, c, d, e: Paxcaman Red supports

Figure 42 f: Ixpop Polychrome support



Figure 43 a, b, d: Paxcaman Red

Figure 43 c, e: More force Unslipped

and from excavation (Figs.42a,b,c,d,e). The Paxcaman ceramic group is also represented by specimens of Ixpop Polychrome (Fig. 42f). The majority of Paxcaman vessels are dishes, with a similar style of scroll feet to Augustine Red. Also used for supports on Paxcaman vessels are hourglass- type feet.

The Daylight ceramic group is represented by a lone orange sherd. Common modes (vessel forms) of the Daylight group generally consist of bowls and jars, and the one fragment found is from a bowl. Two unslipped types, Rio Juan Unslipped and More Force Unslipped (Figs.43c,e) were found in limited numbers (6) and were all jar forms. One type of Early Postclassic pottery that was found at the Yaxtun Group, but not recovered at Barton Ramie (Gifford 1976) includes Tohil Plumbate. At Yaxtun a partially complete Plumbate vessel was found cached above the terminal plaza floor within the fill of the terminal structure (Fig.44a). Plumbate vessels are almost entirely vitrified, and are distinguished by their metallic appearance. These ceramic remains suggest that the last construction phase of Structure 198 was built during the Early Postclassic and that sometime during this period the Yaxtun Group was finally abandoned.

#### **4.3 The Modified Ceramic Sherd Industry**

The modified ceramic sherd industry includes all artifacts made from ceramic sherds. At the Yaxtun Group, these modified sherds include perforated disks, lids, and notched sherds. All of the modified, ceramic, sherd artifacts were produced by cutting, flaking and grinding.









Figure 44 a: Tohil Plumbate

Figure 45: Ceramic Lid

**ARTIFACT FORM:** Perforated Disk (Figs. 44b,c)

# **FREQUENCY: 5**

## **MATERIAL:** Ceramic

DATING: SF. #49, #187, #239, #240 New Town (Early Postclassic)

SF. #242 Barton Creek (Late PreClassic)

CONTEXT: SF. #49- Humus above Plaza floor

SF. #187- In front of Str. 199; Above Plaza FloorSF. #239- In front of Str. 199, Above Plaza FloorSF. #240- In front of Str. 199, Above Plaza FloorSF. #242- Construction Fill of Str. 198

# **COMMENT:**

The perforated sherd disks at the Yaxtun Group range from 2-5 cm. in diameter. Two of the sherds were biconically drilled, and the edges were rounded and smooth. One of the sherds was biconically drilled, but not yet rounded, and two more appear to have been in the process of being drilled. Gordon Willey (1965:407) suggests that these sherds are spindlewhorls, and were used for weaving. Forty-two similar whorls were found in excavations at Barton Ramie, and these whorls are commonly found in other households in the Belize Valley. Ball and Taschek (1986) note that upriver at Buena Vista each household had 1-2 spindlewhorls. In the Peten, Inomata and Stiver (1998) have found a dwelling with a concentration of spindlewhorls and bone needs at the site of Aguateca. They postulate that this concentration indicates a female activity area, where they would have been weaving. Ball and Taschek (1986) suggest that certain households may have produced textiles as a trade item based on the discovery of both spindlewhorls and a



Figures 46-49: Ceramic Net Sinkers (sherd)

Figures 50-52: Ceramic Net Sinkers (modeled)

Figures 53: Ceramic whistle fragment

ceramic roller-stamp. Although no such roller-stamp was found at the Yaxtun Group, given the limited nature of our horizontal excavations their presence cannot be ruled out. It is also probable that if households were not producing textiles for the market, that they were producing it for home consumption. This could explain why most Classic period households have at least one whorl in their artifact assemblage.

### ARTIFACT FORM: Lid (Fig. 45)

# **FREQUENCY:** 1

#### **MATERIAL:** Ceramic

**DATING:** New Town (Early Postclassic)

CONTEXT: Plaza floor, in front of Str. 199

**COMMENT:** The only ceramic lid (for an olla/jar) found at the Yaxtun Group was a partially red-slipped sherd 8 cm in diameter. In northern Belize, Garber (1989:76) found five disks "atop narrow-mouthed vessels in three caches at Cerros" and argues that this in situ discovery provides evidence to support the claim that these disks are lids. In the Belize Valley, Willey also suggests that these disks may have been lids if they are larger than 6.8 cm in diameter (Willey et al 1965:406). Such lids have been found dating between the Late Preclassic to Postclassic times (Willey et al. 1965:406; Garber 1989:73).

ARTIFACT FORM: Net Sinkers/ End Notched Sherds (Figs. 46-49)

SUBFORM: End-notched potsherds

## **FREQUENCY:** 4

## MATERIAL: Sherd

**DATING:** New Town (Early Postclassic) SF # 38, 66, 67, 79

**CONTEXT:** Humus and surface finds

**COMMENTS:** Described as net sinkers or fishing weights, 4 end notched sherds (7 total when including specifically made end notched sherds) were found at the Yaxtun Group. Uncommon in the Classic period, net sinkers are primarily a Postclassic artifact (Masson 1999). They were found in substantial quantities at both Tulum (Sanders 1960:261) and at Dzibilchaltun in the Yucatan. In Belize, several investigators have noted that notched sherds and stones are fishing weights with the differences in weight reflecting slight differences in function (Garber 1986:20; MacKinnon 1996:15; Willey et al. 1965). Garber (1989) suggests that the differences in net sinkers may reflect the different bodies of water in which they were being used. At Baking Pot, the sinkers were probably used in the Belize River, which can range in speed and depth depending on location and seasonal changes in water flow. Alternatively, these net sinkers are also used as loom weights, and it is possible that some of the weights found at the Yaxtun Group were used for weaving.

#### 4.4 The Modeled Clay Industry

This industry comprises all hand-modeled clay artifacts. Three net sinkers, two small ceramic balls and two figurine fragments were included under this category at the Yaxtun Group.

ARTIFACT FORM: Net Sinkers/ End Notched Potsherds SUBFORM: Specially Made End-Notched Potsherds

## FREQUENCY: 3 (Figs. 50-52)

## MATERIAL: Ceramic

**DATING:** New Town ceramic complex (Early Postclassic) SF # 110, 121, 147

**CONTEXT**: Humus and surface finds

**COMMENTS**: These small end notched sherds were made specifically into net sinkers by modeling the clay before firing. These sherds probably would have had the same function as those sherds that were notched after firing. It is consistently noted that in the Postclassic period the majority of Maya settlements are found along rivers and costal areas (Chase and Chase 1985:5; Graham 1985:226-227) and it is believed that these sinkers were used as fishing net weights (Rubio 1985:53-54; Wonderley 1985:263,267).

## **ARTIFACT FORM:** Rattle

## **FREQUENCY:** 2

MATERIAL: Modeled Clay

**DATING:** New Town (Early Postclassic)

CONTEXT: Humus in front of Structures 198 and 199

**COMMENTS:** Two small clay balls were found at the Yaxtun Group, measuring between 1– 1.3 cm. in diameter. One clay ball was unslipped while the second was slipped red. Small clay balls of this size are commonly found in vessel legs or supports and are normally referred to as rattles. Sixteen Postclassic vessel supports that could have held rattle balls were found at the site, and it is possible that these rattles were from two of these legs.

# **ARTIFACT FORM:** Figurine

## **FREQUENCY:** 1

MATERIAL: Modeled Clay

**DATING:** Spanish Lookout/New Town (Terminal to Early Postclassic)

**CONTEXT:** Humus

**COMMENTS:** The single figurine fragment found at the Yaxtun Group is that of a wellmuscled and solid, human arm. In the Maya area, figurines are common in the Preclassic periods, become less frequent in the Early Classic, and increase in frequency again between Terminal Classic and Early Postclassic times. At the Yaxtun Group, the single figurine fragment was found in an Early Postclassic level.

# **ARTIFACT FORM**: Whistle (Fig.53)

**FREQUENCY**: 1

MATERIAL: Ceramic

**DATING:** Spanish Lookout to New Town (Terminal to Early Postclassic)

**CONTEXT**: Surface find

**COMMENT:** This whistle fragment is a human foot. Commonly such whistles were made with ceramic molds, and although animal effigies are more prevalent, this foot is anthropomorphic in form. Like figurines, whistles and ocarinas are frequently found in Terminal Classic to Early Postclassic contexts in the Maya lowlands. In the Belize Valley area, a number of them were found in burials at Pacbitun (Healy 1988). They are also common in Terminal Classic deposits at Lubaantun (Hammond 1975) in southern Belize and at Jaina in the Yucatan (Healy 1988).

#### **4.5 THE GROUND STONE INDUSTRY**

The ground stone industry includes all artifacts that were produced by grinding or pecking. Following Awe (1992), polished stones will be placed in a separate category, designated as the polished stone industry. The ground stone industry at the Yaxtun Group includes several artifact forms made from a variety of raw materials. These different artifact types include manos, matates, spindle whorls, bark beaters, grooved stones, and hammer stones. Granite, chert, and limestone were the most common materials used to produce these artifacts. Limestone can be found about two miles from the site, while granite and chert can be found along the beaches and banks of the Belize River.

# MANOS

Twenty-eight mano fragments, plus one complete specimen, make up our collection from the Yaxtun Group. Based on ethnographic evidence, these manos were used with metates for the grinding of maize (Willey et al. 1965:457, Vogt 1990:135). Nineteen of the manos were recovered from Str. 198, while only 10 were found at Str. 199. The majority of the manos (17 of 29) were found in surface collections or in the humus layers of excavations, probably because our investigations of this first level were greater. The majority of the manos were made of granite and sandstone, and occur in a greater variety of colors than the metates

# ARTIFACT FORM: Mano

#### SUBFORM: Oval

## **FREQUENCY**: 2

**MATERIAL**: Sandstone (SF#140), Granite (SF#36)

**DATING:** Spanish Lookout to New Town (Terminal to Early Postclassic)

## **CONTEXT**: Humus

**COMMENT**: This sub-form includes the only complete mano found at Yaxtun during the 1999 field season and a fragment of a granite specimen. The complete mano is made of sandstone, and is 15cm in length and 5cm in diameter. The granitic mano is pinkish-gray in color, 6.3 cm in diameter but its original length is unknown. Both manos exhibit use wear and polish, confirming their use as grinding implements. According to Awe (1992:287), oval manos have a wide temporal and geographical distribution in the Maya lowlands. They occur from the Formative to Classic periods. The two specimens found at the Yaxtun Group push the duration of their use into early Postclassic times.

## **ARTIFACT FORM**: Mano

SUBFORM: Square

## **FREQUENCY:** 4

**MATERIAL**: Granite (SF#10, 157, 197, 215)

**DATING:** Spanish Lookout to New Town (Terminal to Early Postclassic)

# **CONTEXT**: Surface Finds/ Humus

**COMMENT**: Four, partially complete, square (in cross section) manos were found at the Yaxtun Group. Their diameters range between 5.2 cm- 6.4 cm. All are made from pinkish granite and have smooth, polished surfaces. Seventy-seven of these square manos were found by Willey (1965:457) downstream at Barton Ramie, where he

estimated their lengths to range from 16.6 cm to 25.0 cm. He also suggested that these manos were produced no earlier than the Late Classic Tiger Run Phase, and continued into New Town times.

## ARTIFACT FORM: Mano

**SUBFORM**: Rectangular-thin

**FREQUENCY:** 4

**MATERIAL**: Granite (SF# 217, 195, 108, 220)

**DATING:** Spanish Lookout to New Town (Terminal to Early Postclassic)

**CONTEXT**: Humus

**COMMENT**: Three specimens, all fragments, of rectangular-thin manos were discovered. The widths range from 6.5 cm- 7.5 cm, while thickness ranges from 3.6 cm - 4.4 cm. Lengths are estimated by Willey et al. (1965:459) to range between 20 and 25 cm long. Willey et al. (1965:459) suggest that these manos are similar in form to a rectangular variety, but are thinner in cross section. Two of the rectangular varieties were found at the Yaxtun Group. All three of the Yaxtun specimens date to the early Postclassic. This supports Willey et al's. (1965:459) claim that rectangular thin manos cannot be dated earlier than Spanish Lookout times in the Belize Valley with any assurance.

ARTIFACT FORM: Mano (Fig. 54)

**SUBFORM**: Rectangular-thick

**FREQUENCY**: 1



Figure 54: Mano (Rectangular thick)



Figure 55: Metate (Turtleback)



**MATERIAL**: Granite (SF# 34)

**DATING:** Spanish Lookout to New Town (Terminal to Early Postclassic)

**CONTEXT**: Humus

**COMMENT**: One specimen, incomplete. One side shows greater polish than the other, but both sides exhibit use wear. The width of the single specimen is 7.2 cm, with a thickness of 5.4 cm. Willey et al. (1965:457-459) estimates the length of these forms to fall between 20 cm and 30 cm and dates them to occurring no earlier than the Spanish Lookout phase.

# ARTIFACT FORM: Mano

SUBFORM: Circular

**FREQUENCY**: 1

**MATERIAL**: Granite (SF. # 9)

**DATING:** Spanish Lookout to New Town (Terminal to Early Postclassic)

**CONTEXT**: Surface Collection, Str. 198

**COMMENT**: The single circular mano found at the Yaxtun Group is 10 cm in diameter and Willey et al. (1965:459) estimate the length of these mano forms to range between 18 cm and 32 cm. The surface exhibits use wear, but is not highly polished. The granite itself is of a rougher grain-size than found in the other manos from Yaxtun. These manos first appear in the Hermitage Phase, and continue into New Town, with the vast majority of circular manos appearing in the Spanish Lookout- New Town phases.



# Figure 56: Metate (Turtleback)



Figure 57: Limestone Spindlewhorl



Figure 58: Limestone Barkbeater

## **ARTIFACT FORM**: Metate (turtleback) (Figs. 55, 56)

**FREQUENCY:** 19

MATERIAL: Granite

**DATING:** Late Classic- Early Postclassic

**CONTEXT:** 17 from humus or surface collections, 2 from Late Classic construction fill of Structure 198.

**COMMENT:** These basin-shaped or turtle-back metates are legless, have smooth rounded bases and curve upwards at both ends (Awe 1992). These are the only forms of metates found at the Yaxtun group and range from 3.0 to 6.0 cm thick and 15 to 19 cm long. According to Garber (1989:19) they represent the most common form of metates at lowland Maya sites. Willey (1965) suggests that these type of metates occur from the Middle Formative to the Late Classic period, but our dating at the Yaxtun Group shows that they continue into the Early Postclassic period.

# ARTIFACT FORM: Spindle Whorl (Fig. 57)

FREQUENCY: 1

MATERIAL: Limestone

**DATING**: Postclassic (New Town)

**CONTEXT**: Surface Collection

**COMMENT**: The single limestone spindle whorl found at the Yaxtun Group is 2.5 cm in diameter, and 1 cm in height. The whorl has incised decoration on its domed top, while the bottom is flat and smooth. With a single exception (at the site of Cahal Pech, Awe 1992), limestone spindle whorls have only been found in Late Classic contexts (Sheets

1978:62; Willey 1965) in the Maya lowlands. It should be noted however, that spindle whorls made from perforated sherd disks have been uncovered from the Preclassic to the Postclassic, and these ceramic spindle whorls are more common in the archaeological record.

**ARTIFACT FORM:** Bark beater (Fig.58)

SUBFORM: Rectangular- A

**FREQUENCY**:1

MATERIAL: Limestone

**DATING:** Spanish Lookout - New Town phases (Terminal Classic/Early Postclassic)

**CONTEXT**: Surface collection

**COMMENT:** This bark beater is 10.2 cm long, 8.3 cm wide and 6 cm thick. This bark beater is rectangular, with slightly rounded corners. They were used to remove the bark of trees to obtain the paper for books Although in a state of poor preservation, the longitudinal parallel grooving on the two large faces are still visible. Willey et al. (1965:469) note that there are usually different numbers of grooves on each face, usually in about a 2:3 ratio. The single bark beater from the Yaxtun group reflects a similar pattern, with a 7:9 groove ratio. Like bark beaters recovered at Barton Ramie, this bark beater has a hafting groove running around all four sides, and was probably attached to a shaft before use. This groove is 1.4 cm wide, with a depth of 0.6 cm.. Willey et al. (1965:471) suggest that bark beaters begin in the Terminal Preclassic Floral Park phase (A.D. 100-250) and continue into the Classic period. The Yaxtun specimen suggests that they may have continued to be used into Early Postclassic times.

### **ARTIFACT FORM**: Grooved Stones (Fig. 59)

## **FREQUENCY: 3**

## MATERIAL: Granite

**DATING:** Spanish Lookout - New Town phases (Terminal Classic/Early Postclassic)

**CONTEXT**: Humus/ surface collection

**COMMENT:** Grooved stones have been found in association with fishing nets and are uncommon until the Terminal Classic/Early Postclassic period (Willey et al. 1965:466-469). Similar in function to end notched sherds, it is thought that the ropes would have been tied to the groove to keep the net in place both in rivers and in coastal regions (Garber 1986:20; MacKinnon 1996:15; Willey et al. 1965). These stones are more common at Postclassic sites along the coast, such as Tulum (Sanders 1960:261) and at Dzibilchaltun. Their occurrence during the Terminal Classic/Early Postclassic at sites like Baking Pot could indicate changes in fishing methods and technology or an increased reliance on fish in the diet.

### **ARTIFACT FORM:** Hammer Stone

## FREQUENCY: 1

## MATERIAL: Sandstone

**DATING:** Spanish Lookout- New Town phases (Terminal Classic/Early Postclassic)

### **CONTEXT**: Humus/ surface collection

**COMMENT:** The specimen is egg-shaped yet unmodified by intentional shaping. All surfaces, including ends show use wear associated with pounding and hammering. The hammer stone is 13cm long, 5 cm wide, and is 2.5 cm deep.







Figure 60 a, b, c, d, e: Jadeite Beads

#### **4.6 THE POLISHED STONE INDUSTRY**

This polished stone industry is comprised of artifacts that were intentionally polished. The artifacts included under this category are jadeite and quartz beads and hemispherical stones. Quartz can be found locally, but jadeite was probably imported from the Motagua River basin of Guatemala.

**ARTIFACT FORM**: Spherical stones

**FREQUENCY: 3** 

**MATERIAL**: Quartz

**DATING:** SF 166 and 211 Spanish Lookout (Late Classic)

SF 18 New Town (Early Postclassic)

CONTEXT: SF# 211 Fill of Terminal Phase Str. 199

SF# 166 Fill of Terminal Phase Str. 198

SF # 18 Humus Str. 198

**COMMENT:** These spherical stones are small, with diameters ranging between 1 cm - 1.2 cm and widths between 0.6cm- 0.8 cm. Unlike beads they do not have a hole through the center, but are sometimes grooved around the outside, possibly for attachment. Similar quartz artifacts are often referred to as divining stones in the Maya area (Awe personal communication).

**ARTIFACT FORM**: Beads (Figs. 60 a,b,c,d,e)

**FREQUENCY:** 5

#### MATERIAL: Jadeite

**DATING:** Spanish Lookout (Late Classic) – SF # 176, 144

New Town (Early Postclassic) – SF # 151, 228, 229

CONTEXT: SF # 176- Fill of Penultimate Structure, Str. 198

SF # 144- Fill of Terminal Structure, Str. 198

SF # 151- on Terminal Floor in front of Str. 199

SF # 228, 229- on Terminal Floor together in front of Str. 199

**COMMENT:** Jadeite beads are found in limited quantities from Preclassic to Early Postclassic times in the Belize Valley (Willey et al. 1965:483). They are generally biconically perforated and appear to have been used singularly as pendants or as beads in necklaces.

## **4.7 THE CHIPPED STONE INDUSTRY**

With over 700 chert and obsidian objects recorded, chipped stone tools were the second most common artifact form discovered at the Yaxtun Group. The overwhelming majority of the chipped stones were chert flakes and debitage. Less numerous in the assemblage were formal tools and obsidian blades.

Chert occurs locally in the region in limestone outcrops just north and northeast of the Belize River and near the site of Benque Viejo only a few kilometers from Baking Pot (Willey et al. 1965:411). Large nodules of chert were probably brought into households in the Valley, as numerous cores in various stages of cortex removal were uncovered during excavations. The chert found at the Yaxtun Group varies in color from white, honey-colored, gray, brown, orange and yellow. In contrast, obsidian is not found locally and represents an import from the Guatemalan Highlands. The obsidian used at Yaxtun is both gray and black in color. No cores of obsidian were discovered at the Yaxtun Group in 1999, but their apparent absence may simply reflect the limited coverage of our excavations.

Classification of the stone tools follows Hester (1991), W. R. Coe (1959), and Willey et al. (1965). Like W. R. Coe (1959) and Willey et al. (1965), we established 2 major categories of chipped stone materials: 1) utilitarian chert and 2) utilitarian obsidian. No ceremonial chipped stone artifacts were uncovered. Through this classification, some generalizations can be noted immediately. The most common chert tool is the heavy chopper (a chipped, celt-like implement) found primarily in the Late Classic at the Yaxtun Group. The most common obsidian tool is the prismatic blade, accounting for almost all of the obsidian present at Yaxtun. Chert debitage and waste material was found in abundance, leading to the conclusion that some chert tools were manufactured locally by members of the household. Obsidian, however, was much more scarce, and not a single core or flake was uncovered. This reflects the fact that obsidian was an exotic prized item and was possibly used very carefully with little residue or waste (Willey et al. 1965:411).

## UTILITARIAN IMPLEMENTS OF CHERT

ARTIFACT FORM: Points or Knives: Stemmed, Bifacial (Fig. 61)
SUBFORM: Tapered-stem, long blade
FREQUENCY: 2
MATERIAL: Chert





# Figure 61: Chert Stemmed, biface

3

DATING: New Town (Early Postclassic) – SF # 158, 218, 227

**CONTEXT**: SF # 158- On penultimate plaza floor- front of Str. 198

SF # 218- On terminal plaza floor- front of Str. 198

SF # 227- On terminal plaza floor- front of Str. 199

**COMMENT:** Three fragments, one nearly complete, were found at the Yaxtun Group. The length of SF # 218 (nearly complete) is 12.1 cm. The greatest width of the three specimens ranged between 3 cm and 4.2 cm and the thickness between 0.7 cm and 1 cm. One of the blades was made with honey-colored chert, while the other two were made from a dark brown chert. All blades show fine-edge retouching. Willey et al (1965: 412) found 12 complete stemmed, bifacial points at Barton Ramie, and noted that the stem tends to be one- third to one-forth of the total length. They also note that the chipping tends to be better on these points than on the utilitarian choppers, a trend also evident among the Yaxtun specimens. Hester, Shafer and Berry (1991:72) note that stemmed bifaces are also found in Northern Belize, and are usually found in Early Postclassic contexts. The dating is similar at the Yaxtun Group, as two of the artifacts were found lying on the terminal plaza floor, and the third was cached on the plaza floor prior to the construction of the Postclassic structure. These bifaces are yet another indicator of Postclassic occupation at the Yaxtun Group.

ARTIFACT FORM: Points or Knives: Stemmed, Bifacial

SUBFORM: Tapered-stem, short blade

**FREQUENCY**: 1

MATERIAL: Chert

**DATING:** New Town (Early Postclassic) – SF # 180

**CONTEXT**: SF # 180- On terminal plaza floor- front of Str. 199

**COMMENT:** Only one fragmented specimen was found at the Yaxtun Group. Although largely complete, part of the stem is missing. The short blade is 6.3 cm in length, 4.4 cm in width and 1.1 cm in thickness. The chert is a mixture of honey and orange colored stone, and the chipping is not as fine as the tapered-stem, long blade type. Similar to the other stemmed, bifacial types, this artifact was probably produced during the Postclassic period.

**ARTIFACT FORM**: Points or Knives: Unstemmed, Bifacial

SUBFORM: Heavy, pointed at both ends

**FREQUENCY**: 1

MATERIAL: Chert

**DATING:** Spanish Lookout (Late Classic) – SF # 61

**CONTEXT**: SF # 61 Fill of Penultimate Str. 198.

**COMMENT:** Only one heavy, unstemmed, bifacial knife fragment was found at the Yaxtun Group during the 1999 field season. It is smaller and more carefully chipped than the standard chopping tools, but not as thin as ceremonial knives of similar shape (Willey et al. 1965:412). This fragment is dark honey-colored, and shows retouching and use wear. The width is 4.5 cm, and the thickness is 2.7 cm. The length can not be determined, but Hester et al (1991:72:74) suggest that they generally range between 10 cm and 15 cm long. Hester et al. (1991:72-74) refer to these knives as Lanceolate Bifaces, and indicate that they are commonly found in Late Classic context.

**ARTIFACT FORM**: Choppers or General Utility Tools (Fig. 62)

SUBFORM: Standard Choppers, Bifacial

FREQUENCY: 17

MATERIAL: Chert

**DATING:** Spanish Lookout (Late Classic) SF # 60, 70, 120, 150, 202

New Town (Early Postclassic) SF # 5, 11, 41, 44, 128, 139, 163, 181, 205,

222, 223, 244

**CONTEXT**: SF # 5, 11, 139, 244- Surface Finds, Str. 198

SF # 41, 44- Surface Finds, Str. 199

SF # 128, 163, 222- Front of terminal Str. 199

SF # 181, 223- On terminal plaza floor- front of Str. 199

SF # 205- Front of terminal Str. 198

SF # 70, 150- Fill of terminal Str. 198

SF # 202- Fill of terminal Str. 199

SF # 60 - Fill of terminal plaza floor

SF # 120 – Fill of penultimate Str. 198

**COMMENT:** Seven whole specimens and 10 standard chopper biface fragments were found at the Yaxtun Group. Designated as oval biface celts by Mitchum (1991:46-47), celts by Mark Thompson (1991:143), and standard choppers: general utility tools by Willey et al. (1965:423), these artifacts are all similar. The chipped, celt- shaped tool of chert varies from a tear drop shape to a rectangular shape with a pointed end. The lengths of the intact artifacts range from 8.3 cm to 13.6 cm, with the majority clustering near the



Figure 62: Utility biface chopper

smaller measurement. Widths vary from 5.2 cm to 6.3 cm, while thickness ranges from 2.3 cm to 4.5 cm. Various colors of chert were employed by the Maya craftsmen, including white, red, honey-colored, gray, brown, veined and a blue-black chopper. In cross section these choppers are ovate to diamond shaped, and they taper gradually to the tip. In general, these tools show wear at the tip, and there are signs of re-working. None of the Yaxtun specimens were polished, and 3 still had remains of the cortex on one face.

In the Barton Ramie report, Willey et al. (1965:426-430) note that these choppers were found at all house mounds, at every level of excavation. However, most choppers were found within Spanish Lookout contexts. None of the choppers were found in mortuary contexts, supporting the conclusion that the general choppers were a commonly used tool. All of the choppers found at the Yaxtun Group have been found in fill or in mound refuse.

The function of these tools is problematical, and there are a few theories as to their use. Willey et al. (1965:426) suggest that the tool was used as an axe, as "it is the only such artifact found at Barton Ramie in sufficient numbers to suggest this. Certainly, an agricultural people in a jungle setting needed some such tool to combat the forest." However, Kidder (1947:5) points out problems with this possible function in that their "rounded edges do not seem sharp enough to have served for cutting wood, nor are their pointed ends sufficiently acute to have made efficient picks." Awe (personal communication, 2000) believes that the choppers may have been used both as axes and as hoes for cultivating the land and feels that the latter function may been their primary function. This, he argues, may account for their widespread distribution and great frequency in housemounds throughout the Belize Valley. Choppers are common in Classic period sites in the Petén, in Belize, in the Yucatan, and in Campeche. Kidder (1947) found choppers at the site of Uaxactún as early as the Preclassic, running the gamut of occupation at the site. In Belize, choppers have been found at the sites of Baking Pot (Ricketson 1929:14 fig. l), Benque Viejo (Thompson 1940:25 fig c), Colha (Potter 1991:23 fig a), Cerros (Mitchum 1991:47 figs. e,f), and at El Pozito, Belize (Hester, Shafer and Berry 1991:70 figs. b,c,f,g). In the Yucatan, Quintanna Roo and Campeche, choppers were uncovered at the sites of Labná and Becan (Thompson 1991:148 fig. 2), but not at the Postclassic sites of Tulum or Tancah (Willey et al 1965) leading researchers to believe that these choppers were primarily in use during the Classic period.

## **ARTIFACT FORM**: Chisel-Like Tools

SUBFORM: Small Chisels, Bifacial

**FREQUENCY**: 1

MATERIAL: Chert

**DATING:** New Town (Early Postclassic) SF # 74

**CONTEXT:** SF # 74 Surface collection, Str. 200

**COMMENT:** Little is known about the function of this implement, and neither Willey (1965:433) nor Mitchum (1991:46) venture to guess the use of this tool. The single specimen found at the Yaxtun Group is broken so the length is not determined, but the length of the chisel found at Cerros is 17.9 cm. and the length of the chisel found at Barton Ramie is 11.3 cm (Willey et al. 1965:433). The width of the Yaxtun artifact is 2.2 cm and the chisel is 1.3 cm thick. It appears that the implement is a well chipped, long,

narrow, medium-thick artifact (Willey et al. 1965: 433). The piece thins and tapers near the end, and is made from a white colored chert.

**ARTIFACT FORM:** Drills or Punches

SUBFORM: Small, bifacial

**FREQUENCY**: 1

MATERIAL: Chert

**DATING:** New Town (Early Postclassic) SF # 162

CONTEXT: SF # 162- humus in front of Str. 199

**COMMENT:** A single specimen was found at the Yaxtun Group, and it is not certain whether it represents a reworking of a point tip of a knife or a projectile point. It is carefully chipped on all sides, and is slightly oval, tapering at the edges. The length is 1.8 cm, the width is 1 cm and the thickness is less than 0.5 cm.

**ARTIFACT FORM:** Drills or Punches

**SUBFORM:** Small, Plano-convex

**FREQUENCY**: 1

MATERIAL: Chert

DATING: New Town (Early Postclassic) SF # 20

CONTEXT: SF # 20 humus over Str. 198

**COMMENT:** This single drill was found in the humus layer covering Str. 198. It is made from a honey-colored chert, and has cortex covering the top of the drill. The total length is 4.7 cm, the width ranges between 1.8 cm to 0.2 cm (at the tip) and the thickness

varies between 1.5 cm to 0.1 cm (at the tip). In cross section, the drill is triangular. Willey et al. (1965:434) found 11 small, plano-convex drills at Barton Ramie, and 8 were from caches. While the drill from the Yaxtun Group was not found in a cache, it is similar in style and size to those found by Willey at Barton Ramie.

**ARTIFACT FORM:** Flake Blades and Flakes: Prismatic Blades (Fig 77)

SUBFORM: Small

**FREQUENCY:** 4

MATERIAL: Chert

**DATING:** New Town (Early Postclassic) SF # 89, 90, 174, 245

CONTEXT: SF # 89, 90 - Surface collection, Str. 200

SF # 174 – Collapse of Str. 199

SF # 245 – Above terminal plaza floor

**COMMENT:** These 4 prismatic blades range in length from 2.7 cm to 4.2 cm, from 1.3 cm to 1.9 cm in width and vary between 0.1 cm and 0.5 cm in thickness. Three blades were made from honey-colored chert, while the fourth was black. All were slightly broken and all showed signs of use-nicking along the sides. The prismatic blade type is noted at San José (Thompson 1939:170 in Willey et al. 1965:441) and at Piedras Negras (Coe, W. R. 1959:13 in Willey 1965:441). Willey et al. (1965:441) note that many of these blades may have gone undetected, during excavations, as only 14 small prismatic blades were uncovered at the site of Barton Ramie. Willey et al. (1965) imply that the blades were probably more common than excavations records suggest, and our discovery of 4 in our limited excavations supports this possibility.

## UTILITARIAN IMPLEMENTS OF OBSIDIAN

Tools produced from obsidian are represented by three types: prismatic blades, arrow points, and a fragment of a laurel leaf point. Almost all obsidian tools were found in the form of prismatic blades, and most of them were broken. This form of obsidian is the most common obsidian tool in the Belize Valley. Because of its very sharp edges, obsidian can still cut easily, even after 1,000 years in the ground.

There were three major sources that supplied obsidian to the lowland regions: San Martin Jilotepeque (Rio Pixcaya), El Chayal, and Ixtepeque. All three sources are located in the Motagua Valley of Guatemala (McKillop and Healy 1989; McKillop and Jackson 1889; Nelson 1980, 1985; Healy et al. 1984; Hammond 1972, 1991a). Because obsidian had to be transported over long distances, obsidian is viewed as an "exotic" item in the lowlands (Nelson 1980 and McKillop et al. 1989).

**ARTIFACT FORM**: Flake Blades: Prismatic Flake Blades (Figs. 63a-t)

## FREQUENCY: 111

## MATERIAL: Obsidian

**DATING:** Tiger Run/ Spanish Lookout (Late Classic) to New Town (Early Postclassic) **CONTEXT**: Fill and humus

**COMMENT:** Most of the blades found show signs of use-nicking, and most were broken. These blades appear to have been used in ordinary every-day activities, as they were encountered frequently in refuse and fill. They were also the sharpest blade available, so it is reasonable to assume that they had a multitude of purposes. Willey et al.



Figure 63 a-t: Obsidian Blades
(1965:444) suggests that they could have been used for fine carving on both hard wood and limestone, "to cut fabrics, hides, hair, and the human skin".

It is clear from the number of obsidian fragments recovered that obsidian was much rarer than chert (flakes and blades) at the Yaxtun Group. Although obsidian debitage was not common, obsidian blades were found in relative abundance. This suggests that although obsidian had to be imported from Guatemala, its supply or availability to members of the Yaxtun Group was not limited.

Generally, it is believed that exotics (including obsidian) are synonymous with elite, and therefore it would be uncommon to find obsidian in any great quantities in the residences of the lower strata of society. Moore (1999), however, notes that with the increase of archaeological focus on settlements and minor centers, obsidian products are being discovered to have been distributed among all levels of Maya society from Preclassic to Early Postclassic times (Awe and Healy 1994; McKillop and Healy 1989; Hammond 1972, 1976, 1991a; P. Rice 1984, 1985; Dreiss 1988; Awe et al. 1990; Awe et al. 1994; Awe et al. 1996; Hohmann et al.1996; Pendergast 1981). Ball and Taschek (1986:38) note all households had obsidian blades and that only "objects made from other exotics such as marine shell, jadeite, hematite and pyrite were found strictly in association with nuclear plazuela" groups. Furthermore, obsidian is found in relatively large quantities in many lowland Maya settlements, and its association with both single residences and residential groups is evident. Obsidian is found at the site of Quirigua (Ashmore 1988), Guerra Group (Ball and Taschek 1986), Dos Pilas (Palka 1997), and numerous other sites throughout the region. Perhaps it is time to consider obsidian prismatic blades as a common household item accessible to all ranks of society.





Figures 64 and 65: Notched Obsidian Point

Figure 66: Obsidian Laurel Leaf Point







Figure 67: Shell Pendant

Figure 68: Shell Pendant

Figure 69: Tinkler Shell



Figure 70: Antler Hairpin/Pendant

Prismatic obsidian blades at the Yaxtun Group range in length from 1 cm to 10 cm, in width from 0.6 cm to 1.9 cm, and in thickness from .2 cm to 0.6 cm. All were broken, and all were found in refuse contexts. One blade appears to have been deliberately rounded, but the use for such an object is unknown.

**ARTIFACT FORM**: Flake Blades: Prismatic Flake Blades (Figs. 64, 65)

SUBFORM: Arrow point

**FREQUENCY**: 2

MATERIAL: Obsidian

**DATING:** New Town (Early Postclassic)

CONTEXT: Surface collections SF # 13, 238

**COMMENT**: Made predominately from fragments of prismatic blades, arrow points are one of the most diagnostic Postclassic indicators in the Maya lowlands (Masson 1999). They are also believed to have been introduced from the west by neighboring Mexican cultures. The two points from Yaxtun were less than 3 cm long and 1 cm wide.

ARTIFACT FORM: Unstemmed, bifacial (Fig. 66)

SUBFORM: Laural Leaf Point

**FREQUENCY**: 1

MATERIAL: Obsidian

DATING: New Town (Early Postclassic)

CONTEXT: On terminal plaza floor, front of Str. 199 SF # 226

**COMMENT:** Laurel leaf points have only rarely been found produced from obsidian and these are predominantly discovered in "ceremonial" or ritual contexts. At Barton Ramie two whole chert specimens and a large fragment were found associated with a burial Willey et al. (1965:445). At Xunantunich, two obsidian specimens were discovered in a cache and are believed to have been used as sacrificial blades (Jaime Awe personal communication 2000). At both sites these implements were dated to the Late Classic.

## **4.9 THE WORKED SHELL INDUSTRY**

Four worked shell artifacts were recovered from the Yaxtun Group in 1999. This does not include the thousands of *jute (Pachychilus indiorum* and *Pachychilus glaphyrus)*, *Pomacea flagellata*, and *Nephronais ortmanni* shells which show signs of modification for consumption. The vast quantity of shells found at the Yaxtun Group are freshwater, but there are a few examples of marine specimens present (*Olivella reticularis* and *Strombus gigas*). The worked shells at the Yaxtun Group are represented by three major forms; pendants, tinkler pendants, and shell adornos.

#### **ARTIFACT FORM**: Pendants (Figs. 67, 68)

# **FREQUENCY**: 2

**MATERIAL**: Shell (*Strombus gigas*)

**DATING:** Barton Creek (Late Preclassic) SF # 235

Spanish Lookout SF # 200

**CONTEXT:** SF # 235 – Fill - below second floor (clay tamped) Preclassic Str. 198

SF # 200 – Fill – below second (Plaster) Late Classic Str. 199

**COMMENT:** Two shell pendants were found at the Yaxtun Group. One pendant was carved in the form of a jaguar tooth (SF 200), and measures 3.5 cm long and its width ranges from 0.8 cm to 0.2 cm at the tip. At the top it has a biconical perforation that was probably used for suspending the pendant. The second specimen (SF 235) is flat, and measures 2.3 cm long by 2.5 cm wide.

Both artifacts were made from the shell of a *Strombus gigas*. Shell pendants are considered status items by Ball and Taschek (1986), suggesting that the occupants of the Yaxtun Group may have enjoyed a relatively high status.

**ARTIFACT FORM:** Shell Tinklers (Fig. 69)

#### **FREQUENCY**: 1

**MATERIAL**: Shell (*Olivella reticularis*)

**DATING:** New Town (Early Postclassic) SF # 183

CONTEXT: SF # 183 – On terminal plaza floor, in front of Str. 199

#### COMMENT

The tinkler pendant was usually worn on the wrists and ankles with many other "tinklers," resulting in the rattle when the wearer moved (or danced). The tinkler is 3.1 cm long and is decorated with two perforations for eyes, as well as one for the mouth of a simple face. The tinkler is made from an *Olivella reticularis* shell and according to Willey et al. (1965:508) it is "a widespread Maya lowland as well as a Mesoamerican trait...". Although the example found at the Yaxtun Group is from a Postclassic context

(above the terminal plaza floor, in front of Str. 199) tinklers without the simple face decoration begin to be produced in the Late Formative period (Awe 1992).

### ARTIFACT FORM: Shell Adorno

### FREQUENCY: 1

MATERIAL: Shell (unknown)

**DATING:** Spanish Lookout (Late Classic) SF # 201

**CONTEXT:** SF # 201 – In fill of terminal phase- Str. 199

**COMMENT:** This shell adorno is in the shape of a ring with a series of incised lines all along the band. It is 1.1 cm in diameter but the width of the ring band itself is less than 0.3 cm. The thickness of the artifact is less than 0.1 cm . Willey (1965:510) proposes that these adornos may have had several uses, including "inlays in wooden or otherwise perishable ornaments or ceremonial paraphernalia as well as decorative elements which perhaps were sewed to clothing" (Willey 1965:510 also see fig 309 f).

# **4.9 WORKED BONE INDUSTRY**

**Description:** Carved antler pendant/hairpin (Fig. 70)

Frequency: 1

Material: deer antler

Dating: Spanish Lookout (Late Classic) SF # 124

Context: In fill of penultimate Str. 198

**Comment:** This artifact is 9.5 cm long, and 1.5 cm wide and has incised decoration on the upper third of the body. The use of this artifact is uncertain. In its slightly curved

shape it appears that it could have served as a hairpin. However, there is a biconically drilled hole near the top of the artifact, suggesting its use as a pendant. Nothing similar was found by Willey et al. (1965) at Baking Pot or by Awe (1992) at Cahal Pech.

#### **4.10 MISCELLANEOUS OBJECTS**

**Description:** Briquettes or Daub fragments

Frequency: 867

Material: Clay and organic materials

Dating: Barton Creek (Preclassic) to New Town (Postclassic)

Context: All lots, all units.

**Comment**: Briquettes, or daub fragments, are the remains of the clay and plaster mixture which was originally used to cover (or daub) the pole and thatch structures. The perishable wattle/poles of the house generally disintegrate quickly and do not preserve in the humid tropics. The daub fragments are the only evidence of this architecture that is often preserved and retains the imprint of the poles on the inner side. This provides the archaeologist with an idea of the size of poles the Maya used to construct their homes and supports the interpretation that these structures served domestic purposes. Similar briquettes were found by Moore (1999) at the Atalaya Group at Baking Pot, a residential settlement cluster similar to Yaxtun.

## Summary

The artifacts recovered at the Yaxtun Group are similar assemblages type to other residential groups, both at the site of Baking Pot and at other sites in the Maya Lowlands (Ball and Taschek 1986; Moore 1999, Willey et al. 1965). Many of these artifacts can both shed light on the activities performed by members living at the Yaxtun Group, reveal the status of the occupants within the context of both Baking Pot and the Belize Valley, and reveal the wealth of the occupants. Through a detailed assessment of all the information gathered during the 1999 field season, the dates of occupation, status and wealth of the occupants, and the activities preformed by members of group can be determined. This residential group at the site of Baking Pot will also be put into the context of other house groups in the Belize Valley to compare all artifacts and architecture uncovered.

# CHAPTER 5

# **DISCUSSION AND CONCLUSIONS**

#### **5.1 Introduction**

The research conducted at the Yaxtun Group was concerned with (1) testing whether the settlement functioned as a household (2) determining the chronological development of the patio group (3) ascertaining the status and wealth of the occupants and (4) understanding the nature of the daily activities that occurred at the site. By comparing the data recovered from the Yaxtun Group with that from other peripheral settlements at Baking Pot, and within the Belize Valley and Maya Lowlands in general, we also hoped to gain a better understanding of Classic period Maya settlement dynamics.

Clearly, questions of this nature can best be addressed with a methodology that incorporates horizontal excavations and a 100% sampling of all architecture, patio space, and outlying areas of a given settlement. Given budgetary constraints and available research time, however, this ideal is rarely achieved by archaeologists. The research described herein certainly reflects these constraints. Is this a problem? In response to this question Goldsmith (1993:129) contends that "a sample of less than 100% is unacceptable only if it fails to achieve the scope of data-gathering necessary in the context of the project itself." He also notes that given the limited nature of budgets and time, it is often more fitting to ask: "could the sample excavated answer the questions proposed in the beginning?" If we apply Goldsmith's criteria to the 1999 season of investigations at the Yaxtun Group, it is apparent that our excavation methodology was adequate for addressing the research questions posed by the project. There is, nevertheless, little doubt that more intensive and extensive methods would have provided more conclusive results. For example, although we were able to determine that the Yaxtun Group was indeed a household group, the activity areas, both inside and outside the structures, remain mostly unknown. Despite these shortcomings, the data uncovered during 1999 season of investigations provide us with our first glimpse of the ancient Maya that once inhabited this peripheral settlement at the site of Baking Pot.

# 5.2 Evidence of Household Activity at the Yaxtun Group

Even before trowels began exposing the mounded remains of the structures that once formed the Yaxtun Group, the configuration of the settlement and shape of the ruined architecture had led us to assume that the mounds represented a household. This assumption, however, could only be verified through a systematic analysis of the artifacts and architectural remains uncovered at the site. To achieve this, the artifacts were examined through what Goldsmith (1993:137) refers to as "the tests of expected residential characteristics". This approach was developed by Goldsmith during excavations at the K'ik' Group at Cahal Pech and Group 1 at Blackman Eddy and incorporates a combination of tests designed by Ashmore (1981), Tourtellot (1988), and Haviland (1985).

In his study Goldsmith proposed five tests which could be used for determining whether a structure served residential functions (1993:139-146). The first test requires the use of the "principle of abundance," a theory that has drawn a great deal of criticism (see Chapter 1). Although many have argued against the use of this approach, Goldsmith

(1993) noted an inadvertent use of the principle. He argues that when archaeologists plan to investigate Maya households, they do not excavate temple pyramids, but rather they excavate the "abundant" small mounds that surround the site. Although this theory has great limitations [i.e. it can not tell us the specific function of the house (kitchen, storage)] it provides the locus for excavations, where the information either supports or refutes the belief that the structure is a house (Goldsmith 1993:140).

The second test relies on comparison of newly excavated architecture with that of other residential structures previously identified in the area of study (i.e. the Belize Valley). The main weakness of this test however, is its reliance on the accuracy of previous research, a point that Goldsmith admits. Fortunately, previous investigations by several projects in the Belize Valley provide subsequent researchers with a comprehensive comparison of both household architecture and their artifact assemblages. These earlier investigations include work at the site of Xunantunich by Ashmore (1996, 1997), Yeager (1994, 1995), Yeager and Villamil (1996), and Robin (1996, 1997). Similarly, the work by Ball and Taschek (1986) at the site of Buena Vista provides an excellent example of almost complete excavation of a number of housemounds, and a total artifact assemblage. More recently at Baking Pot, work by Piehl (1998, 1999) presents the results of complete strip excavations of two housemounds, and investigations by Moore (1999) provide comparison of a similar patio group. The early, yet very applicable, study of settlements in the Belize Valley by Willey and his colleagues (Willey et al. 1965) also provide excellent comparisons with households from the nearby site of Barton Ramie.

Ball and Taschek (1986) for example, found the remains of utilitarian "household" artifacts (including manos and metates, utilitarian bifaces and ceramics, and spindlewhorls) that are similar to those artifacts found at the Yaxtun Group. Piehl (1998, 1999) and Moore (1999), note that households were constructed with cut limestone walls used to retain the fill of an elevated platform. On this platform, a perishable superstructure of wattle and daub would have been constructed. These construction techniques are similar with the evidence at the Yaxtun Group, further supporting the belief that the structures were residences. Given the information above, it is clear that comparisons with other investigations are imperative, but that the comparison must be made with a wide range of sites to ensure accuracy. The architecture and the artifacts found at the Yaxtun Group are comparable with the findings of Willey et al. (1965), Piehl (1998, 1999), Yeager (1994, 1995), Ball and Taschek (1986) and elsewhere in the Belize Valley supporting the belief that the Yaxtun Group is a household.

The third test Goldsmith used to determine the presence or absence of a household is a comparison of the architectural features and layout of prehistoric structures with that of ethnographically documented Maya houses (Goldsmith 1993:142). He outlined three fundamental elements of households in the ethnographic record that should be compared with those from the archaeological record. These elements included: (1) methods of platform and perishable superstructure construction; (2) the layout of the structures with in the group; and (3) the surface area of each structure (Goldsmith 1993:142).

Although excavations at the Yaxtun Group did not achieve a 100% sample of the settlement, and although we did not conduct complete horizontal stripping of the mounds

that were excavated, the data recovered provide sufficient information to apply Goldsmith's (1993) elements of comparison.

Evidence for both platforms and perishable superstructures were uncovered at both Structure 198 and 199. The perishable prehistoric buildings also reflect similar methods of construction to that employed on many modern Maya houses. In the village of San José Succotz in the Cayo District of Belize, for example, superstructures are traditionally made of wattle and daub. The wattle consists of thin wooden poles that are tied closely together and placed in an upright position along the entire length of the walls. The daub consists of clay, often mixed with grasses, that is packed between and over the surface of the poles to eliminate the spaces between the wood. When these buildings are destroyed (accidentally or during architectural modification), the daub usually fragments into pieces of variable size and is often used for fill in subsequent construction.

The investigations at the Yaxtun Group recovered a considerable quantity of these daub fragments in every level of every unit excavated, and they were particularly concentrated along the outer bases of the retaining walls of the platforms. Often, the pieces of daub still had the impressions of the poles ingrained on their inner sides. This data indicates that although wattle and daub structures are becoming less common in modern Maya communities (concrete or wood buildings are now the norm), the architectural technique used in the construction of these buildings reflects cultural continuity from at least the Preclassic to modern times.

The platforms of the two excavated Yaxtun structures also correspond to modern Maya houses. Wauchope (1938:10 cited in Goldsmith 1993:143) notes that "stone walls retain an earth and rubble fill, which is packed down and surfaced with marl" and that "large stones placed outside the walls where wall poles meet the ground protect the floor and bases of poles against rain water (Wauchope 1938:12 cited in Goldsmith 1993:141). Both of these features were noted on the architecture at Yaxtun and once again reflect similarities between modern and ancient Maya houses.

As was noted previously, the buildings at the Yaxtun Group formed a U-shape, with a patio in the middle of the structures. This formation was common in the times of the ancient Maya, and it is also noted in modern communities. Sutro and Downing (1988:39 cited in Goldsmith 1993:143) suggest that as additional buildings were added to houses "dwelling structures will tend to form a U-shaped or an enclosed patio configuration". Our investigations at the Yaxtun Group suggest that the settlement may have began as a single house structure in the Late Preclassic. This early house is represented by Structure 198/1<sup>st</sup> and 198/2<sup>nd</sup>. During the Classic period, Structure 199 was erected to the southwest of Structure 198. We do not know as yet when Structure 200 was erected but its addition to the settlement certainly resulted with the formation of a U-shaped courtyard. The settlement configuration of the Yaxtun Group thus supports Sutro and Downing's observation and reinforces the interpretation that the mounds once comprised individual units of a household.

The last ethnographic comparison is that of household size. Although we have no dimensions for Structure 198, we do have a good idea of the size of Structure 199. The ethnographic accounts of Landa contain no mention of house size, and neither does Wauchope (1938). However, through a re-examination of the floor plans from the work of Wauchope, Goldsmith (1993:144) was able to determine that floor area ranges considerably, from 8 square meters to 39.5 square meters. If this is indeed the correct

range of floor sizes (8 square meters appears rather small for a family living space), Structure 199 is large by modern Maya standards at 38.4 square meters. Although we do not have exact measurements of Structure 198, this mound is considerably longer than Structure 199, and therefore may represent the home of a more affluent member of the household.

The fourth test proposed by Goldsmith incorporates the nature of the artifacts recovered from the mounds. One would expect that if the mound was once a house, domestic refuse would be the predominant artifact type found. This theory is one that has been used for some time (see Willey et al. 1965) and is what Goldsmith calls a "common sense" argument (1993:144). In their study of settlements in the Belize Valley, Willey and his colleges devoted considerable energy to the study of artifacts recovered in the housemounds at Barton Ramie and Baking Pot. Because of their meticulous work their study is still one of the best sources for comparing Late Preclassic to Late Classic household material in the Belize Valley.

The most common household artifacts identified by Willey et al. (1965) reflects a similar inventory and distribution with that discovered at the Yaxtun Group. These artifacts include utilitarian ceramics, spindlewhorls (for weaving), manos and metates (for grinding corn), chert flakes and blades, and broken obsidian blades. Although many of these artifacts were found in secondary contexts (usually in construction fill) some were found at the surface, or on floors. It is also probable that much of the construction fill would have been taken from the trash that the households produced. However, because these artifacts are not usually found in primary contexts, Goldsmith (1993:145) suggests that this test may be somewhat suspect.

The fifth test that Goldsmith proposes is the presence or absence of hearths which were likely used for cooking. Only a single hearth was found at the Yaxtun Group. This limited evidence, however, is more likely a reflection of our small sample size rather than the actual frequency of this feature at the settlement. Indeed, only a relatively small surface area was cleared by the excavations thus it is probable that additional hearths could be present and are yet undiscovered. The single hearth found was in Structure 198, at an Early Classic level.

In the plaza unit, at both the penultimate level and at the terminal level, there were a large number of shells and bones found. These middens are surprisingly absent from the terminal plaza area in front of Structure 199, and it is possible that the majority of the cooking was done in Structure 198. The data however, is too limited to support such a claim. We do, however, note that a large variety of animal bones were found at the Yaxtun group. These bones include remains of numerous birds, fish, tapir, jaguar, possum, rabbit, crocodile, dog and deer (see Appendix B). Shellfish is also abundant and are represented by a large quantity of freshwater snails and clams. Clearly, people living in this household were eating quite well and the quantity, diversity and distribution of the animal remains suggest that this food was being processed within the confines of the settlement.

In review, it appears that the Yaxtun Group did indeed have a residential function. Although many of the artifacts recovered came from secondary contexts, they do reflect utilitarian assemblages at other sites. The discovery of a large quantity of animal remains and the presence of fire hearths provides evidence for local food preparation and consumption. Comparison of the architecture of Structures 198 and 199 with modern Maya households, as well as comparison to other prehistoric house mounds in the Belize Valley, further support the interpretation that the Yaxtun Group represents the household of a family that once resided on the outskirts of the ancient city of Baking Pot.

# 5.3 Occupation and Activities Performed at the Yaxtun Group

The occupation of the Yaxtun Group begins in the Late Preclassic (300 BC - AD 300) and continues into the Early Postclassic period (AD 900- 1200), when the group was finally abandoned. This extensive period of occupation is represented by a series of architectural constructions and modifications and associated features and artifacts. Because radiocarbon dating of charcoal samples has yet to be completed, dating of occupation levels was determined by comparisons of the pottery from Yaxtun with dated ceramic assemblages from Baking Pot and other Belize Valley sites.

#### Late Preclassic Period (Barton Creek ceramic complex)

The two earliest platforms of Structure 198 and the first plaza construction were built during the late Preclassic period (BC 300- 300 AD). Two of the floors were made of plaster overlying a relatively thin layer of river cobbles that was used as ballast. The other floor was constructed of tamped clay. Tamped clay floors in the Belize Valley extend back to at least the Early Middle Formative Cunil phase or (1000 – 850 BC) (Awe 1992:345). The Late Preclassic Yaxtun platforms rose slightly above the level of the plaza floor. Daub fragments in the fill suggest that they both supported perishable wattleand-daub buildings. Ceramic remains found in these Late Preclassic levels include fragments of several pottery vessels, all corresponding to types associated with the Barton Creek ceramic complex established by Gifford (1976) at Barton Ramie. Diagnostic types identified in this assemblage included 13 fragments of Sierra Red, two Paila Unslipped sherds, and three Polvero Black. Also found at this level were several partially complete vessels cashed in front of the Preclassic structure. Ceramic types represented in the cache included Sierra Red, Polvero Black, Paila Unslipped, Laguna Verde Incised, Never Delay Impressed, Hillbank Red, Sapote Striated, and Happy Home Orange.

In summary, evidence for Late Preclassic occupation at the Yaxtun Group is found in only Structure 198 and in the plaza area immediately in front of it. This material is coeval with the earliest phase of development presently known for the site core (Group 1) at Baking Pot (Ricketson 1931; Bullard and Bullard 1965; and Willey et al. 1965).

#### Early Classic Period (Hermitage ceramic complex)

There are two schools of thought on identifying the remains of Early Classic occupation in the Belize Valley. The most recent suggests that the Early Classic phase of occupation is generally difficult to identify in this sub-region because few researchers have found materials dating to this phase in pure isolated context, and because researchers have traditionally used a Petén-centric ceramic assemblage to identify occupation corresponding to this time period (Awe personal communication 2000). Both at the site of Baking Pot and at Cahal Pech, Early Classic pottery is present but predominantly mixed with Preclassic or Late Classic material. Pure (stratigraphically isolated) lots of Early Classic period ceramics are exceedingly rare and when found are generally in caches or burials (Awe 1992; Piehl 1997; Moore 1999).

The other school of thought is based on the findings of Willey et al. (1965). They (Willey et al. 1965:350) report that mounds in their survey of the Belize Valley were occupied during the Hermitage phase or Early Classic approximately 77% of the time, or 50 out of 65 mounds. They note that the ceramics found at the site of Barton Ramie are so similar to those found in the Petén that they either were shipped from the Peten to the Belize Valley or "were imitated by craftsmen who either have been schooled in the Petén or instructed by persons directly emanating from Petén sources" (Willey et al. 1965:350). This similarity between the ceramics in the Petén region and the Belize Valley end during the early part of the Late Classic. While these interpretations appear at first to be inconsistent, it is important to note that Willey et al. (1965) determined that mounds were occupied during the Early Classic period solely on the presence or absence of Early Classic ceramic types. Their analysis did not examine ceramic remains in discrete contextual units. The pottery was primarily sorted on the basis of typological similarities and differences irrespective of their context. Because the Belize Valley Archaeological Reconnaissance Project employs a type-variety method of analysis that is contextually sensitive (Awe 1992), it provides a more accurate picture of local and regional changes over time. Despite these differences most projects have recovered evidence for Early Classic occupation in the Belize Valley, but as Awe (personal communication, 2000) notes this data is not very often discovered in pure or sealed stratigraphic context.

Evidence for Early Classic occupation at the site of Baking Pot appears to reflect Awe's contention. At the Yaxtun Group, for example, only a single phase of construction appears to be associated with Early Classic period activity. This is Structure 198/3<sup>rd</sup>. A number of Early Classic pottery was found in the fill of this platform but the majority of the ceramics were represented by Late Preclassic types. The Early Classic pottery found in this level include three Minanha Red sherds and three Pucte Brown sherds. Awe (personal communication 2000) informed me that this type of ceramic mix occurs throughout the Belize Valley and likely suggests that although the Maya of this subregion adopted and produced Peten-like Early Classic ceramics, they continued to produce Late Preclassic types into the Early Classic period. This would explain why so much Late Preclassic pottery (and sometimes Late Classic pottery in more recent stratigraphic levels) are often found in association with Early Classic sherds.

As with evidence for Late Preclassic occupation at the Yaxtun Group, the evidence for Early Classic occupation is limited to Structure 198. Architectural activity is represented a single construction phase, Structure 198/3rd, with no plaza construction identified at this time. More Early Classic pottery was discovered in subsequent construction phases but as noted below, they are mixed with Late Classic material in these contexts.

# Late Classic Period (Spanish Lookout ceramic complex)

The investigations of Willey et al (1965:371) in the Belize Valley noted that 100% of the mounds tested were occupied during the Late Classic period. Indeed, this appears to be time of most intense growth at the site of Baking Pot, and the Yaxtun Group was no exception to this trend. The platform of Structure 198 was raised over 80 cm during this period, and all phases of construction at Structure 199 were built during this time. Similar developments have been noted at Cahal Pech, Pacbitun, Buena Vista, Blackman Eddy and Xunantunich (Awe 1992) and all point to an increase of population in the Belize Valley.

Concurrent with these demographic changes, there were also changes in ceramic styles and their mode of production. Toward the end of the Late Classic, for example, there is a clear increase in the use of volcanic ash for temper in the ceramics of the Belize Valley. Previously, calcite and quartzite were predominantly used as temper. Why volcanic ash so rapidly became popular in the production of ceramics at this time is still obscure. Equally interesting is that all of the types associated with Late Classic period (Willey et al. 1965:373). Pottery recovered at the Yaxtun Group that date from the Late to Terminal Classic periods include types belonging to the following ceramic groups: Belize Red, Cayo Unslipped, Alexanders Unslipped, Garbutt Creek Red, Roaring Creek Red, Yalbac Smudged Brown, Vaca Falls Red, Mount Maloney Black, Benque Viejo Polychrome, and Rubber Camp Brown.

It is clear from the scale of the Late Classic phase architecture (both the quality of the plaster floors and the height of the cut limestone walls) that the people living at the Yaxtun Group during the Late Classic enjoyed a relatively affluent standing in the community. The patio group underwent the greatest level of construction during this phase, with the addition of Structure 199 and major modifications to Structure 198. The boom that Willey et al. (1965) describe in their report on the Belize Valley is clearly reflected at both the site of Baking Pot and the Yaxtun Group.

# Postclassic Occupation (New Town Ceramic Complex)

Unlike several of the peripheral settlements of Baking Pot, the Yaxtun Group was not abandoned at the end of the Late Classic. Our evidence suggests that this household group continued to be occupied into Early Postclassic times. However, although both Structure 198 and 199 were probably used during the Early Postclassic, only Structure 198 was modified during this period. There are also some interesting architectural changes at this time. In contrast to the penultimate structure from the Late Classic period, the terminal phase architecture is quite crude. The walls and terraces of the platform were constructed of river boulders with the occasional cut limestone block. At the summit, only a single line of limestone blocks also lined the outside of the building and most of the limestone appears to have been scavenged from earlier constructions and from other nearby buildings. It is possible that during this phase the occupants of the plaza group may not have enjoyed the privilege or ability to coerce others to provide them with quality raw materials, or it may simply reflect social changes during a period of great instability in the Maya lowlands (following the collapse of many regional centers).

Pottery found in the fill below the floor of the terminal construction phase are of a very late date, ranging from the Terminal Classic to Early Postclassic periods. The diagnostic sherds included a Cayo Unslipped jar with piecrust rim, a cached Plumbate vessel and a large fragment of a Pabellon Molded-carved vessel. The latter and the Plumbate vessel are particularly interesting because they provide further support to the suggestion that the inhabitants of Structure 198 were of relatively high status. Contextual analysis of Pabellon Molded-carved vessels by Helmke (1999) has noted that this ceramic

type consistently occurs in household groups with high status in the Belize Valley, Altun Ha and at Lamanai although usually not in the homes of elites. Plumbate pottery, which is a diagnostic of the Postclassic period, is an import from the highland Guatemala-El Salvador region and also shares a similar contextual distribution with the Molded-carved pottery.

Ceramics found in the humus and collapsed debris of both structures date the terminal phase of occupation and subsequent abandonment to the New Town phase (A.D. 900-1200). Diagnostic New Town phase ceramics recovered in the most recent stratigraphic levels included types such as Augustine Red, Paxcaman Red, and Ixpop Polychrome. In addition, seventeen Postclassic vessel supports were identified. Also found in the humus/collapse of both Structure 198 and 199 were several Pabellon Molded -carved sherds similar to the large panel found in the fill of the terminal phase of Structure 198.

Diagnostic, non-ceramic, Postclassic artifacts included five side-notched arrow points, and seven net weights. Three of the projectile points were produced from chert and two were made from fragments of obsidian blades. The net weights were represented by four notched sherds and three specially made ceramic sinkers. The latter are commonly found at riverine and coastal Postclassic sites and indicate increased reliance on aquatic resources. At Yaxtun this is reflected by the presence of fish bones and the remains of freshwater shell fish.

Our data also suggest that the Postclassic Maya at Baking Pot actively participated in long distance trade and contact. This is reflected by the presence of obsidian and Plumbate pottery that derived from the Maya highlands, greenstone (or jade) from the Motagua valley, and marine shell from the Caribbean. Salt from the coast may have accompanied the importation of the marine shell. What kind of goods did the Baking Pot Maya offer in exchange? While we do not have conclusive evidence for any products from this region, ethnohistoric documentation reports that the area was particularly known for its cacao production (Willey et al. 1965). The occurrence of numerous spindle whorls further suggests that cotton and/or textiles may also have been shipped from the valley.

Although the occupation of the Yaxtun Group did not continue past the Early Postclassic period, the information that it provides about the nature of occupation at this time is particularly valuable because only limited information is presently available on Early Postclassic developments in the Belize Valley. Very few mounds excavated have produced evidence of Postclassic occupation and even within the site core of Baking Pot, only scant evidence of Postclassic activity has been recorded (Aimers 1996). Future investigations will continue to explore the developments that occurred in this very enigmatic period of Maya development in the Belize Valley.

# 5.4 Status Indicators at the Yaxtun Group

Numerous indicators of status were found at the Yaxtun Group, most of which are associated with Late Classic and Early Postclassic occupation. Because excavations exposed larger areas pertaining to these time periods, however, the apparent lack of status objects for earlier periods does not rule out a high status rank for those families. Indeed, the Late Preclassic cache containing several (six or more) well-made vessels is a clear demonstration of conspicuous consumption of wealth. The offering, in fact, represents one of the largest offerings of Late Preclassic vessels yet reported for the Belize Valley (Awe, personal communication, 2000). Exotic items associated with Late Preclassic phases of occupation included a single conch shell pendant. During similar phases of occupation at the site of Cahal Pech, jadeite, obsidian, marine shells and iron pyrite for mosaic mirrors were imported. The fact that similar exotics were not found at Yaxtun during our short season of research may once again reflect the extremely limited sample size of Preclassic phases of occupation. Their absence, therefore, may not necessarily be a reflection of the occupants status. While, I am not suggesting that the occupants of the Yaxtun Group had great wealth, the lack of data regarding exotic materials in Late Preclassic levels cannot conclusively rule out the possibility that the early inhabitants of the group were not affluent citizens of Baking Pot.

Like the Preclassic, few status markers were uncovered in the Early Classic construction phase, and here again they are represented by ceramics and marine shell. The ceramics include several fragments of highly decorated polychrome pottery with basal flanges. The shells included a few fragments of conch shell.

For the Late Classic period, obsidian is the most common exotic recovered in the excavations. Unlike most other trade items, however, obsidian blades are ubiquitous in the Maya lowlands. They are present in just about every mound excavated and thus do not provide a good measure of social standing. Exotics that can be used as better status markers include jade, marine shell, and decorated pottery. All of these items were discovered in the Yaxtun Group, along with other special objects such as a quartzite and shell adorno, and a carved antler pendant/hairpin.

Beside exotics, the size and quality of architecture can also be used to determine status differences between prehistoric settlements. It was noted previously that limestone is not readily available in the alluvial valley on which Baking Pot is located. Limestone for the dressed blocks that were the preferred material for retaining walls had to be brought from approximately two miles away. In comparisons to many other mounds at Baking Pot, the structures that make up the Yaxtun Group were similar in construction. All structures were built on platforms with limestone retaining walls. The structures that were subsequently built on this platform to support the perishable buildings were also at the larger end of the range of households noted in the Maya area by Goldsmith (1993). These structures also had retaining walls made of large cut limestone blocks seven to eight courses high. The size and quality of the Late Classic architecture is therefore consistent with what we would expect of an affluent household.

For the Early Postclassic period, there are also several status markers. As mentioned above, two specialized types of ceramics are very indicative of high status. These include the Pabellon Molded–carved pottery and the nearly complete Tohil Plumbate vessel. The Molded-carved sherds represent two or three vessels. Besides being highly decorated with a carved scene depicting the presentation of bound captives to a lord, they have functional glyph bands that function as Primary Standard Sequences. The PSS's denote the owner of the vessel and the function of the vase (i.e. "the drinking cup of – name of Lord). While not similarly decorated, Tohil Plumbate pottery represents an exotic ceramic type that is predominantly found in special contexts (offerings) and/or assemblages associated with elite contexts. Other objects that reflect the affluence of the

Postclassic occupants of the Yaxtun Group include four jadeite beads; a quartz bead; a tinkler shell pendent; and a conch shell pendent.

## 5.5 Daily Life and Activities Performed at the Yaxtun Group

It might be argued that because of the limited nature of the excavations at the Yaxtun Group, describing the activities of the occupants is premature and futile. Several of the artifacts recovered by the excavations can nevertheless shed some light on the activities that were performed at the settlement. Some of these activities represent simple household chores, but all provide important clues in our attempt to understand the life of the Pre-Columbian inhabitants who resided in the Belize Valley.

The careful interpretation of the artifacts and animal remains recovered in the excavations, for example, can yield information on diet and food procurement. During the Late Preclassic period, the occupants of the Yaxtun Group were living in perishable wattle-and-daub buildings that were erected on low platforms. It appears that the residents of this time may have consisted of a single nuclear family that resided in a single house. The presence of grinding stones suggests that they processed and consumed maize. In the fill in front of Structure 198, over 950 freshwater shells were uncovered and suggest a dependence on aquatic animal resources in the diet. Aside from diet, we have evidence of other activities performed by members of the family. The discovery of an unfinished spindle whorl suggests that weaving was probably a common activity of female members of the family. Perhaps the household made its own clothes or may have produced textiles for local exchange networks.

During the Early Classic period we uncovered less information about the people living at Structure 198. Little direct evidence remains about their diet, although we know from evidence at other households that maize, squash, and beans were the main crops eaten by the ancient Maya (Sharer 1995). The evidence for aquatic dietary supplements includes only shells of several freshwater snails (i.e. *Pomacea flagellata, Pachychilus indiorum* and *Pachychilus glaphyrus* and freshwater bivalves). Although there were no marine shells uncovered, it is probable that the people living at the Yaxtun Group during this period did have access to these materials.

The only hearth found at the Yaxtun Group was built into the Early Classic floor. Although no animal remains were found in association with the hearth, the feature suggests that during the Early Classic period they may have prepared food inside their dwellings. Interestingly, the hearth was located near the center of the platform, which is a common configuration of modern Maya dwellings in Chiapas (Vogt 1990).

Evidence of life in the Late Classic at the Yaxtun Group is more diverse than either the Late Preclassic or Early Classic. The household increased in size, and at least two structures were added to the plazuela. The number of residents may have also increased threefold and probably consisted of an extended family. The members also appear to have acquired more wealth and possibly status, as their platforms are over 280 cm high, and retained by large cut limestone blocks that had to be brought from foothills some two miles away. The floors of both structures were also made with thick layers of lime plaster that in itself represents a marked improvement over previous floors.

Data reflecting dietary information includes over 140 shells of freshwater species plus a wide variety of animal remains. Freshwater shellfish included snails such as "jute" and *Pomacea*, as well as bivalves of the mussel *Nephronais ortmanni*. Marine species included several fragments of conch. Animal remains are represented by bones from white tailed deer, red brocket deer, several birds, tapir, jaguar, rabbits, crocodile, and gibnut. Mano and metate fragments were found in large numbers at this level, indicating a reliance on maize in their diets. Like their Early Classic predecessors, the Late Classic occupants of the Yaxtun Group most likely also relied on beans, squash, and various other domesticates and wild plant food in their diet. It is probable that some of these plants would have been planted in nearby gardens by the family, possibly directly around the patio group. The discovery of chert utilitarian bifaces (a multifunctional tool used for land preparation) further supports the idea that the family grew much of their own food.

For the Postclassic period there is a variety of data that reflect activities associated with food procurement, food processing and food type consumed. Objects associated with food procurement consisted of types related to agriculture, the exploitation of aquatic resources and hunting. Farming-related tools occur in the form of chert utilitarian bifaces and unstemmed chert bifaces. As indicated above, these implements served multifunctional purposes and could have been used as hoes and for land preparation.

Objects associated with the exploitation of aquatic resources are represented by net weights and possibly grooved stones. Both of these artifact types increase in frequency at Postclassic sites located along rivers and on the coast and may reflect the introduction of a new technology during this time. The net weights are also interesting because they come in different shapes and weights. It is possible that the lighter ceramic net sinkers were placed near the top of the net, while the heavier stones were attached to the bottom, allowing the net to anchor more easily along the bottom of fast-flowing rivers. A third artifact type used for hunting animals was the small, side-notched, arrow point. At Baking Pot the latter were produced from chert and obsidian blade fragments. These arrow points were probably used in a fashion similar to that used in Mexico and North America. They would have been attached to long shafts and either thrown or projected into the animal with or without the use of a bow.

Postclassic artifacts associated with food preparation are similar to those found in earlier levels of occupation at the Yaxtun Group. Large numbers of mano and metate fragments were found in the humus and collapsed architectural debris, including one complete mano. As with previous phases of occupation, the manos and metates indicate the importance of maize in the diet. However, other vegetable foods, such as squash and beans were probably important parts of the diet as well.

Actual data on the type of foods consumed are represented by the remains of shell and bone. Both of these occur in relatively high frequency in the Postclassic levels at the Yaxtun Group. Over 900 shells were recovered, with the majority coming from a midden in front of Structure 198. Most of the shells are represented by three species of freshwater snails (*Pomacea flagellata, Pachychilus indiorum* and *Pachychilus glaphyrus*), and the bivalves of the freshwater mussel *Nephronais ortmani*. These shells were probably procured directly from the Belize River, or from a small stream located to the east of the Yaxtun Group. Animal remains include tapir (*Tapirus bairdii*), gibnut (*Agouti paca*), hispid pocket gopher (*Heterogeomys hispidus*), red brocket deer (*Mazama americana*), white-tailed deer, armadillo (*Dasypus novemcinctus*), various species of turtle (?), bush rabbit (*Dasypracta punctata*), jaguar, and parrot fish. This quality and quantity of meat products in the diet of those living at the group indicate that the inhabitants ate a varied diet. Furthermore, deer live in open areas, suggesting much of the area had been cleared for crop production

Other artifacts, such as spindle whorls and bark beaters, provide evidence for different types of activities during the Postclassic period. Within the Postclassic levels at Yaxtun, five spindle whorls were uncovered, including a carved limestone spindle whorl. These whorls indicate that weaving was probably a common activity at this time. According to ethnographic studies, women and even young girls were responsible for making clothes and blankets for the family (Vogt 1990).

Another activity that members of the group may have partaken in was papermaking. The evidence for this is limited, but a single bark beater was located in Postclassic deposits at Yaxtun. These limestone bark beaters were hafted on a stick and the bark was literally beaten off fig trees (which are numerous along the Belize River). This bark paper could have been used to locally or perhaps was produced for market exchange. Fig trees are water loving species and their abundance along the Belize River means that they could have been exploited for the production of paper.

# 5.6 Size and Configuration of the Yaxtun Group

Although limited excavations was conducted at the Yaxtun Group, it was clear from the survey of the mounds that at least three, if not four, structures formed the plazuela. The possible fourth or eastern structure was not surveyed by Jim Conlon (1999) because it was barely visible beneath the overlying foliage and because we hope to confirm or negate its presence during future investigations. The three easily visible mounds lay on the north, west and south sides of the plaza area. The northern and western structures were joined, limiting access within the plaza from the north and west. The southern structure appears to be the smallest structure of the group, but was not tested during the 1999 field season due to time constraints.

The only structure that we gained any substantial architectural information about at the Yaxtun Group is the terminal phase of Structure 199. During the summer of 1999, excavators cleared both the front of the structure (facing the plaza) and portions of the southern and northern walls. The structure was large, with over 38 square meters of living space on the platform. The structure was built in an L shape, with the top of the L facing north.

The northern structure is by far the largest (in regards to height and surveyed length), contrasting with other patio groups at Baking Pot (Atalaya and Bedran) where the largest structure is located at the southern edge of the plaza. The penultimate phase architecture uncovered at Structure 198 appears to have been built contemporaneously with the terminal phase architecture uncovered at Structure 199, and in a similar style. From the information gathered during the 1999 field season, however, it was determined that although Structure 198 did have an outset, it was not an L-shaped building like Structure 199.

The terminal phase architecture of 198 was just as puzzling, as so little of it was cleared. It appears that the structure was terraced, using river boulders and uncut limestone blocks. Retaining walls were no higher than a single line of stones high, contrasting sharply with the seven-course cut stone walls found in the penultimate construction.

The architectural information found at the Yaxtun Group indicates that the household platforms are large, and that there are at least three of them surrounding a central plaza area indicating the layout of a standard plazuela group. Although the architectural information recovered during the 1999 season is relatively limited, given the temporal and financial constraints, the investigations have nevertheless provided substantial new information on peripheral settlements at Baking Pot, and particularly on Postclassic developments in the Belize Valley.

# CONCLUSIONS

Despite the limited nature of the investigations at the Yaxtun Group, the research conducted during the summer of 1999 provide considerable information on this peripheral settlement at the site of Baking Pot. The analysis of both the architecture and the artifacts in mound 198 and 199 indicates that both of these structures functioned as residences. It is probable that a single family lived at the group from the Late Preclassic to the Early Classic, as only Structure 198 produced evidence for occupation during these early periods of habitation. Following the inception of the Late Classic, extensive architectural modification of the plazuela suggests a rise in population and the presence of a household that may have been comprised of an extended family. Ceramic remains further suggest that the settlement continued to function as a residential unit into the Early Postclassic period, approximately 200 years after the site core was abandoned.

The cultural remains recovered by the investigations further suggest that the occupants of the Yaxtun Group enjoyed a relatively high status within the Baking Pot polity. This social stature is manifested by their extensive access to exotic trade goods,

highly decorated pottery, and high quality architecture. Exotic trade goods are present in the form of marine shell and jadeite objects, obsidian blades and projectiles, and Tohil plumbate pottery. Decorated pottery is represented by Early and Late Classic polychromes, and particularly by the remains of two or three Pabellon Molded-carved vessels. Beside containing beautifully carved panels, the latter include Primary Standard Sequences that record function and ownership of the vessels. Architecture, particularly that of the Late Classic phases of construction, also suggest that the occupants resided in relatively large dwellings that were erected with cut limestone blocks (seven to eight courses high) that had to be imported from several kilometers away.

Other cultural remains suggest that the activities performed by various members of the household were primarily domestic in nature. There is evidence for food processing, food procurement, and some specialized production of goods. Evidence for food preparation (and consumption) is indicated by the remains of a hearth, large numbers of shell and animal bone, mano and metate fragments, fishing net weights (of ceramics and of granite) as well as large quantities of utilitarian pottery.

Small arrow or projectile points (two obsidian and three chert) and several net weights suggest that members of the Yaxtun Group were involved in both hunting and fishing. The arrow points were probably attached to wooden shafts and propelled (either by hand or by bow and arrow) into such animals as tapir, jaguar and deer.

Specialized production of goods is indicated by five spindle whorls whose function is related to weaving. Given that this activity is traditionally associated with females, it is probable that the women of the group were involved with the production of textiles for local (household) and/or regional consumption (e.g. selling at the local market).

Excavations of the Yaxtun Group will continue during the 2000 field season. We hope to uncover a greater depth of information about both activities performed at the group and the architecture of each of the structures. A possible eastern structure will also be tested in an attempt to locate the "eastern shrine" commonly found on plazuelas of this period. Although the evidence presented in this thesis is preliminary, the information gathered can be used to improve understanding of household occupation at the site of Baking Pot and of households within the larger context of the Belize Valley. Clearly, more extensive excavations of households are needed, and a greater focus on this part of the site will help clarify issues relating to the composition of a family and to the activities that it performed.

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