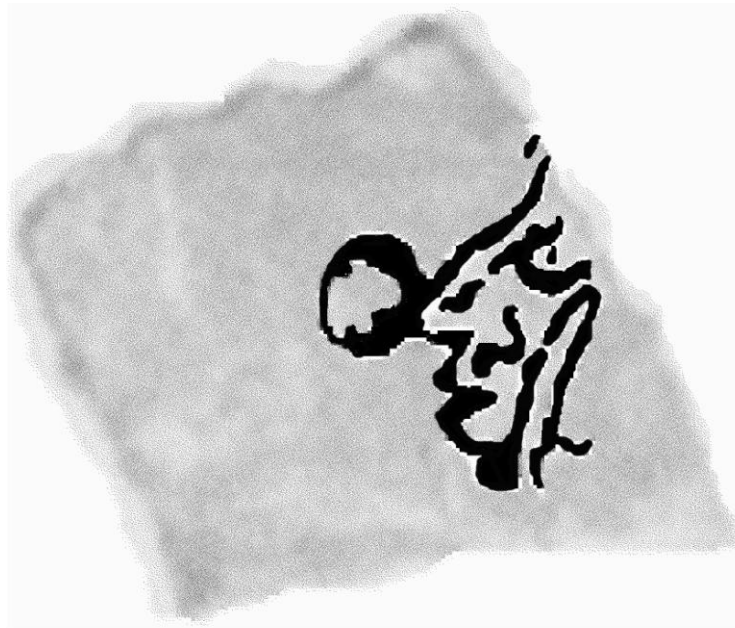


***The Belize Valley Archaeological  
Reconnaissance Project***  
***A Report of the 2009 Field Season***



**Volume 15**

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**Cover:** Painted ceramic sherd featuring a human face and nasal motif, Baking Pot, Belize. Drawing by Julie A. Hoggarth (2008).

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***The Belize Valley Archaeological  
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## **THE 2009 SEASON OF INVESTIGATIONS**

In the 2009 season, excavations focused at the site of Baking Pot, examining the settlement and community organization of the site. Based on Julie Hoggarth's methodology for her dissertation (Hoggarth 2009), the first phase focused on creating a contiguous block coverage survey area of nine square kilometers associated with the epicentral settlement at the site.

The second phase of research focused on developing the systematic program of test-pit excavations, aimed at collecting a 20 percent stratified sample, was continued by Ashley Kiss at M-007, Patrick Wilkinson at M-009, and Eva Jobbova at M-011a. These excavations focused on examining demographic occupation, to serve as a basis to understand broader demographic trends at the site, and to serve in a broader context for understanding changes in community and domestic organization in the Classic to Postclassic transition in Settlement Cluster C. Overall, these excavations demonstrated multiple construction phases, predominantly during the Late to Terminal Classic periods, with a broad spectrum of material remains demonstrating varied socioeconomic status.

In the third phase of this research, horizontal excavations were planned for eight house groups in Settlement Cluster C, aiming to identify major material changes in the Late and Terminal Classic periods, as well as the Early Postclassic period, demonstrating consistencies and changes in the Classic to Postclassic transition in this community. Julie Hoggarth's excavations at the Ixim Group (M-99) focused on the western and southern structures of the group, with horizontal and trench excavations examining the terminal architecture during the Early Postclassic period, as well as extending into the earliest constructions at the group in the Late Preclassic period. Jillian Jordan excavated the other formally organized group in the sample, M-108, M-109, M-110, and M-111, finding that the group was occupied rather late in the Late Classic period, and only extended into the Terminal Classic period. The material remains indicate that the group struggled to maintain a position within the community, and the household did not persist into the Early Postclassic period. Celine Lamb's excavations focused on M-101, one structure in a two-structure group (M-100 and M-101). Her excavations revealed significant occupation during the Late and Terminal Classic, as well as evidence of occupation in the Early Postclassic period. Phylicia Pelayo discusses her excavations at M-96, a large, one-structure house group in 2008 to 2009. Her excavations found four burials, all dating to the Spanish Lookout phase, indicating significant mortuary activity in the group during the Late Classic phase. Finally, the final report shifts the focus away from Baking Pot, with Christina Zweig discussing the results of her Masters research, focused on understanding the assemblage of Formative figurines from Cahal Pech.

The success of the 2009 season is owed to many companies and individuals. We would like to thank the Institute of Archaeology for permitting us to conduct the research

described in this volume. Student accommodations were provided by Midas Resort Hotel and Mana Kai Cabins and Camping. Hode's Restaurant provided food for the project, while Pacz Tours assisted in transportation and logistics.

Many thanks to the field school students in June and July 2009. BVAR staff in the 2009 season included: Jaime Awe, Chris Awe, Rafael Guerra, Julie Hoggarth, Eva Jobbová, Ashley Kiss, Jillian Jordan, Céline Lamb, Phylicia Pelayo, Myka Schwanke, Martin Sneddon Patrick Wilkinson, and Christina Zweig.

Julie A. Hoggarth – Pittsburgh, Pennsylvania, United States

Jaime Awe – San Ignacio, Belize

# **EXCAVATIONS OF MOUND 007, BAKING POT, BELIZE**

**Ashley Kiss  
University of Pittsburgh**

## **INTRODUCTION**

Excavations were commenced in the 2009 season seeking to understand the occupation and social changes associated with the settlement in and around the urban center of Baking Pot. Settlement survey, which was recommenced in 2007, was also continued. Excavations consisted of three vertical 1 X 1 excavation units and three horizontal excavation units. The vertical excavations were conducted to collect chronological data about the occupation of Baking Pot. The horizontal excavations were conducted to collect data that mainly focused on the social organization during the Classic/Postclassic transition period.

## **BACKGROUND**

Baking Pot is a major center located in the Cayo District of Belize, on the south bank of the Belize River on land belonging to Baking Pot Central Farm. The monumental center of the site consists of two architectural groups (Group A and Group B) connected by a 250-m long raised causeway (Causeway 1). Two other causeways have been located that link Group B to its terminus complex and Group A to the Yaxtun *plazuela* group (Causeways 2 & 3 respectively). The settlement extends beyond the site core in all directions. The most current data indicates that the site was occupied from the end of the Middle Preclassic period (c. 600-300 BC) through the Early Postclassic period (AD 1200). The site reached its peak during the Late Classic period (AD 600-850). At its peak, the site is estimated to have a population of around 2000 (Willey 1965).

Ricketson was the first to excavate at Baking Pot in the 1924. His excavations mainly focused on the monumental architecture in Group A (formally Group I)(Ricketson 1929). Excavations resumed again in 1949, when the quarrying of limestone from Group B for the construction of a major roadway was halted by A. H. Anderson. The quarrying removed much of the front facing stones of Structure B1 including the remaining stairway. Gordon Willey started excavations in 1956. Willey was one of the first to focus outside the site core, mapping and excavation many of the housemounds located in the periphery surrounding the site center

(Willey *et al.* 1965). In 1961, William R. Bullard Jr., continuing the work of Willey, began excavations that mainly focused on Structure B1. Bullard documented the exposed architecture left by the earlier quarrying and placed an excavation unit on the summit of the structure (Bullard and Bullard 1965)

In 1992, the Belize Valley Archaeological Reconnaissance (BVAR) project, resumed excavations and mapping at Baking Pot. BVAR, under the direction Dr. Jaime Awe, sought to focus research not on the elite sectors of the site, as many previous excavations had done, but to conduct survey and excavations that mainly concentrated on the periphery of the site. James M. Conlon excavated the Bedran *plazuela* group west of the site core from 1992-1994. In the following years, Conlon also surveyed a large portion of the site including residential areas to the east and south of the epicenter (Conlon 1993, 1995, 1997; Conlon & Ehret 2001, 2000; Ehret & Conlon 2000, 2001). Also, during the this time, the Atalaya *plazuela* group was excavated by Allan Moore (Conlon & Moore 1998, 2003; Moore 1997, 1998, 1999). Excavations were also conducted in and around Group A, beginning with Causeway I, which connects the Group A and Group B (Cheetham 1995).

From 1996-1997, James J. Aimers excavated Plaza 2 located in Group A (Aimers 1998, 1997), and in 1997, Josalyn Ferguson conducted axial excavations in the Northern Ballcourt (Ballcourt 1)(Ferguson 1999, 1998). Jennifer Piehl excavated the site for her PhD dissertation which focused on the social differentiation, status, and health differences among the households around Baking Pot. Using evidence such as the presence of prestige goods in burials, she was able to infer the social status of the occupants of burials. She also examined skeletal remains for evidence of malnutrition and stress. Her work yielded valuable data about the status differences and chronological occupation of five house structures (Piehl 2006, 1999, 1998, 1997).

In 2000, Carolyn M. Audet completed excavations of the Yaxtun *plazuela* group. These excavations showed a strong presence of artifacts dating to the Postclassic occupational phase. Audet also excavated residential and monumental architecture located in and around the site core of Baking Pot (Audet 2007, 2000; Audet & Awe 2000). Over the next four years, excavations were conducted throughout the site. These excavations included those in several ritual structures associated with Causeways 1 and 2 (Audet 2004, Audet & Awe 2003), Structures A1 and E in Group A (Audet & Awe 2003; Hoggarth 2005; Swain 2005), Structures B8 and B9 in Group B (Audet 2005), as well as several residential structures (Dixon 2005; Dixon & Hoggarth 2004; McRae & Audet 2004, 2003; Weller 2002). Also, during this time, Poe continued the mapping and surveying of the site (Poe 2005, 2004).

Archaeological excavations resumed in 2007 when Christophe Helmke began excavations in Group B. These excavations focused mainly on the construction techniques used in the monumental architecture of Group B, but several vertical 1 X 1 excavation units were also placed in the periphery of Baking Pot for settlement research purposes (Helmke & Awe 2008; Hoggarth 2008). The settlement research resumed in 2008 when Julie Hoggarth continued her research into the occupation and settlement changes at Baking Pot. Several vertical units were excavated in the periphery of Baking Pot to gather data pertaining to chronological changes. Several horizontal units were also excavated to gather data focusing on the Postclassic occupation at Baking Pot.

Excavations were continued by Julie Hoggarth in the 2009 season seeking to understand the occupation and social changes associated with the settlement around the urban center of Baking Pot. Expanding on the research conducted in the 2007 and 2008 field seasons, the excavations of the 2009 season sought to continue to collect data pertaining to occupation and settlement changes at Baking Pot.

## **METHODOLOGY**

The site grid of Baking Pot consists of nine one-kilometer squares with the center point directly over the geometric center of the monumental epicenter of the site core. The data collected from the excavations of housemounds randomly chosen within each of the one-kilometer squares are the basis for the research in the 2009 season. Collecting data in this manner ensures that the data recovered from surface collections and excavations is representative of the entire site.

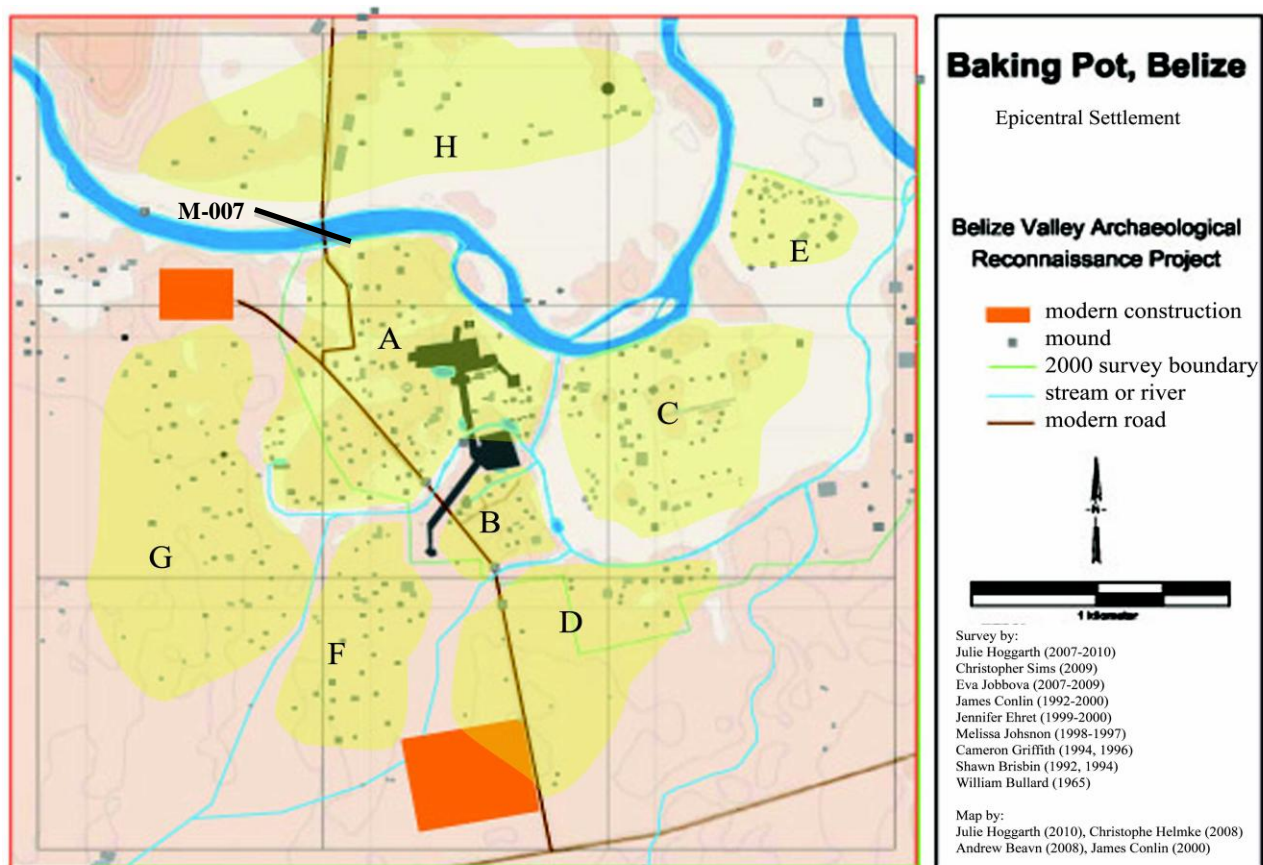
Expanding on the research conducted in the 2007 and 2008 field seasons, the excavations of the 2009 season sought to continue to collect data pertaining to occupation and settlement changes at Baking Pot. Three vertical 1 X 1 were placed in the periphery of the site north of Group A in the northeastern corner of the site grid of Baking Pot. Three housemounds of different sizes were randomly chosen for excavations. The units were excavated to sterile soil. The aim of the vertical excavations was to collect data pertaining to the chronological occupation of Baking Pot.

Three horizontal units were also excavated. These were located southeast of Group B in the periphery of the site. The data recovered from these units focused mainly on the terminal Classic and Postclassic occupation of the site. During these phases of occupation, significant changes were taking place within the city. The horizontal excavations sought to find evidence in the form of architecture, prestige goods, and burials to understand how each of the households was integrated into the larger settlement and what kind of social changes were taking place during these critical time periods.

Settlement survey, conducted by Chris Sims and supervised by Julie Hoggarth, also continued. Using handheld GPS devices and other tools, Sims, along with one or two student(s), were able to gather housemound data such as, field designation, date, time, UTM coordinates as easting and northing, estimated elevation and architectural dimensions. Surface collection also took place at the surveyed housemounds.

### **Structure M-007**

Structure M 007 is located in the northwest of the civic center of Baking Pot along the Belize River (Figure 1). This mound, along with two others, was randomly chosen for vertical excavation units. These excavations were focused on determining chronological occupation phases. A temporary datum was established on the highest point of the mound and a mound profile was measured and drawn. A 1 X 1m excavation unit was placed in the estimated center



**Figure 1:** Location of M-009 in relationship to Baking Pot site core (Modified from Hoggarth 2009).

of the mound. This unit is reported as Excavation Unit 30 in Settlement Research-3 (SR-3). Level 1 (Lot 1781) was started at approximately 35 cm below datum and continued down to approximately 45 cm below datum. This level was characterized by dark brown humus mixed with plant roots. Artifacts found within this level include a partial obsidian bladelette and the top portion of a broken chert biface. Ceramics were also found in this level. Level 1 was closed an arbitrary depth of approximately 10 cm below surface (35 cm below datum) was reached.

Level 2 (Lot 1782) was started at approximately 45 cm below datum. The soil in this level was very hard and a medium, sandy brown color. A large amount of ceramic sherds were found in this level, especially in the southwestern corner of the unit. Chert lithics were also recovered. The level was ended at approximately 60 cm below datum when there was a notable change in soil composition.

Level 3 (Lot 1783) was started at approximately 60 cm below datum. The soil matrix in this level was characterized as sandy alluvial in composition. Ceramics were the only artifact found in this level. After excavating approximately 5 cm, the remains of a plaster floor were uncovered. Lot 1783 was closed at this point at 65 cm below datum. The floor was deteriorated

Str	Lvl	Ce	Ch	Db	Qz	Gr	Ob	Gr	Fa	Fs	Ms	Ls	St	Context
M-007	1	8	3				1							Humus
M-007	2	97	10											Below (plowed) floor
M-007	3	26												Below (plowed) floor
M-007	4	66	4				1			1				Below (plowed) floor
M-007	5	5	3				1							Below Floor 1
M-007	6	9	3							4				Below Floor 1
M-007	7									8				Below Floor 1
M-007	8									3				Sterile
<b>TOTAL</b>		211	23	0	0	0	3	0	0	16	0	0	0	253

**Table 1:** Artifact totals for M-007 by level.

Str	Lvl	Ce	Ch	Db	Qz	Gr	Ob	Gr	Fa	Fs	Ms	Ls	St	Context
M-007	1	8	3				1							Humus
M-007	2-4	189	14				1			1				Below (plowed) floor
M-007	5-7	14	6				1			12				Below Floor 1
M-007	8									3				Sterile
<b>TOTAL</b>		211	23		0	0	3	0	0	16	0	0	0	253

**Table 2:** Artifact totals for M-007 by context.

but mostly intact. Level 4 (Lot 1784) was started at this point. The plaster floor was removed and directly below, a ballast layer was discovered. The plaster was approximately 2 cm thick and the ballast layer was approximately 5-10 cm thick. The ballast layer was made up of ceramics and chert lithics, as well as river rocks of varying sizes. There were few artifacts found below the ballast layer and the level was ended at approximately 95 cm below datum.

Level 5 (Lot 1785) was started at approximately 95 cm below datum. The soil in this level contained a higher quantity of sand than previous levels. This level had very few artifacts. Several ceramic sherds, chert lithics and a fragment of an obsidian bladelette were the only artifacts found in Level 5. Likely, these artifacts were naturally moved downward into the soil from the occupational level above. The level was ended at approximately 115 cm below datum. Level 6 (Lot 1786) was started at this point. This level was also made up of a sandy alluvial, most likely from flood deposition from the nearby Belize River. Very few artifacts were found in this level. However, several ceramic sherds, chert flakes and jute shells were recovered. Also recovered were several small sherds of polychrome ceramics. Level 6 was ended at approximately 135cm below datum.

Level 7 (Lot 1787) was started at approximately 135cm below datum. The soil composition in the level contained more sand than that in previous levels. Only jute shells were found in this level. No ceramics or chert lithics were recovered. Level 7 was ended at

approximately 155cm below datum. Level 8 was begun at this point and it is assumed that sterile soil is either present or near due to the total lack of artifacts found in this level. The jute shells found in the previous level were most likely natural deposits from the nearby river and not necessarily deposited there by human activities. Level 8 was ended at approximately 175cm below datum. At this point, a wall profile was drawn of the eastern wall to show the chronological occupation of Mound 007.

## CONCLUSIONS

Excavations at M-007 revealed one phase of occupation in addition to the terminal phase of architecture, which was likely plowed in recent times. The plaster floor excavated in Level 4 and the lack of evidence for domestic activities in the levels below indicates that this was the only occupational phase. Domestic activities were present at this housemound as indicated by the remains of chert flakes and lithics, as well as ceramic fragments and obsidian bladelettes. The ceramic sherds recovered from M-007 were dated to the Postclassic phase of the occupation of Baking Pot. The plaster floor excavated was very well preserved even through the exposure to the elements indicating there was a substantial investment in the quality of construction of architecture at this housemound.

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## **EXCAVATIONS OF MOUND 009 AT BAKING POT, BELIZE**

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### **INTRODUCTION**

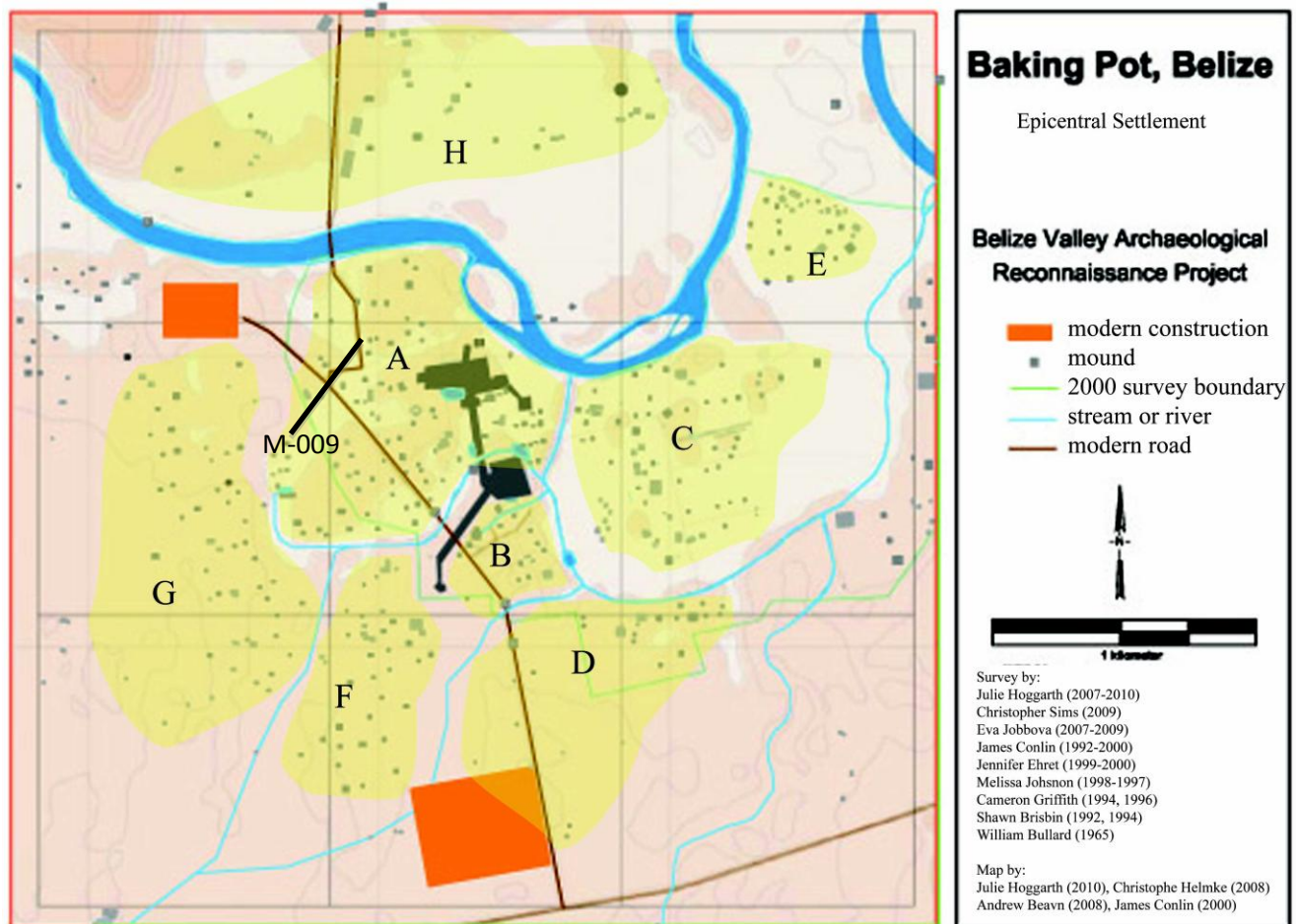
Excavations of Mound 009 began on June 3, 2009 and were completed on June 26, 2009. The primary purposes behind the excavation were to attempt to identify the mound as a residential structure and to determine a chronology of occupation. M-009 is located to the west of the civic core and is near the Belize River (Figure 1). In order to determine if the mound served as a residential platform or had some other, unknown purpose, artifacts related to domestic use and not ceremonial or trade specialization were expected. With this in mind, a 1m by 1m excavation unit was dug in the center of the mound.

### **RESULTS**

#### **Construction Episodes**

The excavation unit was established at the highest point, which was also the center of the mound. A data point was established at roughly 30cm above the mound surface, and a one-meter by one-meter square was laid out, with its sides running north/south and east/west. The excavation was designated as unit number 29, Operation SR-3 (Settlement Research). The first level of excavation was an arbitrary 10cm intended to cut through the vegetation and roots. In this level we found ceramics, obsidian, jute shell, chert, and daub (Lot 1711). We also found a partially decomposed, cotton camouflage hat. This hat was not collected, but is mentioned here because its position near the bottom of the level seems to indicate fairly recent plow activity.

Level 2 was an arbitrary 20cm level. The soil quickly changed from surface humus to sandy silt. In this level were found ceramics, obsidian, jute shell, chert, and daub (Lot 1712). For the purposes of distinguishing construction episodes, we interpreted that the terminal floor was likely destroyed from plowing activities, and thus, the change in matrix texture and color was likely just below the level of the terminal floor.



**Figure 1:** Location of M-009 in relation to site core (modified from Hoggarth 2009).

Level 3 began as another 20cm arbitrary level, but a degraded plaster floor that covered the entire unit was found 12cm below level 2 and the level was stopped there. This floor was designated as Floor 1. In this level were found ceramics, chert, and jute shell (Lot 1713). Level 4 descended approximately 10cm and stopped at an intact plaster floor. This floor also covered the entire excavation unit, and showed evidence of having been burnt. This floor was designated Floor 2. In this unit were found ceramics and chert, including special find M009-1, a painted ceramic sherd (lot 1714).

Level 5 descended through Floor 2 which had to be broken up with picks, and had rock ballast beneath the plaster. Excavations continued down approximately 15cm until Floor 3 was reached. Floor 3 was a stamped earth floor with evidence of partial burning. In this level were found chert and polychrome ceramic sherds (lot 1715). Level 6 was an arbitrary 20cm level and very little was found in the level.

There were some jute shells as well as ceramic and chert pieces that were collected (lot 1716).

Level 7 showed significant disturbance by burrowing animals, and so all areas in the level that appeared to have been disturbed were included in Lot 1718, while the areas that were undisturbed were Lot 1717. Both lots consisted of Jute shell and ceramics. . The level went down an arbitrary 25 cm, and possible architectural evidence was observed. Embedded in the north wall of the unit in this level were a line of four limestone rocks that may have been the remains of a wall or border. These rocks did not extend out into the unit, and may just as easily be coincidence. In level eight the animal burrows continued, so again two lots were used. Level eight descended an arbitrary 25cm, and no architectural evidence was observed. In the undisturbed lot (lot 1719) were found ceramics, chert, jute and marine shell. In the disturbed lot (lot 1720) were found chert and ceramics but no shell.

Level nine was another arbitrary 25cm level. Of note in this level is there was no evidence of animal disturbance, and there is only one lot for this level. In this level no evidence of architecture was found but a mano, chert bi-face, ceramics, and carbon were found. The carbon was collected and packaged in foil (lot 1721).

Levels ten, eleven, and twelve were all intended to be arbitrary 25cm levels. No evidence of architecture was found. In level ten, the soil began to get sandier, and only two small ceramic sherds were found (lot 1722). In level eleven, the soil became even sandier, and again only a two ceramic sherds were found (lot 1723). In level 12, the soil changed to yellow sand, and because of the ease in removal and inattention, the level descended 40cm instead of 25. Again, only a few sherds of ceramics were found and no other cultural evidence (lot 1724).

Level 13 was the last level in this excavation unit, and descended an additional 25cm. The soil was very loose yellow sand, and only jute shells were found in it. These shells were very small and did not have the tips broken off, indicating that they are probably a natural deposit by the river and were not harvested and eaten by the residents (Lot 1725).

### **Artifacts**

Artifacts recovered from excavations were domestic in nature, as expected. In total, 448 artifacts were recovered from all 13 levels (Table 1). Ceramics were the most ubiquitous artifact class, followed by chert. Ceramics were typically utilitarian in nature, with only a few sherds with elaborate decoration. Ceramic analysis is on going, thus, the chronological information for these levels is still unknown. Chert was primarily debitage, consisting of unworked flakes and shatter, along with cores and a few formal tool types (such as crude bifaces).

Structure	Lvl	Ce	Ch	Db	Qz	Gr	Ob	Fa	Fs	Ms	Ls	St	Context
M-009	1	27	4	2			1		1				Humus
M-009	2	37	16	2			2		5				Humus
M-009	3	32	4										Below (plowed) floor
M-009	4	38	8										Below Floor 1
M-009	5	17	2						1				Below Floor 2
M-009	6	15	5						1				Below Floor 3
M-009	7	12	1						1				Below Floor 3
M-009	8	33	15						3	1			Below Floor 3
M-009	9	55	11			2			1	5			Below Floor 3
M-009	10	1											Below Floor 3
M-009	11	1							1				Below Floor 3
M-009	12	2											Below Floor 3
M-009	13								83				Sterile
TOTAL		270	66	4	0	2	3	0	97	6	0	0	448

**Table 1:** Artifact totals for M-009 by level.

Str	Lvl	Ce	Ch	Db	Qz	Gr	Ob	Fa	Fs	Ms	Ls	St	Context
M-009	1-2	64	20	4			3		6				Humus
M-009	3	32	4										Below (plowed) floor
M-009	4	38	8										Below Floor 1
M-009	5	17	2						1				Below Floor 2
M-009	6-12	119	32			2			7	6			Below Floor 3
M-009	13								83				Sterile
TOTAL		270	66	4	0	2	3	0	97	6	0	0	448

**Table 2:** Artifact totals for M-009 by cultural context

The majority of cultural material was recovered from the earliest cultural level, below the third floor (Table 2). This is likely due to the depth of excavations, as this level contained the largest amount of excavation (7 archaeological levels). Artifacts from the humus level was the second highest in frequency, which is also to be expected, as there was evidence that the mound had been plowed in the recent past.

## DISCUSSION

Excavation reveals at least 5 episodes of occupation or construction, one beneath Floor 3 and then three on each of the floors, and the (plowed) terminal floor. The earliest convincing evidence of occupation (and not just sporadic use) is in level nine, when items including a mano, chert biface, and carbon indicate that domestic activities were occurring at the structure. The earliest phase of architecture is evidenced by the stamped earthen floor located in level five. Later

floors in levels four and three show increased investment in labor in the architecture. Due to the exposure to the elements that floor one was subject to, and the fact that floor two was protected from these same elements by floor one, it is not possible to compare the qualities of them.

# **CONTINUING SETTLEMENT RESEARCH AT BAKING POT, BELIZE: RESULTS FROM EXCAVATIONS AT M-11A**

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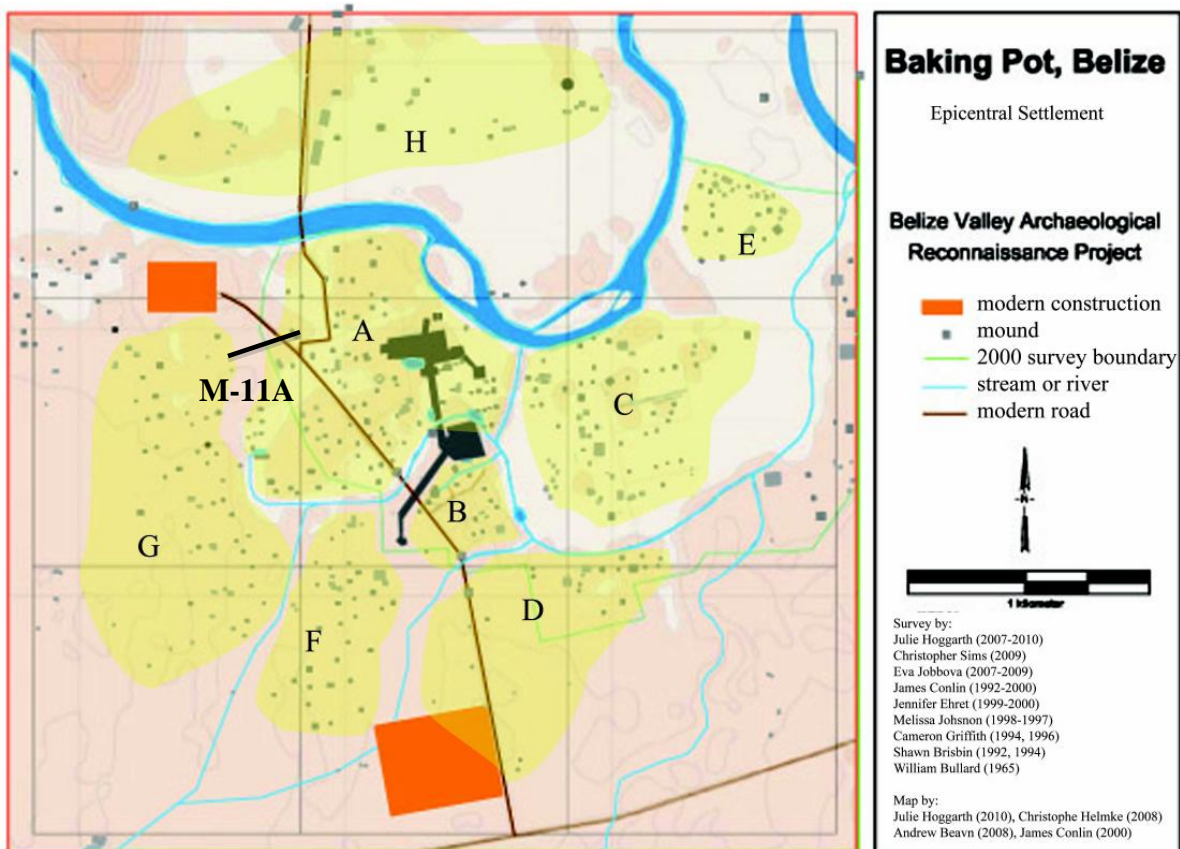
## **INTRODUCTION**

In the 2009 season, Belize Valley Archaeological Reconnaissance (BVAR) project continued settlement research project of Baking Pot, with the aim to gain better understanding of occupational history of the settlement of the site, as well as involvement of common households in political, social and economic organization of the site of Baking Pot and their change during the transition from the Classic to Postclassic period. Project continued with settlement survey as well as with excavations within and around the urban center of Baking Pot. Settlement excavation continued with the objective to complete 20% sample of housemounds at the site and included both larger horizontal excavation and small vertical test pits. They are part of larger research project that intends to systematically sample housemounds at the site of Baking Pot (Hoggarth, 2008).

The ancient Maya site of Baking Pot is located in the Cayo District of western Belize, on the southern bank of Belize River, positioned 9.4 km downriver (roughly northeast) of the modern town of San Ignacio and 26.1 km upriver of the country's capital, Belmopan. As one of the larger settlements in the Belize River Valley (Willey et al. 1965: 301) Baking Pot was occupied from the end of the Middle Preclassic period to Middle Postclassic period (Audet, 2007), reaching its peak during the Late Classic period (AD 600-850) when it served as the capital to a small kingdom.

## **PREVIOUS RESEARCH**

Earliest archaeological research at Baking Pot was conducted in 1924 by O. G. Ricketson, Jr. (Ricketson, 1929) and followed by A. H. Anderson and W. R. Bullard in 1949 and 1961 respectively (Bullard, 1963). These investigations were focused primarily on excavation of ceremonial epicenter of the site, consisting of two large architectural



**Figure 1:** Location of M-011a in Settlement Cluster A, Baking Pot (modified from Hoggarth 2010).

complexes (Groups A and B) that are linked by a 250 meter long causeway (or *sacbe* in Yukatek). Understanding of the settlement and occupation of the region was considerably improved by settlement survey and mapping of Baking Pot, commenced in 1965 by Gordon Willey (Willey *et al.*, 1965). William Bullard as a part of Gordon Willey's team conducted the first settlement survey and mapping of Baking Pot, and also carried out a series of test excavations of some of the house mounds, as part of his settlement pattern project of Belize River Valley (Willey *et al.*, 1965).

Settlement research at Baking Pot was recommenced in 1992 by Belize Valley Archaeological Reconnaissance (BVAR) and focused on expanding and updating the original map of Baking Pot produced by Gordon Willey. Survey was led by James Conlon over the period of seven seasons, until 2000 (Conlon 1993, 1995, 1997; Conlon and Ehret, 2000), and sought to identify the settlement distributions at the site of Baking Pot, comparing settlement components in order to understand community structure (Conlon and Moore, 2003). Most of the survey was oriented eastward from the monumental epicenter (represented by architectural complexes Groups A and B) in order to include previously surveyed sites of Spanish Lookout and Barton Ramie. In following

years this research was complemented by studies such as Piehl's (2004) research focused on health and status changes in households in the eastern settlement group of the site, or the studies exploring monumental construction and ritual activity at the epicentre of the site (Aimers, 1997, 1998; Ferguson, 1998, 1999; Audet 2004, 2005, 2007; Helmke, 2008).

In the summer of 2007, BVAR project continued the settlement survey. The survey was led by Hoggarth and Jobbová (Hoggarth *et al.*, 2008) and the project's aim was to finish 'the settlement picture' of Baking Pot thus gaining better understanding of the spatial organization of the site. As the previous mapping was focused mostly on the area east from the monumental epicenter of the site, the objective was to extend the survey to the west, making it symmetrical with the eastern survey boundaries, and also to look closer at the northern and southern boundaries of the site, encompassing an area of approximately 9 square kilometers. This area was further extended in seasons 2008 and 2009. At the same time excavations also continued with the aim to eventually complete 20% stratified sample of test excavations in the area of 9 square kilometers. Excavations consisted of smaller 1x1m test units providing information about the chronological sequence of the occupation, as well as of horizontal excavations of a smaller sample of house groups with the aim to better understand changes in household and community organization, focusing especially on the transition from the Classic to Postclassic period (Hoggarth *et al.*, 2009).

## METHODOLOGY

Excavation at M-11a was undertaken as part of project's objective to complete 20% sample of housemounds at the site. Mounds were chosen in means of stratified sampling based on architectural volume and also based on location. The 9 km<sup>2</sup> area around the monumental epicenter of the site, from which the sample was drawn, was divided into a grid with 9 squares each covering 1 km<sup>2</sup>. The number of mounds was then chosen within each square for test excavations (1x1m) in order to understand chronological sequence of the occupation of the site. In addition few horizontal excavation of house groups were chosen east of Group B (zone C according to Conlon and Ehret, 2000; or Settlement Cluster C in epicentral settlement of Baking Pot according to Hoggarth *et al.*, 2009), to gain better understanding of changes in household and community organization in households of commoners and the role which these changes played in the changing social organization at the beginning of the Terminal Classic period (Hoggarth *et al.*, 2009).

M-11a located in the square north east of Group B, just south of the river was chosen for one of the test excavations (Figure 1). A 1x1m unit (Excavation Unit 28) was placed approximately in the center of the mound and excavated to sterile, using mostly cultural and natural stratigraphic levels, occasionally (as near sterile) arbitrary levels. The objective was to distinguish various phases of the construction of the structure. For recording was used lot system established by Christophe Helmke during the excavations

at Group B, all material was sieved through screens with 2cm mesh and artifacts were collected and sorted according to artifact class and lot.

## **RESULTS**

### **M-11a, Excavation Unit 28**

Level 1 was the humic layer of compact, homogenous composition and of grey-brown colour of a matrix (very dry), containing many roots, pebbles and significant amount of vegetation. In this levels were found few pieces of ceramic sherds and obsidian and it was closed at approximately 10 cm below datum due to encountered concentration of limestone and suspicion for possible floor, which was subsequently dismissed, as limestone lumps were considered to be natural. Level 2 is still humic layer with possible collapse. Matrix consistency changed to compact clay of dark brown colour with orange tinge. In this level was found increasing amount of ceramic sherds and fresh water shells (jute), it also contained marine shell fragment and fish vertebra. It also contained many small and larger rocks and pebbles and at approximately 56 cm below datum, a row of stones running in SE-NW direction was encountered and cleared as to clarify if these form a wall or it is a collapse. In the process of cleaning around the stones consistency of the matrix changed to more pronounced loam-clay and second row of stones were found underneath the first one, therefore the level was closed. In level 3, the second course of stones was uncovered, the level contained ceramic sherds, chert, daub, fresh water shells, animal bones and larger amount of burnt limestone and charcoal. Level 3 was closed at the level with the base of second course of stones, at approximately 64 cm bellow datum. No evidence of plaster floor was found. Instead, in level 4 at approximately 68 cm bellow datum was encountered concentration of ceramic sherds, pebbles and limestone in SE quarter of the unit. The possibility that this could be ballast under the stamped earth floor at the bottom of row of stones (possibly remains of a wall) was considered at this point, however this is complicated by the fact that the concentration is restricted to only a small part of the unit and it was reconsidered with new evidence later on. Second row of stones and concentration of ceramic sherds, pebbles and limestone was removed and level 4 was closed at 72 cm bellow datum.

Following level 5 contained considerable amount of very large pieces of ceramic sherds, and also some chert, and fresh water shells mixed with compact dark brown-orange loam-clay. Also more stones started to appear in approximately same location as previous two rows of stones and concentration of limestone in western part of the unit indicated possible plaster floor, so the two lots (one for concentration of ceramic sherds and pebbles and other one for the rest of the unit) were leveled and level 5 was closed at 78 cm bellow datum. Excavations in level 6 uncovered plaster floor (floor 1) at approximately 80 cm bellow datum and also remains of a possible wall running in SE-NW direction, associated with the floor were located in western part of the unit (Figure 3). The floor is badly preserved and uneven, covering only small part of the unit. Part of the floor is missing in SW corner of the unit, floor starting unevenly about 10 cm away from the southern baulk wall of the unit. Floor continues towards north-west in

association with the remains of the wall, which follows similar NW direction as the two rows of stones found in previous levels, only this wall is located slightly more west. Floor becomes uneven and then disappears towards the northern part of the unit and its end seems to coincide with the end of remains of the wall. The level 6, as well as previous level 5 contained large amount of large pieces of ceramic sherds, including nearly half of the rim of the jar found next to the northernmost stone in the wall. It also contained burned limestone and pebbles sticking out of the western baulk, just above the plaster floor.

The remains of the wall could represent outer wall of the structure and concentration of ceramics, pebbles and limestone encountered in level 4 could be a part of a midden outside of the wall of the structure, rather than ballast or deposit of ritual nature. This could only be confirmed by the extension of the unit and further excavation following the remains of the wall. However, because this was test excavation focusing on chronological sequence of the occupation, the unit was not extended horizontally and excavation continued vertically. Also in the light of the wall found in the level 6 which was situated slightly more west than the two rows of stones encountered in levels 2 and 3, it seems likely that these represent collapse of upper courses of this outer wall, rather than in situ remains of the wall.

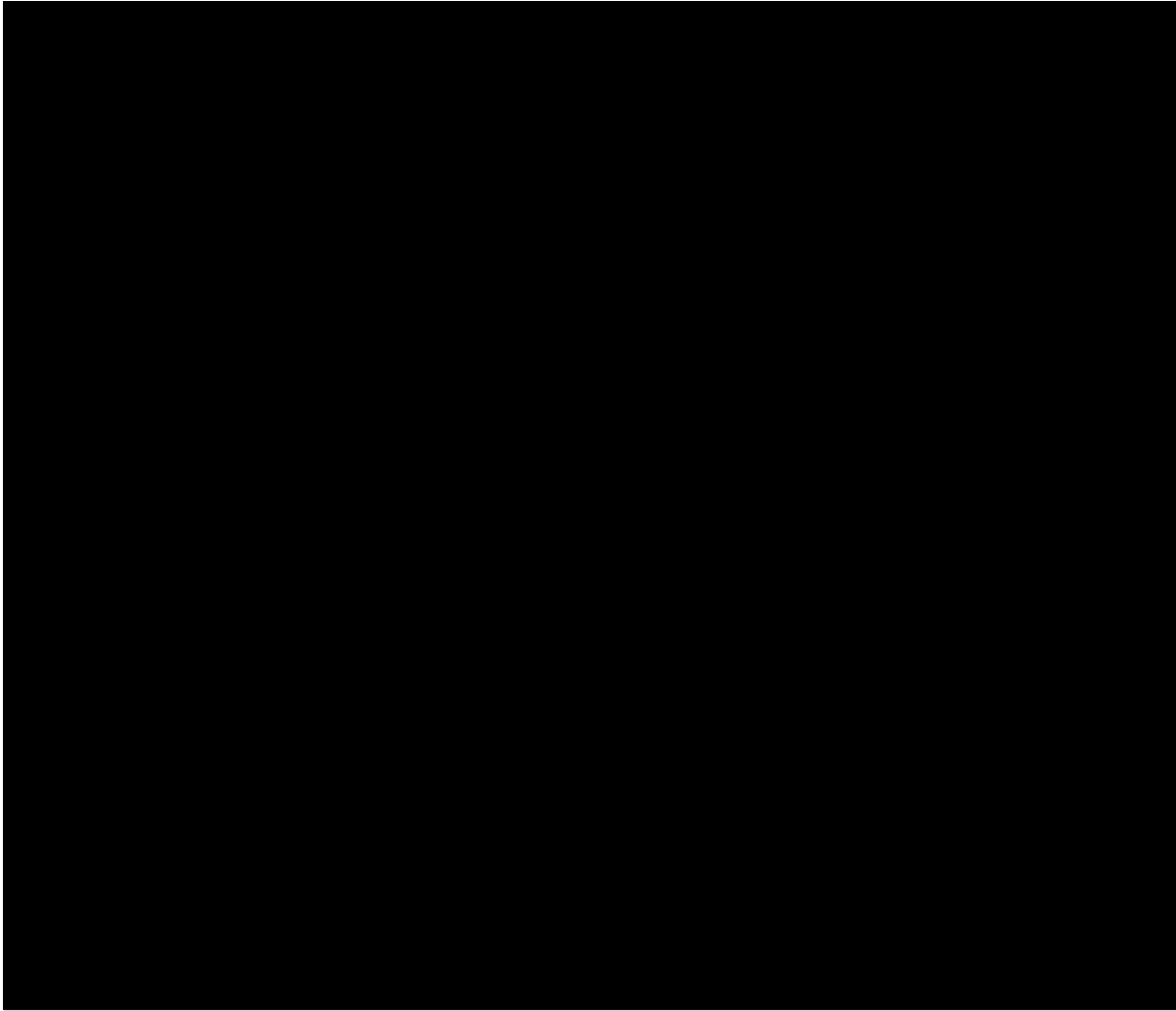
After the floor and remains of the wall were removed, next cultural level 7 was open at approximately 84 cm below datum. In the fill below the floor 1 were found many pieces of ceramic sherds, lithics, pebbles and charcoal mixed with compact dark brown loam-clay. The part of the unit east of the remains of the wall also contained ceramics and occasional limestone, but was less heterogeneous than the part under the floor. Level 7 was closed at approximately 115 cm below datum, when artifacts (ceramic sherds, chert, obsidian and shells) almost completely disappeared, indicating the end of fill under the floor. Just as the level 7 was being closed, bioturbation (probably an animal hole) was detected in the southeast part of the unit. Level 8 is characterized by much smaller amount of artifacts than previous levels, but there were still found smaller pieces of ceramic sherds, chert and fresh water shells, but also couple of small animal bones, a piece of obsidian and fragment of marine shell. Level 8 was closed at 141 cm below datum, when matrix changed from darker brown compact loam-clay to lighter brown-orange sand of looser consistency. Level 9 was characterized by sandier consistency and diminishing number of artifacts, mostly pieces of ceramic sherds, chert, fresh water shells and fragment of marine shell. Level was closed at arbitrary 25 to 30 cm below previous level, when no change in matrix or number of artifact was encountered. Level 10 was open as arbitrary level at approximately 170 cm below datum in order to assess if the level had reached cultural sterile. It was characterized by the same sandy consistency and light brown-orange color as previous level. Artifacts had become gradually sparser; only pieces of ceramic sherds, some fresh water shells and pieces of charcoal were found in this level. Level was closed at arbitrary 25 cm below the previous level. Another arbitrary level 11 was open approximately 194 cm below datum. The consistency and color of matrix remained the same and there were almost no artifacts encountered in the level except for fresh water shells (jute), most of which are probably natural as they are small and only a few of them had tips broken off, couple of questionable pieces of chert

and specs of charcoal. It started to appear that the cultural sterile was reached, but 222 cm bellow datum was encountered patch or dark clay in SE corner of the unit, so level 11 was closed.

As excavation continued in level 12, consistency and color of matrix changed to mid brown loam-clay and number of artifact increased again, indicating that cultural sterile had not been reached yet. There were again encountered pieces of ceramic sherds, fresh water shells, small specs of charcoal and small, perforated bead. Level 12 was closed at arbitrary 30 cm bellow the previous level, at 254 cm bellow datum, when no change in matrix or number of artifacts or any other cultural feature was encountered. Excavation was continued in level 13, which was still characterized by mid brown loam-clay. In level 13, number of fresh water shells decreased, but there were still present small pieces of ceramic sherds and chunks of daub. Level 13 was again closed after approximately 25 cm without any change in matrix. Level 14 was started at 280 cm bellow datum and contained very little cultural material, only 1 piece of ceramic sherd, small pieces of daub and fresh water shells. Level was closed at arbitrary 25 cm bellow the previous level. In level 15, situation remained very similar, with no change of matrix and very little of cultural material encountered, containing only very small pieces of ceramic sherds, daub and possible fragment of marine shell. Level 15 was closed after another 25 cm at 328 cm bellow datum. The same matrix characterized level 16; however no cultural material was encountered in this level. Level 17 was open as another arbitrary level at 350 cm bellow datum without change in colour or consistency in the matrix and this level did not contain any cultural material, except for daub which might be natural. At 374 cm bellow datum, in new arbitrary level 18, matrix started to slowly change from loam-clay to more sandy consistency. There were only 2 pieces of ceramic found in the level, however these are most likely intrusions from previous levels (fallen down from the baulks of the unit). No other cultural material was found in the level. To confirm the assumption that sherds were intrusions and to make sure that cultural sterile was reached; level 19 was open at 406 cm below datum. A few centimeters deeper matrix changed to loose mid-brown sand, which became very loose and fine as we excavated further and no other cultural material was encountered. At this point, no cultural material has been encountered for nearly 1 meter, therefore it was designated that the sterile level had been reached and unit was closed at 410 cm bellow datum.

## **DISCUSSION AND CONCLUSION**

The results of excavations at M-11a indicate at least two construction phases. Earliest phase represented by cultural level 12 shows minimal effort in terms of investment of labor or resources. There is no sign of plaster floor, but possible stamped earth floor could be indicated by change of matrix. Then, interestingly, there is very little of cultural material found between level 12 and level 7 (fill under the floor 1), between which levels there is a difference of approximately 100 cm. Such paucity of cultural material between construction phases and change to sandy consistency of matrix was noticed in other mounds in Baking Pot before, for example excavation at M-184a (see Hoggarth *et al.* 2008).



**Figure 2:** Floor 1 of M-11a (photo by E. Jobbova).

One of the possible explanations, suggested by present alluvial sand, is that the structure was abandoned perhaps due to flooding and then reoccupied later in the Late Classic period when plaster floor 1 was constructed. Other possible explanation is that during the next construction phase (after the earliest one represented by level 12), the platform was raised by nearly a meter before floor 1 was laid down. Although this is not impossible since houses at Baking Pot often have alluvium used as fill, lack of any artifacts in the fill makes this explanation more unlikely than the abandonment alternative. Any further construction phases are difficult to distinguish because of the lack of evidence for any further plaster floors. There was possible indication of existence of another stamped earth floor associated with the bottom row of stones encountered in level 3. However after uncovering the remains of the wall associated with floor 1 in level 6, it is more likely that two rows of stones encountered in levels 2 and 3 represent collapsed upper courses of this wall, rather than another construction phases. Since the floor does not continue beyond this wall it is possible that this was an outer wall of the

structure although its position in the middle of the mounds seems to make this interpretation unlikely. On the other hand it would explain concentration of ceramic sherds, cobbles and limestone found just east of this wall, which could be interpreted as midden piled up outside of the structure. Because there was no time to extend the excavations horizontally these are all just very tentative suggestions regarding the construction phases of the structure. Also, as there was a considerable amount of diagnostic ceramic material present (rims, large painted sherds, foot of a censer), the construction and occupation history of M-11a will be further elucidated after the results of ongoing ceramic analysis will become available.

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## **CONTINUING SETTLEMENT RESEARCH IN SETTLEMENT CLUSTER C: EXCAVATIONS IN THE IXIM GROUP, BAKING POT, BELIZE**

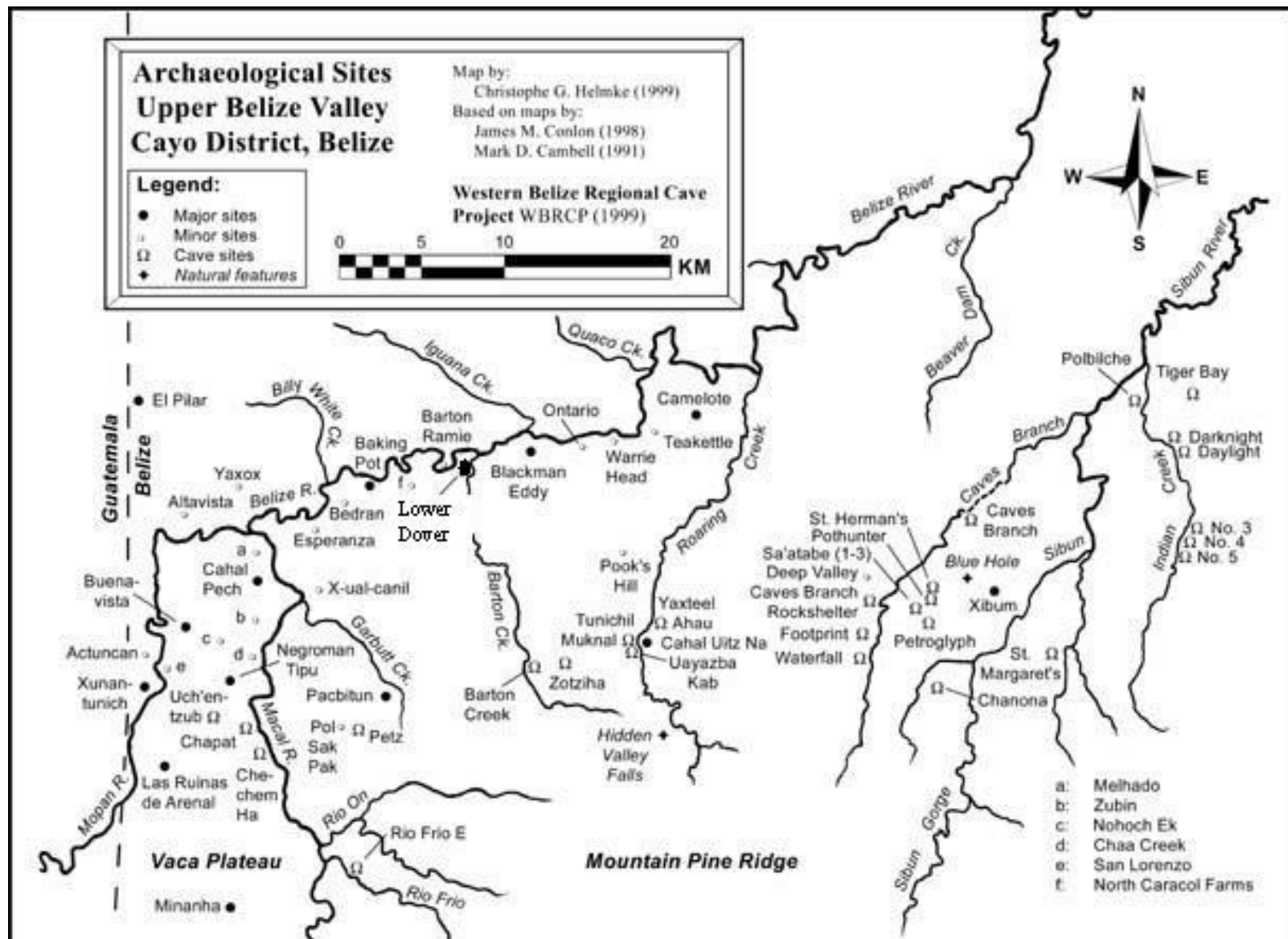
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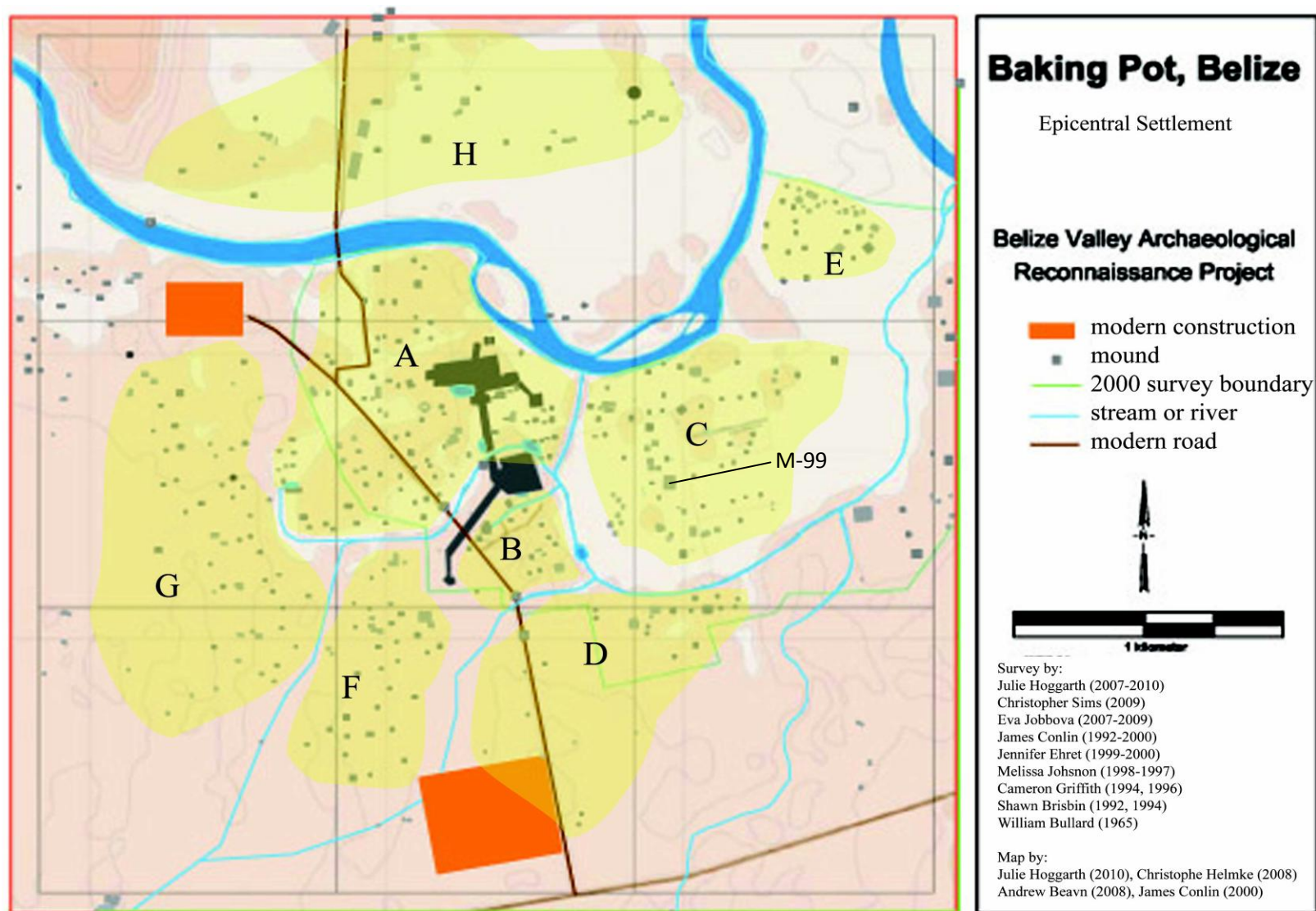
### **INTRODUCTION**

Excavations in the 2009 season continued to focus on the epicentral settlement of Baking Pot. From 2007 to 2008, research focused on expanding the settlement survey to encompass the extent of the settlement pattern at the site. In addition, a systematic program of test pits and surface collection aimed to obtain a 20 percent sample of house groups at Baking Pot in order to gain insights into the demographic development and decline of the site. Excavations in 2009 focused on horizontal excavations of house groups in order to understand diachronic change at the household and community level (see Hoggarth 2009). As one of these excavations, horizontal excavations at M-99 sought to expose the terminal architecture of the southern and western structure of the group, as well as portions of the central patio.

M-99 is the volumetrically-based largest house group in Settlement Cluster C (Figure 2), which is located in to the east of Group B, the southern-most monumental group at Baking Pot. It is composed of a large residential platform in which four platforms are arranged in conjunction with the cardinal directions. M-99a is the northern structure, M-99b the eastern structure, M-99c the southern structure, and M-99d is the western structure. Excavations in 2009 focused on M-99c and M-99d, with both horizontal exposure of the terminal architecture as well as vertical test units to sterile to understand the chronological sequence of construction through time.



**Figure 1:** Archaeological sites in the Upper Belize River valley.



**Figure 2:** Location of M-99 and Settlement Cluster C at Baking Pot.

## **METHODOLOGY**

Selected due to its status as the only Type I house group (Type IB) in Settlement Cluster C, with 912.23 cubic meters of architectural volume, M-99 represents the residence of one of this group of highest status (non-royal) households at Baking Pot. Due to its prominence on the landscape, as well as the vast amount of architectural input into the construction of this group, it likely served as a residence of a high status household, as well as serving as a prominent community ritual center of focus (e.g. Yaeger 2000). Earlier surface collection indicated that the group was occupied into the Early Postclassic period, prompting the selection of this house group to represent the sample of Type I house groups, as well as those that had continuous occupation from the Classic to Postclassic periods.

## **BACKGROUND**

Baking Pot is located in the Cayo District of western Belize, along the southern bank of the Belize River. It is 9.9 kilometers downriver to the east of Cahal Pech, and approximately 6 kilometers west of Lower Dover (see Hoggarth 2009). In terms of sites in the Maya Lowlands, the site is a medium-sized site, and is a major center in the Upper Belize River valley (Figure 1). The monumental epicenter is comprised of two groups, Group A to the north and Group B to the south, and the two are connected by a 250 meter-long sacbe. The settlement is centered around the epicenter, with eight settlement clusters being delineated by physical characteristics, such as intermittent streams, distance, and low-lying terrain (Figure 2). Settlement Cluster C is located to the east of Group B and is one of the more organized of the settlement arrangements at the site (Hoggarth 2009).

M-99 (named the Ixim Group) is one of the few formally organized groups at the site, accounting for approximately 15 percent of house groups (with the remaining 85 percent of house groups being represented by singular and multiple informally organized mounds). As the largest and most formally organized group in Settlement Cluster C, the group likely served as a locus for community-focused ritual and gathering, and possibly representing the household of one of the leading lineage groups at Baking Pot. The architecture is nearly completely intact, with some minor plowing through the center of the group, where surface visibility reveals that a plow took off the northern end of the western structure (M-99d), as well as the southern end of the eastern structure (M-99b) (Figure 3). From the surface, it appears that the eastern and the northern structure may have been connected, although this will need to be tested.

The Ixim Group (M-99) is located in Settlement Cluster C, directly southeast of Group B. The house group is prominent due to its central location and large size, with the central platform alone measuring 2.2 meters in height, and with four structures organized around a central patio. The northern structure (M-99a) measures approximately 9.5 meters by 6.5 meters in size, and

stands at approximately 120 centimeters above the patio surface. The eastern structure (M-99b) is much smaller, measuring 7 meters in length by 5.4 meters in width, and stands only 30 centimeters above the patio surface. In The northern and eastern structure are connected to form an L-shaped structure in the terminal phase of construction. The southern structure (M-99c) measures approximately 12.2 meters in length, 9.1 meters in width and is approximately 70 centimeters above the patio surface, while the western structure (M-99d) measures approximately 6.5, with both of these structures also adjoined in an L-shape.

Initial survey and surface collection was conducted in 2008, with New Town phase ceramics, including Paxcaman Red and Augustine Red, among the diagnostic ceramics collected. Excavations of the Ixim Group were initiated in 2009, with horizontal and trench excavations of M-99c and M-99d.

## EXCAVATION RESULTS

### M-99c Construction History

Mound 99c is the southern structure in the M-99 house group, with the terminal structure reaching approximately 158 centimeters above the terminal patio floor. It was constructed in five construction episodes, with the earliest construction in the Hermitage phase at the end of the Early Classic period, the second also in the Hermitage phase at the end of the Early Classic period, the third episode at the beginning of the Late Classic period (Tiger Run phase), the fourth episode in the Terminal Classic period, and the final construction episode during the Early Postclassic period (New Town ceramic complex).

#### *M-99c 1<sup>st</sup>*

In the first construction episode at M-99c no evidence is present at M-99c. It appears that this section of the larger M-99 platform was constructed at this time, although no structures were placed in this location. The patio floor was not plastered, only having a layer of river cobble ballast with a thin layer of clay over it. Although no materials were found on the surface, the construction fill included alluvium mixed with ceramics, chert, limestone pieces, river cobble, and freshwater shell. Ceramics in the fill indicate construction during the Hermitage phase (Early Classic).

#### *M-99c 2<sup>nd</sup>*

During the second construction episode at M-99c, still no architecture was present in the location. The patio floor was plastered, measuring approximately 1.5 centimeters thick. The floor was increased in height approximately 25 centimeters. Construction fill included alluvium

mixed with ceramics, river cobble, freshwater shell, chert, and obsidian. Ceramics within the fill indicate that this surface was constructed at the end of the Early Classic period.

Although no architecture was present in the location of M-99c, a low (13 cm in height) platform was identified directly in front of the terminal stairs of the structure. Unlike all constructions of M-99c, in which the architecture was oriented east to west, this low platform was oriented north to south, and would have been parallel to M-99d. No materials were present on the surface of this structure; however, materials within the construction fill indicate an Early Classic date of construction.

#### *M-99c 3<sup>rd</sup>*

During the third construction episode, M-99c was joined with M-99d to form a singular L-shaped structure. The platform was constructed measuring 10.5 meters in length, 6 meters in length, and 65 centimeters above the previous patio floor (at this time the patio floor was also elevated approximately 21 centimeters in height). The floor was plastered (approximately 3.5 centimeters thick) overlying a sparse level of river cobble ballast. No materials were found on the floor surface, although materials included in the construction fill included ceramics, chert, freshwater shell, and quartz. Ceramics in the fill indicate that construction occurred during the early part of the Late Classic period.

The plaster floor had been broken and filled in with alluvium, small limestone pieces, and river cobble. Approximately 13 centimeters below the level of the floor, a cache deposit was identified. This cache included large ceramic sherds (although no complete vessels were present), chert, faunal remains, and carbon. The ceramics from the deposit indicate construction at the end of the Early Classic period and the beginning of the Late Classic period.

#### *M-99c 4<sup>th</sup>*

During the fourth construction episode, a second terrace was added to the platform, rising above the first terrace approximately 40 centimeters. No changes were made to the dimensions of the original platform. The platform wall included small, medium, and large cut limestone blocks. The platform floor was constructed with a thin layer of plaster (1.5 cm in thickness) overlying a dense layer of river cobbles. Few materials were recovered from the floor level, with only undiagnostic ceramics present. Construction fill materials included chert, ceramics, obsidian, freshwater shell, and quartz. Ceramics in the fill indicate a construction date during the Terminal Classic period (late facet of the Spanish Lookout phase).

### *M-99c 5<sup>th</sup>*

For the final construction episode at M-99c, the upper terrace was increased 17 centimeters in height, while the lower terrace was not altered. No changes in the dimension of the structure occurred at this time. The platform wall included small and medium sized cut limestone blocks. The platform floor was not plastered, with a dense layer of river cobble underlying a thin layer of clay. Materials were present on the terminal floor surface, particularly in the western portion of the platform, with two concentrations of ceramics, dominated by Belize Group dishes, as well as other materials from the early and late facets of the Spanish Lookout complex. In addition, a few More Force jar sherds, along with several Paxcaman Red and Augustine Red ceramics were recovered on the floor of the platform, as well as on the patio floor in front of the platform. In addition to these materials, two complete copper bells were recovered next to the outset stairs. Other evidence of copper materials has been recovered from Early Postclassic contexts in Baking Pot's settlement, including from the Yaxtun Group (Audet 2000, 2002). Materials in the construction fill included ceramics, chert, freshwater shell, quartz, faunal remains, and daub. Ceramics from the construction fill indicate that the terminal platform level was constructed during the Early Postclassic period. In addition to the terminal fill material, New Town materials on the terminal floor also reinforce this date for both construction and occupation of the terminal platform.

### **M-99d Construction History**

Mound 99d is the western structure in the M-99 house group. As stated previously, the northern end of the platform had been damaged before the first survey season in 2009 and limestone blocks on the surface indicate that some portion of the platform was severely affected. Although originally thought to be two structures, excavation revealed that M-99c and M-99d were actually a single L-shaped structure in its terminal construction. Excavations reveal that the structure was constructed in 6 construction episodes, with occupation between the Late Preclassic period and the Early Postclassic period.

### *M-99d 1<sup>st</sup>*

In the first construction episode at M-99d, little evidence of architecture is present. Large amounts of daub, ceramics, and poorly preserved specks of limestone are present at this level, along with evidence of burning. This evidence indicates that there may have been a very thin layer of plaster that was the occupation level. The large amount of daub also indicates that a perishable superstructure also stood at this location. As this is approximately 288 centimeters

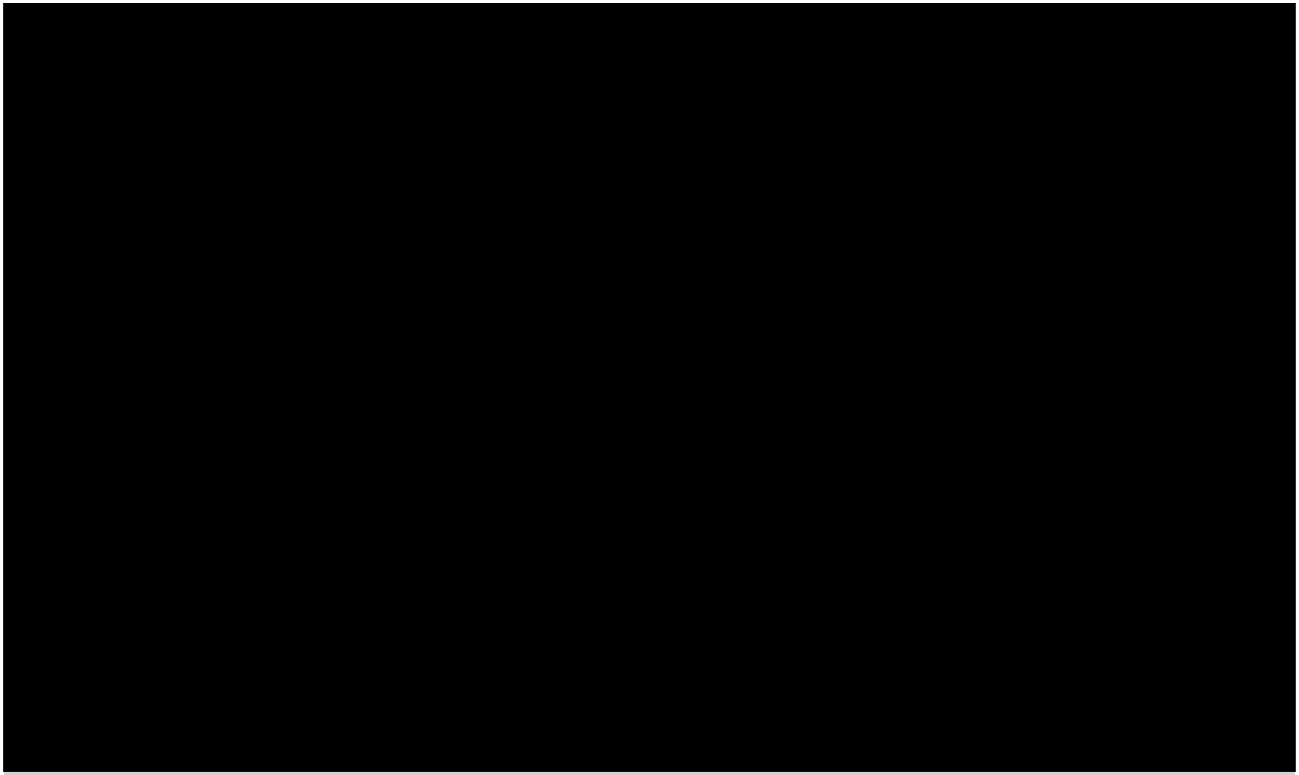
below the surface of the structure, along with its location at the surrounding surface level, indicates that this occupation occurred prior to the construction of the larger M-99 platform. Sporadic river cobble ballast was present beneath the poorly preserved plaster floor and construction no cultural materials were present below this level, indicating that this was not on a constructed surface; rather, the living surface was at the level of the surrounding topography. Ceramics were abundant on this level, indicating occupation at the beginning of the Late Preclassic period.

#### *M-99d 2<sup>nd</sup>*

During the second construction episode, the construction of the larger M-99 patio group platform was constructed. The platform at M-99 was built up approximately 78 centimeters above the surface level and a low platform was constructed on the western end of the platform, measuring 13 centimeters above the patio platform surface. This platform measured approximately 6 meters in length (north to south) and 4.5 meters in length. The platform was constructed with medium-sized (10-15 cm in length) well-cut limestone blocks. The floor was constructed with a dense layer of river cobble ballast underlying a thin (1.5 centimeters in thickness) plaster floor. Few artifacts were recovered on the surface of this platform, although the construction fill included ceramics, chert, quartz, daub, freshwater shell, faunal remains, and granite ground stone fragments in the heterogeneous alluvial fill. Ceramic indicate that construction of this platform took place at the end of the Late Preclassic period.

#### *M-99 3<sup>rd</sup>*

Compared to the second construction, the third construction episode, with the platform increasing 17 centimeters in height and no changes in size. The previous platform wall was extended in height and the platform floor was not constructed with high quality materials. This third platform featured a sparse layer of river cobble as ballast and a 2.5 cm thick plaster floor over this level. This floor was broken, primarily in the north-south direction, with smaller “wings” cut out of the east and west. Evidence of burning was present in the northern part of this broken area. Beneath this broken section of floor a burial was identified. A two-course wall was present in the northern portion of this area, also with evidence of burning. Burial 99w-1 was in the extended position with its head to the north. The individual was a sub-adult, between the ages of 6 and 10 and the sex was indeterminate. No burial goods were included in this burial. Outside the burial, ceramics, chert, freshwater shell, marine shell, and limestone were mixed in the construction fill, indicating the construction of the platform at the beginning of the Early Classic period. While the burial did not contain any materials, the platform of M-99d 4<sup>th</sup> was not



**Figure 3:** Burial 99W-1, showing pit outline in burned plaster floor (photo by J. Hoggarth).

broken, indicating that the burial was interred prior to the construction of the fourth platform at the end of the Early Classic period.

#### *M-99d 4<sup>th</sup>*

During the fourth construction episode at M-99d, the platform underwent significant additions, raising it 164 centimeters in height and expanding the platform to 9.5 meters in length (north to south) and 6.5 meters in length. The platform floor was constructed with a dense layer of river cobble ballast with a thin (less than 1 cm thick) of plaster. The platform wall was built using medium-sized cut limestone blocks. The larger M-99 platform was also increased in height significantly, approximately 141 centimeters, with M-99 4<sup>th</sup> rising above this level by 23 centimeters. The construction fill of M-99d 4<sup>th</sup> was heterogeneous, with ceramics, chert, and freshwater shell mixed with alluvium and river cobbles. A few ceramics were present on the floor; of those that were diagnostic, they were from the Hermitage and Tiger Run ceramic complexes, indicating occupation at the beginning of the Late Classic period. Ceramics in the construction fill indicate that the platform was constructed at the end of the Early Classic period. Just inside the eastern platform wall, a cache was recovered, with three complete ceramic vessels

present. Overall, the dates of these vessels complement the dates obtained from the floor and fill materials.

#### M-99d 5<sup>th</sup>

In the fifth and penultimate construction episode at M-99d, the platform was expanded in size and height, measuring 12 meters in length (north to south), 8 meters in width, and adding 14 centimeters in height. During this construction, M-99d was joined with M-99c forming the singular L-shaped structure seen in its terminal construction. The platform floor had a thin layer (less than 2 cm in thickness) overlying a dense layer of river cobble ballast. It appears that there was also a re-plastering episode, with floor 3b being located beneath this ballast level. This floor was approximately 2 cm in thickness. The platform wall utilized high quality materials, including both medium (10-15 cm in length) and large (15-20 cm in length) cut limestone blocks. Construction fill consisted of compact heterogeneous alluvium mixed with small limestone pieces, ceramics, chert, and river cobble. Few materials were recovered on the floor level; however, several small cut limestone pieces were located on the eastern portion of the platform. Beneath this level, a cache of two ceramic vessels was identified. Both vessels are Late Classic period in date, with Vessel 1 being a Dolphin Head Red bowl and Vessel 2 being a Tinaja Red bowl. This evidence, along with the ceramics from the fill, indicates that the platform was both constructed and occupied in the Late Classic period.

#### M-99d 6<sup>th</sup>

In the terminal construction episode at M-99d, the platform was elevated approximately 9 centimeters in height, with a two-step outset stair constructed on the eastern end of the platform. The outer part of the platform of M-99d 5<sup>th</sup> was retained as the first step in the stair, while the second step was constructed in the construction of the M-99d 6<sup>th</sup> platform. The platform and stairs were constructed with medium-sized (10-15 cm in length) cut limestone blocks. The platform floor was composed of river cobble ballast. There is no evidence that the floor was plastered in the past. Construction fill was composed of loosely compacted alluvium mixed with ceramics, chert, freshwater shell, daub, faunal remains, quartz, and obsidian. Few materials were present on the terminal floor, including ceramics (early and late facet Spanish Lookout and New Town), daub, chert (including several notched chert points), and obsidian blade fragments. Overall, it appears that the terminal platform at M-99d was constructed in the Terminal Classic period, with occupation continuing into the Early Postclassic period.

## CONCLUSIONS

Overall, excavations at M-99c and M-99d indicate that the group was occupied from the Late Preclassic period through the Early Postclassic period. It appears that a low platform was constructed during the Late Preclassic period, soon after which a child between the ages of 2 to 3 was interred in M-99d. Construction episodes continued at the group in the Hermitage, Floral Park, Tiger Run, and the early and late facets of the Spanish Lookout phase, as well as occupation and construction into the New Town phase. Construction materials and techniques were fairly consistent throughout time, with each addition to the platforms utilizing alluvial fill, likely integrating midden materials, as well as using well-cut medium to large limestone blocks as facing stones for the platforms. Both structures became more elaborate in the final constructions, with outset stairs on the face of each platform. Only few materials were recovered from the patio surface, mainly a small cluster adjacent to the western edge of the outset stair at M-99c, where the two copper bells were recovered, along with scroll and trumpet feet associated with New Town Paxcaman Red and Augustine Red types, typical of the Early Postclassic period. In addition to these, a few New Town sherds were found in the construction fill of M-99c, indicating that the structure had a new construction phase during this time. Several notched chert points were also recovered on the terminal floor of both M-99c and M-99d, another diagnostic of Early Postclassic occupation.

Ritual activity within the group was rather limited from our excavations. The Late Preclassic burial within M-99d was the earliest evidence of ritual activity in the Ixim Group. Interestingly, the burial pattern of this individual does not conform to the typical pattern of prone, extended burials with the head to the south that is predominant at Baking Pot as well as the rest of the Belize Valley during the Classic period. A cache was identified in the center of the stairs at M-99d, with two Late Classic red bowls interred along the central axis of the stair. Finally, the remaining evidence of ritual activity comes from the two copper bells recovered in front of M-99c. These would have likely been part of costume, likely associated with dance rituals.

In terms of artifacts, several interesting trends emerge in the proportional data. Chert usage peaks during the Late Classic period, declining again during the Terminal Classic, and peaking again during the Early Postclassic period (Table 1). In terms of raw material type, it is clear that chert is the predominant material for chipped stone tool production, with 91 to 100 percent of the stone tool assemblage being chert throughout all time periods (Table 2). Obsidian usage for chipped stone tools peaked in the Late Classic as well, declining from over 7 percent in the Late Classic to near 3 percent in the Terminal Classic and Early Postclassic period, where quartzite material slightly gains in usage. Faunal remains appears to decline through time, while freshwater shell remains increases through time, which may indicate a greater reliance on

tot / ts	Ch	Db	Fa	Fs	Gr	Jd	Ms	Mt	Ob	Qz	St
LPC	8.63%	9.14%	7.61%	3.55%	0.51%	0.00%	1.02%	0.00%	0.51%	0.00%	0.00%
EC	8.90%	38.57%	6.63%	0.17%	0.00%	0.00%	0.17%	0.00%	0.00%	0.00%	0.00%
LC	23.11%	68.75%	7.01%	1.70%	0.95%	0.19%	0.00%	0.00%	1.89%	0.38%	0.57%
TC	16.60%	16.17%	2.13%	0.43%	0.17%	0.00%	0.09%	0.00%	0.60%	0.34%	0.00%
EPC	26.00%	14.09%	0.78%	2.15%	0.52%	0.01%	0.03%	0.02%	0.89%	0.82%	0.06%

**Table 1:** Artifact proportions, standardized by dividing artifact totals by total sherds per period.

total / cs	cs	Ch	Ob	Qz
LPC	18	94.44%	5.56%	0.00%
EC	51	100.00%	0.00%	0.00%
LC	134	91.04%	7.46%	1.49%
TC	206	94.66%	3.40%	1.94%
EPC	3084	93.84%	3.21%	2.95%

**Table 2:** Proportions of raw material type for chipped stone artifacts.

smaller faunal material in the Terminal Classic and Early Postclassic periods. Overall, it appears that the Ixim Group played a predominant role in Settlement Cluster C, with some of the earliest occupation and most dynamic evidence for ritual and occupation in the Early Postclassic period.

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## **EXCAVATIONS AT M-109, M-110, AND M-111 AT BAKING POT**

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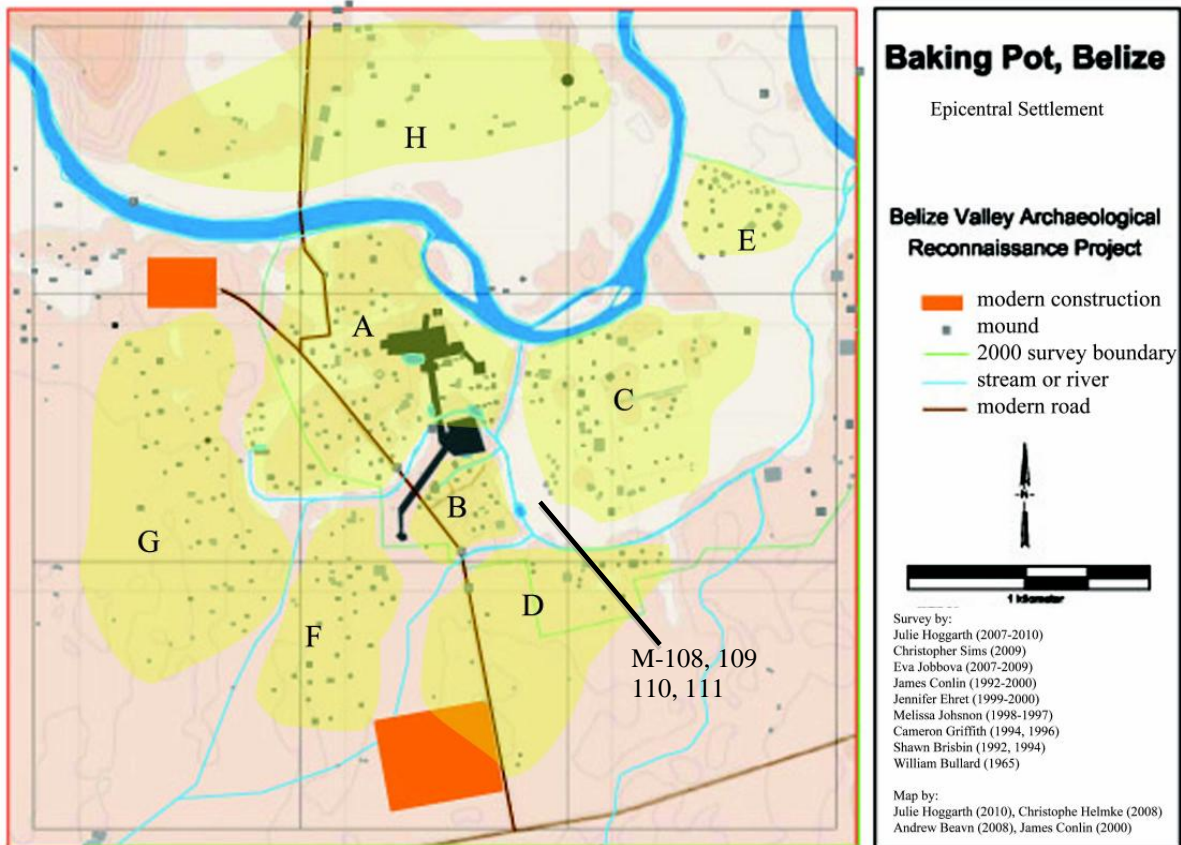
### **INTRODUCTION**

Excavations during the 2009 field season continued in the Baking Pot periphery. The report herein describes excavations conducted on an informal plaza grouping located to the southeast of the Baking Pot periphery (Figure 1). Horizontal and vertical excavations were conducted on the eastern and northern mounds while only some of the terminal architecture was uncovered on the western mound. We were unable to conduct excavations on the southern mound due to time constraints.

#### **M-110 (The eastern mound)**

Excavations in the mound were designed to uncover the terminal architecture, document if this mound was used as a place for the internment of ancestors and to conduct a vertical excavation to sterile subsoil to identify construction stages and diagnostic ceramics. A 10m (N/S) x 8m (E/W) grid of twenty 2x2m units was set up 10 degrees west of north, which encompassed the entire mound. The 2x2m units were numbered consecutively beginning in the northwest corner of the grid. The graphic on the following page shows the location of each of the units. A mound profile (both north/south and east/west along the 10 degrees west of north declination) was drawn above the ground surface. A single datum was established to the south of the grid and was used to take all vertical and horizontal measurements. The units were excavated in arbitrary, cultural and natural levels based on the circumstances. All of the soil removed from the excavation was screened using a ¼ inch mesh screen and all artifacts, with the exception of non-diagnostic ceramics measuring less than the size of a quarter, were collected and processed in the on-site lab.

Excavations began in EU 110-12 and 110-13. The original plan was to excavate all the units in 5cm arbitrary levels until the terminal architecture was identified and then to proceed with cultural or natural levels. However, excavation in 5cm arbitrary levels was far more time consuming than necessary and, in the case of M-110, little to no terminal architecture exists. EU 110-14, 17, 18, 19, 2 were opened with the purpose of



**Figure 1:** Location of M-108, M-109, M-110, and M-111.

identifying terminal architecture. All open units were leveled to 40 cms. Below datum and produced no evidence of terminal architecture. In the interest of time and the need to conduct excavations on the other mounds in this group, the horizontal excavations were abandoned.

A 1m (E/W) x 2m (N/S) vertical excavation unit, identified as EU 110-26 to avoid confusion with existing units within the grid, was placed at the center of the structure. A 1x2m unit was chosen because M-110 is an eastern structure and could potentially contain human remains as eastern structures often functioned as ancestor shrines.

*EU110-26: Level 5 (Lot 1650)*

The first level of EU110-26 is five because the above humic layer was excavated in four 10cm arbitrary levels. Level 5 remains a dark brown loam clay humic layer. At approximately 55 cmbd the matrix changed to a reddish brown loam clay and the artifact density increased. The artifacts include ceramics, a mano fragment, a hammerstone fragment and small pieces of limestone, which represent the first indication that there was

masonry architecture on M-110. Due to the matrix change and higher density of artifacts the level and lot were changed. Only after excavating the northern structure (M-111) did it become clear that this concentration of limestone and artifacts represented the remains of the terminal platform.

*Level 6 (Lot 1803)*

We encountered a level that consisted of small limestone pieces, ceramics and chert. At the same elevation there was a soil change from a reddish brown loam clay to a light brown loam clay. This level was originally believed to be the remains of a floor, however, after excavating the northern mound in this group it more than likely represents the remains of the terminal architecture. It is unknown if facing stones once existed though the daub concentrations identified in the upper levels suggest that there was a perishable superstructure atop the terminal architecture.

*Level 7 (Lot 1805)*

At approximately 65cmbd a single cut stone was identified in southern portion of the unit. This represents the only evidence for cut stone masonry architecture on M-110. The level was changed due to a matrix change.

*Level 8 (Lot 1810)*

The matrix for this level is a loose, yellow brown sandy loam clay. This matrix change likely either represents a past flooding event or construction fill. At 100 cmbd the unit was downsized to a 1x1m (N/S). At approximately 120cmbd the matrix changed to a very compact, gray brown loam clay. The level and lot were changed.

*Level 9 (Lot 1811)*

This level is once again characterized by a very low artifact density. At approximately 145 cmbd a layer of charcoal stained soil and very eroded ceramics was encountered. Unfortunately, heavy rains precluded us from completely clearing the feature and made it impossible to take a photograph. I was able to note that the charcoal staining covered the extent of the 1x1m unit. It is unclear what this feature represented, if anything.

*Level 10 (Lot 1814)*

The matrix for this level can be characterized as a yellow brown sandy clay. The level concluded when yellow sand was encountered. This yellow sand is indicative of sterile subsoil at Baking Pot.

*Level 11 (Lot 1884)*

This level is sterile yellow sand. An addition 30 cm was excavated into sterile subsoil and returned no evidence of human activity. Excavations were concluded on M-110 at 215cmbd.

In addition to the above described excavation, three 2m x .5 m excavation units were placed off mound in an effort to identify middens. Two of the units were placed off of the north side of the mound and one was placed off of the west side. The units were

excavated to between 40 and 45 cmbs (which would have placed them below the level of the terminal architecture) and returned no evidence of a midden.

### **M-111 (The northern mound)**

Excavations in the mound were designed to uncover the terminal architecture and to conduct a vertical excavation to sterile subsoil to identify construction stages and diagnostic ceramics. A 14m (N/S) x 12m (E/W) grid of 42 2x2m units was set up 8 degrees west of north which encompassed much of the mound. The 2x2m units were numbered consecutively beginning in the northwest corner of the grid. Another row of 2x2m units was added along the eastern side of the grid as the original grid did not encompass the entire mound. These units were numbered consecutively beginning in the north bringing the total number of 2x2m units to 49. The graphic on the following page shows the location of each of the units. A mound profile (both north/south and east/west along the 8 degrees west of north declination) was drawn. The mound measures approximately 20m (N/S) x 20m (E/W) and stands at a height of 101 cms. above the ground surface. A single datum was established to the east of the grid and was used to take all vertical and horizontal measurements. The units were excavated in arbitrary, cultural and natural levels based on the circumstances. All of the soil removed from the excavation was screened using a ¼ inch mesh screen and all artifacts, with the exception of non-diagnostic ceramics measuring less than the size of a quarter, were collected and processed in the on-site lab.

Excavation on M-111 began in Units 111-22, 111-23, 111-30 and 111-35. Unlike on M-110, this mound was excavated in cultural levels from the beginning. These units were chosen because they measured higher in elevation and it was assumed that these units would reveal terminal architecture. The humic layer in all three units consisted of a dark brown loam clay with few artifacts. The aforementioned units did not reveal evidence of terminal architecture at 20 cmbs and a new strategy was introduced.

Nine of the 2x2 meter units (111-4, 111-10, 111-19, 111-20, 111-22, 111-23, 111-28, 111-34, 111-40) were divided into 2m x 50 cm units in order to more quickly identify the terminal architecture. In an effort to eliminate confusion, the units were labeled 111-4A and so on. The top of the terminal platform was identified in 111-22A, 23A, 28A and 34A. The terminal platform is crude and consists fist sized limestone pieces and river cobbles. No facing stones were ever identified for the terminal phase of architecture on M-111. Very few artifacts were recovered from the humic layer of these excavation units. After documenting the presence of the terminal architecture, a 1x1 m excavation unit was placed in the northwest corner of unit 111-22 which is located at the center of the mound. The following is a description of the vertical excavations





**Figure 3:** Photo of excavations at M-111 (photo by J. Jordan).

#### Level 1 (Lot 1185)

This level consists of humic material which can be described as a dark brown loam clay. Few artifacts were removed from this level. The level was changed when the top of the terminal platform was reached.

#### Level 2 (Lot 1186)

The terminal platform exhibited a wide range of artifacts including a mano and biface fragment. The platform measures approximately 26cm high and is comprised mainly of river cobbles and small limestone pieces. Directly beneath the crude terminal platform is a wall composed of cut limestone blocks and represents the penultimate platform. The wall runs east/west across the unit and faces south. Level 2 was concluded when the base of the wall was reached.

#### Level 3 (Lot 1887)

The 1x1m vertical excavation was expanded to include the entire 2x2m unit 111-22. Excavation revealed a faint line of plaster in the north and east baulk above the level of the cut-stone wall suggesting the presence of a floor. The floor was very poorly preserved and was not identified during excavation. A very well preserved plaster floor

was identified below the wall first identified in level 2. The floor undulated significantly but is present to the south of the wall throughout the unit. The plaster extends from the wall suggesting that the 'outside' of the platform was plaster and while the 'inside' was not.

#### EU 111-21A and EU111-23B

A 2m (E/W) x 50 cm (N/S) unit was opened in both 111-21 and 111-23. The purpose of these excavations was to follow the penultimate platform wall. The crude terminal platform was identified in 111-23B but not in 111-21A. Very few artifacts were recovered from Level 1. The wall abruptly stops on both the western and eastern sides. It is unknown if the wall uncovered represents the extent of the platform or if there are missing cut stones. The plaster floor undulates and continues with the wall. After exposing the penultimate wall, vertical excavations resumed in 111-22.

#### Level 4 (Lot 1895)

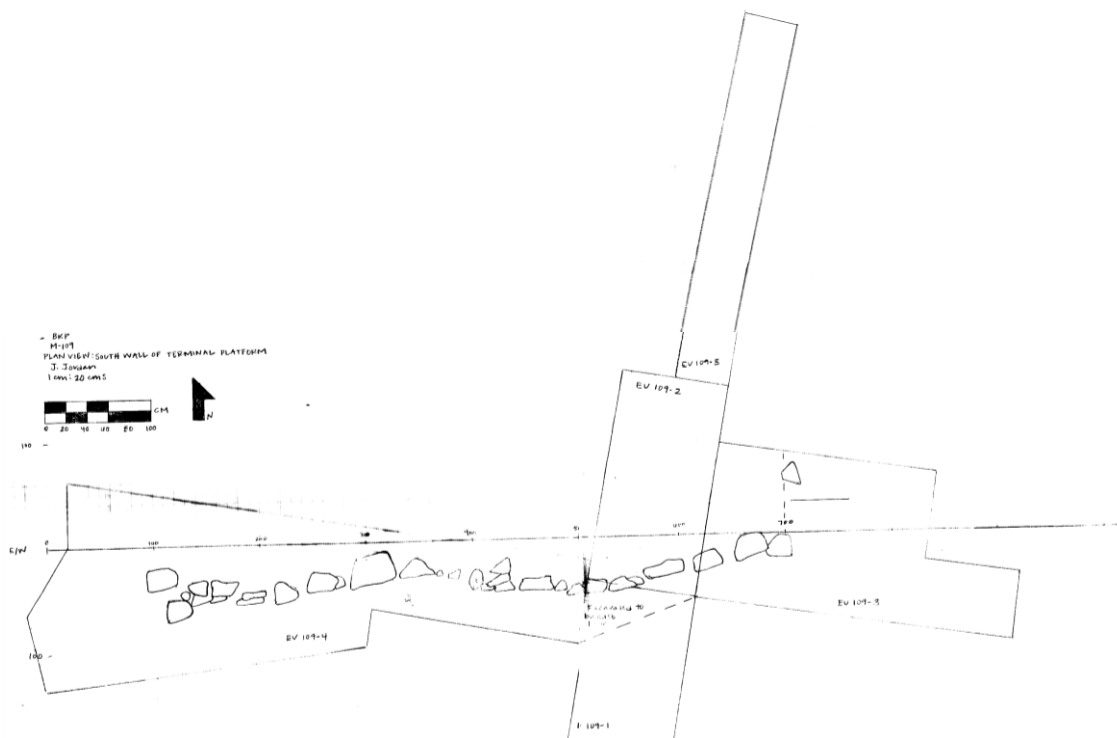
The unit was once again downsized to a 1x1m excavation unit. The vertical excavation was placed in the SW corner of the unit in order to preserve the penultimate architecture. Just below the floor we encountered a light brown sandy soil with an abundance of freshwater shell and few artifacts. The layer has a thickness between 5-10 cms. And ends when the matrix once again becomes a dark brown loam clay. The sandy layer either represents the 'dumping' of alluvium from the Belize River to build up the platform or a flooding episode. I used the datum set up on M-111 to measure the sandy level identified in M-110. The sandy layer identified in M-110 was identified at 125 cmbd and it was identified at 110 cmbd in M-111. The small difference in elevation seems to suggest a flooding episode.

#### Level 5 (Lot 1898)

Level 5 consists of a dark brown loam clay. A floor was identified in the NE corner of the unit and consists only of ballast. The level was concluded when Floor 3 was reached.

#### Level 6 (Lot 1900)

A rock concentration was identified in the southern portion of the unit at 185 cm below datum or about 25 cm below Floor 3. The concentration is conical in shape and is comprised of both limestone and river cobbles. The concentration is difficult to categorize but it may represent architectural elements from an earlier construction phase. No floor was identified in association with this concentration and the level was changed when we reached the base of the concentration.



**Figure 3:** Plan drawing of M-109 (J. Jordan).

#### Level 7 (Lot 2002)

Level 7 produced very few artifacts with the exception of a few pieces of chert and daub. The matrix is a light brown clay that was very difficult to excavate. The level concluded at 260 cm below datum when the matrix changed to a grayish brown loam clay. The sterile level was reached in the following level, level 8.

#### **M-109 (The western mound)**

Excavations on this mound began in the last week of the field season so we took a different approach to excavation. We did not set up a grid nor were we able to complete a vertical excavation. A single datum was established to the north of the mound and was used to take all vertical measurements. Unit 109-01 is a 2m (N/S) x 1m (E/W) unit that was placed on the southeast corner of the mound where a few cut stones were identified on the surface (Figure 3). The unit is aligned according to the architecture at 9 degrees west of north. Another unit (109-02) measuring 2m (N/S) x 1m (E/W) was placed adjacent to Unit 1 on its northern side. Both units contained cut limestone blocks and humus that consisted of a dark brown loam clay. The cut-stone represented the terminal platform.

% / ts	ts	Ch	Db	Fa	Fs	Gr	Ms	Ob	Qz	Sh
Late Classic	938	26.01%	26.12%	0.75%	14.88%	0.85%	0.00%	0.53%	1.49%	0.00%
Terminal Classic	136	44.85%	44.12%	0.68%	2.04%	0.00%	2.21%	0.00%	0.74%	0.00%

**Table 1:** Artifact proportions, standardized using total sherds recovered from excavations in each cultural level.

% / cs	cs	Ch	Ob	Qz
Late Classic	263	92.78%	1.90%	5.32%
Terminal Classic	62	98.39%	0.00%	1.61%

**Table 2:** Raw material type for chipped stone artifacts, with proportions standardized by total chipped stone.

Two more units were added to further uncover the terminal architecture. A 60cm (N/S) x 3m (E/W) trench, Unit 110-03, was added to the east of the two units and a 60cm (N/S) x 5m (E/W) trench, Unit 110-04, was added to the west. The terminal platform continued in both of these units. At this point, we realized that we were quickly running out of time and opted to instead just follow the terminal architecture (instead of setting up formal units) to understand as much as possible before the end of the field season. Thus, a plan of M-109 (Figure 3) was drawn and excavations concluded.

## DISCUSSION

Overall, there were two major construction episodes in the housegroup consisting of M-109, 110, and 111 (as well as M-108 which wasn't excavated). The earliest construction in the structures occurred during the Late Classic period (Spanish Lookout phase, assessed by a preliminary analysis of the ceramics). During this time, there were construction episodes at both M-109 and M-111. M-111 had three construction episodes in total, with two during the early facet of the Spanish Lookout phase (Late Classic) and the final during the late facet of the Spanish Lookout phase (Terminal Classic). In terms of artifacts, it appears that the group has relatively few artifacts, with under 1000 total sherds collected in Late Classic contexts (Table 1). Some interesting trends include the lack of obsidian in Terminal Classic contexts, as well as the drop-off in all artifact class percentages (with the exception of chert and daub). Finally, it appears that chert was the predominant raw material type in both periods (Table 2), with a small usage of obsidian in the Late Classic period, which drops off completely in the Terminal Classic period. Overall, it appears that the material record indicates that this group did not have high status. The poor location of the group, as well as the formally organized structures which appeared to be substantial, but lacked high quality materials, may indicate that this household struggled to maintain position within the community. Unlike many of the groups in the cluster, this group did not persist into the Early Postclassic period.

## **2009 RESEARCH IN SETTLEMENT CLUSTER C, BAKING POT: PRELIMINARY FINDINGS FROM M-101**

**Celine Lamb  
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### **MOUND 101**

Mound 101 is located south-east of Baking Pot's epicenter, in the zone designated C by Conlon and Moore (2003) (Figure 1). This mound is east of the Ixim Group, excavated during the 2009 field season under the direction of Julie Hoggarth. Mound 101 is also located approximately 5 meters southeast of Mound 100, and was considered to be associated to it, possibly as part of the same household. The mound height varies between 70 and 90 centimeters, and measures 14 meters in diameter east to west and 12.5 meters north-south.

Prior excavations of Mound 101 revealed architectural features, but had only uncovered a small amount. However, these investigations demonstrated that Mound 101 was the remains of a cut limestone structure of domestic function. The 2008 field season excavations also vertically tested the mound, enabling to study the chronological occupation of the structure. The goal of the 2009 excavations of Mound 101 was to uncover enough of the terminal architecture in order to estimate its dimensions, record the construction techniques, and compare this set of data to other structures within the "neighborhood" as well as the greater community of Baking Pot.

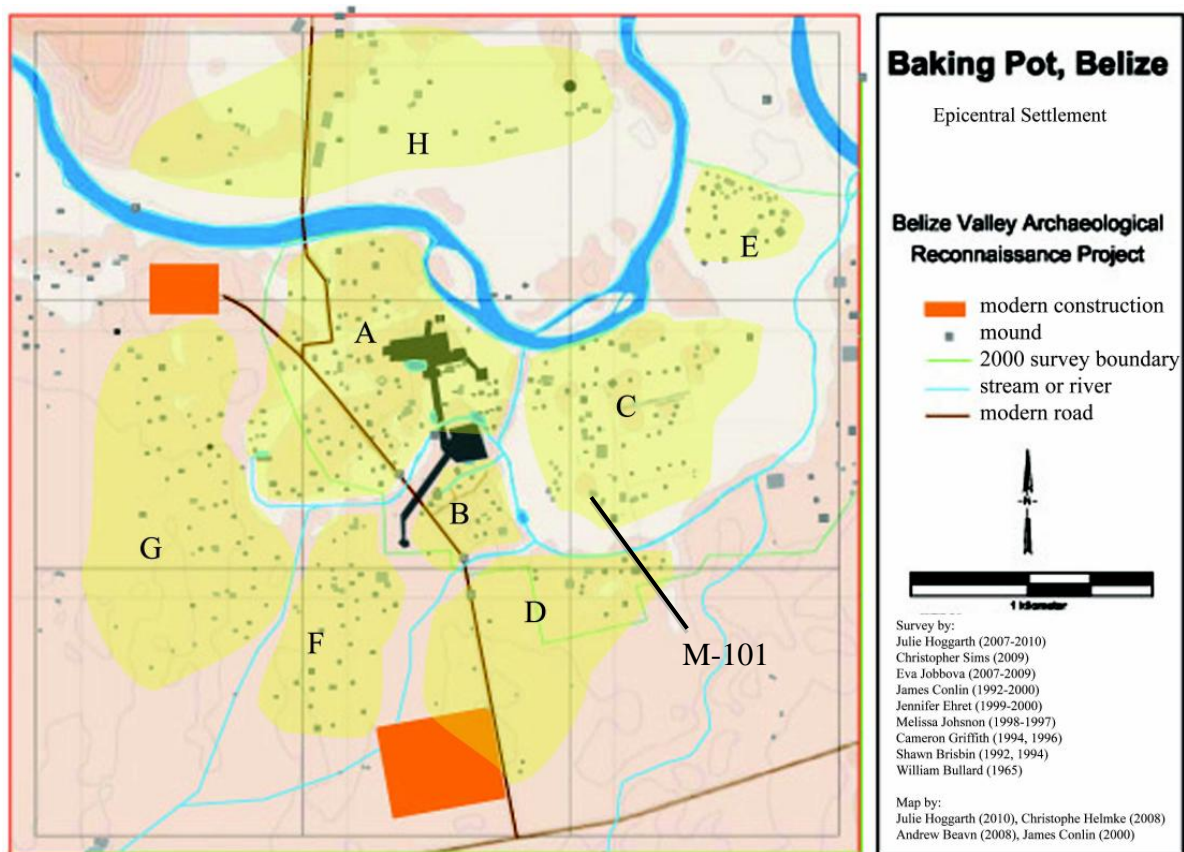
### **METHODS**

A grid of thirty-six 2 by 2 meter excavation units was placed on the mound in order to cover all possible architectural features. However, unlike the excavations conducting on Mound 100, excavations of this mound began with trench like units of 50x200 centimeters on the slopes of the mound in order to effectively determine the extent of possible architecture within the mound. Five units and three extensions were excavated. The results of these are presented below.

### **EXCAVATION RESULTS**

#### **E.U. 101-7-A**

This excavation unit was opened to locate the western edge of the platform. As the outset stairs of Mound 100 are located facing south, it was presumed that the façade of Mound



**Figure 1:** Location of M-101 in Settlement Cluster C (modified from Hoggarth 2010).

101's platform, and its stairs if any existed, would be on the western side, facing a common space with Mound 100.

Unit 101-7-A was a trench like unit measuring 50 by 200 centimeters. Excavations followed natural stratigraphy until a cultural level was reached. Level 1 (lot 1905) consisted of a dark brown, loose humus layer with a relatively large amount of rocks and cobble were found in the upper strata. Excavations further west (Extension 1) revealed the western edge of the platform, demonstrating that this unit was not the location of the edge of the platform. Excavations of unit 101-7-A were therefore ended in order to concentrate efforts on uncovering the edges of the platform.

### **E.U. 101-3-A**

This trench like unit (50 x 200 cm) was opened with the goal to locate the center of the northern edge of the platform. Level 1 (Lot 1906) consisted of a humic layer with a relatively large amount of rock and cobble inclusions at the surface, as a result of some of the rocks settling into the humus. During excavations, limestone rubble, as well as ceramics, chert, faunal remains, daub, and a special find (ceramic net sinker) were recovered. The limestone rubble was aligned with the location of the collapsed architecture and wall encountered during the 2008 excavations. This concentration of limestone was therefore interpreted as collapsed architecture. As a precaution, Level 1 was closed at approximately 80 cmbd in the south of

the unit and 60 cmbd in the north, as standing and collapsed architecture was not easily distinguishable.

Level 2 was also characterised by dark brown humus. In this level, excavations revealed further collapsed architecture, as well as a large cut limestone block that, by its placement, was clearly part of standing architecture. Further excavations east and west (Units 101-4-A and 101-3-B) would help uncover this stone and its function. Cultural materials recovered in this level included ceramics, chert (including a chert hammerstone), and daub. Level 2 was closed for the same reasons as Level 1.

Level 3 (Lot 1920) was started at approximately 95 cmbd in the south and 65 cmbd in the north of the unit. As the previous levels, the matrix was characterised by matrix consisting of humus. Artifacts recovered included ceramics, chert, quartzite, daub, and freshwater shell, along with two ceramic net sinkers. During the excavation of this level, several rows of the stairs became apparent. The same row of stairs was encountered in units 101-3-B, 101-4-A, 101-2-A and 101-2-B. At the base of the stairs, as also encountered in other units, the remains of a plaster floor were found, demonstrating that at least part of the exterior base surrounding Mound 101 was plastered. This finding will be further discussed (see Discussions section).

#### **E.U. 101-3-B**

This unit of 100 by 150 centimeters was opened to continue uncovering the architectural feature encountered in unit 3A. The first level (Lot 1909) was characterised by a dark brown humus layer. Cultural materials recovered in this level consisted of ceramics, chert, and daub (including one fragment with a pole impression). As presumed, the continuation of the same collapsed limestone architecture encountered in unit 3A was found in this unit. Level 1 was closed to as a precautionary measure as it was difficult to distinguish collapsed architecture from standing architecture.

Level 2 (Lot 1915) consisted of a humus matrix. As collapse was cleaned, photographed and removed, excavations began to reveal three standing rows of stairs. Artifacts recovered in Level 2 included ceramics, chert, daub, freshwater shell, and another ceramic net sinker (Lot 1916). This level was also closed out of precaution just as Level 1. Level 3 started at approximately 80 cmbd in the south and 50 cmbd in the north. This level was characterised by a dark brown humus layer. Excavations in this level revealed further collapse. Once collapse was removed, the continuation of the rows of stairs found in unit 3A were uncovered, as well as the remains of a plaster floor at the base of the stairs. Level 3 was ended above this plaster floor.

#### **E.U. 101-4-A**

This unit measured 100 by 200 centimeters and was opened to continue uncovering to the east the architectural feature encountered in unit 3A. The first level (Lot 1914) was characterised by a dark brown, relatively compact humus layer. After removing the collapsed architecture, excavations revealed the east corner of the outset stairs. In addition, the northern wall of the platform was encountered in the southern baulk of this excavation unit. Also noticeable in the baulk's profile, directly above the platform wall, were small limestone fragments and cobbles. This has been interpreted as ballast of the Terminal Floor, or less likely, as construction fill.

Level 1 was ended at the base of the outset stairs and wall, where the remains of a plaster floor were encountered. This floor has been interpreted as the Terminal Floor of this structure. In the corner where the outset stairs meet the platform wall, a Terminal Floor deposit was uncovered (Lot 2071). This deposit started at approximately 120 cmbd and ended at 125 cmbd approximately. The deposit consisted of ceramic molded carved sherds, most probably an entire vessel, a ceramic figurine fragment, and a perforated polished faunal long bone. The molded carved ceramics boasts glyphs. Although these have not yet been analysed, they seem to be actual glyphs, rather than pseudo glyphs (Ramsey Barrois, personal communication 2009). One of the molded carved ceramics sherds has a perforation, at the top of the vessel. This may indicate that the vessel was hung. The perforation in the faunal remain has led us to interpret this artefact as a flute fragment. Whether this long bone is of human or animal origin has not yet been identified by laboratory analysis; but it is worth noting that human long bones used carved into flutes have been encountered in the Belize Valley (Willey *et al.* 1965).

### **E.U. 101- 2-A**

The soils of this unit were backfill resulting from the 2008 investigations. However this unit was reopened to continue to uncover the northern edge of the platform. The backfill was excavated as Level 1 (no lot number assigned). One artifact, a small shell *adorno* of approximately 1 cm long and 0.5 cm high, was recovered from the backfill. Although this artefact was found out of context, it is safe to assume that it originates from Mound 101 as it was found in the backfill soils along with modern refuse material such as plastic wrappers. This artefact will be further discussed below (see Discussions).

### **E.U. 101-2-B**

This unit of 50 by 200 centimeters was also opened this unit to continue to uncover the northern edge of the platform. The first level (lot 1966) was characterised by a dark brown loose humus layer. Excavations revealed the western corner of the outset stairs. The last row of stairs was also revealed, as well as the degraded remains of a plaster floor at the base of the stairs. Several special finds were recovered from this level, including a chert biface, a ceramic net sinker, and a ceramic ball (possibly a rattle for the foot of a vessel). Level 1 and excavations of this unit were ended above the terminal plaster floor.

### **E.U. 101-1-A**

This unit of 50 by 200 centimeters was opened to uncover the western edge of the platform. The first level (Lot 1977) was characterised by a dark brown humus layer. Excavations in this level uncovered collapsed architecture, but no standing architecture. Relatively few artifacts were recovered from this unit. Level 1, and excavations in this unit, was ended above the terminal plaster floor.

### **E.U. 101-7-B**

This unit was opened to uncover the northern platform edge, west of the outset stairs. The first level (Lot 1979), was characterised by a dark brown humus layer, with many small roots in the upper strata. Once collapsed architecture was removed, the platform wall was encountered. The distance from the platform to the edge of the western section of the outset stairs was 70 cm. Level 1, and excavations of this unit, were ended when the remains of a plaster floor were reached at the base of the platform wall.

### **E.U. 101 EXT 1**

Extensions were opened because the grid originally placed did not sufficiently cover the mound, and it was possible that the west edge of the platform would be located outside of this original grid. Extension 1 was a 50 by 200 centimeter unit running east west, located at the approximate center of the western slope of the Mound. This unit was placed in order to locate the center of the western side of the platform. Excavations followed natural stratigraphy until cultural levels were reached.

The first level (Lot 1907) consisted of a humus layer, characterised a dark brown, loose, homogeneous matrix. At the approximate center of the unit, running north south, collapsed limestone architecture was encountered. In addition, while humus was encountered west of the limestone, a soil change (more yellow and silty) was apparent east of the limestone. This difference in matrix seemed to indicate a difference between the exterior of the platform (humus) and the construction fill within the platform (silty matrix). Once the collapsed architecture was removed, a wall constructed of large cut limestone blocks, was revealed. This architectural feature was a portion of the western wall of the platform. Excavations did not reach the base of the wall in this extension due to time constraints. However, excavations of other units and extensions enabled us to measure the height of the wall (see Extension 2 testing).

### **E.U. 101 EXT 2**

This extension originally extended approximately 500 centimeters south from Ext 1. Level 1 (Lot 1910) was characterised by dark brown humus, with vegetation roots in the upper strata and rock inclusions. Excavations revealed the continuation of the architectural collapse encountered in Extension 1. However, the majority of the collapse was located in the northern portion of the extension and much less in the center and south. As the collapsed architecture was removed, the western wall of the platform was also encountered in this Extension. The removal of collapse also revealed a human burial (Burial 101-1). This burial will be further discussed below. Because of time constraints, excavations did not reach the base of the wall in Extension 2. However, a small portion of the wall was tested to measure the total height of the standing architecture at this location.

### **Burial 101-1**

Burial 101-1 was located off of the western platform wall of Mound 101 in Extension 2, west of Unit 101-19 (Figure 3). Although this burial was considered part of Level 1, it was assigned its own lot (lot 1968). Burial 101-1 was a primary deposit of one individual in flexed supine position, oriented east. The placement of this individual was particular as it was on its back but its knees were propped up, and its two hands close together by the individual's cranium. Several of the individual's front teeth were modified by filing. This, however, is known to have been a common practice among the ancient Maya and does not indicate social or economic status, as apposed to stone inlays in teeth.

This burial was particularly interesting because of the mode of inhumation. No clear indication of a grave structure was identified. However, the individual seems to have been interred outside of the terminal platform, which later collapsed onto the individual, since



**Figure 3:** View of Burial 101-1 along northern platform wall (photo by J. Hoggarth).

limestone blocks and fragments were recovered alongside the individual. West of the individual, a linear concentration of limestone and cobble was uncovered, spanning the approximate length of the interment. The materials found near, associated with, and above the interment are refuse material, and it is possible that midden material from anterior occupations of this structure as well as contemporaneous with the burial was used to cover the human remains. Postclassic burials in other regions of the Maya lowlands also note less formal burial locations such as middens.

Major taphonomic damage to the human remains, in particular to the skull and axial skeleton was caused by a large root which had grown under the skull and passed over the individual's upper body and through its lower limbs. No grave goods seem to have been placed with the individual, although cultural material was found associated with the human remains. Refuse material such as a broken biface, two feet of New Town phase ceramic vessels (Augustine Red and Paxcaman Red), ceramic sherds (one large sherd was found directly below the cranium of the interred individual). In addition, a small amount of jute shells, chert debitage was also recovered from the burial. These materials, often found in construction fill, could have been refuse material used to cover the burial. Analysis of these materials indicates an Early Postclassic date for the interment of the individual. Because the interment is not clearly defined, it was difficult to determine what was purposefully deposited with the burial and what was the result of the abandonment and collapse of the structure.

### **E.U. 101 EXT 3**

This extension spanned approximately 470 centimeters north from Extension 1. Natural stratigraphy was followed during excavations until cultural levels were reached. Level 1 (Lot 1911) was characterised by dark brown humus, with vegetation roots in the upper strata and rock inclusions. Excavations revealed the continuation of architectural collapse found in Extension 1 and 2. However, the limestone blocks encountered in Extension 3 were not as large and were also less frequent than in Extensions 1 and 2. Excavations in the northern portion of the extension, revealed the northwest corner of Mound 101's platform as well as the remains of a poorly preserved plaster floor. In this northern portion of the wall, the standing architecture consisted of three to four courses of cut limestone blocks, although these were smaller than those encountered in the southern portion of the wall.

During the removal of the collapsed architecture, most of the cultural material was recovered west of the collapse. Materials recovered included several biface fragments (at least three) and a rattle foot of vessel. Relatively large quantities of ceramic sherds were recovered, and these were often encountered in concentrations. Within the collapse, a small chert projectile point was also recovered. A scroll foot of a ceramic vessel, almost identical to the one recovered from the burial was encountered during the excavations of this extension. Level 1 and excavations of Extension 3 ended above the terminal plaster floor.

## **RESULTS**

The 2009 excavations of Mound 101 provided data necessary to understand the construction techniques used for this structure, as well as estimate the overall dimensions of the terminal structure. Two walls, north and west, of the platform were almost entirely uncovered, as well as outset stairs located at the northern wall of the platform, and the remains of a exterior terminal plaster floor. The platform of Mound 101 seems to indicate an important investment of materials and energy; large, well-cut limestone blocks were used to assemble tightly constructed walls of at least three courses. Although four courses is the maximum amount of standing courses found today on the structure, the amount of collapsed architecture attests that the structure possibly higher. In its present condition, the platform measures, both on the northern and western wall, 70 centimeters in height. Outset stairs are located in the center of the north wall of the terminal platform. These architectural elements in its present state consist of three to four courses of limestone and are 70 cm wide (from platform wall to last course of stones).

The remains of a poorly preserved plaster floor were found in the entirety of the north excavations, at the base of the edge of the platform. However, no plaster floor was found along the western wall. Although it is possible that a floor once existed at this location but was not preserved, it is likely that the inhabitants of this structure only plastered the front exterior of their structure. Concentrating energy and material investments to the façade of a structure is a common practice among all societies.

## **DISCUSSION**

Cultural material recovered from the 2008 and 2009 excavations of Mound 101 demonstrate that this household had access to a variety of materials such as ceramic, chert,

limestone, granite, shell, obsidian, and a greenstone adze. Some of the artifacts recovered demonstrate the possibility that this household had some social or economical importance, such as the greenstone adze recovered in 2008, or the shell adorno and the molded carved ceramic with true glyphs. The dimensions of the structure, as well as the quality of construction, support this possibility, as energy and material investment are dependent on wealth and social standing. Apart from the M-99 Group, Mound 101 is one of the larger structures in its immediate surroundings.

It is generally accepted that households of higher economic and social status would occupy lands of higher quality. This seems to also be the case with Mound 101. Mound 101, among others such as the M-99 (Ixim Group), are situated on a natural terrace. However, Mounds such as Mounds 110, 111, 112 and 113, located further west, would likely have been subjected to periodic inundations because they were not located on this terrace. Multiple levels excavated in Mound 113 during the 2008 investigations, consisting of a sandy matrix with fresh water shells, could have been flood deposits.

The terrace on which Mound 101 is located would not only have helped prevent flooding damage to the structure, but also would have provided potentially high quality cultivatable land, as it would have been well drained soils. The 2009 excavations offered several other interesting finds (net sinkers, burial, terminal floor deposit). First, excavations along the northern edge of the platform recovered ceramic net sinkers. The relatively large amount of these items at M-101 may indicate that this household was either involved in the production of these goods, which are associated with fishing activities, or consumption of such products. As no manufacturing products or unfinished products were found during excavations, it seems plausible that the residents of Mound 101 were using, rather than producing, these net sinkers. The close proximity of the Belize River supports the possibility that this household could have been involved in fishing activities.

Burial 101-1 also presents interesting questions for settlement research at Baking Pot and funerary anthropology in general. First of all, the location at which the individual was interred is not common, as most Maya burials are encountered on the primary axis of structures, generally in the center of the structure or aligned with the stairs of a structure. However, the individual of Burial 101-1 was interred west of the structure, and offset of the transverse axis. As stated previously, this individual seems to have been interred during the Early Postclassic period. Burials and caches of broken pots have both been interpreted as having been used during termination rituals, when a structure was to be abandoned or before it was rebuilt (Mock 1998 in McKillop 2006). In this respect, it is possible that Burial 101 was associated to the Terminal floor deposit encountered off of the outset stairs, and that these two deposits were associated with the termination of the Terminal structure studied today. However, Burial 101-1 has the particularity of lacking signs of ritualization. The manner of Maya burial reflects social standing (McKillop 2006: 264). No grave goods or grave structure have been clearly identified, and as stated before, the odd location of the burial supports the possibility that this individual was not considered of high value by those who interred it.

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## **2008-2009 EXCAVATIONS OF MOUND 96 AT BAKING POT, BELIZE**

**Phylcia A. Pelayo  
Galen University**

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### **INTRODUCTION**

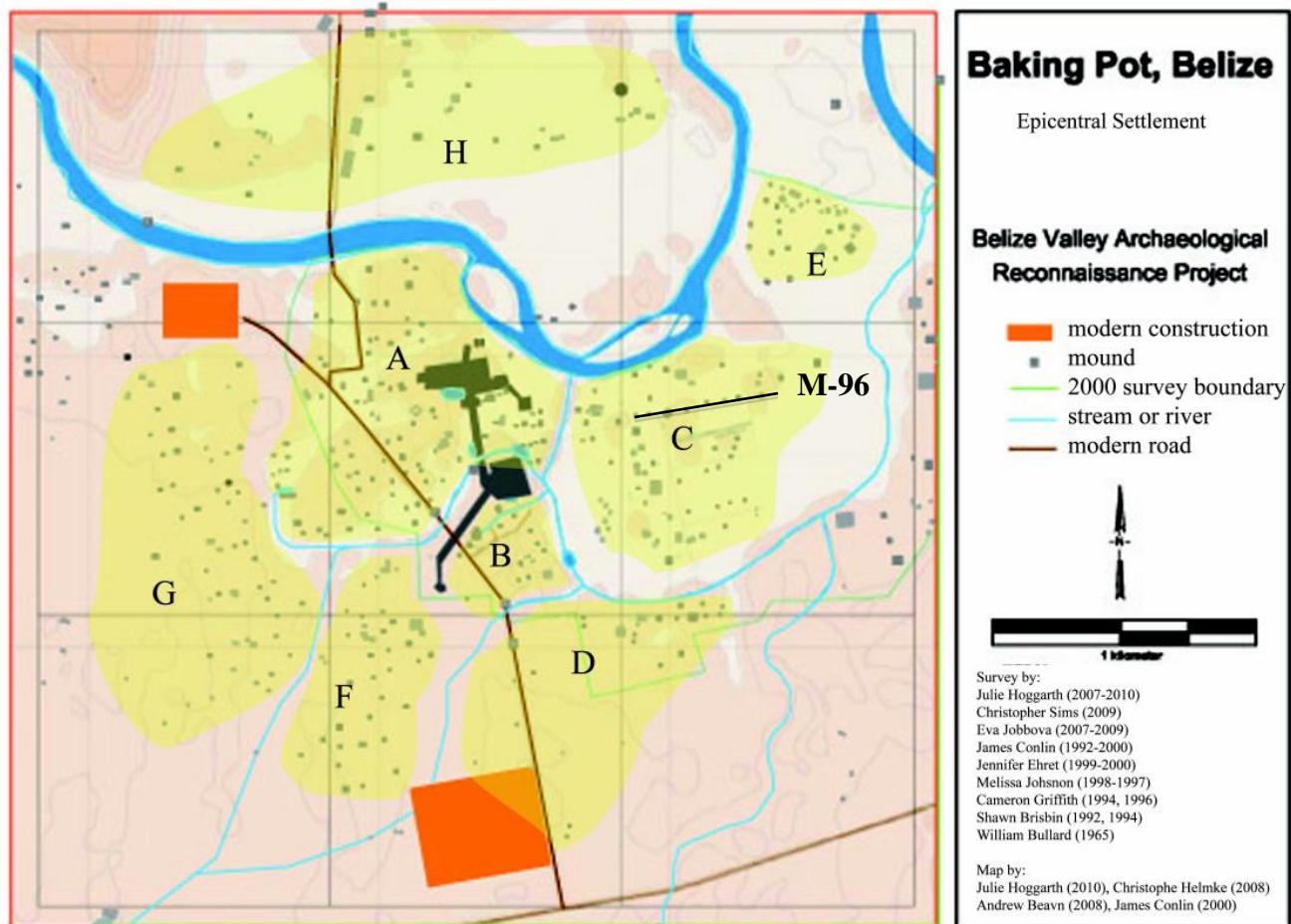
Excavations of Mound 96 were commenced in the June-July 2008 field season and were continued in the July 2009 field season. The initial purpose of conducting excavations was to determine firstly, if the structure was indeed a house mound and not a result of the heavy plowing activity in the area; to expose the architectural features of the mound as well as to possibly determine the various occupational phases of the structure. Excavations of the mound continued the following year with the primary objective being to expose more of the architectural features of the structure to hence determine the possible size of the structure. No prior excavation had been conducted on this structure. 2008 excavations consisted of the vertical excavation of one central unit while in the 2009 excavations; four trenches were established in various directions of the mound that were excavated horizontally.

Mound 96 is located in the periphery of several other mounds- M-94, M-181 and M-184. In order to determine whether the mound served as a residential household, artifacts related to domestic use were expected to be found rather than artifacts serving a ritual purpose. Investigations therefore sought to identify trash middens, caches, burial goods etc. that could provide supporting evidence in determining the purpose of the mound.

### **EXCAVATIONS OF THE 2008 SEASON**

#### **Architectural and Cultural Features**

The excavation unit was established with the north-south axis of the mound and the unit was positioned in the estimated center of the mound. A mound profile was drawn and a datum was established at 23 cm above surface. This unit was recorded as Unit 12, Operation SR-3 (Settlement Research -3). Unit 12 started off as a 1 x 2m unit of



**Figure 1:** Location of M-96 in Settlement Cluster C.

which the first level and Lot (1381) began at 18 cm below datum (central depth). Both level 1 and level 2 (Lot 1382) were excavated at arbitrary 10 cm intervals and consisted of mostly thick humus with plants and roots material. Few ceramic materials were

recovered from these levels. The first architecture that was exposed was at the end of level 2 and was possible top surface of a wall located near the northern baulk of the unit. With this new discovery, the level and lot were closed and level 3 was commenced.

Level 3, Lot 1383 commenced at 40 cm below datum (central depth) was opened and was culturally excavated to expose the architecture. Continued exposure of the wall revealed the formation of three deteriorated limestone rocks as well as a ballast floor. This ballast floor extended throughout the unit and was much unleveled; it was on top of this floor on which the wall was located. There were no remains of plaster left on this floor. An extension of the unit was then made (Extension A) to determine of the floor



**Figure 2:** Floor 1 and associated pit (photo by P. Pelayo).

continued towards the East. This was a 1 x 1m extension that continued the unit from the southern baulk and was excavated through level 1 and 2 at arbitrary 10 cm intervals until level 3 was reached. Level 3 (Lot 1386) was assigned to the general Lot of the extension, which revealed that the ballast floor continued southward.

A 1 x 3m extension (Extension B) was then made from the entire eastern baulk of the unit. At level 2 (Lot 1387) the wall that had been previously found, continued into the extension. Level 1 was closed after the arbitrary depth was reached and level 2 was opened; Lot 1388 in which the floor appeared. With the exposure of the floor in the extension, Lot 1383 was extended to include level 3 of extension B. The floor was then completely excavated and revealed that it continued and was broken throughout the entire extension of the unit. This portion of the floor in extension B was also more leveled and revealed to have more ceramic sherds in the fill than the unbroken portion of the floor. In general level 3 of the entire unit saw an increase in the amount of cultural materials recovered as cultural material such as tiny pieces of ceramic sherds were found mixed in as fill with for the entire floor.

Towards the approximate middle of the floor was a depression in which the ballast was absent. (Figure 2) This depression had first been discovered while excavating the floor in the extension A and since it appeared to have a different cultural context from

the floor it was assigned level 4 (Lot 1389). This area had even more evidence of cultural activity as surrounding this depression appeared to be larger ceramic sherds than those which made up the ballast floor fill. It also appeared to continue at a significant depth below the ballast floor. Large ceramic sherds were found as well chert cores and flakes, a piece of granite and daub were encountered.

Further excavation of Lot 1389 revealed evidence of a plastered floor down further below at 91 cm below datum. In order to further uncover the rest of the plastered floor, the first floor had to be removed. Level 3 (Lot 1390) was therefore assigned to the layer of soil that was in between the two floors. A portion of Lot 1383 would be left intact, as this was the part containing the wall and some of the ballast of floor 1. As excavations continued, a smaller quantity of ceramic sherds and other artifacts was found with each depth approaching closer to the level of the plastered floor. When the depth of Lot 1389 was reached, this Lot was closed off since it was only the depression. As well Lot 1390 was closed off since the plastered floor was found.

The last remaining section of Lot 1383 containing the wall and the last remaining part of floor 1 was left was removed to further excavate downwards to the plastered floor. The plaster floor was assigned (Lot 1431) level 4 and the layer of soil beneath wall and above floor 2 was assigned Lot 1432, level 3. Lot 1432 was excavated solely to expose the rest of the plastered floor beneath. In addition, while excavating the lot a painted ceramic sherd was found which consisted of a black design. Lot 1432 was closed, as the rest of floor 2 was uncovered.

Extension C was then started, which was a 1m x 2m extension to the NE baulk. This was excavated arbitrarily through levels 1-3. Floor 2 was reached and became part of the larger Lot 1431 that was assigned to floor 2. This extension revealed that this eastern half of floor 2 was broken as there was an absent of plaster in this portion and instead the ballast of the floor was exposed.

With the plastered floor now covering the entire unit, a 1.5m x 2m portion of the in the NE broken half of the floor near was designated a new Lot, 1436, level 4. The purpose of this Lot was to excavate further beneath the floor to determine the presence of additional architectural or cultural features. Approximately 5 cm below the floor or ~100 cm below datum, two ceramic vessels were exposed in the SE section of the Lot along with tiny bone fragments. Further excavation revealed that there were actually five vessels which formed a cache. This cache was assigned (Lot 1437) level 5.

The cache consisted of all serving vessels that were all in deteriorating condition, and of which two appeared to be bowls. Four of the vessels were set in two pairs, lip to lip, all of which appeared to be Mountain Pine Ridge Red, while the larger vessel was ash-tempered. With the removal of the cache, both Lot 1436 and 1437 was closed. Furthermore, the new Lot 1438, level 5 was assigned to the general matrix and excavation concentrated on the area where the bone fragments had been found.

A new extension was established south of the extension C, making the entire unit a 3m x 3m. The purpose of this extension was to determine if there were more bone fragments present. The extension was arbitrarily excavated through level 1 (Lot 1439) and level 2 (Lot 1440) while level 3 (Lot 1471) was culturally excavated. Floor 2 was found at level 4, Lot 1472 on which large ceramic sherds and a *metate* fragment were found on top of the floor. As the floor was broken through during excavation a cobble *mano* fragment was found. Lot 1472 was closed off when the level of Lot 1438 was reached; therefore, the lot was extended to include this area.

As level 5 was being approached some large rocks were found in a pile towards the SE corner of the baulk. Therefore extension E, a 1.5m x 2m was established east of the SE baulk of the unit to determine if there was any architectural significance of the rocks. Level 1 (Lot 1473) and level 2 (Lot 1474) was excavated arbitrarily. While level 3 (Lot 1475) was excavated culturally, it was observed that there was an increase in the quantity and variety of artifacts found such more rim sherds found as well as several small, black obsidian blades. A small piece of slate was also recovered along with some human remains of which a tooth was found. There was also an increase in the concentration of chert flakes and cores found. Marine shell, *jute*, faunal remains and even a small jade fragment was found in this Lot. This Lot was closed off as it approached the elevations where the rocks had been found in Lot 1438, there was no indicator that the rocks continued in the extension E. Levels were switch to level 4, Lot 1476 for this extension for continued cultural excavation.

Further excavation in this lot exposed the scarce remains of the floor 2 which only extended within a portion of the lot. Poorly preserved ballast from the floor was exposed in the SE area of the lot as the rest of the floor appeared broken. Artifacts recovered from this lot included more human remains (fragments), chert, ceramic sherds, *jute*, marine shell and chert.

## **Burials**

### *Burial 96-1*

At approximately 107 cm below datum, remains of a skull were exposed in extension E, Lot 1476 that was located beneath a portion of floor 2. As continued excavation reveal more associated bones the feature was assigned Burial 96-1 and the level was changed to level 5, Lot 1477. It was revealed that the skeleton was lying in an extended prone position with the orientation of the head at the south and the feet at the north. An extension (F) was made to the north of the unit where the feet were expected to be found.

This small extension of 0.5m x 1m was excavated culturally of which level 1 (Lot 1478) revealed remains of floor 1 and level 2 (Lot 1479) revealed remains of floor 2. Levels were switch to level 3 (Lot 1480) that contained part of floor 2, which was also broken in the area where the feet were expected to be found. Bone fragments were already being exposed so levels were switch to level 5 immediately, so there was no level



**Figure 3:** Burial 96-1 (photo by J. Hoggarth).

4. This elevation where the feet were found was at a much higher elevation in comparison to the skull.

The skull of the burial was downward with the left arm going under the pelvis. Burial goods included two shell *adornos* of which one was the outline of a star and the other the fragment of a flower, which was found near the legs. Five pieces of obsidian were found in the lower left of the ribcage. Most of the bones were present during removal of the burial in the field and the orientation of the burial within the physical context of the unit indicated that this was a primary burial instead of a secondary interment. Other artifacts found with the burial included, ceramic sherds, chert, *jute* and marine shell. This Lot was closed off upon removal of all of the associate burial remains. In addition, the rocks that were piled in Lot 1438 were removed and the lot was closed.



**Figure 4:** Burial 96-2 (photo by J. Hoggarth).

#### *Burial 96-2*

Another small extension was made to the east of the unit, which was assigned Lot 1491, level 6. This lot not only included the extension but also a portion of what use to be Lot 1438 and Lot 1477. Excavation of the Lot revealed another cache consisting of large broken ceramic sherds and human bones in the western segment of the lot. The cache was assigned Lot 1492 and further excavation revealed a lot of charcoal which seem to be associated with the human remains and the cache. The cache was removed and Lot 1492 was closed off. Excavations in the general matrix of Lot 1491 were taken down deeper which revealed carpals and metacarpals which were aligned with the human bone which was found as well as teeth, with this discovery this lot was closed off. A circular shell *adorno* was found near the left hand of the skeleton.

The general matrix was then assigned Lot 1493 and the burial was assigned Lot 1494 both at level 7. This burial was found at a center depth of approximately 135 cm below datum. As a part of the humerus and skull was going into the southern baulk, extension G was made which was 1m x 1m cultural excavation of the lot revealed floor 1

continued in Lot (1495) level 1 while in level 2 (Lot 1496) revealed what appeared to be a deteriorating wall going east-west. Level 3 (Lot 1947) revealed the second layer of rocks beneath the first ones found in level 2 and floor 2 was not found like in the other excavations. Level 4 (Lot 1948) was started and revealed a variety of artifacts such as marine shell, *jute*, faunal remains, ceramic sherds, chert, granite, daub and even cobble hammering stones. There was no level 5 as evidence of human remains was already being exposed, thus levels were changed to level 6 (Lot 1499) which continued to excavate the general matrix and revealed the skull. This lot was closed and the extension became part of the general and burial lot.

At the beginning of level 7 in extension G, a small chert biface as well as some large ceramic sherds were found next to the skull. The sherds were assigned Lot 1500 to separate the cultural context from sherds found in the general matrix. Complete excavation of the burial revealed that this individual was also lying in a prone, extended position with the same orientation of the head at the south and feet at the north. As well the head was facing downwards. Grave goods included two limestone spindle whorls, which were found near the right ribs. At one of the epiphysis of the right humerus a ceramic fingerbowl was also uncovered. Similar to the previous burial, majority of the bones were present and the bones were in poorly preserved condition making removal of the burial very delicate. A poorly preserve red monochrome ceramic vessel was located near the feet of the individual. The vessel was a small pot which was very fragmented but the sherds were kept intact though the soil. The lot was closed off upon complete removal of the burial as well as Lot 1500 upon complete removal of the large sherds.

### *Burial 96-3*

While excavating the second burial, evidence of bones unassociated with the second individual became exposed as another femur and skull became exposed. This third burial lay within a few cm below the second burial and appeared a taller more robust individual as was evident from the skeletal frame. This burial was assigned Lot 1531, level 7. The bones were also noticeably in a different color from the two previous burials as they appeared to be blackened, almost as if they were burnt. No evidence however of burning such as an increase in the quantity of charcoal found or any soil change.

The burial has the same orientation with head at the south and feet at the north, it is lying in an extended position, however the head is facing west instead of downwards. Unlike the previous burials the left ribs of the individual were not present during field excavation. The pelvis was in better preservation than that of the last two burials and further excavation of the bones revealed that those which were most darkened ranged from the pelvic area to the feet.

Artifacts found with the burial included daub, ceramic sherds, chert, *jute*, marine shell. On top of the ribs of the individual there was a scatter of ceramic sherds that had not been found in the previous burials.



**Figure 5 (Above):** Burial 96-3. **Figure 6 (Below):** Burial 96-4 (Photos by J. Hoggarth).

The Lot was closed after the burial was completely excavated and removed. A 1m x 1m Lot (1534) level 8, was placed center of the area where the burials were discovered to determine if there were any more burials or other cultural features below. There was no evidence of burials and a small quantity of artifacts was found which included: marine shell, obsidian, ceramic sherds, chert, *jute* and miscellaneous human remains. This lot was closed off and excavations ended at 2m below datum.

#### *Burial 96-4*

What appeared to be a cluster of bones unassociated with the three burials was found in NW section of the general Lot 1493. These bones were discovered under a large ash-tempered sherd which was associated with the previous sherds removed from the cache in Lot 1492. Several teeth and miscellaneous bones had been on and around this sherd. Further excavation revealed that it was not a secondary interment but indeed a primary interment with a different orientation and position than all three burials (Figure 6). Excavations first revealed a cluster of human remains that appeared to have no articulation. When the first level of bones was removed, there was indeed articulation beneath. The general Lot was closed off and the burial was assigned Lot 1532.

The first level of human remains found, directly above and beneath the sherds was in deteriorating condition, but second layer of remains revealed that they were in much better condition. In fact, these new bones revealed that they were articulated. There was an articulated arm and the legs were articulated. The legs of the individual was actually crossed with feet going under the pelvis area, therefore the individual was placed in a seated position. The right hand was placed under the right femur and the left hand on top of the left femur. The position of the legs suggested that the burial was oriented in a NW position. Unlike the last three burials majority of the bones were not present and skull was found crushed with this burial.

No vessels or other similar grave goods were found with the individual, with the exception of a complete mano in front of the individual. The cache found on top of the burial was possibly associated with this individual. The Lot was closed upon removal of the burial.

#### **Vertical Unit**

A vertical unit was established within the larger unit adjacent south of the Lot containing burial 96-4. This vertical unit is a 1m x 1m that was excavated culturally to reach sterile soil. This starting Lot was assigned, level 7 (Lot 1601) which leveled off the excavation area and was closed and the level was switch to level 8 (Lot 1602) that carried on to level 9 (Lot 1533). It was within this level that a granite mano fragment was found and several obsidian blades besides the usual ceramic sherds and chert indicating even more activity beneath the floor 2. There was little evidence of a past floor that was observed from the profile at level 9.

At approximately 240 cm below datum very few artifacts were being recovered inclusive of some ceramic sherds, chert, marine shell, *jute* and faunal remains. A change in soil was also noted as the soil at level 7 was more loose and silty in comparison to that of level 9 that was more compact and clay-like.

Excavation was continued down to 2.5 meters below datum after which the Lot was closed off and the level was switch to level 10. The matrix could not be classified as sterile as one or two artifacts were still found during excavation, however, there was a significant decrease in the quantity of artifacts found and the absence in the architectural and other cultural features at this level.

## RESULTS

### Architectural and Cultural Features

Excavations were conducted in association with the unit that was established in the 2008 field season as trenches for this season were established based on the alignment of this unit. Unit 1 was established in alignment with the SW baulk of the 2008 unit and measured 1m x 6m. Unit 2 was established in alignment with the NW baulk of the 2008 and similarly was a 1m x 6m trench. All units were excavated using the similar levels as in the 2008 field seasons. The datum was also constructed 23cm above the surface.

#### *Unit 1*

The first level (Lot 1941) was started at 38 cm below datum (center) which was excavated for 10 cm which consisted of the removal of the topsoil and vegetation. Few artifacts such as daub, ceramic and chert were found.

Level 2 divided the entire unit into two 1m x 3m sections which were assigned Lot 1946 and 1947 from north to south respectively. However, no significant architecture was found in Lot 1947 and as the depth being excavated got deeper, the level and Lot were switched to level 3, Lot 1955. Lot 1946 revealed a much unleveled ballast floor. This floor extended the entire length of the Lot but was broken towards the southern end. The floor was mapped and removed to further excavate beneath it. With the removal of the floor, a two *metate* and a *mano* fragments, another chert biface and a carved slate (monkey wrench) fragment was found amongst the more common artifacts.

With the removal of the floor the level was switch to level 3 (Lot 2026). A wall and a plastered floor were found within this Lot. The wall and floor were assigned separate Lots at level 4 (Lot 2026). The wall was found directly beneath the ballast floor when it was removed at approximately 96 cm below datum. The plastered floor was broken and didn't continue throughout the entire unit. Another, smaller *metate* fragment was found and a possible hammerstone. Excavations ended in this unit after the wall and floor were fully uncovered.

## *Unit 2*

Level 1, Lot 1942 started at 55 cm below datum (center) was excavated arbitrarily for 10 cm and revealed more artifacts than unit 2. A small quantity of artifacts such as daub, jute, chert, ceramic sherds, granite and a chert biface was found. The Lot was closed when the 10 cm depth was reached. Level 2 was started and the unit was divided into three 1m x 2m sections which were assigned, Lot 1943, 1944 and 1945 starting from south-north. Excavations of Lot 1943 revealed the remains of a ballast floor, this however, did not continue significantly into the Lot 1944. Lot 1943 was then closed off and the levels and Lot was switch to Lot 1952. Further excavation of Lot 1944 revealed the poor remains of what appeared to be a ballast floor at a lower depth than the ballast floor found in Lot 1943; this second floor however was only partly preserved and did not extend throughout the Lot. Excavation of Lot 1945 revealed a poorly preserved wall in the northern section of the unit. The rocks that were small and misshapen, limestone consisted of an alignment going from west to east. An obsidian blade was found in this lot. With the discovery of the wall and floor, Lots 1945 and 1944 were closed. Lots 1945 was changed to Lot 1949 and Lot 1944 was changed to 1948, both at level 3.

A 1m x 1m extension (Lot 1950) was established to follow the western alignment of the wall in Lot 1949. This extension however only revealed large cobble rocks that did not appear to form the wall. Since the wall was not found continuing westward, another extension (Lot 1951) was set up towards the east. This was a 2m x 0.5 m lot that also did not reveal more of the wall. Instead a large *metate* fragment was discovered in the mid-southern baulk of this Lot. Lot 1943 was closed and levels were changed to Lot 1952, level 3, with the removal of the ballast of floor 1. At the end of level 2, two cut limestone rocks were found protruding from the eastern baulk, which were further excavated by an extension that continued eastward. This extension, Lot 1953, was 1m x 1m and excavation did not reveal anymore cut limestone rocks.

Similarly to the fill of ceramic sherds found between floor 1 and floor 2 in the 2008 unit, a fill of containing numerous small ceramic sherds were found above another floor below. Floor 2 was a plastered floor that corresponded with the plastered floor found in the 2008 unit. The level and Lot was switched to level (Lot 2023) upon the discovery of the plastered floor. This plastered floor however, was broken with most of the floor itself absent and there were only two small portions, one that was coming out of the southern baulk and the other piece was close to the northern end of the lot. This was the last architectural feature found within this lot, excavations ended for this unit with this section at a depth of 1.5 m (center).

## *Unit 3*

This unit was established parallel to unit 1 towards the east and unlike the previous two units it was a 1m x 4m trench. This unit was set in alignment with the north-south orientation of the bodies of the burials. Level 1 (Lot 1954) was excavated

culturally, along with level 2 (Lot 1958), only a very small part of the ballast of floor 1 was found. No architecture was found within this unit. The only significant cultural feature that was found was at level (Lot 2022) were some large ceramic sherds found in the southern part of the unit that turned out to be a cache, at 130 cm below datum. The ceramic cache (Lot 2025) consisted of various vessel fragments of which one was a broken torch holder and a circular shell *adorno*, similar to the ones found with the burials last year. Excavations were finished at a depth of 135 cm below datum (center) upon removal of the cache.

#### *Unit 4*

This 1m x 3m unit was established east of the 2008 unit and was only excavated for short period due to time constraints. Excavations were only carried to level 2, (Lot 2021) at a depth of 109 cm (center) and the only architectural feature found appeared to have been a continuation of floor 1, the ballast floor which has been found throughout most of the mound.

### **DISCUSSION**

Excavations have revealed two major occupational phases based on the cultural chronology. These phases are marked by the two major platforms found and their difference in the quality of construction, shape and structure. The earlier phase of architecture consisted of floor 2, the well preserved plastered floor which extended throughout most of the units. This plastered floor unlike floor 1, the ballast floor later built above it, appeared to be smaller in dimensions. The ballast floor expanded throughout most of the unit thereby indicating the later architectural phase was more expansive. The quality of construction however for the last phase of architecture was significantly different. With exposure to the elements taken into account, it can still be seen from the only wall found at this phase that the limestone rocks, were much smaller and more poorly shaped. The wall which was found immediately beneath the ballast floor and above the plastered floor, utilized larger and significantly nicer shaped rocks.

# **A REPORT ON THE ANALYSIS OF THE FORMATIVE CERAMIC FIGURINE COLLECTION FROM THE SITE OF CAHAL PECH, CAYO, BELIZE**

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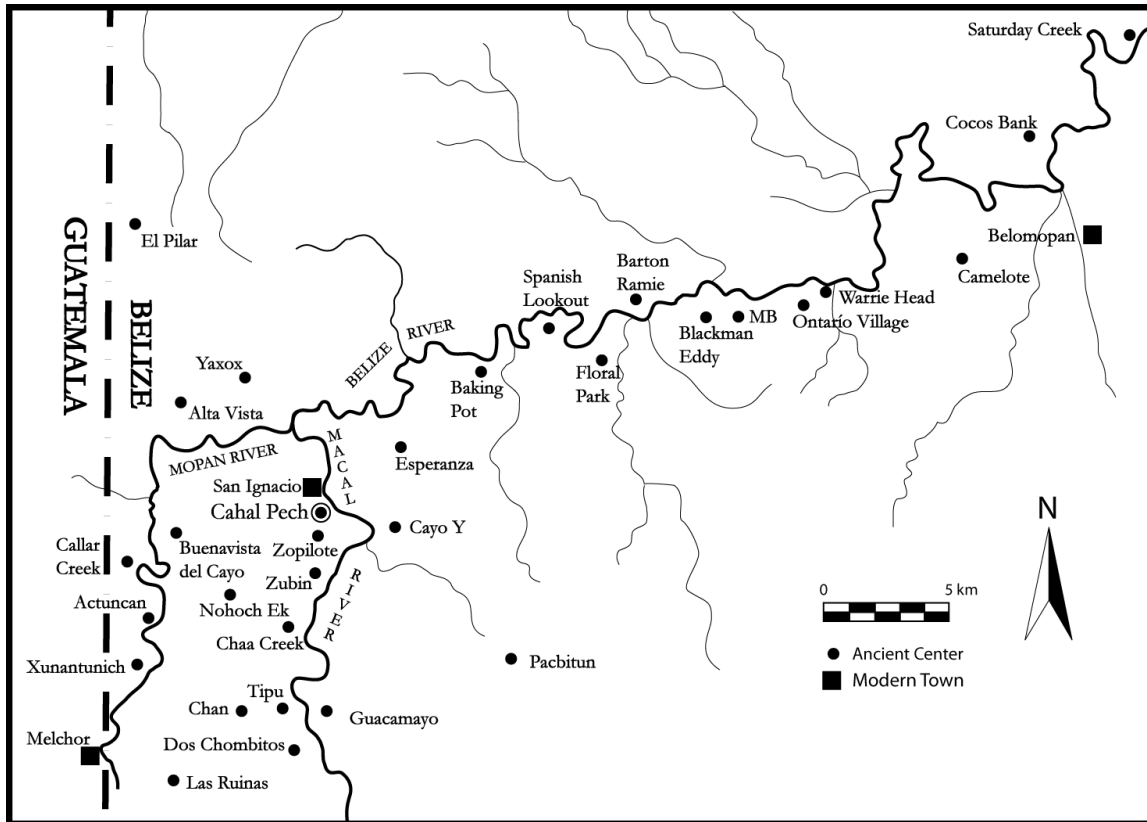
## **INTRODUCTION**

Figurines have been found throughout Mesoamerica in large quantities and in a variety of materials. However, the study of figurines has been frequently overlooked. The ancient Maya figurine tradition has a long history and the hand-modeled figurines, which are diverse and individualistic, are the most common ritual artifacts in Early and Middle Formative villages. The assemblage of figurines from the site of Cahal Pech has increased over the years and is significant because there is no comparable collection from the Belize Valley. It is during the Formative period at Cahal Pech that hand-modeled figurines increase in frequency and then abruptly decline in frequency from Classic period contexts. The figurines were part of a developing ritual complex in the Formative period and likely had multiple roles and functions. In the course of social and ceremonial changes the figurines' role in the Formative period Maya society was likely affected.

## **BACKGROUND**

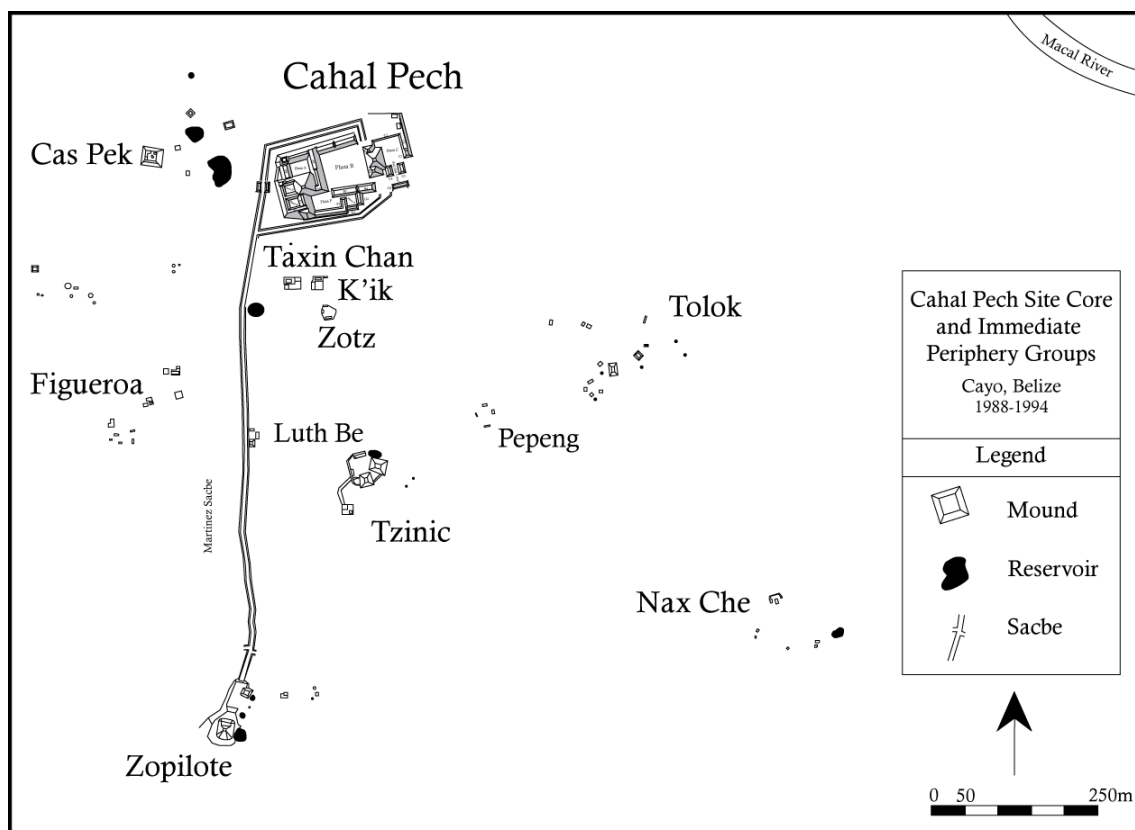
The site of Cahal Pech is located 2 km south of the confluence of the Macal and Mopan Rivers in the upper Belize Valley (Figure 1). One of the earliest lowland pottery traditions (i.e. Cunil, 1200-900 B.C.) has been identified in the Belize Valley and has been identified at Cahal Pech (Awe 1992). There is also evidence of early occupation, with the establishment of a village by the early Middle Formative period (Cheetham 1995: 20).

Cahal Pech was officially reported in the 1950s, but research at the site core and in the immediate periphery was minimal until the mid 1980s. In 1988 the first major archaeological project was conducted in response to looting and the expansion of the modern city of San Ignacio, Cayo. The priorities of that research were to map the



**Figure 1:** Map of the Belize River Valley (redrawn from Chase and Garber 2004, map1).

architecture of the site core, explore the structures and plazas in the core, and conduct comprehensive mapping and testing of the architectural groups and isolated structures in the surrounding area (Awe 1992; Goldsmith 1993). The site core (Figure 2) is located on top of a steep hill overlooking the Belize Valley and has a southern view of the Maya Mountains. There are 34 large masonry structures making an acropolis covering 1.5-hectare area. The architecture includes temple pyramids, single and multistoried range structures, large public plazas, small elite courtyards, and two ballcourts, in addition to reservoirs, a sacbe, and one carved monument and seven plain stelae monuments (Awe et al. 1990, 1991; Awe and Healy 1994; Ball and Taschek 1991, Healy et al. 2004). Most of the 34 structures in the core area were tested, making it possible to reconstruct the 1800-year occupational history of Cahal Pech. Stratigraphic excavations were carried out on Structure B-4 (Awe 1992: 106-143; Cheetham 1995) as well as series of large-scale, horizontal excavations and smaller test pits in Plaza B (Cheetham 1996). These investigations uncovered Cunil (later Early Formative; ca. 1100-800 B.C.), Kanluk (early Middle Formative; ca. 800-650), and Umbral (late Middle Formative; ca. 650-300 B.C.) ceramic sequences. These phases are equivalent to early and late Jenney Creek Ceramic Complexes at Barton Ramie (Gifford 1976).



**Figure 2:** Map of Cahal Pech site core and surrounding peripheral area, (redrawn from Powis et al. 1999, fig. 2).

## METHODS

This report presents the results of an analysis conducted in 2009 by the author on a limited sample of figurines excavated from Cahal Pech. The analysis consists primarily of descriptive data collected for each artifact. The primary data on figurine manufacture includes ceramic paste and slip, form (solid and hollow), and measurements of length, width, and thickness. Each fragment is classified as anthropomorphic, zoomorphic, musical instrument, or unidentifiable. The forms are further separated based on anatomical characteristics: head, torso, appendage, musical apparatus (e.g. mouthpiece), and unidentifiable. Descriptive and stylistic data were collected on individual specimen forms and via photographs. Pictures were taken of every fragment included in this analysis, and several illustrations were made. Each fragment was given an alphanumeric code consisting of a letter indicating the fragment's identification followed by an arbitrary number. This form of identification was developed to enable a uniform reference system. The preservation of the figurines' provenience information was a priority during the analysis. Thus, an inventory was generated in order to document the provenience, current identification code, prior catalogue number, and basic visual information (e.g., ceramic description, form, and size) of each fragment.



**Figure 3:** Complete figurine specimens (I-24 and C-1).

## GENERAL ANALYSIS

Of the 389 specimens included in this analysis, the majority was anthropomorphic and solid. All of the specimens in the collection were fragments from hand-modeled clay figurines. The paste colors ranged from dark brown to a very clean white, and the paste description ranged from very hard to very ashy and brittle. The paste types were consistent with Awe's (1992) descriptions and are comparable to ceramic wares from the Cunil, Middle, and Late Formative periods. The figurines were extremely fragmentary in nature and most of the appendages and heads were not attached to torsos, although occasionally they were. The only complete specimens (Figure 3) in the sample included a small dwarf depiction (C-1) and an ocarina (I-24). None of the fragments had evidence of garment depiction and all were interpreted as nude. Most of the aesthetic elements and the most stylistic variability occurred on the head fragments, while only minor variability was seen in the anatomical details presented on the figurine bodies.

## ZOOMORPHIC AND MUSICAL INSTRUMENT FRAGMENTS

All of the fragments classified as zoomorphic are heads, while the musical instrument category contains instruments with zoomorphic heads and parts of the apparatus such as mouthpieces, resonating chamber, and tonal holes. There were 10 fragments categorized as zoomorphic and 30 identified as musical instruments. There were several animal distinctions including birds, a feline, a frog, a primate, a dog or coyote, an armadillo, and some unknown forms. One of the complete figurines is a zoomorphic whistle in the shape of a bird (see Figure 3, I-24).



**Figure 4:** Type A appendages.



**Figure 5:** Type B appendages.

## **ANTHROPOMORPHIC FRAGMENTS**

### **Appendage Fragments**

Appendages were the most common form of fragment and very few had ornamentation. Of the 137 fragments that were identified as appendages, four different types were distinguished. Type A fragments (Figure 4) had an hourglass shape. The foot base was ovoid and concave and the ankle was constricted front-to-back. This form served to define the foot, and may have aided the figure to stand. Type B fragments (Figure 5) had an S-curve shape with a bend at the knee and a curve at the ankle making an “S” shape. Some fragments were flattened on one side along the length of the appendage and this may have indicated a seated posture with a flattened base the figure would have sat on. The fragments often were thick with highly tapered ends. Type C appendage fragments (Figure 6) were slightly curved extensions and were quite generic in form. They varied in size and degree of curvature with some being an extended limb with a curve at the end representing a hand and others were very short and had a slight curve the entire length of the appendage. Type D appendages (Figure 7) were extended and often appeared to be lower limbs. The most common types are C and D (Table 1).

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Incisions were only present on 29 (21.2%) fragments, 55 (40.1%) fragments had no evidence of incision, and on 53 (38.7%) fragments the presence of incisions could not

be determined with certainty (Table 1). The two general postures that could be determined from the sample were seated and extended. Further identification of seated styles was possible. One seated posture shows the legs not crossing but the soles of the feet would have met with the legs bent, and another example includes folded legs that would cross at the ankles.



**Figure 6:** Type C appendages.



**Figure 7:** Type D appendages.

**Table 1:** Appendage type and incision frequencies (flexed and crab claw types are considered as “other”).

	Incision			
	Present	Absent	Indeterminate	<i>Total</i>
Type A	3	3	1	7
Type B	0	5	2	7
Type C	2	3	9	41
Type D	17	15	10	42
Other	3	2	0	5
Information Not Available	4	0	31	35
<i>Total</i>	29	55	53	137

**Table 2:** Depiction of breasts on torso fragments.

<i>Form</i>	<i>Frequency</i>	<i>Percent</i>
Present	14	18.9
Not Present	18	24.3
Information Not Available	42	56.8
<b>Total</b>	74	100.0

### Torso Fragments

This analysis was initiated with the assumption that the most straightforward gender attributes on the figurines would be anatomical elements indicating male or female. However, during the analysis the task of identifying gender was extremely difficult due to the ambiguous or absent nature of physical clues of gender. Initially the gender assignments were very conservative with only 15 (3.9%) of the fragments identified as female and only 1 (0.25%), a fragment with a phallic representation, as male. This conservative assessment was based on the presence of breasts or genitalia. Only 14 (18.9%) of torso fragments had what was interpreted as breasts and 18 (24.3%) were interpreted as pectorals (Table 2). This procedure was insufficient and additional characteristics were needed to assign gender.

The other aspects of the torso that were included for gender assignment were the waist, abdomen, and hips (Tables 3, 4 and 5). If female figurines were assumed to have constricted waists, rounded bellies, and curvy hips, while male figurines had straighter waists, flatter bellies, and narrow hips, then there would appear to be a higher frequency

**Table 3:** Waist Form Frequencies and Percentages.

<i>Form</i>	<i>Frequency</i>	<i>Percent</i>
Constricted	24	32.4
Straight	8	10.8
Rounded	2	2.7
Information Not Available	40	54.1
<b>Total</b>	74	100.0

**Table 4:** Belly Form Frequencies and Percentages.

<i>Form</i>	<i>Frequency</i>	<i>Percentage</i>
Rounded	15	20.3
Flat	15	20.3
Information Not Available	44	59.5
<b>Total</b>	74	100.0

**Table 5:** Hip Form Frequencies and Percentages.

<i>Form</i>	<i>Frequency</i>	<i>Percentage</i>
-------------	------------------	-------------------

Curvy	19	25.7
Straight	3	4.1
Information Not Available	52	70.3
<b>Total</b>	<b>74</b>	<b>100.0</b>

of female representations in the Cahal Pech sample. However, the figurines were more abstract, and many of them could be considered ambiguous. Moreover, in the process of conducting the analysis a number of questions arose. Could some of the figurines represent gender-neutral forms? Can it be assumed that because sexual characteristics are absent from a figurine, it is male? Though the task of assigning gender is always subjective, using physical and anatomical characteristics was not effective and became more interpretive. As the most stylistic detail was portrayed on the head fragments, they seemed to be the main focus of representation on the figurines. Either gender was not a primary concern, or it is portrayed in a form that we cannot easily decipher. Indeed, there may be much social information encoded on these figurines that we do not yet understand.



**Figure 8:** Sample of female torsos.



**Figure 9:** Sample of male torsos.

### **Head Fragments**

The sample used in this analysis includes 90 anthropomorphic head fragments. As noted previously, most of the stylistic information was encoded on the head fragments and there was far more detail present on the heads than on any other parts of the figurines. The degree of detail and stylistic variability evident on the head fragments suggests that they were the primary vehicles via which the social identities were conveyed.

There were noticeable trends in the shapes of the head fragments. The most common form was flattened (56.7%). These fragments were flattened front to back so the widest points were from ear to ear. Several fragments had a round head (16.7%) and the remaining fragments could not be classified according to head shape. Notably, many of the flattened heads (22.2%) had a concave forehead; in contrast 13.3% had a flat forehead, 11.1% had convex foreheads, and 53.3% could not be classified.

### *Head elements*

There were 32 (35.6%) fragments that featured some form of head element on the crown of the head. For the purpose of this analysis, head elements include adornments, accessories, or coiffures that are present but may not be specifically identified. There were 9 (10.0%) that did not have any elements, 41 (45.6%) could not be classified, and 8 (8.9%) had a smooth head. It is not clear whether the smooth head was indicative of an element or possibly a tonsured or shaved head. Thus, such fragments were separated from heads that definitely lacked elements. More common

elements seen in the Cahal Pech sample of head fragments are buns or knots. These occur as single or multiple elements, and they vary in stylistic presentation. They can be plain, or they may have incisions, striations, or punctations. Eighteen (20.0%) of the fragments had a single bun element, 21 (23.3%) did not have any bun elements, 5 (5.6%) had multiple buns, and 46 (51.1%) could not be classified.

### *Hair*

There were 24 (26.7%) fragments with hair indicated by striations or incisions, 23 (25.6%) with no indication of hair, and 43 (47.8%) that could not be classified. The sample of figurine fragments did not include any portrayals of long or loose hair. When hair is portrayed, it is knotted in buns or depicted very short.

### *Face*

On all fragments that still had a face present there were indications that a nose had been present. Noses were present on 46 (51.1%) fragments and of those fragments, 29 (32.2%) had no nostrils and 17 (18.9%) did. There were 44 (48.9%) fragments that could not be coded for nose presence, absence, or form. The majority of the eyes, 32 (35.6%), were formed using a dual-ovate impression with a single central punctation. There were only 4 (4.4%) that demonstrated a tripunctate style for the eyes, 8 (8.9%) fragments had miscellaneous styles, and 46 (51.1%) of the head fragments did not have this information present. There were 54.4% of the head fragments that had a mouth present. There were several categories of classification and the frequencies are shown in Table 6. A trend of the front two incisors being the only teeth shown was recognized. The teeth were sometimes projected in dimension and one incision in the middle. The mouths created with the tripunctate style occurred on the faces with the tripunctate eyes. The teeth being shown and in this particular manner appears to be unique and may have significance, which cannot be interpreted at this time.

**Table 6:** Mouth Depiction Forms with Frequencies and Percentages.

<i>Form</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Open</i>	13	14.4
<i>Open-Lips</i>	9	10.0
<i>Open-Lips and Teeth</i>	20	22.2
<i>Open-Teeth Only</i>	1	1.1
<i>Tripunctations</i>	2	2.2
<i>Information Not Available</i>	45	50.0
<b><i>Total</i></b>	90	100.0

### *Ears*

The ears show some variety in representation with some demonstrating ears with or without earplugs while others only had earplugs and did not form ears (Table 7).

There was some variety in the earplugs when they were present. Some were appliquéd rings and others were just shown by punctations in the ears (Table 8). Some of the ears also had ear incisions and the way they were shown also varied in number of incisions and direction of incisions (Table 9). Most of the incisions were horizontal and occurred in various numbers. This was hard to determine due to the partial remains of some of the ears. There may be significance to the differentiation in presentation of the ears.

**Table 7:** Ear form frequencies and percentages.

<i>Ear Form</i>	<i>Frequency</i>	<i>Percentage</i>
Present: Ear Plugs	25	27.8
Present: No Ear Plugs	5	5.6
Absent: Ear Plugs	5	5.6
Absent: No Ear Plugs	2	2.2
Informative Not Available	53	58.9
<b>Total</b>	90	100.0

**Table 8:** Earplug variety frequencies and percentages.

<i>Ear Plug Variety</i>	<i>Frequency</i>	<i>Percentage</i>
Perforated	5	5.6
Not Perforated	13	14.4
Appliqué	11	12.2
Nodules	1	1.1
Information Not Available	60	66.7
<b>Total</b>	90	100.0

**Table 9:** Presence of ear incisions with frequencies and percentages.

<i>Ear Incisions</i>	<i>Frequency</i>	<i>Percentage</i>
Present	18	20.0
Absent	13	14.4
Information Not Available	59	65.6
<b>Total</b>	90	100.0

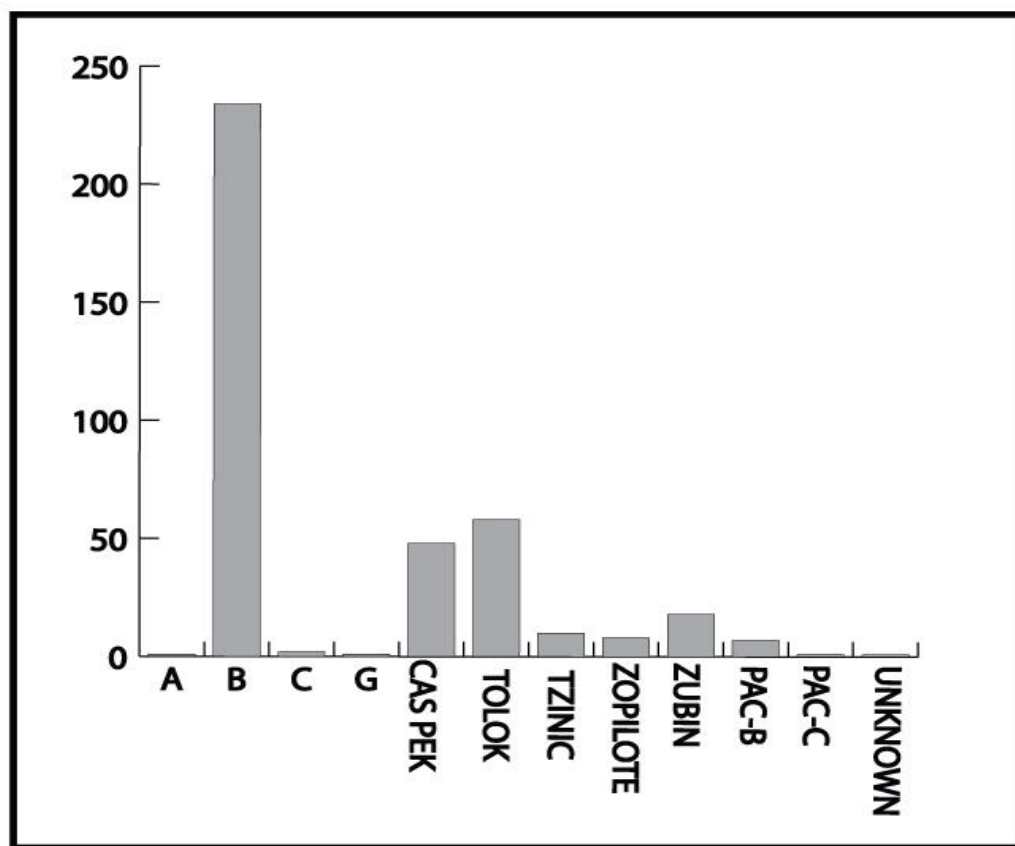
## HEAD FRAGMENT ANALYSIS

A general observation was made about the figurines over the course of the analysis in regards to the presentation of the figurines. It was apparent that the most detail and variation of stylistic forms and elements occurred on the head fragments, and the second most occurred on the torso fragments. Figurine typologies have often been based on the variety of aesthetic qualities found on head fragments (e.g. Vaillant 1930). Harlan (1987) was also aware of this while working with the collection of figurines from Chalcatzingo. He noticed that the depictions of the turbans might have been among the most important because of the large variety of ways they were formed. Marcus (1998) performed an extensive study on the hairstyles and head garments that were on the figurines from Oaxaca. She was interested in the social information that was encoded in them. “In Maya imagery, name glyphs frequently appear in the headdresses of the lords. This has been observed to be a pan-Mesoamerican phenomenon, going back to the Olmec period” (Houston, Stuart, and Taube 2006: 68). The head appears to be a container of identity for the Maya. The head fragments in the Cahal Pech sample that have headdresses and hairstyles seem most variable. Thus, variation in these elements may be one of the most significant ways in which information about social differentiation was conveyed.

## **PROVENIENCE**

The information on the figurine fragments’ provenience was inconsistent. Some of the fragments had limited information, specific to an architectural group at the site with no other information. Other information was detailed to specific lots, levels, and associated features. With only a few exceptions the figurine fragments were primarily found in construction fill and midden contexts.

There were 389 fragments that formed the sample for the analysis with 8 (2.1%) fragments actually having been from the site of Pacbitun. These fragments were stored with the Cahal Pech collection from a previous project and likely demonstrate regional variety; hence they were included in this analysis. The site core of Cahal Pech had 238 (63.0%) fragments that were excavated from Groups A, B, C, and G (Figure 10). There were 142 (37.0%) fragments that were from the periphery groups. These groups included Cas Pek, Tolok, Tzinic, Zopilote, and Zubin (Table 10). All of these groups have documented Formative period occupation. There was only one fragment whose context was limited to the site of Cahal Pech with no other contextual information.



**Figure 10:** Figurine fragment frequencies from Cahal Pech site core and periphery architectural groups, including Pacbitun (PAC) groups (n=389).

**Table 10:** Cahal Pech and Pacbitun site core and periphery group figurine fragment frequencies.

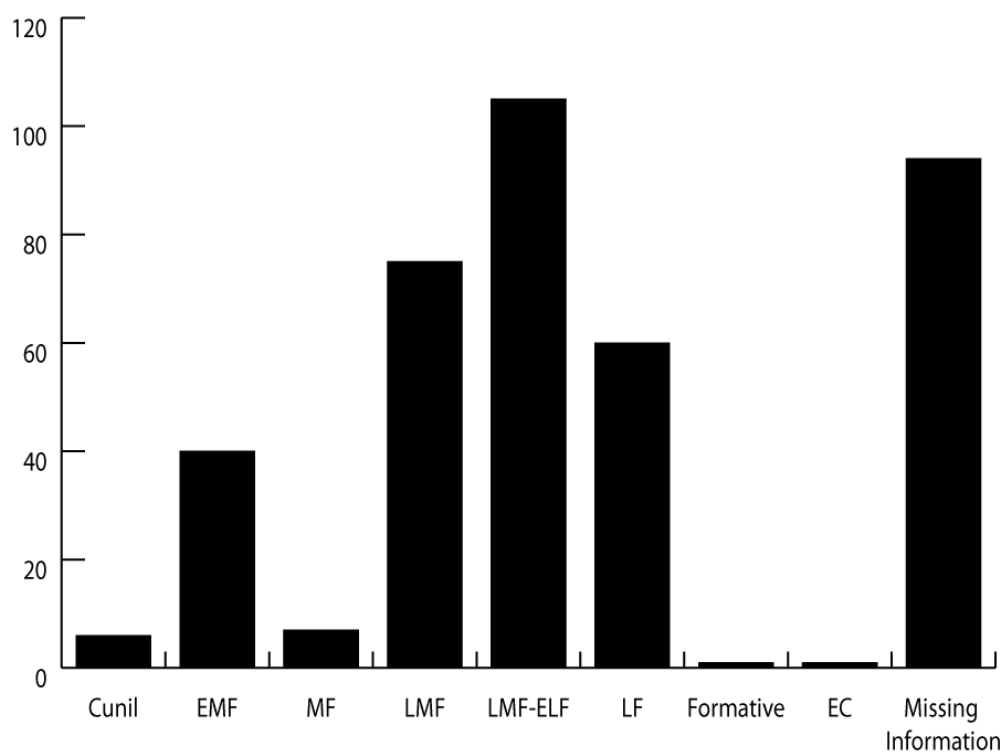
<i>Group</i>	<i>Frequency</i>	<i>Percentage</i>
A	1	0.3
B	234	60.2
C	2	0.5
Cas Pek	48	12.3
G	1	0.3
Pacbitun-B	7	1.8

Pacbitun-C	1	0.3
Tolok	58	14.9
Tzinic	10	2.6
Zopilote	8	2.1
Zubin	18	4.6
Unknown	1	0.3
<b>Total</b>	<b>389</b>	<b>100.0</b>

There were particular structures at Cahal Pech that contained higher frequencies of fragments than others (Figure 11). In the site core, Structure B-4 had the highest frequency of the whole site, 186 (47.8%) fragments, and there were additional 40 (10.3%) fragments from Plaza B, which had associations with the construction sequence of Structure B-4. In the Cas Pek group Structure 1 had 48 (12.3%) fragments and Structure 1 from the Tolok group had 22 (5.7%) fragments. There were 16 (4.1%) fragments from Tolok that had no more specific information and the rest of the structures at Cahal Pech with figurine fragments only had 10 (2.6%) fragments or less (0.3%).

**Figure 11:** Bar chart showing the frequency of fragments found in association with structures in the site core and periphery groups of Cahal Pech and Pacbitun (n = 389).

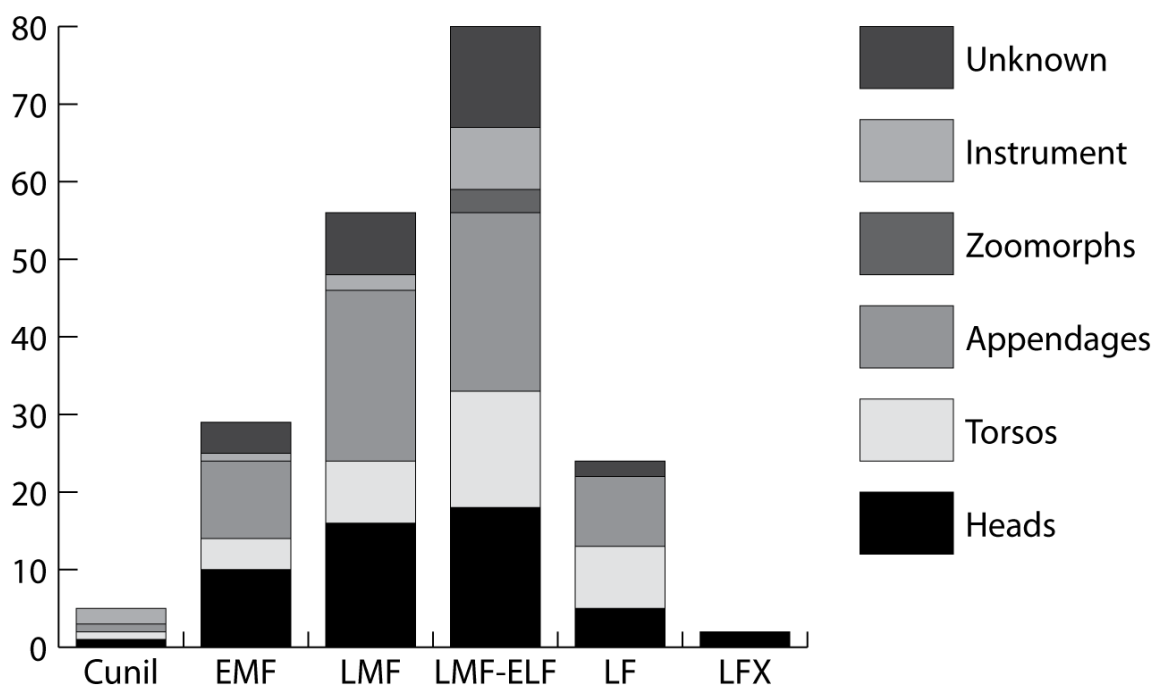
A-G = Cahal Pech site core  
 CP = Cas Pek  
 TK = Tolok  
 TZ = Tzinic  
 ZB = Zubin  
 ZP = Zopilote  
 PAC = Pacbitun



**Figure 12:** Bar chart of figurines with provenience information (n= 389 fragments).

**Table 11:** Frequencies and percentages of figurines with temporal provenience information.

<i>Time Period</i>	<i>Frequency</i>	<i>Percentage</i>	<i>Valid Percentage</i>
Cunil	6	1.5	2.0
EMF	40	10.3	13.6
MF	7	1.8	2.4
LMF	75	19.3	25.4
LMF-ELF	105	27.0	35.6
LF	60	15.4	20.4
Formative	1	0.3	0.3
Early Classic	1	0.3	0.3
Total	295	75.9	100.0
Missing	94	24.1	
<b>Total</b>	<b>389</b>	<b>100.0</b>	



**Figure 13:** Structure B-4 fragment frequencies with chronological context with form distinctions (n=196) (LFX=late facet Xakal ceramic phase).

**Table 12:** Structure B-4 fragments with contextual information and form distinctions (LFX=late facet Xakal ceramic phase).

<i>Time Period</i>	<i>Heads</i>	<i>Torsos</i>	<i>Appendages</i>	<i>Zoomorphs</i>	<i>Instruments</i>	<i>Unknown</i>	<i>Total</i>
Cunil	1	1	1	0	2	0	5
EMF	10	4	10	0	1	4	29
LMF	16	8	22	0	2	8	56
LMF-ELF	18	15	23	3	8	13	80
LF	5	8	9	0	0	2	24
LFX	2	0	0	0	0	0	2
<b>Total</b>	52	36	65	3	13	27	196

### Ceremonial Contexts

The figurines from the Cahal Pech collection were mostly recovered in a fragmentary state and in construction fill contexts. The primary functions of figurines have often been identified as ceremonial or ritual in nature and the majority of the collection probably was the result of ceremonial trash. There are several examples of figurines that were recovered in ceremonial deposits at the site of Cahal Pech. From the Zubin settlement group several deposits containing figurine fragments have been documented. From Structure C-9, in Zubin, two figurine fragments (H-62 and T-61) were “discovered in an apparent cache-like arrangement, having been placed within the

C9-6<sup>th</sup> fill, directly in front of the earlier C9-7<sup>th</sup> building platform retainer wall” (Iannone 1995: 46). Within these levels of Structure C-9 it was described that this locus began to take on increasing ritual significance (Iannone 1995: 53). Iannone discussed in his report the connection to ancestral veneration because there was the presence of a burial and ritual deposits with jade teeth and figurine fragments, along with the figurines occurring in the fill of the structure. Also within the Zubin group a deposit was found in Plaza A and dates to 350-275 B.C. This Late Formative deposit contained two figurine appendages (L-77 and L-79), a distal section of an obsidian blade, and a snapped obsidian blade (Awe 1992: 28).

The Tolok periphery group includes two of four round platform structures from Cahal Pech. In association with the round platforms, Structures 14 and 15, was Burial 9. The interment was dated to the early Late Formative and was an intrusive feature in Plaza Floor 2. The cist burial contained an individual 2-4 years of age lying prone and extended in a north-south orientation. The lower portion of the body was missing, and the cist was nearly twice as long as the child’s upper body. The partial remains of three additional individuals, along with a clump of faunal material, were located at the base of the cranium of the child. The faunal remains included the upper mandible of a parrotfish and bones from two whitetail deer. The other grave goods included a medial fragment of a highly polished greenstone celt, located on the child’s right humerus, an unmodified piece of slate near the pelvis, and a torso figurine fragment (Figure 14) beside the cranium of the child (Powis and Hohmann 1995: 74).

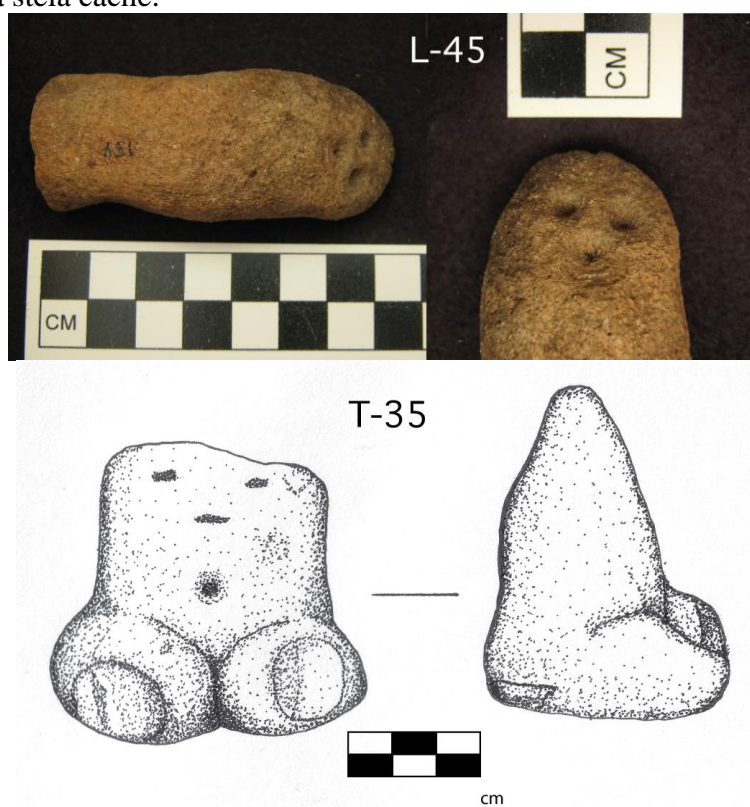


**Figure 14:** Figurine fragment T-68.

The Tzinic group provides an example of monument-related offerings. Specifically, a cache was found in association with an uncarved stela that was suspected to have been erected in the second half of the Early Classic period (Awe 1992: 177). An excavation unit penetrated three plaza floors and yielded a figurine fragment (T-35, see Figure 15) directly below the butt of the monument. The figurine was seated upright, and there is an association with the individual interred in a large crypt burial located in structure 2 (Conlon and Awe 1991: 10). The fragment (T-35) is a modified torso in a

seated posture. The upper portion of the existing torso tapers in thickness from front to back, apparently as a result of modification. On the front is another later modification consisting of three punctations. Conlon and Awe (1991: 11) report that eyes and a mouth “had been incised on the upper torso in order to represent a face.” These modifications were executed sometime after the figurine had been made and Awe (1992: 176) comments that the artifact, which would have been produced in the Middle or Late Formative periods, probably represents an heirloom predating the Early Classic stela.

In this analysis a very similar triadic modification was found on another fragment (L-45, see Figure 15) that was recovered from Structure 4 of the Tolok group. This fragment was interpreted as a leg and on the foot were three punctations added later. There are several possible ways to interpret this modification. One plausible hypothesis is that the punctations served to reactivate a figurine. If these objects were being reused as heirlooms, reactivating them may have been necessary. These triadic clusters could represent the three stones, a common symbol of creation. It is possible that three punctations were added to the fragments of already terminated figurines to reactivate their “souls” so they could be used in rituals of dedication, such as the deposition of a stela cache.



**Figure 15:** Modified specimens L-45 and T-35 (illustration by Melissa Branfman).

The Zopilote group at Cahal Pech is a terminus group with no evidence for residential architecture (Awe 1992; Cheetham 2004). The group includes ceremonial architecture spanning from the Middle Formative through the Classic period (900 B.C.-

A.D. 900). Although this group served as an important ceremonial locus for centuries before the construction of the causeway linking it to the Cahal Pech site core in the Late Formative, only eight figurine fragments have been recovered from the group and none of them are documented as coming from special contexts or associations. The fact that a non-domestic architectural group contains an extremely low frequency of figurines lends support to the hypothesis that these artifacts were domestic ritual objects.

More recent investigations conducted in Plaza B of the site core at Cahal Pech (Garber et al. 2006, 2007; and Garber and Awe 2008) have revealed a series of Middle Formative structures with associated features and ritual deposits that lay directly on top of the initial Early Formative occupation. One of those features was Platform B. At each corner of this platform was a ritual deposit (Figure 16). Together these deposits represent a complex ritual program that reflects various aspects of ancient Maya ideology, including vertical layering, horizontal partitioning, death, resurrection, and cosmic order (Garber and Awe 2008: 186).

**Figure 16:** Platform B ritual deposits (redrawn from Garber and Awe 2008, figure 3).

A limestone slab-covered crypt with a ceramic bowl containing a fragmented but complete human skull and six greenstone beads was located at the southeast corner of Platform B. Directly north was a crypt burial that contained a headless body lying directly on bedrock (Garber et al. 2007: 172). The skull in the ceramic bowl is speculated to have come from the decapitated skeleton. The northeast corner contained a layered cosmogram cache consisting of a base of three slate bars, a headless ceramic figurine, and a tightly clustered arrangement of thirteen polished greenstones. The northwest corner also contained a layered cosmogram deposit with thirteen obsidian chips beneath a ceramic figurine head, and above them three elongated, river-rolled pebbles. In the southwest corner of Platform B, the uppermost portion of the platform was destroyed due to Late Classic constructions. However, in the fill corresponding to the southwest corner a large Middle Formative ceramic figurine head was found. The investigators suggest that the deposition of the figurine head was part of the ritual program involving the deposits found in the other three corners of the platform (Garber and Awe 2008: 188).

There are three main contexts in which ritual residues are generally found: residential structures, communally built structures, and monument-related offerings. Ritual residues including deposits containing figurines have been found in all three of these contexts at Cahal Pech. Like residential structures, the communally built round structures embedded within household groups were probably domestic in nature. The majority of figurines were found in these contexts, and only one example is known to be associated with a non-domestic context (stela cache in the Tzinic group). In the case of the Platform B deposits in the site core, the area that contained ritual deposits was being transformed from a domestic to a more ceremonial purpose. It is also interesting to note that the Zopilote group, which dates back to the Middle Formative period, contained no

evidence of residential architecture and yielded only a handful of figurine fragments, all of which came from mixed deposits or proveniences. These patterns lend additional support to the hypothesis that Formative figurines were used primarily in domestic activities.

## TERMINATION

The figurines from Cahal Pech were mostly found in a fragmented state with the exception of two figurines (Figure 3). While some researchers have attributed the fragmentary nature of the figurines to ritual termination, the act of ritual termination has rarely been conclusively demonstrated. There are figurine fragments in the Cahal Pech sample that indicate evidence of intentional destruction (Figure 18). The evidence includes a number of fragments with clean breakage along the neckline, punctations around the neckline, and defacement.

There are several fragments in the Head and Torso groups that have clean (rather than jagged or haphazard) breaks where the neck would be (e.g., Figures 8 and 9). Two torso fragments (see Figure 18, T-5 and Figure 9, T-61) show clear evidence of decapitation. Fragment T-5, a relatively complete torso, is a complex specimen. It is very simplistic, with rounded, short appendages and a flattened appearance. The ends of the limbs are weathered, but there are indications of incised fingers and possibly toes. The figure's waist is constricted, and the hips are somewhat rounded. At the hips there appear to be creases in the groin. There are breasts depicted as very small raised areas with small punctations for nipples, and they are slightly eroded. There is also a punctation in the abdomen for a navel. The other punctations on the figure are quite intriguing. The breakage at the neck shows evidence of small punctations that go entirely around the neck. Although, they could have been used to decorate the figurine during production, it seems more likely that they served as an aid in decapitating the figurine. This was also seen in fragment T-61, a complete torso with a left arm still attached. This fragment was identified as a male because of its defined pectorals and lack of breasts. The figure is seated with the arms attached to the legs. Around the neck of this fragment there are small punctations that suggest the figurine was intentionally—and carefully—decapitated.

**Table 13:** Frequency and percentages of head and torso fragments that indicate a clean break line along the figurine's neck.

<i>Clean Break at Neck</i>	<i>Frequency</i>	<i>Percentage</i>
Yes	45	27.8
No	15	9.2
Indeterminate	102	63.0
<b>Total</b>	162	100.0

There are other markings on T-5 that seem significant. Below the neck and on the chest of the fragment is a circle of six punctations, and on the back, also below the neck, there is a circle of four punctations. These two circles are at even positioning on the front and back. On the figure's left leg there is a line of four punctations. These punctations may represent body mutilation or other forms of body decoration, but they may also have a more significant meaning. They may be related to an incised circle on the back of the head of fragment H-27 (Figure 17) but a precise interpretation is difficult at this point.



**Figure 17:** Figurine fragment H-27

On fragment H-24 (Figure 18) there are signs of defacement intended to terminate the identity of the figurine. Unfortunately, the crown of the head is deteriorated and the ears are missing, two areas that are significant in displaying status identity. The face of the figurine is haphazardly scratched, reminiscent of defaced monuments seen in Mesoamerica (Grove 1981). Significantly, defacement of Classic Maya monuments typically focused on the eyes and faces of the lords depicted, the apparent loci of their personal identity (Houston, Stuart, and Taube 2006: 100).

Many Formative Mesoamerican figurines have been found in fragmentary states. These have often been interpreted as ritually terminated without much justification for this reasoning. From the site of Kaminaljuyu the figurines are mostly fragmented with no clear evidence of deliberate destruction, and they were probably thrown away in refuse deposits (Kidder 1965: 150). For the majority of the figurines from La Pintada (Jalisco, Mexico), it is not possible to discern whether the fragmentation occurred before or after their discard, but the heads were commonly broken from the torso (Mountjoy 1991: 95). The collection from Chalcatzingo was also very fragmented. Harlan (1987: 252) comments that most of the figurines are broken at the neck area, “a pattern so regular that it strongly indicates purposeful breakage.” Grove (1984: 86) also mentions that these figurines were intentionally broken, and that the breakage was probably the

action that terminated a figure's social function. Awe (1994: 13) also concludes that the Cahal Pech figurines were terminated by the act of decapitation. He draws upon a Lacandon creation story that mentions when the youngest son (Ah T'up) of the creator (Hachacyum) made

some clay figurines which came to life. His brothers were provoked and shot at and killed them, but they came alive again. After this happened about five times, the brothers beheaded them, whereupon they stayed dead (Thompson 1965: 28).

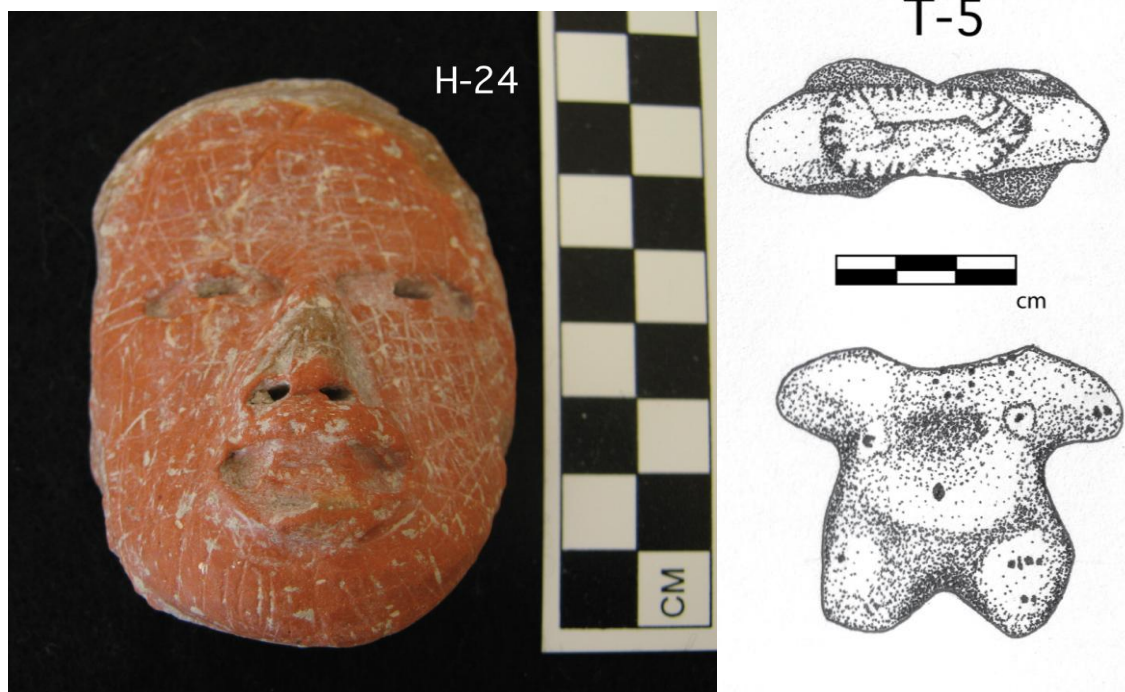
The act of decapitation appears to have been a successful method for releasing the spirits of objects the Maya considered animate.

In ancient Maya cosmology and religion much importance was attributed to the cyclical nature of termination and renewal. The act of termination was significant in many rituals, which may account for the fragmentary nature of many Formative figurines. Moreover, the human body played a very significant role in Mesoamerican cosmology, the human life cycle serving as a metaphor for continuous regeneration (López Austin 1988: 8). Dedication and termination rituals surrounding the construction or changing of a house or residence were analogous to human rites of passage marking death and rebirth (Van Gennep 1972: 23-24).

The ancient Maya perceived an animistic world; linked to this is the anthropomorphization of other animate and inanimate forms (Mock 1998: 9). People could imbue objects with a *ch'ul*, or life-force (Freidel, Schele, and Parker 1993: 182), and release the "soul" by terminating the object and cutting off the connection to the Other World. The destruction of objects used in termination or dedication rituals may relate to the perceived need to empty them of their power once the act is over (Mock 1998: 10).

Events of chaos or crisis perceived as dangerous by the Maya occur throughout the life cycle: birth, puberty, marriage, and death. The rites of separation, transition, and incorporation were meant to ensure the well being of a person, group, and society. Landa described the New Year festival in connection to the *Uayeb*, the lost five-day rites of the Maya of Yucatan, a time of social disorder and chaos. On the first day of *Pop*,

They renewed on this day all the objects which they made use of, such as plates, vessels, stools, mats, and old clothes, and the stuffs which they wrapped up their idols. They swept out their houses, and the sweepings and the old utensils they threw out on the waste heap outside of town; and no one, even he in need of it, touched it (Tozzer 1941: 151-52).



**Figure 18:** Examples of terminated specimens.

## CONCLUSION

The objectives of this study are to collect basic descriptive data on the Formative figurine fragments from Cahal Pech, to examine the extent to which the figurines were representative of gender and other indicators of status, and to investigate how the figurines relate to the growing social complexity of the Formative period by observing the archaeological evidence of social and ritual changes at Cahal Pech. The primary intention of this analysis is to contribute to a better understanding of the Formative Maya in the Belize Valley through this unique and sizeable figurine collection.

This analysis of the Cahal Pech figurine fragments focuses primarily on the anthropomorphic fragments that constitute the majority of the collection. In the Cahal Pech sample there was limited information conveyed on the torsos and in the positioning of the appendages. Clothing was not included on the figurines, and with the exception of a few appendages, ornamentation was only present on the head fragments. There was also a lack of anatomical sexual characteristics presented on the figurines, which made gender representation even more difficult to ascertain.

My initial criteria for identifying gender on the figurines from Cahal Pech were focused on the torso fragments and on the presence of breasts, pregnant abdomens, and genitalia distinctions. The results of my initial gender classification (Table 2) were insufficient, so I considered additional characteristics to help define possible gender distinctions on the torso fragments. Adding qualities like waist, belly, and hip forms

increased the number of specimens that could be categorized in terms of gender (Tables 3,4, and 5). However this approach was still very subjective and insufficient. The bodies of most of the figurines are quite abstract and generic. In the case of the Cahal Pech figurine assemblage, relying solely on anatomical features to identify gender representation is not effective. In figurine studies researchers need to be cautious about basing gender distinctions on androgynous features such as broad shoulders, rounded bellies, and other ambiguous qualities that can be found on both male and female representations.

It became apparent during the course of this analysis that the bulk of the informational load was carried by certain parts of the figurines, particularly the heads. The head fragments exhibited the most stylistic variability, while the other body parts were much less variable. Houston, Stuart, and Taube (2006) examine identity among the Classic Maya. The “self” or “entity” was called *baah*, possibly derived from the word “forehead” or “head” (Houston, Stuart, and Taube 2006: 12). The word *baah* refers to the head or face, in addition to the more generalized body, of an individual. In Maya imagery, name glyphs frequently appear in the headdresses of the lords. This has been observed to be a pan-Mesoamerican phenomenon going back to the Olmec period (Houston, Stuart, and Taube 2006: 68). Through such devices, the Maya and other Mesoamerican peoples displayed in tangible, concrete form an aspect of individuation, an advertisement personhood, of how this or that image correspond to one being and that being alone. Evidence suggests that the Maya understood representation in terms of an extendible essence that was shared by images and the beings that were portrayed (Houston, Stuart, and Taube 2006: 74).

The Formative period was characterized by social and ceremonial changes, and the Formative figurine assemblage was part of the developing ritual complex at Cahal Pech. The fragments were mostly recovered in fill contexts and likely represent ceremonial trash. Structure B-4 contained the most fragments, and these could be associated with its construction history to form a chronological sequence (Table 12 and Figure 13). The majority of fragments were recovered from late Middle Formative and late Middle Formative to early Late Formative levels. It appears that with the introduction and construction of monumental architecture, figurine fragments decreased in frequency. Fragments were also found in caches (Zubin Structure C-9, Zubin Plaza A, Platform B within the site core, and the Tzinic stela cache), and one was included in a child burial (Tolok, Burial 9).

The ritual function of the Cahal Pech figurines is strongly indicated by their treatment and disposal. The act of termination was significant and is likely the reason that so many figurines are found in a fragmentary state. They likely served a ritual purpose that was more private or small-scale. Their presence in construction fill suggests they were discarded with rubbish as ceremonial trash. It appears that the social and ceremonial changes developed at Cahal Pech included an increasing focus on corporate group identities with an emphasis on descent. The round platforms at Cahal Pech were communally built structures that functioned as stages for performances related to ancestral veneration. New socioeconomic relationships may have developed

between corporate groups, and these relationships may have been maintained through ritual involving the members of the respective groups. There likely was a shift in ritual focus from private veneration to more formalized community-focused ceremony. Interaction through ritual involved exchanges between or among groups that could have been reciprocal or redistributive (e.g., feasting) in nature and that served to sustain social bonds.

Figurines increased in frequency at Cahal Pech during the Middle and early Late Formative periods, but they are absent from Classic contexts with the one exception of a Formative figurine found in an Early Classic stela cache. Apparently the production of hand-modeled figurines had ceased all together by the Classic period. Changes in Maya ideology, leadership, and religion were cause for certain arenas and objects to become obsolete. There may have been less focus on domestic and small group ritual and a new emphasis on more public and formalized ceremonies and ceremonial spaces. Given these changes, figurines likely became less of a ritual focus, thus accounting for their disappearance in the Classic period.

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