# KA'KABISH ARCHAEOLOGICAL RESEARCH PROJECT (KARP) REPORT ON THE 2014 ARCHAEOLOGICAL FIELD SEASON

#### Submitted to

# The Institute of Archaeology, NICH

Archaeology Museum and Research Centre Culvert Road Belmopan, Belize

# Edited by

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As archaeological work would not be possible without the co-operation of the local people who have as much invested in our work as we do, if not more, we would also like to thank the following individuals: Ben and Margaretha Dyck of the Blue Creek Community for helping with the project logistics both during and between the field seasons; Srs. Blanco, Che, and Magana for allowing access to their land; the ladies of Las Orquideas for keeping us well fed; and all the members of the various communities, Indian Church, Indian Creek, and Shipyard, that provided us with information and assistance in myriad ways.

# CHAPTER 1

# OVERVIEW OF THE 2014 FIELD SEASON

by

#### Helen R. Haines

Archaeological investigations at Ka'Kabish were initiated in 2007 and, with the exception of 2008, have been on-going annually since that time. This year, 2014, marks the seventh season of excavations at the site by the Ka'Kabish Archaeological Research Project (KARP). These years have produced a wealth of information about Ka'Kabish and have radically altered our understanding of the site. Ka'Kabish is no longer considered a 'small centre' but is known to have included two large civic-ceremonial plazas (most probably connected but now severed by the modern road) and 8 courtyard complexes (although three have been lost to agricultural development in as many years), with a known building count of 104 structures (including those in the lost groups). It is quite likely that additional groups may exist to the north but financial and time constraints have limited exploration into this area.

The land on which the site sits is administered by the San Filipe Land Committee and is spread across several parcels of land (207-210, 222-224, and 227). By 2005, the site's core area was, and still is, owned by three different landowners; Sr. Blanco (San Lazero), Sr. Guadalupe Pech (Yo Creek), and Sr. Rufino Magana. In 2014, we were notified that Sr. Blanco was in the process of selling his land to Mennonites from Shipyard who wanted to repurpose the land from cane farming to cattle ranching. While this is undoubtedly better for any settlement remains or substructure features it raises concerns about the core area of the site on these parcels, and much of my time was spent in discussions with Sr. Blanco and Herr Wall.

The field work was ably directed by Ms. Cara Tremain a doctoral candidate at the University of Calgary and a long-time KARP staff member. In 2014, KARP had 14 students, from five universities, four in Canada and one in the USA (Trent University, University of Toronto, University of Calgary, McMaster University, and Northern Illinois University), join the project for a 3<sup>rd</sup>-year field school credit from Trent University. This year we focused our work on four areas; the southeast quadrant of the Group D plaza, the east face of Strucutre D-4, the Group F Acropolis, and chultun C-2.

The first area, and the location of the largest excavation area, was in the Group D plaza between Structures D-5a and D-9. This area was worked on in previous years, starting in 2011 and continuing into

2013 (Haines 2011, 2012; Haines and Aimers 2011; Haines et al. 2013; Lockett-Harris 2013, 2014; Sinclair 2013; Tremain and Haines 2013). This area has yielded wealth of information about what is currently the earliest occupation at Ka'Kabish. Previous year's work uncovered a secondary burial with numerous jade and greenstone objects and over 500 marine shell beads dated to the Swasey-Bladen phase (ca. 800-600 BC) (Gomer 2013; Haines and Aimers 2011; Haines et al. 2013; Lockett-Harris 2013, 2014). The 2014 excavations, added many more greenstone pieces and several thousand more shell bead to this tally (see Lockett-Harris this volume). These excavations also have revealed a complex of buried/remodeled platforms tentatively dated to the Late Formative and Early Classic periods (Locket-Harris 2013; Sinclair 2013).

The second area investigated involved a return to Structure D-4 which had been part of Ms. Tremain's Master thesis research (Tremain 2011). This work intended to clear the fallen debris from the face of the structure back to the first identified staircase met with an unexpected development when we encountered a hitherto unidentified staircase (see Tremain this volume). What made this discovery so unexpected was that the staircase was constructed with extremely large, yet finely cut, stones, and ceramic analysis (Sagebiel this volume) suggests a Terminal or possibly even Early Post-Classic date for this construction. The use of large stones to refinish the fronts of structures that may have been left unattended for lengths of time, and hence fallen into a bit of disrepair, also has been noted at Lamanai and occur in the same time frame as the Str. D-4 refurbishment (Belanger 2014 pers. comm.).

Work on the Group F Acropolis resurrects work initially started in 2011 but abandoned due to a forest fire. This work sought to achieve to functions; the first to establish a chronology for the acropolis platform, and the second, to trace the contours of a low, single course platform encountered a scant 15-20 cm below the surface (see Sinclair this volume). The platform appears to run at a slightly different orientation from that of main temple behind it (Str. FA-6). Material recovered from the platform and upper levels suggests a Terminal or even Early/Middle Post-Classic occupation (see Sagebiel this volume). The unit being excavated for chronological identification appears to reveal the same pattern found in plazas elsewhere at the site, that of Middle and Late Formative occupation through to Terminal and Early Post-Classic with a lack of a distinct Late Classic period layer.

The fourth area investigated was a chultun located in the C-Group, south of Str. D-10. This work was carried out by Toni Gonzalez's as part of her Master's thesis research being conducted at California State University-Los Angeles under the supervision of Dr. James Brady and was the third chultun excavated by Gonzalez, the first being done in 2012 in Group B and the second to the northeast of Group C in 2013 (Gonzalez 2013, 2014; Verdugo, 2014; Verdugo et al. 2014). The 2014 excavation was carried out to provide additional, comparative information as to the use of chultun (Gonzalez and Haines 2013). All three of which appear to have been used for mortuary purposes, with burials dated to the Terminal and

Post-Classic period (Gonzalez 2013, Gonzalez and Haines 2014; Verdugo 2014; Verdugo et al. 2014), although it is possible that they may have been used for a different purpose in earlier periods. Both chultuns have been dated via radio-carbon and ceramic seriation to the Early Post-Classic periods (it should be noted that differences between Terminal Classic period and Early Post-Classic period ceramics are difficult to distinguish and that "it is difficult if not impossible to distinguish Terminal Classic from Early Post-Classic occupation [Chase and Chase 2004:247; see also Graham 1987 and Pendergast 1986])

Our work at Ka'Kabish over the past years has not only greatly increased our understanding of the site itself, extending its history back to 800 BC and revealing its survival of the "Classic period collapse", but it has also shed a wealth of information about the possible larger political relationships and inter-site conflicts in the region (Haines 2012; Haines and Sagebiel 2014). While seven years of work has revealed a considerable amount of information it has also shown how much more there still is to learn; we have barely scratched the surface of Ka'Kabish! We are hoping that future years will be as productive and surprising as the past years.

# Acknowledgements

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# CHAPTER 2

# STAIRWAY TO NOWHERE: THE 2014 EXCAVATIONS OF STRUCTURE D4

by

### Cara Grace Tremain

Excavations were initiated at Structure D4 (henceforth referred to as Str. D4) in 2014, with the aim of exposing an outset stair on the eastern side of the structure. Evidence for a stair on this side of the structure was identified in 2010, as a result of mapping three large looters' trenches (Tremain 2011)<sup>1</sup>. A team of four students (Caitlin Douglas, Ben Lightner, Caleigh Milne, and Eryn Perras) and two workmen (Jaime Yanes and Gregorio Rodriguez) initiated excavations at Str. D4 on May 21st and concluded work on June 17<sup>th</sup> 2014.

The three female students were assigned to clearing and excavating the eastern face of the structure between the Middle and North looters' trenches, designated East Clearing (North) (Figure 1); Jaime Yanes and Ben Lightner were assigned to the excavation of Sub-III in the North looters' trench<sup>2</sup>, designated Unit 1; and Gregorio Rodriguez was assigned to clearing and excavating the area previously identified as the outset stair of Sub-III in the Middle looters' trench<sup>3</sup>, designated as East Clearing (South). After completion of the East Clearing, all four students opened an excavation unit in front of the North looters' trench, designated Unit 2. Subsequently, Unit 3 was opened at the north wall of the Middle looters' trench by Jaime Yanes and Gregorio Rodriguez. All work undertaken at Str. D4 was classified as Operation 2.

#### **EAST CLEARING (NORTH)**

An area on the eastern face of Str. D4 measuring *roughly* 1.5 m east to west, and 7.5 m north to south was cleared in order to trace evidence for the central stair. Clearing began with extensive raking of debris and cutting of large plant growth. Loose soil was not screened during initial clearing because of the high amount of disturbance, but visibly diagnostic artifacts were collected. At the eastern extent of the cleared area, towards the base of the slope of the structure, very large stone blocks measuring upwards of 45 cm in length became visible (Figure 2). Consequently, the area in front of these blocks was excavated in order to better reveal them. The matrix of this excavation consisted of fist-sized pebbles and plaster chunks—likely a badly deteriorated plaster floor with underlying subfill. This area was excavated further south towards the Middle looters' trench, in order to uncover as large an area as possible. Excavation halted when a change in the matrix was evident.

<sup>&</sup>lt;sup>1</sup> This identification resulted from discussions between the author and her M.A. thesis supervisor and co-supervisor (P. Healy and H.R. Haines).

<sup>&</sup>lt;sup>2</sup> See Figure 4.9 in Tremain 2011.

<sup>&</sup>lt;sup>3</sup> See the Figures 4.13 and 4.15 in Tremain 2011



Figure 1: View of the east face of Str. D4, showing the area being cleared between the Middle and North looters' trenches.



Figure 2: Base of the eastern face of Str. D4, where large stone blocks were revealed.

Following excavation of the area in front of the lowermost stone blocks, the students concentrated on exposing the large stone blocks above these, to the north of the Middle looters' trench. In total, 12 large stone blocks were uncovered by the students in this area—eight of which ran in a north-south alignment. In addition, two large displaced blocks were located in front of this area, thus totalling 14 large stone blocks between the Middle and North looters' trenches. Because stone blocks were not discovered leading from the North looters' trench to the edge of the lowermost stone blocks, Dr. John Morris from the Institute of Archaeology in Belmopan (who visited the site on May 22<sup>nd</sup>) suggested that this was the corner of a side inset. Therefore, it was expected that the lowermost edge of the stone blocks would change direction and run west, before turning north again to meet the edge of Sub-IIIa in the North looters' trench.

#### **EAST CLEARING (SOUTH)**

The purpose of clearing and excavating this area was to expose what was thought to be the stair on the eastern side of the structure (Figure 3). Extended areas of white marl, thought to be an outset stair, were identified in the Middle and North looters' trenches in 2010 and were distinguished as Sub-IIIa (Tremain 2011: 84). Excavation began north of the Middle looters' trench, with the intention of following the large stone blocks that were thought to be part of the stair construction. Due to the lack of stone blocks being uncovered in this area, excavation soon moved south of the Middle looters' trench where a line of stone blocks running north-south was uncovered. This was a clear continuation of the lowermost line of stone blocks uncovered between the Middle and North looters' trenches. Since the Middle looters' trench penetrated Str. D4 approximately in the center of its eastern face, it was estimated that this lowermost course of stone blocks would measure at least 8 m in length (since it was expected the line of stones south of the Middle trench would be similar in length to those north of the Middle trench—which were approximately 4.5 m).

In order to uncover the line of stone blocks to the south of the Middle looters' trench, it was necessary to remove the large tree that had fallen across the structure in this area (visible in Figure 1). Once successfully removed, excavation continued and in total a line of seven stone blocks were uncovered south of the Middle looters' trench, running north-south. In total, 10 stone blocks were uncovered by excavations in the area south of the Middle looters' trench (there were additional fallen blocks in the large looters' back dirt pile further away from the structure that have not been included in this number).

#### Unit 1

The purpose of this excavation unit was to trace the front of Sub-III and its accompanying outset stair (Sub-IIIa), which had been identified as the third, and latest, construction episode of Str. D4 (Tremain 2011: 79, 156). The unit began in the south wall of the North looters' trench along the edge of structure Sub-III and excavation began by following its face until a perpendicular wall was uncovered (Figure 4). Excavation then moved east (towards the base of the structure), and upon the discovery of a corner it moved south. Surprisingly, an addition to this structure was discovered that had not been visible in the looters' trench while mapping in 2010. This addition was designated Sub-IIIb. Although the possibility of a fourth construction episode was acknowledged following the mapping of the looters' trenches in 2010 (Tremain 2011: 79), it was not identified in the profile maps and therefore has been not previously reported.

Roughly 1.5 m of topsoil was cleared in front of Sub-IIIb (eastwards), until a large tree restricted further clearing. Subsequently, excavation proceeded southward in order to continue uncovering more of Sub-IIIb and to determine whether or not it had a relationship to the lowermost stone blocks on the eastern face of Str. D4. The corner of Sub-IIIb was soon uncovered, and excavation thus progressed eastwards towards the base of the eastern face of Str. D4. It was soon discovered that this final construction was directly connected to the line of stone blocks running north-south along the eastern face of Str. D4 (Figures 5 and 6). Therefore, Dr. Morris was correct in his assertion, although the lowermost stones were connected to Sub-IIIb rather than Sub-IIIa.

#### Unit 2

This unit was opened on May 30<sup>th</sup> 2014, upon completion of excavation and mapping of the large stone blocks on the eastern face of Str. D4. The purpose of this unit was to better understand the chronology of construction events for the structure—particularly since an additional construction (Sub-IIIb) had recently been discovered. In the future this information can be related to the chronological information from the 2010 excavation of Plaza D, in order to understand the construction sequences in this area of Group D. All four students were assigned to the excavation of this unit, which was placed at the corner of the exposed area of Sub-III in the North looters' trench, and initially measured 2 m x 1.5 m. It was set slightly back from the wall of Sub-IIIa, in case it sloped out toward the plaza.

The first level of the unit (level 2—level 1 having already been excavated by Unit 1) excavated what was a hard white matrix close to the structure, which was thought to be a possible plaster floor, and ended atop a more compact plaster surface—thought to be an earlier plaster floor (level 3). As excavation progressed, a noticeable difference between the northern and southern sections of the unit appeared, with a darker and looser matrix of plaster chunks and pebbles north of a compact plaster surface. It is likely at least the north-east section of the unit was heavily disturbed by large tree roots, and thus the plaster surface did not preserved in the northern sections of the unit. The compact plaster surface was removed (as level 4) in the southern section of the unit, and it was found to sit immediately atop the same matrix of plaster chunks and pebbles in the north section. At this time, the unit was extended 0.25 m west towards Sub-IIIa, and it was discovered that the wall of Sub-IIIa sat on top of the compact plaster surface just removed (level 4).

Following identification of the surface that the wall of Sub-IIIa sat upon, the unit was extended further west towards Sub-III and the floor of the North looters' trench to clarify the sequence of constructions (Figure 7). This extended area measured roughly 1 m x 0.9 m and was dug as one level, until it reached the same surface found at the close of level 4 in the original unit. A series of large stone blocks were uncovered in this extension, which may be remnants of the base of Sub-III. The remaining portion above these blocks was destroyed by the tunnelling activity of the looters'. Excavation ceased when there was lack of clear building construction to trace further westwards.

#### Unit 3

Upon completing exposure of the north-east corner of Str. D4, Jaime Yanes and Gregorio Rodriguez proceeded to excavate further up the slope of the structure. The intention was to keep the final phase of construction (Sub-IIIb) intact and reveal the previous construction. Accordingly, Unit 3 was opened on the eastern face of the structure in line with Sub-IIIa. Excavation proceeded north of the Middle looters' trench in an area roughly 0.5 m in width (Figure 6), and continued 3 m northwards. A layer of soft grey soil (level 2) was first removed, which sat above a harder white matrix (level 3). This allowed for a much clearer view of the construction of the eastern face of Str. D4, and showed that the outer construction of Sub-IIIa was stepped (Figure 8). Heavy rains prevented profile or plan mapping of this unit prior to the end of the field season, but dimensions were recorded as part of the overall plan map of the excavations on the eastern face of Str. D4.

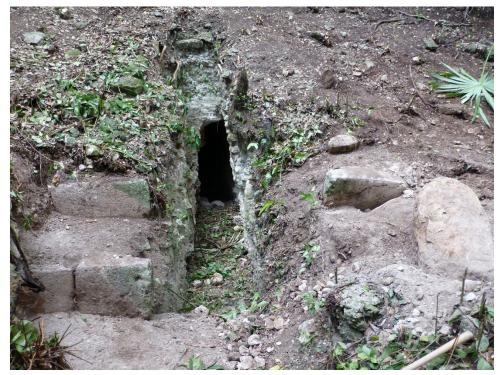


Figure 3: Excavation of large stone blocks at the edges of the Middle looters' trench.



Figure 4: Excavation of Sub-III in the southern wall of the North looters' trench.

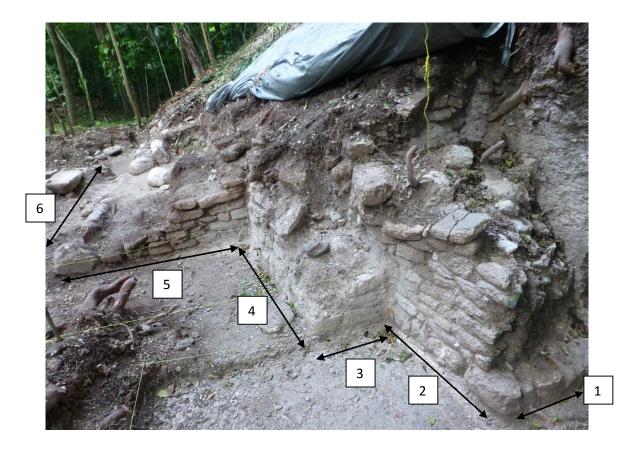


Figure 5: Exposure of the north-eastern corner of Str. D4. Lines 1 and 2 correspond to Sub-IIIa; lines 3, 4, and 5 correspond to the later Sub-IIIb addition. Line 6 is the lowermost course of stone blocks, which also correspond to Sub-IIIb.



Figure 6: View of the eastern face of Str. D4. The connection between the lowermost stone blocks and Sub-IIIb can be seen, as can the location of Unit 3.



Figure 7: Unit 2, including extension of unit past the wall of Sub-IIIa.



Figure 8: The stepped outer construction of Sub-IIIa revealed in Unit 3.

#### **DISCUSSION**

Although the 2014 excavations of Str. D4 were not able to identify the location of a stair on its eastern face, they have been able to correct the structure's construction history. The 2010 mapping of the looters' trenches were able to identify three construction phases, with a final addition, which were designated (from earliest to most recent) Sub-I; Sub-II; Sub-III; and Sub-IIIa. The results of the 2014 excavations have been able to establish a final addition in front of Sub-IIIa, which has been designated Sub-IIIb. This is due to the extensive clearing and excavation of the eastern face and north-east corner of the structure—the debris on top of which had previously been obscuring the majority of the Sub-IIIb construction. Dating of this final construction may prove difficult (as it did in 2010 for the other construction episodes), due to the lack of diagnostic artifacts in its construction fill and the large amount of disturbance from looting, tree growth, and debris falling away from the summit of the structure. It is anticipated that Sub-IIIb dates to the Terminal Classic, or later, and that this can be verified by future ceramic studies and by correlating its construction to one of the plaza floors exposed during the 2010 Plaza D excavations (Tremain 2010).

Exposing the construction materials and design of Sub-IIIb itself has revealed additional information about the later years of Str. D4. There are several displaced large stone blocks on the eastern face, which would have originally been part Sub-IIIb, that have been purposely moved by looters. However, there is a significant lack of large stone blocks to the north of the Middle looters' trench (above the lowermost alignment of stones) which suggests that the structure may have been stripped of some of

its outermost construction during its final years—perhaps to reuse in construction elsewhere at the site. Alternatively, they may have fallen out of place and have not yet been located at the site (though this seems unlikely given the fact that their weight would prevent them from moving very far from the base of the structure). Both instances indicate that Str. D4 may no longer have been in use during the later periods of Ka'Kabish's history, or that residents of the site lacked the resources to maintain the upkeep of the structure.

In addition to the type of material used to construct Str. D4 in its later years, excavations have revealed a stepped construction design on the eastern face of the structure. This stepped design, as seen in Unit 3, is likely why a stair was identified in the profile maps of the Middle looters' trench during the author's M.A. field research in 2010. It is now possible to rule out the presence of a stair on the eastern edge of the structure and instead comment on the style of structure being constructed. The presence of inset corners and a side outset on the eastern face of Str. D4 suggests a similar configuration to that illustrated in Figure 9.

Since there is no stair on the eastern face of Str. D4, we were literally chasing a stairway to nowhere during the 2014 field season. It is now thought that the stair is located on the southern side of the structure, in line with the ballcourt. Interestingly, this is where Dr. Haines believed the stair to be located prior to mapping of the looters' trenches in 2010—based on the layout of the main temple pyramid (N10-43) and ballcourt at the nearby site of Lamanai. If the location proves to be in line with the ballcourt, this would require that we reconceptualise the function of this area of Group D.

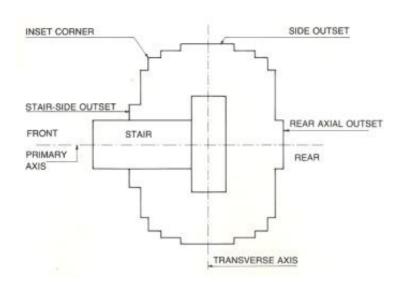


Figure 9: Structure with inset corners and side outsets (Loten and Pendergast 1984: Figure 3)

# Acknowledgements

I would like to thank all the students that participated in the 2014 excavation of Str. D4 for their hard work and enthusiasm—you were a joy to work with and contributed significantly towards our understanding of a structure that holds a special place in my heart. ¡Y tambien, muchos gracias para mis amigos Jaime y Goyo—siempre tus talentos continúan asombrarme! Finally, thank you to Helen Haines for allowing me to return on a yearly basis to the beautiful country of Belize and the amazing site that is Ka'Kabish.

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# CHAPTER 3

# 2014 EXCAVATION IN THE PLAZA D – SOUTHEAST QUADRANT: OPERATION 8, UNITS 5 & 9

by

# Joshuah J. Lockett-Harris

Excavations undertaken within the South-Plaza of Group D at Ka'Kabish during the 2014 field season continued efforts initiated in 2010 and continued in subsequent years, designed to investigate the founding and construction history of one of ceremonial plazas at Ka'Kabish (Haines 2011; Lockett-Harris 2012, 2013). Previous year's excavations within the southeast quadrant of the Group D plaza have revealed a sequence of plaza floor surfaces, buried masonry platforms, and cultural deposits denoting a long history of use and renovation. In the earliest levels, pottery types datable to 800-600 BC (Aimers 2011; and Sagebiel Chapter 6 this volume) and associated radiocarbon dates of 760-400 BC (Haines 2011), 799-517 BC cal. (Lockett-Harris 2013), and 762-428 BC cal. have been recovered.

Investigations during the 2014 season, focused on excavating Units 5 to bedrock (it was started but not completed in 2013). The purpose of this excavation was to expand on previous work in the area that encountered significant Middle Formative ceramic, architectural, and mortuary evidence. An additional unit (Unit 9) was placed directly to the east of Units 5 and 6 with the stated goal of exploring the eastern extent of the buried platform evidenced in Unit 6. The main purpose of investigations in this area of Group D was to solidify the chronology of the earliest "founding" events yet evidenced within the ceremonial core. Previous years' investigations demonstrated that the central area of the South-Plaza of Group D was subjected to an active ritual, architectural, and ideological agenda during the Middle Formative period (Haines 2011, 2013; Lockett-Harris 2012, 2013).

The 2014 results added significantly to our understanding of this period, with the recovery of a variety of objects recovered from 18 bedrock offering pits. These offerings, coupled with the Middle Formative dating of the earliest platform construction episode (Str. DP-3<sup>rd</sup>), demonstrates that the ideological manifestations previously evidenced in the mortuary evidence from this location are likely part of a larger ritual behavior, representing a more developed and complex level of material expression than previously anticipated.

#### GROUP D SOUTH-PLAZA UNIT 5, OPERATION 8: EXCAVATION

Excavations of Units 5 and 6 began in 2013 with the two units excavated as two contiguous 2m by 3m excavation grids with no delineating baulk retained between them. Later in the season, Unit 5 was extended to the north by a meter, in order to explore for the eastern extent of Str. D1-2<sup>nd</sup>. The northern extension of Unit 5 was integrated into the rest of Unit 5 and was not treated as a separate unit. However, due to the discovery of substantial buried architecture throughout Unit 6 and the western portion of Unit 5 in 2013, excavations within these areas were halted. Excavations within the eastern quadrants of Unit 5 were halted at a plaster floor, associated with the platforms due to time constraints.

In 2014, excavation resumed in Unit 5 with the objective of clearing the area to bedrock. The unit was bounded by Str. DP-2<sup>nd</sup> to the west, and Str. DP-1st<sup>st</sup> to the south. A small exploratory unit had removed a section of the Str. DP-1<sup>st</sup> façade in 2013, to expose the face of Str. DP-3<sup>rd</sup> (Figure 1). This area was also excavated down to bedrock as part of the 2014 work to determine which, if any, plaster floor was associated with this structure. The northern and eastern walls were the same as in previous years. A 30 cm retaining baulk wall was retained between Unit 5 and Unit 9, in order to facilitate the backfilling and possible continued excavations of Unit 9 in future field seasons.



Figure 1: Unit 5: Southern Excavation Baulk

Excavations within Unit 5 during the 2014 field season encountered a series of superimposed plaster floor surfaces, most of which had been better preserved in the southwest quadrant of the excavation area. (Figure 2). This pattern of differential preservation had been evidenced in previous plaster surfaces excavated within this area in 2013. As postulated in the previous 2013 field report (Lockett-Harris 2014), this preferential preservation may have been due to the existence of now-destroyed corner of Str. DP-2<sup>nd</sup>. Each plaster floor construction event was excavated as a distinct cultural level, with the plaster floor and the construction fill beneath removed as one cultural unit.

#### Floor 5: Plaster Surface and Fill Beneath (Level 23)

After the removal of all backfill from within Unit 5 and the removal of the plastic tarps that had been laid down at the close of the 2013 field season, we began excavations by removing the remaining compact grey matrix that had underlain level 19. This level was interspersed with chunks of degraded plaster, suggesting that level 23 likely represented both an interface between fill and plaster floor, as well as the underlying subfloor fill. A relatively high quantity of large well-preserved rim sherds were

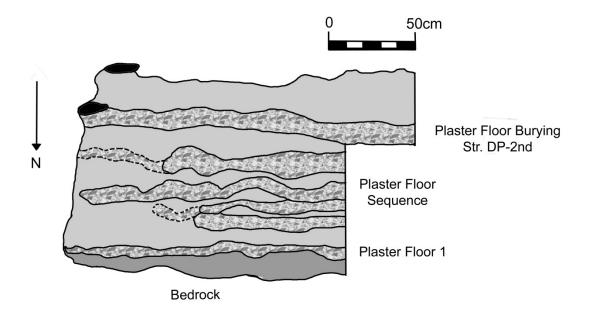


Figure 2: Unit 5: Southern Excavation Baulk Showing Superimposed Plaster Floor Sequence
Overlaying Bedrock

recovered from the matrix, as well as concentrations of apple snail shells, fragments of animal bone, and substantial flecks of carbon. Ceramic types recovered from this fill layer represent middle and late Middle Formative Period types. A prismatic obsidian blade was also recovered from the area in front of Str. DP-1<sup>st</sup>.

#### Floor 4: Plaster Surface and Fill Beneath (Level 24)

Following the aforementioned pattern, a relatively well-preserved plaster surface was revealed in the southwest quadrant, as well as under the area immediately in front of Str. DP-1<sup>st</sup>. Underlying this plaster surface the compact grey fill matrix contained a relatively high concentration of well-preserved ceramic rim sherds, with forms adhering to middle and late Middle Formative types, as well as evidence of shell, other faunal materials, and carbon flecking.

#### Foor 3: Plaster Surface and Fill Beneath (Level 25)

In order to further tease out the superimposed layer-cake of plaster floors evidenced within the southwest quadrant of Unit 5 we once again switched levels due to the presence of a partially preserved plaster surface. Large diagnostic ceramic sherds were predominantly recovered from this fill layer displaying little slip erosion, suggesting that this fill layer was likely their primary context. As with previous layers, these ceramic forms also represent middle and late Middle Formative types. Despite the large diagnostic sherds recovered from this layer, it was otherwise relatively sterile compared to previous fill layers.

#### Floor 2: Plaster Surface and Fill Beneath (Level 26)

A plaster surface was revealed in the southwest quadrant of Unit 5 that was used as a marker for switching levels across the unit. Ceramics recovered from the fill level beneath the plaster surface represent well-preserved diagnostic examples of middle and late Middle Formative types, while lithics, apple snail shells, faunal materials, and carbon flecking were also present.

#### Floor 1: Fill Beneath, and Bedrock Alterations (Level 27)

Floor 1 deviated from the previous surfaces, where the plaster was more preserved in the southwest quadrant, as it was uniformly preserved across the entire excavation area. This thick, plaster floor, matches that found in Units 1 and 2 (Lockett-Harris 2012). Excavations revealed that the masonry and mortar wall of Str. DP-3<sup>rd</sup> was associated with this floor.

In the fill, a stemmed macro-blade was recovered, and substantial flecks of carbon were noted and collected. Most of the ceramics initially encountered within the fill consisted of highly eroded and fragmentary sherds of middle Middle Formative types, although a few possible late Middle Formative pieces were also recovered

Beneath the fill layer the bedrock undulated across the unit and 23 possible bedrock pits with varying degrees of alteration were noted (Figure 3). The bedrock pits in the northeast quadrant of the excavation area had been only lightly altered, with most of the declivities used as offering pits being natural, irregularly shaped crevices and shallow pits (the exceptions being Clusters 5 and 8 that seemed to have been artificially deepened). Conversely, the offering pits present within the other three excavation quadrants seemed to represent completely artificial roughly circular deep bedrock alterations. Also, the bedrock exposed within the northwest quadrant was much less dense and more brittle then that in the northeast quadrant. When excavated, this brittle layer seemed to flake off revealing a harder limestone surface beneath.

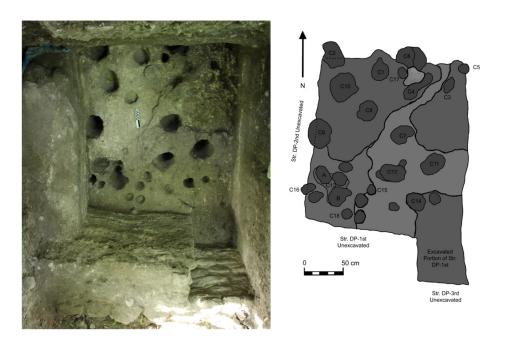


Figure 3: Close of Unit 5: Limestone Bedrock Demonstrating Substantial Alterations

Offerings, in variable numbers, were recovered from 18 of these pits, although it is possible that the remaining five pits contained now-decayed organic items. The offering pits, were labeled "Clusters," based upon the presence of four shell beads or more. In total, 1837 shell beads were recovered from the eighteen clusters, of which ten clusters housed a total of 27 jade and greenstone objects. Another three greenstone objects were recovered from the screen, thus making their potential associations unclear. Additionally, pottery fragments, possible chalk-white and yellow-pigment beads, another inverted ceramic bowl, and an inverted deer antler were also recovered.

#### Cluster 1:

The offerings in Cluster 1 consisted of a deer antler, over 282 shell beads of various size and form, numerous blocky white-chalk and yellow-pigmented possible beads, and a small egg-sized blackish-blue matte greenstone celt. Preliminary analysis of this specimen by Arianne Boilea of Florida State University has confirmed that this antler belonged to a locally native male white tailed deer (*Odocoileus virginianus*). The articulation of the shell and other beads suggests that the inverted deer antler may have been draped in length of beads before being deposited into the offering pit and buried. The greenstone celt (Greenstone 18) appears to have been placed on a horizontal, round limestone disk underlying the greenstone artifact, similar to the capstone associated with Cluster 1 from Units 1 and 2 in 2012.

Some Consejo sherds were also recovered from this area but may be part of the fill. The pit was approximately 22cm in diameter and 26cm in depth. The northern extent of the bedrock-alteration housing Cluster 1 ran under the northern baulk of our excavation area necessitating undercutting the baulk in this area. This practice was also necessary for the excavations of Cluster 2, 5, and 8.

#### Cluster 2:

The area above Cluster 2 was marked by a concentration of ceramics and a strange greenish-grey lithic flake, broken into two pieces, which due to its concave smooth face and coloration was initially labeled as a greenstone object. This artifact has been designated as Greenstone 28, though it likely represents a greenish-tinged flake of local chert. Initial interpretations surmise that the ceramic deposit may represent the southwestern extent of the ceramic deposit found in Unit 2. Ceramic types recovered from this ceramic concentration adhere to middle and late Middle Formative types, and correspond with those found in 2012in the adjacent levels of Units 1 and 2.

The cluster proper consisted of 347 shell beads, ranging in size and form from tiny 3 mm by 1mm bi-conically bored beads, to medium-sized blocky beads, and four greenstone pieces designated Greenstones 31, 32, 35, and 38.

Greenstone 31 is a light turquoise-colored, and seems to be a worked edge fragment from a larger, finely worked, greenstone object. Greenstone 32 is a dark bluish-green streaked with white striations tubular bead approximately 3.5 cm long. Greenstone 35 is a light greenish-grey celt with a smooth but pitted surface and wear-patterns on its broad cutting edge that indicated that it likely functioned as an actual tool during its use-life. Greenstone 38 is a finely worked, flat jadeite pendant roughly 8 cm long, and 1 cm wide pendant with one end wider then the other, and two bi-conically bored perforations running through the width of the less then 1cm thick pendant. Both faces are highly polished, and one is convex while the other is concave. The color and composition of this pendant suggests that it may be composed of the much-discussed "Olmec Blue" jadeite variety.

The dimension of the roughly circular offering-pit were approximately 36 cm in diameter and varied between 46 cm to 30 cm in depth running from north to south below the existing bedrock surface. Also, the northern extent of the bedrock-alteration housing Cluster 2 ran under the northern baulk of our excavation area, thus necessitating undercutting the baulk in this area.

#### Cluster 3:

This deposit consisted of 60 shell beads of various size and a small flat slab of greenstone, which had been placed thin side up amongst a concentration of shell beads (Figure 4). This object was designated Greenstone 19 and appears to be a partially worked slab of striated dark green and white stone, which may likely represent an intermediary stage of lapidary manufacture. This artifact has since been designated Greenstone 19. In total, and form were also recovered from within this natural, or lightly altered, limestone declivity.

The bedrock declivity housing the contents of Cluster 3 was roughly 10 cm in diameter and varied between 10 cm to 22 cm in depth below the existing bedrock surface, running from east to west.



Figure 4: Cluster # 3: Greenstone # 38 with Shell Beads

#### Cluster 4:

Cluster 4 consisted of lightly altered or possibly natural bedrock declivity housing a cluster of 33 shell beads and two, possible three, greenstone objects designated Greenstone 33, 41, and 43. Greenstone 33 is a small chunk of dark moss green and white stone, with reddish-orange inclusions, that likely represents a piece of chipped-stone production debris. Greenstone 41 is a very small apple-green jade bead, of which four other examples have also been recovered from the bedrock offerings within Units 1, 2, 5, and 6.

The dimension of the peanut-shaped, double-lobed bedrock declivity revealed was roughly 36 cm in length and varied between 16 cm, 10 cm and 12 in width, and likely represents a natural crevice in the surface of the limestone bedrock that was only lightly altered.

During the final sweeping and cleaning of the unit of any remaining loose soil from the crevices of the surface of the exposed limestone bedrock in Unit 5 we recovered another small apple green jade

bead, Greenstone 47. However, this bead was recovered from the screen, though from the location where the soil was removed, it is likely that it may have originated from the vicinity of Cluster 4.

#### Cluster 5:

Cluster 5 consists of a concentration of 33 shell beads and nine greenstone objects designated Greenstones 20, 21, 29, 30, 34, 36, 37, 39, and 40. Greenstone 20 is composed of a whitish grey stone with hints of green, which likely represents some variety of granite, and seems to represent a fractured piece of naturally water-smoothed stone, or a partially polished object. While Greenstone 21 is composed of a beautiful mottled green and white mineral, and seems to represent a highly polished half egg-shaped object, with one highly polished face and another rough from fracturing. Greenstone 29 is a highly polished or water-worn mottled whitish-blue greenstone pebble, located in the center of the declivity. Greenstone 30 is a greyish green chunk of stone, subsequently designated, which likely represents a fragment of chipped-stone production debris. Greenstone 34 is composed of a mottled whitish blue greenstone and displays a slightly rounded flat face which has been highly polished, and a series of faces representing evidence of fracturing and likely represents a broken fragment of a larger unknown object. Greenstone 36 appears to be another broken fragment of a larger unknown polished object. It is also a very similar color to Greenstone 34. While, Greenstone 37 is composed of a comparable whitish greenstone mineral as Greenstone 34 and 36, though it likely represents a chunk of chipped-stone production debris, or alternatively the interior of a broken larger object. Greenstone 39 was composed of a similar mineralogical composition as Greenstones 34, 36, and 37, and seems to also represent a flat broken fragment of the interior of a larger unknown artifact. Greenstone 40, was also composed of a similar mineral to the previously mentioned objects, and also seems to represent a flat broken fragment of a larger unknown artifact.

Of the nine greenstone objects recovered from the relatively shallow bedrock-declivity housing Cluster 5 at least four of these objects likely represent fragments of a broken unknown artifact, while two likely represent chunks of production debris, one represents a natural greenstone pebble, and two represent similar shaped partially worked objects of unknown significance and very different mineralogical composition. Of the ceramic sherds recovered from the soil filling the bedrock-declivity housing Cluster 5, only late Middle Formative Joventud types were present.

The final dimension of the circular bedrock offering-pit housing the contents of Cluster 5 was roughly 12 cm in diameter and 11 cm in depth below the existing bedrock surface, although some of offerings associated with this bedrock-declivity were placed in the overlying soil. The northern extent of the bedrock-alteration housing Cluster 5 ran under the northern and eastern baulks of our excavation area, thus necessitating undercutting the baulk in this area.

# Cluster 6:

A total of 173 shell beads were recovered from this offering-pit, along with a roughly triangular pinkish white limestone object, possessing a similar mineralogical composition and geometric form as the burial marker recovered in 2012, though on a much smaller scale.

The dimension of the roughly circular bedrock offering-pit housing the contents of Cluster 6 was roughly 31 cm in diameter and 51 cm in depth below the existing bedrock surface. The western extent of the bedrock-alteration housing Cluster 6 ran under the western baulk of our excavation area, thus necessitating undercutting the baulk in this area.

#### Cluster 7:

Cluster 7 contained 73 shell beads ranging from medium to small blocky, as well as exterior spangles. Circumscribed within the bedrock-alteration housing Cluster 7 we also recovered a concentration of broken middle Middle Formative Consejo bowl fragments, suggesting a portion of a broken cached vessel. No greenstone objects were recovered from Cluster 7. The closing dimensions of the bedrock offering-pit housing the contents of Cluster 7 were 30 cm approximately in diameter with a depth that varied between 32 cm to 42 cm below the existing bedrock surface from north to south.

#### Cluster 8:

Located in the approximate center of the northern extent of Unit 5, running under the northern excavation baulk, the Cluster 8 offering consisted of a roughly horizontally placed inverted vessel (Figure 5), beneath which 412 shell beads of every shape and size, 14 blocky 1 cm by 1cm square chalk beads, 8 triangular 1 cm by 1cm by 1 cm yellow-pigment beads, as well as numerous fragmentary examples, and three greenstone objects (Greenstone 22, 23, and 24) were recovered.



Figure 5: Cluster #8: Inverted Cached Vessel

The vessel was a middle Middle Formative Consejo bowl with vertical striations and bulging lobes reminiscent of a gourd or pumpkin (Sagebiel personal communication). All three objects (Greenstone 22, 23 and 24) are composed of a mottled whitish stone similar to Greenstones 34, 36, 37, 39 and 40. They also seems to represent a fragment of a larger unknown artifact. Greenstone 22 has a slightly rounded flat polished face, with another face demonstrating fracturing. One face of Greenstone 23 was a polished slightly pitted surface, while the others demonstrated fracturing. Greenstone 24 is a roughly triangular rounded nub of a broken object, with only one surface demonstrating fracturing with the others rounded from polishing.

The bedrock offering-pit housing Cluster 8 was roughly kidney-shaped with two lobe-like connected segments forming the larger offering pit, and a high bedrock protrusion creating a raised ridge along its southern extent. The diameter of the offering-pit was roughly 35 cm running east to west, and

varied between 21 and 27 cm running north to south, while the depth of the offering-pit slopped from roughly 38 cm to about 12 cm below the existing bedrock surface. Also, the northern extent of the bedrock-alteration housing Cluster 5 ran under the northern baulk of our excavation area, thus necessitating undercutting the baulk in this area.

#### Cluster 9:

Cluster 10 was a shallow round bedrock alteration which seems to have been almost completely overlain in the brittle white limestone material present throughout the northeast quadrant of Unit 5. Only 4 shell beads were recovered from within the confines of the circular bedrock-alteration housing Cluster 4, though the alteration its self was clearly intentional and artificial. The dimension of the circular bedrock offering-pit housing the contents of Cluster 9 was roughly 16 cm in diameter and 10 cm in depth below the existing bedrock surface.

#### Cluster 10:

Cluster 10 consisted of three greenstone objects, and 20 shell beads. Greenstone 25 was a small apple green jade bead. Greenstone 26 was a small dark green celt-like artifact, displaying white striations and serpentine marbling. This highly polished object seems to have been fractured width-wise, with only the tapered-end present. Another greenstone object was also recovered from just below Greenstone 26. Though this object appears to be either a natural greenstone nodule with water-worn flat faces and rounded edges, or a polished and lightly worked object of unknown significance. The ceramic sherds recovered from above Cluster 10 represented middle Middle Formative Consejo and late Middle Formative Joventud types.

The final dimensions of the roughly circular bedrock offering-pit housing the contents of Cluster 10 were roughly 27 cm in diameter and varied between 15 cm to 30 cm in depth below the existing bedrock surface, running from east to west.

#### Cluster 11:

This deep pit housed a total of 28 shell beads and one greenstone object (Greenstone 44). The beads range widely in shape and sizes with one large broken shell pendant measuring nearly 3 cm across. Greenstone 44 is composed of a similar mottled bluish-green white material as Greenstones 22, 23, 24, 34, 36, 37, 39, and 40, though it does not seem to demonstrate any "fresh" fractured faces like the aforementioned artifacts. One face of the object has a slightly rounded, flat, polished surface, while the obverse face is indeed fractured flat, but it is coated in a reddish-orange mineral staining that is either a natural mineral cortex, or may represent a hematite or ochre coating. The dimensions of the pit were roughly 31 cm in diameter and 58 cm in depth.

#### Cluster 12:

Cluster 12 consisted of possible speleothem, 29 shell beads, and a single, blue-green polished greenstone pebble (Greenstone 42). The closing dimension of the roughly circular pit varied between roughly 33 cm in diameter running east to west and 24 cm running north to south, and extended to 56 cm in depth below the existing bedrock surface.

#### Cluster 13:

Cluster 13 consisted of three interconnected bedrock pits carved to form a three-lobbed offering receptacle. The two larger pits were designated (A) and (B) respectively, in order to better control for spatial provenience. Pit A contained two greenstone objects (Greenstones 43 and 45), and was laced throughout with shell beads. While Pit B and the smaller connecting pit contained a peculiar quartz laden ferrous-stained sedimentary rock, the only obsidian recovered from any of the bedrock offering pits, and more shell beads. In total, 191 shell beads were recovered from the three inter-connected bedrock alterations housing Cluster 13.

Greenstone 43 was a small, partially worked, chunk of moss green stone with visible reddishorange inclusions. Greenstone 45, located near the bottom of the pit, is a small chunk of whitish-green stone, which displayed some flat surfaces and previously fractured edges, but was water-worn or abraded to create rounded edges and partially polished surfaces. Fragmentary ceramic sherds were present throughout the matrix of Cluster 13, are eroded examples of middle Middle Formative Consejo types.

Of the bedrock-alterations excavated during the 2014 field season that which housed Cluster 13 seems to demonstrate the most elaborate design and the most labor investment. Though, it is not nearly as elaborate or substantial as the mortuary cist or inter-connected offering pits evidenced in Units 1 and 2 in 2012.

#### Cluster 14:

Cluster 14 consisted of 25 shell beads, all of which were small to medium in size, with many examples displaying mother-of-pearl faces. The final dimension of the circular bedrock offering-pit was roughly 31 cm in diameter and 16 cm in depth.

#### Cluster 15:

Six small to tiny shell beads, comprised the entirety of Cluster 15. The bedrock pit iin which these were contained was circular in shape, measuring roughly 16 cm in diameter and 16 cm in depth. A matching "empty" pit beside Cluster 15 was of similar a dimension.

#### Cluster 16:

A total of 15 shell beads were recovered from the Cluster 15. A matching, although empty pit was found immediately to the east of this cluster. Both pits were approximately 17 cm in diameter and roughly 37 cm in depth. Both pits ran under the western wall of the unit underlying the later Str. DP-2<sup>nd</sup>.

#### Cluster 17:

A total of 23 shell beads were recovered from Cluster 17, all representing a relatively uniform medium-small variety. Also, a pinkish white limestone nodule was recovered from within the declivity, which upon analysis seems to be the same material as the triangular stone recovered from above Cluster 6 and the burial marker recovered in 2012. The closing dimension of the roughly circular pit was roughly 12 cm in diameter and varied between 21 cm to 16cm in depth below the existing bedrock surface, running from north to south. It appeared to be a natural or lightly altered bedrock crevice utilized as an offering receptacle.

#### Cluster 18:

Two similar-sized round, shallow bedrock pits were excavated in the southwestern quadrant of Unit 5. One pit yielded 25 shell beads, while the other yielded no preserved cultural materials. The closing dimensions of the pits were roughly 13 cm in diameter and 15 cm in depth.

#### GROUP D SOUTH-PLAZA UNIT 9

Unit 9 consisted of a 2 x 3 metre unit oriented north-south to the east of Units 5 and 6 and separated from them by a 30 cm wide baulk. The purpose of this unit was to establish the eastern extent of the series of buried platforms evidenced in Units 5 and 6 in 2013. Although the uppermost preserved portion of the final construction stage of this buried platform was identified the building continued eastward and consequently the edge is still undetermined.

Our efforts revealed seven distinct construction layers (see Figure 6), which were excavated in ten cultural levels before reaching a horizontal plaster surface. This surface appears to correlate with the plaster surface located in Unit 5 that seems to have buried Str. DP-2<sup>nd</sup>. Excavations were terminated upon reaching this plaster surface due to time restraints and a shift in research focus necessitated by the discovery of the additional bedrock offering pits in Unit 5.

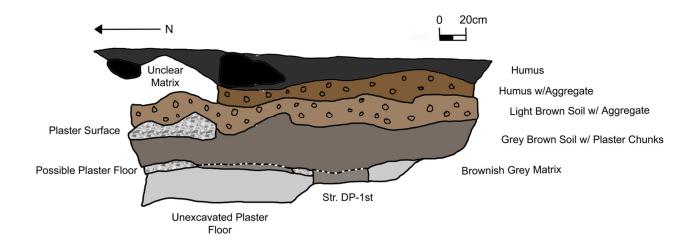


Figure 6: Unit 9: East Profile

#### Humus (Level 1)

The topsoil layer within Unit 9 ranged from between 5-10 cm in depth, and was composed of blackish brown soil. A series of large rocks (Figure 7), of which a few in the northern half of the excavation area seemed to exhibit evidence of highly degraded plaster on their uppermost surface were encountered in this upper level. A fragment of a *mano* was recovered associated with the northern concentration of rocks.

The highly degraded ceramics recovered from the humus layer likely date to the Terminal Classic (A.D. 900 - 1100) or the Early Postclassic Periods (A.D. 1100 - 1300), based upon the chronological ceramic sequence for Units 1, 2, 5, and 6 established by Dr. Sagebiel and myself at the close of the field season. Obsidian, lithics, and faunal materials were also recovered from this layer in moderate quantities.



Figure 7: Unit 9: Possible Residential Platform Foundation

Later on during excavations it was noticed that a pit was present in the southwest corner of the excavation area that seems to have been dug from the base of the humus layer down to about level 4. Soil from this pit contained a high degree of ash content and hundreds of tiny ash covered land snails.

#### Humus with Aggregate (Level 2)

The second excavation level ranged between 5-10 cm in depth, and was composed of the same blackish brown soil as the preceding humus layer, though it also included an increase frequency of pebble aggregate and small fragmentary piece of eroded plaster. Initial interpretations speculate that this pebble aggregate and fragmentary plaster may represent a heavily degraded living surface. The ceramic material recovered from level 2 also likely dates to the Terminal Classic (A.D. 900 – 1100) or the Early Postclassic Periods (A.D. 1100 – 1300). Obsidian, lithic, and faunal material were once again recovered in moderate quantities from the matrix of level 2.

#### Possible Residential Platform (Level 3)

The third excavation level consisted of a layer of rocks ranging from 10 to 30 cm in size that stretch across most of the excavation area, although they seemed to be concentrated in the northern and eastern portions of the unit. Some areas of the surface of the rock layer seem to have been surfaced in plaster underlain by pebble aggregate. Removal of these stones revealed a relatively flat horizontal surface beneath. Similar concentrations of stones were also encountered during the excavation of adjacent occupation horizons in Units 2, 3, 4, 5 and 6 during previous field seasons that have been interpreted as representing possible residential platform foundations (Lockett-Harris 2013). All the ceramic materials associated with these possible residential platforms yet analyzed have yielded Terminal Classic (A.D. 900 – 1100) or Early Postclassic Periods (A.D. 1100 – 1300) ceramic types. Thus, this may indicate that the South Plaza of Group D experienced a residential reoccupation after the Late Classic Period (A.D. 600 – 900) hiatus witnessed in Units 1, 2, 5, and 6.

#### Plaza Fill (Level 4)

The fourth excavation level was approximately 50 cm in depth and was composed of greyish brown soil interspersed with pebble aggregate and fist-sized rubble. Excavations of level 4 were ceased when large 20-30 cm rocks were encountered within the soil matrix. A large quantity of highly eroded ceramics were recovered from the matrix of level 4, though the southern extent of the excavation area yielded a noticeably lower proportion of ceramic material then the northern portion of the unit. Moderate quantities of obsidian, lithics and faunal were also recovered from level 4. This excavation level likely represents a thick plaza floor fill layer intended to substantially raise the surface of Plaza D South, similar to adjacent layers evidenced in Units 5 and 6 (Lockett-Harris 2013).

#### Plaza Fill (Level 5)

Level 5 ranged from 6 to 10 cm in depth and was composed of a similar matrix to level four, though with the additional presence of large 20-30 cm rocks that likely comprise plaza fill. Along with the previous level, this excavation level likely represents an attempt to raise the height of the surface of Plaza D South. The highly fragmentary ceramic materials recovered from the matrix of Level 5 likely date predominantly to the Early Classic Period (A.D. 300 - 600). A similar quantity of obsidian, lithics, and faunal was recovered from this level.

#### Plaza Fill (Level 6)

Level 6 varied from 10-15 cm in depth and was composed of a similar matrix to Level 4. A substantial amount of artifacts were recovered from the matrix of level 6, including a large amount of highly eroded ceramics. As with the previous two levels discussed, the ceramics recovered from level 6 likely date to the Early Classic Period (A.D. 300 - 600). A relatively large quantity of lithics where recovered from the matrix of level 6, as well as moderate quantities of obsidian and faunal materials.

### Cobble Fill with Possible Plaster Surface (Level 7)

Composed primarily of fist-sized stones Level 7 ranged from 15-20 cm in depth and formed a horizontal cobble-like layer, with pebble aggregate and greyish brown soil interspersed. A portion of the northern extent of the cobble layer evidenced a degraded plaster surface. Once the overlying cobble layer in the southern extent of the unit was removed the upper surfaces of an alignment of roughly rectangular 10-20 cm limestone blocks running along an east-west axis, parallel with the southern baulk of the unit, was encountered. An adjacent cobble layer was encountered in Unit 6 in 2013 that was revealed to bury the uppermost preserved portion of the buried platform Str. DP-1<sup>st</sup>. Due to the two units proximity and the similar elevations of the two cobble layers it is likely that level 7 represent the same cobble sub-floor as encountered in Unit 6. Ceramic, lithic and faunal materials were all recovered from the matrix of level 7 in moderate quantities, as well as obsidian. The ceramic materials recovered from level 7 likely date to either the early century of the Early Classic Period (A.D. 300 – 400) or to the Terminal Formative Period (A.D. 81 – 300).

# Sub-Floor Fill (Level 8)

Level 8 was approximately 5cm in depth and was composed of compact brownish grey soil interspersed with pebble aggregate. Excavations revealed a two-course limestone block wall running parallel with the northern face of Str. DP-1<sup>st</sup>, running across the southern section of the unit. This was set

upon a relatively flat horizontal surface of marl or plaster. A review of the eastern profile of Unit 6 from 2013 revealed that this two-course block alignment was present and had likely extended across Unit 6 as well, though in a poorly preserved state, since it was not located during excavations. A comparison with the stratigraphic sequence of Unit 6 suggests that the flat surface beneath the block alignment represents the uppermost preserved surface of Str. DP-1<sup>st</sup>. Excavations of Level 8 were terminate in the southern half of the unit when we reached a relatively horizontal surface that exhibited a hard marl or plaster composition. In the northern portion of the unit level 8 was ended at an arbitrary elevation that coincided with the surface encountered in the southern half of the unit. However, upon subsequent observation of the northern section of the east profile of Unit 9 it was noticed that a lens of eroded plaster was present in the baulk at about the same elevation as our arbitrary transition between levels 8 and 9, which may represent a highly eroded plaster surface (FIG. 19). It is also of note that this lens of eroded plaster seems to be located on roughly the same horizontal plain as the top of the unexcavated Str. DP-1<sup>st</sup> in Unit 9. Thus, indicating that this highly eroded, possible plaster surface may have been associated with the burial of Str. DP-1<sup>st</sup>.

# Sub-Floor Fill (Level 9)

The ninth excavation level ranged from 15-20 cm in depth and was composed of a similar brownish grey matrix interspersed with pebble aggregate as Level 8. Excavations of level 9 ceased when the overlying matrix from the surface encountered in the southern half of the unit, and when we had delineating the northern face of Str. DP-1<sup>st</sup>, was removed.

# Sub-Floor Fill (Level 10)

The tenth and final excavation level removed from Unit 9 during 2014 represented a thin roughly 5 cm thick lens of soil composed of the same matrix as levels 8 and 9. This level ended at a relatively well-preserved plaster surface located in the northern extent of Unit 9 that is likely the same plaster surface that was demonstrated to have buried Str. DP-2<sup>nd</sup>.

Excavations within Unit 9 were terminated at this point due to a shift in research interests towards the bedrock offering pits encountered in Unit 5. It was determined that the substantial plaster surface present beneath level 10 represented a logical point from which to continue investigations within Unit 9 in future field seasons.

#### DISCUSSION

As discussed above, excavation within Unit 5 undertaken during the 2014 field season sought to explore the earliest occupational horizons present above bedrock in the South Plaza of Group D. Previous excavations within Units 1 and 2 during the 2012 field season resulted in the discovery of a bedrock carved cist with associated carved pits that yielded a secondary, bundled burial, a substantial ceramic midden, an inverted cached vessel, seventeen greenstone objects, and over five hundred finely carved shell beads (Lockett-Harris 2012). The additional findings from Unit 5 in 2014, which include another thirty greenstone objects, a second inverted cached vessel, an inverted deer antler, almost two thousand more shell beads, and a fair quantity of chalk and yellow pigment beads from an additional eighteen carved bedrock offering pits, has greatly broadened our sample of this earliest founding event with the South Plaza of Group D.

The broader perspective elicited by these additional finds have lead Dr. Haines and I to believe that though this substantial caching event was likely focused upon the individual individual/ancestor interred in the bedrock cyst, it was also likely part of a larger ritual behavior intended to in essence "found" this area of the ceremonial core of Ka'Kabish, and thus legitimize the social role of the survivors of the interred individual (Lockett- Harris *in progress*).

Excavations within Unit 5 during 2014 also sought to establish the strata upon which the earliest platform construction event yet evidenced within the South Plaza of Group D, Str. DP-3<sup>rd</sup>, was built. Our effort revealed that this substantial meter tall platform wall, which was built of triangular limestone blocks set in white marl mortar, rested either upon the surface of the first plaster floor construction event, or upon the dark grey fill used as the sub-floor substrate beneath Floor 1. Due to the potential melding of the marl mortar and the surface of Floor 1, the interface between the two was indistinguishable. A masonry alignment across the southern portion of Unit 9 may represent either an additional platform step on the upper surface of Str. DP-1<sup>st</sup>, or the preserved foundation of a standing masonry wall of a since destroyed structure. It is also interesting to note that during excavations of Unit 5 tentative evidence was encountered that the northern edge of Str. DP-1<sup>st</sup> may have possessed a standing limestone block wall, due to the presence of seemingly fallen blocks in the fill to the north of the buried platform. Ceramic analysis of the materials recovered from the layers both directly preceding and following the construction of Str. DP-3<sup>rd</sup>, coupled with a growing number of radio carbon samples from associated levels, place the construction of Str. DP-3<sup>rd</sup> within the middle Middle Formative Period (900 – 600 B.C.).

#### **CONCLUSIONS**

Excavations within Unit 5 during 2014 continued excavations started the previous field season and succeeded in the intended goal of reaching sterile bedrock and establishing the chronological placement of Str. DP-3<sup>rd</sup> in the construction history of the South Plaza of Group D. In doing so, a series of plaster floor construction events associated with the northern masonry face of Str. DP-3<sup>rd</sup> were excavated until the earliest plaster floor construction event was reached, and with which Str. DP-3<sup>rd</sup> was demonstrated to articulate. Twenty-three bedrock pits, of which eighteen yielded a total of thirty greenstone objects, an inverted cached vessel, an inverted deer antler, over two thousand shell beads, and a fair quantity of yellow pigment beads, were also excavated. These cached offerings are located in an area directly adjacent to the bedrock offerings and mortuary remains recovered in 2012. Thus, through our investigations of Unit 5 in 2014 we recovered a greatly expanded sample from the early "founding" event first evidenced in Units 1 and 2 in 2012.

Through our investigations into the construction history of the South Plaza of Group D at Ka'Kabish over the past five field seasons we have revealed that this area of the ceremonial core of Ka'Kabish experienced a precocious ritual founding event, followed by the construction of substantial architectural features, which are both significant unto themselves and important when compared to similar evidence from other more well know Middle Formative sites throughout Belize and the Petén, such as Cuello (Hammond, Estrada-Belli and Clark 1992), K'axob (McAnany 2004) Cahal Pech (Healy et al. 2003), Blackman Eddie, Pacbitun, Nohoch Ek (Garber et al. 2003), and Nakbe (Hanson 2005). The evidence of a significant ritual and architectural agenda active at Ka'Kabish during the Middle Formative Period is particularly significant when taken into account with the rest of the Plaza D South construction chronology, which stretches from its Middle Formative founding, through over two millennia of occupation into the Early Postclassic Period, with the only significant cultural break represented by a Late Classic Period hiatus.

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#### CHAPTER 4

## INVESTIGATIONS OF CHULTUN C-2

by

## Toni Ann Gonzalez

This report provides the data collected from the investigation of Chultun C-2 during the 2014 field season at Ka'Kabish, Belize. This has been the third consecutive year that research has been conducted on chultuns at the site. Many of these features within the site periphery have been mapped and recorded and show signs of cultural modification or utilization. In order to ascertain the general functional use of these features and their role within the site, chultuns were chosen in different group sets in various locations, but were all in close proximity to the site core.

During the 2012 field season, the excavation of Chultun B-2 in Group B yielded the remains of at least three individuals (See Gonzalez 2012). In 2013, the excavation of Chultun C-1 in a currently unidentified group yielded the remains of at least six individuals (See Gonzalez 2013). In both instances the individuals were intentionally interred with offerings. The chultun's functional use that terminated future use appears to be a burial chamber that was utilized at some period during the Post Classic. It was decided to conduct investigations within another chultun in a different group in order to expand our sample size and to determine if this was a common trend at the site during this time period.

## DESCRIPTION

Operation 14 is the investigation of Chultun C-2 in Group C, which is north of Group B and south of Group D. Between Group B and C is an oval depression believed to have served as an aguada. Just east of the aguada is Group C, which consists of a cluster of three small mounds sitting on a limestone rise. Until further investigations it is unclear what these mounds functioned as, but it has been speculated that they may have served as platforms for perishable structures (Helen 2007: 9).

Chultun C-2 is located on the south side of Structure C2 (Figure 1). The chultun's opening is culturally modified into the limestone and is round in nature. The dimensions of the opening are 27 cm north/south and 23 cm east/west. The opening of the chultun angles downwards in a northeast direction directly under Structure C2. The chultun does not have a capstone and is almost completely filled. There is a 30cm gap from the lip of the chultun to the top of the fill.

There is another opening into the limestone southeast of Stucture C2. The opening is oval and rugged. It has been speculated that it may be a collapsed chultun or possibly a looter's trench. It was decided that the second feature was too unstable to investigate further; therefore the only excavations that will be conducted will be in Chultun C-2.

## METHODOLOGY AND EXCAVATION

Prior to excavation it was necessary to remove the fill from the entrance, which consisted of rotting wood, leaves, stones, dirt etc. It was decided to take down the entrance to a level where an

individual could see into the chamber and could squeeze within to take measurements. Most of this fill was not screened.

Our unit datum was set 254 cm north of the site datum (site datum previously determined). Since the chultun sloped downwards and into the chamber we created a unit datum #2 49.5 cm directly below unit datum #1 in order to determine depth.



Figure 1: Chultun C-2 on south side of Structure C2.

The length of the chamber measures 230 cm east/west and is not circular in nature. There are many niches in the chamber's walls, but none seem to be modified or altered. There is clear evidence of bioturbation from tree root growth from above and intensive rodent burrowing. It was decided to excavate the chultun as an entire unit and in arbitrary levels according to changes in cultural materials and/or changes in the soil.

Excavation equipment included trowels, a rock pick and brushes. All excavated soil (except for entrance fill) was screened upon removal using a 1/8" screen and a 1/16" screen. All material recovered through the screening process were bagged accordingly to their material type and those recovered in site were carefully mapped and also collected accordingly to their material type. Temperature and humidity were also recorded on a daily basis.

# OPERATION 14, CHULTUN C-2; Surface

The initial surface of the chultun consists mostly of outer debris that has washed in through time. The debris is an accumulation of dirt, twigs, stones, tree branches, and leaves. Since the "surface" of the chultun almost touches the ceiling in certain areas it was difficult to ascertain surface artifacts from a bird's eye view. There is a high concentration of ceiling fall covering the surface. Faunal material is also present in in the northern area of the chultun, and appears to be a type of rodent species. The soil is

poorly sorted and consists of a light brown soil matrix with limestone inclusions. The artifacts collected include three ceramic sherds, faunal material and a small obsidian blade fragment.

#### Level 1

Level 1 is very similar to what was encountered on the surface, although less foliage was present. Limestone ceiling fall is still very present in this level and ranges in size from <1cm to 40cm in size. The soil is a coarse dark brown matrix with limestone inclusions and is becoming more compact. While excavating in the northwestern area of the chultun close to the entrance a human pre-molar was exposed. We continued to clear the rest of the area of Level 1 and uncovered two human phalanges. In the northwestern area more faunal material of a small-medium sized rodent were exposed. A fragmented notched point manufactured from chert was recovered in the screening process. Other artifacts collected include ceramic sherds, and an obsidian blade fragment. Level 1 was closed in the anticipation that a burial may be exposed.

#### Level 2

The soil in Level 2 is a dark brown matrix with limestone inclusions about a centimeter large or smaller. There is still ceiling fall present, but is not as prevalent as in higher elevations. There is a high frequency of land snail in the central and northeastern areas of the chultun. Land snail has been found in high quantities in other chultuns excavated that contained burials. A peculiar odor, reminiscent of plant decay, is becoming stronger as we excavate. As excavations continued the shape of the chultun is extending outward creating a larger chamber. The limestone wall along the eastern area of the chultun seems to be altered. It appears as if there is burning or some change in properties turning the limestone a bluish grey color. It is only in certain areas and does not reach the ceiling of the chamber. The interior of the chultun is now at the same level as the entrance platform. Four human teeth were found not in situ and in different areas of the chultun. Two were discovered in the screening process, while one was discovered in the central area, and the other in the northeastern area. Other artifacts collected were ceramic sherds, lithic shatter, and two fragmented obsidian blades. Faunal material was also collected. Level 2 was closed in order to excavate the chultun in its entirety.

## Level 3

The soil in Level 3 is a dark brown, sandy matrix with limestone inclusions. It is loosely sorted and easy to excavate. There is a greater amount of large limestone spall (>20cm) present in this level. In the northeast area of the chultun a lot of the speculated burnt limestone from the walls is being unearthed. The soil and limestone are a greyish blue color. Another human incisor was discovered in the screening process. We are encountering a larger quantity of ceramic sherds and lithic flakes, all of which were collected. These artifacts do not appear to be in situ or set in clusters. This may be a result from wash in from the exterior or artifacts that have been lifted from lower levels by bioturbation. 67 cm below datum an intact ceramic rim, Vessel #1, was exposed in the eastern area of the chultun (Figure 2). Artifacts associated with this level include ceramic sherds and a lithic flake manufactured from obsidian. A small amount of faunal material was also collected.

#### Level 4

The soil in Level 4 is a dark brown sandy matrix with limestone inclusions. In the Northeast and eastern area of the chultun, the walls continue to remain a bluish grey hue. A soil sample was taken from

within Ceramic Vessel #1. All soil excavated around the vessel were screened using a fine mesh (1/16"). There was a significant amount of charcoal found around and inside the vessel. All contents within the vessel were collected separately. Ceramic Vessel #1 was excavated intact sitting upright with most of the soil in tact within to excavate separately.



Figure 2 Vessel #1 in situ (right); Vessel #2 and Vessel #3 in situ (left)

As excavations proceeded toward the center of the chultun, two more ceramic vessels were exposed not upright, but on their sides. Ceramic Vessel #3, a tripod, contained a fragmented chert biface sticking out of its opening. It was a pinkish/red color suggesting that it may have been heat-treated. All three vessels were Post Classic variety types and were at similar depths. Larger pieces of carbon were exposed along the eastern and southern walls of the chultun. As excavations continued southwest a human incisor and two human phalanges were exposed. The soil consistency changed and became extremely compact and compressed making it difficult to excavate. Larger pieces of limestone ceiling collapse were also present. Faunal material was present and collected. Other artifacts collected included ceramic sherds and lithic flakes.

#### Level 5

The soil in Level 5 is a dark brown matrix with limestone inclusions and appears to be compressed, but still disturbed by bioturbation especially by tree root growth. The frequency of cultural material minimized substantially in comparison to levels prior. The area around the entrance of the chultun has hit bedrock and is sloping downward into the chamber. There is a greater frequency of carbon being exposed sporadically throughout the chultun, but is too delicate and miniscule to collect.

As we approached approximately 120 cm below datum a fragmented human pelvis and two skull fragments in the eastern area of the chultun were discovered. They were badly preserved and fragile.

This closed excavations for Level 5. Artifacts associated with this level include ceramic sherds, lithic flakes, and obsidian flakes.

#### Level 6

The soil in Level 6 is a dark brown matrix with limestone inclusions and is compact. Excavations began in the eastern area of the chultun unveiling more human remains, Burial #1 (Figure 3). The bone fragments were badly fragmented and fragile, at times crumbling at the touch of a brush. Due to bioturbation and ceiling fall it was difficult to ascertain the positioning and placement of the individual interred. These disturbances can explain the human premolar and two phalanges unearthed in Level 2. A partial skull was discovered along the northeastern wall along with long bones. The ribcage and pelvis were discovered in the central area of the chultun. Many of the bone fragments were deteriorated making it difficult to decipher without further analysis being conducted.



Figure 3 Exposing Burial #1

As excavations continued to uncover the full burial it became apparent there was more than one individual interred and some of the remains from the two burials coalesced through time from bioturbation. In the southern area of the chultun another skull was discovered against the chultun wall. Considering the probability of Burial #2 being mostly contained in the southern area of the chultun, Burial #1, which predominantly appeared to be exposed in the eastern part of the chultun, was exhumed as Level 6 while Burial #2 became the catalyst for Level 7 to keep the remains separate. The artifacts collected in this level include ceramic sherds, lithic flakes, and a fragmented obsidian blade but none seemed to be directly related to the remains. Carbon was discovered in relation to the mortuary finds and was also collected.

#### Level 7

The soil in Level 7 is a dark brown matrix with limestone inclusions and is compact. Excavations for Level 7 continued in the south and southeastern area of the chultun where Burial #2 was discovered

(Figure 4). Just as encountered in Level 6 with Burial #1 bioturbation played a destructive role in context and preservation. Since most of the remains were not intact they were mapped and collected in clusters. Very few artifacts were present in this level; those that were collected included ceramic sherds. Most of the dirt coming out of the chultun is sterile.



Figure 4 Skull from Burial #2 facing the chultun wall

Unfortunately due to time constraints level 7 was the final level of excavation. A test pit was conducted in the central area of the chultun to distinguish the remaining depth to bedrock. 36 cm remained and there was not enough time to fully complete the task. It was decided to tarp the inside chamber of the chultun and minimally backfill the area to appear undisturbed until the next field season.

#### **OBSERVATIONS**

The placement of Chultun C-2 is very distinctive in that it is modified into the bedrock to open up underneath a small mound/structure. Natural and artificial caves are important features in the ritual landscape in Mesoamerica (Brady 2004). Chultuns as chambers excavated into the limestone bedrock appear to be a close parallel to caves, especially artificial caves. In several instances, features recorded as chultuns were at least partially natural chambers, which strongly suggests that these features were being equated to caves. Unfortunately no excavations have been conducted on the surface or on the small mounds in Group C. Further investigations can shed light as to what they may have functioned as in correlation to Chultun C-2.

Excavations yielded the remains of at least two individuals. Ceiling fall and bioturbation from tree root growth and animal burrowing were detrimental in the preservation of context. Most of the mortuary remains were badly damaged, fragmented and shifted from their original positioning. Considering the close proximity to the actual floor of the chultun and the disbursement of the remains between levels, it appears that the individuals were intentionally interred within terminating future use of the chamber. As excavations neared bedrock the presence in cultural material ceased dramatically. Until the final level is fully excavated it will not be certain how many individuals were buried within the chamber or if more cultural material is present.

The three Post Classic vessels recovered in Level 4 are the only artifacts that appear to have been placed intentionally within the chultun and have been excavated in situ. The placement of these vessels directly above the burials suggest that they may be related. Perhaps they were used as mortuary offerings or rituals were conducted to commemorate the burials within. This of course is speculation, but cannot be ruled out. This also does not answer whether the burials date to the Post Classic or not. Perhaps the burials were interred before and veneration came later? Further analysis on the ceramic deposit is being conducted to determine the outcome (please refer to Kerry Sagebiel's chapter on the ceramic analysis of Chultun C-2).

When analyzing Vessel #1 it was discovered that the interior of the vessel was burnt while the exterior was not. Vessel #2 and Vessel #3 showed no signs of internal or external burning. There are many instances in cave contexts of ceramic vessels and bowls being used as copal and incense burners. This could explain the burning or altering of the limestone wall of the chultun, which only appeared "burnt" behind and above where the vessels were discovered. This could indicate a ritual being conducted inside of the chamber. If the subterranean chamber is being viewed as a cave, and since caves act as important ritual spaces within Maya cosmology, the artifacts within them are part of a ritual assemblage (Brady and Peterson 2008). Until further analysis is conducted on the vessel and on the soil samples collected, we cannot be certain what was being burned inside of Vessel #1.

#### **CONCLUSIONS**

It can be concluded that the primary function of Chultun C-2 was a burial chamber for multiple individuals and ritual most likely took place. Until excavations are fully complete it cannot be deciphered whether there was prior use before it's mortuary use. It is also unsure at the moment if the burials interred in Chultun C-2 can be specifically dated to the Post Classic. Analysis of the artifacts collected and C-14 dates from the carbon samples may provide more solid dates.

The presence of multiple individuals suggests the repeated performance of mortuary rituals, which constitutes a process of sacralization of that space. The implications of this activity cannot be ignored in a discussion of a feature's function. I would argue that individuals had been interred in *chutuns* precisely because these features had a ritual function before the death of an individual. The mortuary itual represented a continuation of the very same types of activities.

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## CHAPTER 5

## RESUMPTION OF INVESTIGATIONS IN THE GROUP-F ACROPOLIS

by

## Amanda Sinclair

The excavations on the acropolis within Group F, extended over a five week period. Within that time frame, three teams worked on eight units with multiple objectives. All three teams were placed approximatly on the north side of structre FA-6. One team would open mulitple units (Units 3,4,5,6,7, and 9) and excavate horizontaly with the purpose of establishing the orientation and size of a Post Classic wall. This wall was orignally uncovered in the 2011 field season. At the end of the 2014 field season, despite laying 6 new units, neither the corner nor the direction of the wall was determined. A second team opened a unit (Unit 2) with the purpose to excavate until they reached bedrock. This was done in hopes of determining any construction phases which may have taken place during the Classic period. The team did not reach bedrock. However we believe that some dates for construction can be established. The final team began late in the season with only a week and a half to excavate. The purpose of their unit (Unit 8) was exploritory. It was set in an open space on the arcopolis, in lign with the corner of FA-6. The levels and the findings of each unit will be discussed in further detail below.

#### **OPERATION 5- FA-6**

FA-6 is a square temple which measures roughly 27 meters North-South, 20 meters East-West, and is 9 meters high (Haines:2010). The F group is the most northern group at Ka'Kabish; it is located north of the road which divides the site. FA-6 is one of the 15 strutures of the F group. Of those 15 structures, 9 (one of which is FA-6) sit on top of an acropolis, which is on the eastern half of the group. The acropolis is approximately 3 meters high, measures roughly 108 meters from North to South, and measures 72 meters East to West (Haines:2010) Previous excavation of the F group has been limited to exploration of the tomb within FA-6 in 2010 and exploring architecture between F1 and F2 in 2011 (Haines:2011;Pitre:2012). Excavation's in 2010 exposed a Post Classic wall on the west side of FA-6. North of the wall is a plaster floor and south of the wall was presumed to be a cobble stone floor. (Haines, personal communication 2014). There was a forest fire in 2011 which impeded the excavations and made it too risky to revist the F group until 2014.

#### METHODOLGY

Eight new units were opened during the 2014 field season, and one unit (Unit 1) was reopened from 2011's field season (figure 1). The backfill in Unit 1 was removed and the unit was restrung to measure 2 meters by 2 meters. Unit 2 was placed north (grid north) and parallel to Unit 1. A 60 cm bulk was left between the two units. Units 3, 4, 5, 6, 7, and 9 were laid adjacent to one another and to Unit 1, on a rough east/west axis. This was done in order to follow the wall. All of the units measured 2 meters by 2 meters, except for Unit 5, which was a 1 meter by 2 meter unit. Unit 8 measured, 2 meters by 2 meters and was alligned with the north west (true north) corner of FA-6.

All of the units were excavated using trowels, brushes, and rock hammers. Rarely a pick axe was used. The soil removed from the units was sifted through ¼ inch mesh screens. Complete collection of lithics was practised, but only those ceramic sherds which were larger then a quarter or those which were diagnostic, were kept. The quantity of material found in each unit was recorded on lot forms and the material was bagged and labeled sperately for each unit and level in which they were found.

The elevations were taken using datum points, string levels, plumb bobs, and measuring tapes. The three datum points were created in total in order to take elevtions across the operation. All features (such as the wall), or suspected features, had additional elevations taken and were mapped on separate grid paper or on lot forms. Profile maps of the north, south, west, and east walls were drawn for Unit 2. At the closing of all levels in Operation 5 a photograph was taken.

Unit 8 and Unit 2 were dug in stratigraphic levels, and for the most part, the levels were determined using cultural changes (where there is an observable difference in soil or construction material). Arbitrary levels were created in Unit 2 where there was no change in soil, and when a test pit was created. The units which followed the wall (3,4,5,6,7, and 9) had unique criteria to determinine the levels. Level 1 was excavated until the top of the wall was exposed. Once the wall was found the level was closed. The south side of the wall was left unexcavated. The north side of the wall was excavated until the anticipated plaster floor was found (the same floor found on the north side of the wall in Unit 1). The wall was mapped and elevations were taken for each unit. Units were set adjacent to the previous units in order to continue following the orientation of the wall.

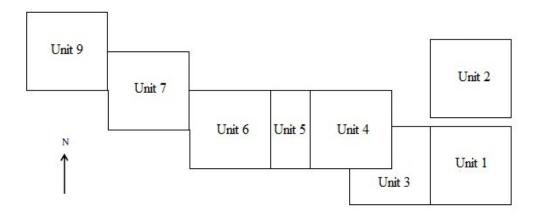


Figure 1: Units from the 2014 field season (laid on grid north). Due the location of Unit 8 it was omitted from this map.

# EXCAVATION INFORMATION FOR OPERATION 5 – FA-6: Units 3,4,5,6 *Level 1*

Level 1 consisted of a humus layer, soil, small roots, and small stones. Some lithics and ceramics were found, but in very small quantity. This level was closed when the top of the wall was found. Using a compass it was determined that the wall runs almost perfectly on a East West axis. The wall was made of natural and limestones.

#### Level 2

Only the north side of the wall was excavated. The level was closed when the anticipated floor was found. This level consists of soil, small limestones, and a small number of ceramics and lithics.

## **Excavation information for Operation 5 – FA-6: Unit 7**

## Level 1

The level consists of humus layer, soil, roots and small stones. The level was closed for two reasons: First, when the top of the wall was located, and second, when another line of stones appeared running north and south. This second line of stones may have fallen naturally, or they may represent the corner of the building.

## Level 2

This level was excavated north of the East/West running wall and east of the line of stones running North/South. The level consits soil, and small natural and limestones.

#### Level 3

In order to determine if the wall was turning as predicted, the south side of the East/West wall was excavated, and the west side of the North /South stone cluster was excavted as one level. It was determined that the wall did continue to run on an East/West axis, ie.the corner was not found. The matrix was consistant with level 2.

# EXCAVATION INFORMATION FOR OPERATION 5 – FA-6: UNIT 9 *Level 1*

Within excavating the first 25 cm below the suface, a smooth compact plaster floor was uncovered (Figure 2). The floor covers the south west side of the unit, but, appears to disinagrate towards the north. Evidence of a tree on the north half of the unit may point to an explanation behind the disinegration.



Figure 2: The closing of level 1 in Unit 9 revealing a smooth plaster floor.

# EXCAVATION INFORMATION FOR OPERATION 5 – FA-6: UNIT 8 *Level 1*

This level consitisted of humus and a very small quantaty of ceramics and lithics.

## Level 2

The matrix was a combination of soil, small roots, and small natural stones. The material found was in small quantities and consisted of lithics, ceramics, and obsidian (the only obsidian found during the 2014 field season).

#### Level 3

Soil, natural and limestones, small roots, and one very large root made up the matrix for level 3.

## Level 4

Large stones measuring 10 cm-40 cm were uncovered. Very few lithics or ceramics were found. This level was not completely excavated and the end of the field season due to time restraints. The unit was backfilled to be continued during a future field seasons.

## EXCAVATION INFORMATION FOR OPERATION 5-FA-6: Unit 2

## Level 1

A humus layer which consisted of dark soil and many roots. Less than 20 ceramic sherds and lithics were found

### Level 2

Level 2 consisted of pebbles, small size natural stones (3-5cm), soil, and many roots. There were 30 lithics and 30 ceramics sherds found. The closing of level 2 was mapped on a lot form because of a cluster of rocks which emerged on the south end of the unit, and we were uncertain of their nature.

## Level 3

The matrix was similar to level 2 with the addition of 7 large stones. The quantity of material culture found remained consistent with level 2. A map was created on the lot form. Originally, we anticipated that in this level we would encounter the plaster floor found in Unit 1 (based on our observations of Unit 1's north and east wall profiles). However, we did not encounter the plaster floor and the level was closed.

## Level 4

This level appears to be partially fill on the north end of the unit, and a poorly preserved plaster floor on the south end of the unit. The south end of the unit also contained less stone. The plaster floor in level 4 compared to that in Unit 1 is in poor condition. Less than 10 ceramic and lithics herds were found. It should be noted that there was a tree near the south west corner of Unit 2 and the North West corner of unit 1. Roots coming from the tree may have disturbed the plaster.

#### Level 5

This level consisted of a combination of compact plaster, and large stones with little soil. This level was poorly sorted. The south west corner contains a softer gray soil matrix. The south west corner is adjacent to a tree trunk and roots, which may account for the looser soil. Little cultural material was found. The elevation on the east half of the unit was noticeably higher then on the west side of the unit. Elevations were taken of the 'ridge' of the raised elevation as well as the four corners of the unit.

#### Level 6

The matrix consists of what appears to be soft compact plaster with large rocks and with no soil. Very little cultural material was found in this level. Due to the depth of this level, it was closed arbitrarily. We also needed to considered that there were two possibilities; that we may have it bed rock, or this level was scabe.

#### Level 7

Dr. Helen Haines believed at this point we may have hit bedrock due to the composite nature of level 6. Therefore a test pit measuring 1 meter by 1 meter was placed in the south west corner of Unit 2. Using a pick axe, 50 cm was dug horizontally. A slipped ceramic was found in the test pit which Haines believes to be Early Classic (Haines personal communication 2014); this could mean that level 7 was Early Classic building fill. More ceramics appear in the test pit and the soil became darker. It was decided we had not reach bed rock. Therefore, the remaining ¾ of the unit was excavated down 50 cm to bring the unit down to the same elevation (roughly) as the bottom of the test pit. This level may have been two cultural levels.

The top half consists of the same soft plaster like composite which was found in level 6 as well as plaster and natural sontes. The bottom half (approx.) consist of soft gray matrix and natural stones. The majority the lithics were found in the north east corner, within the cluster of rocks. The west half of the unit contained the most ceramics shards. This would be consistent with our surmise that the west half of the level may have been fill. At the end of this level, we decided to divide the unit into different levels. Haines believes the North West corner maybe the corner of a building (personal communication 2014). The corner will remain unexcavated for now.

#### Level 8

The level is made of a light gray clay matrix. The level was shallow (2-8 cm) and was excavated as an 'L' shape, which left the corner of the building intact (Figure 3). The south west corner continued to contain a looser gray matrix, with more soil and less plaster in comparison to the remaining level. More compact plaster emerges south adjacent to the corner of the building (where we had not encountered plaster in previous levels). The south east section of the level begins to slope downward toward the west. Haines suggested it may be an earlier extension of the building or it may be plaster that has bled from the structure (Dr. Helen Haines personal conversation 2014).



Figure 3: The closing of Level 8, note the emergence of the building in the North East corner.

## Level 9

This level consist of a dark gray matrix, poorly sorted with many natural medium sized stones. This level continues with 'L' shape excavation. The corner of the building has either 'crumbled' or is larger than

initially anticipated. Natural stones emerge on the edge of the building. The majority of cultural material found in this level was ceramic, which consisted of over 40 sherds.

### Level 10

Level 10 is a deep layer of fill. This level involved removing a layer of natural stones form the building in order to determine where the wall meets the floor. However, it didn't emerge. Although there were many remnants of ceramic sherds in this level, they were too small to analyse so they were not kept.

#### Level 11

This level consisted of little cultural material and involved the removal of some natural stones from the edge of the building along with a shallow layer of the west half of the unit. Because we still had not come across where the floor and the wall met, it was decided to close this level and remove the feature (the corner of the building).

#### Level 12

Level 12 was the corner of the building. There were a number of ceramic sherds (approx. 40 pieces) and lithics (approx. 20), most of which were found in the very north east corner of the building. It is in this same corner where the plaster was most compact and hard.

#### Level 13

This level consisted of soft gray clay textured matrix with large natural and plaster stones. The stones were larger than 10 cm and are packed close together. The east side had noticeably less stones. This level was closed when visibly diagnostic shards were partially exposed.

#### Level 14

The matrix for level 14 was gray and with plaster and natural stones, poorly sorted. There were many diagnostic ceramic pieces at this level. A ceramic spout was found; Haines believes it is Middle Formative (Haines, personal conversation 2014). This level was closed because the matrix had changed quite drastically in the north eastern corner. In the corner, stones were found varying form 5-20 cm (maybe aggregate) surrounded by a matrix of more well sorted gray soil with fewer stones. A tarp was laid to cover the floor and sides of the unit, and the unit was back filled, to be completed in subsequent field seasons.

#### DISCUSSION

The most notable finds in Operation 5, were discovered in Unit 2 and revolve around construction within the acropolis. To begin, it is very clear that has some point, there was a building which was built before the Post Classic period. The structure, stratigraphly speaking, is located at a lower level then the Post Classic wall on the acropolis. Further dating of the construction phases within the acropolis can be assigned based on diagnostic ceramics which were found throughout the excavation. In level 7 an Early Classic ceramic sherd was found and further down, in level 14, a Middle Formative spout was found. These were preliminary analysis and further diagnosis of recovered sherds need to be completed. However, if there remains no evidence of Classic period construction within the acropolis, this may speak to a larger picture of the activities of Ka'Kabish during the Classic period. Why was there no

construction? Was there a scarcity of resources, or of manpower? If so, why was there a scarcity of man power. This may speak to political ties or lack thereof to nearby Laminai. Upon further analysis and investigation we will be able to speak with more certainty in regards to the construction and thereby potential political relationships in the region.

Despite the inability to find the corner while following the wall, there was a very significant find while searching for the wall in Unit 9. Although due to time restraints this unit remained unexcavated past its first level, the initial discovering of a smooth plaster floor in the southern half of the unit. Surprisingly the floor was well preserved considering it was only 25 cm below the surface. There was no evidence of this floor in the previous units. Thus the floor remains a mystery at this point.

#### **CONCLUSION**

The initial purposes of excavations of Operation 5 were: to date construction, exploratory, and to determine the orientation and size of the wall. The dates for some of the construction can be, at this point, hypothesized (as discussed above). At this point more analysis and research is needed to assert a time frame of construction with certainty. The other two objectives were cut short by the time restraints of the field season. Despite every attempt, continued excavation will be needed in order to fulfill the objectives to reach bedrock, explore the acropolis, and to determine the orientation and size of the Post Classic wall. These future explorations of the F group will be necessary in order to gain a more accurate role Ka'Kabish played in the politics in the region.

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## CHAPTER 6

## ANALYSIS OF CERAMICS FROM THE 2014 KA'KABISH ARCHAEOLOGICAL FIELD SEASON

bv

## Kerry L. Sagebiel

During the 2014 Ka'Kabish Archaeological Research Project (KARP), 7,587 ceramic sherds were recovered from five different operations. These included Operation 2 around Structure D-4, Operation 5 in Group F in front of Structure FA-6, Operation 8 in the Group D South Plaza, Operation 14 in Chultun C-2, and survey and collection carried out in newly cleared agricultural fields on the northside of the road just beyond the Mile 2 site.. The analysis presented here was conducted in the field by the author with the assistance of Trent University student Linda Canton.

#### **METHODS**

Sherds equal to or greater than the size of a United States quarter (ca. 2.5 cm), as well as smaller sherds with diagnostic features (e.g., decoration, appendages), have been collected from all excavated contexts at Ka'Kabish. Some special contexts, particularly the chultuns (including Chultun C-2) and the "smash and trash" deposit (Operation 8 in the Group D South Plaza), have had 100% of sherds collected. Once in the laboratory, bags of sherds were logged into the log books with their provenience information and checked that they had correct labels and tags. The sherds were washed with plain water (soaking was avoided) and soft toothbrushes, unless fugitive paint or other decoration was present. They were dried on \(^1\fmathscr{4}\)-inch mesh screen along with their associated bags and tags. Once dry, they were re-bagged with new bags and tags made as necessary. The sherds were also labeled (for full discussion of laboratory procedures see Gomer and McCollum 2012). The sherds were then ready to be analyzed.

Analysis followed the type/variety/mode method of analysis (Gifford 1976; Sagebiel 2005; Smith et al. 1960). An initial analysis separated the sherds into proposed types and varieties and was used to help date the lots. A second, more intensive analysis of diagnostic sherds (e.g., rims, bases, handles, painted body sherds) has emphasized attribute analysis, particularly of form and visual paste characteristics. The latter data are still being processed and analyzed by the author.

The renamed ceramic complexes were presented at the Belize Anthropological and Archaeological Symposium in July 2014 (Sagebiel and Haines 2014) and are presented in the table below (Table 1). These complexes should be considered working complexes, as they will undoubtedly be revised as further analysis is completed.

#### STRUCTURE D-4 (OPERATION 2)

Operation 4 was carried out in front of the east side of Structure D-4 and consisted of three units, which were basically clearing units with very little depth to them and only a small number of ceramic sherds were recovered. The topsoil from the east side of Structure D-4 was removed to uncover the last phase of architecture and the looters' backdirt was also partially removed to access the building. Most of

COMPLEX	TIME PERIOD	DATES		
Mormoops	middle Middle Formative	800–600 B.C.		
Noctilio	late Middle Formative	600–400 B.C.		
Rhogeesa	Late/Terminal Formative	400 B.CA.D. 300		
Desmodus	Early Classic	A.D. 300–600		
Trachops	Late Classic	A.D. 600–750/800		
Vampyressa	Terminal Classic	A.D. 750/800–900/1000		
Artibeus	Early/Middle Postclassic	A.D. 900/1000–1350/1400		
Centurio	Late Postclassic	A.D. 1350/1400–1500		
Molossus	Terminal Postclassic/Colonial	A.D. 1500–1700		

Table 1. Ka'Kabish Ceramic Complexes

the sherds from these endeavors were too eroded to be identified, but those that could be ranged in date from the Formative period to the Early/Middle Postclassic (see Tables 2 and # at the end of chapter). The most significant find in Operation 2 was the discovery in the topsoil of Structure D-4 of 11 sherds from one or more Postclassic censers, most likely Cehac Hunacti Composite (Smith 1971) (Figure 1). These censer fragments consisted of 1 rim, 1 flange, 2 pedestal base fragments, and 7 body sherds. The vessel(s) was likely the typical vase or chalice form (Smith 1971:94–95; Figures 63a–c) that sat on a tall pedestal base. Some of the body sherds have finger-impressed and fingernail- or tool-impressed appliqued fillets that probably adorned the neck/body and body/base joins. The large, square flange may have been attached vertically on the sides of the vessel, but that is uncertain. The paste is 2.5YR 4/6 Red (Kollmorgen 1975) and moderately coarse with grog and calcite inclusions. Although typical of the Yucatán (Smith 1971), these censers have been found at many sites in Northern Belize (Sidrys 1983), including Lamanai (Graham 1987:90; Pendergast 1985).



Figure 1: Cehac\_Hunacti\_censer

#### STRUCTURE FA-6 (OPERATION 5)

Operation 5 in Group F in front of Structure FA-6 was a continuation of excavations that were begun in 2011 before they were halted by a forest fire. A wall had been discovered in the plaza area in front of Structure FA-6 and the purpose of the excavations in 2014 was to define the structure and get a sense of when it was built. Eight units (Units 2–9) were excavated in the area, but only Unit 2 was excavated to any depth. The excavations in Operation 5 uncovered sherds dating from the middle Middle Formative to the Early/Middle Postclassic (see Table 2). The upper levels in all the units had Terminal Classic and/or Early/Middle Postclassic sherds in them, suggesting occupation or use during these late time periods. Again, Unit 2 has the best sequence. Terminal Classic sherds were found as deep as Level 4. Sherds from Levels 5 and 6 are too eroded to give a firm date. Early Classic sherds are the latest sherds present in Levels 7, 8, and 9. Levels 10, 11, and 13 contain Late/Terminal Formative sherds as the latestdated sherds, and the deepest level, Level 14, contains nothing later than the late Middle Formative. Both Levels 13 and 14 also include earlier middle Middle Formative sherds as admixture. This sequence of possible construction episodes dating to the late Middle Formative, Late/Terminal Formative, and Early Classic are in line with construction dates in other parts of Ka'Kabish (see below). As in other areas of Ka'Kabish, occupation evidence from the middle Middle Formative is indicated by admixture of those sherds in later fill, and occupation dating to the Terminal Classic and Early/Middle Postclassic is evident with sherds in the upper strata and topsoil. As has so far been typical of Ka'Kabish, there is little evidence of Late Classic (ca. A.D. 600–800) construction or occupation.

# GROUP D SOUTH PLAZA (OPERATION 8) *Unit 5*

Unit 5 was re-opened in 2014 in order to continue investigating the possible ritual feasting and other ritual deposits discovered in 2012 and 2013. Level 23 was interpreted as the remaining matrix from Levels 18a/19 from 2013. Level 23 consisted of a mix of late Middle Formative and middle Middle Formative sherds (see Table 2). Level 24 was interpreted as floor fill. It contained mostly late Middle Formative, along with a few middle Middle Formative, along with a few middle Middle Formative sherds. Level 25 was also interpreted as floor fill and also consisted of mostly late Middle Formative, along with a few middle Middle Formative sherds. Level 26 was interpreted as yet another floor fill event; it, too, consisted mostly of late Middle Formative sherds with a small amount of middle Middle Formative admixture. Level 27 was the final floor fill excavated above bedrock and included a number of ritual deposits placed in bedrock declivities. Altogether, Level 27 fill consisted of a large number of sherds with about two-thirds of the sherds dating to the middle Middle Formative and one-third to the late Middle Formative. Nearly all of the sherds from the bedrock declivities containing ritual deposits were middle Middle Formative, indicating that those deposits may, in most cases, date to that period (Sagebiel and Haines 2014). This includes Cluster Number 8, which contained Vessel Number 1.

**Vessel Number 1:** is a middle Middle Formative vessel, possibly belonging to the Consejo Group (Figure 2). It is a small bowl with a flat base and wide horizontal grooves on its exterior. This grooving or modeling is often likened to that of a squash. The sides are slightly incurving with a slightly everted and thickened rim with a round lip. The interior is slipped orange-red (2.5YR 5/8 Red) with a possible white underslip, and the exterior is highly eroded and may even have been unslipped. The vessel is 3.5 cm in height, with a rim diameter of 9.5 cm, an orifice of 8.5 cm, and a base diameter of 9.3 cm. The maximum diameter of the vessel is 10.5 cm. The walls and rim both average 0.9 cm thick. The paste is moderately fine with calcite and sherd inclusions and is dark pink (2.5YR 5/6 Red).



Figure 2: Consejo Group Vessel

#### Unit 9

Unit 9 was opened in order to determine the extent of the buried platform discovered in Units 5 and 6 during 2012? 2013 (heretofore referred to as the 2013 platform). It was immediately recognized that the unit contained a wall alignment that is thought to be a Postclassic house platform. Levels 1 and 2 associated with the topsoil and above-floor fill of the platform floor contained mostly eroded sherds. Most of those that were identifiable are Terminal Classic and Early/Middle Postclassic, including a red-rimmed jar, possibly Red Neck Mother (Chase 1982) and a basin with a large, bolstered rim (see Table 2). Level 4, which was the fill of the probable Postclassic platform, appeared to consist of re-deposited midden consisting of a large number of small, mostly eroded sherds. This fill contained one possible Late Classic polychrome sherd, but the majority of the sherds were late Middle Formative, Late/Terminal Formative, and Early Classic. Again, the dearth of Late Classic sherds (A.D. 600–750/800) in this platform fill is additional evidence that there were relatively few people living around the Ka'Kabish site core and depositing their trash during the Late Classic.

Level 5 consisted of large rock fill, likely used to raise the Group D South Plaza. This fill contained mostly Early Classic sherds, including a large number of "crud ware" bowls (57% of the sherds), along with a small number of late Middle Formative and Late/Terminal Formative sherds (see Table 2). Level 6, which was fill of smaller rocks, was similar to that of Level 5, containing mostly Early Classic sherds with a small number of Late/Terminal Formative sherds. Again, 56% of the sherds were "crud ware" bowls. Level 7 consisted of a possible plaster floor over cobble fill. This fill also consisted mostly of Early Classic sherds, including 52% crud ware bowl sherds. The fill also contained late Middle Formative and Late/Terminal Formative sherds in small numbers. Level 8 is interpreted as fill on top of the 2013 platform. This fill contained mostly Late/Terminal Formative sherds along with some late Middle Formative sherds. Level 9 may have gone through a floor that capped the burying event of the 2013 platform. Level 9 contained a mix of Late/Terminal Formative and late Middle Formative sherds along with a small number of middle Middle Formative sherds. Level 10 was the last level excavated and was fill just above the plaster floor that caps the 2013 platform. This fill consisted of a mix of Late/Terminal Formative and late Middle Formative sherds.

#### **CHULTUN C-2 (OPERATION 14)**

Chultun C-2 is at the base of a small structure and likely contains ceramics that have eroded from the structure and/or were tossed into the chultun during the time of occupation. This may explain why the sherds in Chultun C-2 are far more mixed throughout the deposit than in the previous chultuns excavated at the site (Sagebiel 2014). The surface sherds collected from around the chultun are highly eroded with the few diagnostic sherds dating to the Terminal Classic and Early/Middle Postclassic (see Table 2). Level 1 also contained a high percentage of eroded sherds with primarily Terminal Classic and Early/Middle Postclassic diagnostics, along with a couple of late Middle Formative and Late/Terminal Formative sherds. Level 2 consisted of highly eroded sherds with diagnostics all dating to the Late/Terminal Formative and Terminal Classic. Levels 3 and 4, which are correlated levels, consist of a large number of sherds dating from the late Middle Formative to the Early/Middle Postclassic. In addition, Level 4 contained the Early/Middle Postclassic vessels associated with the burials; those whole vessels are described further below. Like Levels 3 and 4, Level 5 consisted of a large number of sherds spanning the entire occupation of Ka'Kabish from the middle Middle Formative to the Early/Middle Postclassic. However, the next level, Level 6, contained a large number of sherds dating primarily to the Late/Terminal Formative, although it also included a few Late/Terminal Classic and Early/Middle

Postclassic sherds. Level 7 contained Late/Terminal Formative sherds along with a few Early Classic sherds. Level 8 consisted mostly of eroded sherds with a few identifiable sherds dating to the Late/Terminal Formative, Early Classic, and Late/Terminal Classic. The large number of both Late/Terminal Formative sherds in the lower levels, particularly Level 6, indicates there was likely a fair amount of Late/Terminal Formative occupation in this portion of the site. The presence of Terminal Classic sherds in nearly all levels and the presence of Early/Middle Postclassic sherds through Levels 1–6, along with the Early/Middle Postclassic vessels associated with the burial, indicate a likely second period of occupation during the Terminal Classic and Early/Middle Postclassic somewhere near the chultun.

### Chultun C-2 Burial Vessels

Vessel Number 1: is an Early/Middle Postclassic unslipped jar (Figure 3). The body is globular with a round base. The rim is everted or collared and the lip is nearly square. The height is 27.0 cm, the maximum body diameter is 31.5 cm, the maximum rim diameter is 30.0 cm, and the orifice is 23.0 cm. The collar width from the body join to the lip edge is 3.5 cm. The walls are fairly thin averaging, 0.7 cm in thickness and the lip is 0.9 cm thick. The interior and exterior are both unslipped with the exterior having light drag marks. The bottom of the interior is burnt and burnt residue was collected from it for future analysis. The exterior surface also appears burnt to halfway up the sides of the walls. The paste is moderately coarse with calcite and rock inclusions and is Pale Brown (10YR 6/3) with a thick, dark gray, unoxidized core.



Figure 3: Post-Classic Unslipped Vessel

**Vessel Number 2:** is an Early/Middle Postclassic red-on-orange trickle jar (Figure 4). The body is somewhat oval, tapering to the base. The base is flat and slightly recessed. The rim is everted or collared and the lip is square. The height is 17.0 cm, the maximum body diameter is 20.0 cm, the maximum rim diameter is 18.0 cm, and the orifice is 15.0 cm. The collar width from the body join to the lip edge is 2.2 cm. The walls are fairly thin, averaging 0.5 cm in thickness and the lip is 0.6 cm thick. The interior is

unslipped except for the collar. Manufacturing drag marks are visible on the interior. The exterior is red trickle (10R 4/8 Red) on orange (2.5YR 5/8 Red) with the trickle running vertically from the rim to the base. The base has a dark fire cloud or burnt patch. The paste is moderately fine with calcite and sherd inclusions. It is Light Yellowish Brown (10 Y/R 6/4) and well fired.





Figure 4: Post-Classic Trickle Jar

Figure 5: Post-Classic Orange Tripod Jar

Vessel Number 3: is an Early/Middle Postclassic orange tripod jar (Figure 5). The body is round with a tall, narrow neck. The rim is slightly everted with a nearly square lip and is fairly uneven. Below the rim on the exterior is a narrow appliqued band or collar. The neck/body join is slightly offset as if the neck were slightly too small for the body or bowl shape into which it was set and then was smoothed together. The hollow oven tripod feet have rattles in them, although only one foot has a small round vent hole, which looks as if it were gouged in as an afterthought. The total vessel height is 11.0 cm, the neck is 5.1 cm tall, and the feet are about 2.0 cm in height. The maximum body diameter is 8.0 cm, the maximum rim diameter is 6.0 cm, and the orifice is 5.0 cm. The wall thickness could not be measured but is likely similar to the thickness of the rim, which is 0.7 cm. The interior and exterior, except for parts of the feet, are slipped Light Red (2.5YR 6/8) with Light Yellowish Brown (10YR 6/4) fire clouds. The paste is fine with calcite inclusions. It is Light Reddish Brown (5YR 6/3) and well fired.

#### **NEW FIELD 2014**

The 14 collections made from a newly cleared fields investigated in 2014 and consisted of diagnostic ceramics that were almost all Terminal Classic and Early/Middle Postclassic. Indeterminate Formative sherds were collected from two loci and Late/Terminal Formative ceramics were recovered from two loci. Early Classic sherds were recovered from five loci. Late Classic sherds were recovered from two loci. Terminal Classic sherds were recovered from 13 loci and Early/Middle Postclassic sherds

from 11 loci. This preponderance of late sherds may indicate a predominantly Terminal Classic and Early/Middle Postclassic occupation or it may be due to some kind of bias in sampling diagnostic sherds, erosion, or the nature of the disturbances which may have left earlier occupation levels undisturbed.

#### **CONCLUSIONS**

The excavations in 2014 have reaffirmed the preliminary chronology of Ka'Kabish. The excavations in Group D South Plaza and Group F have continued to reveal a possible middle Middle Formative occupation somewhere around the site core that resulted in possible ritual deposits in declivities in bedrock during this time period in the Group D South Plaza. The first platform structures there likely date to the late Middle Formative based on their fill content as does the earliest fill of Level 14 in front of FA-6. These construction and occupation events were then covered by a sequence of plaza floors in the late Middle Formative in Group D South Plaza. Both the Group F and Group D South Plazas then were built up in the Late/Terminal Formative and Early Classic. There was a hiatus in construction in both plazas during the Late Classic. The nature of resumed occupation in the Terminal Classic and Early/Middle Postclassic is still somewhat unclear, but it appears that Early/Middle Postclassic occupations are also evident in the Postclassic censer left on top of Structure D-4 and the Early/Middle Postclassic burials and vessels from Chultun C-2.

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Table 2. Dates of Sherds Recovered by Level

LOT 717	OP.	UNIT	LEVEL 1	SHERD COUNT	middle Middle Formative Moormoops 800-600 B.C.	late Middle Formative Noctilio 600-400 B.C.	Late/ Terminal Formative Rhogeesa 400 B.C 300 A.D.	Early Classic Desmodus A.D. 300- 600	Late Classic Trachops A.D. 600-800	Terminal Classic Vampyressa A.D. 800- 1000	Early/ Middle Postclassic Artibeus A.D. 1000- 1350	Late Postclassic Centurio A.D. 1350- 1500	Terminal Postclassi c/ Colonial Molossus A.D. 1500- 1700
698	2	2	2	18									
711	2	2	3	12					X	X			
713	2	2	4	19				X	X	X			
728	2	2	1 (west extension #4)	2									
712	2	2	1, 2, 3	1									
729	2	3	2	12					X	X			
730	2	3	3	2	X								
705	2	D-4	East clearing topsoil 1	21			X				X	X	
704	2	D-4	East Face looters's backdirt	1	X								
		1											
654	5	2	1	9									
655	5	2	2	23				X					
656	5	2	3	37									

	_				1			ĺ	l	1	ĺ		
657	5	2	4	8					X	X			
690	5	2	5	5									
691	5	2	6	10			X						
699	5	2	7	130		X	X	X					
722	5	2	12	80		X	X	X					
706	5	2	8	44		X	X						
714	5	2	9	84			X	X					
715	5	2	9	28									
715	5	2	10	39		X	X						
718	5	2	11	59		X	X						
723	5	2	13	44	X	X	X						
731	5	2	14	113	X	X							
		Π		I		<u> </u>	<u> </u>	1			I		
658	5	3	1	85						X			
659	5	3	2	11									
				1	1					1	1		
660	5	4	1	28					X	X			
692	5	4	2	41				X		X	X		
		_		1				I			1		
689	5	5	1	21				X			X		
700	5	5	2	47			X	X	X	X			
707			1	82									
	5	6											
716	5	6	2	16						X	X		
720	5	7	1	62					X	X	X		
724	5	7	2	4						X	X		
725	5	7	3	28				X		X	X		
	-			1	1					1	I.		
719	5	8	1	20					X	X	X		
				1	1	1	1	1	1	1	1	l	1 1

735	5	8	3	36			X	X				
736	5	8	4	4								
									ı		I	
732	5	9	1	73				X		X		
733	5	9	2	6								
									l		l	
661	8	5	backfill	1			X					
701	8	5	16/17	5		X	X					-
662	8	5	23	245	X	X						
663	8	5	24	274	X	X						
664	8	5	25	62	X	X						
665	8	5	26	118	X	X						
702	8	5	27	803	X	X						
	l		1			1	1		l		l	
709	8	9	9(Baulk)	17			X	X				
666	8	9	1	84						X	X	
667	8	9	2	118				X		X	X	
668	8	9	4	386		X	X	X	X			
669	8	9	5	129		X	X	X				
693	8	9	6	292			X	X				
696	8	9	7	181		X	X	X				
697	8	9	8	211		X	X					
708	8	9	9	223	X	X	X					
710	8	9	10	60		X	X					
		Chultu	1	·  -		1	1		I	I	I	
670	14	n C-2	surface	120						X	X	
671	14	Chultu n C-2	1	129		X	X			X	X	
		Chultu										
672	14	n C-2 Chultu	2	73						X	X	
703	14	n C-2	3	337		X	X	X	X	X	X	

694	14	Chultu								i .	1	1
	17	n C-2	4	656		X	X	X	X	X	X	
		Chultu										
721	14	n C-2	5	485	X	X	X	X	X	X	X	
		Chultu										
727	14	n C-2	6	593			X		X	X	X	
		Chultu	_									
737	14	n C-2	7	130			X	X				
738	14	Chultu n C-2	8	74			X	X	X	X		
136	14	II C-2	0	/4			ΙΛ	Λ	A	Ι Λ		
	New			I	I	I	I		Ι	l	T T	
	Field			58				X		X	X	
	New			- ~								
675	Field			31				X		X	X	
	New											
	Field			39						X	X	
	New			l								
	Field			54			X			X	X	
678	New Field			30						X	X	
	New			30						Λ	Λ	
	Field			5						X		
	New									11		
	Field			7					X	X		
	New											
	Field			30						X	X	
	New											
	Field			15					X	X	X	
	New									V	V	
	Field New			9						X	X	
	New Field			23						X	X	
	New			23						11	11	
685	Field			23				X		X	X	
	New			-								
687	Field			16			X	X		X	X	
	New											
688	Field			5				X				

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Table 3. Comments on Sherds Recovered by Level

LOT	OPERATION	UNIT	LEVEL	COMMENTS
717	2	1	1	definite Terminal Classic, possible Early/Middle Postclassic
698	2	2	2	Formative and Classic; small, eroded sample
711	2	2	3	small, eroded sample
713	2	2	4	small, eroded sample
728	2	2	1 (west extension #4)	indeterminate; small, eroded sample
712	2	2	1, 2, 3	indeterminate; small, eroded sample
729	2	3	2	small, eroded sample
730	2	3	3	small, eroded sample
			East algoring tomosil	
705	2	D-4	East clearing topsoil	Cehac-Hunacti Postclassic censer fragments
			East Face looters's	
704	2	D-4	backdirt	small, eroded sample
654	5	2	1	indeterminate and 11 and 24 and 12
			1	indeterminate; small, eroded sample
655	5	2	2	small, eroded sample
656	5	2	3	Classic; small, eroded sample
657	5	2	4	small, eroded sample
690	5	2	5	indeterminate; small, eroded sample
691	5	2	6	small, eroded sample
699	5	2	7	1 possible Early Classic sherd
722	5	2	12	definite Early Classic; encompasses levels 8-11
706	5	2	8	noted that is seemed highly eroded for a level 8
714	5	2	9	2 possible Early Classic sherds, note 2 lot numbers for Level 9
715	5	2	9	Formative; small, eroded sample, note 2 lot numbers of Level 9

715	5	2	10	note: same Lot number as Level 9
718	5	2	11	note, same not number as never y
723	5	2	13	2 massible Fault Classic shards
				2 possible Early Classic sherds
731	5	2	14	
658	5	3	1	
			2	
659	5	3	2	indeterminate; small, eroded sample
660	5	4	1	
692	5	4	2	
0>2		•		
689	5	5	1	
700	5	5	2	
707	5	6	1	indeterminate; eroded sample
716	5	6	2	and Formative
		T	T	
720	5	7	1	
724	5	7	2	small, eroded sample
725	5	7	3	
		l	T	
719	5	8	1	
726	5	8	2	
735	5	8	3	
736	5	8	4	indeterminate; small, eroded sample
			I	
732	5	9	1	
733	5	9	2	indeterminate; small, eroded sample
661	8	5	backfill	

701	8	5	16/17	
662	8	5	23	
663	8	5	24	
664	8	5	25	
665	8	5	26	
702	8	5	27	
709	8	9	9(Baulk)	
666	8	9	1	
667	8	9	2	
668	8	9	4	mostly Early Classic, 1 possible Late Classic
669	8	9	5	lots of Early Classic crudware
693	8	9	6	lots of Early Classic crudware
696	8	9	7	lots of Early Classic crudware
697	8	9	8	
708	8	9	9	
710	8	9	10	
670	14	Chultun C-2	surface	
671	14	Chultun C-2	1	
672	14	Chultun C-2	2	
703	14	Chultun C-2	3	
694	14	Chultun C-2	4	includes likely Early Postclassic vessels
721	14	Chultun C-2	5	
727	14	Chultun C-2	6	mostly Late/Terminal Formative
737	14	Chultun C-2	7	
738	14	Chultun C-2	8	
674	New Field			

675	New Field		
676	New Field		
677	New Field		
678	New Field		
679	New Field		
680	New Field		
681	New Field		
682	New Field		
683	New Field		
684	New Field		and Formative
685	New Field		and Formative
687	New Field		
688	New Field		