# REPORT TO

# THE INSTITUTE OF ARCHAEOLOGY, NICH, BELIZE OF THE JUNE 2005 RECONNAISSANCE OF KA'KABISH, ORANGE WALK DISTRICT

**Prepared and Submitted** 

by

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#### INTRODUCTION

Research at ancient Maya sites in northern Belize has been an ongoing endeavour since the end of the 19<sup>th</sup> century when Thomas Gann first visited the sites of Santa Rita Corozal (Gann 1900; Gann and Gann 1939). Despite over a century of, albeit sporadic, excavations in the region, large gaps exist in our knowledge of this area. Work in the area has been conducted largely at primary or secondary sites (Lamanai, Cerros, Nohmul, and Cuello to name a but a few), where investigations have been restricted almost exclusively to the area of primary occupation, with limited attention paid to sites in the periphery zone or inter-site relations at the polity level (Hammond 1973, 1991a; Pring 1976; Robertson and Freidel 1986). Recently, research has been undertaken in the Orange Walk District to expand our understanding of smaller settlements. Most of this work has focused on the Three Rivers Region above the escarpment (Driver et al. 1997, 1999; Driver and Wanyerka 2002; Guderjan and Driver 1995; Hageman and Hughbanks 2002; Lohse 2004; Scarborough et al. 2003; Sullivan 2002; among others), although some studies of smaller secondary or tertiary settlements also have been done on the Belizean Coastal Plain (Baker 1995; Guderjan 1996; Hammond 1973, 1991; Masson 2000; Pring 1976; Rosenswig 2004; Rosenswig and Masson 2001, 2002; Smith and McField 1996). Work on small centres forms an important balance to research conducted at larger centres as it informs our understanding of Maya social organisation on a broader multi-scalar level. Yet, this type of research is most valuable when it can be integrated into the discussions of core-periphery relations for a unified polity (Chang 1968, 1983; Willey 1983). The argument that "a king and his subjects may both be understood only in their relationships to one another" (Willey 1983:46) is equally important for understanding relations between sites in a single polity as it is for elucidating the relationships between individuals within a single centre.

Research in north-central Belize, while contributing considerable new information regarding smaller settlements, has focused primarily on the dynamics of a single site (Driver et al. 1997, 1999; Driver and Wanyerka 2002; Guderjan and Driver 1995; Hageman and Hughbanks 2002; Hammond 1973, 1991; Masson 2000; Pring 1976; Scarborough et al. 2003; Sullivan 2002) and exploring the relationships between members of differential social standing or particular social groups within these communities (Hageman and Hughbanks 2002; Hageman and Rich 2001; Lohse 2004). Ka'Kabish, a secondary site in north-central Belize, presents us with an ideal opportunity to expand our knowledge of Classic period Maya socio-political organisations at subsidiary, secondary centres, as well as the ability to explore these dynamics at the polity level.

<sup>&</sup>lt;sup>1</sup> An exception to this being the seminal work by Scarborough and others to unit the research conducted in the Three Rivers Region to investigate the idea that Maya communities in this area were heterarchically organised (Scarborough et al. 2003).

#### HISTORY OF RESEARCH AT KA'KABISH

Ka'Kabish is located almost exactly 10 km from the larger centre of Lamanai (at 311 degrees magnetic north) (Figures 1 and 2), and from the top of the Templo Mayor at Lamanai, Ka'Kabish is clearly visible on the horizon (Figure 3). In contrast to the extensive research conducted at Lamanai (cf. Graham 2004; Pendergast 1981, 1985. 1986), little is known about the site of Ka'Kabish (Guderjan 1996).

Located on a limestone ridge, one of several that undulate across this part of north-central Belize (Hammond 1973; Romney et al. 1959). The site sustained damage during the construction of a modern road that links the towns of San Filipe and Indian Church; at least one building was completely destroyed and two other structures along with a section of the south plaza were removed during the brief succeeding use of the site as a quarry for road fill (Guderjan 1996). Additional damage to the site was caused by extensive illicit looting operations, although currently the greatest danger to the site is from the encroaching farmland (Figure 4). This last situation is undoubtedly exacerbated by the sites proximity to four growing communities – one in every direction.

The first known visit to the site by an archaeologist was by David Pendergast, who visited briefly in the early 1980s while working at Lamanai. He reported finding Early Post-Classic ceramics on low mounds in recently cleared milpa fields immediately outside of the site core (Pendergast 1997: personal communication). In the mid-1990s, Ka'Kabish was visited by archaeologists from the Maya Research Program (including this author) who produced a functional, although rudimentary, map of the site core (Guderjan 1996).

A total of 27 structures were originally reported, divided into two areas by the modern road. During reconnaissance by the Maya Research Program, ceramic and architectural evidence was uncovered that suggests Ka'Kabish enjoyed a long history of occupation, dating from the Late Preclassic through the Late Classic period (Guderjan 1996). This preliminary inspection also encountered five looted tombs (two of which were vaulted and another with a domed plaster roof [Figure 5]) tentatively dated to the Late Classic period (Guderjan 1996). One of these tombs had originally been painted red with dark red glyphs on the walls (Figure 6), although looting and subsequent exposure has rendered them indecipherable (Simon Martin 1997: personal communication). The size of the site, similarity in architectural arrangements, and proximity to the larger site of Lamanai all suggest that Ka'Kabish was a secondary centre within the larger Lamanai polity, one perhaps occupied by a cadre of elite personages. A ball court, complete with a circular marker, provides supporting evidence for an elite occupation at Ka'Kabish.

#### PRELUDE TO SITE DISCUSSION

In 2005, with the permission of Dr. John Morris, Institute of Archaeology, NICH I returned to Orange Walk District, Belize,, to conduct an assessment of the Ka'Kabish ruin and explore the feasibility of initiating a research project at the site. While a large part of the 'field season' was spent working out the logistically details of establishing a base in Indian Church, considerable time was also spent learning the property management system, contacting and discussing the archaeological importance of the ruin with the landowners, and gaining their support for future work at the site.

Although the land around and beneath the site is administered by the San Filipe Land Committee, only two landholders, Don Rufino Magana and Don Domingo Torres, are actually residents of San Filipe. Don Magana was also a member of this committee and graciously showed us a copy of the Land Committee's map for the area noting the different parcels of land surrounding the site. He permitted me to sketch a copy of the document to aid in identification of the site (Figure 7). During visits to the site several of the lot dividers were noted and GPS readings were taken using a Magellan 100 hand-held GPS unit.

In total, four individuals own the land beneath or immediately adjacent to the core area of Ka'Kabish. The parcels of land are sectioned off using the road as the north-south divider. Don Magana currently owns lot 210, a parcel of land on the north-east edge of site core. The largest section of land is owned by Don Guadelupe Pech, a resident of Yo Creek. This section includes three parcels of land (lots 207, 208, and 209) beneath and immediately to the west of the northern half of the site core.

All of the identified structures that comprise the southern half of Ka'Kabish reside on the three pieces of land (lots 223, 224, and 227) held by Don Manuel Blanco (a resident of San Lazero). A fourth landowner, Don Domingo Torres, was also identified, but was away from San Filipe on business. Don Torres' land (lot 222) is to the south-west of the site and currently is not known to contain any major structures. Work in future years will likely expand to include a survey of this property, as well as those of other landowners who's properties abut the Ka'Kabish core area.

Of the three key landowners upon whose property the site core resides I am pleased to report that all were enthusiastic about the idea of an archaeological project at the site of Ka'Kabish. They individually expressed their concern regarding the security of the site, noting that they had each endeavoured to chase people away from the ruins to protect the monuments. All felt the presence of an archaeological project might help to raise awareness of the importance of the site and afford it some additional protection. They willingly gave consent for me to visit the site and to apply to the Institute of Archaeology, NICH, for a permit to conduct future archaeological work on their property.

With the permission of the landowners I, aided by two assistants from Indian Church (Luis Gonzales and Jaime Yanes), proceeded to visit the ruin, visiting both the site core, as originally identified by the Maya Research Program, and parts of the adjacent fields. The remainder of this paper will discuss the results of these visits.

## ASSESSMENT OF THE KA'KABISH ARCHAEOLOGICAL ZONE

Using the original Maya Research Program 1996 map as a guide the 2005, survey team spent several days assessing the state of the ruins and surrounding settlement area. Located at approximately 17° 48′ 58" north latitude by 88° 43′ 47" west longitude² (Figure 2) the core area of Ka'Kabish was separated roughly in half by the construction of a road connecting the village of Indian Church to San Filipe. Using this road as a dividing point we designated the two halves of the site the North Complex and South Complex for the purposes of our initial investigations (Figure 8), although future investigations may need to refine these terms.

The intent of the 2005 visit was to assess the site for future research and to note damage to the structures. Several potential new buildings were noted and were incorporated into the original 1996 map using pace and compass techniques (Figure 9). Information about looters trenches, plaza limits, and other features were also grafted into the existing map. Groups of structures found outside the core zone were sketched and a written description of these areas is provided below.

The cursory inspection of the site core identified an additional four potential structures not included on the original map, defined the southern edges of the South Complex plaza, and recorded the presence of numerous looter's trenches. Inspection of the fields immediately surrounding areas revealed a complex with a small range structure in one corpse of trees, a group of potential house platforms in a second wooded area, and evidence of domestic occupation throughout the cleared fields.

## The South Group

We started our exploration of the site with the south group. All of the structures that comprise the south group reside on land owned by Don Blanco. In the process of finding an easy point of access to the ruins we passed through a milpa located immediately to the west of a long range building we designated Structure 1<sup>3</sup>. The presence of the milpa is worthy of note for two reasons. First, it highlights the vulnerability of the site to encroaching farmland as illustrated by the entire back

reassessments of this identification scheme may be required when the site is formally mapped.

<sup>&</sup>lt;sup>2</sup> This reading was taken from the centre of the road that bisects the site using a Magellan 100 handheld GPS unit.

<sup>3</sup> As the previous map produced by the M aya Research Program did not contain numbers, and the descriptions in the text could not be matched to the structures on the map (Guderjan 1996) we have renumbered all the structures. It should also be noted that our work was an assessment, not a full-scale mapping project. Due to the density of the vegetation future

side of Structure 1 being stripped of vegetation during construction of a milpa (Figures 10 and 11). Second, the corn in this field was quite high and lush, which contrasts dramatically with findings at the Blue Creek Ruin on the Rio Bravo escarpment where paleobotantical investigations have yielded a surprising paucity of maize. Indications suggest that this lack was due unfavourable growing conditions both above and below the escarpment (Beach personal communication 2005), a condition that apparently still exists today above the escarpment (Beach personal communication 2005; B. Dyck personal communication 2005).

Upon reaching the floor of the South Complex plaza the first thing we noted was the density of the vegetation. Originally under-brushed in 1995 to facilitate mapping by the Maya Research Program team, secondary growth has reclaimed the area reducing visibility to a mere two metres in some areas. Although structures were numbered as they were encountered and appear on the new site map, it is possible that additional features and trenches exist that were not noted by the 2005 research team.

Structure 1, a long range structure, defines the east side of the South Complex. The west side (rear) of the structure is considerably taller and steeper than the east side of the building. It appears that the building was constructed immediately adjacent to the edge of the plaza with the rear wall forming part of the plaza side, an architectural duality that was noted at several other structures around this complex. Structure 1 was damaged during the aforementioned quarrying activity and the north end of the building is absent, making estimates of the building's original length problematic. A single looters' trench was found in the approximate centre of the structure. This trench penetrates deep into the centre of the building along the primary access then branches out laterally into two tunnek that extend a short visible distance to the south and an undetermined length to the north. During one of the early visits by the Maya Research Program team this composite trench was explored and a looted tomb was reported at the terminus of the north tunnel (Renaud personal communication 1995).

The second structure encountered (Structure 2) defines the north-east edge of this complex. Like the previous building, Structure 2 was designed so that the rear of the building forms part of the plaza wall. It too was damaged by quarrying, and the east edge of the structure was removed. Despite, or perhaps because of, its visibility from the road this structure appears to have been unaffected by looting activity.

A small structure (Structure 3) was located to the west of Structure 2. This tiny building, roughly 1.5 metres in height from the plaza floor, was missed on the previous map. It appears to have been spared from looting by virtue of its small size and near invisibility in the dense foliage.

The South Complex is dominated by Structure 4, a large, abnormally steeply-sided pyramidal mound that towers over the surrounding structures. Roughly 20 metres in height and estimated to be 20 metres along the east side the structure is clearly the focal point of the complex. The building suffered severe looting and the entrances to five trenches were noted around the perimeter – three trenches on the east side level with the plaza, a fourth on the west side level with the plaza, and a fifth high on the west side near the summit of the structure. The centre trench on the east side (Figure 12) appears to connect with the trench noted low on the west side.

The original map depicts the structure as being somewhat lopsided, with the north-west corner out of alignment with the south-west corner. Cursory examination of this part of the building revealed that this odd shape was likely due to severe damage to the north-west corner, although the dense foliage inhibited identification of the exact cause of this condition. This damage may have resulted from a number of different factors, quarrying, looting, or structural instability that resulted in a part of the structure sheering away, and is in need of future investigation.

The trenches, more accurately described as tunnels, that traverse the core of Structure 4 revealed several construction epochs. Ceramics recovered from the tunnels by the Maya Research Program indicated that construction spanned the Late Formative period (400 B.C.-A.D. 250) through to the Late Classic period (A.D. 600-900). Based on a cursory examination of the central tunnel conducted by the author in the 1990s, the original form of Structure 4 appears to possibly have consisted of two parallel structures, between which existed a deep hole (likely an entrance to a cavern) from which a noticeable draft emanated (personal observation). These structures were subsumed by a succeeding construction episode that merged the two into one large building. If Structure 15 (discussed below) was present at the time of this modification, space constraints may account for the abnormally steep-sided form and may also have contributed to the apparent collapse of the north-west corner.

Unfortunately, the construction technique used to merge the two early buildings into a single temple relied on loose laid rubble fill which, by the mid 1990s, had collapsed creating a large domeshaped hollow in the centre of the tunnel. The instability of the tunnel ceiling and downward slope of the loose, rubble strewn floor prohibited further investigation at the time. This area was also home to countless bats a situation that has given rise to the colloquial appellation Templo de Murciélagos<sup>4</sup>.

To the south-east of Structure 4 is another long range building. Structure 5 defines the south side of what appears to be a small plazuela in the South Complex. A single looters trench, situated on the north side slightly east of the primary axis, was found in this structure. This trench did not appear

<sup>&</sup>lt;sup>4</sup> This structure also has been referred to locally as El Templo Grande and El Templo Mayor. However, in an effort to differentiate this building from the more famous Templo Mayor at Lamanai we advocate the use of the name Templo de Murciélagos.

very deep and it is probable that the integrity of the structure was not substantially impacted by the illicit digging.

The Maya Research Program report noted the presence of two uncarved fallen stela within this plazuela group (Guderjan 1996:118), but the exact location of these monuments was not specified. Two large slab-like stones roughly 1.5 metres long by 1 metre wide and 50 centimetres thick were found in front of Structure 4 and initially these were presumed to be the two, previously discovered, monuments. However, upon examination of the looters trenches nearby it was ascertained that these were construction stones removed from the building during the illicit digging. No other monuments were noted in this area although the density of the underbrush leaves this issue open to further research.

Immediately south of Structure 4, west of Structure 5, and outside the confines of the plazuela group were two parallel structures arranged on a north-south axis. These structures were originally identified as a ball court complete with ball court marker (Guderjan 1996). Our investigations of the structures confirmed this identification as well as the presence of a large circular marker roughly one metre in diameter and 50 centimetres thick located in the centre of the playing alley (Figure 13). These two buildings (Structure 6 on the east and Structure 7 on the west) were affected by the illicit activity although to differing degrees.

Only one trench was noted in Structure 6. This trench penetrated the building's west side and extended into the playing alley, slightly displacing the central marker. The marker appeared raised on the north end and it is possible that the looters looked underneath the monument for a cache. Despite being disturbed, the marker appeared in remarkably good shape. No carving was discerned on the surface, although it is possible that some images may be found with the correct lighting.

Structure 7 suffered considerably more damage than its twin. Four trenches were noted in this structure, one entered the playing slope from the north, a second penetrated the building from the south side, while a third trench was excavated on the west side roughly along the primary axis. The fourth trench effectively removed most of the north-west portion of the structure.

To the south of these structures was a single small range structure. This structure (Structure 8) is a very curious building as it appears unrelated to any other buildings, floating almost randomly in the centre of the South Complex. The alignment of the structure is also at an odd angle compared to those of the surrounding structures enhancing its appearance of being disassociated from the surrounding buildings. One looters' trench was found in the south side of the building along the primary axis.

Structure 9 is a large pyramidal structure in the south-east corner of the complex. This structure is believed to correspond to that identified as Structure 14 in the original report (Guderjan

1996:118); however, some discrepancies are present that make identification problematic. During the 2005 assessment two trenches were found in this structure, one that was quite shallow located in the upper east corner near the summit of the structure, the second a large deep trench that gouged into the face of the structure. This latter trench (not a tunnel) exposed several levels of architecture and the side of at least one staircase was visible near the summit. According to the original report the trench in Structure 14 extended backwards into the plaza and included a tunnel excavated west under the plaza floor. Although the trench is clearly remembered by the author, no evidence of this tunnel was found in Structure 9 during the 2005 survey. Three possibilities exist to explain this discrepancy; the first possibility is that the trench collapsed, the second suggestion is that another trench exists but was obscured by the dense vegetation, and the third alternative is that this building is not the one identified as Structure 14 by the Maya Research Program mapping team.

The south side of the South Complex is defined by a long range structure (Structure 10). Three looters' trenches were discovered in this building, all located at the east end. One trench was located on the east side of the structure and is quite shallow and appears to have been abandoned early into the excavation. The second trench was located on the south side of the building, close to the summit. This trench also appears to have been a half-hearted attempt and is probably more aptly described as a small pit rather than a trench. The third trench was the deepest and penetrated into the structure from the north side on a downward angle. As all of these illicit excavations are located away from the primary axis of the structure it is believed that the informational integrity of the structure remains intact.

Structure 10 rises approximately 5 metres from the floor of the plaza, but descends roughly twice that distance on the south side where it appears constructed immediately adjacent to, or as part of, the plaza wall. This plaza edge is roughly five metres high and extends west from the south-west corner of Structure 10 north-west to the south-east corner of Structure 12. The plaza edge also extended north-east and incorporated the rear walls of both Structure 9 and Structure 1. The area to the south of Structure 10 contains a large stand of cohune and majestic palms. A survey roughly 100 meters south into this area yielded no evidence of additional structures although a more exacting survey is clearly warranted.

Structure 11 was a very low, small range structure that was covered in dense foliage, and appeared undamaged. It is possible that the structure's unimposing nature compared to its larger neighbours to the west spared it from looting.

Structures 12, 13, and 14, form a closely interconnected unit. As with Structures 10, 9, and 1, the rear walls of this set of buildings appear to double as the wall of the plaza. Based on the described location it is possible that these structures (12, 13, and 14) correspond to those labelled 8, 7,

and 5 respectively in the original report; however, unlike the original survey, our investigations could only find looters trenches in two of the buildings. Structure 12 appears unaffected by illicit activity but both Structure 13 and Structure 14 show evidence of looting.

A single trench found on the west side of Structure 13 was quite deep and exposed beautifully cut masonry blocks. Structure 14 was penetrated by two tunnels; a very deep tunnel on the west (rear) of the building and a second, slightly shallower tunnel on the north side of the structure. Four plaster floors were exposed in the interior of the north trench suggesting a multi-faceted construction sequence for this building. Both of these structures are quite high, rising roughly six metres above the plaza floor and descending an estimated 10 metres off the plaza along the west side.

It is quite likely that these two structures contained the partially cleared vaulted room and/or the large red-painted room mentioned in the original report (Guderjan 1996:118); however, no evidence of either feature was seen during the 2005 assessment. The fact that the report also associates a "pair of masks flanking a central staircase" is somewhat perplexing as no stairs were noted in either trench. It is clear that these structures warrant closer attention in the future.

Extending north from Structure 14 is a long low edifice that resembles a high thick wall. This identification refers only to the form of the construction as no looters trenches were noted that would provide evidence as to the true function of this structure. This 'wall' aligns with the edge of the plaza and runs for a considerable distance north before making an approximate 90 degree turn east and connecting with Structure 15, a short range structure located to the west of Structure 4.

A single long trench, more like a groove, was located on the south side of Structure 15. The area to the north (behind) Structure 15 appears to be level with the main plaza surface. Dense vegetation prohibited further exploration of this area to determine if the plaza edge continued in this direction or if the plaza merged with the limestone rise upon which it was constructed. A more indepth survey of this area may reveal the presence of hidden structures and further exploration is clearly warranted.

#### The North Group

To the north of the San Filipe-Indian Church road lies the second part of the Ka'Kabish archaeological core. This area consists of 12 structures located primarily on land owned by Don Pech with some building located on the land owned by Don Magana.

Closest to the road are two pyramidal structures situated on a shared platform. Both buildings, Structures 16 and 17, rise roughly 12 metres and have suffered from illicit digging. Structure 16, the southernmost of the two buildings, has a single long shallow trench located close to the summit on the east side. Structure 17 was more adversely affected by looting with a total of five

trenches found penetrating the building from all sides. One trench, located on the east side close to the north corner, consisted of a deep tunnel that penetrated into the core of the structure. A second smaller and shallower trench was located close to the summit, almost directly above the first. A third trench was found on the west side of the building close to the south corner. This tunnel appears to have collapsed leaving the only entrance a deep, vertical shaft. A fourth shallow trench was located near the north-west corner of the summit, while the fifth trench penetrated the structure on the west side close to the north corner. Guderjan (1996:118) reports that one of these two buildings had a looted, vaulted tomb, while the other had two looted tombs, one of which was vaulted. As none of the looters trenches were extensively investigated due to safety issues it is unclear which building contained which tombs.

Two structures located to the north-west on the original map (Structures 18 and 19) could not be located in the exceedingly dense secondary growth that has engulfed the site. As such nothing can be currently added to our knowledge of these buildings.

The 2005 survey team was able to located the long range building (Structure 20) that formed part of the unit of structures defining the northern edge of the North Complex. This building appeared unharmed by the looting activity that affected its southern neighbours. It connected on the east side with a small pyramidal building (Structure 21), which had a single small trench located on the north side that appeared to have caused little damage to the structural integrity of the building. On the east side of the structure a long, construction projects south-east, this is possibly a wall defining the edge of the compound. This construction is attached on the south side to another small pyramidal building (Structure 22). Both these structures (the wall and Structure 22) appeared to have escaped being victimised by illicit excavations.

To the south of Structure 22 is an odd, multi-layered (or split-level) building (Structure 23). It appears as if the front of this structure consists of a lower platform or building that abutted a taller structure. This is a rough assessment is based on the visual form of the building and not on architectural evidence. A single, shallow trench was present on the west side roughly aligned with the primary axis but debris obscured any architectural evidence that might have been exposed by the digging.

What appeared to be two new simple rectangular structures were located to the east of Structure 23. Structure 24, the northernmost of the two, had two small shallow trenches on the west side, but neither trench appeared to have altered the structural integrity of the building. Structure 25, however, was not as fortunate and a large collapsed trench on the east side of the building, roughly along the primary axis, raises questions about the stability of the structure. A second smaller trench was located on the west side close to the north corner.

Further to the south was Structure 26. This building was similar in form to Structure 23 in that it has a lower front section. The rear (east) side of the structure is considerably steeper and appears to be part of a plaza edge. Four trenches were noted on this structure, two were located on the west side; one at the north corner and one at the south corner. A third shallow trench was found on the south side of the building. The west side had the deepest trench, a tunnel that penetrated several metres into the structure and intersected with a vaulted painted tomb.

This tomb was originally reported in 1996 by the Maya Research Program team (Guderjan 1996) and examination in 2005 revealed it to still be structurally sound. The original design of this tomb is unclear. Looters penetrated the tomb from the west wall, close to the north corner, and proceeded to clear the room damaging the walls and causing part of the north wall to collapse in the process. Evidence remaining on the southern section of the east wall suggest that the entire tomb had been painted red. Remnants of darker red paint indicates that the walls were also adorned with glyphs (Figure 6) although not enough remains to identify them with any certainty (Martin personal communication 1996).

An entrance in the centre of the east wall opens onto a long masonry-lined passageway that was partially cleared by looters. Although this may have been the entranceway to the tomb as postulated by Guderjan (1996), the construction above the capstones suggests that the tomb may have been intruded into an earlier structure from above. Looters, in removing the capstones, exposed parts of a shaft filled in the Late Classic style of alternating layers of material and earth. Here the builders interspersed the layers of earth with layers of shell, chert, carbon, and obsidian. Additionally, members of the Maya Research Program team recovered large quantities of obsidian blades and bladelets that were found strewn about the tomb floor (Haines 2000). These blades are in excess of what could reasonably be expected to have fallen from the ceiling and may represent the remains of a layer of blades placed as a mortuary offering on the floor of the tomb (cf. Coe 1988; Haines 1996, 1997, 2000; Haines et al. 2000; Moholy-Nagy 1994, 1997; Guderjan 1991; Neivens 1991; Smith 1950, 1972; Trik 1963).

Structure 26 is connected to a building further to the south (Structure 27) by what appears to be the edge of a plaza. This steeply sloped side has yet to be identified in any other part of the north group. Two small trenches were excavated into this plaza side although little was exposed but bedrock fill. Structure 27 is much higher than it appears on the map, rising approximately 12 metres off the surrounding surface. This building is a high, flat, roughly square, structure that may have been a sub-structural platform for a perishable structure although excavation is needed to confidently ascertain the function of the building. A deep trench was found penetrating the south side of the structure but little of architectural value was noted in the profiles.

The area to the south of Structure 27 is a dense mesh of cohune palms and tangled secondary growth. At an estimated 10 metres south of Structure 27 was a small range building, Structure 28, that had a single trench located on the south side. The north side of this building was a scant three metres in height while the south side descended roughly six metres suggesting that this building resides against part of the plaza edge. Unfortunately, due to the density of the underbrush we could not clearly ascertain the possible contours of this potential plaza surface.

## Surrounding Settlement Zone

According to the original report, an outlying complex existed "generally north" from the site core in which the original British DOS survey marker was placed (Guderjan 1996:118). Unfortunately, this building was neither mapped nor located securely on a map by GPS. During the 2005 assessment several likely copses of trees were explored in the surrounding area to the north of the site in hopes of finding this location, that had been described as a "complex of buildings centred on one building which is approximately 5-7 metres tall" (Guderjan 1996:118). In the process of looking for this structure we identified two tree-covered outlying complexes (neither of which contained the DOS marker) (Figure 14). We also identified the presence of numerous almost invisible households in the open fields to the west of the site. An aerial survey we conducted of the vicinity revealed several ancient plaster house-floors in recently tilled fields to the south west of the site core (Figure 15).

Occupation in the fields to the west was confirmed by a surface survey of the area that showed the area to be covered with remnants of ancient ceramics and lithic debris. An aerial survey of this field revealed an interesting circular hollow formation that may be indicative of a structure with interior patio.

In a copse of trees to the north of this field, the 2005 survey team discovered a small complex consisting of at least two structures (Group A). One structure was in the north-east corner of the tree lot at roughly 17° 49° 23" north latitude by 88° 43° 47" west longitude. This structure was a small pyramidal mound that had been severely looted. A total of five trenches were found penetrating the structure with one trench on each the north, west, and east walls, and two trenches on the south side.

The north wall had a very deep tunnel along the primary axis that exposed beautifully cut masonry architecture. In excavating the trench on the west side the looters tunnelled deep into the building exposing two interior architectural faces, these suggest the building underwent at least three construction episodes. Between the two walls (likely the penultimate construction phase) we noted larger ceramic sherds in loose-laid 20-30 rock fill. These sherds, a bi-chrome red-rimmed orange dish

manufactured from a thin fine paste and a thick-walled black slipped vase fragment were photographed before being returned to the matrix from which they were recovered (Figure 16).

The trench on the south wall nearest the west corner exposed an interior structure that had been partially cleared by looters (Figure 17). This structure was at a different angle than the final construction phase. Although quite deep this tunnel does not connect with the tunnel entering the structure from the west, and likely passes above this tunnel. The second trench on the south side was located close to the east corner. This trench was collapsed and we suspected that it might contain the DOS marker but cursory examination of the area revealed nothing. Both trenches on the south, and presumably front, of the structure missed the primary axis. The trench on the east side was very deep and like its counterpart on the west side of the structure exposed two layers of construction.

To the south west of this structure (approximately 30 m inside the west tree line) we encountered a second structure. It resembled a long range structure or platform arranged on an east-west axis, that appeared to be 1.5 to 2 metres in height. Although more structures may exist in this copse of trees the density of the secondary growth reduced visibility to a scant 2 metres in places. Future clearing and mapping of this area is warranted.

To the north-east, approximately 70 metres from the Group A tree lot, we explored a second group of trees. Although this forest was also incredibly dense we managed to identify a group of five possible structures (Group B), one potential chultun, and one possible quarry area. Using an entry point of 17° 49° 23" north latitude and 88° 43° 47" west longitude the 2005 team encountered the first structure, a long low u-shaped mound roughly 100 metres to the north-west. The second structure was located to the south-west of the first building. This structure was approximately 10 metres square and one metre high with a central depression similar to the one noted in the aerial survey. A small deep hole located to the west of the structure may be a chultun. A low small possible platform was located to the south of this feature. Further south we encountered a long low east-west lying range structure roughly 14 metres long, 3 metres wide and approximately 2 to 3 metres in height. A fifth possible structure was located to the south-west. This was another low small range structure roughly eight metres long and six metres wide and only 1.5 to 2 metres high. None of these structures showed evidence of looting.

A third grove of trees to the north-east of the site was also investigated in search of the elusive DOS marker. These trees yielded no immediate evidence of structures although the density of the undergrowth makes this assessment inconclusive.

A relatively large architectural complex (Group C) was noted further west along the road to San Filipe at roughly 17<sup>o</sup> 49' 37" north latitude and 88<sup>o</sup> 44' 13" west longitude<sup>5</sup>. At some point in the recent past the vegetation had been cleared from complex, and more recently the land immediately adjacent to it, and the buildings were easily visible from the air (Figure 18). Although equally visible from the road (Figure 19), it was not visited as the landowners could not be located.

Evidence of additional groups of building, in varying degrees of complexity, surrounding the site of Ka'Kabish is not surprising. Previous work conducted by Robert Baker surveyed the road between Ka'Kabish and Lamanai looking for evidence of occupation (Baker 1996). This study revealed almost continuous habitation between the two sites with a moderate-sized complex (Coco Chan) located roughly half-way between the two centres. This evidence, coupled with the data gathered during the 2005 assessment, clearly shows that Ka'Kabish was part of a large vibrant settlement area, where it played an integral part in the social and political dynamics the Lamanai polity.

#### DISCUSSION OF THE KA'KABISH SITE

It is clear from the previous inspection conducted by the Maya Research Program that Ka'Kabish poses several interesting questions. Although a small site, several of the buildings appear disproportionately large in comparison to the size of the plazas and overall dimensions of the site core. And while the presence of a ball court marker is perhaps not unheard of at secondary sites (Thompson 1931), the existence of a marker (even an uncarved one) makes the area worthy of closer consideration.

Based on ceramics recovered during the Maya Research Program survey, it appears that the majority of the architecture was constructed or elaborated upon during the Late Classic period (A.D. 600 – 900) (Guderjan 1996). This expansion period is particularly intriguing as the "greatest gap in the data [at Lamanai] occurs in the early to middle Late Classic (7<sup>th</sup> and 8<sup>th</sup> centuries A.D.)" Pendergast 1981:42).

The sudden architectural expansion corresponds to discoveries elsewhere in the Maya area that suggest during the 7<sup>th</sup> to 9<sup>th</sup> centuries, many polity capitals endured a hiatus of power and authority, which allowed secondary sites to exert their autonomy (Culbert 1991; Grube 2000; Hammond 1991a; Iannone 2005; Martin and Grube 2000). During this period many secondary centers underwent major building episodes, that often involved the construction of 'royal compounds' and other architectural arrangements intended to replicate the cosmological site plans found at polity capitals (Ashmore and Sabloff 2000). Inhabitants at some of these sites are believed to have also

<sup>&</sup>lt;sup>5</sup> This reading was taken from the closest point on the road to avoid issues of trespassing.

installed their own 'royal' lineage in defiance of the pre-existing kingship at the polity center (Iannone 2005; LeCount et al. 2002). While this may appear to explain the building boom at Ka'Kabish, and an arrangement of structures (a large temple with a long range structure to the south and between a north-south ball court with circular marker) that mimics a grouping at Lamanai, we do not believe that this "break-away secondary site model" adequately explains the evidence at Ka'Kabish and Lamanai.

The ball court at Lamanai is a late feature, being constructed in the 10<sup>th</sup> century (Pendergast 1981:42). If the residents of Ka'Kabish were emulating the Lamanai style this would indicate that occupation at Ka'Kabish dated to the Early and Middle Post-Classic periods. Not only have none of the structures in the Ka'Kabish site core have yielded evidence dated to this period but this too late to explain the early Late Classic hiatus noted at Lamanai. Moreover, many of the suddenly autonomous secondary sites were located at distances roughly 30 km from their primary centers (Chase and Chase 1998; Hammond 1991b; Marcus 1993). This is a distance that inhibited easy access and facilitated sites' ability to break away and assert independence. Ka'Kabish, however, is located a scant 10 km inland from Lamanai, close enough to be visible from the top of the *Templo Mayor* at Lamanai. I believe the close proximity of Ka'Kabish to Lamanai, coupled with the paucity of Late Classic elite burials at Lamanai (Pendergast 1981:42) changes the question from "did Ka'Kabish install their own rulers during the 7<sup>th</sup> and 8<sup>th</sup> century gap at Lamanai?" to "did elites from Lamanai move to Ka'Kabish during the early Late Classic period?"

It is my hypothesis that Lamanai, situated along the edges of the New River Lagoon, is poorly located in the event of any aggressive activity directed at the polity. I believe that during the 7<sup>th</sup> and 8<sup>th</sup> century, when may sites were suffering increased incidents of aggression (acts that may have exacerbated if not directly triggered the power hiatuses noted elsewhere in the Maya world), at least some of the elites at Lamanai took up residence at Ka'Kabish. The short distance between the two sites, while providing a measure of security not found at the river site, would have afforded these people the ability to continue to exert influence at the main center. It is my belief that the presence of five known tombs, all roughly dated to the Late Classic (Guderjan 1996), supports the assertion that elites of some stature resided at Ka'Kabish during this period. This evidence, coupled with the few elite graves at Lamanai, provides additional support for this hypothesis. Evidence for shifting locations of polity royal courts, although rare, has been documented at ancient Maya sites (Ball and Taschek 2001), and I believe it may have occurred at Ka'Kabish.

It should be stated that the data from Ka'Kabish are currently not sufficient to permit a exact account of the interactions of these two closely connected settlements. Moreover, no evidence of violence has been encountered thus far at the site of Lamanai, although the threat of danger may have

been sufficient to induce at least some of the elite population to retreat inland. However, these data clearly demonstrate that Ka'Kabish played an integral, although as yet undefined, role in the Lamanai polity, and reinforces the importance of the Ka'Kabish site for expanding our understanding of Classic period Maya socio-political organization in north-central Belize.

#### **FUTURE RESEARCH**

It is my intent to apply to the Institute of Archaeology, NICH, Belize, for a permit to begin investigating these questions. The first stage of these investigations will involve the creation of a new, more precise and detailed map of the site core. This mapping project will be designed to record all structures, monuments, and ancillary features (i.e., looters' trenches and plaza edges).

I plan to apply for a permit for the 2006 summer season to conduct a six-week mapping project of the site core. As the goal of this work is to create a precise map for future work at the site I will seek permission from the Institute of Archaeology and the land-owners to remove all secondary growth from the plazas, including the forest deadfall that now obscures several of the looters' trenches. The removal of this under-brush will greatly increase the accuracy of the map, facilitate identification of any new features and monuments, and allow for the accurate identification and recording of damaged to the structures resulting from looting or other causes.

I expect this mapping project to consume the entirety of the 2006 field season, however, in the event that this work moves more rapidly than anticipated I will also apply to the Institute of Archaeology for permission to being surveying the looters trenches. This work will involved inspecting the walls of the trenches for architectural evidence that may provide information as to the construction sequences at the site. Section-line drawings and plan maps will be initiated on the most promising trenches. Although the eventual goal will be to create a complete series of section-line drawings and plan maps of all the looters' trenches for use in documenting the construction history of the site as well as monitoring interim activity at the site, this target will likely exceed the abilities of the 2006 season.

After the map of the site core has been completed, and assessed, I plan to continue to apply to the Institute of Archaeology for permits on an annual basis to extend the map into the settlement area surrounding the site. Ultimately, Dr. Elizabeth Graham of the Lamanai Archaeology Project (LAP), and I would like to conduct a transect survey from Ka'Kabish to Lamanai to map the settlements between these sites. However, this work is projected for three to fives years in the future, after the completion of an accurate map of the Ka'Kabish core and settlement zone.

At the same time as the mapping of the settlement core is underway I hope to have a second small team continuing to map the looters' trenches. I expect that all three of these works (mapping of

the settlement area, recording of the looters' trenches at Ka'Kabish, and eventually a survey transect between Lamanai and Ka'Kabish), with the permission of the Institute of Archaeology, will continue over the course of several years.

To fund the initial 2006 mapping project I have applied to the Foundation for the Advancement of Mesoamerican Studies Inc. (FAMSI) for funds. I am also working on grants to both the Heinz Foundation and Werner Gren for additional assistance.

#### **CONCLUSIONS**

Ka'Kabish affords a unique opportunity to simultaneously add to the limited corpus of excavated sites in north-central Belize, and to investigate the dynamics of intra-polity socio-political organization. The site presents us with the interesting conundrum of a settlement, secondary site in scope, but with attributes normally associated with a primary center. The proximity of Ka'Kabish to Lamanai makes it unlikely that Ka'Kabish was a primary center, or even a secondary site with a period of autonomous rule, along the lines of Xunantunich or Minanha (Iannone 2005; LeCount et al. 2000).

It seems most likely that Ka'Kabish was a secondary site with close ties to the capital of Lamanai, and was possibly occupied by elite from that site (maybe even a cadet branch of the royal family). This hypothesis provides an ideal opportunity from which to explore Classic period coreperiphery interactions. By virtue of the extensive research previously conducted and currently underway at Lamanai, future work at Ka'Kabish (under a new Ka'Kabish Archaeological Reconnaissance Project [KARP]), presents the perfect situation for exploring the nature of Classic period polity organisation. This work will contribute greatly to our understanding of the sociopolitical structure at both sites as well as yielding considerable information regarding Late Classic Maya polity dynamics in this part of the ancient Maya world.

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#### REFERENCES

Ashmore, Wendy, and Jeremy A. Sabloff

2002 Spatial Orders in Maya Civic Plans. Latin American Antiquity 13:201-215.

#### Baker, R.

No Postclassic Here: A Reconnaissance of the Lamanai-Kakabish Corridor. In Archaeological Research at Blue Creek, Belize. Progress Report of the Third (1994) Field Season, edited by T. H. Guderjan and W. D. Driver pp. 105-118. Maya Research Program, St. Mary's University, San Antonio, Texas.

#### Ball, Joseph W., and Jennifer T. Tashek

- The Buenavista-Cahal Pech Royal Court: Multi-Palace Court Mobility and Usage in a Petty Lowland Maya Kingdom. In *Royal Courts of the Ancient Maya: Volume 2 Data and Case Studies*, edited by Takeshi Inomata and Stephan D. Houston, pp. 165 200. Westview Press, Boulder.
- 1968 Toward a Science of Prehistoric Society. In *Settlement Archaeology*, edited by K. C. Chang, pp. 1-9. National Press Books, Palo Alto.
- 1983 Settlement Patterns in Ch inese Archaeology: A Case Study from the Bronze Age. In *Prehistoric Settlement Patters: Essays in Honor of Gordon R. Willey*, edited by E. Z. Vogt and R. M. Leventhal, pp. 361-374. Cambridge, MA, University of New Mexico Press and Peabody Museum of Archaeology and Ethnology.

#### Chase, Arlen F., and Diane Z. Chase

1998 Late Classic Maya Political Structure, Polity Size, and Warfare Arenas. In Anatomia de una civilización aproximaciones interdisciplinarias a la cultura maya, edited by Andrés Ciudad Ruiz, Yo landa Fernández Marquínez, José Miguel García Campillo, M. Josefa Iglesias Ponce de León, Alfonso Lacadena García-Gallo, Luis T. Sanz Castro, pp. 11-29. Sociedad Española de Estudios Mayas, Madrid.

#### Culbert, T. Patrick

Maya Political History and Elite Interaction: A Summary View. In *Classic Maya Political History*, edited by T. Patrick Culbert, pp. 311-346. Cambridge University Press, Cambridge, UK.

## Driver, William D., Heather L. Clagett, and Helen R. Haines (eds.)

1997 The Blue Creek Project: Working Papers from the 1996 Field Season. San Antonio, Maya Research Program and St. Mary's University.

## Driver, William D., Helen R. Haines, and Thomas H. Guderjan (eds.)

1999 The Blue Creek Project: Working Papers from the 1997 Season. San Antonio, Maya Research Program and St. Mary's University.

#### Driver, William D., and P. Wanyerka

2002 Creation Symbolism in the Architecture and Ritual at Structure 3, Blue Creek, Belize. *Mexicon* XXIV: 6-7.

# Flannery, Kent V., Joyce Marcus, and Stephen A. Kowalewski

The Preceramic and Formative of the Valley of Oaxaca. In *Supplement to the Handbook of Middle American Indians: Volume One: Archaeology*, edited by Victoria R. Bricker and Jeremy A. Sabloff, pp. 48-93. University of Texas Press, Austin.

#### Gann. Thomas

Mounds in Northern Honduras. *Nineteenth Annual Report*, 1897-1898, *Bureau of American Ethnology*. Washington D.C., Smithsonian Institution. **Part 2:** 661-692.

#### Gann, Thomas, and Mary Gann

1939 Archaeological Investigations in the Corozal District of British Honduras. Washington D.C., Smithsonian Institution.

#### Graham, Elizabeth A.

2004 Lamanai Reloaded: Alive and Well in the Early Post-Classic. In Research Reports in Belizean Archaeology, edited by Jaime Awe, John Morris, and Sherilyne Jones, pp. 223-242. Institute of Archaeology, NICH, Belmopan, Belize.

## Grube, Nikolai

The City-States of the Maya. In *A Comparative Study of Thirty City-State Cultures*, edited by Mogens Herman Hansen, pp. 547-565. Royal Danish Academy of Sciences and Letters, Copenhagen.

## Guderjan, Thomas H.

1996 Kakabish: Mapping of a Maya Center. In *Archaeological Research at Blue Creek, Belize. Progress Report of the Fourth (1995) Field Season*, edited by T. H. Guderjan, W. D. Driver and H. R. Haines, pp. 117-120. Maya Research Program, St. Mary's University, San Antonio.

#### Guderjan, Thomas H. (ed.)

Maya Settlement in Northwestern Belize: The 1988 and 1990 Seasons of the Rio Bravo Archaeological Project. Maya Research Program and Labyrinthos Press, San Antonio, TX.

## Guderjan, Thomas H. and W. D. Driver (eds.)

1995 Archaeological Research at Blue Creek, Belize. Progress Report of the Third (1994) Field Season.

Maya Research Program and St. Mary's University, San Antonio, TX.

#### Hageman, Jon B., and Paul J. Hughbanks

Shrine Abandonment, Re-Use, and Landscape at Guijarral, Belize. Paper presented at the 101st Meeting of the American Anthropological Association. New Orleans, Louisiana.

## Hageman Jon B., and Michelle E. Rich

Family Matters: The Identification and Significance of Late Classic Maya Lineages. Paper presented at the 66<sup>th</sup> Annual Meeting of the Society for American Archaeology, New Orleans, LA.

## Haines, Helen R.

- A Preliminary Discussion of Preclassic Midden Deposits at Structure 9. *Archaeological Research at Blue Creek, Belize. Progress Report of the Fourth (1995) Field Season*, edited by T. H. Guderjan, W. D. Driver and H. R. Haines, pp. 85-108. Maya Research Program, St. Mary's University, San Antonio.
- 1997 Rubbish, Remains, and Relics: A Preliminary Discussion of Formative Midden Deposits at Blue Creek, Belize. Paper presented at the 62nd Annual Meeting of the Society for American Archaeology. Nashville, TN.
- 2000 Intra-Site Obsidian Consumption and Distribution Patterns in North-Western Belize and the North-Eastern Peten, Guatemala. Unpublished Ph.D. dissertation submitted to the Institute of Archaeology. UCL, University of London, London, UK.

## Haines, Helen R., Kim A. Cox, and Michael D. Glascock

2000 New Stones, New Thoughts?: Interpreting the Obsidian Data From Blue Creek Ruin, Orange Walk District, Belize, and Beyond. Paper prepared for the Symposium "Obsidian Studies in the Maya Region", sponsored by the International Association of Obsidian Studies. Presented at the 65th Annual Meeting of the Society for American Archaeology, Philadelphia, PA.

## Hammond, Norman

- 1973 *Corozal Project: 1973 Interim Report.* Centre of Latin American Studies, University of Cambridge, Cambridge.
- 1991a Cuello: An Early Maya Community in Belize. University of Cambridge Press, Cambridge.

1991b Inside the Black Box: Defining Maya Polity. In Classic Maya Political History, edited by T. Patrick Culbert, pp. 253-284. Cambridge University Press, Cambridge, UK.

#### Iannone, Gyles

2005 The Rise and Fall of an Ancient Maya Petty Royal Court. Latin American Antiquity 16:26-44.

#### LeCount, Lisa J., Jason Yaeger, Richard M. Leventhal, and Wendy Ashmore

2002 Dating the Rise and Fall of Xunantunich, Belize. *Ancient Mesoamerica* 13:41-63.

## Lohse, Jon C.

2004 Intra-Site Settlement Signatures and Implications for Late Classic Maya Commoner Organization at Dos Hombres, Belize. In *Ancient Maya Commoners*, edited by J.C. Lohse and Fred Valdez, Jr., pp. 117-146. University of Texas Press, Austin.

#### Marcus, Joyce

Ancient Maya Political Organization. In *Lowland Maya Civilization in the Eighth Century A.D.*, edited by Jeremy A. Sabloff and John S. Henderson, pp. 111-183. Dumbarton Oaks Research Library and Collection, Washington D.C.

#### Martin, Simon, and Nikolai Grube

2000 Chronicles of the Maya Kings and Queens. Thames and Hudson, London.

#### Masson, M. A.

2000 Postclassic Maya Ritual at the Laguna de On Island, Belize. *The Ancient Civilizations of Mesoamerica:*A Reader. M. E. Smith and M. A. Masson. Malden, Massachusetts, Blackwell Publishers Inc.: 441-467

#### Moholy-Nagy, Hattula

1994 Tikal Material Culture: Artifact and Social Structure at a Classic Maya City. Unpublished Ph.D. Thesis. UMI Microfilms Dissertation Service International, Ann Arbor, MI.

1997 Middens, Construction Fill, and Offerings: Evidence for the Organization of Classic Period Craft Production at Tikal, Guatemala. *Journal of Field Archaeology* 24: 293-313.

## Neivens, Mary

1991 Operations at the Site of Blue Creek. In *Maya Settlement in Northwestern Belize: The 1988 and 1990 Seasons of the Rio Bravo Archaeological Project*, edited by T.H. Guderjan, pp. 51-54. Maya Research Program and Labyrinthos Press, San Antonio, TX.

## Pendergast, D. M.

"Lamanai, Belize: Summary of Excavation Results, 1974-1980." Journal of Field Archaeology 8: 29-53.

1985 Lamanai, Belize: An Updated View. *The Lowland Maya Postclassic*. A. F. Chase and P. M. Rice. Austin, University of Texas Press: 91-103.

1986 Stability Through Change: Lamanai, Belize, from the Ninth to the Seventeenth Century. *Late Lowland Maya Civilization: Classic to Post Classic*. J. A. Sabloff and E. W. Andrews V.: 223-249.

#### Pring, D.

1976 Report on the Excavations at El Pozito. *Archaeology in Northern Belize, British Museum-Cambridge University Corozal Project 1974-1975 Interim Report.* N. Hammond. Cambridge, UK: 128-131.

## Robertson, R. A., and D. A. Freidel (eds.)

1986 An Interim Report. Archaeology at Cerros Belize, Central America. Southern Methodist University Press, Dallas, TX.

## Romney, D.H., A.C.S. Wright, R.H. Arbuckle, and V.E. Vial

1959 Land Use in British Honduras, Report of the Land Use Survey Team. Her Majesty's Stationary Office, London.

## Rosenswig, Robert M, and Marilyn A. Masson

2001 Seven New Preceramic Sites Documented in Northern Belize. *Mexicon* 23(6):138-140.

2002 Transformation of the Terminal Classic to Postclassic Architectural Landscape at Caye Coco, Belize. Ancient Mesoamerica, 13:213-235.

#### Smith, A.L.

- 1950 *Uaxactun, Guatemala: Excavations of the 1931-1937*. Carnegie Institute of Washington Publications, Volume 588. Carnegie Institute of Washington, Washington D.C.
- 1972 Excavations at Altar de Sacrificios: Architecture, Settlement, Burials, and Caches. Papers of the Peabody Museum of Archaeology and Ethnology, Volume 64(2). Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge.

## Smith, H. A. and K. M. McField

Excavations at Lamanai South, Orange Walk District, Belize: Second Interim Report of Field Activities. Belmopan, Belize, Department of Archaeology.

#### Sullivan, L. A.

Dynamics of Regional Integration in Northwestern Belize. In *Ancient Maya Political Economies*, edited by M. A. Masson and D. A. Freidel, pp. 197-222. AltaMira Press, Walnut Creek, CA.

## Thompson, John E.

1939 Archaeological Investigations in the Southern Cayo District, British Honduras. Field Museum of Natural History Publication 301, Anthropological Series Volume XVII, No. 3. The Field Museum of Natural History, Chicago, IL.

#### Trik, A.S.

The Splendid Tomb of Temple 1 at Tikal, Guatemala. *Expedition* 6:2-18.

#### Willey, Gordon R.

1983 Settlement Patterns and Archaeology: Some Comments. In *Prehistoric Settlement Patterns: Essays in Honor of Gordon R. Willey*, edited by E.Z. Vogt and R.M. Leventhal, pp. 445-463. University of New Mexico Press and Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, MA.

# **FIGURES**

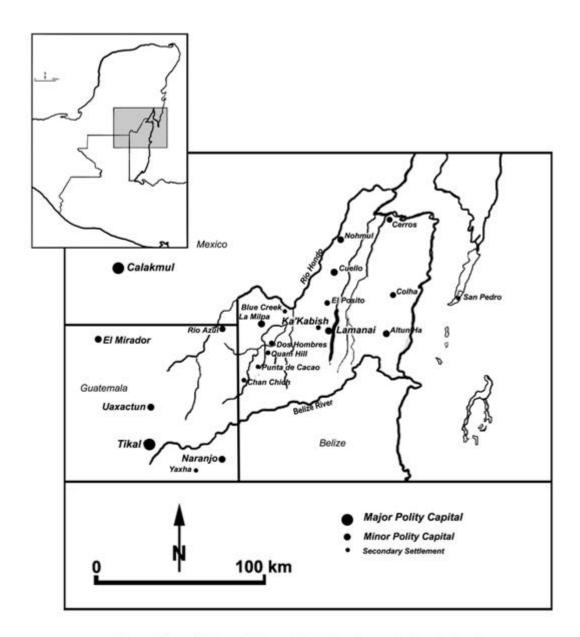


Figure 1. Map of Northern Belize and North-East Guatemala showing key sites

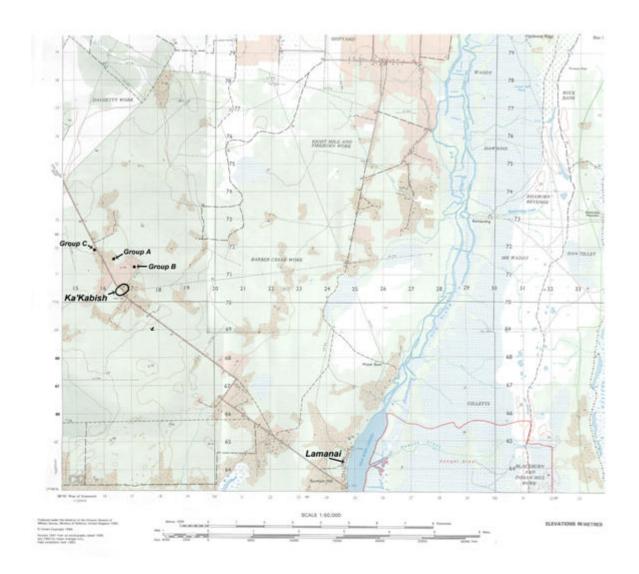


Figure 2. British Survey Map of area



Figure 3. View of Ka'Kabish from the top of the Templo Mayor, Lamanai



Figure 4. Satellite photo of Lamanai-Ka'Kabish corridor (adapted from Google Maps)



Figure 5. Looted tomb at Ka'Kabish



Figure 6. Red painted glyphs in looted tomb

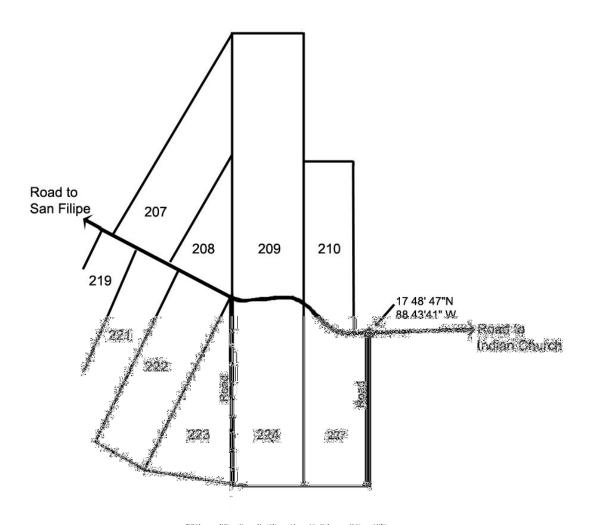


Figure 7. Spt: Filips Land Committee Map.

Bon Patri — 207, 208, 209 Den Magena - 210 Den Franco - 223, 324, 227 Don Torres - 722



Figure 8. Arial view of Ka'Kabish showing both sides of core area and modern road

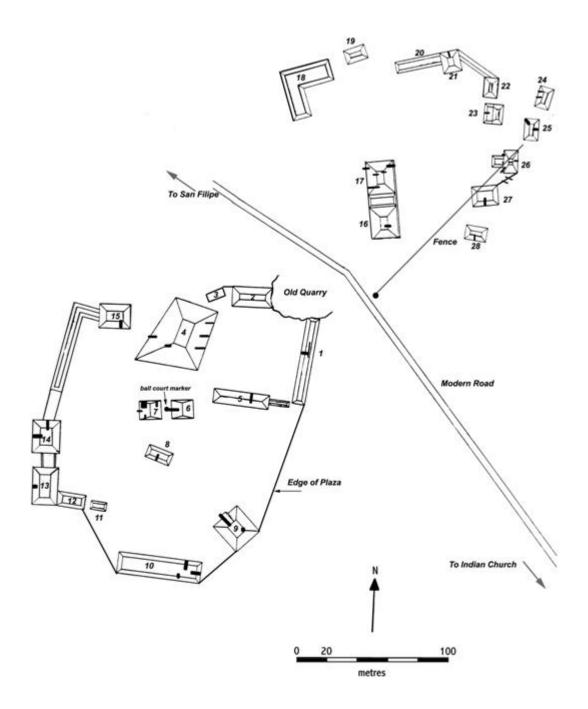


Figure 9. Map of Ka'Kabish site core from 2005 assessment (adapted from Guderjan 1996)



Figure 10. Arial photo of site looking south showing encroachment of fields



Figure 11. View of milpa field to the east of Structure 1





Figure 14. View of fields to north-west of KaKabish core



Figure 15. View of fields with exposed house-floors to south-east of Ka'Kabish core



Figure 16. Ceramics from building Group A



Figure 17. Buried structure in Group A



Figure 18. Arial view of Group C



Figure 19. Group C from the road