Chapter 1
Field Research of the 2003 Season

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The goals of the Xibun Archaeological Research Project (XARP) have always been temporally inclusive and interdisciplinary in subject matter. Focused on the Sibun River Valley of central Belize (Figure 1.1), XARP has sought to blend an archaeological investigation of Archaic through Colonial periods with an examination of environmental history. Although the Sibun Valley is readily accessible from the Western and Hummingbird highways—and is adjacent to extensive underground caverns that have long fascinated archaeologists and cavers—relatively little systematic research had been undertaken in this area prior to 1997. In some respects, the larger sites of the Belize River Valley—an area more populous today and likely also in the past—overshadowed the less spectacular archaeological remains of the Sibun River Valley. Yet, the presence of known pottery-strewn caves, the pair of stelae at the Samuel Oshon site that Scottie MacNeish had documented in the early 1980s, the string of small house mounds mapped by Elliot Abrams and now under the cacao orchard at the Tiger Sandy Bay Farm, and the 11-meter tall pyramid at a site called Hershey hinted that the riparian forests and orchard groves of the Sibun River Valley concealed a historical narrative well worth uncovering. The fact that the Classic-period population in the valley had not been as dense as in the Belize River Valley to the north or the Petén to the west also intimated that the Sibun region may not have suffered the environmental ravages of more densely populated portions of the lowlands and, in fact, may have provided a refugium for botanical and faunal species threatened elsewhere.

When the project was initiated in 1997, its official moniker became the Xibun Archaeological Research Project because archival maps identify the Sibun River as the Xibun or Xib’um, indicating that its current name is an Anglicized Mayan one. As the river is over 60 km in length, not all of it could be surveyed and some type of sampling strategy was in order. A series of five transects—numbered from the base of the Sibun Gorge downriver towards the sea—were chosen for intensive survey and excavation (Figure 1.2). During the initial 1997 field season, survey, excavation, and cave documentation concentrated on the middle section of the valley, otherwise known as Transect 3 (McAnany 1998). Field research in Transect 3 continued in the 1999 season with additional survey and limited excavation in the coastal-oriented Transect 5 (McAnany 2002). During the 2001 season, the scope of survey and excavation expanded to include Transect 1 (base of the Sibun Gorge), Transect 4 (Gracy Rock) with final field work in Transect 3 (McAnany and Thomas 2003). The current report presents the results of fieldwork conducted during the 2003 season that included survey and excavation in Transects 1, 2, 4, and 5. As a result of these four field seasons, mapped sites within the Sibun Valley total 40: 22 mapped settlement sites (of which 9 have been tested through excavation) and 18 cave sites (Thomas 2004).

In this report, the findings of the 2003 field season are divided into six parts. In the first four parts, reconnaissance, survey, and excavation efforts in Transects 5, 4, 2, and 1 are presented. The fifth section deals with artifact analyses and the final one presents the results of biological and geomorphological analyses. Below, the highlights and significance of each part of the report are discussed.
Figure 1.1. Location of the Sibun River drainage in the Caribbean watershed of central Belize and the eastern part of the Maya Lowlands. (Map prepared by Ben S. Thomas.)
Figure 1.2. Sibun Valley showing the location of the five survey transects as well as settlement sites and caves. (Map prepared by Ben S. Thomas.)
Further Investigations within Coastal-Oriented Transect 5

In 1995, Principal Investigator Patricia A. McAnany discussed the idea of a project in the Sibun Valley with Mr. Harriot Topsey, then Commissioner of Archaeology in Belize. Mr. Topsey had predicted that, unlike northern Belize, the archaeology of the Sibun Valley would contain very late sites from the Late through Post Classic periods. This prediction has proven prescient. After four seasons of excavation, it is clear that the majority of construction and occupation within the valley took place between the centuries of A.D. 500 and 1000, peaking during the Terminal Classic period (A.D. 830-950). This trend is particularly obvious within Transect 5 at the sites Augustine Obispo and Samuel Oshon where two circular shrine structures have been uncovered. Eleanor Harrison-Buck reports on the multi-phase round structure at Obispo (see Chapter 3) and elsewhere has described the circular shrine fronted with two stelae at the Oshon site (Harrison 2003). These structures represent the strongest indicators of interaction with the rising power of the northern capital at Chichén Itzá. The multiple construction and renovation phases of the Obispo circular structure, moreover, hint at the multi-generational nature of this structure and greater time depth than generally has been supposed.

Moving beyond ideological and probably commercial links with the North, the Sibun Valley was a place where Xibun Maya residents lived and died. The only mortuary interment excavated during the 2003 season came from an axial feature in a large residential mound at the Obispo site. In Chapter 4, Emily Hall describes the excavation of this Late-to-Terminal Classic platform and the dedicatory interment of a single individual. Back at the Oshon site, Harrison-Buck (Chapter 2) details the rich midden deposit—with material spanning the Late Classic through Colonial periods—of a riverside mound called Structure 424.

Colonial Period and Earlier at the Entrance to the Karst (Transect 4)

Documenting the footprint of Colonial imperialism in the valley was a goal of the project from the very beginning. Ethnohistorian Grant Jones (1989:201) had documented the presence, but not the location, of a Spanish-colonial visita in the valley that apparently had been part of a late 16th century encomienda based on cacao production. In reference to the latter part of the Colonial period, Daniel Finamore had located British Colonial maps in the Public Record Office in London that showed logging claims along the Sibun River. If Finamore was able to locate the actual sites of these claims, as he had done along the New River (Finamore 1994), then details of the material livelihood of British claim holders and African-American slaves could be understood in unique detail. The presence of a tributary near Gracy Rock called Runaway Creek and old Colonial reports of stockaded settlements of escaped African slaves near the Blue Mountains (Burdon 1931-35) further fueled the idea that Maroon sites might be found in the valley.

During the 2001 season, we had followed up on a hunch that the visita might have been located near the base of the Gorge and Finamore investigated that area for the remains of Colonial structures and artifacts (Finamore 2003). Although the search proved fruitless, an end-of-the-season test excavation at a newly mapped site in Transect 4—Cedar Bank—yielded a surprising number of Spanish-Colonial artifacts (see Morandi 2003). In Chapter 5, Morandi and Cesario detail the program of expanded excavations at Cedar Bank, particularly those on the top and at the base of the largest platform at the site, Structure 351. Based on the Spanish Colonial majolicas and olive jars found at the base of the structure and the cobble surfacing on the top of the mound, Morandi and Cesario suggest that this structure could have been the residence of a Xibun Maya leader of the early post-contact period.
Transect 4 is located at the down-river terminus of the karst and thus represents a key zone of transition between the Sibun estuary and the high banks flanked by karstic hills of the middle and upper reaches of the river (Figure 1.2). Given the singularity of this location, it is no wonder that Spanish Colonial material has been found in Transect 4, just as it also was chosen as the place to film the idyllic village in the Harrison Ford movie, *Mosquito Coast*. Unfortunately, set construction caused untold damage to the site and may have obliterated evidence of the *visita*. On the other hand, annual and extreme overbank events along this part of the river simply may have buried the chapel under meters of alluvium. While surveying for Colonial remains of wood-cutting sites in Transect 4, Finamore found that the rapid aggradation of alluvial deposits within the Sibun Valley stymied efforts to locate the ephemeral remains of wood-cutting claims shown on archival maps (Chapter 6). Regardless, documentation of British-colonial artifacts on top of what may have been a Maya Spanish-colonial period residence on Structure 351 suggests that we may have found the remains of at least one claimant—William Tucker. In Chapter 6, Finamore also details the negative results of a search for Maroon sites along Runaway Creek.

**First Exploration of Transect 2**

During the 2003 season, the last unexplored transect was investigated (Figure 1.2). Due to its relative inaccessibility in reference to survey control markers (which generally are located along highways), the survey of Transect 2 was conducted purely with a mapping-grade Sokkia GPS. Although parts of the transect require further examination, about 80% of the area was surveyed. In Chapter 7, Murata, Morandi, and Buck report on their methods and results. The primary result of the Transect 2 survey—discovery of a linear arrangement of low, residential platforms named Queso Blanco—is presented in Chapter 7 followed by a presentation of topographic mapping and test excavations performed at the newly discovered site in Chapter 8 (Murata, Morandi, Buck, and Cesario).

**Return to Hershey Site (Transect 1)**

The rich farmland of the “pocket” valley located at the base of the Sibun Gorge is visually stunning. The power and fertility of this landscape did not escape the notice of Classic Xibun Maya builders who constructed the largest monumental structures known in the Sibun Valley at a site called Hershey. The fact that Actun Chanona—the most impressive cave in the valley—is accessible from the base of the Gorge likely contributed to favorable perceptions of this location. Mapping and limited excavation at the Hershey site during the 2001 season had indicated that—like the downriver sites—Hershey was largely a Late Classic site with an uppermost Terminal Classic occupation. Excavations of the 2001 season sharpened considerably our understanding of the nature of the occupation. The care and labor lavished on the monumental constructions of the site is clearly indicated by the excavation of a passageway connecting the Main Plaza to the East Plaza (see Harrison-Buck and Cesario, Chapter 9). Finished with ashlar masonry, there is no evidence of packed-earthen or river-cobble construction as is observed at non-monumental structures. A Terminal Classic deposit on the uppermost floor of the passageway contained a scatter of human bone—both adults and children—a vivid reminder of the turbulence of the Terminal Classic period.

In Chapter 10, King provides confirmation that the two, short parallel platforms located immediately southeast of the main pyramid formed a playing alley for the ballgame. Small ballcourts, often called effigy ballcourts, are common throughout the Petén, the most famous can be found in the southern shadow of Temple 1 at Tikal. Excavation beneath the level of the playing alley revealed remnants of an earlier
structure, likely not a ballcourt but seemingly a residential structure. The geomorphological significance of the alluvium that buried the playing alley is discussed by Bullard in Chapter 23.

The second and smaller pyramid-plaza at the Hershey site is situated very close to the current channel of the Sibun River. Perhaps due to this proximity, the structures are located on top of a formidable basal platform. Morandi (Chapter 11) reports on the investigation of one of these structures—the pyramid of Structure 514. Exhibiting multiple construction phases, this excavation again reminds us that despite the absence of Preclassic and Early Classic construction phases, the Hershey site was not “built in a day.” One of the most significant artifacts retrieved from the exposure of the front face of Structure 514 is a sherd incised with what appears to be a portion of the Naranjo emblem glyph (see Chapter 11). The final excavation at the Hershey site took place at an isolated structure east of the main plaza. From its location, this structure would appear to have functioned as an eastern shrine. Harrison-Buck and Buck (Chapter 12) report on extra-mural excavations conducted in order to determine the geometric shape of the structure. Exposure of a portion of a linear retaining wall confirmed that the structure was quadrilateral rather than circular. Thus far, no circular structures are known to have existed above the mid-valley site of Pechtun Ha (see Harrison and Acone 2002).

Analysis of Artifacts from the 2003 Field Season

Although the field season focused on the retrieval of field data rather than its analysis, laboratory processing and preliminary analyses offer some insight to the nature of the artifact assemblages that formed the material livelihood of Xibun Maya residents. In Chapter 13, Murata summarizes trends in artifact frequencies as revealed by lab counts that were entered into Yaxche, the FileMaker database used to store excavation and lab data. López Varela (Chapter 14, Section 1) takes a long view of pottery collected over the past four seasons and, employing a type-variety analysis, describes which types are prevalent in the settlement sites and caves. Significantly, López Varela finds evidence of Preclassic and Early Classic pottery in the ritual deposits of the caves, but precious few sherds that predate the Late Classic Period from settlements. One of the most common types of the Late-to-Terminal Classic Period is a locally produced ware called Roaring Creek Red. Predominantly large bowls that were set upon a ring or pedestal base, these vessels (or fragments thereof) are common in deposits at Actun Chanona and Glenwood Cave. Lord (Chapter 14, Section 2) presents an analysis of the size and shape characteristics of Roaring Creek Red bowls from cave contexts.

While the soils of the Sibun Valley are favorable for orchard cultivation, they do not promote pottery preservation. Hard stone—obsidian, chert, granite, and basalt artifacts—fare much better. These material classes are the subject of Chapters 15, 16, and 17 that focus upon the chipped chert, obsidian, and groundstone artifacts respectively. Bateman and McIntosh (Chapter 15) examine patterns of chert utilization at sites in the lower part of the valley and find considerable evidence of production, particularly at the Obispo and Oshon sites, which are known to have been located near a source of chert. Obsidian, a long-distance import in the Sibun Valley, occurs primarily in blade form although some interesting deviations to this pattern are present (see Yates, Chapter 16). Raw material types used to fabricate the groundstone tools found at settlement sites of the lower Sibun Valley are sharply delimited in distribution. That is, tripodal metates made of vesicular basalt are found only in Transect 5 sites and often are associated with the terminal phase of a circular structure. Farther upriver, locally available granite appears to dominate the groundstone assemblages (see Thibodeau, Chapter 17).
The final material class under consideration in Part 5 is known as baked clay material (BCM). In Chapter 18, Demonaco Lopez examines this often amorphous material recovered from excavations and concludes that most of it was used architecturally, as part of wattle-and-daub (or bajareque-style) structures or as fired-clay floor material. Although often neglected in architectural analyses, BCM has the potential to reveal rich details of non-stone construction techniques.

**Biological and Geomorphological Analyses**

In the final section of this report, biological and geomorphological analyses are presented. First, Storey (Chapter 19) discusses the results of an osteological and paleopathological study of the skeletal remains of Burials 1 and 2 at Pakal Na. Excavated during the 1999 and 2001 field seasons (see Harrison 2002; Harrison and Acone 2003), these Late-to-Terminal Classic interments contain a complex array of burial accouterments and secondary interments, most of which appear to have accompanied the focal interment of a large, muscular, older male.

Mollusca excavated during the 2003 season form the subject of study in Chapter 20 in which Belzowski notes that the *Strombus* and *Melongena* spp. excavated near the walls of the circular structure at the Obispo site likely formed part of architectural adornment. Plant remains retrieved from excavations by water flotation are the subject of Chapter 21. Tripplett reports on the protocols used for collecting samples and processing the sediment through the sieves. Microscopic plant remains are addressed in Chapter 22. Palynologist John Jones reviews the pollen cores and pollen washes retrieved as part of the Xibun Archaeological Research Project. Preliminary data indicate that the oxbows in the middle part of the river system tend to postdate the Classic Period, a finding beneficial to understanding site location but detrimental to retrieving paleo-environmental data from the peak period of valley occupation. Basal portions of cores—not yet analyzed—may extend the sequence back to the first millennium A.D. With current core data, Jones sees a pattern of forest growth that is dramatically different from what has been documented in northern Belize and suggests that it might be the remnants of a pattern of orchard agriculture, possibly in support of cacao cultivation.

Thomas F. Bullard contributes the final Chapter 23, which is an examination of the fluvial geomorphology of the upper Sibun drainage. His study is spurred by the fact that Hershey—the most monumental site in the valley—is situated on a terrace that currently floods during extreme overbank events. In an attempt to understand changes in flooding regimes and discharge rates, he pays particular attention to the formation of boulder bars within the stream channel. Such features form quickly when discharge rates are high and can locally raise base level and promote flooding. We can only assume that this type of devastating flood was less common during the Late-to-Terminal Classic periods when the site was built and occupied. The climatological causes of lower discharge rates, however, are a matter for another study.

**The Work Ahead**

Four seasons of fieldwork in the Sibun Valley have yielded a tremendous wealth of information from settlements, caves, and corollary geological and palynological studies. Although the Late-to-Terminal Classic might have been the most populous period in the valley, we now have evidence of use of the valley as early as the Archaic period (see Finamore 2003 on the discovery of a Lowe projectile point). If
additional artifacts from this early time period could be found to complement this surface find from Transect 1, a critical period in the transition from gathering and collecting plant foods to farming might be better understood. Although Preclassic and Early Classic pottery types have been documented in the caves adjacent to the Sibun Valley (and not from the settlements), we have yet to conduct petrographic and INAA analysis of this pottery that would facilitate our understanding of its provenance and perhaps the home base of those who made early pilgrimages to the caverns of the Sibun-Manatee and Hummingbird Karst.

The five transects that have been surveyed and tested via excavation represent only a portion of the habitable valley. Additional sites, located between transects, are known to exist. For instance, land at the confluence of Caves Branch and the Sibun River contains a site called Xaiha by landowner Victor Quan. In the course of our excavations, we uncovered the remains of three circular structures but more could be present in the valley. As the “smoking gun” of northern interaction, these structures provide critical information about the political dynamics of the Terminal Classic period. The Postclassic and Colonial Periods are still emerging in terms of focus. Additional survey and excavation are needed to clarify the extent of Spanish colonial presence in the valley and to match archival maps of British wood-cutting claims with ephemeral surface distributions of late colonial artifacts.

Most critically, the environmental and geomorphological landscape of this tremendous cultural sequence has been partly but not fully reconstructed. More palynological studies are needed from both the protected deposits of caves and oxbows that may reach farther back in antiquity. The role of the Sibun Valley region in cacao production and as a refugium for plant and animal species that may otherwise have gone extinct during the Classic period has yet to be solidly documented. Geomorphologically, the terrace sequence constructed for the upper valley needs to be extended throughout the valley so that the long-term fluvial patterns of the most volatile river in Belize may be fully understood. In short, the knowledge produced by the Xibun Archaeological Research Project has been substantial and many initial research questions have been answered. As a consequence of the research process, however, more queries have been posed and likely will engender another cycle of investigation.

References Cited

Burdon, Sir John Alder

Finamore, Daniel

Harrison, Eleanor

Harrison, Eleanor

Harrison, Eleanor, and Kevin Acone


Jones, Grant D.

McAnany, Patricia A., editor

McAnany, Patricia A., editor

McAnany, Patricia A. and Ben S. Thomas, editors
Morandi, Steven

Thomas, Ben S.