
17 **ROCKSHELTER EXCAVATIONS IN THE CAVES BRANCH RIVER VALLEY**

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Research by the Belize Valley Archaeological Reconnaissance project during the summers of 2005 and 2006 focused on the excavation of the Caves Branch Rockshelter, as well as the initial surveying and test pitting of other sites in the surrounding river valley. The data from the Caves Branch Rockshelter suggest that a small farming community used it as a cemetery sometime during the Protoclassic period, after which other local groups occasionally visited it. The skeletal population from the cemetery includes both sexes and all age groups, including a high ratio of infants. These demographic proportions are typical of pre-industrial societies, though are rarely found at Maya sites because of cultural bias in mortuary patterning at complex urban centers. The age and sex ratios of the skeletal population, as well as the lack of signs of social complexity in this early, rural community, suggest that this context may contain a relatively complete population that could serve as a skeletal reference population, thus aiding in future bioarchaeological studies of the ancient Maya.

Introduction

The Caves Branch River Valley is located just east of Belmopan along the Hummingbird Highway near the modern village of Armenia and the ancient Maya site of Deep Valley. The karst mountains lining the valley are riddled with caves evidencing human activity, and these sites have been a focus of investigations by the Belize Valley Archaeological Reconnaissance project during the 2005 and 2006 field seasons. So far, the most extensive excavations have been conducted at Caves Branch Rockshelter (CBR), first investigated by Juan Luis Bonor in 1994 and 1995 (Bonor 1995a and 1995b, Bonor et al 1999). During 2006, the Caves Branch project was expanded by systematically identifying other rockshelters in the area showing evidence of ancient use. Test pits were placed in one of these, Deep Valley Rockshelter 1 (DVR-1), to help determine the dates and nature of its use.

The project was initiated with two basic research agendas. First, we are focusing on these sites in an effort to further identify variation in ancient cave use, which was a central theme of the Western Belize

Regional Cave Project (Awe 1998: 1). The WBRCP specifically investigated light, penumbral and dark zone contexts at three sites, Actun Nak Beh, Actun Uayazba Kab, and Actun Halal to determine if the ancient Maya used specific areas differentially. With a few notable exceptions, rockshelters largely have been overlooked in Maya cave studies despite the ritual significance these sites had for ancient, as well as for modern, Maya. The preliminary data from Caves Branch clearly show that the use of rockshelters by the Maya changed over time. Furthermore, the material culture found in rockshelters is easily distinguishable from that found in “dark zone caves,” suggesting that the geomorphological differences were important to the ancient Maya in defining the ritual functions of sites. The basic research goals related to caves are (1) to further characterize the ritual use of rockshelters, noting changes in their use over time, and (2) to explore other rockshelters in the area to determine inter-site variability.

A second important research focus of the Caves Branch project is bio-archaeology. The density of burials found by Bonor

during his preliminary excavations led him to estimate that the site held approximately 150 individuals, which appears now to be an underestimate (Bonor et al 1999). Glassman's analysis, following Bonor's original excavations, identified individuals of both sexes and a range of age groups, including numerous infants (Glassman and Bonor 2005). Based on the sheer numbers of individuals, on the age/sex profile of the initial skeletal population, and on Bonor's hypothesis that this was the funerary site of a small rural agricultural community, we decided to reopen excavations in the hopes that the skeletons were representative of an entire community. If this were the case, then this skeletal population would be relatively unique in the Maya region. Without the complex rules governing burials at ceremonial centers, it's possible that this skeletal population may be demographically accurate and thus could be used as a biological reference population to create standards for analysis and comparison with other sites, much the way data from the colonial site of Tipu is used currently (Wrobel et al. 2002, Danforth et al. *in press*).

To determine whether the skeletal series is such an appropriate reference sample, the bio-archaeological research goals are focused on (1) determining whether the mortuary use of the site was limited in time and (2) seeking evidence for the presence of mortuary differentiation within this community, which might indicate that some individuals were buried elsewhere

Caves Branch Rockshelter

The Caves Branch Rockshelter is approximately 35 meters long and 15 meters high, with a maximum depth of 10 meters (Figure 1). Nearby are other cave sites, a Late Classic plazuela group and the bulldozed remains of a number of housemounds, and a fresh water source.

Bonor and colleagues (1999) hypothesized that ritual activity at the site was limited to a single function, that of a domestic cemetery. To test this hypothesis, we looked for the presence of unique interments, such as secondary or sacrificial burials, or of other specialized deposits, which would suggest that the site had multiple ritual roles.

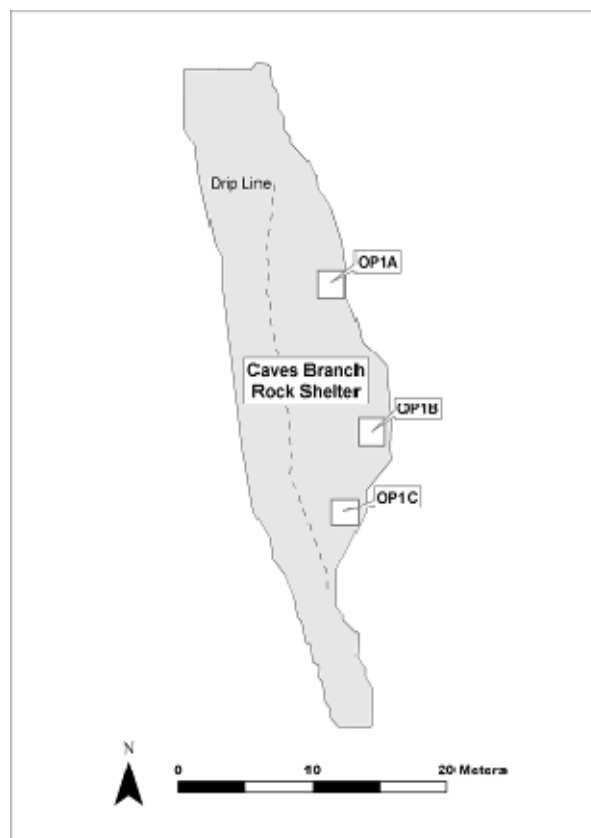


Figure 1. Map of Caves Branch Rockshelter with excavation operations.

Interpretation of burial features is often difficult since the site was constantly churned up by new burials, in the process disturbing older one. In many cases, this activity, as well as other taphonomic processes, usually will result in puzzling contexts. However, the bones uncovered thus far do not exhibit cut marks or any other indication of ritual postmortem treatment. In addition, none of the disarticulated remains found in the Caves Branch Rockshelter appear to be formal

bundled remains of secondary burials. Instead, much in the same way that the bones of individuals placed in tombs were often pushed to the side to make way for a new body, the bones of individuals disturbed by a newly dug grave were included in the grave fill. Often, some of the larger or more distinctive elements were piled on or near the new interment and excavation of nearby contexts generally revealed the undisturbed portion of the body left intact.

Dates for the burials were derived from several vessels, which were clearly interred as grave goods (Figures 2 and 3). The styles found at CBR are utilitarian, and are best described by Reents (1980: 168-186, figure 21a-24d) and Gifford (1976). The vessels found in graves all date to the Hermitage phase, and include types such as Succotz Striated and Cocay Applied, which are found throughout caves in Western Belize, including Petroglyph, St. Herman's, Actun Balam, and others in the Caves Branch, Roaring Creek, and Sibun River Valleys (Graham et al. 1980). None of these vessels have kill holes, which suggest an important distinguishing characteristic between "grave goods" and of "offerings" in the form of ceramic vessels often placed in caves. Thus far, no artifacts have been found within the vessels. Most show charring on the bottom, suggesting that they were cooking vessels, and may have held food when they were buried.

Potsherds in the rockshelter not directly associated with burials show a much wider variety of forms spanning a longer time period, ranging from the Middle Preclassic through the Terminal Classic, including Floral Park, Hermitage, Spanish Lookout and New Town Complexes. Again, most seem to come from very functional cooking vessels, though there are some other decorative examples as well. This range of dates is typical of other ceramic assemblages

found in other rockshelters and caves in the area.



Figure 2. Protoclassic vessel included as grave good in Caves Branch Rockshelter.



Figure 3. Detail of Protoclassic vessel included as grave good in Caves Branch Rockshelter

In general, the artifacts found in the rockshelter are consistent with those expected from a small rural farming community, including net weights, local fauna, chert flakes, and jute shell. An arrow point found near the surface suggests hunters stopped by the rockshelter in the Terminal Classic or Postclassic period (Figure 4). While a few exotic or imported items were found at the site, including several small pieces of jadeite, obsidian, and carved marine shell, these are items that are consistently present in low levels in most settlement contexts. In addition, these

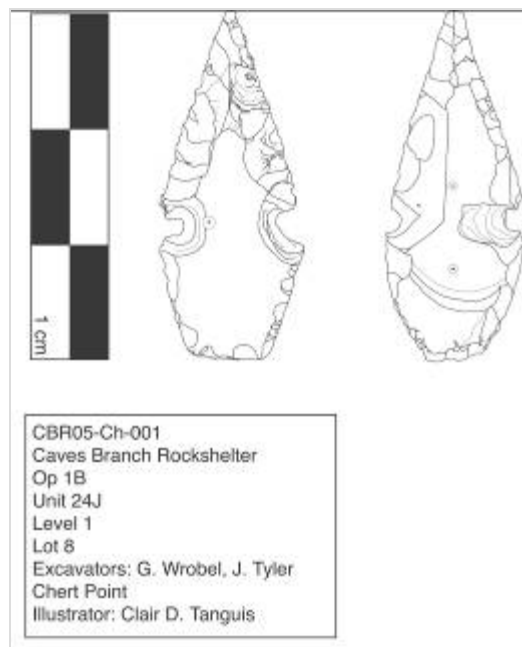


Figure 4. Arrow point surface collected from Caves Branch Rockshelter

exotic items were found in the general matrix rather than with burials, perhaps suggesting a later date than the burials.

The only possible indicator of status hierarchies in the population was an elaborately carved bone (Figure 5) found near the head of a small child. This individual was discovered in the south wall of unit 13G and was represented solely by cranial elements. The skull was either placed face down or became situated in that manner as a result of taphonomic processes following interment. While it has been stated that the population interred within the Caves Branch Rockshelter appears to represent a small, agrarian, non-elite community (Glassman and Bonor 2005, Wrobel and Tyler 2006), the presence of this type of artifact raises questions as to this assumption. It has been suggested that this type of woven mat motif is, in many cases, a symbol intimately tied with royalty and council houses. Citing the *Dictionario San Francisco* (Michelon 1976), Grube et al.

(1995) illustrates that these mat houses were referred to as a *popol nah*. Friedel et al. (1993) observed this mat pattern on the walls of a building at the site of Uaxactun. Their interpretation of this motif suggests that it represents, “a community council house” and “a place where the king interacted with his people- especially through the performance and teaching of sacred dance” (Friedel et al. 1993:143-143).

Whether or not this specific artifact represents a direct link to a royal council house is, at this point, debatable given the utilitarian nature of all the other artifacts recovered thus far, and the lack of differentiation in the burials, which might suggest the presence of a social hierarchy.



Figure 5. Carved faunal bone showing weaved mat motif

Finally, a Late Archaic Lowe point was discovered in association with the lower torso of a probable female adult, which was placed in a tightly flexed position (Figure 6). It was evident that this burial had been disturbed, probably as a result of numerous burials interred directly above this individual. The Lowe point was located approximately 9cm. from the knee area of the individual and was oriented at 39 degrees NNE with the point facing towards

the rockshelter. As discussed by Lohse et al. (2006), radiocarbon dates for this type of Archaic point have been based on three samples taken from northern Belize, two of which have been described by the author as “loose associations” (p. 217), a context that is all too common with regard to these types of discoveries. However, these samples have provided a date between 2500-1900 B.C. for Lowe points, a range that can be corroborated by examples Pohl et al. (1996) discovered at Pulltrouser Swamp. This date raises a number of interesting points concerning this specific interment at the rockshelter. While its close association to the Protoclassic burials would suggest the individual is Maya, it is from the deepest cultural levels of the rockshelter. If the burial does date to the archaic period, then it would represent the oldest dated human remains in Belize, and among the oldest in Mesoamerica. If, however, the burial is contemporaneous with the Protoclassic interments, then this represents a case of curation of discarded objects, perhaps for use as divination/ divining tools or personal sacra, as discussed by Brown (2000) for both ancient and modern Maya ritual.

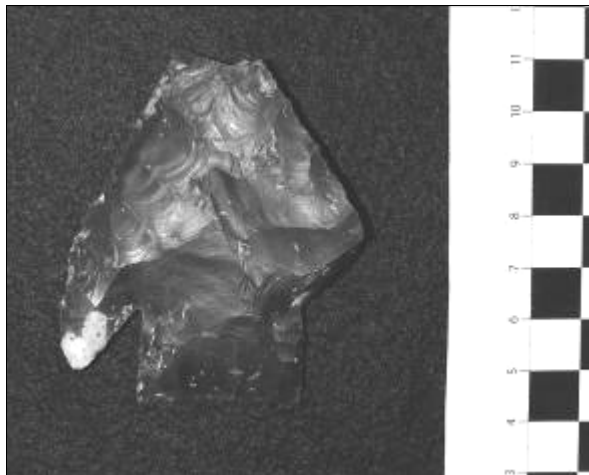


Figure 6. Archaic Lowe point found with a burial in the Caves Branch Rockshelter

Deep Valley 1 Rockshelter

During the 2006 field season, the Caves Branch project initiated excavations at the site of Deep Valley Rockshelter 1 (DVR-1) in an attempt to begin to characterize the diversity of material culture of rockshelter sites in the region (Figure 7). This site was targeted for investigation based on its similarity to CBR. Both rockshelters are approximately the same size—height, depth, length, with a flat floor, and both have small caves within them. Like at CBR, the surface of DVR-1 was littered with numerous ceramic sherds, faunal remains, two pieces of human bone, and jute shells. However, the initial excavations have clearly shown that the deposits at DVR-1 are very distinct from those at Caves Branch. The matrix at DVR-1 is incredibly dense with jute snails—a 1x1 test pit yielded over 20,000 shells in the first 60 cm. These snails were a source of food for the ancient Maya, are often associated with ritual activity in caves, and even today are abundant in the Caves Branch River, which flows next to DVR-1. Interestingly, the DVR-1 jute are generally very small, and with the exception of the larger shells, the majority does not have their ends spire-lopped, which is the typical way to extract the meat when eating them (Halperin et al 2003). At CBR, the jute was generally larger and less plentiful. One explanation for these differences may be related to the riverine source of the jute shell, which may have been different for the two sites. Another possibility is that the jute deposits were temporally distinct at the two sites. A recent study by Cook and Salter-Pedersen (2006) of pomacea shells at Chau Hiix found that they were smaller in the Early Classic compared to the Terminal Classic, which they tentatively interpret as over-harvesting when the population of the site was larger. The dense deposits of jute shell at DVR-1 are similar to that of the

rockshelters in the Maya mountains, where they were used as grave fill (Prufer 2002). Thus far, no burials have been found at DVR-1, and the relative paucity of early ceramics there suggests that it did not have the importance of CBR to the Protoclassic population.

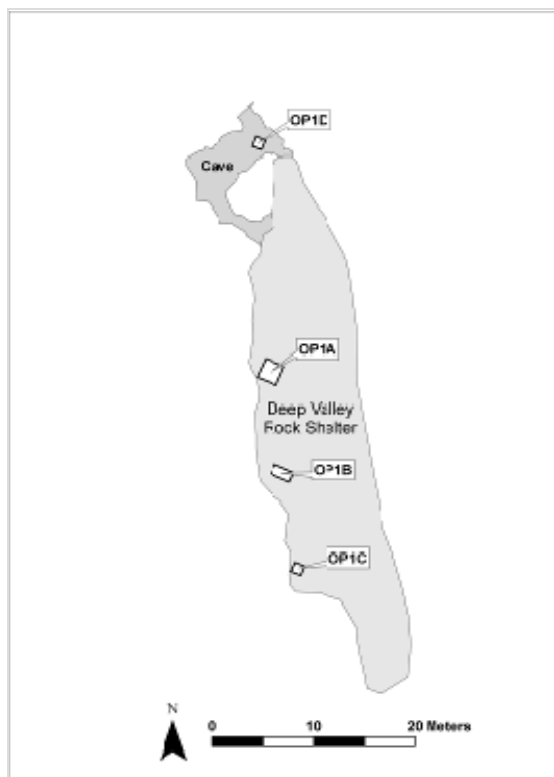


Figure 7. Map of Deep Valley Rockshelter 1 with excavation operations

Skeletal Remains from Caves Branch Rockshelter

Skeletal remains excavated from the Caves Branch Rockshelter in the last two seasons have undergone preliminary analysis. Bonor's excavations identified a total of 32 primary burials, and in the 12 weeks of excavations conducted during the 2005 and 2006 seasons, 55 more. As discussed above, part of the Caves Branch project's research agenda focuses on defining the demographic character of the skeletal population in these rockshelters. The age distribution of the CBR skeletal series (Table 1) shows a mortality pattern

that heavily favors infants and children (30.4%), when compared to other Classic Maya sites. Such a high infant mortality is very typical of pre-industrial societies. These statistics are important to physical anthropologists in demonstrating differences in health between groups separated by time, space, or social class. Unfortunately for bio-anthropologists working in the Maya region, cemetery samples like this are rarely identified. One reason for this is that archaeologists often tend to target architecture and bio-anthropologists in this region do not generally have their own archaeological research designs. There are few sites with large Maya skeletal collections in general, and for none of these can we be certain that the sex and age distributions are representative of their source living populations, since their composition can be affected by cultural and taphonomic factors. In other words, our "samples" are not samples, since they are not a random group of individuals selected from the population, and thus are not good models for ancient Maya populations. Instead, the skeletons represent those individuals that archaeologists are most likely to find and collect. So far, Caves Branch Rockshelter has produced a very promising collection. The population shows biological stresses, such as linear enamel hypoplasias and porotic hyperostosis, typical of Maya populations. Again, though, the most exciting aspect is the possibility of actually being able to quantify these rates within the population.

Conclusions

The following conclusion summarizes the current data from CBR and DVR-1 as they relate to the general hypotheses of the Caves Branch project outlined above.

1. *To further characterize the ritual use of rockshelters, noting changes in their function over time.*

	B-2	2-6	6-18	30-40	40+	Adult	Indet.	Total	%
Male	N/A	N/A	---	1	3	1	---	5	10.2
Female	N/A	N/A	---	2	4	5	---	11	22.4
Subadult	7	7	1	---	---	---	---	15	30.6
Indeterminate	---	---	---	1	3	14	---	18	36.7
Total	7	7	1	4	10	20	0	49	100
Percent	14.2	14.2	2.0	8.1	20.4	40.8	0	100	

Table 1. Sex and age distribution of Caves Branch skeletal population through 2005 fieldseason.

The mortuary component of Caves Branch Rockshelter is unusual for the ancient Maya, who in general are not thought to have used cemeteries until the Colonial era, instead burying their dead within residential structures and “ceremonial locations” (Welsh 1988, Whittington 1991: 172). While human remains are often found in caves, mortuary use of most caves, like ceremonial architecture, generally is limited to a few individuals based on their special social roles in life or their sacrificial roles in cave rituals (Minjares 2003, Gibbs 2000, Brady 1997, Brady et al. 1997). Despite these distinctions, however, the Caves Branch Rockshelter also is similar to the more traditional caves thus far documented by the WBRCP, since it is a ritual site incorporated into a natural rock feature located peripherally to a settlement, rather than a wholly constructed feature located within a settlement - thus there are similarities in patterns of use. So, the changes in the use of rockshelters over time parallel those noted in “dark zone” caves (See Moyes and Prufer, this volume). The diagnostic vessels associated with graves at CBR all date to a similar time frame, likely sometime between 100 and 400 AD. However, the site was obviously visited long after the mortuary use of the site ceased. Like other cave sites, we find smashed pottery well into the Late Classic and even the Terminal Classic.

2. To explore other rockshelters in the area to determine inter-site variability.

In addition to CBR, several other rockshelters have been located in the Caves Branch River Valley. The excavations at Deep Valley Rockshelter 1 showed that activities associated with rockshelters might have been as variable as in caves. Research planned for the 2007 field season will continue to document variability in rockshelter use by placing test pits in a series of other rockshelters to try to determine whether any factors such as time period, location, or morphology is related to material culture indicating particular uses of the sites.

3. To determine if the mortuary use of Caves Branch Rockshelter was limited in time.

Thus far, the data seem to indicate that the CBR skeletons were relatively contemporaneous. And all of the diagnostic vessels found in association with burials date to the Protoclassic period. Ceramic sherds from other time periods spanning the Middle Preclassic through the Terminal Classic are not associated with burials, but instead appear to have been broken and scattered on the surface. Some of these were found in deeper levels because of bioturbation and looting activity. The overlapping nature of the burials suggests that the site was used for burial over the

space of several generations. Thus, “relatively contemporaneous,” this could still mean that the “population” spanned several hundred years, which would not be ideal for a reference population.

4. To seek evidence for the presence of mortuary differentiation within this community, which would indicate that some individuals were buried elsewhere.

The burials found in the last two seasons have revealed much more variation than reported by Bonor (1995a, 1995b, 1999). However, these variations are basically in the form of body position and orientation, rather than in elaboration. The possible exception to this is the individual buried with the incised bone, carved with a woven mat motif. Again, though, based on the lack of other evidence of vertical social tiers, we agree with Bonor’s assessment of the skeletal population as being a simple agricultural community. While it’s still certainly possible that some individuals may have been distinguished in death by their social role within the community, we see no evidence for it within the rockshelter. The nearby plazuela group is large enough to suggest an elite presence in this valley, but an initial probe into the eastern structure in 2005 revealed only Late Classic ceramics, suggesting that the mortuary use of the rockshelter predates at least this piece of evidence for social verticality.

Research at the Cave’s Branch Rockshelter represents a dynamic research agenda. Future research initiatives will provide continued focus on the skeletal remains while embracing newfound research themes such as the potential archaic presence at the site and the changing role of the social and political organization in the Protoclassic/Early Classic transition. Information gained through the continued investigation of the CBR and surrounding areas will provide a wealth of information

on topics that will benefit all those engaged in Maya research.

Acknowledgements: We would like to thank the following individuals and institutions for their support and assistance: Dr. Jaime Awe, Dr. John Morris, Rafael Guerra, Sherilyne Jones, and the rest of the Belize Institute of Archaeology; Christophe Helmke, Gwendolen Raley, Cameron Griffith, Dr. Lisa LeCount, Myka Schwanke, Jill Jordan, and Danielle Tanguis; Ian Anderson and all the staff at the Caves Branch Adventure Lodge. The University of Mississippi Office of Research and Sponsored Programs, and the UM Department of Sociology and Anthropology.

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