

C h a p t e r T e n

The Sweatbath in the Cave

by Holley Moyes

A Modified Passage in
Chechem Ha Cave, Belize

In Mesoamerica, there is a cognitive link between sweatbaths and caves that has been noted by scholars (Child 2002; Gossen 1999: 16; Groark 1997: 23; Heyden 1976: 19–20; Houston 1996: 142; Vogt and Stuart 2005; Webster 2001). The reasons that both spaces are similarly conceptualized may be that they are dark, enclosed, and womb-like. Using ethnohistoric, ethnographic, and archaeological examples, this chapter demonstrates that in the Mesoamerican mind both caves and sweatbaths are associated with generation, regeneration, fertility, and birth. Evidence from Chechem Ha Cave, an ancient Maya ritual cave site located in western Belize near the Guatemala border, suggests that this association dates to the Late Preclassic period (120 B.C.–A.D. 250) or possibly earlier. At Chechem Ha, morphological modifications made to a crawl space in the dark zone of the cave resemble the architectural features of ancient Maya sweatbaths from surface sites and fit descriptions of modern sweatbaths from ethnographic reports. This is the first recognized instance of a ritual sweatbath deep within a cave.

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This study begins with a brief review of ethnographic and ethnohistoric examples of the function and meaning of sweatbaths in Mesoamerica. To create expectations of the morphology and artifact assemblage of a sweatbath, examples from the archaeological record are presented. Finally, the sweatbath feature located inside Chechem Ha Cave and its contents are described. The fact that the sweatbath is located within an ancient Maya ritual cave suggests that it was designed for ritual use, which is not surprising considering that ethnographically sweatbaths are often used for ceremonial purposes. I argue that it is likely that rituals performed within the sweatbath in the cave related to earth deities.

THE ETHNOGRAPHY OF SWEATBATHING IN MESOAMERICA

Sweatbathing is an ancient indigenous custom once present throughout most of Central America (Driver and Massey 1957: 314, figure 107; Groark 1997: 6; Lopatin 1960: 977–979). The ethnohistorian Francisco Clavijero (1945: 349) noted that sweatbaths were used for hygienic, therapeutic, and ritual purposes, traditions that have continued into the present. Sweatbathing is practiced today primarily among Maya people located in the highland regions of Chiapas and Guatemala (Cresson 1938: 101–102; Groark 1997: 8; Houston 1996: 138; Tedlock 1987: 1073–1074). Barbara Tedlock (1987: 1074) noted that in Momostenango, Guatemala, sweatbaths are used for hygiene, massage, ritual purification, and birthing. Gary Gossen (1999: 15–17) noted the similarity between sweatbaths and caves and provided ethnographic data from his own experiences in a Chamula sweatbath. Gossen described the sweatbath as “a dark, low rectangular cave slightly longer than the human body,” that could hold two or three people and had just enough headroom to sit up. Near the door was a stone-lined hearth. Once the space was heated, the fire was extinguished and the door closed, water was poured on the rocks to create steam, and participants lie down and beat themselves with leafy branches. Sometimes they were used for routine bathing, but more typically for ritual or therapeutic purposes such as postpartum or postmenstrual bathing. They could also be used for ritual cleansing of patients in preparation for curing ceremonies or for ceremonial purification of those about to assume ritual responsibilities.

The use of sweatbaths in birthing practices is common throughout Mesoamerica. In Central Mexico ethnohistorians described the use of sweatbaths and their relationship to childbirth and fertility (Clavijero 1945: 349; Moedano 1977: 11). Both Durán (1994: 41) and Clavijero (1804: 250) reported that among the Aztecs, women sat in sweatbaths for five or six days following delivery. According to Sahagún, steam bathing was associated with particular deities and rituals and was under the auspices of the creatrix goddesses Toci (Teteoinnan) or Yoalticiti, but sometimes related to another female goddess, Tlazolteotl (the filth-eater) (Groark 1997: 17; Miller and Taube 1993: 160). Toci was associated with female fertility, pregnancy, and childbirth, and was worshipped by midwives.

In the Maya area the use of sweatbaths by women during and after childbirth

has been noted by a number of ethnographers (Groark 1997: 50–54; Laughlin 1969: 187; Tax and Hinshaw 1969: 81; Tedlock 1987: 1074; Villa Rojas 1969a: 207, 1969b: 242; Wagley 1969: 66). In his detailed study, Kevin Groark (1997: 50–54) reports that in the central highlands village of Santo Tomás Oxchuc, Chiapas, both mother and child are given postpartum steam baths to prevent illness due to cold. Many Oxchuqueros believe that the ancestors created the steam bath specifically to protect women during high-risk periods such as those associated with childbirth. Groark suggests that physiological changes in temperature may have initiated the practice of sweatbathing since women may experience chills and uncontrollable shivering soon after delivery.

Houston (1996) suggested that among the ancient Maya the connection between birth and sweatbaths dates back to the Classic period. He argued that the small inner structures located in the interior of the temples of the Palenque Cross Group were symbolic sweatbaths that represented the birthplace or origin of the gods. His interpretation is based on the inscriptions associated with the temples that refer to the buildings as sweatbaths related to the births of the principal deities.

THE ASSOCIATIONS OF CAVES WITH SWEATBATHS

Direct associations between sweatbaths and caves are found in the ethnohistoric and ethnographic literature and in the archaeological record. For instance, in the Codex Nuttall, figure 16a illustrates a temple within a mountain that is entered through a cave portal (Nuttall 1903). Doris Heyden (1981: 19) interpreted the figure as a steam bath inside of a cave.

Gary Gossen (1999: 15–17) specifically noted the similarity between sweatbaths and caves in the highland Chiapas town of Chamula. One of the most well-known ethnographic examples of the association occurs at the community's Festival of Games (Bricker 1973: 114). As part of this yearly renewal festival, villagers visit a small cave with water emerging from it. The feature is referred to as a "sweatbath" because of its morphology, which is long and narrow like a steam bath. Those who participate in the festival deposit three stones or potsherds at the entrance as tribute to earth deities, for as Bricker notes, "if they do not offer three stones to the cave, they will die."

Mesoamerican caves are well-known mythological places of origin from which humans were thought to emerge (Brady 1989: 40; Heyden 1975; LaFarge 1947: 127–128; Neilson and Brady n.d.; Taube 1986; Thompson 1970: 314, 316; 1975: xxxiii; Vogt 1969: 375). This resonates with common beliefs about sweatbaths that relate to female fertility. Sahagún (1969: VI, 118, 151) reported that among the Aztecs, women referred to their vaginas as "caves" indicating that children were created in human caves. When a woman was about to give birth, the steam bath or *temazcalli* to which she was taken was referred to as *xochicalli* or "house of flowers," since flowers were regarded as a sexual symbol related to the uterus. According to Sahagún, because it was a place of birth, the sweatbath represented an artificial cave.

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Working among the Mixe, Ralph Beals (1939: 431, 1945: 86) reported a mountain shrine used by barren women to petition for children. The shrine was located in a cavity in a natural rock that morphologically resembled a sweatbath in miniature. A pile of rocks was used to resemble the fire chamber. Fires had been built in the chamber and branches and shrubbery were laid on top. Cornhusks were located inside of the structure and evidence of turkey sacrifice was present around the entrance.

SEXUAL CONNOTATIONS

Both caves and sweatbaths have sexual connotations. James Brady (1988) has called attention to the eroticism associated with ancient caves throughout Mesoamerica. This is explicitly expressed in cave art such as the painting of the copulating couple found in the ancient Maya cave site of Naj Tunich (Brady 1989: 47, figure 3.2; Stone 1995: 100, plate 12) or in the painting of a jaguar copulating with a human in the Olmec cave of Oxtotitlan (Grove 1973: 133). Expressions of sexuality are also stated in modern mythology concerning caves. The Tzotzil *H'ik'al* or Blackman (similar to the Central Mexican *pingo*) is a hypersexual being with a foot-long penis that resides in a cave. If impregnated by the Blackman, women die from over-menstruation or multiple births of offspring that come to term in three days (Blaffer 1972: 20, 117). Among the Tzotzil Maya, the word for cave, *c'en*, is a humorous metaphor for the vagina (Bricker 1973: 65–66, 150–151; Laughlin 1975: 132).

Similarly, sweatbaths are also associated with sexuality and have served as discreet locations for illicit sex among the Mam (Wagley 1949: 35), the Quiché (Carmack 1979: 361–367), the Mixtec (Parsons 1936: note 40), the Tzeltal, and the Tzotzil (Groark 1996: 56, footnote 1). In a personal communication to Kevin Groark (1997: 16), J. Rus reported that “the Chamula Tzotzil tell a number of hilarious stories about old male curers (*j'ilol*) who prescribe the steambath for their nubile young patients, then take advantage of them as they swoon in the heat. It is even said that you can tell when a woman has lost her attractiveness, because the *j'ilol* no longer insists on accompanying her to the steambath.”

Although sweatbaths are intimately associated with the female aspect in central Mexico, J. Eric Thompson (1970: 246) has argued that the earth goddess/patroness of childbirth cult was temporally sensitive. He believed that it was widespread in the Preclassic period but among the later Maya, gave way to cults of the Young Maize God as well as the God *Itzamna* who was deified as the earth reptile. Groark (1997: 20–23) reported that in the Maya Highlands, the steambath may fall under the auspices of either a male or female deity. The Tzeltal and Tzotzil consider the steambath to the “owned” by either the Earth Lord described as a male agricultural deity, or by the Holy Earth, a female agricultural/lunar deity. In Chamula, the Sun-Christ deity, possessing curative powers, is said to manifest as fire in the sweatbath. Two nearby caves are referred to as “steam bath cave” or *pus ch'en* and *pus ch'entik*. One is thought to have been used by the people of the previous creation

and the other is thought to be a representation of an underworld steam bath located in the belly of a turtle. To burn their sins away in the heat, souls must pass through the steam bath/cave after death.

As Groark (1997: 23) has suggested, sweatbaths are metaphorically associated with caves because both reference the generative powers residing in the interior of the earth. At Santiago Atitlán, Guatemala, the Mam or Maximón, an earth lord who is the old god of transformative power, is thought to live in an underground sweatbath (Tarn and Prechtel 1997: 284–284). The Mam works at night and has dominion over sexual affairs and love, causes crops to grow, and forms children in the womb. His heat is said to cook them into existence and he is considered the “road-opener” during childbirth (Groark 1997: 26). At one time the Mam figure was kept in a high niche in the wall of the church at Santiago Atitlán, which was referred to as a cave containing a sweatbath. The cave was thought to be the entrance to a hole, which lead underground and through which his washing water was poured (Tarn and Prechtel 1986: 300, note 14). In his underworld steam bath the Mam was thought to cohabit with a harem of hypersexual women. Atitecos believe that prostitutes in Guatemala City keep an image of the Mam in their rooms and call him “their best friend.” It is also said that women who sin ask the Mam to take them to his underworld sweatbath when they die.

SWEATBATH MORPHOLOGY

Sweatbaths with masonry construction (Figure 10.1) are found throughout the Maya area from the Preclassic (Andrews, IV and Andrews, V 1980: 30; Hammond and Bauer 2001) through the Late Postclassic periods (Ichon 1977). The best-preserved example is the Classic period sweatbath located at the site of Cerén in El Salvador (Sheets 1992: 97–102). Although Cresson (1938: 101) believed that sweatbaths were not present among the Maya of Belize, a rare example was excavated at the site of Buenavista (Ball 1993: 56, figure 48) located near Chechem Ha Cave and an Early Preclassic example was discovered at Cuello (Hammond and Bauer 2001). Interestingly, subterranean sweatbaths, morphologically similar to caves, are located at the sites of San Antonio in Chiapas (Agrinier 1969: 16–27) and at Agua Tibia in the southeastern Guatemalan Highlands (Alcina Franch 1981; Alcina Franch et al. 1980: 93–98; Ciudad Ruiz 1984: 109–112).

In his survey of ancient sweatbaths, Houston (1996: 143) concluded that they all have roughly the same dimensions, although they vary in shape from roughly square or circular, to long and narrow. In Houston’s sample, the average width is 3.14 m, length is 3.34 m, and height is 2 m. The smallest structure in the sample is found at Quiriqua and measures 55 cm in width by 3.04 m in length by 1 m in height (Morley 1935: 141–142, figure 38a; Satterthwaite 1952: 25). The largest was from the site of San Antonio in Chiapas, Mexico, which measured 3 m by 10 m by 1.6 m (Agrinier 1966: 29–30).

Satterthwaite (1952: 20) lists a number of architectural features common to

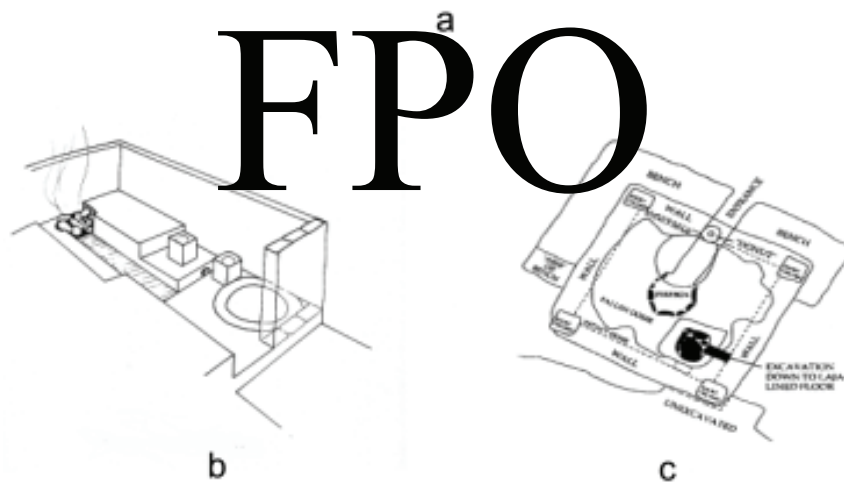


FIGURE 10.1. *Examples of ancient sweatbaths with the bench/trench architectural feature. a. San Antonio Chiapas (Agrinier 1969: 22, figure 35), b. Los Cimientos-Chustum (redrawn from Ichon 1977: 207), and c. Cerén (Sheets 1992: 98, figure 6-7).*

ancient sweathouses. At a minimum, they may be expected to have small dimensions and low ceilings, a system of steam production such as a hearth or hot surface on which water will vaporize, and a draught hole. They may also feature a water drainage system or have benches running parallel to a sunken drain. In his ethnographic survey, Cresson (1938: 93) reported that the drains did not necessarily carry the water out the door, but could form a sinkhole for the water. In their simplest form, the drains were made of dirt through which water could seep.

Benches lining the central drain are found not only at the Piedras Negras sweatbaths, but also at Buenavista (Ball 1993: figure 48), San Antonio Chiapas (Agrinier 1969: 22, figure 35), Los Cimientos-Chustum (Ichon 1977: 207), and Cerén (Sheets 1992: 98, figure 6-7). Although not every Mesoamerican sweatbath exhibits

this feature, the bench/trench combination is a defining characteristic of sweatbath structures.

Although they are most commonly found at surface sites, at least one sweatbath feature has been located in a natural rural environment (Webster 2001). A small construction built into a rock shelter on the periphery of Piedras Negras, Guatemala, was identified as a sweatbath. The feature was small and rectangular measuring 1.4 m by 1.9 m and had with a red-stained plaster floor. Three crudely built walls set in mud mortar bounded the rectangular feature and the back of the shelter functioned as the fourth wall. The heating source appeared to be burned calcified rocks located in the corner. Hypothetically, water would be poured on the hot rocks to create steam. A circular mirror and five marine shells were found within the structure.

THE SWEATBATH IN THE CAVE

The Western Belize Regional Cave Project (WBRCP), under the direction of Dr. Jaime Awe, has been conducting investigations at Chechem Ha Cave since 1998. Chechem Ha (a.k.a. Vaca Falls Cave), is located in the Cayo District of western Belize on the western bank of the Macal River upstream from San Ignacio Town (Awe et al. 2005; Figure 10.2). Positioned on a steep hill, the site may be classified as a dry cave due to the lack of an interior water source. The Main Tunnel is 237 m

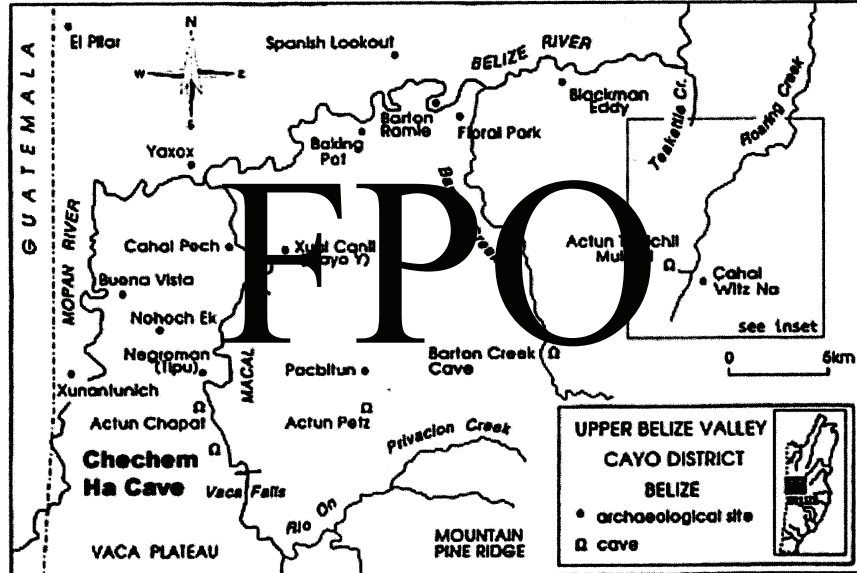


FIGURE 10.2. Map of western Belize showing location of Chechem Ha Cave (courtesy of WBRCP).

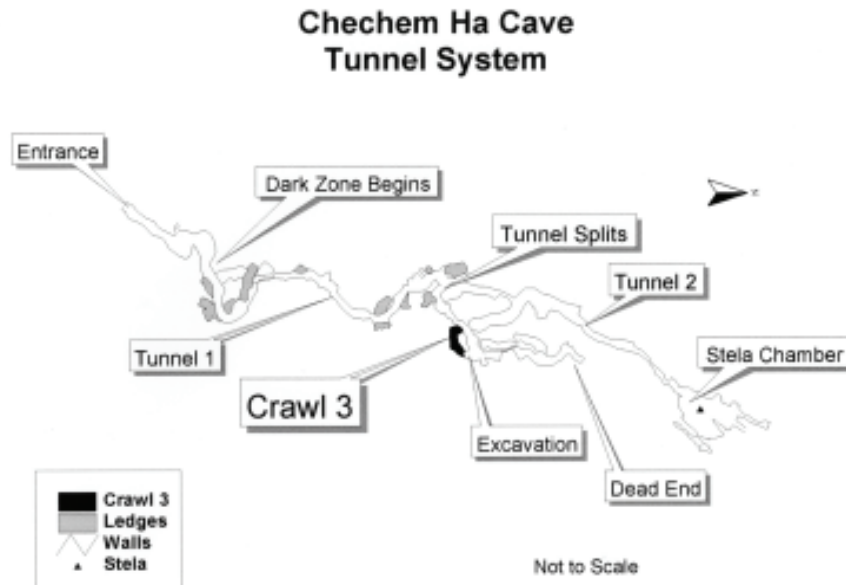


FIGURE 10.3. Map of Chechem Ha Cave system illustrating location of Crawl 3.

long, and bifurcates 134 m from the cave entrance (Figure 10.3). One passage leads to a dead end, while the other descends to a large cathedral-like chamber designated the Stela Chamber because of the presence of a miniature stela surrounded by a circle of stones (Awe et al. 2005). Artifact deposits are located along the floor of the Main Tunnel and on eleven high ledges ranging from 3 to 7 m above the passage floor. Additionally, artifacts were found in six elevated side passages that branch off the Main Tunnel. Four of these passages were narrow and had low ceiling heights. These were designated as “crawls” because it was impossible to stand up in them. Crawl 3 is the focus of this chapter. It is unique in that it exhibits both morphological modifications and a hearth feature, which coupled with the artifact assemblage, suggests that the area was used by the ancient Maya as a ritual sweatbath.

Crawl 3 is located deep within the dark zone of the cave, 154 m from the entrance. The crawl is located 2.5 m above the tunnel floor. It is an L-shaped space oriented on an east/west axis, running roughly parallel to the Main Tunnel, opening into the tunnel system at both ends (Figure 10.4). The western end of the crawl makes a sharp turn, and culminates in a vertical drop. The easiest access to the crawl is via the east entrance. The space measures 9 m in length, and its width ranges between 0.55 m and 2.75 m. The ceiling height is between 0.70 m and 1.2 m.

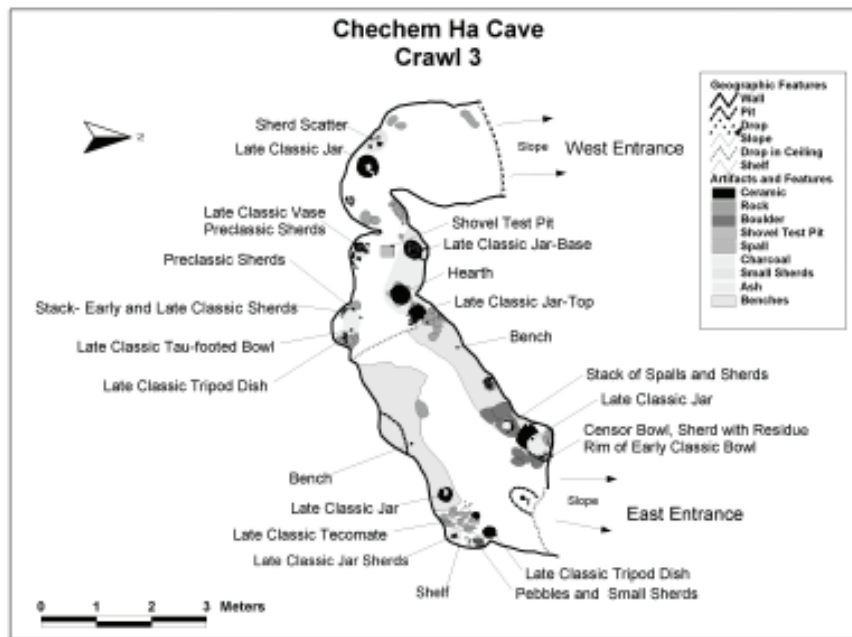


FIGURE 10.4. *Detail map of Crawl 3.*

These dimensions are most similar to the sweatbath at the site of San Antonio reported by Agrinier (1966: 29–30).

A 3-m long area was modified by the Maya to produce low walls lining both sides of the Crawl 3 passage and a central trench. The width between the low walls of the trench is 0.50 m at its narrowest and 1 m at the widest point. The walls on both sides of the trench measure between 0.35 m and 1 m in width with an average height of 0.45 m. The top surfaces are flat and resemble benches. The floor of the entire passage is covered with well-compacted brownish yellow sediment, white marl, and charcoal. The walls consist of the same brownish yellow sediment but are loosely compacted. Vertical cuts in the sediment matrix along the side of the walls are the result of the excavation of the central trench. A large pile of similarly colored sediment lies against the wall on the tunnel floor below the eastern entrance. An elemental analysis of sediments from Crawl 3 and the pile on the tunnel floor was carried out. Results suggested that the two are very similar sediments and confirmed that the pile was backdirt from the ancient excavation.

Crawl 3 is similar to sweatbaths found in other archaeological contexts not only in size but morphology. Note the morphological similarity between the low walls or benches in Crawl 3 as compared with the entrance to a Classic period sweatbath from the site of Piedras Negras (Figure 10.5). The low walls in Crawl 3 correspond to the benches present in the masonry structure in the Piedras Negras

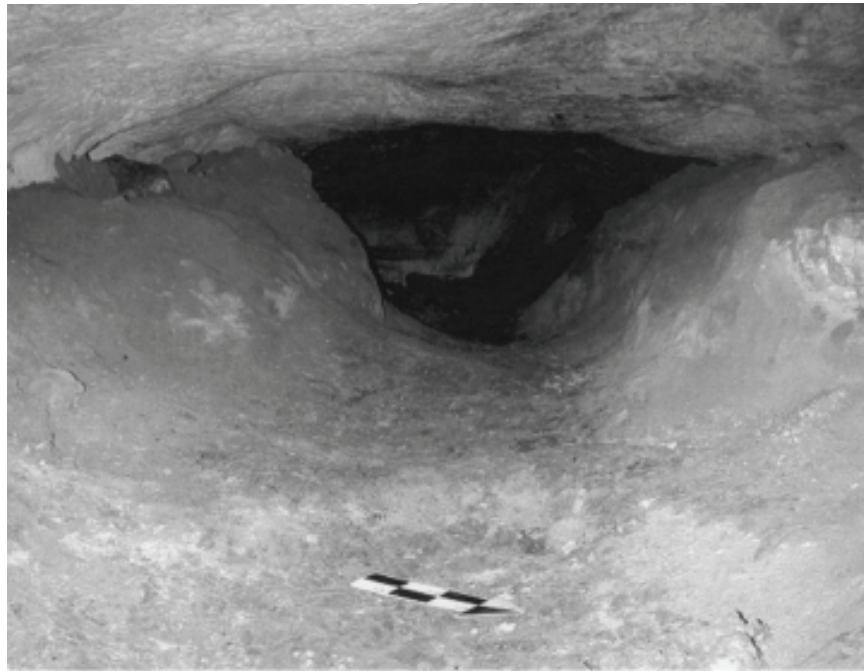


FIGURE 10.5. (Top) Modified area in Crawl 3 photographed from the east entrance (photo by the author). (Bottom) Reconstructed sweatbath from Piedras Negras (photo courtesy of Stephen Houston).

example and the center trench is analogous to the central drain.

THE ARTIFACTS

Artifact concentrations are located at the eastern entrance and in the center of the passage. The portion of the tunnel lined with the low walls or benches previously discussed separates these two areas. Beginning on the north side of the crawl, adjacent to the eastern entrance, ceramic vessels and sherds are positioned in and around fist-sized stones arranged a circle abutting the north wall. A Late Classic jar with a kill hole at the base and exhibiting exterior charring, sits in the center of the circle. Charcoal flecks are present in the sediment matrix. Resting on top of the stones is a censor bowl with a heavily blackened interior, a jar sherd exhibiting a fire-blackened exterior surface, and a large potsherd. Adhering to the interior of the jar sherd was a caked, hardened, black greasy resin containing starch grains of *Zea mays* (Morehart 2002: 174). The large sherd was identified as an Early Classic deep sided bowl (Joseph Ball 1998: personal communication). Several cobbles, small sherds, and a limestone spall were located against the wall. Spalls are chips or fragments removed from rock usually by weathering and exfoliation (Gary et al. 1972: 677). They are often found accompanying other offerings in caves and in many cases resemble potsherds in size and shape. Three charred jar sherds were stacked on a large rock on the east edge of the stone circle. To the east of the circle is a stack of spalls interspersed with sherds. This stacking creates a “sandwich-like” deposit.

On the south wall, adjacent to the east entrance is a small natural shelf. Clustered at the eastern entrance are thirty pebbles and a number of small sherds (Figure 10.6a). The rocks are not limestone, are similar in size (2–3 cm), and are smoothed, which suggests that they were collected in a river or streambed. To the west of the stones are fifteen small sherds and a spall. Next to the cluster of sherds is a stack of seven Late Classic jar sherds sitting on top of a scatter of charcoal and ash. Adjacent to the shelf are half of a Late Classic, bichrome, tecomate (gourd-shaped vessel) and a pile of fist-sized stones. A Late Classic jar in an inverted position with a kill-hole and charring at the base sits next to the wall along with a pile of cobbles and a spall. A Late Classic tripod dish (Ishihara 2000) sat below the shelf but was removed by the former Belize Department of Archaeology (now the Belize Institute of Archaeology). The geometric design on the interior of the vessel is faded, and all three feet are missing (Figure 10.6b).

In the mid-section of the tunnel adjacent to the western end of the low walls or benches, there is a dome in the ceiling that creates an area with enough head room to sit upright. A hearth is situated on the north wall. It consists of a fully intact, Late Classic, wide-mouthed, jar resting on five smoothed river cobbles (Figure 10.7). The exterior base of the jar is heavily charred, as are the cobbles on which it rests. The interior surface of the jar exhibits no apparent traces of residue. Beneath the vessel is a concentration of charcoal and ash 8 to 10 cm thick, which contained kernels of

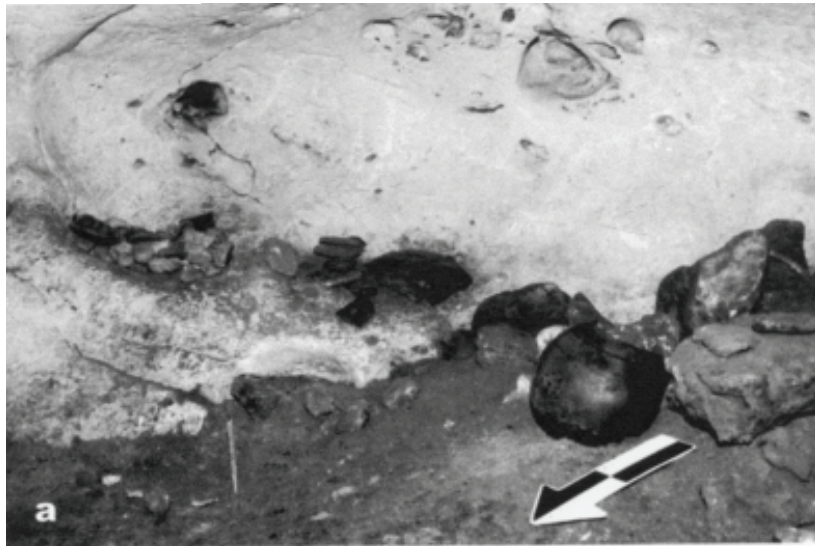


FIGURE 10.6. *a. Western entrance to Crawl 3. Black arrow points to water-worn pebbles and sherds on natural shelf on left. Tecomate sherd and pile of stones pictured in foreground. b. The tripod dish originally sat in the open space to the left of the north arrow (photo by the author).*



FIGURE 10.7. (Top) View of hearth area facing east. Hearth is jar on far right behind north arrow (photo by the author). (Bottom) River cobbles located beneath jar surrounded by ash and charcoal (photo by the author).

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Zea mays (Morehart 2002: 174). The limestone floor of the cave is discolored exhibiting a bluish cast, which is typical of the changes that occur when limestone is exposed to fire. The ceiling in the west area of the crawl is also heavily charred, which attests to the intense use of the hearth.

Next to the hearth is the top-half of a charred, Late Classic, narrow-necked jar. Several jar sherds are located beneath the vessel. The base of the jar is located on the west side of the hearth. Three volleyball-sized stones with cobbles placed between them are stacked west of the jar. A scatter of twenty sherds and several cobbles lies between the vessel base and the wall.

On the south side of the mid-section of the passage, at the western end of the bench is a stack of five fist-sized stones. These stones are charred and the artifacts in this area are surrounded by a heavy concentration of charcoal. Two polychrome vessels from the area were removed by the Department of Archaeology. Both are mostly intact, exhibit no signs of charring, and have been dated to the Late Classic period (Joseph Ball and Jennifer Taschek 2005: personal communication). Neither contained visible residues suggesting that they either held perishable substances or functioned as offerings themselves. The first, a tripod dish with rattle feet, has a waterbird motif (Figure 10.8a). It was originally positioned on top of the stack of stones. The second vessel, a cylindrical, ash-tempered, tau-footed, tripod bowl displays a caiman motif (Figure 10.8b). It was positioned on the north side of the rocks. Adjacent to the tau-footed vessel is a stack of seven sherds. A sherd from an Early Classic dish is sandwiched between Late Classic jar sherds and a large cobble sits on top of the stack. This stack is interesting because the Early Classic sherd sits between Late Classic examples suggesting that it was stacked together in the later period. Although the practice of stacking sherds in caves is not well understood, in this instance it suggests repeated usage of the area, reminiscent of stacking of sherds when cleaning shrine sites, a common practice among the Quiché in Guatemala (Tedlock 1992). Three sherds dating to the Late Preclassic period (Jaime Awe 1998: personal communication) sit adjacent to the stack.

To the west, adjacent to the south wall, is the bottom-half of a Terminal Classic, flat-based, cylindrical, polychrome vase (Joseph Ball and Jennifer Taschek 2005: personal communication). It exhibits either fire clouding or light charring on both the interior and exterior surfaces. The polychrome design on the vessel is divided into three panels (Figure 10.9). Occupying each panel is a seated figure with its right arm extended. A bird-like creature hovers over an *akbal* vase in the center panel and oblong device lies on either side of each figure. Placed inside of the vase were a spall and two sherds. One sherd was dated to the early part of the Late Preclassic period (Jaime Awe 1998: personal communication). Two additional Late Preclassic sherds (Joseph Ball 1998: personal communication) lie on the ground adjacent to the vase. At the elbow of the passage, also along the southern wall is a stack of eight sherds positioned beneath a rock. West of the stack a Late Classic jar with a kill hole sits in an inverted position. A cluster of thirty-six small sherds sits next to the jar adjacent to the wall near the west opening.

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FIGURE 10.8. *a. Tripod dish with rattle feet (photo by the author). b. Tripod cylindrical vessel displaying caiman motif (photo by the author).*

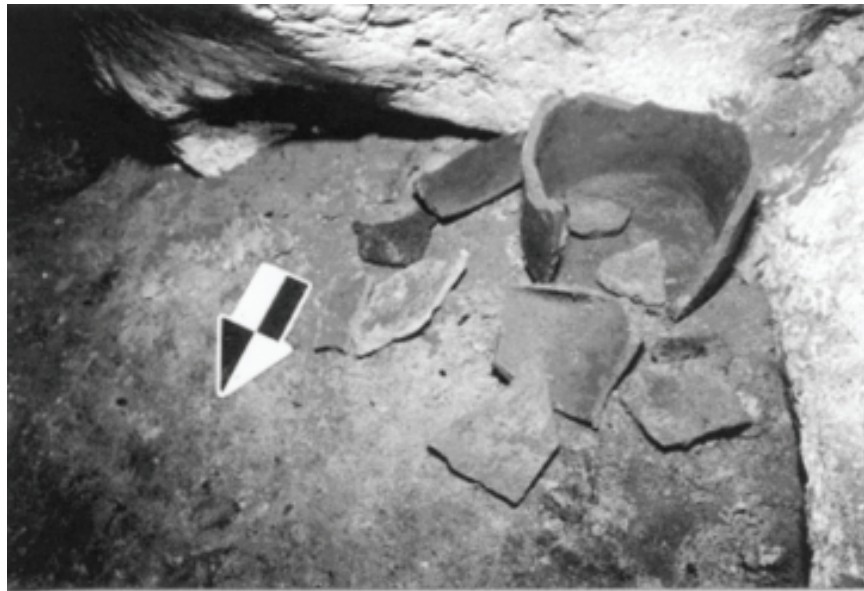


FIGURE 10.9. Flat-based cylindrical vessel containing Late Preclassic sherd. (Top) Vessel in situ. (Bottom) Vase illustrates seated figure with elongated right arm (photo by the author).

CHRONOLOGY AND CHANGES OVER TIME

Chronology in caves is often difficult to establish. Ceramic chronologies provide adequate guidelines, but changes in ritual practice over time can obscure activities that do not require the use or deposition of ceramic vessels or sherds. As demonstrated in Crawl 3, artifacts and features are often surface deposits that become comingled particularly in areas that are re-used over long temporal spans. In the absence of stratigraphy, the palimpsest nature of these surface deposits can interfere with the interpretation of absolute dates from preserved or charred organic remains as well. To overcome these problems, it is necessary to utilize both absolute and relative dating techniques and to date material from subsurface contexts when possible.

Ceramic chronologies in Crawl 3 were determined by ceramic cross-dating using James Gifford's type/variety method developed for Barton Ramie, Belize (1976). In Crawl 3, most of the ceramic assemblage was from the Spanish Lookout complex and dated to the latter part of the Late Classic period (A.D. 700–950). The Late Classic assemblage was composed primarily of highly diagnostic whole or partial vessels. Only a few sherds dated to earlier periods. At least one sherd dated to the early part of the Late Preclassic (300–100 B.C.), two to the latter part of the Late Preclassic (100 B.C.–A.D. 250), and one to the Early Classic (A.D. 250–600). Because of the paucity of ceramic sherds dating to the earlier periods, one would be tempted to assign a Late Classic date of usage to the area, but this is not the case.

To determine an absolute age for the initial use, a 25- by 25-cm test pit was excavated in the area of most intense activity. Bedrock was encountered at a depth of 7 cm and a small sample of wood charcoal was collected from the base of the pit. The date obtained using ^{14}C AMS was 1944 ± 71 rcybp, calibrated using OxCal3 with a two-sigma range to 120 B.C.–A.D. 250, which falls at the end of the Late Preclassic period. An additional date obtained from a bulk sample of wood charcoal obtained from below the hearth vessel was 1696 ± 36 rcybp, calibrated using OxCal3 with a two-sigma range to A.D. 250–430, which falls within the Early Classic period. A third date that is perhaps less reliable but still of interest was collected from an excavation unit placed in the backdirt mound on the Main Tunnel floor. The sample of wood charcoal came from the interface of the backfill pile and the original floor surface. This date, 2432 ± 33 rcybp, calibrated using OxCal3 with a two-sigma range to 770–400 B.C., which correlates with the Middle Preclassic period. Caution is observed with this date because the charcoal fragment may have been resting on the tunnel floor for a long time before the sediment was piled on top. Also, because the subsurface sample from Crawl 3 suggests a later date for the modification of the space, it is safer to assign the Late Preclassic date to the initial use of the area. The Early Classic date of the hearth material suggests continued usage of the area and the large number of Late Classic vessels suggests a Late Classic date for the latest use.

There appears to be a change in ritual practice during the period of latest usage. Although the space underwent modification and intense utilization before

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this time, the number of ceramics deposited in the area increased dramatically during the Late Classic period (A.D. 700–950). There were a total of thirty-five partial and whole vessels recorded in the crawl. Of these, thirty-two were diagnostic. Twenty-seven of the diagnostic examples were from the Spanish Lookout (Late Classic) complex. Additionally, all of the partially intact or whole vessels dated to this time period and rest of the assemblage consisted of small fragments. The Late Classic vessel and five river cobbles sitting on top of the pile of charcoal that dated to the Early Classic period suggests that the hearthstones and jar were a later addition.

DISCUSSION

The similarity in the size and morphology typical of masonry sweatbaths from archaeological sites and those of modern communities to the modifications in Crawl 3 illustrates that the passage was constructed as a sweatbath. The dimensions of Crawl 3 and low ceiling height are within the ranges of sweatbaths found in other archaeological contexts and most similar to the underground sweatbath located at San Antonio in Chiapas (Agrinier 1969: 16–27). The two low walls or benches in the passage bear a striking resemblance to the walls and central trenches of Classic Period masonry sweatbaths. Additionally, the working hearth, which was used extensively, would have produced the environment appropriate to a functional sweatbath. The Late Classic wide-mouthed jar sitting on top the hearthstones showed no evidence of residue, which suggests that it contained water to create steam. In earlier times there may have been another gap or steam may have been produced by throwing water on heated stones as evidenced by the charred rock near the hearth.

Although the smoke produced in the crawl would have been suffocating, this was probably not unusual. Payson Sheets (1992: 101), describing the sweatbath at Ceren, noted that he was puzzled by the amount of charring on the inside of the roof. He later realized that in sweatbaths, the firebox was often placed at the center of the room and at least some of the smoke was probably let out via a small plugged hole in the roof before people entered the structure (McKee 2000: 91). Also, Cresson (1938: 90–93) has reported that no ventilator holes were found in the sweatbath Structure N-1 at Piedras Negras, which suggests that the central chamber became filled with smoke. In his visit to a modern sweatbath at Milpa Alta, he observed that the steam room had no ventilator holes and the smoke from the firebox escaped from the entrance door. Crawl 3 is well ventilated by comparison, because its two access areas would allow cross ventilation. Considering that the outside air from the cave's tunnel system remains cool all year round, it stands to reason that smoke would move into the tunnel. Interestingly, the hearth is placed roughly in the center of the crawl similar to those found in sweatbaths such as the one at Ceren.

Finally, the artifacts within the area are commensurate with what might be expected in a ritual sweatbath. Of particular interest is the tau-footed vessel with

the caiman motif found on the south side of the crawl across the passage from the hearth. The caiman motif or Earth Monster is also present on the Temple of the Cross at Palenque, previously discussed, that has been identified by Houston (1996) as a cosmological sweatbath that functioned as a birth place for the gods. Additionally Mark Child (2005) reported a vessel with a similar motif from a Piedras Negras sweatbath.

Taube (1989: 9) has suggested that among the Classic Maya, there was an earth/caiman metaphor. He described Itzam Cab, the earth caiman, as the *axis mundi* par excellence and has identified the creature as the god of creation and sustenance in both Highland Mexico and Postclassic Yucatán (1998: 437). Taube notes that in the iconography of Copan, the deity is depicted with three stones in its mouth. This motif is identified as the *k'oben* or kitchen hearth fire, which, in *The Ritual of the Bacabs*, is described by the term *pib* or sweatbath (Roys 1965: 61). The mouth of the deity may also be symbolized as a cave. In architectural metaphor the mouth of the *witz* monster, a similar entity located on temple pyramids is a symbolic cave opening (Gendrop 1980; Schávelzon 1980; Stuart 1997: 15–16).

Finally, a cluster of potsherds is located at the west entrance to Crawl 3 and a cluster of pebbles and sherds is found on the natural shelf on the south side of the eastern entrance. The pebbles in the later configuration were clearly water-worn. No other stones of this nature are found inside of the cave, other than the river cobbles used to support the jar in the hearth feature. The arrangement and clustering of the pebbles as well as their uniform size suggest that they are a unique offering. The location of the clusters of sherds and pebbles near both the east and west entrances to the crawl suggests that these offerings are analogous to the pebbles and sherds offered as a tribute to earth deities at the entrance of the “sweatbath/cave,” at the Festival of Games in Chamula reported by Bricker (1973: 114). It is not unusual for pebbles to be used as payment or “money” intended for otherworld use. Bishop de Landa mentions that stones were placed in burials to be used for money by the deceased (Tozzer 1941: 130). Among the Zapotec of Mitla, Oaxaca, a ceremony performed on New Year’s Eve, a ritual exchange takes place at a cross at the town boundary or in a cave. People bargain with each other for things that they want in the upcoming year using pebbles for payment, which they call “the money of God” (Leslie 1960: 75).

CONCLUSION

This chapter has argued that Crawl 3, a modified passage within Chechem Ha Cave, served as a ritual sweatbath. The area has a number of shared characteristics with known sweatbaths in archaeological and ethnographic contexts that support this interpretation. Additionally, both caves and sweatbaths are strongly associated with aspects of fertility. Earth deities associated with creation and renewal are denizens of both of these dark enclosed spaces. The association of the sweatbath with earth deities among the Maya suggests that offerings to the cave/sweatbath

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propitiate these entities. Data presented in this chapter reinforce the cognitive association between sweatbaths and caves and suggest that this ancient concept developed as early as the Preclassic period.

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