



Figure 1. Hunting shrine near Santiago Atitlan with peccary and white-tailed deer crania.

# Communal and Personal Hunting Shrines Around Lake Atitlan, Guatemala

Linda A. Brown

In this report I present the results of ethnoarchaeological research on contemporary and recently abandoned Maya hunting shrines around Lake Atitlan, Guatemala.<sup>1</sup> Hunting shrines are places in the landscape used for ceremonial activity to placate the supernatural animal guardian before and after a hunt. From a material perspective these sites are notable, as they contain a unique feature indicative of their role in hunting ceremonialism—a ritual faunal cache—that is recognizable by archaeologists after site abandonment. Ritual fauna caches consist of the curated remains of hunted animals deposited at sacred sites in the context of a hunting rite.

Over the past several decades, Maya household archaeology has significantly increased our knowledge of the rites performed by everyday people. We now know that ancient commoners engaged in various ceremonies including: (a) mortuary rites and ancestor veneration (e.g., Gillespie 2001; McAnany 1995, 1998;

McAnany et al. 1999; Yaeger 2000, 2003a, 2003b); (b) dedication and termination rites (e.g., Brady and Ashmore 1999; Garber et al. 1998; Mock 1998; Robin 2002); (c) feasting (e.g., Brown 2001; LeCount 1999, 2001; Robin 2002); and (d) divination (Simmons and Sheets 2002). The research reported here suggests that an important type of ritual is absent from the above categories; no hunting-related ceremonialism is identified. Yet references to the supernatural lord of the animals and hunting ceremonialism flourish in the ethnographic literature (e.g., Alcorn 1984:88; Cabarrús 1998:47; Freidel et al. 1993:187; Hofling 1991:136-153; Redfield and Villa Rojas 1934:117-118; Sapper 1897:268; Thompson 1930:88-89, 124-135; Villa Rojas 1945:103; Wisdom 1940:72-73). Colonial period documents record commoner participation in hunting ceremonies throughout the Maya area (e.g., Clendinnen 1987:73; Cortes y Laraz 1958[1768-1770]:119-120; Scholes and Adams 1938:63; Thompson 1930:124-135; Tozzer 1941:144, 162), while Pre-Columbian iconography and epigraphy attest to the longevity of a hunting-related deity (Fox and Justeson 1984; Taube 1997, 2003b). Where is the archaeological evidence of Maya hunting rites?

The Lake Atitlan hunting shrines provide us with a

<sup>1</sup> This report describes the 14 hunting shrines identified during the 2005 field season. Three additional hunting shrines were identified in early work (Brown 2005). Collaborative research conducted by Emery and Brown in 2007 resulted in the discovery of three more hunting shrines, bringing the total number of known sites to 20 (Brown and Emery 2008).

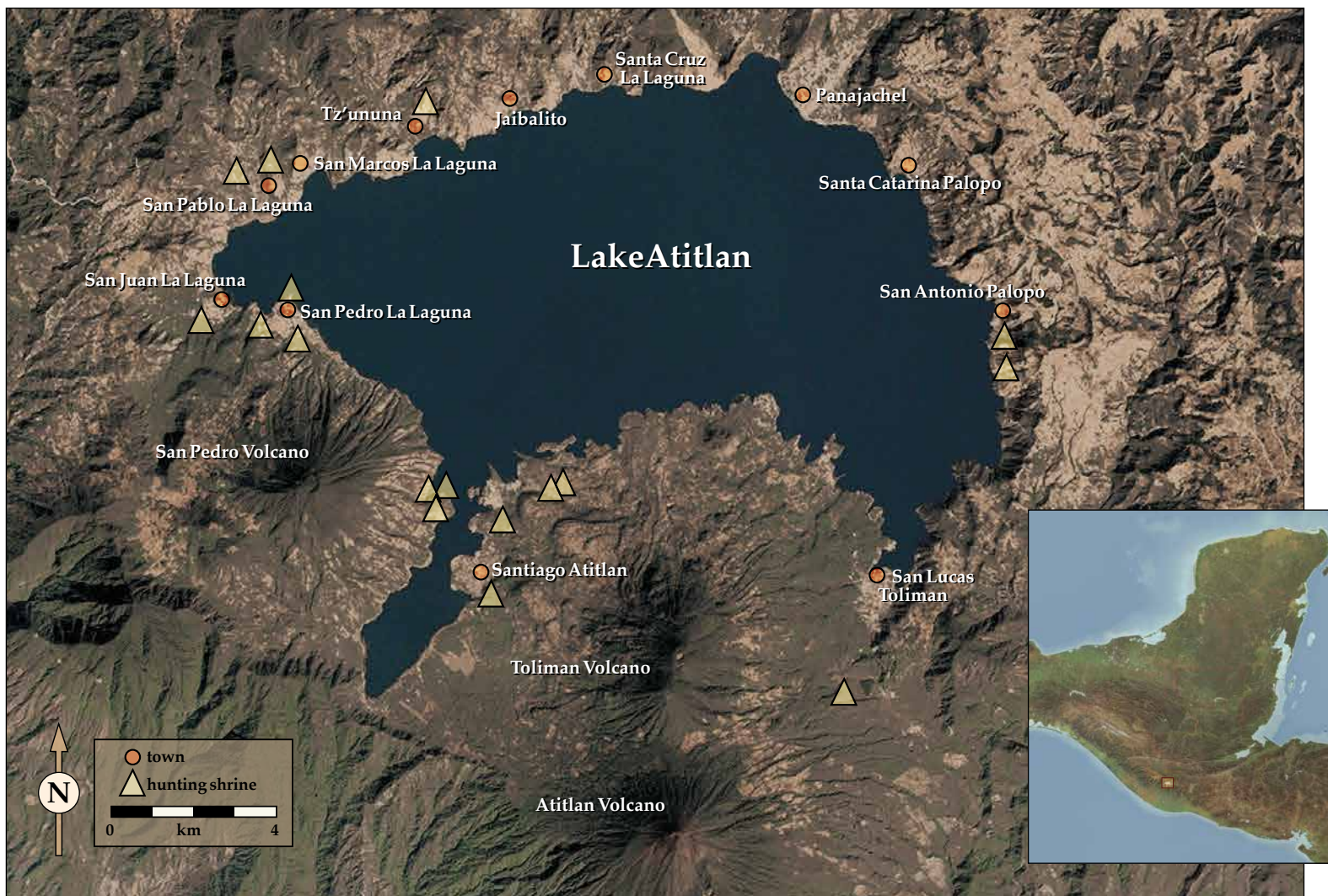


Figure 2. Map of Lake Atitlan showing the locations of known hunting shrines.

glimpse of the “material signature” of hunting rites and the types of topographic features chosen for this activity. In the following pages, I first describe recently recorded hunting shrines and ethnographic information collected about their use.<sup>2</sup> Then I discuss the types of topographic features chosen for hunting rites, as similar places may have been used in the past. I present interview data on the types of species and skeletal elements that undergo specialized discard at sacred sites. Finally, I discuss the ritual discard of animal bone from other areas of the Maya world and greater Mesoamerica. The core cultural concepts informing this behavior have historical time depth suggesting similar discard practices likely existed

<sup>2</sup> For information on the in-depth zooarchaeological analyses of three ritual fauna deposits, consult Brown and Emery (2008).

in the past.

### Description of Hunting Shrines

Under the aegis of El Proyecto Etnoarqueológico Costumbres Mayas, directed by the author, three initial hunting shrines were identified in 2002 (Brown and Romero 2002), with three suspected sites located in subsequent work (Brown 2005). During the summer of 2005, project members returned to Lake Atitlan with the goal of identifying additional hunting shrines and conducting ethnographic interviews with older hunters and ritual practitioners who remembered the use of these sites. By the end of the field season, we had recorded 17 hunting shrines; three shrines were still active while 14 were virtually abandoned. Hunting shrines are associated with Tz’utujil and Kaqchikel communities

around the lake including Santiago Atitlan, San Pedro la Laguna, San Juan la Laguna, San Pablo la Laguna, Tz'ununa, San Antonio Palopo, and a coffee *finca* south of San Lucas Toliman (Figure 2).

Based on field work and ethnographic interviews, we identified two general types of hunting shrines around Lake Atitlan.<sup>3</sup> The first consists of personal shrines used by an individual hunter; the second are communal shrines used by multiple people or even the entire community. In addition to hunting ceremonies, some active sites are used for other types of ritual requests as discussed below.

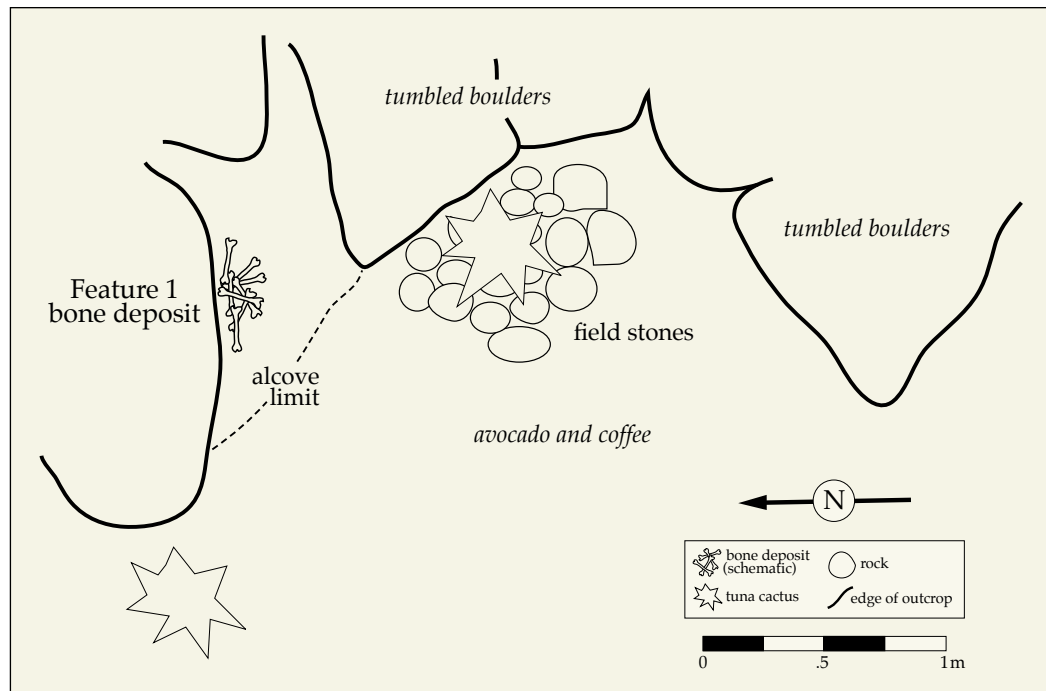
### Personal Hunting Shrines

Based on ethnographic interviews, three hunting shrines can be securely classified as personal shrines used by an individual hunter. All three shrines were used by hunters from Santiago Atitlan and abandoned within the past 30-40 years.

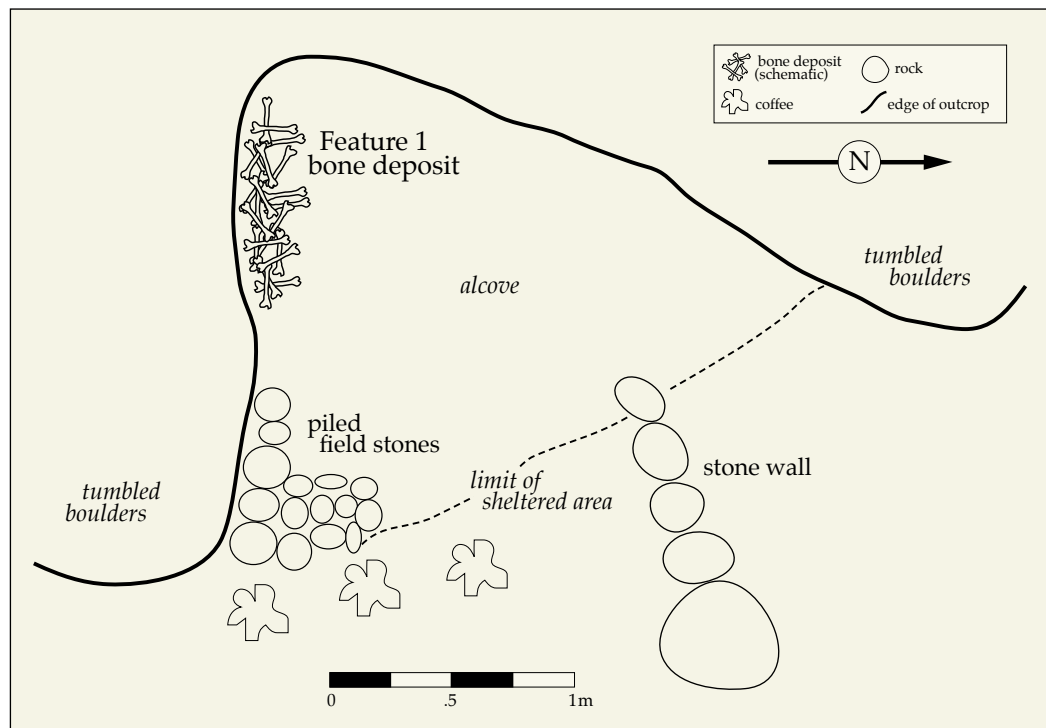
Two personal shrines were located on Chuitinamit, a small volcanic hill at the base of the San Pedro Volcano across the bay from Santiago Atitlan. The shrines, located along the eastern slope of the hill, consisted of bone deposits placed in natural rock alcoves formed by tumbled volcanic boulders (Figures 3-4). The fauna deposits contained cranial and post-cranial remains from white-tailed deer, with an occasional peccary and brocket deer present. Both shrines were used by the same now-deceased hunter. The hunter's son continues to watch over his father's fauna cache, covering the bones with sheets of plastic to provide protection against the elements.

The other personal shrine is located

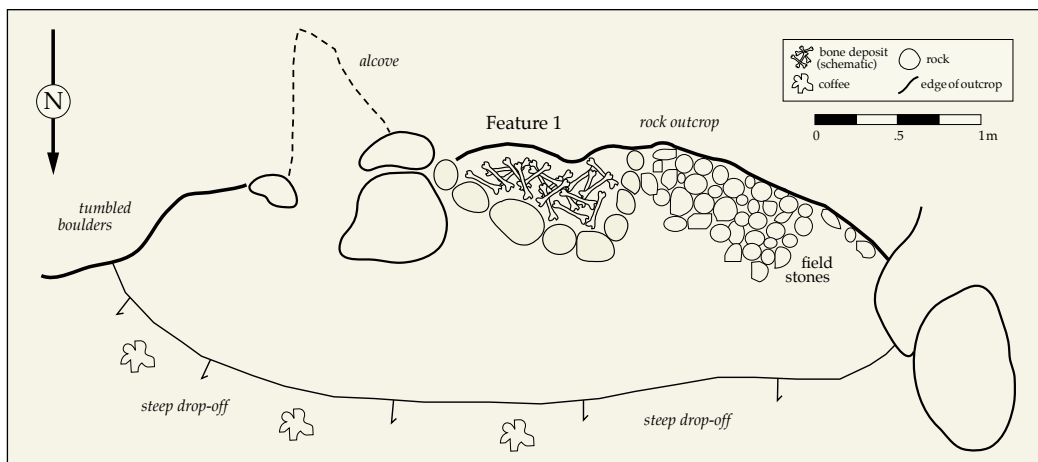
<sup>3</sup> Additionally we recorded a number of abandoned sites where we did not have ethnographic information or adequate surface deposits to discern whether they functioned as communal shrines or were used by a single individual.



**Figure 3.** Plan view map of an abandoned private shrine on Chuitinamit. This site and Chuitinamit III were used by the same hunter from Santiago Atitlan. After map by Linda A. Brown and Miguel Coché Par, May 25, 2005.



**Figure 4.** Plan view map an abandoned private shrine on Chuitinamit. This site and Chuitinamit II were used by the same hunter from Santiago Atitlan. After map by Linda A. Brown and Miguel Coché Par, June 16, 2005.



**Figure 5.** Plan view map of a private shrine overlooking the archaeological site of Chukumuk. This site was used by a now-deceased Santiago Atitlan deer hunter. After map by Linda A. Brown and Miguel Coché Par, June 8, 2005.



**Figure 6.** Plan view map of the active communal shrine of Pa' Sak Man located outside of San Pedro la Laguna (after map by Linda A. Brown, Manuel Jáminez Tambriz, and Pedro Velásquez Yaxón, May 24, 2007).

two kilometers east of Santiago Atitlan on a hillside overlooking the archaeological site of Chukumuk. Similar to Chuitinamit, the shrine we called Chukumuk II was used by a now-deceased hunter from Santiago Atitlan. According to the hunter's grandson, his grandfather was a deer hunter and returned bones to the shrine because, if he did not, then "he would not be able to catch any more deer." Deer bones were placed in a shallow alcove under tumbled boulders and the deposit was protected from eroding downslope with a stone wall (Figure 5). While mandibles and post-cranial elements are present, no crania were identified, suggesting these may have been returned to the Cofradía San Juan, as discussed in more detail later. As with the private shrines on Chuitinamit, this deposit continues to be curated by a male biological descendant of the original hunter.

### Communal Hunting Shrines

Of the fourteen hunting shrines recorded in 2005, more than half (eight) were confirmed to be communal shrines. Communal shrines are associated with the communities of Santiago Atitlan, San Pedro la Laguna, San Juan la Laguna, San Pablo la Laguna, San Antonio Palopo, and the archaeological site of Chuitinamit.<sup>4</sup> One communal site is still active (Pa' Sak Man), two are no longer maintained but receive an occasional visitor (Pa' Ruchi' Abaj and Chu Pad Abaj), while the others were abandoned within the past 20-50 years.

<sup>4</sup> In addition to these sites, we previously recorded two active communal shrines. One was associated with a *finca* south of San Lucas Toliman, and in addition to being used for hunting ceremonialism it was used for rituals associated with coffee production. The other communal site, located outside of San Pablo la Laguna, was used for rituals for hunting armadillo as well as a wide variety of other ritual requests (Brown 2005).



**Figure 7.** Feature 1, the main fauna cache at Pa' Sak Man.

### ***San Pedro la Laguna***

#### ***Pa' Sak Man*** ("Place of the White Bird")

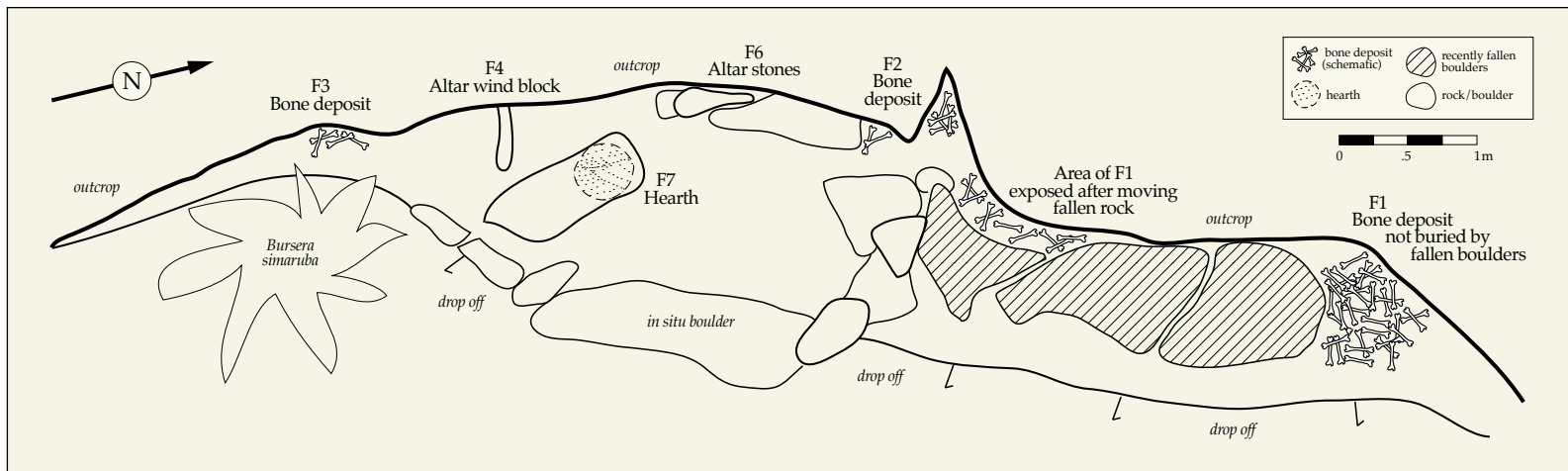
Pa' Sak Man is an active communal shrine located approximately 400 meters south of San Pedro la Laguna. The site consists of a west-facing rock shelter that provides a protected space for ritual performances.

Pa' Sak Man has an impressive amount of fauna remains including seven distinct ritual caches (Figure 6). Starting in the western side of the site, Feature 7 consists of a small bone cache in an alcove outside of the main sheltered space. Inside the rock shelter, Feature 1 functions as the main bone deposit. The cache is composed of thousands of cranial and post-cranial elements stacked on top of one another to a height of about one foot above the present ground surface (Figure 7). A stone alignment delimits the north and western edges of this cache, while *in situ* boulders

define the east and southern edges of the deposit. A second dense bone cache, Feature 11, was placed in an elevated niche immediately above Feature 1.

Moving to the eastern side of the site, Feature 3 is a bone cache placed on an elevated rock ledge. Bones were also cached in an alcove immediately above and behind this deposit (Feature 8). In addition to these more substantial caches, animal remains were tucked into various nooks and crannies along the back wall of the rock shelter (Features 6-7). Identifications by Dr. Kitty Emery and her graduate students showed the most common species present (MNI) were armadillo, white-tailed deer, peccary, coati, and agouti paca (see Brown and Emery 2008 for in-depth

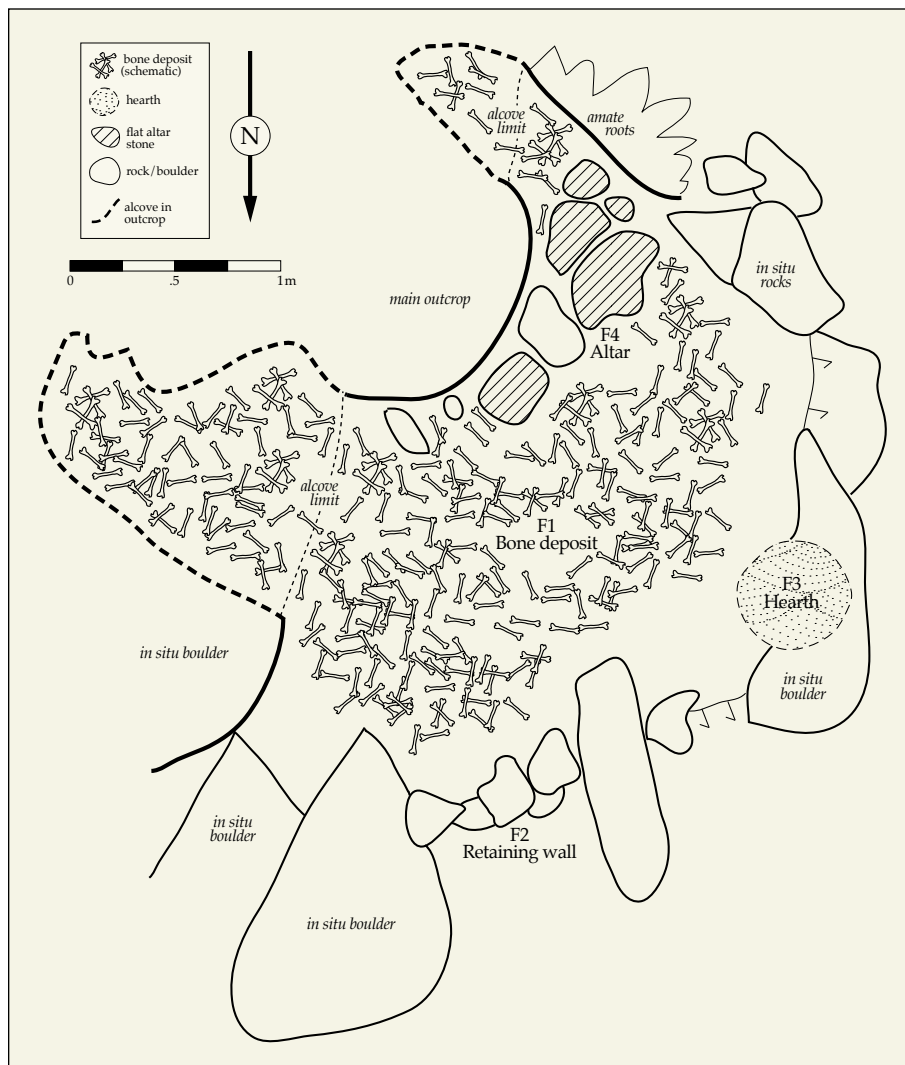
<sup>5</sup> Preliminary field identifications were done by the author and Dr. Kitty Emery, who visited some of the communal hunting shrines in the summer of 2005.



**Figure 8.** Plan view map of the abandoned communal shrine of Pa'ziguan located outside of San Pedro la Laguna (after map by Linda A. Brown, Manuel Jáminez Tambriz, and Pedro Velásquez Yaxón, June 13, 2007).



**Figure 9.** Detail of skeletal remains in Feature 1 at the abandoned communal hunting shrine of Pa'ziguan. Note the tapir, white-tailed deer, and peccary mandibles on top of the deposit.



**Figure 10.** Plan view map of the communal shrine of Pa' Ruchi' Abaj located outside of San Juan la Laguna (after map by Linda A. Brown, Michelle LeFebvre, Francisco Ixtamer Ramos, and Manuel Jámenez Tambriz, May 15, 2007).

zooarchaeological analyses).

Several other ceremonial features are present at Pa' Sak Man including: altars, sacrificial offering hearths, and a cleared maintained space (see Figure 6). A natural rock ledge (Feature 10) and an *in situ* boulder (Feature 9) function as altar areas for burning candles. Two sacrificial offering hearths are located on-site. Feature 2, the main offering hearth, is placed on a low elevated earthen rise immediately below Feature 10. Feature 4 consists of a smaller hearth located in an enclosed alcove to the east of the former. A cleared maintained area, used for gatherings and ritual performances, is protected by a rock overhang providing shelter to ritual participants and on-site deposits. Several light scatters of fragmented bones are present across the performance and gathering space. These scatters appear to be trampled bones displaced from various fauna caches.

### *Pa' ziguan ("The Cliff")*

Pa' ziguan is an abandoned communal hunting shrine located approximately 500 meters southwest of the town of San Pedro la Laguna. The site consists of an east-facing rock shelter located along an intermittent drainage that trends towards the lake shore.

The site is divided into two main activity areas: a northern and southern area (Figure 8). The northern area was primarily used for the deposition of animal bones. Feature 1 is the main fauna cache. It consists of hundreds of bones carefully tucked under a low stone ledge protruding from the back wall. Crania, mandibles, and various post-cranial elements are present, and species identified include white-tailed deer, peccary, and tapir (Figure 9). When I revisited the site in the summer of 2007, much of Feature 1 was buried under several large boulders that sheared off from the rock shelter wall during a recent earthquake.

The southern activity area includes several fauna caches as well as an altar area and offering hearth (see Figure 8). Feature 2 consists of a medium-sized fauna cache (100-200 elements) that was tucked into several small rock alcoves. The deposit includes crania and mandibles of tapir, peccary, and white-tailed deer, and Emery's graduate students noted the most common species present were white-tailed deer, armadillo, and tapir followed by coati, peccary, and agouti paca (Brown and Emery 2008). Feature 3 is a smaller buried bone deposit eroding out of the ground surface at the southern end of the shelter. In addition to these caches, several other ceremonial features are present. Feature 6 is an altar area where ritual participants used unmodified stones and pumice candleholders for burning candles during rites. A nearby *in situ* boulder provided a fire-resistant surface for offering hearths.

### *Ethnographic Information about Pa' Sak Man and Pa' ziguan*

Hunters and older residents provided information about the use of Pa' Sak Man and Pa' ziguan. According to locals, in the past hunters curated all skeletal remains from wild mammals and did not discard any in the trash. The bones were stored in large baskets and kept in household compounds until the Day of the Dead (November 2). When this day arrived, the hunters accompanied by a ritual practitioner returned to these sacred places for post-hunting ceremonies. Baskets of curated bones were transported





**Figure 11.** Detail of skeletal remains in Feature 1 at Pa' Ruchi' Abaj.

to shrines using tumplines. In addition to the bones, hunters brought their hunting dogs, as the dogs were crucial participants in the ceremonies. During the rite, the ritual practitioner formally presented the hunters and their dogs to the animal guardian, making sure to speak the name of each hunter and dog while asking forgiveness for all involved in the bloodshed. The curated bones were added to on-site fauna caches. Candles were lit in front of fauna deposits and alcohol was poured upon the bones. Sacrificial offerings included copal incense, which was burned in

gratitude for the generosity of the animal guardian. Some older residents fondly remembered drinking *jocote* (plum) liquor during these rites and stumbling home tipsy after the ceremony.

### *San Juan la Laguna*

*Pa' Ruchi' Abaj* ("Mouth of the Rock")

*Pa' Ruchi' Abaj* is an abandoned communal hunting shrine located along an old trading route approximately 800 meters

southwest of San Juan la Laguna. The site consists of a substantial fauna deposit on the northwest side of a large boulder (Figure 10).

Feature 1 is a dense deposit of bones cached at the base of the main rock outcrop (Figure 11). The deposit, measuring approximately three by two meters, is bordered by the outcrop on the south and east while *in situ* boulders and a small retaining wall enclose it to the north and west. Complete and nearly complete bones observed on the surface overwhelmingly are from white-tailed deer, although armadillo, peccary, and tapir were noted. Calculations suggest that surface and subsurface deposits have an estimated total of 600,000 bones (Brown and Emery 2008).

While the site has been abandoned for some years, recently it has been reincorporated into ceremonial use by an occasional ritual practitioner. Evidence of recent activity includes the presence of several pumice candle holders. A tapir tibia fragment used as a candleholder may date to the site's original use in hunting rites or reflect more recent activities (Figure 12).

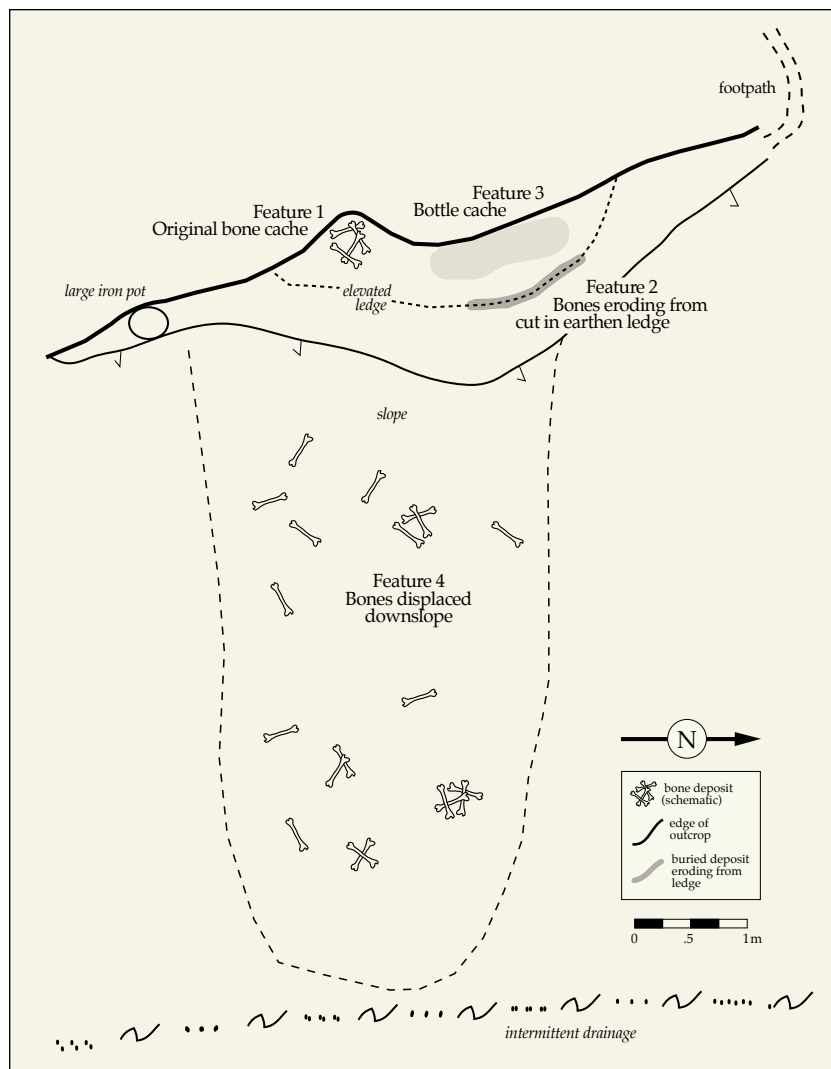
#### *Ethnographic Information about Pa' Ruchi' Abaj.*

An older resident of San Juan attended post-hunting ceremonies at Pa' Ruchi' Abaj in his youth. The rite involved four or five hunters along with their hunting dogs and the ritual practitioner. As was the custom in San Pedro la Laguna, curated bones were transported to the site in large baskets. The hunting ceremony consisted of prayers of forgiveness for the hunters as well as their dogs. Candles, incense, and alcohol were offered to the animal guardian, and ritual intoxication was part of the ceremony. Additionally, this person stated that ceremonies at Pa' Ruchi' Abaj included musical performances with wooden flutes and drums, as playing music "made the *dueños* (lords, masters, owners) happy."

Sexton and Ujpán (1999:67-70) also recorded ethnographic information about rites at this site. The authors reported that during the pre-hunting ceremonies hunters presented gifts of roosters, sheep, or beef when asking permission to hunt. These permission ceremonies could only occur once every twenty days, on the day that the *dueño* of the animals appeared to receive the offerings. At midnight the great rock at Pa' Ruchi' Abaj thundered open as the *dueño* emerged to take the hunters' offerings to the bottom of his cave. If he was pleased with the gifts,



**Figure 12.** Fragment of a tibia from a tapir used as a candle holder at Pa' Ruchi' Abaj. Note the wax and candlewick on the surface.



**Figure 13.** Plan map of the abandoned communal hunting shrine Sak Bal Bak located outside of San Pablo la Laguna (after map by Linda A. Brown, Sergio Garcia, and Julian Perez Xajil, May 23, 2005).

he appeared to hunters in dreams, telling each how many animals he could take. The bones of hunted animals were deposited at Pa' Ruchi' Abaj in post-hunting rites accompanied by lots of candles, copal, *aguardiente* (cane liquor), and *chichi* (corn liquor). People reported that bones were brought back to the site so the *dueño* could count them, making sure none of the hunters exceeded the requisite number of animals allotted.

### **San Pablo la Laguna**

#### **Sak Bal Bak** ("Place of the White Bones")

Sak Bal Bak is an abandoned communal hunting shrine approximately 100 meters north of the town of San Pablo la Laguna (Figure 13). The site consists of an east-facing upright rock located along an intermittent drainage. Currently local residents are discarding trash upslope from the outcrop,

and trash is scattered across various parts of the site. Empty alcohol bottles and a large iron caldron are being stored in a section of the shrine that previously functioned as the main ritual activity area.

Feature 1 consists of a ritual fauna cache originally placed on an earthen ledge adjacent to the rock outcrop. While some bones are still present in this area, many have been displaced downslope. Species noted include white-tailed deer, peccary, armadillo, and coati, and both cranial and post-cranial elements are represented. In addition to this surface deposit, buried bones (Feature 2) were visible in a vertical cut in the earthen ledge where bones were deposited. Feature 2 consists of a stratum of buried bones that extends horizontally in the profile of the earthen ledge for 1.3 meters. The deposit begins at approximately 40 cm below the current ledge surface and continues to 75 cm, where the ledge meets the present ground surface.

#### *Ethnographic Information about Sak Bal Bak*

According to local residents, Sak Bal Bak was severely impacted by a prolonged heavy rain that fell sometime around 30 years ago. Apparently the storm produced flash flooding that washed away much of the fauna deposit, thereby ending the site's use as a hunting shrine. Residents told us that prior to its destruction individuals went to Sak Bal Bak to ask permission to hunt. If they were successful, they curated the bones until the time when they were returned to the site and deposited during a post-hunting ritual.

### **Santiago Atitlan**

#### **Chu Pad Abaj** ("In Front of Father Rock")

Chu Pad Abaj is a communal shrine located on a hill above Panabaj, on the outskirts of Santiago Atitlan.<sup>5</sup> The site consists of a large zoomorphic boulder still occasionally used for ceremonies. However,

<sup>5</sup> This site appears to have various names. Allen Christenson, who told me about the skulls at this site, visited the shrine with someone from Santiago Atitlan who called it Iglesia Abaj ("Church Rock"), a name I used in a previous publication (Brown 2005). In the summer of 2005, I was given two additional names for this site: Chu Quej Ajay ("In Front of Deer/Horse House") and Chu Pad Abaj ("In Front of Father Rock"). In this publication I have chosen to use Chu Pad Abaj, as this name was provided by the landowner.

recent ceremonial use appears to be minimal as performance areas are covered in leaves and other organic debris.

Chu Pad Abaj has two main ceremonial activity areas: one to the north of the outcrop and one to the south (Figure 14). Starting with the former, Feature 1 consists of a stone wall that delimits a ceremonial space. A small bone deposit (Feature 2) was tucked against the outcrop's surface in the northwest corner of this feature. Species present include white-tailed deer and peccary, and cranial and post-cranial elements are represented. A second fauna deposit (Feature 3) was placed outside and to the east of Feature 1. Feature 3 consists of the two collared peccary crania and mandibles and a fragmented white-tailed deer pelvis tucked into a narrow alcove angled downward into the stone. Feature 6 consists of a semicircular rock construction that abuts a property wall to the east of the outcrop. While the shape of this feature suggests its use as an offering hearth, currently its original function is unknown.

The ceremonial space to the south of the outcrop is defined by a stone wall with an entranceway in the west. Feature 7 consists of an altar area with several flat stone slabs used for burning candles. A small fauna cache (Feature 4) was placed flush against the rock to the east of the altar area. Skeletal remains included cranial and post-cranial fragments from an unidentified large mammal.

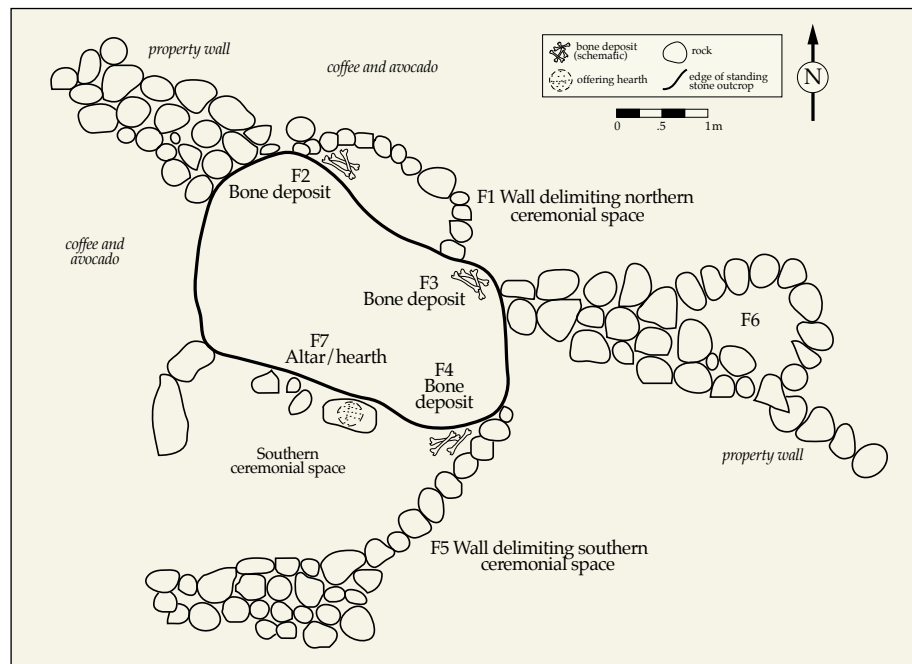
#### *Ethnographic Information about Chu Pad Abaj*

According to the landowner, Chu Pad Abaj was used for harvest ceremonies as well as hunting rites. He told us that the site is a doorway into a temple that houses all the wild animals of the forest.

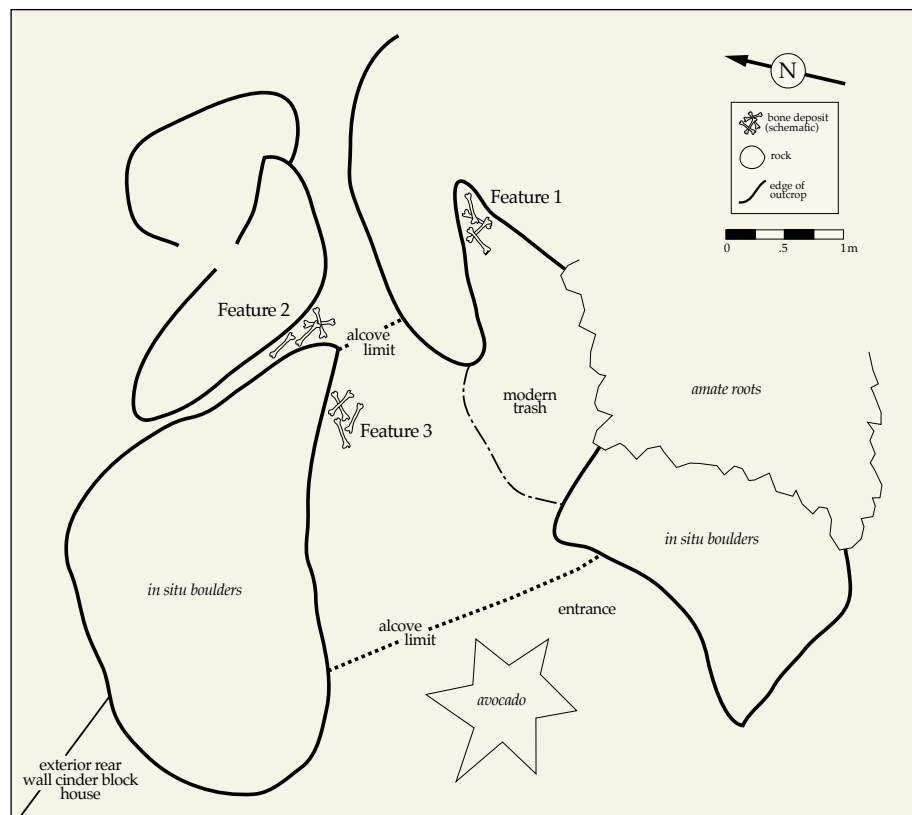
#### *Chuitinamit/Lothrop's Sacrificial Cave*

Chuitinamit is an abandoned hunting shrine located on a volcanic hill at the base of the San Pedro Volcano. The site consists of a tumbled pile of boulders forming a west-facing alcove used for caching animal bones. Currently the alcove is covered in leaves and functions as a dump for glass, food cans, and plastic bottles.

Today a private residence has encroached upon the site. However, evidence of a fauna deposit still remains. Three distinct bone caches were recorded: two within the main alcove and one in a narrow space



**Figure 14.** Plan map of the communal shrine Chu Pad Abaj located outside of Santiago Atitlan (after map by Linda A. Brown and Miguel Coché Par, May 17, 2005).



**Figure 15.** Plan map of the abandoned hunting shrine Chuitinamit. This site is very like the "sacrificial cave" recorded by Samuel Lothrop (after map by Linda A. Brown and Miguel Coché Par, May 18, 2005).



Figure 16. Peccary skulls found in Feature 1 at Chuitinamit.

immediately north of the former (Figure 15). Feature 1 consists of a bone cache in the easternmost section of the main alcove. Specimens present include peccary and white-tailed deer crania (Figure 16) as well as post-cranial elements from deer, peccary, tapir, and armadillo. Feature 3 is a buried fauna deposit eroding from the soil to the west of Feature 1. Exposed elements include a peccary mandible and a white-tailed deer tibia. Feature 2 is located just outside of the main alcove in a small space between several large boulders. Skeletal elements present include cranial and post-cranial elements from coati, peccary, white-tailed deer, and agouti paca as well as a fragment from an armadillo pelvis.

#### *Additional Information about Chuitinamit*

During the 1920s, Samuel Lothrop (1933) excavated the Postclassic ruins of Chuitinamit. In the course of this work, he noted a “sacrificial cave” located on the same hill yet lower in

elevation than his excavations. As his description makes clear, the “sacrificial cave” actually consisted of animal remains placed in a west-facing alcove formed by a pile of boulders. Lothrop’s photographs documenting on-site topography, his sketch map plotting its location, and his written descriptions lead me to conclude that this hunting shrine is his sacrificial cave.<sup>6</sup> In addition to the fauna deposit, Lothrop noted a second activity

<sup>6</sup> Lothrop (1933:83) reported seeing a fauna cache comprised of armadillo carapaces as well as the skulls and scapulae of about a dozen “sheep or goat,” a field identification I believe to be in error. Often when I inquired about the presence of hunting shrines around the lake, people told me about sites by describing them as “large rocks with sheep, goat, or cow bones.” I believe Lothrop was told the same and he did not have the occasion to closely examine the deposit. His published photographic overview of the cache shows at least one skull with cranial morphology suggesting it belonged to a peccary—a species that is present in the fauna cache I recorded. Test excavations could resolve this question.

area he called a “shrine” located downslope and to the east of the sacrificial cave, in an area currently incorporated into hotel grounds. The shrine likely consisted of a stone altar and place for burning sacrificial offerings. The presence of several activity areas suggests Lothrop’s sacrificial cave was a communal hunting shrine.

### *San Antonio Palopo*

#### *Tzanimul (“Place of Many Rabbits”)*

Tzanimul is an abandoned communal hunting shrine located slightly more than a kilometer south of San Antonio Palopo on a hillside near Tzampetey. The site consists of two large volcanic boulders that form a small protected crawl space.

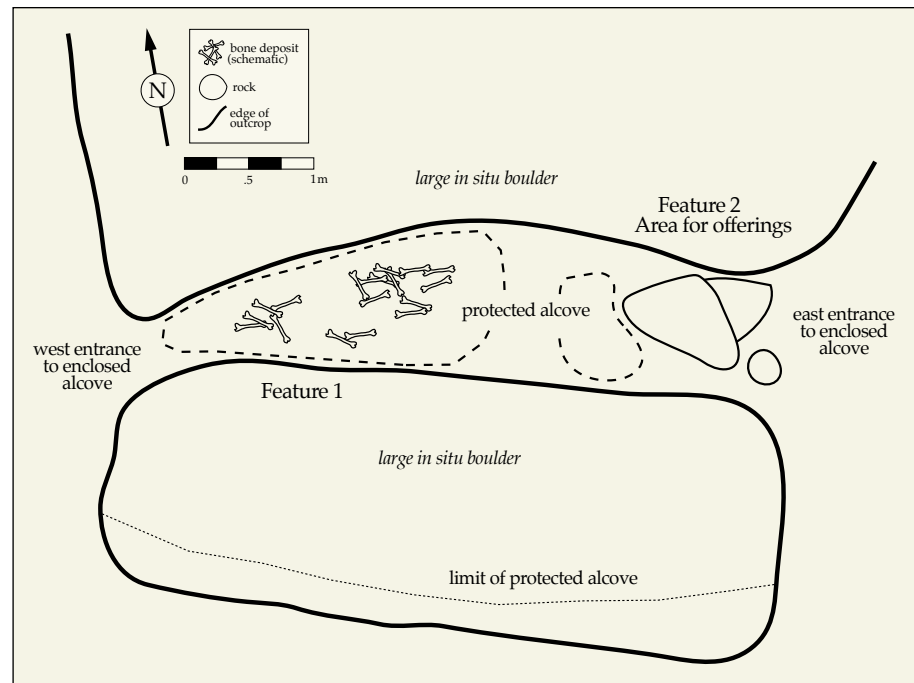
Feature 1 is a light surface bone scatter in the westernmost side of the alcove (Figure 17). Cranial and post-cranial remains are present including coati and agouti skulls and white-tailed deer mandibles. Feature 2 is located to the east of the fauna deposit. This part of the alcove was used for depositing offerings. No evidence of burning was noted on the surface.

#### *Ethnographic Information about Tzanimul*

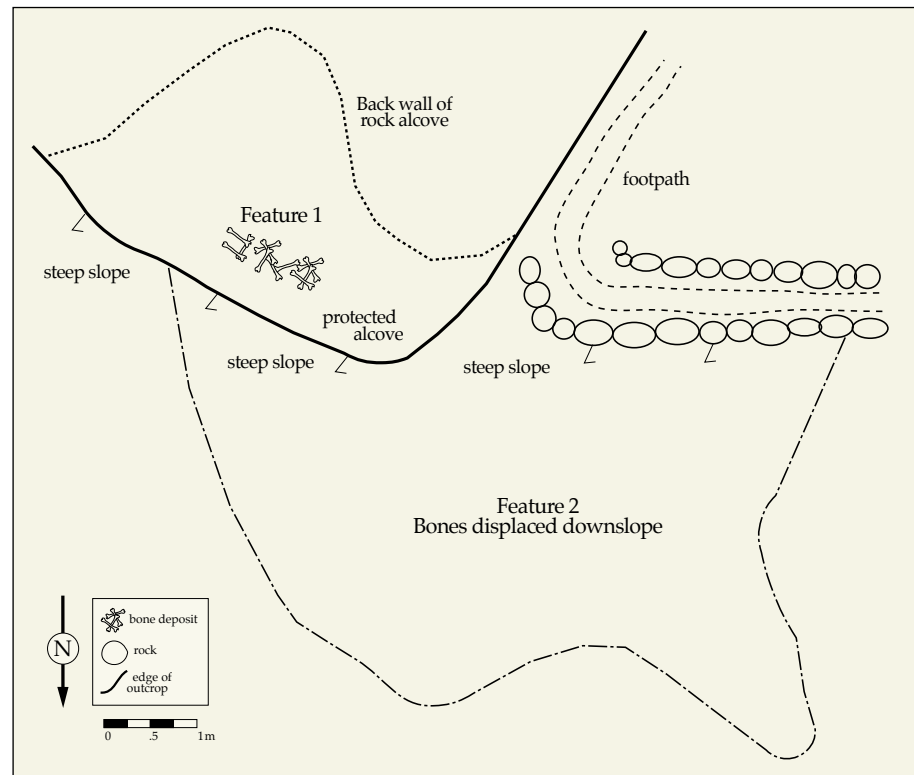
An older resident of San Antonio Palopo showed us this site, noting that it has not been used for several decades. According to our guide, people came to Tzanimul for two types of rituals associated with wild animals. The first ceremony was performed with the approach of the planting season. Just prior to sowing, individuals conducted a rite to ask the animals of the fields not to dig up and eat the newly planted seeds or the growing corn. The other ceremony conducted at Tzanimul was a hunting rite. Prior to hunting, individuals brought various types of offerings including copal, candles, liquor, beer, tamales, meat, pine needles, and a live chicken for sacrifice, all payments to the animal guardian. According to our guide, no post-hunting rite was performed when the curated bones were returned.

#### *Pan Q’aj Ziwan (“In the Middle of the Hill”)*

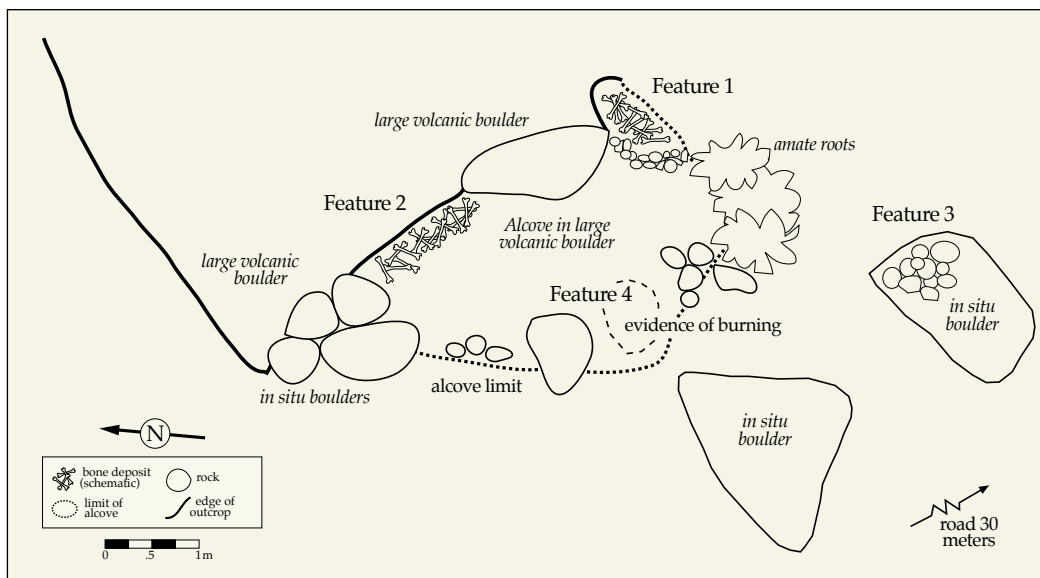
Pan Q’aj Ziwan is an abandoned communal shrine located approximately 500 meters south of San Antonio Palopo. The site consists of a large boulder precariously perched on the north slope of an intermittent drainage (Figure 18). A small protective



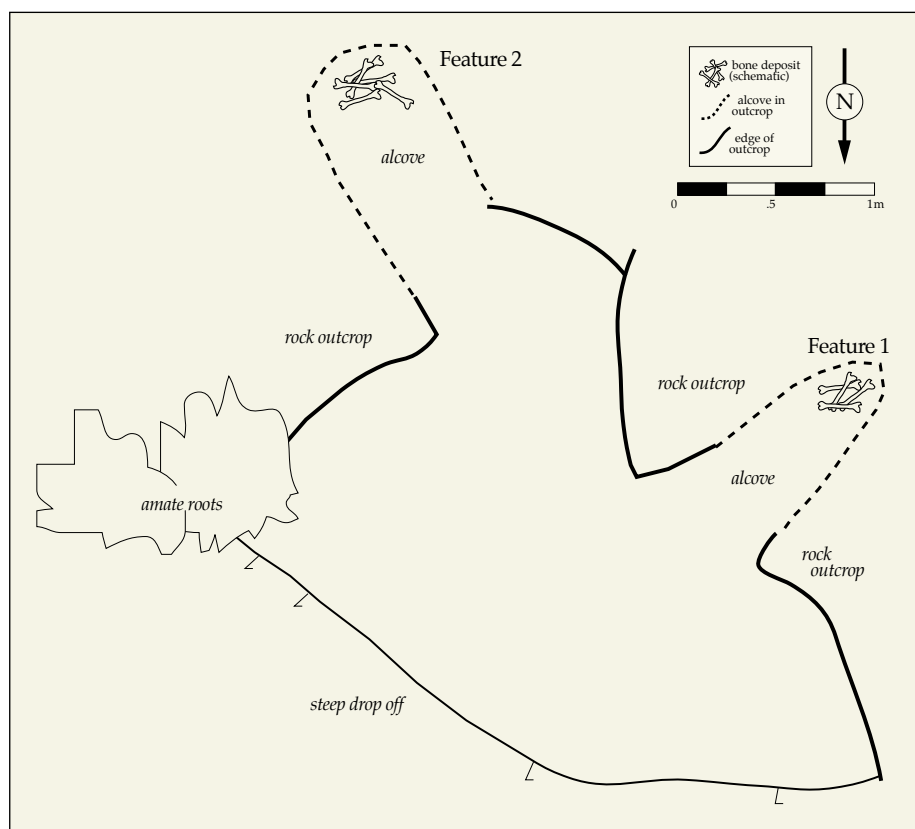
**Figure 17.** Plan map of the abandoned communal hunting shrine Tzanimul located outside of San Antonio Palopo (after map by Linda A. Brown and Julian Perez Xajil, July 11, 2005).



**Figure 18.** Plan map of the abandoned communal hunting shrine Pan Q’aj Ziwan located outside of San Antonio Palopo (after map by Linda A. Brown, Sergio Garcia, and Julian Perez Xajil, June 6, 2005).



**Figure 19.** Plan map of the abandoned hunting shrine Tzam Chicham located outside of Santiago Atitlan (after map by Linda A. Brown and Miguel Coché Par, May 12, 2005).



**Figure 20.** Plan map of the abandoned hunting shrine Chukumuk located outside of Santiago Atitlan (after map by Linda A. Brown and Miguel Coché Par, May 13, 2005).

alcove beneath the boulder was used for depositing bones.

Feature 1 consists of a light fauna cache observed in the alcove. Currently most bones have been displaced from this original context and washed downslope by heavy rains (Feature 2). Crania and mandibles scattered across the slope include peccary, white-tailed deer, coati, and agouti paca. Post-cranial elements present were from white-tailed deer, armadillo, and tapir.

### Other Hunting Shrines

In addition to the communal and private shrines described previously, we recorded three sites where we did not have adequate ethnographic information to classify them as belonging to one group or another. These shrines are described below.

### Santiago Atitlan

#### Tzam Chicham ("Point of the Smelly Water")

Tzam Chicham is an abandoned hunting shrine located one kilometer north of Santiago Atitlan. The site consists of a large boulder with an overhang that forms a sheltered alcove.

Four features were identified at the site (Figure 19). Feature 1 consists of a small fauna cache tucked into a small interior alcove inside the main protected space. The surface deposit contains cranial and post-cranial elements and includes skull fragments from white-tailed deer, peccary, and agouti paca. A second fauna deposit (Feature 2) is located to the northwest of the former. Similar to Feature 1, this deposit contains cranial and post-cranial elements including white-tailed deer, peccary, and agouti paca remains. In addition to these caches, a light bone scatter was noted throughout the alcove.

Feature 4 consists of a small burned zone inside yet close to the edge of the alcove. This feature likely represents

recent trash burning. Feature 3 is an oval-shaped stone construction built on top of a nearby *in situ* boulder. The purpose of this feature is unclear.

### *Chukumuk*

Chukumuk is an abandoned hunting shrine located two kilometers northeast of Santiago Atitlan (Figure 20). The site consists of a northeast-facing rock outcrop on the same hill that contains the private hunting shrine of Chukumuk II. Chukumuk may also be the shrine of a single hunter although we were unable to verify this through interviews.

The site contains a very light fauna deposit placed in two rock alcoves. Most bones were post-cranial elements. Those we were able to identify belonged to white-tailed deer.

### *San Pedro la Laguna*

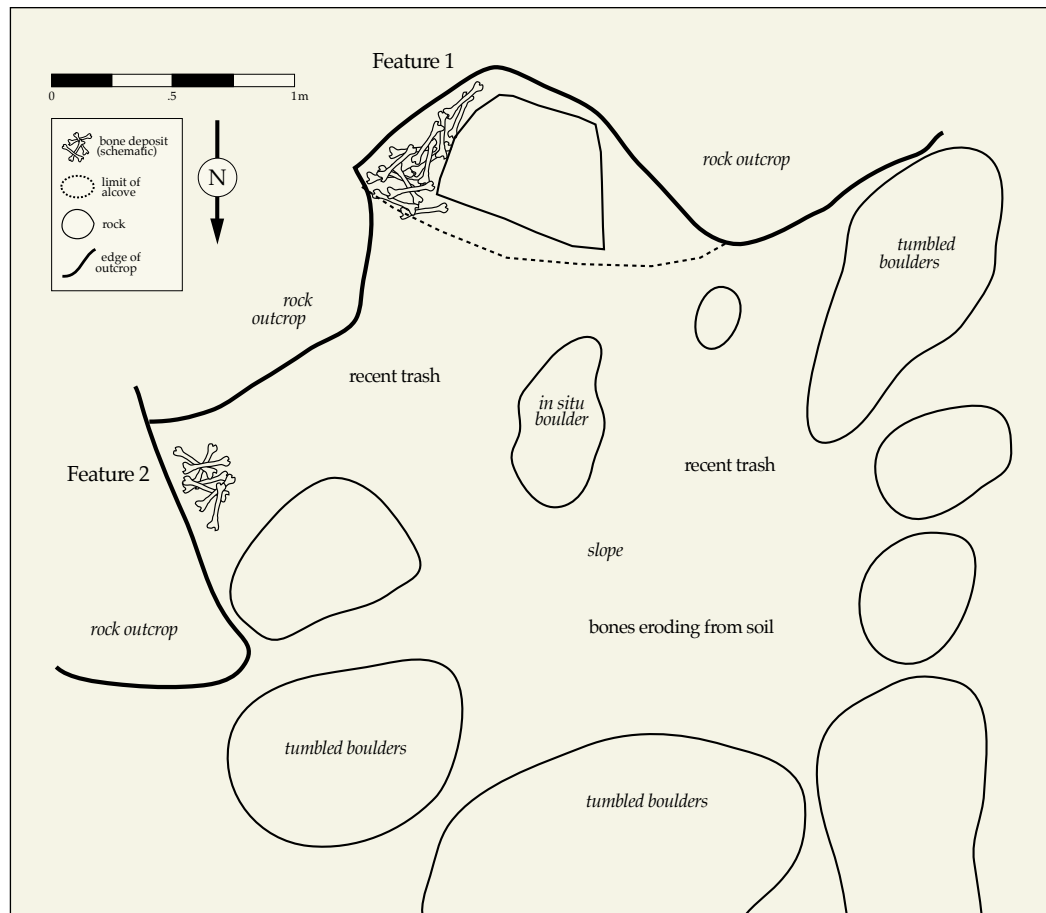
#### *Tzam Tawual* (“Point of the Island”)

Tzam Tawual is an abandoned hunting shrine located immediately north of San Pedro la Laguna. The site consists of a northwest-facing pile of tumbled boulders overlooking Lake Atitlan.

The site has two bone deposits tucked into alcoves formed by the tumbled boulders (Figure 21). Feature 1 is a fauna cache in the southernmost area while Feature 2 is located on the eastern side. Cranial and post-cranial elements are present, and species identified include white-tailed deer, peccary, and tapir.

### **Topographic Features Chosen for Shrines**

One of our research goals was to understand the type of topographic features associated with the animal guardian and chosen for use in hunting rites. All hunting shrines identified to date are associated with rock formations. Of the 17 known sites, three are in rock shelters while the others are associated



**Figure 21.** Plan map of the abandoned hunting shrine Tzam Tawual located outside of San Pedro la Laguna.

with large volcanic boulders. The types of boulders selected for use include single stones with prominent alcoves (Figure 22), multiple tumbled boulders forming an alcove (Figure 23), outcrops with small modest alcoves (Figure 24), and boulders lacking alcoves but with an overhang that provides protection from rain (Figure 25).

There appears to be some consistency in the spatial placement of bone deposits in relation to on-site topography. While cache locations did not indicate any directional preference, people did place bones in close proximity to the physical rock surface and often flush against the outcrop itself. If alcoves were present, typically these were used for caching bones. All locations chosen for ritual caches offered some protection from the elements.

### **Local Understandings About What Remains Get Returned**

From the outset of the project, it was clear that individuals selected certain taxa and skeletal elements for special deposition at hunting shrines. Thus one of our goals was to better understand this decision-making process. What animal remains could be discarded in household middens and which should be returned to the animal guardian at sacred sites?

To articulate emic understandings of the types of animals and skeletal elements that





**Figure 22.** Topographic features chosen for use in hunting ceremonies include single large boulders with alcoves, as seen at the site of Tzam Chicham.

should undergo specialized discard, we used methods from cognitive anthropology and applied them to archaeological questions. One such method, the free-list, is used to elicit items belonging to a specific cultural domain of knowledge. In the present study, the cultural domains of interest included the types of animals and skeletal elements that should be returned to the guardian of animals at hunting shrines.

To elicit a free-list of the types of taxa that should undergo specialized deposition, interviewees were asked to name all the animals they could think of whose remains should be curated and returned to a sacred site in the landscape. To understand which specific skeletal elements should be returned, we asked people to list all the types of bones that should be curated and then returned to shrines. Responses to these questions were processed using ANTHROPAC (Borgatti 1996).

#### *Animals Whose Remains Should Undergo Specialized Discard*

Mammals dominate the list of animals whose remains should be returned to the animal guardian at sacred sites (Figure 26). This observation is notable given the past and present reliance on wild resources associated with the lake, including fish and lake crabs as well as migratory birds (McBryde 1945). Of the twenty most frequently mentioned animals, only one was not a mammal. White-tailed deer was the most frequently mentioned animal (92%) that should undergo specialized discard. Species mentioned by at least half of all respondents included important subsistence animals, such as the white-tailed deer, peccary, armadillo, and agouti paca, as well as coati, raccoon, and gray fox.



**Figure 23.** Topographic features chosen for use in hunting ceremonies include tumbled boulders that form alcoves, as seen at the private shrine Chuitinamit II.

In addition to food sources, feline predators with historically important symbolic roles in Maya culture were mentioned. These species included the jaguar, puma, and ocelot. Interestingly, a hunter we interviewed in San Juan la Laguna was curating the lower legs of an ocelot, among other animal remains, for special deposition at a local sacred site.

#### *Skeletal Elements That Should Be Deposited At Shrines*

To better understand the selection of certain skeletal remains for inclusion in hunting caches we asked people to name all bones

one should bring back to a sacred site. Our interviews are ongoing but already suggest some variation in caching practices. Interviews allowed us to identify three groups of symbolically important bones that should undergo specialized discard: a) crania and mandibles; b) bones of large animals; and c) all bones of hunted mammals. In most places, there was consensus among community members about the types of bones that should be returned to a sacred site. A notable exception to this consensus was Santiago Atitlan, where individual responses varied as to which remains should be returned to sacred sites.



**Figure 24.** Topographic features chosen for use in hunting ceremonies include shallow alcoves, as seen at Chukumuk II, an abandoned shrine used by a deer hunter from Santiago Atitlan.

#### *Bone Caching Practice A*

Individuals in Kaqchikel communities of Pampojila and Agua Escondida along the east and southern areas of Lake Atitlan reported that crania and mandibles were the most important elements to return to sacred sites (Figure 27). Skulls and mandibles were said to represent the animal *in toto*, thus their return was sufficient to placate the animal guardian and assure success in future hunts. These reports are corroborated by surface deposits in Kaqchikel hunting shrines, as they are dominated by

crania and mandibles, although other elements are also present.

Individuals in the Tz'utujil town of Santiago Atitlan also reported a specialized yet different life history for crania. While people from the Kaqchikel communities return crania to sacred sites in the landscape, in Santiago Atitlan respondents reported that the skulls and skins of hunted animals should be returned to the Cofradía San Juan. Locally San Juan is understood to be the lord of the wild animals (Carlsen 1997:98). The *cofradía* serves as a repository for skulls and skins of various wild mammals, with some stuffed and hung from the ceiling while others are

used as dance costumes during the deer jaguar dance (Figure 28). Although individuals in Santiago Atitlan reported that skulls should be returned to the *cofradía*, fauna deposits at nearby hunting shrines suggest variation in this practice over time. Crania were observed in ritual fauna deposits of five local shrines, indicating that sometimes skulls were returned to sacred sites in the landscape (Figure 1).

#### *Bone Caching Practice B*

Several residents of Santiago Atitlan reported that only the bones of large animals needed to be returned to sacred places, either the *cofradía* or shrines in the landscape. Species cited by respondents as constituting “large animals” included: white-tailed deer, brocket deer, collared peccary, white-lipped peccary, agouti paca, coati, and raccoon.

Preliminary field identification of taxa in surface deposits at nearby shrines generally supports this practice. Remains overwhelmingly consist of white-tailed deer, with some peccary, agouti paca, coati, and tapir present, although armadillo was noted as well. The *Cofradía* San Juan contains many of the “large animals” mentioned but also includes armadillo carapaces as well as squirrel and a small spotted cat (either ocelot or margay).

#### *Bone Caching Practice C*

The previously mentioned discard patterns contrast with those reported in the Tz’utujil towns on the western side of the lake (see Figure 27). Interviewees in San Pedro, San Juan, and San Pablo la Laguna insisted that all skeletal elements of hunted mammals should be returned to sacred sites. As noted by one man,



**Figure 25.** Topographic features chosen for use in hunting ceremonies include large boulders with overhangs that provide protection from the elements, as seen at Pa’ Ruchi Abaj, an abandoned communal shrine outside of San Juan la Laguna.

Rank	Taxon	# Respondents Mentioned (n=26)	% Respondents Mentioned
1	White-tailed deer	24	92
2	Peccary*	19	73
3	Armadillo	18	69
4	Agouti paca	18	69
5	Coati	18	69
6	Raccoon	16	62
7	Gray Fox	14	52
8	Jaguar	11	42
8	Puma	11	42
10	Ocelot	9	35
11	Squirrel	9	35
12	Coyote	8	31
13	Skunk	7	27
14	Opossum	6	23
15	Forest rabbit	6	23
16	Kinkajou	6	23
17	Central American agouti	5	19
18	Giant anteater	5	19
19	Turkey	4	15
20	Brocket deer	4	15

\* Respondents did not divide peccary into white-lipped or collared.

**Figure 26.** The twenty most frequently mentioned taxa whose remains should undergo specialized discard at sacred sites in the landscape, organized according to frequency.

the animal owner “makes one new animal from each bone you return—even the littlest toe bone. That is why you have to return all of them.” Here discard behavior is unambiguously linked with regeneration of the species. Preliminary field identification of fauna deposits associated with these communities appeared to support this behavior, as they contain a broad diversity of skeletal elements.

Some residents of Santiago Atitlan also reported that all bones of hunted animals should be returned to sacred sites, regardless of size. Individuals reporting this practice still stated that the preferred location for crania and skins was the Cofradía San Juan, while other remains should be taken to places in the landscape.

## Discussion

Clearly individuals living around Lake Atitlan discarded some, or all, wild mammal bones in ritual contexts located outside

of the household—a practice with potentially significant archaeological implications. Do other communities engage in this practice, or is this strictly a local behavior? A review of the ethnographic literature suggests that the ritual discard of animal bones extends well beyond the borders of Lake Atitlan. In the early twentieth century, La Farge and Byers (1931:243) visited a cave in the Jacalteco area that contained “vast quantities of animal bones.” The Q’anjobal Maya of San Miguel Acatan curated deer bones on household altars until the time that they too were disposed in a local cave (Grollig 1959:162). In Momostenango, the K’iche’ deposited deer bones at an upright sacred rock and a carved boulder depicting a jaguar (Cook 1981:143, 2000:114-115). Meanwhile the Huastec in Veracruz put deer bones in a shallow hole encircled with stones for deposition (Alcorn 1984:88).

The belief that animal bones must undergo special deposition is also documented for Mesoamerican peoples outside of the Maya area. In Honduras, the Lenca stored deer bones until post-hunting ceremonies when they were deposited at mountain shrines (Chapman 1985:141). In Mexico, the Nahuatl of northern Hidalgo deposited all bones of hunted animals at sacred places in the mountains (Montoya Briones 1968:23). The Mixe of Oaxaca curated the “skulls, mandibles, and other bones of animals they have killed” to return to sacred sites on mountaintops or in caves (Lipp 1991:95). Similarly, the Tlapanec in Guerrero carefully stored the skulls and mandibles of hunted animals until they were ritually deposited at a sacred place in the mountains (Neff Nuixa 2001:368-369).

As noted above, the ethnographic record demonstrates that various Mesoamerican peoples deposit wild animal bones in sacred places in the landscape rather than discard them in household middens. Yet the question remains as to how long individuals have engaged in this ritual practice. Although evaluating time depth will take field research and the dating of *in situ* hunting deposits, the literature hints that the specialized discard of certain animal bones has historical depth in the Maya area. One of the earliest written reports of people curating animal bones is from the colonial period. During the 1700s, hunters in the Department of Huehuetenango, Guatemala, carefully curated deer bones so as not to anger the lord of deer (Cortés y Larraz 1958[1768-1770]:119-120). Unfortunately, the final deposition of these remains was not provided. However, much later in time Grollig (1959:162), working in the same area, reported that hunters from San Miguel Acatan stored deer bones until the time that they were taken and deposited in a nearby cave.

Archaeological deposits from lowland Maya caves document the antiquity of subjecting certain animal remains to specialized deposition in sacred places (Brady 1989; Emery 2004; Pendergast 1969, 1971, 1974; Pohl 1983; Pohl and Pohl 1983). A Late Classic



**Figure 27.** Local understandings concerning the types of bones that should be returned to sacred sites as reported by individuals knowledgeable about hunting ceremonialism in various communities around Lake Atitlan.

deposit from the Eduardo Quiroz Cave, Belize, contained unrelated skeletal elements from opossum, coati, paca, forest rabbit, tapir, brocket deer, and white-tailed deer, suggesting that “only portions of these animals were brought to the cave” to be deposited (Pendergast 1971:83). Similar deposits of unrelated medium and large mammal bones were noted in Late Classic cave assemblages of Actun Polbilche (Pendergast 1974) and Actun Balam in Belize (Pendergast 1969:58) as well as Naj Tunich in Guatemala (Brady 1989:377-378). Meanwhile fauna remains from various lowland caves suggest that deer skulls were deposited in these ceremonial contexts (Pohl 1983:89; Pohl and Pohl 1983). Perhaps these bones were “handed over” to the

animal guardian in ancient hunting rites performed in caves.

As evident in ethnographic accounts, the formation of ritual fauna caches is guided by belief in the animal guardian who will exact revenge against hunters breaking ceremonial protocol. Yet the specialized treatment of skeletal remains is also informed by the symbolic conflation of bone with regeneration in the Maya area. The K’iche’ Maya envision bones as seeds ripe with latent potency and life (e.g., Carmack 1981:352; Christenson 2003:129). A Chuj myth recounts the exploits of a deity who curated and planted the bones of wild animals so they would create new creatures (La Farge 1947:50). After successfully sprouting, the forest creatures were enclosed in a stone corral cave and the gate



**Figure 28.** Deer skull and skin dance costumes curated on a table in the Cofradía San Juan in Santiago Atitlan. Miscellaneous skulls and skins are stored on the lower table shelf.

was closed with rocks. Such beliefs are based upon the notion of the “flowering of the dead,” a core cultural paradigm that illustrates how the ancestral life force supports, and is endlessly recycled, in new generations (Carlsen 1997:50; Carlsen and Prechtel 1991).

Ethnographic references from greater Mesoamerica also associate the curation and special deposition of animal bone with indigenous concepts concerning the regeneration of species. The Huichol believe that the deer does not die but is reborn from his bones if they are carefully handled and stored (Myerhoff 1974:83, 201). The Mixe in Oaxaca return bones to sacred sites so the animal guardian can refresh them (Lipp 1991:95). Meanwhile the Tlapanec of Guerrero present food offerings to curated animal skulls and mandibles. In a symbolic act of regeneration, each

is wrapped in cotton “skins” prior to deposition at mountain shrines (Neff Nuixa 2001:368-369).

Indigenous creation accounts from the colonial period also link bone with active agency and regeneration. In the *Popol Vuh*, the mother of the Hero Twins is impregnated by a skull hanging from a tree, and the Hero Twins are reborn in the underworld from their ground bones (Christenson 2003; Tedlock 1985). A Mexica myth from central Mexico recounts how Quetzalcoatl created human beings by collecting the bones of ancestors and sprinkling them with his own blood (Caso 1958:12). In addition to written accounts, visual depictions of bones as a source of new life are common in Classic-period Maya iconography, which depicts skulls flowering with vegetation and human corpses sprouting from the underworld as trees (e.g., Carlsen and

Prechtel 1991:32-36; Schele and Mathews 1998:120-123). The long symbolic linkage of bone with regeneration in Mesoamerica—coupled with the belief in a lord of the animals—suggests that hunting protocol dictating certain skeletal remains undergo specialized discard likely existed in the past.

### **Conclusions**

From the Classic period to the present, scholars have documented the widespread Maya belief in a supernatural animal guardian who must be appeased in rituals before and after the hunt (e.g., Alcorn 1984: 88; Cabarrús 1998:47; Cortes y Larráz 1958[1768-1770]:119-120; Hofling 1991:136-153; Redfield and Villa Rojas 1934:117-118; Sapper 1897:268; Taube 2003b:472-475; Thompson 1930:124-135; Tozzer 1907:162, 1941:144,162; Wagley 1949:57; Wisdom 1940:71-73). Despite this resilience, the physical places used for hunting rites and associated ritual deposits remain largely unknown.

The Lake Atitlan hunting shrines provide us with a glimpse of the types of topographic places and ritual deposits associated with contemporary and recent Maya hunting ceremonialism. All hunting shrines were associated with rock outcrops including: rock shelters, tumbled piles of boulders with alcoves, and single boulders providing protection from the elements. The most obvious cultural feature indicating a site's role in

hunting rites is the presence of a ritual fauna cache. Preliminary investigations suggest that these caches are dominated, although not exclusively, by mammal remains paralleling contemporary local beliefs about the types of animals under the protection of the animal guardian. The identification and in-depth analysis of archaeological bone caches that may have formed during ancient hunting rites constitutes an important step for testing the continuity of these practices over time.

### **Acknowledgements**

The current research was supported by a grant from the Foundation for the Advancement of Mesoamerican Studies, Inc. (#05012). I would like to thank Dr. Kitty Emery and the Environmental Archaeology Program at the Florida Museum of Natural History, who generously donated digital images of skeletal elements used for preliminary species identifications. Sincere thanks go to Dolores Ratzan, Miguel Coche Par, Sergio Garcia, Julian Perez Xajil, Manuel Jáminez Tambriz, Pedro Velásquez Yaxón, Andres Sosa, and Francisco Ixtamer Ramos for assistance in the field work. Hunting shrines were first identified as part of El Proyecto Etnoarqueológico Costumbres Mayas directed by myself and Luis Romero. I would like to thank the Instituto de Anthropología e Historia, Guatemala, who granted permission for this project.



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