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Caracol: Archaeology Serves Tourism

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Archaeotourism



Towering some 135 feet above the jungle canopy, Caana (Sky Place) is the tallest human-made structure in Belize. The front of Caana is now completely exposed. It's thought that ritual, administrative, and commercial activities once took place here.

It's a long, slow drive to Caracol. A badly rutted, punishing dirt road takes visitors to this place deep in the lush jungle of southwestern Belize. As she has done many times, Sherry Gibbs patiently wends her way along this road that is more than a match for the sturdiest four-wheel-drive vehicles.

For three weeks at a time a single-room pole-and-thatch hut serves as her office and home. A mosquito net covers her bed. Hers is one of a number of such austere huts that form a small village inhabited by a handful of archaeologists and dozens of other workers. These huts are adjacent to several far larger and grander structures—the awesome handiwork of the ancient Maya.

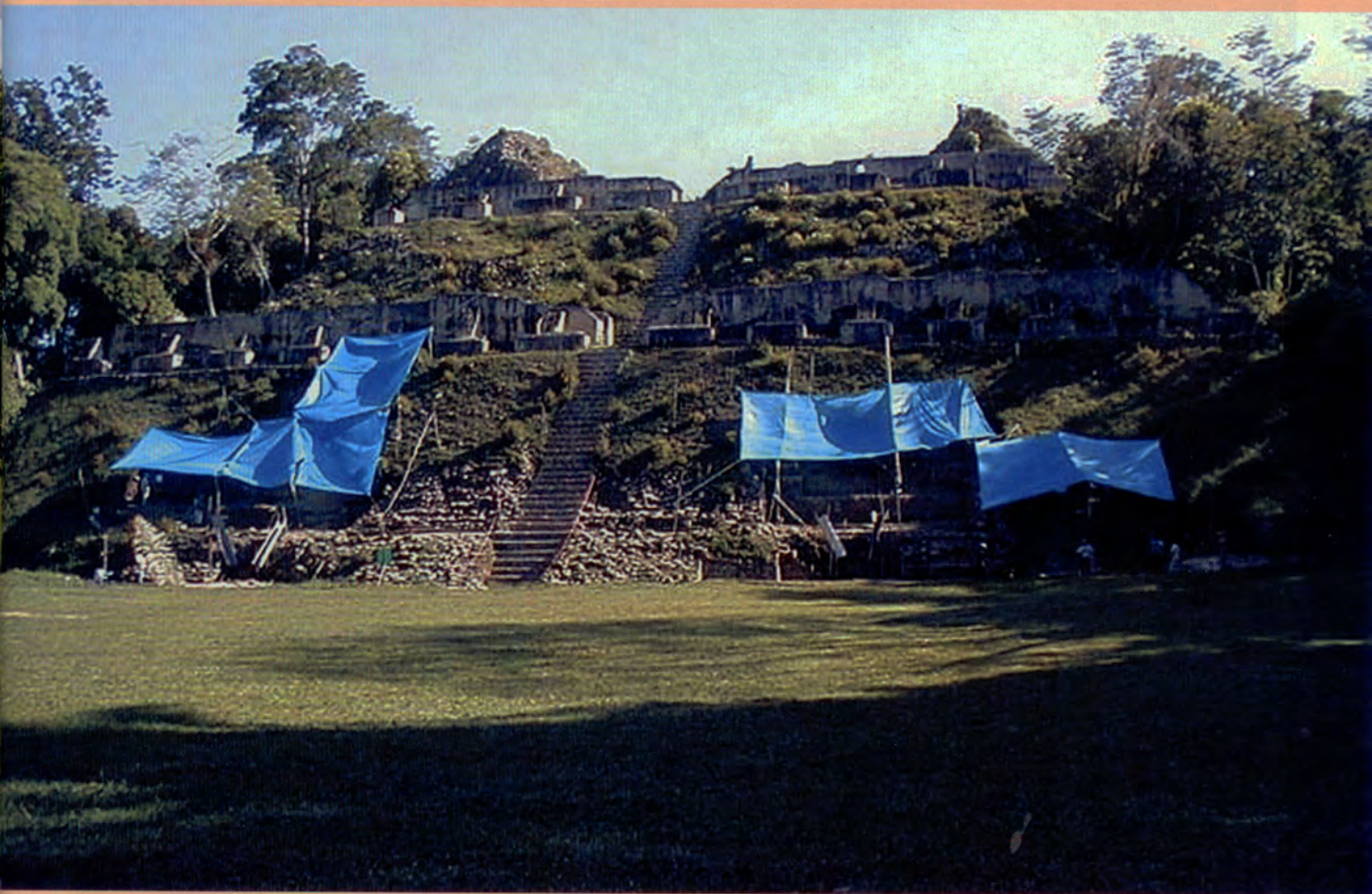
Caracol is the largest site in Belize and one of the largest in the Maya area. According to one estimate, it covers approximately 110 square miles and includes thousands of

structures of varying sizes. For centuries it was the jungle's secret. In 1937 it was discovered by a logger who reported the finding to A. H. Anderson, the first archaeological commissioner of Belize. Anderson investigated the site that year, finding eight carved stone monuments, some architectural remains, and numerous mounds. More work was done in the 1950s, and in 1985 archaeologists Arlen and Diane Chase of the University of Central Florida embarked on a major investigation of the site that is still ongoing.

It's believed that Caracol once wielded considerable political, economic, and military power. The site was first inhabited some time around 600 B.C., and it reached its zenith during the Maya Classic Period (A.D. 250–900). Many of its numerous structures were built during this period. The Chases believe that the population of urban Caracol could have grown to roughly 140,000 people,

INCREASING TOURISM AND KNOWLEDGE OF THE MAYA ARE THE GOALS OF A MAJOR PROJECT AT A SITE IN BELIZE.

By Michael Barwaya



Recovering Caana from the jungle required a tremendous amount of work. Awe's crew spent roughly 18 months excavating and consolidating this huge structure, the back half of which remains covered by vegetation.

which is more than twice that of Belize City, the largest city in the country today. Its inhabitants excelled at city planning and agriculture; the latter is all the more remarkable since the site is far from any source of water. Caracol warred with, and defeated, Tikal, an extremely powerful Maya city in nearby Guatemala, in A.D. 562, and then Naranjo, also in Guatemala, in the early A.D. 600s. Roughly 400 years later this great city was abandoned.

Jaime Awe, laden with 15 chickens, has returned from town. Before setting out for Caracol, he performed one of his many obligations: making sure his crew would have dinner. Working in the jungle can be very difficult, but he boasts that his workers eat well. Awe, the director of Belize's Institute of Archaeology, supervises a huge project devoted to excavating and stabilizing structures at

Caracol. Gibbs, who sports a Maya glyph tattoo just below her left ear, is his crew chief. The work is done under the auspices of the government of Belize, and its purpose is twofold: to contribute to the country's archaeological record and to increase tourism to its Maya sites, thereby bolstering its economy.

The project began in the fall of 2000, when Awe and his crew of about 25 set to work building their own village of huts, complete with a community dining room, basketball court, and a soccer field of sorts. These pole-and-thatch huts mirror the Maya dwellings of centuries ago; and like those ancient residents, Awe's crew, some of whom are Maya, can build these huts without use of a single nail.

There are but two native Ph.D. archaeologists in all of Belize, and Awe, who has done research in the country



B5 is one of the structures Awe's crew is focusing on. Excavators have uncovered large stucco masks of Tlaloc, the rain god, and the sacred water lily monster.

for 20 years, is one of them. With that distinction comes significant responsibility. The work at Caracol is part of the Tourism Development Project, a grand effort that also includes archaeological work at four other sites in Belize: Altun Ha, Lamanai, Cahal Pech, and Xunantunich. Awe also directs the work at these sites, and therefore he's often in motion, going from one place to the next. "It means that I would love to be cloned," he says.

Awe is of medium build and has dark, wavy hair. He is plain-spoken, and frequently jokes with his crew. He tries to spend at least two days a week at Caracol. Upon returning here he gathers a few members of the crew and begins "the walk." Gibbs informs him of the good and the bad that's occurred in his absence as they tour the excavation areas, assessing the various situations. "I'm making decisions as I go," Awe says. "I don't have the luxury of being every day, every minute at these sites." Due to the lack of highly trained archaeologists and the lesser-creden-



Excavators expose the architecture along the base of mounds in the South Acropolis, a place where the elite resided.



Jaime Awe (right) discusses the day's work with his crew chief Sherry Gibbs and archaeologist Doug Weinberg.

tial archaeologists being "swamped," Awe states that he "can't call upon a host of other Belizian archaeologists to come and assist us." This personnel shortage is addressed by foreign archaeologists. "We have very good relationships with our foreign colleagues," Awe observes.

"We have a hundred people up here," he says. "At one time we had 150." They work throughout the year. Given the size of their task, they need every worker and every day. Over the decades archaeologists have exposed and stabilized, either partly or completely, the tiniest fraction of Caracol's structures. The rest are buried under a layer of jungle, appearing as mounds that stud the site. Compared to many other archaeological projects, Awe has vast resources at his disposal; nonetheless, he has nowhere near sufficient time, money, and manpower to recover all of these structures.

The crew is working in the center of Caracol in sec-



Workmen construct the thatch roof of a temporary structure that protects the monuments found at Caracol.

tions known as the A and B groups and the South Acropolis. The A and B groups feature plazas surrounded by large structures. It's thought that the A Group plaza was used for ritual activity. There are a number of large stones lying on the ground and the archaeologists believe they are fragments of stelae and altars. Several of the A Group's structures were temple pyramids and there was also an observatory from which the Maya tracked the movements of the celestial bodies.

The B Group features the huge pyramid named Caana (or "Sky Place") which, at approximately 135 feet, remains the tallest building in Belize. Various ritual, administrative, and commercial activities probably took place here. It was probably home to Caracol's rulers. The South Acropolis was a place where the elite resided. "We know that because of the size and quality of a masonry structure," Gibbs notes. "The everyday farmer or common person wasn't living in structures like this." They



Because of Caracol's remote location a camp was constructed to house the huge crew that works there.

have also found jade and tombs with grave goods that also suggest it was an upper-class residence.

The weather is hot and sticky and there's no lack of bugs. Though it's the rainy season, the sun is relentless. The incessant din of the jungle's wildlife reaches every corner of the site. When first heard, the roar of the howler monkeys is alarming. The crew is accustomed to these conditions. Their work is painstaking and orderly. The excavators, under the supervision of the archaeologists, peel off the foliage and collapsed stone covering a structure to expose its architecture. That done, "we have a drafts crew that goes in, they map, draw, photograph, illustrate, do profiles, elevation, plan views," Gibbs explains. "Then the



The eastern facades of structures A5, A6 and A7. These structures are part of what's known as the A Group. Their location is thought to be a place where rituals were performed.



The temporary structure being built in the photograph on p. 15 now serves as a sort of makeshift museum in which the monuments are displayed.

“masons move in and stabilize.” It took about 18 months to expose and consolidate the front half of Caana. The back half, from which sprouts a number of trees, is still firmly in the jungle’s grasp.

Across the plaza from Caana is a temple pyramid called B5. There are roughly 10 men working on this structure, the upper portion of which is covered by vege-



This strangler fig tree has taken root above a structure. Despite all the recovery work that has taken place, the jungle still has a purchase on much of Caracol.



This monument, named Altar 12, dates to A.D. 820. It was discovered in the B group plaza.

tion. They are working on B5 because, “when you climb Caana and turn around you look at this thing,” Gibbs states. “We really had to do something about it.” Two masks (human, animal, or god-like effigies), roughly nine-feet tall and eight-feet wide, have been discovered here. “When we found them it was like opening Pandora’s Box,” she says. They were faced with the sort of decision they have to make from time to time: Should they leave the original exposed? Or should they make a replica that would be used to cover the original in order to preserve it? The decision is determined by the condition of the mask. In this case, they decided to cover the originals with precise replicas made of fiberglass.

When they discover masks that are extremely fragile, extra care is required to make the replicas. They map, photograph, and draw the original, using this information to create an exact clay copy. The map details “every single stone,” says Gibbs, as well as informing the craftsmen how deep to draw crevices. Any cracks or other evidence of deterioration in the original will be reflected in the replica. “They mess up the clay a little bit in spots” she says, to give it a stone-like texture.

Needless to say, it requires skilled hands to craft these clay models, though some of their tools are surprisingly simple. Two craftsmen sit under a sheet of corrugated metal held up by poles at the foot of B5 fashioning a clay replica. The metal shields them from the sun. A map and an illustration of the mask they’re recreating are next to the clay mold they carefully sculpt with spokes from a bicycle wheel that have been customized for this task. They employ several triangular and oval tools made from spokes. One of them says that he learned of these tools and how to use them from “a guy in Guatemala.” One of their craftsmen is scheduled to receive more formal training by attending a class in replica making in Taiwan.

The challenges inherent in keeping an operation the size of Caracol’s going from one day to the next extend far beyond archaeology. Awe says it costs about \$50,000 a

Dedicated to Caracol

In order to obtain a permit from the Belize government, husband-and-wife archaeologists Arlen and Diane Chase initially committed to doing 10 years of research at Caracol beginning in 1984. The site has been plagued by looting and early in their investigation the Chases found a note affixed to a tree. The note, authored by a looter, informed them that the "real archaeologists" were already at work and, as their services weren't needed, they should pack up and leave. The Chases refused the advice, and they've been working at Caracol ever since. "We could be doing this for the rest of our natural lives," says Arlen.

He is not speaking in hyperbole. This former metropolis covers approximately 110 square miles. The Chases surmise the site has some 36,000 structures, only a few of which are exposed. In short, there is work enough to occupy several lifetimes.

But that's not to say they haven't been busy. Their count of Caracol's structures results from having mapped more than 14 square miles of the site. "We've tested 107 residential groups outside the epicenter," Arlen states. They've also done considerable work in the A, B, and C groups, the heart of Caracol. Some of their recent work complements that of Belize's Tourism Development Project directed by Jaime Awe. This project is Belize's second attempt to promote tourism through archaeology. The Chases directed the initial attempt, which took place between 1989 and 1993.

At the start of their investigation they assumed Caracol would prove to be a mid-sized Classic Maya city of the sort found in the southern lowlands. Major structures and monuments were built in the center of these cities, and settlements were scattered beyond the core. Caracol, they soon learned, did not fit this profile. It was so large and dense that establishing its boundaries was a challenge. Goods such as exotic shells and jadeite pendants were found throughout the city, whereas in other sites such luxury items were generally concentrated in ceremonial areas. Vaulted masonry tombs, usually the trappings of royalty, were discovered in humble residences as well as pyramids and temples. These tombs also indicate that the common people were engaging in ritual activities that normally were performed only by the elite.

These findings indicated that Caracol was highly unusual in that it possessed a huge "mid-level group that developed its own identity," according to Arlen. This group, a precursor of the modern middle class, appears to have enjoyed prosperity and in return contributed to the city's development and social cohesion. Because of the thousands of structures they've identified, the Chases deduce that Caracol's population, in the late A.D. 600s, was at least 115,000 and may have reached 140,000.

The sociopolitical system that produced this middle class held sway for more than three centuries, from A.D. 560 to about 790. After this time, luxury goods are found only in palaces, suggesting that they belonged exclusively to the elite. It also appears that ordinary people discontinued ritual activities.

In Arlen's estimation, Caracol was abandoned due to "political exigencies" and a possible drought. By A.D. 895 the center of Caracol was burned. The discovery of an unburied child is evidence of "rapid abandonment" that could have been caused by warfare.

"Caracol is a very important site in the Maya world," Arlen states. Take it from a real archaeologist. —Michael Bawaya



Diane works on a scale drawing.



Arlen reconstructs pottery.

week to field his crew, and they work year-round. "When you're doing a big research project like this, it's all about logistics," he observes. Logistics "takes up easily 50 percent of your time." They run short of supplies, their equipment breaks down. They have about six vehicles to get the crew to and from Caracol, but they could use twice that. The site is so remote that two-way radio provides their only communication with the outside world. Sustaining the operation requires a variety of skills. The workers range from archaeologists to mechanics to cooks to artists. As it was for the Maya, water is a concern for Awe's crew. They estimate their daily usage at roughly 3,000 gallons. The Macal River, their nearest source of water, is 12 miles away.

There are also the occasional acts of nature to con-

tend with. The road to Caracol crosses the Macal, and come the rainy season the river may flood. "Last year we were stuck back here for a week," says Awe. "We could not get out." The river, by his estimation, rose 10 to 12 feet over the bridge. Consequently, keeping sufficient food on hand to last for 10 days is a priority. "We might be eating beans and rice and canned goods," he says, "but at least we won't starve."

Hurricane Iris hit Belize in October of 2001. Having gotten more rain than wind at Caracol, the crew thought the site had escaped serious damage. "Then I went up to the top of Caana. We lost the whole back side of the western pyramid," Gibbs recalls, referring to one of the small pyramids at the top of the structure. "It was gone."

The wall forming the back of the pyramid had col-



Some of the masks discovered at Caracol are so fragile that precise replicas are made and placed over the originals to protect them. Making these replicas is a painstaking process that includes the following steps: (Top) A mass of clay is carved into an exact copy of one of the masks. (Middle) The clay mold is covered with fiberglass. (Bottom) The fiberglass replica is painted to match the color of the original mask.

lapsed and its stones had tumbled down the length of Caana. "It was a big, big mess," she says. Nor did their budget allow for such a problem. The fallen stones had to be recovered and the wall rebuilt, an emergency that required nearly three-quarters of the crew to work nonstop. "We had to beg and plead our case" to get the money to pay the crew overtime. A number of the workers arranged themselves in a "stone line" running from the base to the summit of Caana. The hurricane's swift fury was methodically remedied as the many stones, conveyed from hands to hands, were eventually returned to the summit to rebuild the wall.

Breakfast is over and the dining room, which had been full of workers, is nearly empty. The cooks are planning lunch, the highlight of which will be pigs' tails, a delicacy, in many a worker's estimation, that ranks with cows' feet soup. Awe sits at a picnic table and explains the demise of the people who long preceded him here. Some scholars think warfare took a heavy toll on the Maya, but he considers it a factor rather than the primary cause, which in his mind is environmental degradation.

"We think people first came here because the soils were very good and there was available water to support a certain level of population," he explains. Whereas the Chases estimate that Caracol's population grew to some 140,000, Awe believes it was somewhere in the range of 60,000 to 100,000.

The Maya consumed natural resources such as water and wood while paying little heed to sustainability. By about A.D. 600 "we have millions of people living in the central Maya zone," he continues. "Belize alone may have had close to a million people." Agriculture was their main means of sustenance, requiring the clearing of large tracts of land. They also needed wood to construct their homes. "We're talking thousands of homes," adds Awe. The Maya used wood to cook their meals and fire their pottery. The mortar holding their remarkable pyramids together was made of lime. They produced lime by heating limestone to approximately 900 degrees centigrade, an extreme temperature that necessitated a lot of firewood. "They were doing major deforestation," he concludes.

Citing the construction of skyscrapers as an example, Awe states that humans try "to develop technologies that will increase the carry-



A view of structures A2 and A3. These are two of the structures that the Tourism Development Project has focused on conserving.

ing capacity” of their environments. The Maya’s technical prowess was evidenced in the reservoirs they built to increase their water supply as well as the terraces they constructed to prevent erosion and increase the moisture in, and thereby the fertility of, the soil. The Maya adapted to a degree but, he states, “ultimately they failed because they abandoned this area.”

Caracol’s environmental decline had political consequences. Unable to maintain their lifestyles, the people refused to support the ruling families who, though once thought to be omnipotent, had seemingly lost the power to provide for their subjects.

Caracol is a major archaeological site but hardly a major tourist attraction. A mere handful of tourists wander the plaza between Caana and B5. Of the Tourism Development Project’s five sites, Altun Ha gets the most tourists—approximately 800 to 1,000 a day—and Caracol the least. Altun Ha benefits from its proximity to Belize City, getting traffic from the cruise ships that dock there. Caracol suffers for its remoteness. Awe and the Belize government (the Institute of Archaeology is part of the Ministry of Tourism) would be happy to lure 1,000 tourists a day to Caracol which now, during high season, gets perhaps 100. “We hope to eventually make this our anchor site,” he explains, “just like Tikal is the anchor site for Guatemala.”

The main problem is the condition of the road. “I’ve destroyed I don’t know how many vehicles on that road,”

laments Arlen Chase, who’s been driving it for nearly two decades. There are plans to improve the road and an airstrip located about 30 minutes from the site. Then tourism could flourish. But could a swarm of visitors overtax Caracol as the Maya once did? “A lot of people say, ‘Oh my god, would you want that many people at the site?’” Awe says, mimicking the concern in their voices. His answer, of course, is yes. Because of its size, Caracol has a large “carrying capacity.” He adds that the limestone used to build the structures here is more durable than that used at some other Maya sites.

He admits it’s possible to be too successful, and that he wouldn’t want it to draw the huge crowds that Chichén Itzá, in southern Mexico, does. Despite the few tourists Caracol gets, they have caused problems now and again. A tourist climbed a mask and damaged it. Another visitor, having made her way to the top of a structure, froze in fear. Members of Awe’s crew were dispatched to escort her down. Other tourists have ignored flagging tape and entered restricted areas that were being stabilized.

But Awe is optimistic. One of the advantages of Belize’s archaeology department being subsumed by the tourism department is that the archaeologists are in regular contact with, and can influence the decisions of, tourism officials. “What we want is sustained tourism,” he states. “And if we want to sustain tourism in Belize into the distant future, we’ve got to manage appropriately and properly.”

MICHAEL BAWAYA is the editor of *American Archaeology*.