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MAYA SETTLEMENT AND TRADE ON AMBERGRIS CAYE, BELIZE

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Abstract

Archaeological fieldwork was conducted on Ambergris Caye, Belize, for three years beginning in 1986. Nineteen archaeological sites were identified during survey work. Intensive excavations were conducted at three sites and limited excavation at several others. In addition, a fourth site has been excavated by another party. This data base gives us the opportunity to examine the diachronic and functional variability of the archaeological record.

The first occupation of Ambergris Caye dates to the Late Pre-classic, and by the Early Classic a pattern had begun to form that continued until the Terminal Classic. Sites on the island's protected leeward side participated in a growing and thriving coastal-trade network. At the same time, sites on the unprotected Caribbean coast did not have the same access to exotic goods and did not build formal architecture. Trade-related sites are relatively closely spaced, about 5 km, and exhibit no evidence of conflict. The Ambergris data show that a much more vibrant trade system existed during the Late Classic period than has been previously known.

At the end of the Classic period, a fundamental restructuring of life on Ambergris Caye seems to have occurred. Coastal-margin sites that had been involved with the trade system were largely abandoned. While some of this activity seems to have been consolidated at the site of Marco Gonzalez, a new settlement pattern also emerged. By the Early Postclassic, an adaptation based on terrestrial rather than maritime resources developed in the northern interior of Ambergris Caye. This restructuring is coincidental with the restructuring of the Maya political and economic situation in the southern lowlands and gives us a new perspective from which to view the institutional organization of the Maya.

The ancient Maya used the Caribbean coast of the Yucatan Peninsula of Mexico and Belize as a primary commercial route. While peripheral to the major Maya population centers, events in the coastal area provide an important window into Maya economic and political organization. By viewing the Maya from this perspective and correlating events to those in the major population centers, it is possible to gain a clearer insight into the institutional framework of the society.

In this paper, the status of our information regarding the events and dynamics of the Maya settlement of Ambergris Caye, off the coast of northern Belize, is summarized. This information is then used to illuminate the dynamics of Maya coastal trade and political economy. Much of the data presented here were collected during several seasons of survey and excavation beginning in 1986, under the direction of the author and his codirectors, James F. Garber and Herman A. Smith (Guderjan

and Garber 1995). Additional information derives from the work of Elizabeth Graham and David Pendergast (1989) on the southern part of the island.

Maya coastal settlement and the implications of patterning in that settlement have been the focus of considerable attention over the past two decades (Freidel and Sabloff 1984; Hammond 1976; McKillop 1987; Sabloff and Rathje 1975; among others). Ambergris Caye, however, offers special opportunities for understanding coastal settlement systems. Unlike most of the coast, where all settlement functions needed to be arranged lineally along the coastline, Ambergris' physiography enabled the Maya to functionally separate site locations in an observable way.

Information from the Cozumel Project indicated that maritime trade increased in importance during the Postclassic (Sabloff and Rathje, eds. 1975). On Cozumel, population dramatically increased as did trade-related activities during the Postclassic. Consequently, when the Ambergris Project began, it was expected that relatively little evidence for Classic-period trade would be found and that trade as an organizing principal for the island's settlement would not become apparent until the Postclassic. Instead, the Ambergris record shows rich evidence of a very active, Late Classic period trade system. While similar results were being uncovered by McKillop (1980) at Moho Caye near the mouth of the Belize River and MacKinnon (1989) at Placencia along the southern Belize coast, the Ambergris data more clearly reflect the shifting dynamics of the trade system.

GEOGRAPHY OF AMBERGRIS CAYE

Ambergris Caye forms a barrier between the open Caribbean Sea and the Chetumal Bay system (Figure 1). The Río Hondo and New River drain into Chetumal Bay and its smaller southern extension, Corozal Bay. Along these bays and rivers are found many of the larger and more important prehistoric communities of the region. Thus, these waterways form important commercial routes.

Ambergris Caye is misnamed, for it is not actually an island but an extension of the Xkalak Peninsula. Ambergris is sepa-



Figure 1. Locational map of Ambergris Caye.

rated from the rest of the peninsula and Mexico by a very narrow channel, the Bacalar Chico, which may have been constructed by the Maya no later than A.D. 600 and perhaps considerably earlier (Guderjan 1988; Guderjan and Garber 1995). Nevertheless, Ambergris is commonly considered to be an island (Wood et al. 1988) and will be termed as such in this paper.

Ambergris is about 30 km long, and not wider than 4 km at any point (Figure 2). It roughly parallels the barrier reef with a general north-south orientation. Today, as in the past, the reef is perhaps the most important aspect of the island's geography. The reef protects the beach from the open sea and provides abundant marine resources. Waves that commonly exceed 3 m in the open sea are diminished to less than 1 m behind the reef. Between the reef and land, waters are also quite shallow, typically 3–7 m, and crystal clear. Immediately outside of the reef, the depth often exceeds 40–50 m.

Consequently, Maya canoe traders normally plied the calm coastal waters between the reef and the land. It was not until the Postclassic period that much evidence exists for use of the deep-water cays of southern Belize (MacKinnon 1989) or even for intense activity on the island of Cozumel (Sabloff and Rathje, eds. 1975), which also required journeys beyond the reef.

One of the most important anomalies along the entire Quintana Roo-Belize-Honduras coast is found at Rocky Point on Ambergris. Here, the reef converges with the land and for

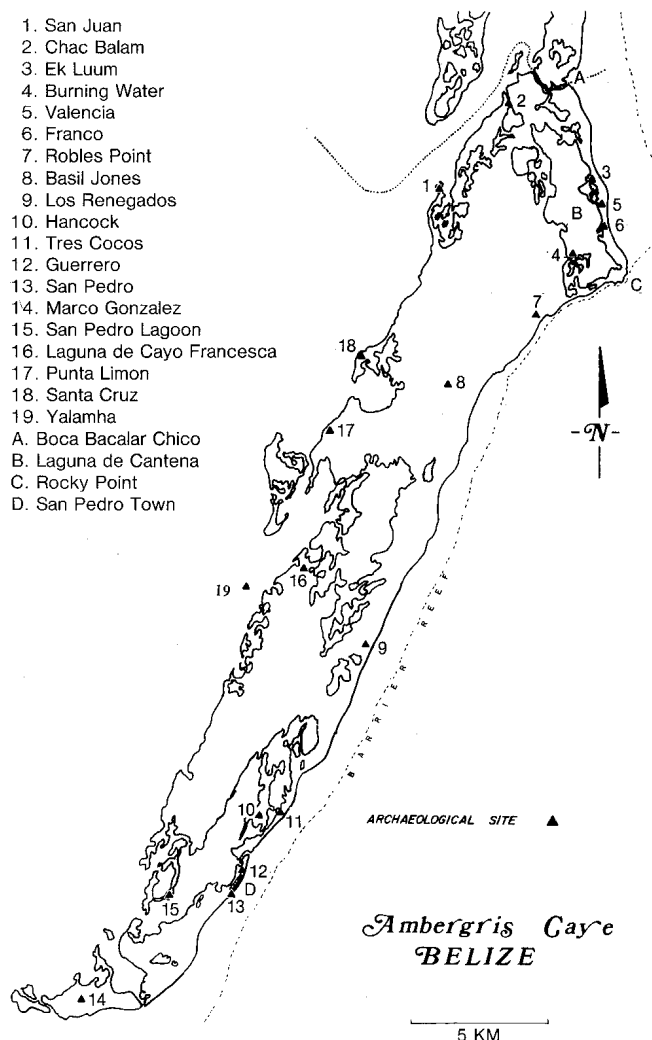


Figure 2. Map of Ambergris Caye, showing known archaeological sites.

approximately 1 km they remain joined, separating again at Robles Point. While this makes for spectacular scenery, this convergence was disruptive to coastal-trade routes. In order to avoid ventures outside of the reef, the Maya may have dug the Bacalar Chico passage at the narrowest point of the Xkalak Peninsula.

The evidence for the Bacalar Chico channel being open in pre-Columbian times is circumstantial but compelling. The presence of San Juan and Chac Balam along the channel route combined with the quantities of exotic goods found at those sites indicate a linkage with the maritime trade, which seems extremely unlikely unless they were directly connected with the open seas (Driver 1991; Driver et al. 1995). Also, a deposit of "killed" conch dating to approximately A.D. 600 was found at San Juan (Guderjan 1988). These were used for food, but not as tools. The idea of carrying conch in their shells across the island is also very unlikely. However, bringing them by boat is much more feasible. Further, conch cannot live in the bottom sediments on the west side of the island and can only live on the floor of the open seas.

Archival records also indicate that the channel was open at an early date. The channel was certainly open in 1783 when it

was used as the international border as declared by the Treaty of Versailles and was subsequently mapped (Bay-Man of Honduras 1787). As early as 1726, the channel was open and considered to be the direct route into Chetumal and Lake Bacalar, and by 1726, the Spanish had blocked a preexisting natural or human-made channel from Chetumal Bay to Lake Bacalar (Grant Jones, personal communication 1991). Therefore, documentary evidence also supports a date of at least early Colonial and probably pre-Columbian times.

Offshore resources and opportunities are related to windward- vs. leeward- side location. The windward side of the island is where prevailing winds strike. In this case, the prevailing wind comes from the Caribbean Sea to the coast, and the eastern or beach side of the island is the windward side. The barrier reef is also on this side of the island and presented another suite of resources. The "back," or western side, is the leeward side. Water salinity is much lower on the leeward side than the windward because of the freshwater brought into the bay system by the New River and the Río Hondo. Also, bottom sediments differ greatly.

Ambergris' terrestrial environmental zones are defined by the height of the underlying limestone plate. At the lowest level, where the limestone is submerged, are the interior lagoons that actually comprise the bulk of the island's mass. Adjacent to them are extensive mangrove swamps. These swamps are crucial to the marine-life ecosystems and often nearly impassable. A "mangrove walk" commonly means carefully climbing on mangrove "hoops," 2 m above ground, for long distances. In areas that are not generally flooded and that have elevations less than approximately 3 m above sea level, savannah vegetation such as salt grass is found. Finally, in the highest elevations, over approximately 3 m above sea level, the low scrub forest of northern Belize dominates the landscape.

Archaeological sites found in mangrove environments are generally easily located as they are slightly elevated because of the substructures built by the Maya that support forest vegetation can be seen from some distance. Typically, they are ringed with a narrow transition zone of savannah vegetation. On the other hand, small sites in the scrub forest or modern coconut plantations are extremely difficult to locate.

Along the entire windward coastline is the beach that extends 30–50 m from the water. Typically, a relict beach is seen behind today's beach, probably from a time of higher relative sea level. Currently, the beach is slowly eroding away as sea level rises. Dunn and Mazzulo (1993) documented a local sea-level rise of about 30 cm over the past 2,100 years. However, in southern Belize, Heather McKillop (1987, 1994, 1995, 1995b) has found a number of sites submerged under three to four times as much water. Similarly, she found Classic-period materials under more than 1 m of water at Moho Cay (McKillop 1981). On Ambergris, Yalamha, an Early Classic site, is submerged under more than 1 m of water (Guderjan 1993). Deposits dating prior to A.D. 670 ± 70 (TX-5658) were found at San Juan that were approximately 60–70 cm below current groundwater levels (Guderjan 1988). In addition, Dunn and Mazzulo's study also runs contrary to evidence from Cerros (Scarborough 1991), the apparently submerged Postclassic seawall at Isla Cerritos (Andrews et al. 1988), and Placencia (MacKinnon 1989). Scarborough (1991) summarized much of the evidence for sea-level rise or land subsidence in his monograph on the canals and settlement of Cerros. Consequently, Dunn and Mazzulo's measure-

ments must be considered to be an understatement of the actual situation. The effect of sea-level rise on the vegetation communities of Ambergris would have been to inundate or partially inundate savannah areas that now are mangrove swamps.

ARCHAEOLOGICAL DATA

The first archaeological work on the island was by Thomas Gann who excavated at least one Postclassic site (Gann 1926). Much later, Elizabeth Graham and Peter Schmidt, both as archaeological commissioners, made informal surveys in the late 1970s and early 1980s. During the same period, Norman Hammond (1976:78) reported that trade wares such as Plumbate and Fine Orange had been found on the island. The provenience of these is not known, as they were in a collection of looted materials from Ambergris (Hammond, personal communication 1988).

Other references to the archaeology of Ambergris Caye include Andrews's (1983) work on salt production and trade. Andrews (1983:46) reports that local informants estimated the production of two salinas on northern Ambergris to have yielded 10–100 tons of salt annually. However, these have ceased to function in the past few decades. Cherry Hamman-Hollander (1984:128–130) also discussed the possibility that the "black dirt mounds," as sites are often termed on Ambergris and elsewhere, were the result of the Maya bringing dirt for gardens from the mainland by canoe. This concept has been dismissed as excavations were undertaken.

Programmatic study of Ambergris was begun when the author and Herman Smith undertook an initial testing operation at the site of San Juan in 1985. Then, joined by James Garber as a third codirector, we began intensive excavations at San Juan in 1986 (Guderjan 1988; Guderjan et al. 1989). In 1987, we were joined by David Glassman and excavated at the sites of Ek Luum and Chac Balam, completing the work at Chac Balam in the 1988 season. During the 1987 and 1988 seasons, we conducted concurrent surveys, which were continued in 1990 and 1991 (Guderjan 1995). Smith has also found additional sites as recently as 1993. In addition, Elizabeth Graham and David Pendergast have conducted intensive excavations of the Marco Gonzalez site (Graham 1989; Graham and Pendergast 1989) and in the town of San Pedro.

As a result, 22 prehistoric sites are known on Ambergris Caye. While most of these are on the coastal margin, within about 200 m of the water, some are on the higher interior of the island. Equally important is if they are on the windward or leeward side of Ambergris and whether or not they exhibit formal architecture. "Formal architecture" in this paper is defined as stone masonry or earthen substructural mounds. Table 1 summarizes the known archaeological sites on Ambergris Caye. While this is, an exercise in squeezing diverse and disparate data into categories, it does aid in understanding patterns.

Category 1 represents the leeward-side sites that exhibit formal architecture. These also have direct access to natural or possibly man-made harbor facilities, and with one exception—Punta Limón—are the largest Late and Terminal Classic sites on the island. In several cases, these sites exhibit formal plazas (Chac Balam, Burning Water, Laguna de Cayo Francesa, Santa Cruz, and Marco Gonzalez). While these sites are large by island standards, they are small by mainland standards. A reasonable maximum occupancy "guesstimate" for sites such as Chac Balam, Burning Water, and San Juan would be in the neighbor-

Table 1. Prehistoric sites on Ambergris Caye

Site	Size	Occupational Dates				
		LPC	EC	LC	TC	PC
Category 1 (leeward, formal architecture)						
Marco Gonzalez	large	X	X	X	X	X
Chac Balam	large	?		X	X	
Burning Water ^a	large			X	X	
San Juan	large			X	X	
Punta Limón	small			X	X	
Santa Cruz	large			X	X	
L. de Cayo Francesa	large		?	X	X	
San Pedro Lagoon	large				?	
Category 2 (windward, formal architecture)						
TresCocos ^b	medium			X	X	
Robles Point ^c	medium			X	X	
Ek Luum ^d	medium			X	X	
Category 3 (interior, formal architecture)						
Basil Jones	large					?
Category 4 (leeward, no formal architecture)						
Yalamha	small		X			
Hancock ^e	small			?		
Category 5 (windward, no formal architecture)						
San Pablo	small				X	
San Pedro	?					X
Guerrero	small				X	
Mata Grande	small				?	
Los Renegados	small					X
Habaneros	medium				X	X
Franco	small				X	
Valencia	small				X	

Note: Data from Guderjan (1995).

^aOn interior northern lagoon, accessible via open channel to windward side.

^bAdjacent to open channel that joins leeward and windward sides.

^cHas minimal formal architecture, small addition to .5-m-tall natural rise.

^dActually is more accessible through lagoon and open channel to leeward side, is located closer to lagoon than windward-side beach.

^eEqually accessible from windward or leeward side on small lagoon.

hood of 100 persons. These would probably represent large, extended families or similar lineage groupings. Our survey work has been sufficient to conclude that we have a complete sample of sites in this category.

Category 2 includes the three windward-side sites that have formal architecture. Each requires some further discussion. The sites of Tres Cocos and Ek Luum are actually on narrow strips of land roughly between the windward-side beach and interior lagoons. In the Ek Luum case, access is provided through the lagoon and Bacalar Chico to the leeward side. Tres Cocos is in a similar setting, with access provided by the San Pedro River to the leeward side. In these special cases, their proximity to the beach masks the fact that they fit in many respects in Category 1. Placement in Category 1 would be as reasonable as Category 2 due to their high degree of accessibility from the leeward side. Robles Point is another anomaly in that its "formal architecture" consists solely of a very low, barely defined extension to a natural stone outcrop. Test excavations show that this extension is only about 50 cm tall. Presumably, the outcrop and extension were used as agglutinated platforms (Freidel and Sab-

loff 1984) or substructural bases for perishable structures. Therefore, Category 2 is best characterized as the anomalies on the windward side. Our survey work was sufficient to conclude that we have a complete or nearly complete sample of sites in this category.

Category 3 includes only the special case of the Basil Jones site. Basil Jones is unique in its location in the center of the northern Ambergris terrestrial mass, instead of being located near navigable water. Basil Jones is one of three sites, the others being Santa Cruz and San Pedro Lagoon, which include stone-masonry structures. At least four masonry structures exist at Basil Jones in very poor condition. Basil Jones also includes an extensive network of "field walls" covering at least 4 square kilometers. Elsewhere, these date to the Early Postclassic period (Rathje and Phillips 1975) and the Late Postclassic (A. Andrews, personal communication 1995). A late temporal assessment is supported by Tohil Plumbate vessels recovered by looters from the site and the strong possibility that this is the site dug by Gann (1926). In the Basil Jones case, the function of the field-walls has not been determined. However, they probably marked agricultural or residential space.

Category 4 includes the two small leeward-side sites of Yalamha and Hancock. Yalamha is an Early Classic residential site submerged by more than 1 m of water. Hancock is actually on an island in an interior lagoon, but is readily accessible from the leeward side. It is likely that we have not located all sites of this category, and our data are insufficient to discuss patterning among them.

Category 5 is composed of the windward-side sites with no formal architecture. Most of these sites (San Pablo, Mata Grande, Habaneros, Franco, and Valencia) are habitation sites dating to the Late and Terminal Classic periods located adjacent to interior lagoons very near the windward-side beach. The San Pedro site is a Postclassic residential and mortuary site currently being excavated by Elizabeth Graham and David Pendergast. Materials from this site are being recovered from buried contexts without any visible surface features from the center of the town of San Pedro. The Guerrero site is a residential midden on the north side of the town of San Pedro and may be related to the San Pedro site. Los Renegados is a Middle Postclassic site unrelated to the other sites in this category except in the sense of its general characteristics. Testing operations at Los Renegados by Herman Smith yielded large quantities of obsidian (McKillop 1995a) and a very restricted range of ceramics (Valdez and Guderjan 1992).

Late Preclassic and Early Classic Periods

The first known occupation of Ambergris Caye occurred during the Late Preclassic period (300 B.C.–A.D. 300) and is evidenced from the sites of Chac Balam and Marco Gonzalez. Unfortunately, the evidence for Late Preclassic occupation is quite meager. A single, Protoclassic mammiform sherd was found in the surface collection from Chac Balam, and no construction or intact occupation has been found. Similarly, Graham and Pendergast (1989) found a few Late Preclassic sherds underlying the major construction at Marco Gonzalez.

It was during the Late Preclassic that Cerros flourished as a trade center at the mouth of the New River in Corozal Bay (Garber 1989; Robertson and Freidel 1986). Therefore, it is likely that the Bacalar Chico, if it existed, was used for canoe

traffic and linked Cerros and other riverine and bay communities with the northern coast.

Early Classic materials have also only been found at three sites: Laguna de Cayo Francesca, Yalamha, and Marco Gonzalez. A third-party collection from Laguna de Cayo Francesca included a few Early Classic sherds. However, no other Early Classic materials were found during subsequent visits to the site despite deep exposures in looters' pits. Yalamha, which translates from Mopan Maya as "place under water," appears to have been a small residential site on the leeward side. Rising sea level and, presumably, related wave erosion have deflated the site, and all that remains is a scatter of artifacts under more than a meter of water. Graham (1989:150) reports Early Classic materials at Marco Gonzalez. While this is apparently a substantial occupation, it is poorly known, as it is largely buried under considerable later construction. Consequently, little more is known of the Early Classic than of the Late Preclassic. However, it is clear that permanent occupation of the island occurred by the Early Classic.

Late and Terminal Classic Periods

During the Late Classic period, significantly more activity occurred on Ambergris. Late Classic components are known from nearly all sites. The primary information comes from excavations at San Juan, Chac Balam, and Ek Luum. By about A.D. 600, construction of formal architecture was underway at these and several other sites, and the general site plans as they appear in the Terminal Classic period were being developed. The general settlement pattern of the island was intensive occupation of the coastline with little occupation of the interior.

By this time, San Juan, Chac Balam, Burning Water, Santa Cruz, Punta Limón, and Laguna de Cayo Frances had access to the open Caribbean through the Bacalar Chico and its feeder canals. Coastal trade was a major consideration in the development of these communities. Each was located with respect to a natural harbor or an artificial harbor was constructed. Each had formal architecture and several—Chac Balam, Marco Gonzalez, Santa Cruz, Laguna de Cayo Francesca, and Burning Water—had formal plazas.

The strongest architectural evidence for trade and interaction with the north during the Late Classic (Tepeu 3) was found at Structure 3 at San Juan (Figure 3). In its Structure 3B-2nd and 3B-1st configurations, this was a two-tiered, round, perishable structure with upright stone slabs on its perimeter built on top of a round substructure (Guderjan 1988, 1995). The lower tier was elevated approximately 2.0 m and was 9.2 m in diameter. The upper tier was 6.2 m in diameter and raised 15 cm above the lower tier.

Round buildings are rare in the Maya lowlands during the Classic, but assume importance during the Terminal Classic at Chichen Itza. Other Terminal Classic and Early Postclassic round buildings are found at Seibal (Smith 1982), Becan (Harrison 1979), and Nohmul (Chase and Chase 1982).

A number of round structures also exist at Cozumel (Freidel and Sabloff 1984). Some structures at La Expedición on Cozumel apparently are storage facilities (Freidel and Sabloff 1984:33), while others scattered about the island are associated with *cenotes* and may be apiaries (Wallace 1978; cf. Freidel and Sabloff 1984:33–34). Round structures at Buena Vista on Cozumel are undated, and their functions are unknown (Freidel and

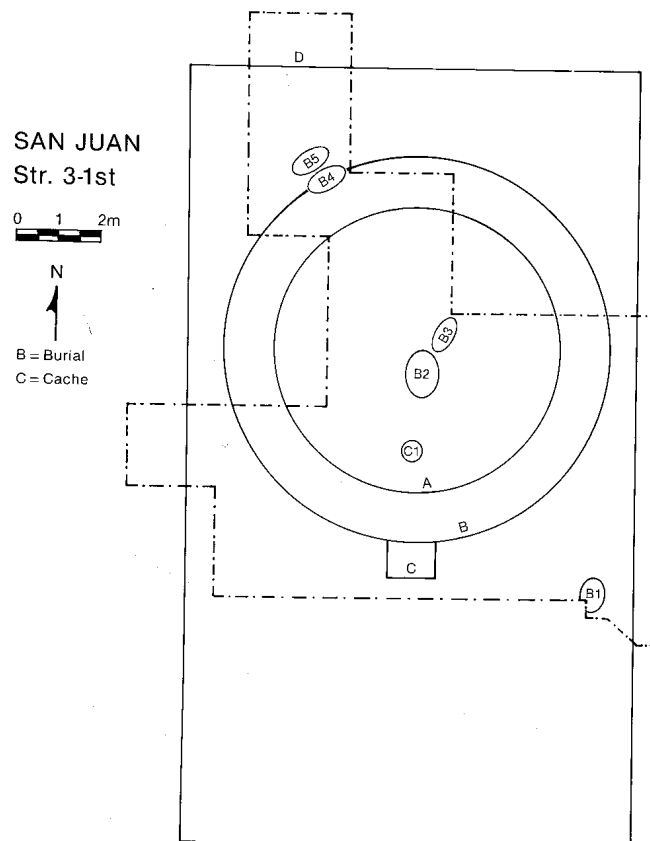


Figure 3. Plan of Structure 3 in San Juan.

Sabloff 1984:33). San Gervasio Structure 34-f is a small stone structure with a three-tiered substructure (Freidel and Sabloff 1984:62; Gregory 1975).

The two structures most comparable to Structure 3 at San Juan are Structure 9 at Nohmul (Chase and Chase 1982) and Structure 79 at Seibal (Smith 1982). Nohmul Structure 9 dates to the Terminal Classic/Early Postclassic, as does San Juan Structure 3. The platform is round and about 14.8 m in diameter. The substructure is about 9 m in diameter. This is larger, but on the same order of magnitude as San Juan Structure 3. A perishable superstructure was built on top of the substructure as was the case with San Juan Structure 3. Unlike Structure 3 at San Juan, Nohmul Structure 9 has a central support. Like Structure 3, a small staircase allowed access to Nohmul Structure 9.

Structure 79 at Seibal is considerably larger than those at San Juan or Nohmul (Smith 1982). This building is 18 m in diameter and 3 m high. There are three equal-sized terraces and a stairway allowing access. In front of the stairway is an altar. On top of the round structure is a smaller, slightly elevated rectangular floor. Seibal Structure 79 dates to the Bayal phase, the Terminal Classic florescence, which is marked by Fine Orange and Fine Gray wares.

Structure 34-f at San Gervasio on Cozumel is similar in the configuration and scale of its substructural platform. This is a Terminal Classic building on the southern end of a shrine group on an agglutinated platform separated from the other groups at San Gervasio by about 400 m. The platform is rounded on the south end, forming the first tier of the substructure. Pub-

lished accounts do not specifically state the dimensions of the platforms (Freidel and Sabloff 1984; Gregory 1975). However, by using plan views and reconstruction drawings in each source, general estimates can be made. The lowest tier, actually an extension of the main platform, is about 10 m in diameter. The second tier rises about 3 m above the first and is about 7 m in diameter. The third tier rises another 5 m and is about 5 m in diameter. Each tier is centered upon the previous one. Atop the final tier is a small masonry building in ruins. This was originally believed to be round (Gregory 1975), but a reevaluation and comparison with Escalona Ramos's (1946) earlier drawing convinced Freidel and Sabloff (1984:62) that it was square with large openings on each side. However, excavations of the building in the early 1980s showed that both the platform and upper structure were round (Vargas de la Peña 1992:72–74).

The similarities in design of these buildings combined with the apparent precedent in the Caracol at Chichen Itza have led Chase and Chase (1982) to argue that the round building at Nohmul is direct evidence of Yucatecan influence at that site. In addition, Hammond (1978) reports a probable port facility at Nohmul. Such a port facility furthers the argument that Structure 9 is a result of interaction with the north. Similarly, Sabloff (1973:128) sees Structure 79 at Seibal, combined with other architectural evidence, as indicative of a "foreign takeover." Whether it does or not, it certainly exhibits an influx of ideas and influence from elsewhere.

The string of Quintana Roo round structures at ports such as Xcaret, Tulum, Paalmul, and Xelha indicates that round structures were incorporated into the accoutrements of the maritime-trade system. Although these sites postdate the round buildings at San Juan, Seibal, Nohmul, and Becan, the association with maritime trade is clear. In all cases, these buildings are in prominent locations within the site. Generally, these are seen as shrines or administrative structures. At San Juan, occupational debris on Structure 3 indicates that it had a residential as well as administrative function. Structure 3's prominent location with a stairway opening to the center of the site indicates that the administrative aspect existed there as well.

In short, the presence of Structure 3 at San Juan strongly supports the concept that the site participated in the maritime-trade system. It is the strongest architectural evidence that could have been recovered. The existence of Terminal Classic round structures appears to be a result of non-Maya influence on the Maya world. Further, this is a period of increased interaction among parts of the Maya world as well as with other peoples. Some of this interaction may not have been peaceful, such as seen at Seibal. San Juan Structure 3 predates the round structures associated with trade along the Quintana Roo coast, but the analogy remains very strong. This is especially true with the position of Nohmul and its port pointing to riverine trading activities in association with a round structure. This is not to suggest that the presence of Structure 3 represents the presence of members of a northern ethnic group at San Juan. Instead, it seems to be emulation of an exotic architectural type.

Another important architectural configuration, the *plazuela*, or small plaza group, is reflected in the site plans of Chac Balam and Burning Water. Both sites have a centrally located rectangular plaza that is surrounded on all sides by platforms that vary in height from 2 to 6 m. The dating of this style at Chac Balam is at least as early as the Late Classic period. This architectural

pattern was common at mainland sites and prominent on Cozumel in the Terminal Classic period when trade and other interactions with the Chichen Itza polity increased (Freidel and Sabloff 1984).

Artifactual data also support the concept that Category 1 sites were well integrated into the maritime-trade system. Excavations at Chac Balam and San Juan indicate that these sites had a considerably higher level of access to exotic goods than sites on the windward side that lacked formal architecture and harbor facilities. These larger, more affluent sites apparently represent the activities of family enterprises in the coastal-trade system. Though the scale of the sites is variable, there is no evidence to support a proposition of any centralized authority on the island. The political relationships with mainland sites, such as Santa Rita, cannot be adequately assessed.

Nearly all ceramics found on Ambergris were imported from elsewhere. The major exception is Coconut Walk Plain and Striated (Graham 1994), a common coastal type found from at least southern Belize northward to well up the Quintana Roo coast. While ceramics from the northern Belize sphere dominate the assemblages at San Juan, Chac Balam, and Ek Luum, materials from a number of other areas are included. The Belize Valley, southern Belize, Campeche, and Yucatan all contributed wares to these assemblages (Guderjan 1988; Valdez et al. 1995). Exotic ceramics include Daylight Orange, Chunhuitz Orange (Gifford 1976:301–302, 267–269) and Silkgrass Fluted (Graham 1994) and a number of unnamed Trickle Wares. By the Terminal Classic, this inventory included Fine Orange, Fine Gray, Chichen Red, Sotuta Slate (Smith 1971), and Tohil Plumbate (Shepard 1948). This assemblage would appear to be a function of Ambergris participating in a trade system that incorporated all of these areas. Trade or other interaction with the northern Belize sphere of the mainland is also seen in the Ambergris ceramic assemblages. Very elaborate Peten Gloss wares such as Saxche and Palmar Orange polychromes (Adams 1971) are found in abundance.

Tohil Plumbate vessels were found at both San Juan (Guderjan 1988:175–180) and Marco Gonzalez (Graham and Pendergast 1989). The "San Juan jar" (Figure 4) is a gadrooned, tripodal jar with Shepard's (1948:30–31) "button-face" anthropomorphic figure applied on the exterior. The identity of "button-face" is unknown, but it possibly represents a local deity in the Pacific coast region of Guatemala and Chiapas (Neff 1989), the place of Plumbate manufacture. Other speculations as to the identity are Ek Chuak, the merchant god (Valdez et al. 1995) or a bat motif. Interestingly, a nearly identical vessel lacking a tripodal base was found at Marco Gonzalez (Graham and Pendergast 1989). A number of us (Garber, Guderjan, Pendergast) have seen both vessels and conclude that the stylistic similarities are so great that they may have been made by the same potter. Both were found in Terminal Classic burials under floors of important buildings. The San Juan jar was found in Burial 2, Structure 3 with a tubular jade bead, a carved jade bead, and two chert bifaces.

One class of exotic stone that reflects long-distance trade is obsidian. The major sources in the Guatemalan highlands are El Chayal and Ixtepeque. Generally, El Chayal was the dominant source during the Late Preclassic and Early Classic periods, while Ixtepeque increased in prominence during the Late and Terminal Classic, eventually dominating during the Post-



Figure 4. Tohil Plumbate jar from San Juan.

classic (Dreiss 1988; Nelson 1985). While there are deviations within some collections indicative of greater complexity (for example see Healy et al. 1984), the general pattern is apparent. Other sources include Pachuca, the major Mexican source of green obsidian, and other sources of gray obsidian in northern and central Mexico.

The obsidian recovered from Ambergris sites also reinforces the interpretation of long-distance trade (Guderjan et al. 1989; McKillop 1995a). Green Pachuca obsidian from central Mexico, which would have been transported by boat around the northern Yucatan Peninsula, was found at San Juan and Laguna de Cayo Francesa, as well as at Marco Gonzalez (Graham and Pendergast 1989). At San Juan, the percentage of Pachuca obsidian was surprisingly high at 13.9%. The total percentage of obsidian from sources in central Mexico is even higher at 18.6%. Ucareo obsidian is also found in Terminal Classic contexts at San Juan as was also the case at Wild Cane Cay and Isla Cerritos. Most obsidian at San Juan, though, came from El Chayal in the Guatemalan highlands and was probably shipped down the Motagua River and northward along the coast. The predominance of El Chayal obsidian at San Juan is surprising, as Ixtepeque is more common at such sites as Wild Cane Cay, Nohmul, and Colha during the Terminal Classic. In general, while the obsidian assemblages show some degree of variability, McKillop (1995a) has shown that the obsidian from these sites fit well into existing distance-reduction models for coastal trade.

It is significant that no green obsidian was found on north-

ern Ambergris Caye except at San Juan. This includes the nearby site of Chac Balam, where two seasons of excavation were undertaken. This indicates that San Juan functioned differently than other sites on the island. Throughout northern Belize, very low frequencies of green obsidian have been reported, and these are usually from special contexts such as elite burials (Dreiss 1988). The frequency at San Juan is much higher than at any of these other sites, and green obsidian was found in domestic refuse. These data support San Juan's role as a transshipment facility that acted as a funnel for goods coming into and out of northern Belize. From the site of Marco Gonzalez, gray obsidian, green Pachuca obsidian, jade, chert, and granite artifacts have been reported (Graham and Pendergast 1989), although their frequencies and chronological contexts have not been reported.

In addition to obsidian, other exotic stone materials including quartz, marble, volcanic stones such as basalt and andesite, chloromelanite, and a variety of greenstones have been found at sites on Ambergris Caye from Late and Terminal Classic contexts (Garber 1995). Although excavations have been conducted at four sites on the island (Ek Luum, San Juan, Chac Balam, and Marco Gonzalez), surface materials at all sites were examined. Lagoonal and leeward sites show a significantly higher proportion of all classes of exotic materials than the windward-side sites. This, no doubt, is due to the fact that leeward and inland lagoonal sites are situated to have participated in canoe trade and had a very high degree of access to elite goods. Elaborate shell artifacts were being carved for local use and exchange (Garber 1995).

While the ratios of exotic to local material used in the manufacture of objects at San Juan and Chac Balam reflect the role of long-distance trade and roughly match those of Cozumel (Phillips 1979), regional trade with mainland Belize is reflected in the patterns seen in the chert artifacts. No sources of chert for stone tools exist on Ambergris, and chert artifacts recovered from all sites probably derive from the chert-bearing zone around Colha in northern Belize (Shafer 1982:41; Shafer and Hester 1991). Analysis of the Ambergris material indicates that these artifacts arrived as finished tools from the workshops at Colha and possibly elsewhere. These tools were then reworked as necessary by the Ambergris population, who were, understandably, not very skilled at stone knapping (Hult and Hester 1995). The implication of this pattern is that the islanders were occupational specialists who could acquire finished tools in exchange for other goods.

Ritual behavior seen in cases such as Burial 14 at Chac Balam clearly mimics elite behavior of mainland centers. The individual interred in Burial 14 was an adult male interred with an Altun Ha-style, fluted, Saxche Orange polychrome vessel (Figure 5) that was covered by a sherd lid. By his head was a pair of jade ear spools, and at his pelvis were a conch shell cup and carved bone bloodletting tool. A major structural addition was built in his honor (Driver 1991; Driver et al. 1995). We interpret this as being the burial of the most important male of Chac Balam who practiced ritual autosacrifice, as normally restricted to the elites. This imitation of elite behavior and the elaborate nature of the interment support the idea that sites such as Chac Balam were finding mercantilism to be a viable alternative and a route toward control of resources. Or, as Sabloff and Rathje (1975) noted, the merchant class was rising.



Figure 5. Saxche polychrome cylinder vase from Chac Balam.

Settlement patterning at this time reflects a functional dichotomy among Ambergris sites. The wealthier Category 1 communities that were participating in the trade system were on the western or leeward side of the island and, in the case of Burning Water, the northern interior lagoons. The calm waters of the leeward side and natural coves provided strategically useful locations for such settlement. Where such natural harbors did not exist, such as was apparently the case at Chac Balam, artificial harbors were constructed. Burning Water and, in a sense, Ek Luum, were linked to the other communities and the trade routes by open channels, which were possibly man-made. They were also located so that they could easily be reached by canoes coming from the coast bringing goods to be later loaded onto canoes plying the coast itself.

On the windward side of the island, many smaller, Category 2 residential sites were also present. Examples include Guerrero, Franco, and Valencia. Excavations at these sites revealed no buildings with substructures or formal architecture. These communities did not have sustained access to exotic goods, as did their wealthier neighbors. The most common pottery found is a crude, friable unnamed type with sand temper that appears to have been made on-site. Few or no exotic goods were found; burials included few or no grave goods, and only simple plastered house floors were found. These small sites apparently were simple fishing communities. The reef merges with the island at Rocky Point, cutting off these communities from long-distance trade routes and economic prosperity.

Faunal remains from the excavations are sparse. However, a sufficiently large sample was obtained from Ek Luum for Shaw (1995) to determine that broad-based exploitation of maritime (deep water, reef, and shallow water) and terrestrial animal resources occurred. The use of maritime resources explain why skeletal studies show the Ambergris Maya population to equal or exceed the health standards of the mainland, especially during the Terminal Classic, when mainland populations were

experiencing health stresses, probably due to degrading diets (Glassman 1995).

An important and yet unresolved question is whether imported corn was a major component of these coastal people's diet. Today, corn and other agricultural products are grown on the rich, anthropomorphic soils of archaeological sites. However, these soils are the consequence of occupation and subsequent abandonment and did not exist in the past. With the exception of Basil Jones, island sites were not situated near soils appropriate for growing corn, and the island adaptation is clearly focused on maritime resources. Therefore, if corn was a significant part of island diet, it probably would have been imported from the mainland, indicating that coastal trade in such commodities actually existed.

Another question illuminated by the Ambergris data is that of local saltmaking on the Belize coast. MacKinnon and Kepecs (1989) identified an artifact complex composed of crudely made ceramic cylinders, sockets, and spacers that joined ceramic vessels during the process of evaporating salt from sea water (*sal cocida*). This complex was found at a number of small, specialized-use Terminal Classic sites on Placencia Point in southern Belize. Valdez and Mock (1991) report that a similar complex is found in Terminal Classic levels at the Northern River Lagoon site. While the original papers do not identify the ceramic type associated with the saltmaking complex, Valdez has more recently identified it as Coconut Walk (Valdez et al. 1995).

Coconut Walk ceramics are found at numerous Ambergris sites, including large deposits at San Juan, Chac Balam, and Ek Luum. However, the cylinders, sockets, and spacers are extremely rare or nonexistent. In addition, the location of Chac Balam nearly adjacent to a well-known salina is important in this regard. The salina was identified by Andrews (1983:46), who interviewed people in the town of San Pedro on Ambergris Caye. They reported that salt was harvested from this salina as recently as a few decades ago. One report, confirmed by the author with the informants, was that nearly a ton was harvested in one visit. Andrews estimates the potential production of the two northern Ambergris salinas to be in the range of 10–50 tons annually. On one hand, it is difficult to understand why small-scale evaporative techniques (*sal cocida*) would be used at sites adjacent and nearly adjacent to lagoons that produced salt (*sal solar*) that could be shoveled out when the lagoons annually dried. On the other hand, it is equally difficult to explain the 4-m-high mound composed almost entirely of burnt Coconut Walk ceramics at Ek Luum, adjacent to the lagoon (Driver et al. 1995). Consequently, Andrews (1983) is certainly correct that salt production on Ambergris Caye was of large enough scale to be a significant component of the economy. However, the association of Coconut Walk ceramics, at least without the associated lugs, remains problematical.

In the Terminal Classic period, most sites show a continuation of early patterns. Major construction at these sites, however, was replaced by repeated refurbishings on a much smaller scale. For example, the floor of Structure 3 at San Juan was replastered at least three times, but no significant remodeling or construction occurred. Trade goods were still abundant, and evidence for continued interaction with the north as well as mainland northern Belize is present. A mortuary pattern of repeated, very shallow burials reflects the low-level of energy invested in all such activities, though the health of the popula-

tions remained stable (Glassman 1995). During this period, Ambergris continued to participate in the maritime trade system. However, we do not know what stresses were exerted upon the system to cause a reduction in construction efforts.

The end of the Classic brought major changes on Ambergris. Nearly all sites on the coast were abandoned, and trade activities may have ceased. The last major activity at San Juan was the construction of small buildings on the flanks of the site. The most recent radiocarbon date of ca. A.D. 1000 comes from this context and nearly marks the abandonment of the site. While some activity continues at Chac Balam after this date, it is probable that the site was no longer fully occupied and may have been used primarily for mortuary purposes. The major exception to this pattern is Marco Gonzalez, which thrived and grew during the Terminal Classic and Early Postclassic periods (Graham 1989).

Postclassic Period

The data from the Postclassic period reflect a major restructuring of both settlement on Ambergris Caye and the economic system of the Maya. The small, coastal-margin sites were abandoned, and activity was concentrated at Marco Gonzalez and perhaps Basil Jones. This was clearly a shift of focus, and there may also have been movement of people from other sites to Marco Gonzalez.

At Marco Gonzalez, Graham and Pendergast (1989; also Graham 1989) found continuous occupation from the Late Classic into the Postclassic. Importantly, major construction continued into the Postclassic at Marco Gonzalez. It is very possible that the close ceramic affinities between Marco Gonzalez and Lamanai are related to the community's apparent independence from the factors that influenced the abandonment of the coastal margin of the northern part of the island.

Basil Jones, on the interior of the island, and the San Pedro Lagoon site are believed to date to the Postclassic. These assessments are based on the presence of the very crude stone buildings and, in the case of Basil Jones, the field walls. Also, the elaborate Postclassic burial excavated by Thomas Gann on Ambergris, at "the largest mound," was probably at Basil Jones. I initially believed this to be San Juan; it now seems probable that Gann dug in one of the now nearly demolished mounds of Basil Jones. Alternatively, Anthony Andrews (personal communication 1995) has suggested that it was at the San Pedro Lagoon site. Interestingly, an early Spanish map shows a settlement in this general area of Ambergris that may well be Basil Jones (Grant Jones, personal communication 1991), so occupational continuity may have occurred.

The growth of Basil Jones, then, reflects an adaptation with a more terrestrial focus. Even so, trade may have continued to be an important activity, and Basil Jones could have functioned similarly to San Gervasio and Buena Vista on Cozumel (Sabloff and Rathje 1975). Nevertheless, a complete structural shift had occurred. The northern Ambergris coastal margin was abandoned, and population apparently grew in the interior, adopting attributes such as walled compounds, which are seen elsewhere at the same time. In the southern part of the island, Marco Gonzalez seemingly retained its maritime and trade focus while growing in size and complexity. However, other coastal-margin sites in the south end of the island were abandoned.

The only Middle Postclassic site found so far on Ambergris Caye is Los Renegados. The very large quantities of Ixtepeque obsidian recovered from the site indicate that coastal trade was again flourishing (McKillop 1995a). However, the impact on the island was much different than previously. Los Renegados includes no formal architecture, only dense residential debris and the floors of perishable buildings. We cannot know if, at this time, Basil Jones or other sites were occupied. However, Graham and Pendergast (1989) have found evidence of residential and mortuary activity at the San Pedro site dating from this period.

IMPLICATIONS FOR UNDERSTANDING MAYA COASTAL TRADE AND POLITICAL ECONOMIES

The study of premodern market economies largely derives from the work of Polanyi et al. (1957) and their colleagues. One of them, Anne Chapman (1957), investigated the function and role of trade in pre-Columbian Maya society. Nevertheless, the first broad picture of Maya trade emerged from the work of Eric Thompson (1970). From these and other works, interest arose in the role of trade in the rise and fall of the Maya civilization. In particular, the Cozumel Archaeological Project was designed to study the island as a port of trade with important results in terms of the politics and mechanics of trade, as well as the decline of the Classic Maya (Freidel and Sabloff 1984; Sabloff 1977; Sabloff and Rathje, eds. 1975). More recent work has focused on the trade of items such as salt (Andrews 1983), obsidian (Dreiss 1988; Hammond 1976), and site-specific studies (i.e., Andrews et al. 1988; Garber 1989; Guderjan 1988; McKillop 1981, 1987).

The general themes of what is known of Maya trade during the Classic and Postclassic periods can be briefly summarized. Sabloff argued that Classic-period trade dealt primarily with nonessential elite goods rather than utilitarian goods. Only in the Postclassic period does trade, at least maritime trade, hit its full pace with the establishment of ports of trade such as Cozumel (Sabloff 1977). This generally supports Thompson's (1970) idea that the Putun Maya of the coast of the Gulf of Mexico took control of trade routes during the eighth and ninth centuries A.D. but does not agree with Andrews's (1983) information regarding the large requirements of salt in the southern lowlands that were being supplied from the north during the Classic period. According to Sabloff, jade, basalt, obsidian, etc. were the primary materials being traded during the Classic. However, by the Early Postclassic, Cozumel had been established as a Chichen Itza/Putun sphere port of trade that avoided the coastal portion of the Coba sphere. Similarly, Terminal Classic architectural affinities with the northern Yucatan are seen in northern Belize at Lamanai (Pendergast 1986) and Nohmul (Chase and Chase 1982). Walled coastal cities such as Tulum and Ichpaat'un, with their columned structures, also participated in this system. During this period, specialized pottery-manufacturing techniques, designed to facilitate ease of transport, increased commodities trade, and there was a shift in the sources of obsidian (Dreiss 1988; Hammond 1976; Sabloff 1977). Central Mexican influence was more strongly felt as indicated by an increase in green obsidian, and the central Mexican-style murals at Postclassic Santa Rita show evidence of contact with central Mexico (Chase 1982).

The impression should not be left that large-scale maritime trade was only a Classic and Postclassic phenomenon. Late Preclassic Cerros may well have been a interregional port (Garber 1989; Robertson and Freidel 1986). Trade may also have been one of the important mechanisms of the rise of Maya civilization itself (Freidel 1979; Rathje 1971). By the Classic period, however, maritime trade surely served to provide goods that reinforced the authority of the elites and commodities such as salt. It should also be noted that things that were once only goods for the elite had become commodities by the end of the Classic period. By then, obsidian, for example, is found repeatedly at the household level throughout the southern lowlands. During the Postclassic, maritime trade had become a vital force in Maya economics, which may have come about in conjunction with the emergence of a merchant class (Sabloff and Rathje, eds. 1975).

The role of outside groups in the development of Maya maritime trade has been the subject of controversy and debate since Thompson (1966) introduced the notion that the Putun Maya (sixteenth-century Chontal Maya) of the Gulf coast took control of, and developed, existing trade routes during the eighth and ninth centuries A.D. Fine Orange and Fine Gray wares are believed by some (Thompson 1971) to be Putun Maya markers, although the validity of this has been challenged (Adams 1971; Andrews and Robles Castellanos 1985:62–64; Sabloff et al. 1982). Whether or not the Putun model is valid, this is a period of increased interaction within the lowlands as well as with external "Mexicanized" groups. Some of this interaction may not have been peaceful and probably contained violent components as was the case at Seibal.

As Andrews and Robles Castellanos (1985) point out, the Putun models are superficial and simplistic and do not address the questions of sociopolitical interaction at the local level. Furthermore, critics have argued that the Putun may not have been a single group, but rather were a group of related and perhaps competing Gulf coast peoples (Miller 1977). Indeed, it may be erroneous to view the situation as a single event such as an invasion or take over by the Putun (or Gulf coast peoples), but rather as a continuous process marked by increasing influence. A more gradual development is precisely what Andrews (1983) concludes for Gulf coast influence on the north and west coasts of the Yucatan Peninsula during the Terminal Classic and Early Postclassic periods. On Ambergris Caye, Sotuta ceramics, round structures, and a variety of exotic imports, including high proportions of central Mexican obsidian, recovered on Ambergris Caye, are suggestive of strong relationships with the Maya of northern Yucatan sites such as Chichen Itza.

The Ambergris sites that were situated to participate in the maritime trade system—Chac Balam, San Juan, Burning Water, Santa Cruz, Laguna de Cayo Frances, and Marco Gonzalez—share a number of attributes. Each is located on the calm leeward side of the island or on lagoons connected to the leeward side. Each is, therefore, protected from the windward side and could participate in the trade system without the dangers of canoe travel beyond the reef. These sites also have port facilities. Santa Cruz, Laguna de Cayo Frances, and Marco Gonzalez are all situated adjacent to protected lagoons. Furthermore, the plaza at Laguna de Cayo Frances fronts onto a probable artificial canal. Several small protected inlets are on the west side of Punta San Juan, and docking facilities would have been easy

to build at any location. Burning Water and Ek Luum are also adjacent to Laguna de Cantena, which is connected to the Bacalar Chico channel by a long secondary canal. Chac Balam is located directly adjacent to an artificial port facility. The calm waters of the leeward side make safe harboring possible at almost any point. Leeward-side sites are simply situated at especially good locations.

The artifactual evidence for trade consists of the presence of large quantities of exotic nonperishable goods, particularly stone and ceramic artifacts. Exotic stone and pottery of the Maya world reflect not only the existence of trade but also reveal much of the nature of the trade network itself.

The evidence from Ambergris Caye forces some rethinking of the maritime trade systems of the Maya. While information about the Late Preclassic is limited, that dearth of information does actually shed some light on the structure of the trade system at that time. For example, Cerros was a regionally important trade port in the Late Preclassic period (Freidel 1979). However, the trade network apparently did not incorporate the use of Hammond's (1976) "transshipment points" on Ambergris or, perhaps, anywhere else.

The Ambergris data also shed new light on Sabloff's (1977) concept of coastal trade being relatively small in scale during the Late Classic, dealing only with elite goods. Again, it must be mentioned that goods traditionally reserved for the elite had become commonplace to the degree of being commodities by the end of the Classic period. Obsidian seems to have become a commodity, and salt was certainly being traded in considerable quantity (Andrews 1983). Harrison (1990) has argued that the intensive fields of Pulltrouser Swamp provided food for the nearby city of Nohmul, and it is likely that food from Pulltrouser Swamp also entered the maritime-trade system. Further, the Ambergris data clearly show that structured systems to accommodate trade date to the earliest part of the Late Classic if not earlier. If such a group as the Putun existed, Thompson (1970) appears to have been correct in stating that they seized control of existing trade routes and were not the creators of these routes.

The trade routes were apparently created by a growing group of competing family units during the Classic period and consolidated in the Early Postclassic. This concept also fits with the Postclassic data from Ambergris. At the very time that trade routes were being consolidated, the coastal margin of Ambergris was being virtually abandoned. This only makes sense if the functions of the walled cities of Tulum on the Quintana Roo coast and Ichpaat'un on Chetumal Bay, for example, are taken into account. First, these walled cities are much farther apart than the previous nodes in the trade network. Only a few miles separated Chac Balam, San Juan, Santa Cruz, and Laguna de Cayo Frances, while modern replicative studies show that a Maya trade canoe could have easily traveled 40 km per day (Michel Peissel, personal communication 1989). In other words, a canoe with a preset destination could easily have passed up each and every site on Ambergris. It is not coincidental that MacKinnon (1990) found the earliest utilization of the far-offshore islands of southern Belize to have occurred at this time. This may simply be a strategy of avoiding hostile raiders near the coast. Also, the walled cities of Tulum and Ichpaat'un are as well if not better suited for defense by terrestrial forces as opposed to maritime forces. By defending trade ports and spacing them relatively far apart, the Postclassic traders were sim-

ply reducing the energy input required to maintain control over the system. By controlling the system, they also forced the creators of the system, those family entrepreneurs of Ambergris and elsewhere, out of the system.

CONCLUSIONS

The archaeological record on Ambergris Caye reflects a trajectory of growth throughout the Classic period, perhaps as early as the Late Preclassic, which was inextricably intertwined with the growth of coastal-trade systems among the Maya. By the end of the Classic period, this fully developed system included a network of small sites, perhaps family-run enterprises, organized around single-unit *plazuela* complexes. These were inter-related nodes in the coastal-trade system. In addition to servicing coastal trade, these may have been points where Ambergris products such as salt, shell, and salted fish entered the trade network, bound for mainland sites. Importantly, not all communities participated in this system. Some, especially windward-side commu-

nities, did not have the degree of access to exotic goods afforded to the trade-related communities.

In the Early Postclassic this trajectory dramatically changed. With the exception of Marco Gonzalez, coastal-margin sites were abandoned. A restructuring clearing occurred that included a shift in adaptation to the resources of the island's interior, especially at Basil Jones. This shift marks the transformation of the trade system from one of cooperating and possibly independent small units to large, more distantly placed units, which were well prepared for defense against land attacks. The shift to the use of remote, offshore islands in southern Belize may also reflect a concern with protection of trade routes from raiders.

This shift is tremendously important because it provides a window into the nature of the restructuring of Maya society at the end of the Classic period. In concert with the political and economic changes occurring in both the southern and northern lowlands, the coastal-trade system that had gradually developed over at least half of a millennium was rapidly reorganized to reflect the new realities of the Maya world.

RESUMEN

Investigaciones arqueológicas se condujeron por tres años en Cayo Ambergris, Belice, empezando en 1986. Durante la prospección se identificaron 19 sitios arqueológicos. Se realizaron excavaciones intensivas en tres sitios y excavaciones limitadas en algunos más. Además, un cuarto sitio fue excavado por otro proyecto. Esta base de datos nos proporciona la oportunidad de examinar la variabilidad temporal y funcional del registro arqueológico.

La primera ocupación de Ambergris data del período preclásico tardío y en el clásico temprano se empezó a formar un patrón que continuó creciendo hasta el clásico terminal. Los asentamientos localizados en el área protegida de la isla participaron en una prospera red de intercambio. Al mismo tiempo, los asentamientos en el área no protegida de la costa del Caribe no tuvieron el mismo acceso a bienes exóticos y no construyeron arquitectura formal. Los sitios relacionados con el

intercambio están localizados relativamente cerca del uno al otro, más o menos 5 km, y no exhiben evidencia de conflicto. Los datos de Ambergris demuestran que el sistema de intercambio que existió durante el período clásico tardío fue mucho más intenso que lo anticipado.

Al final del período clásico se produjo un cambio fundamental en la vida de Cayo Ambergris. Los asentamientos costeros que participaron en la red de intercambio fueron abandonados. Aunque ciertas actividades parecen haber sido consolidadas en el sitio de Marco González, un nuevo patrón de asentamiento también emergió. Para el período postclásico temprano, una adaptación basada en recursos terrestres en lugar de marítimos se desarrolló en el interior norteño de Cayo Ambergris. Este cambio coincide con aquel ocurrida en la situación económica y política maya en las tierras bajas del sur y nos da una nueva perspectiva para observar la organización institucional de los mayas.

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