Models for ancient Maya coastal site development and economy: examination of Pork and Doughboy Point, Port Honduras, Belize

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MODELS FOR ANCIENT MAYA COASTAL SITE DEVELOPMENT AND ECONOMY:
EXAMINATION OF PORK AND DOUGHBOY POINT, PORT HONDURAS, BELIZE

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
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requirements for the degree of
Master of Arts

in

The Department of Geography and Anthropology

By
Kevin Michael Pemberton
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# TABLE OF CONTENTS

ACKNOWLEDGMENTS ........................................................................................................................................................................... ii

LIST OF TABLES .................................................................................................................................................................................. vi

LIST OF FIGURES .................................................................................................................................................................................. vii

ABSTRACT ............................................................................................................................................................................................ ix

CHAPTER

1 INTRODUCTION .................................................................................................................................................................................. 1
   The Ancient Maya Economy ............................................................................................................................................................ 2
   The Ancient Maya Economy of Coastal Belize ............................................................................................................................... 4

2 ARCHAEOLOGY OF THE INTERIOR CENTERS OF SOUTHERN BELIZE . ......... 6
   Lubaantun .......................................................................................................................................................................................... 8
   Pusilha ............................................................................................................................................................................................... 8
   Nim li punit ......................................................................................................................................................................................... 9
   Uxbenka .......................................................................................................................................................................................... 9
   Xnaheb ......................................................................................................................................................................................... 10

3 ARCHAEOLOGY OF THE PORT HONDURAS ........................................................................... 11
   Wild Cane Cay .............................................................................................................................................................................. 12
   Frenchman’s Cay ............................................................................................................................................................................ 12
   Punta Ycacos Lagoon .................................................................................................................................................................... 13
   Pork and Doughboy Point ............................................................................................................................................................ 13

4 PORK AND DOUGHBOY POINT, BELIZE ........................................................................ 15
   Location ........................................................................................................................................................................................ 15
   Environmental Setting ................................................................................................................................................................. 15
   Cultural Significance .................................................................................................................................................................... 17

5 FIELD METHODOLOGY .............................................................................................................................................................. 19
   Field School .................................................................................................................................................................................... 19
   Survey and Mapping .................................................................................................................................................................... 19
   Surface Collection ......................................................................................................................................................................... 20
   Excavations .................................................................................................................................................................................. 21
   Artifact Conservation and Storage ............................................................................................................................................... 22

6 LAB METHODOLOGY ............................................................................................................................................................... 23
   Artifact Preparation .................................................................................................................................................................... 23
   Pottery ......................................................................................................................................................................................... 23
LIST OF TABLES

Table 1. Quantifications of Excavated Pottery Types and Vessels ...........................................52
Table 2. Quantifications of Pottery Types from Surface ...........................................................52
Table 3. Classic Period Obsidian Densities from the Port Honduras ........................................57
Table 4. Obsidian Blade Measurements from Pork and Doughboy Point.................................58
Table 5. Average Classic Period Obsidian Blade Measurements from the Port Honduras.......58
Table 6. Soil Descriptions from Test Units ...............................................................................58
LIST OF FIGURES

Figure 1. Map displaying extent of ancient Maya culture ...........................................................1
Figure 2. Location of centers and Pork and Doughboy Point in southern Belize .......................6
Figure 3. Illustration of some of the numerous sites in the Port Honduras ..............................11
Figure 4. Aerial view of Pork and Doughboy Point .................................................................16
Figure 5. Pork and Doughboy Point map .................................................................................20
Figure 6. Artifact density (kg/m³) from Unit 1 and Unit 2 excavations .....................................26
Figure 7. Punta Ycacos Unslipped .............................................................................................31
Figure 8. Punta Ycacos Unslipped incense burner fragments ..................................................31
Figure 9. Mangrove Unslipped ..................................................................................................32
Figure 10. Bedford Unslipped ....................................................................................................34
Figure 11. Payne’s Creek Unslipped ...........................................................................................35
Figure 12. Crique Sarco Unslipped ...........................................................................................36
Figure 13. Joe Taylor Creek Striated .........................................................................................37
Figure 14. Forest Home Red ....................................................................................................38
Figure 15. Moho Red ..................................................................................................................39
Figure 16. Unnamed Yellow/Orange Paste ...............................................................................40
Figure 17. Unnamed Calcite Tempered .....................................................................................41
Figure 18. Unnamed Thin Fineware ..........................................................................................42
Figure 19. Unnamed Calcite Tempered Slipped .......................................................................43
Figure 20. Unnamed Hard Paste Painted ..................................................................................44
Figure 21. Unnamed Quartz Tempered Slipped .......................................................................45
Figure 22. Untyped Black Slipped Vessel .................................................................47
Figure 23. Untyped Slipped Collar Jar .........................................................................48
Figure 24. Untyped Polychrome Dish ..........................................................................49
Figure 25. Polychrome Incurved Bowl .........................................................................50
Figure 26. Comparison of slipped pottery with unslipped pottery ..................................53
Figure 27. Mold-made figurine whistle fragments ..........................................................54
Figure 28. Side-notched fishing weights .......................................................................55
Figure 29. Uniface chert flake point ..............................................................................56
Figure 30. Obsidian blade fragments ...............................................................................57
Figure 31. Comparison of Punta Ycacos Unslipped groups .............................................63
Figure 32. Comparison of Punta Ycacos Unslipped with all other identified pottery ..........63
ABSTRACT

In the summer of 2003 I conducted an archaeological study at Pork and Doughboy Point, Belize, under the direction of Dr. Heather McKillop. The site, situated amidst other ancient Maya coastal settlements of the Port Honduras in southern Belize, has only been tested for offshore deposits in the three decades since it was reported. The current research involved the first reported terrestrial excavations at the site. The goals of this investigation were to recover pottery that could be used to date the ancient Maya occupation and obtain artifacts that would suggest the nature of the site. From artifact analyses I have concluded that Pork and Doughboy Point was the location of one or more intensified activities, the products of which were likely involved in coastal-inland trade with the interior centers of southern Belize. I propose first generation models that test the available data in an attempt to depict the nature of ancient Maya coastal site development and economy. These models may also be appropriate in other regions of the Maya realm.
The ancient Maya civilization is archaeologically identified in Belize, Guatemala, El Salvador, western Honduras, and Mexico’s Yucatan Peninsula and Chiapas. Researchers have terminologically divided the Maya region into the northern lowlands, southern lowlands, and highlands (Figure 1).

The evolution of Maya civilization is commonly discussed temporally in periods known as the Preclassic, Classic, and Postclassic. However, researchers do not uniformly agree upon the dates of these periods. For example, Hammond (1982a), McKillop (2002), and Willey (1980) employ different chronologies. For the purpose of this thesis, I have integrated the above chronologies into periods designated as follows: Preclassic, 2000 B.C. to A.D. 300; Classic, A.D. 300 to 900; and Postclassic, A.D. 900 to 1520. Since this thesis is primarily concerned with events of the Classic period, further refinement of this period is needed. The Classic period
subdivisions employed are Early Classic (A.D. 300 to 600), Late Classic (A.D. 600 to 900), and Terminal Classic (A.D. 800 to 900).

I do not recount the cultural evolution of the ancient Maya in this thesis, and instead refer the interested reader to introductory texts on the subject (e.g. Coe 1993). Rather, I focus on archaeological data from one site, Pork and Doughboy Point, Port Honduras, Belize, and consider the site's role within local and intraregional contexts. I have provided below a brief review of leading researchers’ insights on ancient Maya economics as a frame of reference from which to consider the phenomena of activity at this site. My emphasis on the Ancient Maya economy follows a long tradition of such studies (see Andrews 1990; Masson and Freidel 2002; Rathje 1971; Sidrys 1976, 1979; Tourtellot and Sabloff 1972; Voorhies 1982).

The Ancient Maya Economy

An unresolved debate about the ancient Maya economy is whether it was centralized, meaning resources were acquired and distributed to households by the rulers, decentralized, where households acquired needed goods by direct collection or through trade expeditions at the family scale, or uncentralized, implying a more fluid nature involving both centralized and decentralized movement of items relative to the time and place. Rathje (1971) considers the Peten to have lacked the daily household resources required by its inhabitants, namely obsidian for cutting, hard igneous stones for metates, and salt for dietary requirements. Rathje proposes that sociopolitical organization was necessary for the development of long distance trade routes to procure these resources. Rathje suggests that the lowland dwellers used agricultural products and ceremonially significant objects to trade for highland resources.

Voorhies (1982) shares Rathje’s view of a centralized lowland economy, but suggests a model in which the lowland is self-sufficient and viewed as a resource-rich exporter. Supporting
this concept, Hammond (1974) notes that chert and limestone were locally available in the lowlands for tool and metate construction and salt could be obtained from the nearby Belize coast. Voorhies (1982) lists a host of lowland resources that may have been desirable as exotic items to highland elites. Ceremonial goods such as elaborately painted pots, fine clothing, and feather-crafted items were feasibly traded. Other lowland products likely to have been involved in long distance trade include pelts, cacao, cotton, medicines, spices, dyes, and incense. The ability to confirm such trade is hampered though, as many organic trade commodities have no material representation in the archaeological record (Voorhies 1982). Voorhies argues that a centralized lowland economy existed based on the dispersed hierarchical nature of lowland Maya settlements where large urban centers served as the nexus for trade, in contrast to similarly sized communities theorized to be prevalent in an uncentralized economy.

McKillop (2002) argues that the ancient Maya political economy was uncentralized, partly due to the discovery of specialized sites in peripheral locations. McKillop (2002:182) recognizes the tendency of independent specialists to locate themselves in proximity to key resources and raw materials used in their craft. McKillop’s view of localized organization for specialty sites is consistent with her interpretation of an uncentralized Classic Maya economy (McKillop 2004). McKillop (2002:182-83) asserts the Port Honduras elite controlled local labor investments and participated in trade alliances that maintained steady exchange with interior centers. Coastal-inland trade benefited both groups. The inland centers obtained coastal resources and sea-traded exotics, while the coastal Maya received ceremonial objects (McKillop 1995a, 1996, 2002).

Leventhal (1990) proposes that intraregional trade sustained the common Maya whereas long distance trade perpetuated the existence of an elite class. McKillop (1995a, 2002) supports
the concept that common items were produced locally whereas elites engaged in long distance trade, a notion first proposed by Tourtellot and Sabloff (1972). Tourtellot and Sabloff’s examination of artifact data from seven Late Classic major centers indicates subsistence-level items were only exchanged locally, with the exception of obsidian prismatic blades, whereas elite-level goods were involved in long-distance exchange networks. Graham (1987:762) suggests archaeologists should not differentiate long-distance trade from interregional and intraregional exchange. Graham proposes that the long-distance movement of goods may have operated under the same trade mechanisms that controlled regional or even local trade. The movement of both exotic and coastally produced goods from the Port Honduras to inland centers discussed below supports Graham’s suggestion.

The Ancient Maya Economy of Coastal Belize

The prehistoric economy of coastal Belize has long been a point of discussion and the importance of coastal Maya sites spanning the Preclassic through Postclassic timeframe has been well established by researchers (e.g. Andrews 1990; Chase 1981; Freidel et al. 1982; Freidel and Sabloff 1984; Guderjan and Garber 1995; Hamblin 1985; Hammond 1974, 1980; Healy et al. 1984; McKillop 1980, 1984, 1985, 1987, 1989, 1995a, 1996, 2002; McKillop and Healy 1989; McKillop et al. 2004; Mock 2004; Pyburn et al. 1998). Freidel (1978) views coastal settlements as an essential element in the development of the Maya civilization. Freidel (1978:251) contends that the coastal center of Cerros during the Late Preclassic derived political and economic authority from its involvement in coastal trade and marketing of marine resources. McKillop’s (1980, 1985) assertion that coastal resources were instrumental to the Maya economy and belief system has been repeatedly confirmed by archaeological investigations.
Graham (1987:753) suggests that considering resource availability is essential to determining ancient regional and local exchange patterns. A chief Maya resource of the coast was salt (McKillop 1995a, 2002). McKillop (2002) geographically delineates salt production techniques: in northern Belize, solar evaporation was common, whereas in southern Belize boiling was prevalent. Early Classic salt production is known from coastal northern Belize sites (Mock 2004:362), but to date only Late Classic salt processing sites are known from southern Belize (McKillop 2002). McKillop (1996, 2002) and Mock (2004) provide evidence for coastal salt production associated with trading sites. Other marine resources are known to have been significant to the ancient Maya. Manatee bones have been discovered at several coastal locations, some with post-butchered alterations to create figurines, musical instruments, and fishing weights (McKillop 1985). Shell celts and drilled shark teeth are occasionally found at coastal sites. Marine resources such as manatee bones, stingray spines, and shells were traded and used in inland ceremonial functions (McKillop 1980).
CHAPTER 2
ARCHEOLOGY OF THE INTERIOR CENTERS OF SOUTHERN BELIZE

This brief synopsis of previous investigations at centers in the Toledo District of Belize is meant to orientate the current research within the corpus of literature. Dunham et al. (1989) recognize five primary centers in southern Belize, these being Uxbenka, Pusilha, Lubaantun, Nim li punit, and Xnaheb (see Figure 2). These centers are comparable to small to medium centers found in the Peten. As noted by Dunham et al. (1989:263), “most of the sites are located in the foothills of the Maya Mountains near their intersection with the coastal plain. This intermediate location facilitated access to the variety of resources available in different ecological zones.” None of these centers is closer than 20 km to the coast, but all had coastal access via rivers.

Figure 2. Location of centers and Pork and Doughboy Point in southern Belize.

The initial occupation of the foothills is currently poorly understood, but this region provided ample resources for the development of royal centers. Dunham et al. (1989:256) note that “within a region, communities develop to occupy niches in the physical and cultural
environment. These niches may be attractive due to nearby limited resources and the nature and structure of political and economic interaction.” The Maya Mountain foothills can be considered a niche where the rich soils, abundant minerals, and relative seclusion of the region allowed autonomous center development in the Classic.

Uxbenka and Pusilha represent the earliest large inland Maya settlements of southern Belize, with stelae and ceramics dating to the Early Classic. Other centers seem to be entirely Late Classic. Long-distance trade is documented for the region. Pottery identified from Seibal as well as exotic obsidian and jade have been recovered at centers, particularly at Lubaantun (Hammond 1982b:228). Additionally, ceramics from the Belize Valley are common at Lubaantun (Hammond 1975, 1982a:227), Nim li punit, Xnaheb, and, to a lesser extent, Pusilha (Dunham et al. 1989:268). All centers were abandoned by the Late to Terminal Classic.

Leventhal (1990:137) discusses southern Belize as a distinct region, one that can be defined geographically, culturally, and temporally. Leventhal argues that the natural boundaries of southern Belize, such as the Maya Mountains, the Caribbean Sea, rivers, and swamplands, also acted as cultural boundaries between adjacent lowland Maya regions. Leventhal concludes that the Late Classic Maya centers of southern Belize share particular cultural traits, such as architectural style and burial practice, which distinguish this region from others in the southern lowlands. Despite their apparent political independence from core centers, the major centers of southern Belize did not escape the widespread Classic collapse. Naturally the cessation of monument erection is more easily established archaeologically than actual site abandonment. Nevertheless, the interior centers appear to have not shared the Postclassic success the coast experienced.
**Lubaantun**

Lubaantun was frequently visited by archaeologists in the early part of the twentieth century, notably by Thomas Gann and the British Museum. The site is orientated along a steep, stone-faced ridge bordered by streams amidst the foothills of the Maya Mountains, some 25 km from the coast. Coastal resources were important to the site; marine organisms were found to comprise 39 percent of the site’s total faunal collection, and included remains of seashells, sea turtles, sharks, snook, grouper, jack, tuna, and parrotfish (Hammond 1975:379, 382-88).

Lubaantun is a curious Maya center as it lacks stelae but exhibits 20 plazas, two ball courts, and an enormous volume of construction. Hammond (1975) views the site as central to the region, but Dunham (1989:263) disagrees because of the absence of carved stelae. Lubaantun dates from A.D. 730 to 860 based on artifact analysis (Hammond 1975:133). Ball court markers at the site are stylistically dated to A.D. 790 (Hammond 1975:375).

**Pusilha**

Pusilha has been host to several archaeological projects. The first, by the British Museum, involved survey, excavation, and removal of stelae (Gruning 1930; Joyce 1929; Joyce et al. 1928). In 1979, Richard Leventhal began examination of the site, noting its dichotomous nature: the north side demonstrates small architecture, whereas the south exhibits massive 30 m hill-façade pyramids (Leventhal 1990:131). Worth noting is a connection between Pusilha and Quirigua. Sharer (1978:63) reports the Quirigua Emblem Glyph appears at Pusilha earlier than it is known at Quirigua. Sharer considers this possible, but not likely, evidence that Quirigua’s Late Classic rulership descended from Pusilha. Recent investigations affirm the autonomy of Pusilha throughout most of the Classic (Braswell et al. 2004). References to events occurring in A.D. 81 and A.D. 159 have been found at the site, but the hieroglyphic texts point to the
emergence of dynastic rulership at A.D. 570, ending after A.D. 751, and possibly as late as A.D. 798 (Braswell et al. 2004:340).

**Nim li punit**

Discovered in 1976, Nim li punit is notable for its stela plaza. Another connection between southern Belize and Quirigua has been found at this site. Nim li punit boasts a 9.5 m carved stela (Hammond 1982b:205), second largest within the Maya realm only to Monument 5 from Quirigua (Sharer 1978:65). Three major groups compose the central core of Nim li punit, with the largest structure some 10 m high (Leventhal 1990:132). A multiple-interred elite tomb was discovered in the stela group (Leventhal 1990:132). Hammond (1982a:359) proposes that Lubaantun and Nim li punit were interrelated, the former a political capital while the latter a dynastic cult center. Preliminary ceramic analysis indicates the presence of a local population at the site somewhere around A.D. 400 to 700 (Dunham et al. 1989:268). Carved stelae provide dates ranging from A.D. 721 to 790 (Dunham et al. 1989:268).

**Uxbenka**

Uxbenka is situated nearest to the Maya Mountains of the primary centers in southern Belize. To date, investigations at the center have been limited. The central portion of the site resides on a faced hill, accessed by a stone stairway. Only this hill has been formally surveyed, revealing 18 stelae, five structures, and a tomb (Leventhal 1990:134). Twelve stelae were found aligned in front of the main structure, which rises some 12 m. Termination of kingship and site abandonment in the Late Classic has been suggested, but not proved (Dunham et al. 1989:268). The earliest stelae date stylistically to A.D. 396, but the only carved date is A.D. 780 (Dunham et al. 1989:268).
Xnaheb

Leventhal (1990:134) mapped most of Xnaheb in 1984, and notes the center was constructed on a foothill ridge extending from the Maya Mountains. The site exhibits several construction groups, a sacbe, and six stelae. The main structure in the central plaza is a 12 m terraced hill with stone facing. Dunham et al. (1989:272-275) propose that Xnaheb was a boundary center between Lubaantun and Nim li punit, its location determined by the relative power of the two other centers. Architectural similarities with Nim li punit also suggest that Xnaheb originated as a satellite site (Dunham et al. 1989:275). Only one historic date has been obtained from the site, A.D. 780.
CHAPTER 3
ARCHAEOLOGY OF THE PORT HONDURAS

The Punta Ycacos Lagoon and Joe Taylor Creek form the borders of the Port Honduras in southern Belize (Figure 3). A number of ancient Maya sites can be located along the coast and cays of this area. Certain ceremonial items discovered throughout the Port Honduras indicate a cultural and economic link with inland centers. Mold-made figurine whistles manufactured at Lubaantun have been recovered at the trading ports, some salt work shops, and Pork and Doughboy Point. These and other items, such as greenstone celts and incense burners, demonstrate similar cultural practices between the coast and interior.

For the purpose of this study I am primarily concerned with only the Port Honduras special-use sites. I define special-use sites as loci of specialized or intensified economic activities. Two trading ports, Wild Cane Cay and Frenchman’s Cay, have been identified because of the frequent recovery of exotic and high-status goods at the sites (McKillop 1987, 1995a, 1996, 1997; McKillop et al. 2004; Magnoni 1999; Watson 1999). Salt work shops in the

Figure 3. Illustration of some of the numerous sites in the Port Honduras (shaded).
Punta Ycacos Lagoon exhibit specialized pottery used in salt production (Braud 1996; McKillop 1995a, 2002). The current study of Pork and Doughboy Point indicates the presence of another special-use site in the Port Honduras.

**Wild Cane Cay**

Research at Wild Cane Cay by McKillop (1987, 1995a, 1996) has verified the site’s importance in a coastal trade network. During the Late Classic, Port Honduras trading ports were integrated in intraregional trade with inland centers, evidenced by trade goods such as Lubaantun-style figurine whistles, and also as part of a network of long distance trade in obsidian. With the Classic collapse of interior centers, Wild Cane Cay reoriented its trade activities to take advantage of the burgeoning circum-Yucatan exchange. From the Late Classic to the Postclassic, a dramatic increase in the density of exotics, particularly obsidian, was observed in excavations (McKillop 1987). The recovery of Mexican green obsidian and Tulum Red pottery is clear evidence of participation in Postclassic coastal trade. This trend demonstrates a rise in power and wealth for the inhabitants of Wild Cane Cay during the Postclassic.

**Frenchman’s Cay**

McKillop directed fieldwork at Frenchman’s Cay during 1994 and 1997 (McKillop 1995b, 1997; McKillop et al. 2004; Magnoni 1999; Watson 1999). The density of exotic materials retrieved indicates the site’s involvement in long-distance trade. The trading port was of primary importance during the Late Classic and lessened in the Postclassic. Like Wild Cane Cay, coral mound construction practices were revealed and submerged building foundations and artifacts were also discovered.
**Punta Ycacos Lagoon**

Survey and excavations in the Punta Ycacos Lagoon have revealed inundated Late Classic salt production work shops (Braud 1996; McKillop 1995a, 2002). The sites exhibit specialized pottery, standardized in size, and distinctive to the production of salt (McKillop 2002). McKillop (2002) hypothesizes that the work shops could have supplied interior populations with required salt. Work shop activities ceased coeval with the loss of inland markets in the Terminal Classic. Artifact preservation at the sites indicates little postdepositional disturbance.

**Pork and Doughboy Point**

Before this present study was conducted, Pork and Doughboy Point was already known to be an ancient Maya site (Hammond 1975), and furthermore that a portion of the site’s midden lay submerged under the sea up to 40 m north and 20 m east of shoreline (Brandehoff-Pracht 1995; McKillop 2002:160). Surface and underwater collections have been conducted at the site since the 1970’s: first by Norman Hammond (1975), and later by Heather McKillop (1995b). An underwater excavation carried out in 1994 by Jodi Brandehoff-Pracht and McKillop (Brandehoff-Pracht 1995) demonstrated that the submerged artifacts were in situ deposits. The excavation unit, which was placed 55 centimeters below sea level, produced pottery, lithic tools, and flora and faunal remains. The recovered artifacts that have been described from Pork and Doughboy Point suggest the site was a Late or Terminal Classic Maya hamlet or village (Brandehoff-Pracht 1995; Hammond 1975). A radiocarbon date of cal A.D. 665 to 885, taken from a submerged charcoal sample, confirms this chronological assessment (McKillop 2002:160).
During the summer of 2003 I conducted the first reported land excavations of the site under the direction of Dr. Heather McKillop, and with the assistance of field school students. The purpose of further research at this site was threefold. Although the inundated portion of the site had been dated, the age of the land component of Pork and Doughboy Point had not been. Furthermore, temporal termination of site activities was unknown. Finally, the nature of site activities and the site’s involvement in local, intraregional, and exotic trade was known only from limited testing.
CHAPTER 4
PORK AND DOUGHBOY POINT, BELIZE

Location

Pork and Doughboy Point lies at latitude 16°10’37”N, longitude 88°44’45”W (Brandehoff-Pracht 1995:19), about 11 km northeast of the modern town Punta Gorda, in the Port Honduras of the Toledo District of southern Belize (Figure 3). The point extends several hundred meters, running about 12 m in width near the tip, and is surrounded by red mangroves (Figure 4). The site can be reached only by boat. The western inland portion of the point is dominated by low-lying swamplands, whereas the eastern tip is in places 2 m above sea level and exhibits vegetation typical of dry coastal land within the Port Honduras. Plant varieties consist mostly of native palms, cane, and mangroves. The point’s name is derived from the poknoby palm, Bactris major, that is common to the area. The archaeological site approximates the western boundary of higher elevation on the tip of the point, but also includes a submerged, offshore component.

Environmental Setting

Southern Belize exhibits a variety of environments, all of which provided resources for the ancient Maya. To the west lie the Maya Mountains, a source of igneous rock for tool manufacture. The foothills of the mountains supported five centers, previously discussed, and numerous sites. A rainforest-laden plain extends to the coast, which is rich in wildlife and vegetation. The coast is abundant in marine resources, and served as a conduit for ancient sea trade. Adjacent to the coast lie several cays, some of which are known to have been settled by the ancient Maya.
Hammond (1975:276) claims that Pork and Doughboy Point was previously a delta of the Rio Grande. His conclusion is based on air photo interpretation and the presence of a local sandy soil. He further suggests that the site is located on a former cay that has since been connected to the mainland by bar formations. This interpretation stems from the fact that the dry-land boundary of the site is situated on relatively higher ground with different soil appearance and vegetative cover than the inland swamps. The site reconnaissance and soil analysis presented later in this thesis support the likelihood that the formation of Pork and Doughboy Point is the result of delta deposits. However, I cannot substantiate that the site once encompassed a cay, and instead I offer a differing interpretation of the data leading Hammond to his assertion.

Later in this thesis I describe a visible change in soil between the eastern tip of the point and the swamplands. Although Hammond interprets this change to indicate past distinct geological processes, it is more likely that the soil changed appearance due to the presence of standing water. Hammond (1975:276) even notes that Wright et al. (1959) do not identify a change in soils at the point. The palms, cane, and trees at Pork and Doughboy Point, although typical of many cays as noted by Hammond, are also abundant along the coastline at locations
above the tidal range, which would include the less eroded portion of the site. Without further, more precise testing, I believe Pork and Doughboy Point is best characterized solely as a delta formation.

What accounts for the site’s higher elevation than the inland portion of the landform? I argue it is a result of anthropogenic deposits concurrent with ancient Maya settlement. A similar phenomenon is reported at Wild Cane Cay (McKillop 2002:167-68) and Frenchman’s Cay (McKillop et al. 2004:354). Pork and Doughboy Point has been partially inundated by a local rise in sea level over the past thousand years, while other coastal and island Maya settlements in the area have been totally flooded (see McKillop 2002). McKillop (2002) argues that in some cases cultural, and in other cases environmental, conditions determined site persistence or abandonment in the Terminal Classic Port Honduras. The inhabitants of Pork and Doughboy Point were capable of responding to the rising sea; their midden deposits remain above sea level today. Changing cultural conditions may have warranted abandonment of the site.

**Cultural Significance**

Pork and Doughboy Point is one of many sites within the boundaries of the Port Honduras (Figure 2). Traveling a few kilometers by boat, one can reach Wild Cane Cay, an important link in an ancient coastal trade network (McKillop 1987), or Punta Ycacos Lagoon, where inundated salt production work shops have been discovered (McKillop 1995a, 2002). The Seven Hills site, which appears to be Late Classic with a possible ceremonial function (Hammond 1975:276), is just northwest of Pork and Doughboy Point. With the formerly lower sea level (McKillop 2002), the present inland swamps would not yet have formed during site use. A land trail may have existed linking Seven Hills with Pork and Doughboy Point. Village Farm, another Late Classic site, is a few kilometers north of Seven Hills, across Seven Hills Creek.
The Port Honduras area can also be considered in terms of regional ancient site location within southern Belize. Several kilometers inland from the Port Honduras, the politically and ceremonially significant centers of Lubaantun and Nim li punit were accessible via the Rio Grande and Golden Stream, respectively. South of the Port Honduras, the Moho River could have been used to reach Pusilha.

Although Pork and Doughboy Point lacks any strong evidence of ancient stone architecture or monument building, the site is frequently visited. The location presently serves as a side-excursion for local fisherman and tourists, and boats are occasionally docked at the site. Potsherds litter the ground surface, and visibly extend into the shallow water off the shoreline. Any obsidian or artifacts of monetary value that once covered the ground surface have been picked up. The looting disturbance is not restricted to the surface. We observed a pit on our initial visit. Formal analysis of the site was important, as future research may not be possible there due to high erosion. The site has experienced hurricane damage, which has magnified the occurrence of erosion (McKillop 2003, personal communication). A conspicuous swath of vegetation has been removed from the point, leaving the midden uncovered and subject to increased erosion.
CHAPTER 5
FIELD METHODOLOGY

Field School

Pork and Doughboy Point was included within the study area of a permit granted to Dr. McKillop from the Belize government Institute of Archaeology. This investigation was carried out as one component of Dr. McKillop's 2003 field school, “In Search of Maya Sea Traders.” Field school students assisted in this and all other research projects undertaken by Dr. McKillop and the field school staff members. Funds from the field school allowed for the chartering of a boat from Punta Gorda to Pork and Doughboy Point on two occasions. Our first visit was an all day excursion on June 17, consisting of Dr. McKillop, two field school students, and me. One student accompanied Dr. McKillop and me on a brief stop at the site again on June 26 on our way to Punta Ycacos Lagoon.

Survey and Mapping

We conducted a reconnaissance upon reaching the site for the first time. A cutbank was examined for natural soil stratigraphy and the presence of cultural features, which we did not detect. Amid thick vegetation, insects, and land crabs we searched for the presence of features and surface artifacts. Pottery sherds littered the ground surface, but were most abundant on the eroded eastern tip of the point. Dr. McKillop and a student mapped a portion of the site employing standard transit and stadia rod technique, using a tape measure to establish intrasite distances. Relative changes in elevation were recorded at several points along the cutbank and coastline.
During our return visit on June 26, our three-member team measured the approximate dry-land extent of the archaeological site. We extended a tape measure nearly straight along the coastline to varying lengths, recording distances as we progressed. Our path bifurcated the point as we followed an interface between changes in elevation and soil appearance. To the west of our path elevation decreased, swamplands became prevalent, and the soil was gray in color and had a slick texture. As mentioned above, I believe this change in soil is only superficial. Shovel tests would, of course, better serve to define the boundary of the site. As our measurement across the site continued, our path changed to intercept the locations of the uprooted tree and Unit 2, which are discussed below. Figure 5 illustrates a portion of our combined survey and measurement efforts.

![Figure 5. Pork and Doughboy Point map.](image)

**Surface Collection**

Although ancient artifacts that have been eroded out of their original stratigraphic context and onto the surface lack temporal constraints, such items can be useful in determining a site’s age when used with collaborating data. A surface collection of diagnostic sherds was made on each of our trips to the site. An uprooted tree, felled by hurricane winds, was observed and
exposed sherds were collected on June 17. On June 26 we collected diagnostic artifacts from the ground surface and shallow seawater that were later useful in further confirming the age and function of the site. Due to the copious amount of potsherds covering Pork and Doughboy Point, we were afforded the convenience of collecting only large sherds.

**Excavations**

After our initial reconnaissance of the site, we selected a barren high point above the cutbank for the location of Unit 1 (Figure 4). This spot was within the hurricane damage zone, but near the line of vegetation. The relatively higher elevation of this location meant that artifacts buried there were more likely in situ than the result of outwash and redeposition. I laid out a 1 by 1 m unit using two tape measures to triangulate, being careful to avoid placing the unit on any visible crab burrows. My preferred manner of excavation was to shovel dirt directly into a ¼” wire rocker where the soil was screened, but I often encountered dense concentrations of pottery that I elected to remove by trowel. Unit 1 was excavated in 20 cm levels, ultimately reaching 80 cm in depth.

After mapping the site, Dr. McKillop and a student discovered a looter’s pit farther inland from Unit 1. The looters demonstrated great resolve to dig this pit as the location was infested with mosquitoes and surrounded in poison-bearing poknboy palms. The decision was made to take advantage of this unfortunate act and open a second unit. The pit was cleaned and the north wall was widened to 1 meter in length. Unit 2 extended 30 cm into undisturbed soil from the north wall. Dr. McKillop and a student excavated the unit by 20 cm levels, to a depth of 60 cm, using trowels. All discovered artifacts were bagged by level.

No artifacts smaller than a ¼” in diameter were recovered from Unit 1 due to the screening wire’s size. The minimum size of recovered artifacts from Unit 2 is slightly larger due
to the lack of a screen during excavation. The result of not recovering any ancient flora or faunal remains at the site is likely an issue of poor preservation and sampling technique, and not lack of deposition. At nearby Wild Cane Cay, the frequency of organic recovery is dramatically increased when excavating waterlogged sediments (McKillop 1987).

No burials or architectural features such as postholes or house floors were observed in either unit. Unmodified rocks uncovered during the excavation of Unit 1 were saved for further study, but not from Unit 2. Soil samples were collected from each unit. Photos were taken and a wall profile drawn of each unit for posterity, but not included in this thesis as they do not contribute data in understanding the site’s function or age. Before we departed the site, the walls of the units were lined with plastic and the excavations were backfilled.

**Artifact Conservation and Storage**

Artifacts and rocks from the test units were bagged according to 20 cm levels. The final level, 60 to 80 cm, of Unit 1 was quickly excavated by Dr. McKillop using a shovel, screened and bucketed due to the imminent sunset, and later bagged. Surface collections were bagged with a date of acquisition. Soil samples from the units were bagged and labeled to indicate the stratigraphic extent of each soil type taken for analysis. The artifacts, rocks, and soil samples were stored in marked plastic buckets for later study.
CHAPTER 6
LAB METHODOLOGY

Artifact Preparation

I returned to the LSU Maya Archaeology Lab in Punta Gorda in January 2004 to clean, catalog, and study the artifacts under the guidance of Dr. McKillop, who was simultaneously studying pottery from other Port Honduras sites. Standards for processing and labeling artifacts required by the Belize government Institute of Archaeology were followed. Artifacts were washed in the lab and scrubbed using toothbrushes. Fineware pottery was cleaned cautiously to avoid removing paint. Artifacts were then arranged on trays and dried in direct sunlight. Once dry, all the ceramic artifacts were laid out according to unit and level so that I could familiarize myself with the collection in its entirety. Lithic tools, rocks, and the soil samples were examined when the ceramic analysis neared completion. Photos of the collection from Pork and Doughboy Point also were taken.

Pottery

Excavations and surface collections produced abundant ceramics that allowed for a basic reconstruction of the ancient Maya’s temporal occupation of Pork and Doughboy Point and provided an indication of site function. A chronological determination for the anthropogenic use of Pork and Doughboy Point was completed through standard pottery analysis techniques utilizing the type-variety system of ceramic classification. Smith et al. (1960) suggest a systematic method for establishing ceramic chronologies in the Maya area through the use of types and varieties that are correlated with time spans. I further discuss the type-variety concept later with the results of pottery analysis.
The pottery from each level of each unit was examined separately, but having all the pottery laid out allowed me to think about the collection as a whole and visualize real and appropriate groupings. I heavily utilized *Type-Variety Analysis of Ceramics from Port Honduras, Belize* (McKillop 2001) as a basis for the local type-variety ceramic classification, and used Sabloff (1975) for recognition of vessel forms. I also had access to the type-variety collection of Frenchman’s Cay pottery from the 1997 excavations (McKillop 2001) for visual comparison. Discussions with Dr. McKillop and the availability to observe other local collections led to the identification of distinct pottery groups from Pork and Doughboy Point based on sherd surface finish and decoration.

Ceramic function was evaluated when possible in order to ascertain specific site activities. Considering ceramic function allows one to reasonably assume the types of activities users of a certain vessel carried out. In this study, vessel form was considered an essential determination of function. However, paste characteristics were also regarded for this matter.

**Modified Lithics**

Excavated obsidian was studied to examine the involvement of Pork and Doughboy Point in long distance sea trade. Blades were measured by length and width, weighed, and catalogued. The obsidian density, or the mean weight of obsidian pieces per cubic meter of soil deposit excavated, was calculated following methods first employed by Sidrys (1976) and later McKillop (1989). A density:distance value was then obtained by comparing obsidian density to distance from nearest potential parent rock source (McKillop 1989; Sidrys 1977). An unusually high density:distance value could identify a site as being an important trading center.

An indication that obsidian was readily available to users is the archaeologically observable act of not conserving the material. A low cutting edge length to blade weight ratio
indicates relative obsidian abundance (McKillop 1996; Sheets and Muto 1972; Sidrys 1979). Measurement of blade width can also be used to find or dispel obsidian conservation (McKillop 1996; Rovner 1976). Sidrys (1979) views Classic Period obsidian as a multi-purpose status commodity that was subject to economic maximization. Sidrys found that as site distance to nearest source increased, obsidian blades were produced more efficiently. Quantification of various aspects of recovered obsidian allows for comparison of Pork and Doughboy Point with other Maya settlements to determine the relative ease with which the site was able to procure the material. This ease can then be expressed generally as indicative to site wealth and/or power.

**Soils and Rocks**

Soil color and texture were examined for any clues that would lead to a further understanding of the ancient Maya’s use of the site. I compared a portion of each soil sample taken to a Munsel Color Chart to obtain a standardized color description. I describe soil textures in relation to relative particle size consistency and soil friability.

Rocks were studied with particular interest due to the question of the site’s natural history. Working under the former river delta scenario, I anticipated the site’s soil could contain smooth river pebbles and inclusions of storm deposits. The recovery of unworn, non-local rock types would suggest anthropogenic deposition, known as manuports. A magnifying hand lens was used to examine the recovered rocks for signs of cultural modification.
CHAPTER 7
RESULTS

The 2003 archaeological investigation of Pork and Doughboy Point produced a substantial artifact collection considering the brevity of fieldwork employed to obtain it. The artifact density from Units 1 and 2 (Figure 6) displays the relative abundance of material culture encountered at the site. This value, coupled with my reported observations of the site, suggests the locality has a rich preserved history. Below I present the results of analyses concerning pottery, ceramic objects, modified lithics, and soils and rocks.

Figure 6. Artifact density (kg/m\(^3\)) from Unit 1 and Unit 2 excavations.

Pottery

I utilized the type-variety concept in my ceramic study. Other methodologies exist for conducting pottery analysis, but I was principally interested in reconstructing a chronology for the site. As Smith et al. (1960:333) argue, the type-variety approach is an appropriate technique since “a type represents an aggregate of visually distinct ceramic attributes already objectified within one or (generally) several varieties that, when taken as a whole, are indicative of a
particular class of pottery produced during a specific time interval within a specific region.” By identifying pottery in terms of types and varieties I am able to compare the Pork and Doughboy Point collection with other Port Honduras pottery as well as published ceramic reports of distant sites. Below I present the results of the type-variety analysis of the Pork and Doughboy Point collection. Dr. McKillop ultimately evaluated my classificatory scheme. The following categories used in this study are modified from Sabloff (1975), following McKillop (2001).

**Type:** A type is meant to “approximate the range of variation encompassed by the original prehistoric ceramic unit” (Smith et al. 1960:332). Ceramic variation includes paste, temper, method of firing, surface finish, and vessel form. The creation of pottery types aids in the study of spatial, temporal, and functional aspects of pottery by classifying ceramics into abstract entities based on their inherent characteristics.

**Variety:** Varieties are subsets of types, in that types are generally composed of several varieties. A variety indicates organized variation of ceramic attributes within the sphere of a defined type.

**Quantity:** Listed here is the number of recovered sherds identified as a specific type and/or variety or untyped vessel.

**Principal Identifying Characteristics:** A brief synopsis of the pottery’s traits that aid in identifying a type and/or variety or untyped vessel is presented here.

**Paste, Temper, and Firing:** This category describes three important components dictating the pottery’s appearance and durability. Paste refers to the materials used in constructing a vessel. In this study, paste is generally only described in terms of color and degree of mixing. Temper refers to any materials mixed with clay during the manufacture of a vessel. Firing refers to the heating of a vessel during production, and in this study is only discussed in terms of low or poor and high or well.
**Surface Finish and Decoration:** This is a descriptive category detailing the superficial condition of the sherds and the recognition of any decorative techniques.

**Forms:** Only pottery forms recognized from recovered sherds at Pork and Doughboy Point are mentioned here. A particular type and/or variety may exhibit different forms at other sites. Form categories follow Sabloff (1975).

**Intrasite Locations:** The provenience of recovered sherds identified as a type and/or variety or untyped vessel are listed here.

**Intersite References:** The recovery of a type and/or variety at other Port Honduras sites is noted here. Untyped vessels that are similar to types and/or varieties found in published ceramic reports also are noted.

**Cultural Significance:** Comments made in this category include the assumed function of various pottery forms and the implications of discovering a specific type and/or variety or untyped vessel at Pork and Doughboy Point.

**Time Period:** This category notes when strong evidence allows a type and/or variety or untyped vessel to be temporally defined.

**Pottery Type-Variety Descriptions**

**Type:** Punta Ycacos Unslipped (Figures 7 and 8)

**Variety:** Unspecified

**Quantity:** 136 rim sherds, 2864 body sherds, 1 vessel support, 1 handle, 1 candelero, 6 incense burner fragments

**Principal Identifying Characteristics:** 1) coarse sand temper; 2) typically red paste with a black core; 3) usually heavily eroded
**Paste, Temper, and Firing:** This is a low fired, poorly mixed pottery type that is tempered with quartz sand. Paste color is generally red, but occasionally pink or light gray, with a black core, which is what I refer to as the standard description for the type. A small proportion of sherds fell outside of this range of variation, resulting in the creation of three subsets for this type. One group is sherds composed of entirely black paste. Another is composed of brown paste sherds with sandy textures. The final group is thin red sherds that lack a black core, and therefore are not likely to be extremely weathered versions of the standard type. A larger sample size would be needed to justify constructing varieties for these groups.

**Surface Finish and Decoration:** Most sherds are heavily weathered and lack their original surface. Some sherds with original surface demonstrate a smoother interior than exterior. Six sherds display exterior incisions.

**Forms:** All of the rim sherds recovered for this type indicate they are deep open bowls with vertical walls and direct rims, although some weathered rims appear to be exterior-thickened. Rim thickness varied among sherds, with some rims narrowing to the lip and others narrowing to the body. The recovery of only one vessel support, part of the surface collection, suggests the bowls lacked supports. Other forms are hinted at by the recovery of one handle, located in Unit 1 at 60-80 cm. Also recovered were incense burners of various shapes including candelero and fry pan. Hammond (1975:364-65) found ten miniature vessels of the candelero class at Pork and Doughboy Point. All are generally similar to the candelero recovered in the present study.

**Intrasite Locations:** Standard description: Unit 1: all levels; Unit 2: all levels; surface collection

Black paste group: Unit 1: 40-60 cm

Brown sandy group: Unit 1: all levels; Unit 2: 40-60 cm

Thin group: Unit 1: all levels; Unit 2: 40-60 cm
Incense burners: Unit 1: 20-40 cm; surface collection

**Intersite References:** Thick Punta Ycacos Unslipped jars and bowls with associated cylinder legs and spacers were used in salt production at Punta Ycacos Lagoon sites (McKillop 2001, 2002). Thinner sherds of bowl form, not the thick jars associated with salt boiling, represent Punta Ycacos Unslipped at Pork and Doughboy Point.

**Cultural Significance:** Punta Ycacos Unslipped is the most common type of pottery at Pork and Doughboy Point. These vessels, being of a specific form in great abundance, are believed to materially represent one or more intensified activities. Generally, the open bowls would have been well suited for non-serving domestic activities. As stated, some rim sherds were found narrowest in thickness at the lip and others in the body. Speculation on the function of this variation concludes the following. Bowls thinner at the lip were suited for storage or perhaps mixing, pounding, or grinding purposes. Bowls thinner in the body were appropriate for boiling and soaking activities. The black paste and brown sandy groups probably represent variation in clay source and the vessels functioned similar to the standard group. The thin group may represent eroded sherds but, lacking a core, do not appear to be of the standard type. They may instead have been originally thin bowls used in cooking.

**Time Period:** Late Classic

**Type:** Mangrove Unslipped (provisionally identified) (Figure 9)

**Variety:** Unspecified

**Quantity:** 12 rim sherds, 297 body sherds, 1 basal support sherd

**Principal Identifying Characteristics:** 1) calcite tempered; 2) heavily pockmarked but smooth; 3) silky feel
**Paste, Temper, and Firing:** This is a calcite tempered pottery type that is well fired and light in weight. Paste is typically red but also black, orange, tan, or gray.

**Surface Finish and Decoration:** These sherds have smooth surfaces that feel silky. Temper has been removed on nearly all sherds leaving pockmarks on interiors and exteriors.

**Forms:** The common form is a jar with outflaring rim, but a possible shoe pot was also recognized.
**Intrasite Locations:** Unit 1: all levels; Unit 2: 20-40 cm, 40-60 cm

**Intersite References:** Frenchman’s Cay and Punta Ycacos Lagoon salt production work shops (McKillop 2001, 2002).

**Cultural Significance:** This pottery type would be well suited for storing liquids.

**Time Period:** Late Classic

**Note:** Provisionally identified as Mangrove Unslipped due to the jar form with pockmarked surfaces, these sherds are usually lighter, thinner, and smoother in feel than Mangrove Unslipped from the Frenchman’s Cay collection. There is a possibility than some or many of these sherds were originally slipped.

**Type:** Bedford Unslipped (provisionally identified) (Figure 10)

**Variety:** Unspecified

**Quantity:** 3 rim sherds, 78 body sherds

**Principal Identifying Characteristics:** 1) smooth interior with heavily pockmarked exterior; 2) pockmarks are stretched
**Paste, Temper, and Firing:** This is a calcite tempered pottery type that is well fired with no core visible. Paste colors are black, red, tan, or gray. The interior and exterior of a sherd are often different colors.

**Surface Finish and Decoration:** While the interiors have smooth, even surfaces, the exteriors of sherds are pitted from presumed calcite inclusions. Exterior pockmarks are frequently horizontally elongated, creating a dragged appearance. Sherd exteriors range from glossy to rough feeling.

**Forms:** A high collared jar was the only diagnostic rim recovered.

**Intrasite Locations:** Unit 1: all levels; surface collection

**Intersite References:** Wild Cane Cay and Frenchman’s Cay (McKillop 2001, 2002).

**Cultural Significance:** Vessels with a rough exterior are generally considered utilitarian in usage. The recovered form suggests this type was used for liquid storage.

**Time Period:** Late Classic

**Note:** Bedford Unslipped is provisionally identified at Pork and Doughboy Point due to differences between this type collection and the collection from Frenchman’s Cay. Although elongated pockmarks are descriptive of both collections, generally rough, uneven exterior surfaces are found at Frenchman’s Cay whereas this study found exterior surfaces ranging from a smooth feel to a coarse, rough feel. These sherds are also lighter and thinner than Bedford Unslipped at Frenchman’s Cay.

**Type:** Payne’s Creek Unslipped (Figure 11)

**Variety:** Unspecified

**Quantity:** 10 rim sherds, 23 body sherds

**Principal Identifying Characteristics:** 1) smooth interior and exterior; 2) hard, durable sherds
Figure 10. Bedford Unslipped (Photo by McKillop).

**Paste, Temper, and Firing:** This pottery type is characterized by well fired, calcite tempered sherds. Paste color is typically red or gray.

**Surface Finish and Decoration:** This type has smooth surfaces that are rarely pitted.

**Forms:** Sherds of jars with outflared rims and short necks were recovered.

**Intrasite Locations:** Unit 1: all levels; surface collection

**Intersite References:** Wild Cane Cay and Frenchman’s Cay (McKillop 2001).

**Cultural Significance:** This pottery would have served as durable storage vessels.

**Time Period:** Late Classic

**Type:** Crique Sarco Unslipped (Figure 12)

**Variety:** Unspecified

**Quantity:** 6 rim sherds, 47 body sherds

**Principal Identifying Characteristics:** 1) smooth interior with exterior striations; 2) thick vessel walls

**Paste, Temper, and Firing:** This is a calcite or mixed tempered pottery type, generally well fired, with thick walls. Paste color is reddish brown to dark gray.
Surface Finish and Decoration: Sherds were weathered but originally had smooth surfaces and striations on the exterior. One lip was incised.

Forms: The recovered sherds indicate this type to be jars with outflared rims.

Intrasite Locations: Unit 1: 20-40cm, 40-60cm; surface collection

Intersite References: Frenchman’s Cay (McKillop 2001).

Cultural Significance: McKillop (2001:73) believes Crique Sarco Unslipped is a locally made type used for liquid storage.

Time Period: Late Classic

Type: Joe Taylor Creek Striated (Figure 13)

Variety: Unspecified

Quantity: 8 body sherds

Principal Identifying Characteristics: 1) striated exterior with smooth interior; 2) thin vessel walls

Paste, Temper, and Firing: This is a well fired pottery type with calcite temper. Paste is brown to black.
Surface Finish and Decoration: Thin, smooth sherds with striations characterize this pottery type.

Forms: No rims were recovered.

Intrasite Locations: Unit 1: 40-60cm, 60-80cm; Unit 2: 40-60cm

Intersite References: Frenchman’s Cay (McKillop 2001).

Cultural Significance: Another type suitable for liquid storage, striated jars were common in the southern Maya lowlands over a long period of time (McKillop 2001:61).

Time Period: Late Classic by association

Type: Forest Home Red (Figure 14)

Variety: Unspecified

Quantity: 4 rim sherds, 30 body sherds

Principal Identifying Characteristics: 1) dark red slip; 2) generally thick sherds

Paste, Temper, and Firing: This pottery type has calcite temper with well mixed clay. Paste is typically red or reddish-orange.
Surface Finish and Decoration: Sherds were slipped on the interior of bowls and the exterior of jars. Surfaces were smooth with small pockmarks.

Forms: Open bowls and jars.

Intrasite Locations: Unit 1: all levels; Unit 2: 40-60cm

Intersite References: Frenchman’s Cay (McKillop 2001).

Cultural Significance: This type is a well made monochrome pottery appropriate for domestic use.

Time Period: Late Classic

Type: Moho Red (Figure 15)

Variety: Unspecified

Quantity: 2 rim sherds, 5 body sherds

Principal Identifying Characteristics: 1) volcanic ash tempered; 2) fine yellow paste that erodes easily

Paste, Temper, and Firing: This pottery type is volcanic ash tempered and very weathered. The paste is uniform in color, and either yellow or bleached gray.
Surface Finish and Decoration: These sherds were originally painted red but all slip has been eroded.

Forms: Form is difficult to determine in this collection, but likely bowls or dishes.

Intrasite Locations: Unit 1: 20-40cm, 40-60cm, 60-80cm

Intersite References: Finding this pottery type ties Pork and Doughboy Point to the Belize Valley, Lubaantun, and other Port Honduras sites. Moho Red is known as Belize Red at Lubaantun (McKillop 2001).

Cultural Significance: This is a common Late Classic type in Belize and demonstrates trade from volcanic regions of Mesoamerica. Volcanic ash layers are present in the outcrop of the Bladen Volcanic Series and ash deposits are found in the Trio Branch of the Monkey River in southern Belize (Graham 1987:759). Graham (ibid) also reports that ash beds are located “in the Punta Gorda region near San Pedro,” although further details of this location are unknown. For this thesis I will still consider volcanic ash-tempered pottery to be a tradeware, as this is the customary procedure (see McKillop 2001).

Time Period: Late Classic
Figure 15. Moho Red (Photo by McKillop).

Unnamed Pottery Type-Variety Descriptions

Type and/or Variety: Unnamed Yellow/Orange Paste (Figure 16)

Quantity: 106 body sherds, 1 ring basal support sherd

Principal Identifying Characteristics: 1) yellow/orange paste; 2) thin, smooth interior and exterior surfaces; 3) no slip visible

Paste, Temper, and Firing: This is a calcite tempered, well-mixed, well-fired pottery type. The paste color varies from mustard yellow and orange to a bleached light gray.

Surface Finish and Decoration: Sherds were weathered but still smooth. No slip or decorations were present, but this type was likely slipped.

Forms: A ring basal support was recovered but no rims.

Intrasite Locations: Unit 1: all levels; Unit 2: 20-40cm, 40-60cm

Intersite References: This same type and/or variety is found at Village Farm, where Dr. McKillop considers it likely weathered Warrie Red (McKillop 2004, personal communication). Warrie Red is a Late Classic unit-stamped pottery with distinctive monkey, “S,” or dot motifs on jar shoulders, with strong connections to Lubaantun, Seibal, and Altar de Sacrificios (McKillop
Kidder (1954) presents unit-stamped pottery from Poptun, Department of Peten, Mountain Cow district, Belize, and Lubaantun, all of which strongly resembles unit-stamped sherds recovered from the Port Honduras.

**Cultural Significance:** As identified in this study, this type and/or variety reflects fineware vessels of undeterminable form. This pottery may very well be Warrie Red, but with no slip or decorative sherds a positive identification could not be made. Hammond (1975:278) reports “a stone stamp possibly used for making unit-stamped pottery” was found at Wild Cane Cay. This evidence could suggest imported Warrie Red had local counterparts.

**Time Period:** Late Classic by association with Village Farm collection

![Figure 16. Unnamed Yellow/Orange Paste (Photo by McKillop).](image)

**Type and/or Variety:** Unnamed Calcite Tempered (Figure 17)

**Quantity:** 111 body sherds

**Principal Identifying Characteristics:** 1) ground limestone tempered; 2) pitted surfaces; 3) lightweight

**Paste, Temper, and Firing:** This is generally poorly fired pottery with ground limestone visible in pits and on fresh breaks. Paste is tan or red but some sherds exhibit a gray core.
**Surface Finish and Decoration:** Sherds showed no slip or decorations and appeared heavily eroded.

**Forms:** No rims were recovered.

**Intrasite Locations:** Unit 1: all levels; Unit 2: 40-60cm

**Intersite References:** None known.

**Cultural Significance:** This type and/or variety could represent poorly fired Mangrove Unslipped or Payne’s Creek Unslipped that has been heavily weathered. Some thicker sherds resemble eroded Forest Home Red.

**Time Period:** inconclusive

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![Figure 17. Unnamed Calcite Tempered (Photo by McKillop).](image)

**Type and/or Variety:** Unnamed Thin Fineware (Figure 18)

**Quantity:** 37 body sherds

**Principal Identifying Characteristics:** 1) thin, sandy feeling sherds; 2) uniform paste color

**Paste, Temper, and Firing:** This pottery type has a fine sand or mixed temper. Paste color is orange to tan, with no visible core, meaning it is well fired.
**Surface Finish and Decoration:** Gritty to the touch, this is a highly weathered fineware with no visible slip or smooth surfaces.

**Forms:** No rims were recovered.

**Intrasite Locations:** Unit 1: 20-40cm, 40-60cm; Unit 2: 20-40cm

**Intersite References:** Hammond (1982b:227) describes a tradeware at Lubaantun similar in clay composition to pottery from the Belize Valley, particularly Barton Ramie, which could be Unnamed Thin Fineware. Hammond’s yellow, sand textured pottery has a glossy red slip, which may not have endured erosional forces at Pork and Doughboy Point if it is indeed the same type.

**Cultural Significance:** This type is a highly eroded fineware with no original surfaces. While it appears similar to Unnamed Yellow/Orange Paste, Unnamed Thin Fineware has a distinct sandy texture.

**Time Period:** inconclusive

Figure 18. Unnamed Thin Fineware (Photo by McKillop).

**Type and/or Variety:** Unnamed Calcite Tempered Slipped (Figure 19)

**Quantity:** 1 rim sherd, 16 body sherds
**Principal Identifying Characteristics:** 1) fine ground limestone temper; 2) smooth interior and exterior; 3) interior slipped black and/or dark red

**Paste, Temper, and Firing:** This is a fine calcite tempered, well mixed, well fired pottery type. Paste is dark brown, but some sherds are discolored to red. Contains inclusions that may sparkle.

**Surface Finish and Decoration:** The interior is slipped black and/or dark red. Interior surfaces are smoother than the exterior, which may display horizontal striations.

**Forms:** The recovered form is a square lipped deep bowl with an exteriorly bolstered rim. A 40 cm rim diameter was measured with 8 % of the rim.

**Intrasite Locations:** Unit 1: 60-80cm; Unit 2: 20-40cm, 40-60cm

**Intersite References:** None known, but generally similar to Classic Period bowls from the Belize Valley.

**Cultural Significance:** This type and/or variety represents well made fine slipped bowls probably for serving or ritual use.

**Time Period:** Classic

![Figure 19. Unnamed Calcite Tempered Slipped (Photo by McKillop).](image)

**Type and/or Variety:** Unnamed Hard Paste Painted (Figure 20)
**Quantity:** 2 rim sherds, 1 body sherd

**Principal Identifying Characteristics:** 1) hard slipped sherds; 2) thick rounded rims

**Paste, Temper, and Firing:** This is a well fired, well mixed pottery type with visible quartz sand temper.

**Surface Finish and Decoration:** The interiors of two sherds are slipped black while the other is red.

**Forms:** Bowls with direct round rims.

**Intrasite Locations:** Unit 1: 40-60cm; Unit 2: 20-40cm

**Intersite References:** Village Farm (McKillop 2004, personal communication).

**Cultural Significance:** Little can be noted concerning this type other than interior slipped bowls place emphasis on the contents rather than the vessel. These sturdy slipped bowls might have been used for serving or possibly in ritual functions.

**Time Period:** Late Classic by association with Village Farm collection

![Figure 20. Unnamed Hard Paste Painted (Photo by McKillop).](image)

**Type and/or Variety:** Unnamed Quartz Tempered Slipped (Figure 21)

**Quantity:** 4 body sherds
Principal Identifying Characteristics: 1) very smooth interior; 2) rough exterior with visible quartz sand temper

Paste, Temper, and Firing: This is a well fired pottery type tempered with quartz sand or possibly mixed. Paste color is dark brown on the smoothed interior and dark brown to red on the coarse exterior.

Surface Finish and Decoration: Interior surface slipped black, no other colors visible.

Forms: No rims were recovered.

Intrasite Locations: Unit 1: 20-40cm

Intersite References: None known.

Cultural Significance: This type’s interior surfaces are the smoothest of the entire collection from Pork and Doughboy Point. With a rough exterior presumably for gripping, this type may represent vessels that were frequently moved, such as serving vessels.

Time Period: inconclusive

Figure 21. Unnamed Quartz Tempered Slipped (Photo by McKillop).

Untyped Pottery Vessel Descriptions

Untyped Vessel: Black Slipped Vessel (Figure 22)
**Quantity:** 28 body sherds, 1 base sherd

**Principal Identifying Characteristics:** 1) black slip; 2) fluted; 3) durable

**Paste, Temper, and Firing:** This is a calcite or possibly mixed tempered, well fired vessel.

Paste color is black or tan.

**Surface Finish and Decoration:** Interior and exterior surfaces are smooth and slipped black.

The exterior of some sherds exhibit vertical fluting. The recovery of one basal sherd and several unfluted body sherds indicate the flutes did not extend to the base of the vessel, and were likely widely spaced apart.

**Forms:** Resembles a Belize Valley vase with convex sides or a barrel-shaped bowl.

**Intrasite Locations:** Unit 1: 20-40cm, 40-60cm, 60-80cm

**Intersite References:** Smith (1955:174-175, ill. 42b1) describes a Tepeu 2 cylindrical vase with vertical fluting. Not entirely similar to the Black Slipped Vessel described here, the Uaxactun vase has a red interior and horizontally incised exterior. This vessel is also similar to types from Barton Ramie described by Gifford (1976). The Black Slipped Vessel is most similar in form to a fluted bowl with flared sides of the Spanish Lookout Complex, Benque Viejo Polychrome: Variety Unspecified (Gifford 1976:269-72, fig. 173h). However, Benque Viejo Type pottery is tempered with volcanic ash. The untyped vessel is most similar in paste composition to Hermitage Complex, Paradero Fluted type (Gifford 1976:166-67, figs. 88p and q). Paradero Fluted: Oak-burn Variety bowls have a tan or dark paste of fine texture with minor calcite inclusions. Unlike the Black Slipped Vessel, these vessels have a slightly rounded base.

**Cultural Significance:** As with all the untyped vessels in this study, a clear determination could not be made placing this vessel within an established type and/or variety. However, the vessel can be confidently placed within the Middle to Late Classic due to its qualities that overlap these
temporal divisions. Should the vessel be Middle Classic, its occurrence in a Late Classic midden indicates it was likely an heirloom tradeware. This vessel indicates communication between the Port Honduras and the Belize Valley, or perhaps even the Peten.

**Time Period:** Middle or Late Classic

**Note:** An important recognition was made concerning the provenience of sherds for this untyped vessel. I have reasonably assumed that the sherds, which come from the lowest three levels of Unit 1, are all from the same vessel, which likely indicates most of the material from this unit was deposited contemporaneously.

![Untyped Black Slipped Vessel](image)

**Figure 22. Untyped Black Slipped Vessel (Photo by McKillop).**

**Untyped Vessel:** Slipped Collar Jar (Figure 23)

**Quantity:** 1 body sherd, 1 body with neck

**Principal Identifying Characteristics:** 1) black slipped exterior; 2) thin, well made collar jar

**Paste, Temper, and Firing:** This is a calcite or possibly mixed tempered, well fired vessel. The weathered exterior paste color is dark brown to light red and the interior is dark brown.

**Surface Finish and Decoration:** The interior and exterior surfaces are smooth, with the exterior slipped black.
**Forms:** Necked jar

**Intrasite Locations:** Unit 1: 20-40cm

**Intersite References:** None known.

**Cultural Significance:** This is a vessel for storing and pouring liquids.

**Time Period:** inconclusive

![Figure 23. Untyped Slipped Collar Jar (Photo by McKillop).](image)

**Untyped Vessel:** Polychrome Dish (Figure 24)

**Quantity:** 1 rim sherd

**Principal Identifying Characteristics:** 1) hard, smooth surfaces; 2) interior is polychrome slipped

**Paste, Temper, and Firing:** This vessel was tempered with calcite crystals or possibly mixed material. Other than slip deterioration, this sherd is hardly weathered and shows no pockmarks. The paste is a dark red with a black core.

**Surface Finish and Decoration:** The exterior appears unslipped while the interior is cream slipped with a red slip on portions.

**Forms:** An open dish with basal angle, beveled-in rim, and pointed lip.
Intrasite Locations: Unit 1: 20-40cm

Intersite References: This untyped vessel has similarities to types found at Barton Ramie. Hermitage Complex, Dos Arroyos Orange-polychrome type dishes share general form, paste, and slip characteristics with this Polychrome Dish (Gifford 1976:173-79, figs. 95i, 97i, 100b, and 100e). The Tiger Run Complex, Mountain Pine Red: Old Jim Variety also has comparable form and paste qualities (Gifford 1976:193-95, fig. 110e).

Cultural Significance: This vessel is a durable polychrome serving dish probably from the Belize Valley.

Time Period: Classic

Figure 24. Untyped Polychrome Dish (Photo by McKillop).

Untyped Vessel: Polychrome Incurved Bowl (Figure 25)

Quantity: 2 rim sherds, 1 body sherd

Principal Identifying Characteristics: 1) exterior cream and black or red slipped; 2) restricted bowl form

Paste, Temper, and Firing: These are calcite-tempered vessels with brown paste and dark cores.
**Surface Finish and Decoration:** Sherds have a smooth, cream and black or red slipped exterior with a smooth cream slipped interior.

**Forms:** Incurved bowl

**Intrasite Locations:** Unit 1: 20-40cm, 40-60cm

**Intersite References:** This untyped vessel has some similarities to incurved bowls of the Tiger Run Complex, Mount Pleasant Red: Mount Pleasant Variety at Barton Ramie (Gifford 1976:196-98, figs. 112c-h). Mount Pleasant Red type vessels have tan paste that are tempered with calcite, but unlike this Polychrome Incurved Bowl the rims are exterior thickened, and there is no mention of a cream slip. This untyped vessel is similar in form to incurved bowls of the Spanish Lookout Complex, Dolphin Head Red: Dolphin Head Variety at Barton Ramie (Gifford 1976:227-28, figs. 138a, b, c, and g).

**Cultural Significance:** Slightly restricted bowls are appropriate for storing or serving dry goods.

**Time Period:** Middle or Late Classic

The results of the ceramic study (Tables 1 and 2) can be summarily expressed as follows. Existing pottery types were found, possible new types and/or varieties were distinguished but not
named according to the type-variety system, certain vessels were recognized but not assigned a type-variety designation, and some sherds were not identified in the course of this study. Recognition of an existing pottery type and/or variety was done so eight times. However, two of these are designated as provisional for reasons discussed in their descriptions above. Six possible new types and/or varieties from the Port Honduras area are noted in this study, but not permanently named due to small sample sizes and the difficulty of assessing the original characteristics of some eroded sherds. Pottery groups that did not appear to fit into previously identified types and/or varieties were given a descriptive label suitable for the sherds they represented. The labels do not conform to the methods established by Smith et al. (1960:334) for designating new nomenclature within the type-variety concept, as they are not intended to define new types and/or varieties. Further intersite collection comparisons need to be completed in order to determine if these unnamed types and/or varieties are established elsewhere and represent tradewares or are instead of local production. In four instances I describe untyped vessels. These vessels appear to be tradewares, however, without examining an appropriate comparative collection I was unable to determine with confidence their type and/or variety. The recovery of numerous small, heavily eroded sherds that I was uncomfortable identifying within the type-variety system also led to the creation of an unidentified group.

Only sherds exhibiting a slipped surface were placed within a slipped type, with the exception of Moho Red, which is easily recognized by its volcanic ash temper. Several sherds were thin and smooth, suggesting they were likely originally slipped. Sherds exhibiting such characteristics were sorted according to unslipped pottery diagnostics and identified as distinct groups. Many sherds provisionally identified in this study as Mangrove Unslipped, although meeting all the defined attributes of that particular pottery type, had smooth surfaces despite
pockmarks and may have been originally slipped. Unnamed Yellow/Orange Paste and Unnamed Thin Fineware may also comprise sherds that were originally slipped.

Table 1. Quantifications of Excavated Pottery Types and Vessels.

<table>
<thead>
<tr>
<th>Pottery Types/Vessels: From Excavations</th>
<th>Sherd Count (#)</th>
<th>Ceramic Weight (g)</th>
<th>Mean Weight (g/sherd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punta Ycacos Unslipped</td>
<td>2958</td>
<td>18710</td>
<td>6.3</td>
</tr>
<tr>
<td>Mangrove Unslipped</td>
<td>310</td>
<td>1227</td>
<td>4.0</td>
</tr>
<tr>
<td>Bedford Unslipped</td>
<td>79</td>
<td>271</td>
<td>3.4</td>
</tr>
<tr>
<td>Payne’s Creek Unslipped</td>
<td>27</td>
<td>247</td>
<td>9.1</td>
</tr>
<tr>
<td>Crique Sarco Unslipped</td>
<td>52</td>
<td>263</td>
<td>5.1</td>
</tr>
<tr>
<td>Joe Taylor Creek Striated</td>
<td>8</td>
<td>70</td>
<td>8.8</td>
</tr>
<tr>
<td>Forest Home Red</td>
<td>34</td>
<td>173</td>
<td>5.1</td>
</tr>
<tr>
<td>Moho Red</td>
<td>7</td>
<td>15</td>
<td>2.1</td>
</tr>
<tr>
<td>Unnamed Yellow/Orange Paste</td>
<td>107</td>
<td>233</td>
<td>2.2</td>
</tr>
<tr>
<td>Unnamed Calcite Tempered</td>
<td>111</td>
<td>351</td>
<td>3.2</td>
</tr>
<tr>
<td>Unnamed Thin Fineware</td>
<td>37</td>
<td>119</td>
<td>3.2</td>
</tr>
<tr>
<td>Unnamed Calcite Tempered Slipped</td>
<td>17</td>
<td>230</td>
<td>13.5</td>
</tr>
<tr>
<td>Unnamed Hard Paste Painted</td>
<td>3</td>
<td>53</td>
<td>17.7</td>
</tr>
<tr>
<td>Unnamed Quartz Tempered Slipped</td>
<td>4</td>
<td>45</td>
<td>11.3</td>
</tr>
<tr>
<td>Untyped Black Slipped Vessel</td>
<td>29</td>
<td>95</td>
<td>3.3</td>
</tr>
<tr>
<td>Untyped Slipped Collar Jar</td>
<td>2</td>
<td>36</td>
<td>18.0</td>
</tr>
<tr>
<td>Untyped Polychrome Dish</td>
<td>1</td>
<td>41</td>
<td>41.0</td>
</tr>
<tr>
<td>Untyped Polychrome Incurved Bowl</td>
<td>3</td>
<td>15</td>
<td>5.0</td>
</tr>
<tr>
<td>Unidentified</td>
<td>712</td>
<td>1667</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4501</strong></td>
<td><strong>23861</strong></td>
<td><strong>5.3</strong></td>
</tr>
</tbody>
</table>

Table 2. Quantifications of Pottery Types from Surface.

<table>
<thead>
<tr>
<th>Pottery Types/Vessels: From Surface</th>
<th>Sherd Count (#)</th>
<th>Sherd Weight (g)</th>
<th>Mean Weight (g/sherd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punta Ycacos Unslipped</td>
<td>51</td>
<td>1720</td>
<td>33.7</td>
</tr>
<tr>
<td>Payne’s Creek Unslipped</td>
<td>6</td>
<td>425</td>
<td>70.8</td>
</tr>
<tr>
<td>Bedford Unslipped</td>
<td>2</td>
<td>272</td>
<td>136.0</td>
</tr>
<tr>
<td>Crique Sarco Unslipped</td>
<td>1</td>
<td>26</td>
<td>26.0</td>
</tr>
<tr>
<td>Unidentified</td>
<td>1</td>
<td>45</td>
<td>45.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>61</strong></td>
<td><strong>2488</strong></td>
<td><strong>40.8</strong></td>
</tr>
</tbody>
</table>

Slipped sherds account for a low percentage of the total ceramic collection (Figure 26).

Of the recovered pottery from Pork and Doughboy Point, many represent utilitarian ceramics, but some finely made vessels were recovered as well. For the purpose of this thesis, the definition of utilitarian pottery proposed by Prudence Rice is used. Rice (1981:222) characterizes utilitarian pottery to be “low-status ceramic goods of widespread occurrence, low value, and high consumption.” Fine, or, as Rice (ibid) uses, “elite” pottery are “a luxury, high-status, or prestige commodity, with ceremonial or special function, high value, low consumption,
and some kind of restricted distribution.” At Pork and Doughboy Point, I consider utilitarian pottery to be a locally made product and fine pottery to be an imported commodity.

![Figure 26. Comparison of slipped pottery with unslipped pottery.](image)

**Ceramic Objects**

Some of the ceramics recovered in this study are not the remains of pottery vessels. Included in this category are mold-made figurine whistles, net-sinkers, and fragments of amorphous clay. Below I briefly note the occurrence of such objects and suggest their cultural implications.

The presence of figurine whistles is documented at Pork and Doughboy Point by one fragment and possibly two others (Figure 27). These three fragments are from Unit 1, 20-40 cm, and weigh 13 g total. Hammond (1975:372) notes “the Lubaantun figurines consist of a flat-backed plaque, made in an open mold from which they take up a complex design, with a three-note whistle attached to the back.” Mold-made figurines appear to have been primarily manufactured within the ceremonial center of the Lubaantun site (Hammond 1975:373). Hammond (1975:267-78) notes Lubaantun-style figurines have been found during various
projects in southern Belize at minimally six sites. The distribution of these ceremonial items indicates they were a common intraregional trade good.

Figure 27. Mold-made figurine whistle fragments (Photo by McKillop).

Although originally a portion of a vessel, I consider side-notched sherd fishing weights as ceramic objects due to their ultimate functionality. Two netsinkers were recovered at the site from Unit 1 20-40 cm and 60-80 cm weighing 9 g (Figure 28). Potsherds netsinkers have been recovered in Classic contexts from numerous coastal sites. The scarcity of fishing weights at Pork and Doughboy Point could indicate fishing provided little contribution to daily subsistence, but more likely represents the limited extent of excavations at the site.

Amorphous fired clay was found in nearly all levels of excavations, although it is excluded from the pottery quantifications listed above. The presence of amorphous clay lumps may have an explanation analogous to McKillop’s assumption for their presence at Punta Ycacos Lagoon sites. McKillop (2002:62-63) explains the ubiquity of fired clay lumps at salt work shops to be the result of broken vessels and slag from vessel manufacture accumulating within hearths. Although salt boiling was not occurring at Pork and Doughboy Point, Punta Ycacos
Unslipped type vessels were being produced in quantity, and I consider the amorphous clay lumps to be a byproduct of this utilitarian pottery.

Figure 28. Side-notched fishing weights (Photo by McKillop).

**Modified Lithics**

Lithic tools represent only 0.2% of the total excavated artifact weight in the present study. The apparent dearth of tools most appropriately reflects the short time span recorded in excavated deposits and the site’s emphasis on one or more intensified activities. The modified lithics we recovered from the site were manufactured from chert and obsidian. At 58 cm below datum in Unit 2, a stemmed uniface chert flake point was excavated (Figure 29). The point weighs 30.3 g and measures 12.5 cm in length, 3.2 cm in width, and 0.8 cm in thickness. Since the point is whole and apparently not part of a cache, I assume the tool was lost rather than discarded. Imported chert artifacts were plentiful in Wild Cane Cay Late Classic deposits (McKillop 1987).

A total of nine gray obsidian prismatic blade fragments were recovered from the three lowest levels of Unit 1 (Figure 30). The absence of obsidian from Unit 2 is likely due to the smaller volume of excavated deposit. Larger operations would be needed to suggest Unit 2 is
situated in an area of the site where obsidian was not utilized. If the obsidian were sourced, I expect the sources to match those identified from Wild Cane Cay, as I believe the village obtained its obsidian from this trading port, versus direct long-distance procurement (see McKillop 1987, 1989, 1996). At Wild Cane Cay, 55.6% of the Classic Period obsidian was sourced to Ixtepeque with the remaining 44.4% to El Chayal (McKillop 1987:134). Hammond (1975:340) reports Pusilha, Pork and Doughboy Point, and Lubaantun acquired obsidian from the El Chayal source.

An obsidian density of 9.3 g/m³ was calculated from site excavations at Pork and Doughboy Point. The value from Late Classic deposits at Wild Cane Cay is nearly double (Table 3). I believe the obsidian density and resulting density:distance value for Pork and Doughboy Point is inflated, but further excavations are needed to confirm this suggestion. The presently observed density indicates Pork and Doughboy Point was well supplied with obsidian. Demonstrating obsidian conservation at the site would suggest the obsidian density value is indeed exaggerated.
Figure 30. Obsidian blade fragments (Photo by McKillop).

Table 3. Classic Period Obsidian Densities from the Port Honduras.

<table>
<thead>
<tr>
<th>Site</th>
<th>Source Distance (km)</th>
<th>Density (g/m³)</th>
<th>Density x Distance 100</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pork and Doughboy Point</td>
<td>260</td>
<td>9.3</td>
<td>24</td>
<td>Present study</td>
</tr>
<tr>
<td>Wild Cane Cay</td>
<td>260</td>
<td>16.8</td>
<td>44</td>
<td>McKillop 1989:Table 6</td>
</tr>
</tbody>
</table>

Table 4 shows quantitative measurements of the obsidian, and although the sample size is not statistically valid, I will cautiously compare these measurements to those recorded at Wild Cane Cay. The average cutting edge to weight ratio is a measure of relative obsidian conservation. The value of 5.6 cm/g at Pork and Doughboy Point is compared with 4.67 cm/g McKillop (1987:Table 6.3) records from Wild Cane Cay (Table 5), suggesting the preference at the former to conserve obsidian relative to the latter. Blades tend to be thinner at Pork and Doughboy Point as well, indicating a concern for efficient production. These acts of conservation are most appropriately explained as the result of Pork and Doughboy Point having somewhat restricted access to a supply of imported obsidian because its inhabitants lacked the power and/or wealth to obtain obsidian at will.
Table 4. Obsidian Blade Measurements from Pork and Doughboy Point.

<table>
<thead>
<tr>
<th>Depth (cm)</th>
<th>Weight (g)</th>
<th>Length (cm)</th>
<th>Width (cm)</th>
<th>Cutting Edge (cm)</th>
<th>Cutting Edge to Weight Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-40</td>
<td>1.4</td>
<td>3.2</td>
<td>1.1</td>
<td>6.4</td>
<td>4.6</td>
</tr>
<tr>
<td>20-40</td>
<td>1.9</td>
<td>2.5</td>
<td>1.8</td>
<td>5.0</td>
<td>2.6</td>
</tr>
<tr>
<td>20-40</td>
<td>1.7</td>
<td>2.8</td>
<td>1.4</td>
<td>5.6</td>
<td>3.3</td>
</tr>
<tr>
<td>20-40</td>
<td>0.5</td>
<td>2.1</td>
<td>0.9</td>
<td>4.2</td>
<td>8.4</td>
</tr>
<tr>
<td>40-60</td>
<td>1.0</td>
<td>2.6</td>
<td>1.1</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>40-60</td>
<td>0.8</td>
<td>2.3</td>
<td>0.9</td>
<td>4.6</td>
<td>5.8</td>
</tr>
<tr>
<td>40-60</td>
<td>0.5</td>
<td>1.7</td>
<td>0.9</td>
<td>3.4</td>
<td>6.8</td>
</tr>
<tr>
<td>60-80</td>
<td>0.7</td>
<td>2.5</td>
<td>1.0</td>
<td>5.0</td>
<td>7.1</td>
</tr>
<tr>
<td>60-80</td>
<td>0.6</td>
<td>2.0</td>
<td>0.9</td>
<td>4.0</td>
<td>6.7</td>
</tr>
<tr>
<td>AVG</td>
<td>1.0</td>
<td>2.4</td>
<td>1.1</td>
<td>4.8</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Table 5. Average Classic Period Obsidian Blade Measurements from the Port Honduras.

<table>
<thead>
<tr>
<th>Site</th>
<th>Width (cm)</th>
<th>Cutting Edge to Weight Ratio</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wild Cane Cay</td>
<td>1.18</td>
<td>4.67</td>
<td>McKillop 1987: Table 6.3</td>
</tr>
<tr>
<td>Pork and Doughboy Point</td>
<td>1.1</td>
<td>5.6</td>
<td>Present study</td>
</tr>
</tbody>
</table>

Soils and Rocks

Table 6 displays the results of soil sample analysis. I did not obtain a soil sample below 62 cm in depth from Unit 1. However, my field notes indicate the soil was similar to that described for 7 to 43 cm. Examination of soil samples from Unit 1 suggests that Punta Ycacos Unslipped was likely produced at the site, tempered from locally available quartz sand. A local clay source has yet to be discovered, however. Hammond (1975:276) indirectly states that the silica sand present at the site eroded in the Maya Mountains, traversed the interior by means of the Rio Grande, and was deposited in the former delta environ of Pork and Doughboy Point. The presence of quartz sand within the soil matrix from the midden suggests sand was available to local potters in such quantity that natural processes (aeolian and alluvial) regularly transported it into the midden.

Table 6. Soil Descriptions from Test Units.

<table>
<thead>
<tr>
<th>Provenience</th>
<th>Munsel Color Chart Description</th>
<th>Texture Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1: 0-7cm</td>
<td>10YR 2/2 very dark brown</td>
<td>loose sandy loam</td>
</tr>
<tr>
<td>Unit 1: 7-43cm</td>
<td>10YR 2/2 very dark brown</td>
<td>very sandy loam with visible sand</td>
</tr>
<tr>
<td>Unit 1: 43-62cm</td>
<td>10YR 3/4 dark yellowish brown</td>
<td>very sandy loam with visible sand</td>
</tr>
<tr>
<td>Unit 2: north wall</td>
<td>5YR 3/3 dark reddish brown</td>
<td>silty loam</td>
</tr>
<tr>
<td>Unit 2: bottom nw corner</td>
<td>10YR 4/6 dark yellowish brown</td>
<td>hard sandy silt</td>
</tr>
</tbody>
</table>
Noting prevalent rock types within an archaeological excavation can be of interest if the rocks recovered have a non-local source or are typical of a specialized use. Rocks examined from Unit 1 include smooth river pebbles, pumice, unidentified hard rocks or minerals, chert, limestone, and coral. Of these, river-worn pebbles and pumice are believed to have arrived at Pork and Doughboy Point under natural physical processes, whereas the remaining rock types were likely obtained through an investment of human labor. Although no recovered rock showed clear indication of human modification, all were deposited congruous with ancient Maya artifacts and therefore may be of some significance to the site’s cultural history. River-worn pebbles are expected in a former delta setting, but their occurrence in Unit 1 dictates they were consciously discarded within the midden, not naturally placed there. These smooth pebbles may have served as burnishers or smoothers for pottery, or they may have simply been associated with the sand deposits and cast away when encountered. The pumice probably floated to the site naturally from volcanic regions in Guatemala or Honduras via rivers and coastal currents, as this is the interpretation at other Port Honduras sites (McKillop 2002:98). The pumice may have been used as fishing floats, although there is no direct evidence at the site for this.

The presence of all other recovered rocks is best explained by human agency. The closest abundant source for hard rocks and minerals would have been the foothills of the Maya Mountains, some 25 km inland. Certainly rivers could have transported rocks and minerals downstream from the Maya Mountains as noted by Graham (1987:754). However, no signs of alluvial abrasion were detected from the collected specimens. Chert lithic production is known from Pork and Doughboy Point (Brandehoff-Pracht 1995:54-55), so the presence of unworked chert cobbles with cortex and fragments without cortex is not unexpected. The recovered chert may have been unsuitable for knapping, and hence discarded, or it could have served an entirely
different function. Chert cobbles were used in mound construction at nearby Arvin’s Landing (Steiner 1994), so a similar practice at Pork and Doughboy Point is not unreasonable. Limestone might have been brought to Pork and Doughboy Point to serve an architectural aspect that this investigation did not discover. At Wild Cane Cay (McKillop 2002:13) and Frenchman’s Cay (McKillop 1997; McKillop et al. 2004) limestone slabs were transported from the inland and used in mound facade construction. Pieces of coral might have naturally washed ashore, but another possibility remains. The local sites of Frenchman’s Cay (McKillop 1995b, 1997, 2002:154-156; Magnoni 1999; Watson 1999), Wild Cane Cay (McKillop 1987:81, 1995b, 1997) and Green Vine Snake (McKillop 1997, 2002:162-163) all demonstrate coral mound architecture, a unique feature of Port Honduras, Belize. Although Pork and Doughboy Point presently shows no mound construction, a mound or mound complex may have once existed, and due to extreme erosional events such as hurricanes, or damaging effects of looting, fragments of chert, limestone, and coral might be all that remain as evidence.
CHAPTER 8
DISCUSSION

Site Function

This study discovered a thick midden that contained utilitarian and fineware pottery, ritual paraphernalia, and modified lithics, suggesting the excavations were performed within the disposal area of a former hamlet or village. An underwater excavation in 1994 demonstrated that stratigraphic artifact deposits continue at least 75 cm below current sea level (Brandehoff-Pracht 1995:23; McKillop 2002:160-61), establishing the site’s midden to be minimally 2.5 m thick. Site abandonment during the Late or Terminal Classic is demonstrated by the recovery of such dated pottery and the absence of Postclassic pottery. An Early or Middle Classic component is unknown for the site, but cannot presently be ruled out since no operations at Pork and Doughboy Point have penetrated to sterile ground.

Noticeably missing from the artifact assemblage are the remains of subsistence behavior. As stated above, two ceramic fishing weights were recovered, but no flora or faunal remains. The artifact assemblage does, however, suggest that Pork and Doughboy Point was a settlement and not a specialized site such as the salt work shops in Punta Ycacos Lagoon. I expect deeper excavations into waterlogged sediments would indicate subsistence at the site was similar to that of other Port Honduras sites where marine resources were utilized. Shells provided a source of sustenance at Frenchman’s Cay, particularly Strombus sp. conch shells (McKillop and Winemiller 2004). McKillop (1985) reports that manatee was an important meat contributor at Wild Cane Cay. Tree cropping was apparently a significant subsistence strategy in the Port.
Honduras as well; at Wild Cane Cay, McKillop (1994) found the food remains of cohune, coyol, and coconoboy palms as well as fruit trees.

Based on the results of artifact analyses, I believe Pork and Doughboy Point served as a Late or Terminal Classic hamlet or village. The overall thickness of the midden, coupled with the contemporaneousness of the deposits in at least three levels of Unit 1, suggests this was a year-round settlement for either a large extended family or small community. The characteristics of the recovered pottery suggest this was also an intensified settlement engaged in one or more enterprises. The presence of exotic material and ritual paraphernalia indicates the site inhabitants were capable of procuring such items. This ability can be explained as the result of participation in trade. The questions to be answered are in what endeavor(s) did site intensification focus and how did intensification relate to the economy of the Port Honduras and southern Belize?

The dominant pottery type recovered from the site is Punta Ycacos Unslipped, which is a low fired, poorly mixed pottery tempered with quartz sand. The Pork and Doughboy Point standard description for the type is a red paste color with black core. Subsets of this group were created to reflect variation within the type (Figure 31), but with the exception of incense burners are essentially stylistic in nature. However, as discussed above, the thin group may represent a unique function from the other groups. All rim sherds recovered indicate an open bowl with direct rim form. Calculated rim diameters range from 22 to 32 cm, but average 28.8 cm. Punta Ycacos Unslipped sherds were found in all levels of all units as well as the surface collection. The overwhelming abundance in comparison to other pottery types found indicates it was an intensively used form at the site (Figure 32). For rationale discussed below, I believe Punta Ycacos Unslipped bowls were often utilized in one or more economic activities related to trade, which is my justification for considering Pork and Doughboy Point a special-use site. I
recognize, but do not further discuss, the possibility that the nature of the site’s artifact assemblage is only a function of its location along an ancient sea trade route.

Figure 31. Comparison of Punta Ycacos Unslipped groups.

Figure 32. Comparison of Punta Ycacos Unslipped with all other identified pottery.

A Late or Terminal Classic date places Pork and Doughboy Point coeval with other special-use sites in the area, allowing comparisons to be made with these sites. Certainly the site was not a salt production work shop such as the ones found underwater in the Punta Ycacos Lagoon. These work shops are materially represented by specialized artifacts used in the
production of salt, with no signs of domestic habitation (McKillop 1995a, 2002). Likewise, trading ports in the Port Honduras leave distinct archaeological records exhibiting high frequencies of tradewares and exotic materials and elite burials (McKillop 1987, 1989, 1996, 1997; McKillop et al. 2004). Pork and Doughboy Point does not exhibit the appropriate artifact collection to be considered either a salt work shop or trading port. Intensification at the site must have been of a different nature. A further examination of the ceramic evidence for intensification is presented below.

Generally, open bowl forms are well suited for storage, mixing, boiling, or other non-serving activities. However, slight variation in this bowl form may indicate specific functional design. Some rim sherds found are thinnest at the lip and others in the body of the vessel. This distinction is likely important, as variation in utilitarian form is most readily explained by differentiation of function. As Rice (1987:227) notes, a vessel’s thickness makes certain use activities most appropriate, such as thick walled vessels used for storage and food processing and thin walled vessels utilized for cooking. Punta Ycacos Unslipped bowls thinnest at the lip may have been suited for mixing, pounding, and grinding purposes or perhaps for storage, although storage vessels are typically expected to have restricted orifices. Contrastingly, bowls thinnest in the body were likely used for boiling or soaking activities, but the lack of sooting on recovered sherds suggests these bowls were not extensively used over fires.

Ceramic residue analysis may or may not elucidate the nature of this activity. Since nearly all Punta Ycacos Unslipped sherds lack their original surface due to weathering effects, any residue to be tested would have to have permeated into the vessel walls. Lacking any empirical means by which to determine vessel function, I will tentatively argue that many Punta Ycacos Unslipped bowls were used in one or more intensified activities. Presently, whether or
not the type’s division in form is explained by the separation of domestic and intensified activities cannot be determined. Regardless, both forms had practical domestic uses and I expect were used as needed. Further investigations are needed to assess the relationship of intensified activities and ceramic manufacture and use at the site.

The abandonment of Pork and Doughboy Point by the Postclassic compared with the continued, albeit restructured, trade activities of Wild Cane Cay is notable. Since Pork and Doughboy Point has not been completely inundated, the cessation of activities at the settlement can be solidly attributed to cultural factors. McKillop (2002) makes a case that the desertion of the Punta Ycacos Lagoon salt work shops was directly related to the collapse of inland centers. If the intensified activity occurring at Pork and Doughboy Point was related to inland trade, abandonment of the site concurrent with the Classic collapse would be expected, just as was the case with the salt work shops. Comparatively, intersite trade with Wild Cane Cay, Frenchman’s Cay, and other Port Honduras sites could have continued into the Postclassic if Pork and Doughboy Point’s intensified activity had been a product intended for local use.

Therefore, with reasonable assurance I propose that one or more intensified activities utilized Punta Ycacos Unslipped bowls at Pork and Doughboy Point and were related to the coastal-inland trade with centers in southern Belize. A more specific description cannot be made at this time, as this contribution to inland trade could have been an actual trade good or a product intended for local use but directly related to inland trade. The product(s) of intensification remains unclear, but it likely was organically related, the nature of which could be subsistence-based or involve the preparation of raw materials. Presently I consider the processing of either palms, particularly poknobo and cohune, or marine resources as likely activities. As this intensified undertaking is expected to have had organic components, I find it appropriate to link
the choice of the site’s location with this activity. One inquiry by Rice (1981:219) concerns the environmental preconditions to craft specialization, which I discuss below in regards to the location of Pork and Doughboy Point.

Settlement survey 90 km to the south of the Port Honduras indicates inhabitation preferences were related to the accessibility of natural resources. Voorhies (1972) surveyed the Lago de Izabal zone of Guatemala, finding 30 Late Classic settlement or utilization sites. Hamlet locations were found to be the result of two factors: proximity to freshwater and access to restricted resources, specifically flint, limestone, and high-quality soil (Voorhies 1972:125). I propose a similar practice of site location for the Port Honduras. McKillop (1987) recognizes the natural benefits the island of Wild Cane Cay exhibits for use as a trading port, particularly the protected harbor it forms. The dispersed nature of the Port Honduras sites is a probable result of particular advantages offered at each locality. Although geologic resources are unlikely to vary a great degree within the area, vegetation and marine resources do. Selecting optimal geographic settings for procuring particular natural resources involved in intensified production or conducting specific cultural practices might characterize many of the Port Honduras site locations, including Pork and Doughboy Point.

Research at Pork and Doughboy Point has yielded obsidian, jade, and pottery tradewares which all indicate long distance trade. Since Wild Cane Cay served as a trading port (McKillop 1987), presumably the inhabitants of Pork and Doughboy Point acquired their exotics from this nearby trading station (McKillop 1996). Due to the lack of considerable wealth, stone architecture, and monument building at Pork and Doughboy Point, there is no evidence that these people controlled the trade activities of Wild Cane Cay. The trading port would have been under no obligation to freely supply Pork and Doughboy Point with obsidian, jade, or tradewares.
Therefore, the occurrence of exotics at Pork and Doughboy Point could suggest a Late Classic Port Honduras market economy. This possibility does not conflict with the evidence that Wild Cane Cay was also involved in interregional relocation of exotics (McKillop 1987, 1996) and intraregional movement of coastal resources (McKillop 2002), perhaps principally with Lubaantun (Hammond 1976).

McKillop (1989, 1996) notes the distribution of obsidian to other Port Honduras sites as being finished blades, indicating blade manufacture was exclusive to Wild Cane Cay. McKillop (1996) argues that the greater abundance of obsidian recovered from Wild Cane Cay compared to Lubaantun, as well as the presence of obsidian at a variety of Port Honduras sites in addition to the trading port hinders a view of inland elite market control over the Port Honduras. However, she acknowledges that other exotic materials had a more restricted circulation. The control and distribution of obsidian may not be an adequate marker of political orientation. For instance, Sidrys (1979) demonstrates that obsidian held a unique role within the Maya economy, and Tourtellot and Sabloff (1972:131) established it to be a ubiquitous exotic item across the Maya Lowlands, so the distribution of obsidian alone cannot be used to suggest the sociopolitical character of the Port Honduras. To this end I propose models below for elucidating the demographic, political, and economic nature of the Port Honduras.

McKillop (2002; McKillop et al. 2004) contends that the Port Honduras sites were autonomous from inland centers. One might be tempted to associate Postclassic coastal success with Late Classic independence from dynastic rulerships. However, other autonomous Late Classic sites in southern Belize did not transcend into the Postclassic. In particular, hieroglyphs at Pusilha indicate the center was autonomous throughout most of its inhabitation, including prior to its abandonment (Braswell et al. 2004). Overall, the major centers of southern Belize
exhibit sovereignty from larger polities while actively engaging in foreign trade (Dunham et al. 1989; Hammond 1975; Leventhal 1990). Dunham et al. (1989) suggests some secondary sites in southern Belize developed into independent centers as well. Yet none of these sites endured the collapse either. The autonomous nature of many centers did not spare them the widespread effects of the Classic collapse, suggesting the nature of the collapse did not entirely center on political variables. Below I present first generation models suggesting how Pork and Doughboy Point’s political orientation was related to local and intraregional economies.

**Proposed Models for Special-Use Site Formation**

The relationship of marginal sites with proximal centers is undoubtedly multifaceted. My approach to understanding this relationship is to examine these two spheres in terms of demographic, political, and economic considerations. Although the topic of this thesis resides specifically on Pork and Doughboy Point, I will also consider the other special-use sites of the Port Honduras in the following discussion. The hypothesis to be tested here is that the inland centers of southern Belize controlled and exploited peripheral special-use sites in the Port Honduras. This hypothesis is reasonable since models of Maya center-site orientation are overwhelmingly hierarchical, with large centers regulating the affairs of smaller sites (see Chase and Chase 1996; Hammond 1975; Marcus 1993; Voorhies 1982).

Models are needed to examine the data indicating a relationship between special-use Port Honduras sites and inland royal centers. Dunham et al. (1989) propose center foundation within southern Belize occurred along one of two lines, a center-first model or a population-first model. Simply stated, under the center-first proposal centers were constructed by existing polities and then settled by those polities. Such an arrangement would allow the polity to directly procure needed resources from an area. According to the alternative population-first
model, centers were constructed out of a local population’s growing need for increased organization. Other polities would be forced to ally themselves with these centers for trade purposes, or resort to military coercion.

Dunham et al. (1989) discuss one case supporting their center-first model. The authors consider Silver Creek to be an example where a larger center, in this case Lubaantun, established a colony within its own territory. Based on transect survey and excavations, Dunham et al. determine that Silver Creek never sustained an appropriate settlement for the site’s grand layout. The authors conclude the center was built not out of local population needs but rather for settlement easing or resource procurement at Lubaantun. Although their determination of a low population is partly based on the relative absence of house mounds, a population estimate that has been proven inadequate (see Chase 1990; McKillop 1995b; Pyburn 1990; Steiner 1994), Dunham et al. also consider the generally low pottery density encountered in 17 operations at the site. Furthermore, the authors explain the presence of large plazas with small surrounding structures to indicate future expansion was planned but never realized, presumably due to the effects of the Classic collapse.

The center-first and population-first models provide an appropriate cognitive framework in which to examine Port Honduras sites and their relation to inland centers. However, the models must be adjusted accordingly since the Port Honduras contains no centers. I have chosen to view the chronology for development of dynastic rule at inland centers in relation to settlement of special-use sites in the Port Honduras. I will designate these new inquiries as the dynasty-first and coastal-first models.

According to the dynasty-first model, dynastic kingship emerged at interior centers prior to the establishment of special-use coastal settlements. The development of a royal class created
an immediate demand for exotic goods and ritual paraphernalia. The possibility that inland elites were acquiring such items prior to dynasty formation is acknowledged, but examples of this have not been reported in southern Belize. Therefore it is most appropriate to temporally place this arising demand congruent with the appearance of royalty, as documented by hieroglyphs. Alternatively, the coastal-first model predicts special-use coastal sites were settled prior to, or contemporaneous but separate from, the inland emergence of kingship. The implications of these models are demographic, political, and economic.

Acceptance of the dynasty-first model would not negate the prior existence of limited subsistence-level occupations along the coast. From a demographic perception though, the special-use site inhabitants, and certainly any Port Honduras elites, would have originated from the inland centers. As such, their allegiance would have been to their native home. Politically then, the Port Honduras specialized or intensified settlements would have acted as extensions of inland centers, directed locally by elites who in turn were acting on the behalf of inland royalty. Allied by kinship ties to the interior, the special-use coastal sites existed for the economic benefit of inland centers. Labor investments along the coast funneled local products into the interior, as well as exotic goods obtained from sea traders. The coastal elite were rewarded for their actions with high status goods and perhaps a portion of the trade goods, which may have been shared among the commoners for their continued cooperation.

Evidence concurrent with the coastal-first model would suggest a different set of circumstances, many of which have been previously raised by McKillop (see McKillop 1996, 2002; McKillop et al. 2004). Maya who were familiar with coastal life settled the Port Honduras prior to or contemporaneous with the interior’s royal development. They may or may not have shared kinship ties with Maya in the region. As an autonomous group, the Port Honduras Maya
utilized natural geographic advantages and integrated their economic activities with those of the sea traders. Special-use sites devoted their attention to trade or the production of trade goods, benefiting local elites and, through them, commoners. The coastal communities remained independent from the emerging inland rulers, but formed trade alliances with these dynasties, ensuring exchange in both directions. The Port Honduras communities were able to retain significant wealth related to their involvement in coastal trade, even after participating in inland trade.

**Model Discussion**

The hypothesis assessed here is that inland centers of southern Belize controlled and exploited peripheral special-use sites in the Port Honduras. I test the models presented above in order to tease out the relationship between the coast and interior in southern Belize. Each model predicts a unique set of demographic, political, and economic conditions along the coast. Below, I discuss the representation of these conditions in the Port Honduras archaeological record.

To date, human remains have not been recovered from the Punta Ycacos Lagoon work shops or Pork and Doughboy Point. McKillop (1987) reports on burials excavated at Wild Cane Cay, from which Spence (1987) was able to compare dentition observations with those reported at Lubaantun burials, noting M1 and M3 cusp pattern similarities, but not M2. Recovery of well-preserved human remains from Port Honduras sites is necessary for further demographic studies. The data currently available hint that the ancient Maya of Port Honduras may have been of a different origin than their interior counterparts, but this remains to be further tested.

Whether the Port Honduras sites were a group of autonomous settlements or politically governed by interior centers is difficult to demonstrate from the archaeological record. Such claims are made elsewhere on the basis of hieroglyphic writing (see Martin and Grube 1995),
which is lacking in the Port Honduras. I reviewed the recovered elite grave goods for Wild Cane Cay reported by McKillop (1987) but found little evidence indicating the political nature of the coast. McKillop (2002) suggests ceremonial items manufactured in the interior were presented as gifts to coastal elite in exchange for their continued participation in a trade alliance. However, archaeologically distinguishing a gift from a trade good is problematic at best. Due to the lack of direct evidence describing the political orientation of the coast, I will view the accumulation and retention of wealth as indicative of political clout.

The sheer quantity of Late Classic exotic materials and trade goods at Port Honduras trading ports argues against these sites being controlled by interior centers. If inland polities oversaw these ports I would expect the centers to accumulate the vast majority of the wealth and leave little behind in the Port Honduras, except perhaps payment to the local elite. The fact that these ports retained such a significant amount of trade goods indicates that these sites were likely autonomous and free to retain all the exotics they did not trade inland. The recovery of tradewares and ceremonial objects produced in the interior along with the existence of special-use sites in the Port Honduras demonstrates the coast’s engrossment in inland trade during the Late Classic. Most goods from the interior were likely obtained in exchange for local coastal resources and exotic commodities garnered from sea trade, and some could have been gifts as suggested by McKillop (2002).

I argue that the autonomous nature of the coast refutes the hypothesis that royal centers controlled special-use sites in the Port Honduras. Assumptions of the hierarchical nature of ancient Maya sites can obscure social, political, and economic realities of small sites. The Port Honduras, being free of direct inland control, is then best viewed in terms of the coastal-first model. This model, however, requires a specific settlement chronology that does not at first
appear to be supported by present Port Honduras data. The model predicts special-use sites were established prior to or contemporaneous with inland royal emergence, first represented in the Early and Middle Classic at Uxbenka and Pusilha. All of the known Port Honduras special-use sites were founded in the Late Classic, except perhaps Pork and Doughboy Point which has not been excavated to sterile ground. Where is the evidence that demonstrates special-use sites existed prior to the Late Classic?

One Preclassic Port Honduras site, Butterfly Wing, confirms that organized activities were occurring on the coast at this time. McKillop (1996:57, 2002:11) reports the site contains Late Preclassic and Protoclassic pottery associated with El Chayal and Ixtepeque obsidian, indicating the Port Honduras was integrated into larger sea-trading networks at this early time. Although Butterfly Wing is not known to be a special-use site, the presence of exotic obsidian suggests, by analogy with the Late Classic, there were special-use sites in the Port Honduras participating in economic exchanges with traders. It is therefore my premise that continued survey will uncover other early sites, particularly intensified sites, demonstrating a substantial coastal population during the development of interior dynasties.
CHAPTER 9
CONCLUSION

The Late Classic Port Honduras community of sites varied in function. Archaeological operations conducted at Pork and Doughboy Point produced artifactual evidence for intensification of economic activities, specifically the dominance of Punta Ycacos Unslipped pottery sherds in the collection. I have suggested Pork and Doughboy Point is best viewed as a member of the collective Port Honduras sites engaged in coastal-inland transactions, as the site was abandoned concurrent with inland center collapse.

I consider the models I have created and utilized in this thesis to be preliminary steps in developing comprehensive inquiries that are appropriate for testing intraregional site relationships. The first generation coastal-first and dynasty-first models express only general demographic, political, and economic characteristics that may have existed in the Port Honduras during the Late Classic. Although I chose to emphasize trade relations between the coast and interior because the evidence for trade is best preserved in Pork and Doughboy Point’s archaeological record, studies emphasizing the demographic qualities or political orientation of the Port Honduras may produce different results than those presented in this thesis.

The hypothesis that interior centers controlled and exploited special-use Port Honduras sites is not supported by the characteristics that have been described for the coast. There is enough evidence to view the Port Honduras as an autonomous entity. Instead, in this peripheral region a case can be made for ancient Maya economic maximization of opportunities. The increasing demand for coastal resources and access to coastally traded exotics by Late Classic interior Maya created an atmosphere for market-minded entrepreneurs in the Port Honduras to
flourish. There, special-use sites engaged in economic ventures to profit from trade with the interior centers of southern Belize. Data from the Port Honduras indicate ancient Maya special-use sites were not always exploited by larger polities, but rather might have depended on one another.
REFERENCES CITED

Andrews, Anthony P.

Brandehoff-Pracht, Jodi

Braswell, Geoffrey E., Christian M. Prager, Cassandra R. Bill, and Sonja Schwake

Braud, Melissa R.

Chase, Diane Z.


Chase, Arlen F., and Diane Z. Chase

Coe, Michael D.

Dunham, Peter S., Thomas R. Jamison, and Richard M. Leventhal
Freidel, David A.  
1978  “Maritime Adaptation and the Rise of Maya Civilization: The View from Cerros, Belize.”  

Freidel, David A., Robin Robertson, and Maynard B. Cliff  

Freidel, David A. and Jeremy A. Sabloff  

Gifford, James C.  
1976  “Prehistoric Pottery Analysis and the Ceramics of Barton Ramie in the Belize Valley.”  

Graham, Elizabeth  
1987  “Resource Diversity in Belize and its Implications for Models of Lowland Trade.”  

Gruning, E. L.  
1930  “Report on the British Museum Expedition to British Honduras, 1930.”  

Guderjan, Thomas H., and James F. Garber, editors  

Hamblin, Nancy L.  
1985  “The Role of Marine Resources in the Maya Economy: A Case Study from Cozumel, Mexico.”  

Hammond, Norman  


Healy, Paul F., Heather I. McKillop, and Bernie Walsh

Joyce, T. A.

Joyce, T. A., T. Gann, E. L. Gruning, R. C. E. Long

Kidder, Alfred V.

Leventhal, Richard M.

Magnoni, Aline

Marcus, Joyce

Martin, Simon, and Nikolai Grube

Masson, Marilyn A., and David A. Freidel, editors
2002 *Ancient Maya Political Economies*. AltaMira Press, Walnut Creek, CA.

McKillop, Heather I.


2001 “Type-Variety Analysis of Maya Pottery from Port Honduras, Belize.” Unpublished manuscript. Department of Geography and Anthropology, Louisiana State University, Baton Rouge.


McKillop, Heather I., and Paul F. Healy, editors

1989 *Coastal Maya Trade*. Occasional Papers in Anthropology No. 8. Department of Anthropology, Trent University, Peterborough, Ontario, Canada.

McKillop, Heather I., and Terance Winemiller

McKillop, Heather I., Aline Magnoni, Rachel Watson, Sharon Ascher, Terance Winemiller, and Bryan Tucker

Mock, Shirley B.

Pyburn, K. Anne

Pyburn, K. Anne, Boyd Dixon, Patricia Cook, and Anna McNair

Rathje, William L.

Rice, Prudence M.


Rovner, Irwin

Sabloff, Jeremy A.

Sharer, Robert J.
Sheets, Payson D., and Guy R. Muto
1972 “Pressure Blades and Total Cutting Edge: An Experiment in Lithic Technology.” Science 175(4022):632-634.

Sidrys, Raymond V.

Smith, Robert E.
1955 Ceramic Sequence at Uaxactun, Guatemala. Middle American Research Institute No. 20, Tulane University, New Orleans.

Spence, Michael W.

Steiner, Edward P.

Tourtellot, Gair, and Jeremy A. Sabloff

Voorhies, Barbara

Watson, Rachel M.
Willey, Gordon R.

Wright, A. C. S., D. H. Romney, R. H. Arbuckle, and V. E. Vial
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Kevin pursued a lifelong interest when he accepted an offer to study archaeology at the Louisiana State University Department of Geography and Anthropology. Kevin was fortunate enough to accompany Dr. Heather McKillop to southern Belize on several occasions, and greatly benefited from her knowledge of the ancient Maya and her ability to solve archaeological problems. While at LSU he also participated in fieldwork at Louisiana prehistoric mound sites. Currently Kevin is funded by the Southern Methodist University Department of Anthropology where he is pursuing his doctorate degree.