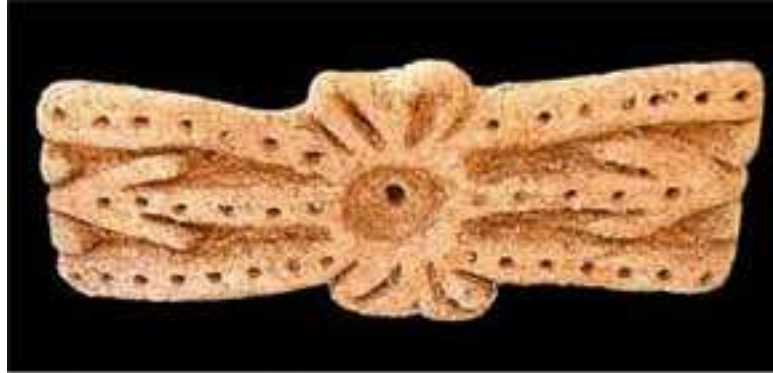


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Isla Piedras: A Northern Campeche Coast Seaport as Part of a Regional Polity



Research Year: 2004

Culture: Maya

Chronology: Late Classic

Location: Campeche, México

Site: Isla Piedras

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Abstract

The pre-hispanic settlement of Isla Piedras is located on the north coast of the State of Campeche, México. Survey, collection and mapping carried out during May and June of 2004 produced the first topographic map of the island as well as collections of basalt, obsidian, chert, limestone, shell, and ceramic artifacts, fragments of stucco, and human and animal remains. Ceramic analysis dates the principal occupation of the site to the Late Classic, a time when Isla Piedras was likely linked to its nearest neighboring coastal site, Jaina, forming part of a polity that embraced the coastline and inland areas of the north Campeche coastal zone.

Resumen

El asentamiento prehispánico de Isla Piedras se localiza en la costa norte del Estado de Campeche, México. Entre mayo y junio de 2004 se realizaron los trabajos de prospección, recolección y mapeo, dando como resultado el primer mapa topográfico de la isla y la muestra de artefactos de basalto, obsidiana, sílex, caliza, concha, y cerámica, fragmentos de estuco, y restos humanos y de fauna. El análisis cerámico fecha la principal ocupación del sitio para el Clásico Tardío, momento en el cual Isla Piedras se debió encontrar asociado al sitio costero vecino más cercano, Jaina, formando parte de una entidad política que abarcaba parte del litoral y tierra adentro de la zona costera del norte de Campeche.

Introduction

Archaeological studies have been sporadic on the west coast of the Yucatán Peninsula. Of all the sites in the area, the pre-hispanic settlement of Jaina has received the most attention, beginning during the second half of the 1940s. However, interest in the region has increased recently, as is evidenced by the investigations that have been carried out at the coastal sites of Canbalam (Dahlin *et al.* 1998), Jaina (Benavides 2002; Zaragoza and Dávila 2002; Barba 2003; Sauri, Jiménez and Benavides 2005), Uaymil (Inurreta 2002, 2004; Inurreta and Cobos 2002, 2003a, 2003b; Cobos, Fernández and Peniche 2005) and currently Isla Piedras, which until 2004 had not been studied by any formal archaeological project.

The recent attention these coastal sites have received is due to an interest in the role they must have played, not only at the site level, but at a regional level within the complex world of the Gulf of México and Caribbean Sea coasts. The Isla Piedras Archaeological Project has chosen to focus on Isla Piedras, offering a first formal step toward understanding this site.



Figure 1. Condensed state of Campeche (INEGI 1999).

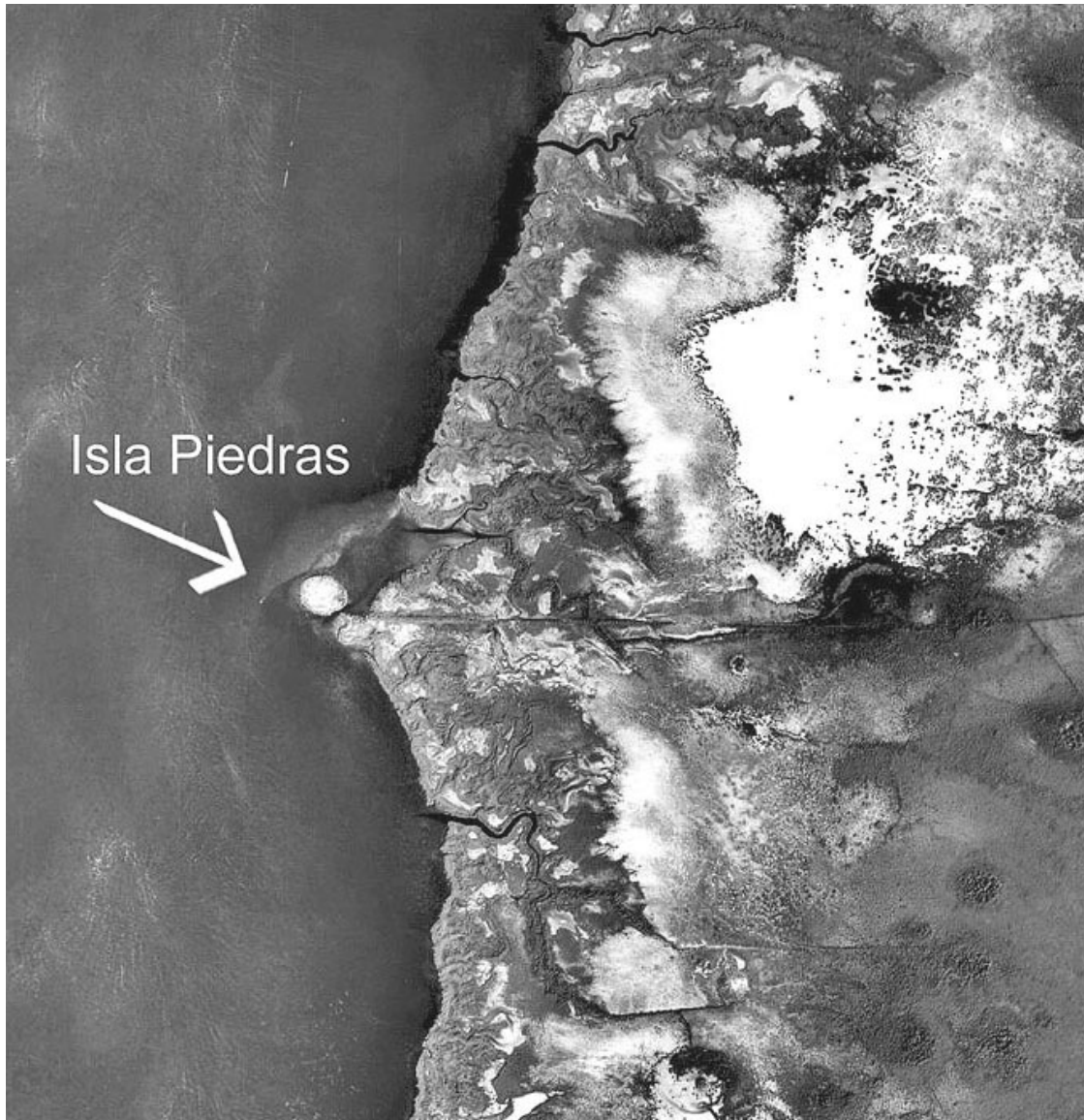


Figure 2. Aerial photograph of the Isla Piedras zone (INEGI 1998b).

The remains of the pre-hispanic settlement at Isla Piedras are located on an island with the same name on the north Campeche coast, in an ecological zone dominated by mangrove ([Figure 1](#), shown above). Isla Piedras (also known as Isla de Piedra) has UTM coordinates 2251489 North and 761237 East, and is located approximately 39 kilometers south of the lighthouse at Isla Arena (the nearest present day coastal town), 12 kilometers south of the mouth of the canal that leads to the archaeological site of Uaymil, and 15 kilometers north of the archaeological site of Jaina (Instituto Nacional de Estadística, Geografía e Informática (INEGI) [F15-9-12] 1:250,000 1998a). Isla Piedras is located approximately 50 meters, at the nearest point, seaward of the mangrove coastline, slightly south of the mouth of the canal Isla de Piedra (INEGI [F15D78])

1:50,000 1985) ([Figure 2](#), shown above). The island measures approximately 220 meters along its north-south axis, and 265 meters east-west.

Proposal

This study was designed with the intention of fulfilling three objectives: to establish the chronology of the pre-hispanic settlement of Isla Piedras based on the analysis of the ceramic material recovered at the site; identify indicators that support the idea that Isla Piedras and neighboring site Jaina were part of the same polity; and propose Isla Piedras' hierarchical level within that polity during the principal occupation of the site. The project proposal focused on Jaina because due to the present and past physiography of the inland area nearest the coastline (mangrove, blanquizal, petens, flood zones), it is reasonable to conclude that communication between Isla Piedras and Jaina by sea would have been much easier than between Isla Piedras and any interior site.

In order to fulfill the three objectives mentioned above, it was necessary to carry out field work to gain information about the morphology and ceramic remains of the site, as well as to study other materials that would support an understanding not only of the temporal, political and hierarchical position of Isla Piedras, but also other important aspects of the site.

Historical Background

In 1886, French explorer Désiré Charnay (1978) visited the islands of Jaina and Piedras, and wrote the first report about the latter site. During the twentieth century, Isla Piedras was visited by cultural preservationists for the Mexican government, as well as by various investigators. An early archaeological interest is evident in the archaeological maps published by Tulane University in 1940 and Ruz Lhuillier in 1945 (Andrews 1997), and in the visits made to the island by Edwin Shook (1955:293), Victor Segovia (1966), and Jack Eaton (Eaton 1974:197-208, 1978:1-67; Ball 1978:69-146). In 1977, Isla Piedras was included in the surveys carried out by Anthony Andrews (1977:65-67, 1978:40-43) for the Atlas Arqueológico del Estado de Yucatán (Garza T. de González and Kurjack 1980). Later visits were made by Anthony Andrews, Rafael Cobos, Bruce Dahlin and Fernando Robles during the 1990s.

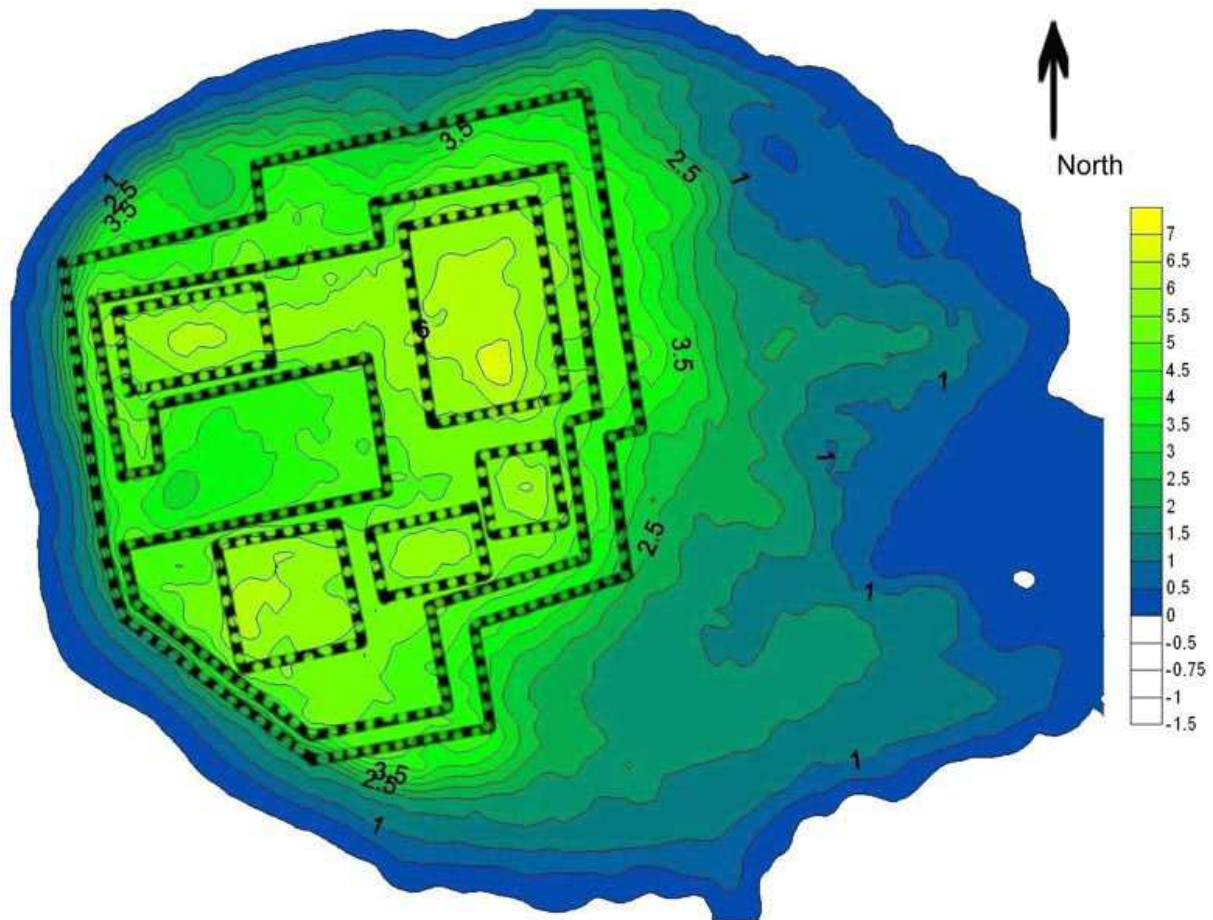


Figure 3. Topographic map and proposed planimetry of Isla Piedras.

Site Description

During May and June of 2004, survey, collection and mapping were systematically carried out at Isla Piedras, located on the north Campeche coast. Surface collection resulted in samples of diverse pre-hispanic cultural materials (basalt, obsidian, chert, limestone, worked shell and ceramics) that suggest that the ancient inhabitants of Isla Piedras took advantage of local as well as non-local materials. Human, faunal and historical remains were also collected.

Making a topographic map of Isla Piedras was an essential step due to the fact that wind, rain, and wave erosion, as well as extensive looting, have accelerated the destruction of the site. As a result of the mapping activities carried out in 2004, the first topographic register of the site was created ([Figure 3](#), shown above). This topographic map was then used to analyze and propose the spatial distribution of the structures that made up the site. The numerous looters' holes throughout the site showed different

construction materials such as limestone rocks of various sizes, filler stones and sascab.

Based on analysis of the topographic map, the following pre-hispanic structures are proposed to have made up the only architectural group on the island: a foundation, a platform, five structures, a semi-closed plaza, an open plaza and a pre-hispanic or historical dock. An historical house and a second dock (historical or pre-hispanic) were also registered on the island.

The interpretation from the topographic map is that the foundation is located on the western portion of the island, facing the open sea, and covering about 60% of the island's terrain. On top of the foundation, there is a platform on which five structures (identifiable as mounds) were built. The platform has three closed sides and a small extension on the fourth (west) side, which creates a partial opening that gives access to a semi-closed plaza.

The eastern portion of the island has been interpreted as an open plaza since it does not present any architectural remains that indicate ancient constructions may have been there at one time. This open plaza or open space is similar to the open plazas at Isla Cerritos (Andrews *et al.* 1988) and Uaymil (Inurreta 2002). It is possible that this space, which currently supports a population of *Rhizophora* mangrove vegetation was used for a specific activity in the past.

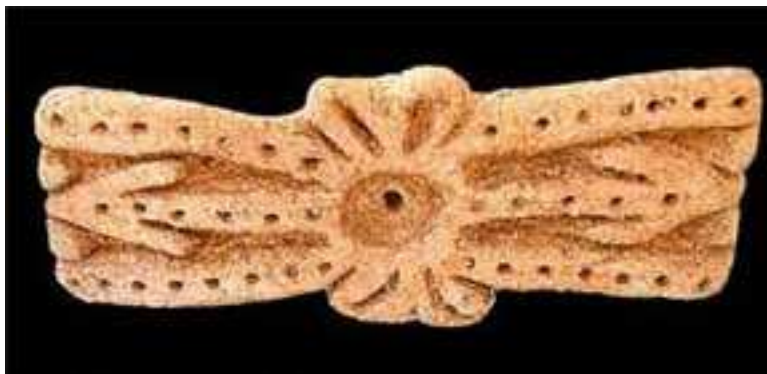


Figure 4. Ceramic stamp.

Ceramics

Based on the observations made during previous visits to Isla Piedras by Shook (1955:293), Eaton (1978:1-67) and Andrews (1977, 1978) as well as on the analysis carried out by Ball for the ceramic materials collected from the surface of the island by Eaton, the site was previously considered to have been occupied from the Early Classic to the Early Post Classic periods, with a principal occupation occurring during the Late Classic (contemporaneous to Jaina) (Andrews 1997:4; Andrews and Vail 1990:42) and Terminal Classic (Ruz Lhuillier 1969; Ball 1978:137-141) periods.

However, the ceramic analysis that was carried out for the material collected from different parts of the surface of Isla Piedras during the 2004 field season offers several changes in the dating of the site. To date, a total of 8,200 ceramic fragments have been assigned to 27 ceramic groups that correspond to periods from the Terminal Late Pre-Classic to the Terminal Classic ([Table 1](#), shown below). The principal occupation of the site is identified as having occurred during the Early and Late Classic, due to the fact that 94 percent of the ceramic fragments were dated to those two periods. The groups that were most frequently found at Isla Piedras are Triunfo (N=1609), Baca (N=1013), Nimun (N=1857) and Tenabo (N=2045). The Late Classic stands out as the period with the greatest frequency of associated groups and therefore the greatest occupation of the site ([Figure 4](#), shown above).

Table 1. Ceramics Found at Isla Piedras			
Period	Ceramic Group	Frequency	Percentage
Terminal Classic A.D. 800-1050/1100	Encanto	2	0.024
	Jilon	10	0.122
	Koxolak	441	5.378
	Muna	8	0.098
	Total	461	5.622
Late Classic A.D. 600-800	Baca	1013	12.354
	Chimbote	1	0.012
	Chukul	1	0.012
	Nimun	1857	22.646
	Saxche	5	0.061
	Teabo	1	0.012
	Tenabo	2045	24.939
	Total	4923	60.036
Early Classic A.D. 250-600	Acu	1	0.012
	Aguila	193	2.354
	Balanza	8	0.098
	Batres	32	0.390
	Chenkoh	8	0.098
	Dos Arroyos	3	0.037
	Hunabchen	29	0.354

	Kanachen	109	1.329
	Kochol	10	0.122
	Maxcanú	336	4.098
	Oxil	433	5.280
	Timucuy	25	0.305
	Triunfo	1609	19.622
	Total	2796	34.099
Terminal Late Pre-Classic 100 B.C.–A.D. 250	Polvero	7	0.085
	Sapote	2	0.024
	Sierra	11	0.134
	Total	20	0.243
Total		8200	100.000



Figure 5. Polyhedric core.



Figure 6. Projectile point.

Obsidian

A total of 135 obsidian artifacts were gathered during surface collection and mapping on Isla Piedras ([Table 2](#), shown below). The pieces were identified as flakes (N=2), prismatic knives (N=125), knife-awl (N=1), polyhedral cores (N=2), chunk (N=1), stemmed projectile points (N=2), cutter (N=1) and scraper (N=1). One hundred twenty three (91.11%) of the obsidian artifacts were sourced to El Chayal, Guatemala ([Table 3](#), shown below). The geologic sources of the artifacts were visually identified by Dr. Geoffrey Braswell (see Braswell 1997, 1999) ([Figure 5](#) and [Figure 6](#), shown above).

Artifact Type	Total	Percentage
Flake	2	1.48
Prismatic knife	125	92.59
Knife-awl	1	0.74
Polyhedral core	2	1.48
Chunk	1	0.74
Stemmed projectile point	2	1.48
Cutter	1	0.74
Scraper	1	0.74
Total	135	99.99

Geologic Source	Total	Percent
El Chayal (Guatemala)	123	91.11
El Chayal/Ixtepeque (Guatemala)	1	0.74
Ixtepeque (Guatemala)	1	0.74
Otumba (México)	1	0.74
Pachuca (México)	7	5.19
Ucareo/Zaragoza (México)	1	0.74
Zaragoza (México)	1	0.74
Total	135	100.00

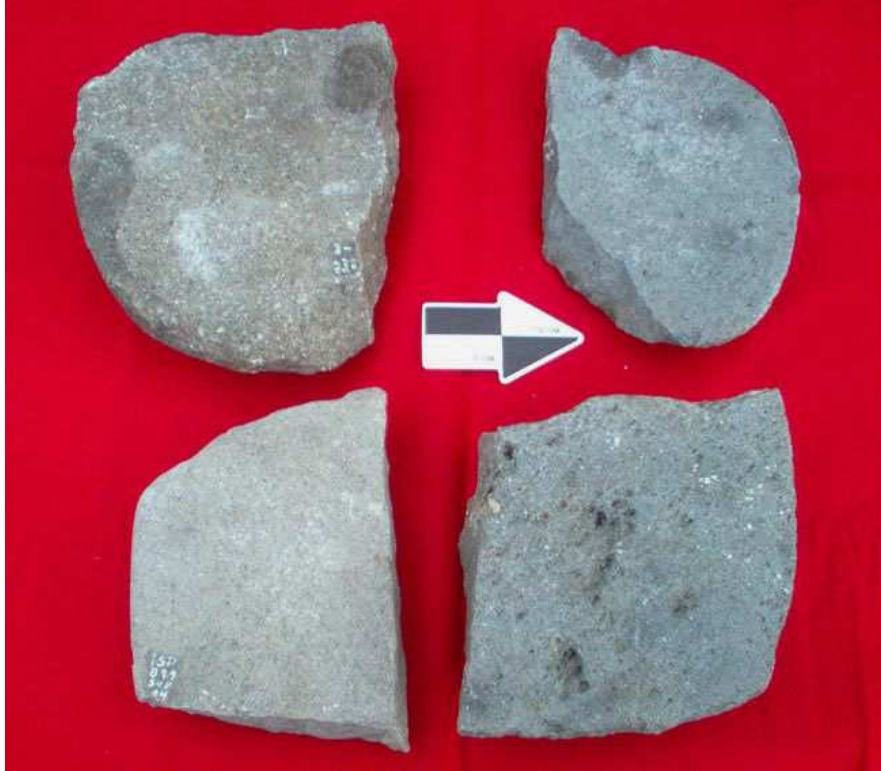


Figure 7. Basalt metates.



Figure 8. Basalt metate.

Basalt

A total of 122 pieces of basalt were collected from the surface of Isla Piedras during the survey and mapping of the island. All of the pieces were identified as artifacts used for grinding, and included manos (N=12) as well as fragments (N=47), supports (N=8), borders (N=50), and bodies (N=5) of grinding stones (or metates) ([Table 4](#), shown below; [Figure 7](#) and [Figure 8](#), shown above).

Table 4. Basalt Artifacts Found at Isla Piedras		
Artifact Type	Total	Percentage
Metate fragment	47	38.52
Metate support	8	6.56
Metate border	50	40.98
Mano (whole)	4	3.28
Mano (medial fragment)	8	6.56
Metate body	5	4.10
Total	122	100.00



Figure 9. Chert projectile points.



Figure 10. Chert celts.

Chert

A total of 370 chert artifacts were recovered during survey and mapping at Isla Piedras ([Table 5](#), shown below). The collection includes bifaces (N=45), flakes (N=102), casual flakes (N=32), tapering flakes (N=7), cortex removal flakes (N=10), macroflakes (N=5), percussion knives (N=10), nodules (N=3), casual flake cores (N=25), chunks (N=101), large chunks (N=2), polished artifacts (N=8), flakes produced from exposure to fire (potlidge flakes) (N=10), hammerstones (N=7), a fishing net weight (N=1), and unidentified artifacts (N=2) ([Figure 9](#) and [Figure 10](#), shown above).

Table 5. Chert Artifacts Found at Isla Piedras		
Artifact Type	Total	Percentage
Biface	45	12.16
Flake	102	27.57
Casual flake	32	8.65

Tapering flake	7	1.89
Cortex removal flake	10	2.70
Potlidge flake	10	2.70
Macroflake	5	1.35
Percussion knife	10	2.70
Nodule	3	0.81
Casual flake core	25	6.76
Chunk	101	27.30
Large chunk	2	0.54
Hammerstone	7	1.89
Fishing net weight	1	0.27
Polished artifact	8	2.16
Unidentified artifact	2	0.54
Total	370	99.99

Limestone

A total of 91 limestone artifacts were recovered during the 2004 field season at Isla Piedras ([Table 6](#), shown below). The collection includes the following tools: smoothers (N=24), pebbles (N=6), pebble/fishing net weight (N=1), celts (N=2), macerator (N=1), manos (N=25), manuport (N=1), fishing net weights (N=21), triangle (N=1) and unidentified artifacts (N=9).

Artifact Type	Total	Percentage
Smoother	24	26.37
Pebble	6	6.59
Pebble/Fishing net weight	1	1.10
Celt	1	1.10
Celt (probable)	1	1.10
Macerator	1	1.10
Mano	19	20.88

Mano (probable)	6	6.59
Manuport	1	1.10
Fishing net weight	21	23.08
Triangle	1	1.10
Unidentified	9	9.89
Total	91	100.00



Figure 11. Shell celts.



Figure 12. Shell star adornment.

Shell

Seventy shell artifacts were recovered during the 2004 field season at Isla Piedras ([Table 7](#), shown below). The collection includes wings (N=4), scoops (N=3), knives (N=2), celts (N=24), celt-awl (N=1), spatulas (N=2), awls (N=4), polisher (N=1), punches (N=2), scraper (N=1), container (N=1), disk adornments (N=4), star adornment (N=1), discoidal bead (N=1), wheel-shaped bead (N=1), pectorals (N=3), pendants (N=10), unidentified artifacts (N=5) ([Figure 11](#) and [Figure 12](#), shown above).

Table 7. Shell Artifacts Found at Isla Piedras		
Artifact Type	Total	Percentage
Wing	4	5.71
Scoop	3	4.29
Knife	2	2.86

Celt	22	31.43
Celt (unfinished)	2	2.86
Celt-awl	1	1.43
Spatula	2	2.86
Awl	3	4.29
Awl (unfinished)	1	1.43
Polisher	1	1.43
Punch	2	2.86
Scraper	1	1.43
Container	1	1.43
Disk adornment	4	5.71
Star adornment	1	1.43
Discoidal bead	1	1.43
Wheel-shaped bead	1	1.43
Pectoral	3	4.29
Pendant	10	14.29
Unidentified artifact (unfinished)	3	4.29
Unidentified artifact	2	2.86
Total	70	100.04



Figure 13. Fragment of turtle humerus.



Figure 14. Fragmented manatee rib.

Faunal Remains

A total of 22 faunal bone fragments were collected at Isla Piedras. The fragments are evidence that the following animals lived on, or were transported to, the island: turkey, crab, whale, racoon, manatee, domestic pig, white-tailed deer, shark, turtle, and iguana ([Table 8](#), shown below). This list offers an idea of the animals that may have been utilized by pre-hispanic as well as historic and recent people ([Figure 13](#) and [Figure 14](#), shown above).

Species	Common Name	Total (Bone Fragments)	Percentage
Unidentified	Turkey	1	4.55
<i>Uca rapax</i>	Crab	1	4.55
Cetaceo sp.	Whale	1	4.55
<i>Procyon lotor</i>	Racoon	1	4.55
<i>Trichechus manatus</i>	Manatee	6	27.27
<i>Sus scrofa</i>	Domestic Pig	1	4.55
<i>Odocoileus virginianus</i>	White-Tailed Deer	1	4.55
Unidentified	Unidentified	1	4.55
Unidentified	Shark	5	22.73
<i>Eretmochelys imbricata</i>	Turtle	2	9.09
<i>Ctenosaura similis</i>	Iguana	1	4.55
Unidentified	Turtle	1	4.55
Total		22	100.04



Figure 15. Human clavicle.



Figure 16. Clavicle with cuts.

Human Remains

In all, 198 human bone fragments were recovered at Isla Piedras, the majority of which were long bones ([Table 9](#), shown below). Apparently, the remains found at the site are the result of varying cultural circumstances and processes, including poor conservation due to weathering, direct fire, and looting or other conducts not associated with the pre-hispanic tradition. Common practices from the pre-hispanic tradition include ritual posthumous markings made on bones, and the elaboration of objects from human bone. From the collection of human remains recovered at Isla Piedras, a right clavicle with cuts on the metafisial area stands out ([Figure 15](#) and [Figure 16](#), shown above).

Bone	Total	Percentage
Tooth	4	2.02
Cranial cavity fragment	5	2.53
Clavicle fragment	2	1.01
Femur fragment	23	11.62
Long bone fragment	112	56.57
Unidentified bone fragment	19	9.6
Humerus fragment	10	5.05
Mandible fragment	6	3.03
Maxillary fragment	2	1.01
Scapula fragment	1	0.51
Premolar fragment	5	2.53
Radius fragment	2	1.01
Tibia fragment	7	3.54
Total	198	100.03

Conclusions

To date, the ceramic analysis suggests that the major period of occupation at Isla Piedras began during the Early Classic, reaching a maximum in the Late Classic. The obsidian materials recovered at Isla Piedras support the chronology proposed by the ceramic analysis. Ninety-one percent of the obsidian artifacts found at Isla Piedras come from the source at El Chayal, Guatemala, which has been identified by Nelson

(2003) as the preferred obsidian source in the Mayan area from the Early Classic to the end of the Terminal Classic.

By analyzing the map that was made of Isla Piedras, it was possible to propose the arrangement of the architectural elements of the site from the Late Classic to the last moment of occupation. On the western portion of the island, these architectural elements include a large foundation, a platform, five structures, and a semi-closed plaza (which likely had an altar at its center). The presence of these constructions, along with their distribution around the central plaza, suggests that the site likely had an administrative function. Furthermore, due to its location on the coast and the non-local materials collected during surface surveys, it can be strongly suggested that Isla Piedras was a port that participated in a maritime trade network, supporting a regional polity.

The most important and nearest site to Isla Piedras is Jaina, which has a shared chronology with Isla Piedras during the Late Classic. According to Sauri *et al.* (2005:230), the Late Classic and Terminal Classic were the periods of principal occupation at Jaina, which continued to be an active site until the Post Classic (Barba 2003; Zaragoza and Dávila 2002). Jaina has three architectural groups, several plazas, a ball court, and hieroglyphic inscriptions, which, in comparison with Isla Piedras, make it an administrative site of greater hierarchy.

In conclusion, the evidence found at Isla Piedras suggests that this site had a role as an administrative port with access to non-local materials such as basalt and obsidian, and which allowed the movement of objects from both distant and nearby regions. During the Late Classic period, Isla Piedras was a lower-ranking site associated with Jaina, forming part of a regional polity that embraced the coastline and inland areas of the north Campeche coastal zone.

Acknowledgements

The investigation carried out at Isla Piedras in 2004 was possible thanks to the support given by the Archaeology Committee of the National Institute of Anthropology and History (INAH); the Archaeology Department and the Director of the INAH branch in Campeche; and the School of Anthropological Sciences at the Autonomous University of Yucatán. The field work was possible thanks to the funding provided by the Foundation for the Advancement of Mesoamerican Studies, Inc., (FAMSI) (Project #03053). I also give many thanks to Ramón Zetina, Cecilia Soldevila, Nayeli Jiménez, Jorge Carrillo, Socorro Jiménez, Dr. Geoffrey Braswell, Nancy Peniche, Daniel Pat, Christopher Götz, Russell Rosado, Dr. Vera Tiesler, Rodolfo Canto, Mauricio Germon, Marieke Dusenbery, and Dr. Rafael Cobos for their help and support in the field and the laboratory. Finally, I thank my colleagues from the institutions mentioned above for their support of the archaeological research at Isla Piedras. Many thanks to the "Señores" and "Señoras" from Sihó, Yucatán.

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