“Conchal Nicaragua:

The Meaning of the Natural and Built Landscape”

by

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Dedication:

This thesis is dedicated to my grandfather, John R. Lapp, Sr., my father, John R. Lapp, Jr. and my significant other, Jared R. Mills. These three men would not give up on me and always had faith that I could achieve this. Especially my father, who believed that I should follow my heart and always supported me in my path. And, in loving memory of my mother, Karen Jane.

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Abstract

This dissertation seeks to explain the settlement of Conchal from a landscape perspective and to ascertain the symbolic identity of the various shell mounds located there. The hypothesis is that the increasing sizes of the mounds are associated with burials and fluctuate due to increases in population. The physical changes of the landscape, as well as the change in the meaning of those changes that occurred over time are analyzed. A succinct, definitive interpretation of landscape and archaeology is complicated because there continues to be ongoing debate (Tilley 1997; Bender 2001; Knapp and Ashmore 2003; Smith 2003) which will be addressed below. The material culture, as well as the material patterns encountered during excavations illustrate the creation of meaning within the Conchal tradition. The analysis of the artifacts and features of the landscape reveal the importance of Conchal to the pre-Columbian inhabitants. The excavations at Conchal are part of a larger Permitted project, Proyecto La Flor. Conchal is a first step in this on-going long-term project and provides the baseline information for future archaeological research in this area.

The transformation of the natural environment and the creation of Conchal's constructed landscape is the focus of this dissertation. The assumption is that this location was recognized as a special area with diverse and abundant natural resources. The vast amount of data from the Americas supports this assumption (Willey 1966). Neither surveys of resource procurement nor excavation to discover mounds have been undertaken for the Nicaraguan Pacific coast. The analysis below focuses on the changing meaning the population gave to Conchal which is unique to this area. The mounds increase in number and size as the population grew and diversified during the Sapoá period (AD 800-1350), supporting the theoretical position that the landscape was

created. The mounds are thus transformed into meaningful structures and become a place to process harvests, to bury the dead and to mark the inhabitants' territory; in other words Conchal became a tangible space that held a symbolic sense of identity that persisted through time.

These mounds grew in size once the inhabitants realized what their actions had created. These people then gave the mounds meaning and continued to throw away debris from their daily life to increase the size of the mounds. The early settlers of Conchal began to inter the dead in the mounds. When the mounds became too difficult to navigate (e.g. too tall to add debris), the inhabitants of Conchal created another mound. The creation of multiple mounds perpetuated the claim to the land and the meaning that these burials gave to Conchal, as well as building on tradition.

The analysis of the data from Conchal is influenced by an understanding of landscape theory as discussed below (Crumley and Marquardt 1987); this analysis strongly suggests a fortunate confluence of resources with geography. This is supported by the human remains, the molluscs, the different types of ceramics and stone tools found during the excavations of the mounds at Conchal. At the heart of this study is an interest in how people lived their daily lives and how the analysis of these artifacts and ecofacts might reveal their daily life. It is assumed that Conchal was continuously occupied by the same group. This is reified by the continuation of the artistic traditions in the ceramic styles combined with no evidence of another population. Also, there is no break in stratigraphy. Proximity to their ancestors through the burials located near their daily activities may have added more importance. The mounds illustrate their claim on the land and the ceramics and tools show that the landscape of Conchal became a settlement as illustrated by the artifacts and their context.

During the transition from the Bagaces to the Sapoá period, Conchal started out as a small population of individuals who harvested shells. The type of stone tools found throughout Conchal illustrates a pattern of daily activity. The artifacts and their density and distribution over time support this assumption. Curiously there were no complete vessels encountered at Conchal. The different types of burials during the latter part of the settlement, the transition from Sapoá to Ometepe period, indicate that there was a difference in status among the occupants.

Over the next few hundred years, the inhabitants of Conchal began to conduct more complex tasks and exhibit a division of labor. The lithics, ceramics and spatial context exhibited by the burials, is positive evidence for this division of labor. By the latter time period of the settlement at Conchal, there was a difference in status, which is demonstrated by more elaborate vessels that were used by higher status individuals for eating and drinking as well as the different burial practices.

Conchal, its landscape, and the people that inhabited it, aid in the understanding of the prehistoric inhabitants along the coast of lower Central America. To date, no other prehistoric site with shell mounds has been excavated in Pacific Nicaragua. There are other sites that are at least superficially similar to Conchal; one is approximately seven kilometers to the south in the present-day town called Ostional. It is believed that subsequent investigations of Ostional and similar places will contribute to a clearer picture of the activities that occurred in lower Central America.

CHAPTER 1: INTRODUCTION

Proyecto La Flor

The idea for Proyecto La Flor first began while working as a graduate assistant on Dr. Geoffrey McCafferty's excavation of Santa Isabel in 2005. It was during this field season that Dr. McCafferty first introduced Nicaraguan archaeology and the unexcavated site of Conchal. Later, when searching for a project that would become a dissertation, Dr. McCafferty suggested speaking with Dr. Frederick Lange who had just returned from Nicaragua. Dr. Lange suggested the site of Conchal; he believed it was the ideal site for a dissertation topic. Dr. Lange kindly provided contact information for a family that lived nearby, who would be able to arrange for a tour of the site.

Arrangements were made to fly to Nicaragua for the first three months of 2008. It was during this time that this researcher first met with the family Dr. Lange suggested, the Sanchez's. The Sanchez family helped secure lodging and a guide to aid in the location of the archaeological site. A Permit request was submitted in Managua to the Department of Cultural Patrimony and verbal permission secured to conduct a surface survey only after obtaining permission from the landowners as well. After returning to Conchal, verbal permission was also secured from the landowners and the surface survey began.

The surface survey was conducted using compasses, flagging tape and pin flags. Nothing was physically collected, as part of the agreement, but areas with high artifact density were noted in field notes and put in a GPS unit for further analysis. A young woman named Kimberly Jordan assisted in the survey; the entire road, riverbed, and the land on the opposite side of the river and the forest were surveyed. It was during this first field season that the relative boundaries of the site were determined and a strategy for excavations emerged.

After returning to the United States, Drs. McCafferty and Perrelli provided oversight and guidance in analyzing the data collected; a plan was constructed on how best to survey Conchal. It was not until January 2009 that actual excavation of Conchal began in Nicaragua. The first point of business was to submit another Permit request to the Department of Cultural Patrimony. The site received a national designation and was labeled DA.DPC.09.09. The prehistoric site Conchal is now officially known in Managua's Cultural Patrimony office as DA.DPC.09.09.

Following the receipt of the Permit to excavate, permission from the local police/military force, the mayor and the landowners were the additional requirements. The police force and mayor were quite amenable to the excavations of Conchal; it was the landowners that proved to be the most difficult. Three meetings with the study crew chief, researcher, and landowners were required in order to finally receive permission to excavate. After the final meeting, excavation was Permitted and the crew allowed to place shovel tests in the site as long as five of their men were hired to aid in the excavations. Thankfully, four of the five men had worked on archaeological excavations in other parts of Nicaragua and were therefore useful immediately. The biggest difficulty with working with the local men was the limited ability to communicate with them in Spanish; this was remedied quickly as the project continued and the team's Spanish improved.

Before excavations could begin, mesh screens were constructed to be used for screening dirt with hand tools. We also built drying racks with trays in order to process artifacts in the lab. Shovels, pikes and trowels were to be used in the excavations. The shovel testing of Conchal lasted approximately 9 weeks, with the laboratory portion of this part of the excavations lasting for 12 weeks. After all of the fieldwork was finished and the artifacts were processed and stored, the team returned to the United States.

The final portion of the excavations at Conchal, required a return to Nicaragua in June of 2009. Again, a Permit request to the Department of Cultural Patrimony in Managua was submitted and the Conchal excavation began as soon as received. The same gentlemen required to be hired previously also worked during the previous field season. Arrangements were also made for a laboratory that was similar to that obtained the previous season to be used to process the artifacts that were excavated daily.

The purpose of this field season was to place units throughout the site to determine the stratigraphy and to examine different densities of artifacts that were present throughout the site, as suggested by Drs. Douglas Perrelli and Geoffrey McCafferty. A trench was placed in one of the mounds to determine its stratigraphy; this methodology was suggested by Dr. McCafferty. He believed that it would be unnecessary and too time consuming to excavate more than one mound at this early juncture.

The final field season continued for twelve weeks. During this time the excavations took 8 weeks and the lab work spanned approximately 11 weeks. Toward the end of the excavations, a Permit to remove artifacts from Nicaragua for further analysis was requested in Managua. Permission was granted to remove lithic and ceramic artifacts from Nicaragua to the United States; they are currently in a safe in the Washington, D.C. area. They will be returned to the government of Nicaragua within the next year, along with a detailed analysis of the excavations at Conchal written in Spanish. Field notes, all of the original paperwork for excavations and photographs are currently also in a safe in the Washington, D.C. area.

The Purpose of the Excavations

The objective of this project is to analyze the coastal sites of the Greater Nicoya and compare them to inland sites of the same time period. There had been no scientific excavations of the

Pacific Coastal Nicaraguan southern border sites until Proyecto La Flor was Permitted. After conducting an extensive ground survey in 2008, this researcher decided that the excavations of Conchal were to be the first part of a project conceived and entitled Proyecto La Flor, named after the river that bounds Conchal to the south.

The primary objective of the excavations in Conchal was to gather and analyze baseline data that would, at a later date, be utilized in the understanding of the Greater Nicoya region as a whole. This analysis will be part of the larger Proyecto La Flor concept. Proyecto La Flor is conceived as a long-term, lifelong project that aims to assess and analyze the prehistoric sites along the Pacific Coast of Nicaragua and Costa Rica. This ambitious plan was inspired by Salgado's regional survey of the Granada region of Nicaragua (1996); as well as by Dr. Roderick Salisbury, who suggested an examination of the region as a whole. The first part of this project was the excavation of Conchal; this is to be followed by the excavation of a prehistoric site in Ostional and then an excavation and analysis of sites in Costa Rica, some of which were discussed in Dr. Frederick Lange's dissertation.

A final objective of this project is to analyze the coastal sites of the Greater Nicoya region and compare them to inland sites of the same time period. This comparison is to determine the differences of these sites, as most archaeologists believe they are of the same culture. One early possibility that needed to be investigated was whether these groups may be conducting one task and then transporting it back to the larger group at a later date (Cowan 1999). This researcher wanted to determine whether the group that lived in Conchal was actually part of a larger group. Or, if they were their own small group functioning on their own without outside assistance. It was assumed that at the very least these cultures were related due to their utilization of the same type of lithic tools and same types of ceramic traditions.

When conducting the original reconnaissance of Conchal, the first items that were noticed were the multiple shell mounds, crushed shells and ceramics on the ground's surface. Originally it was believed that the mounds were domestic refuse mounds and the crushed shells and ceramics on the surface were run-off refuse from these mounds. The preliminary intent of the investigation was to systematically test the site and determine how long it was used as a domestic refuse site. It was believed that most of the items encountered would be crushed shell with some ceramic pieces spread intermittently throughout the site.

When excavations began, it was realized that the mounds were much more than domestic refuse piles that were the result of pure economic activity. These mounds held ceramics, human remains, animal remains, lithic materials and mollusc shells within them. These mounds, while believed to be key in the analysis of the inhabitants of Conchal, became much more than that. It was then determined that something more than a mollusc processing site was being excavated. This site was originally occupied for the sole purpose of mollusc obtainment and processing, but changed into something more. The occupants began occupying the surroundings and utilizing other resources. They started processing different resources; the inhabitants transformed into a group that conducted homogeneous activities on diverse projects. This site was transformed from a grouping of mundane refuse piles to a habitation that was utilized for ceremonial activity and held a symbolic meaning to the population.

The Project Area

Conchal is located near the community of Tortuga, which is part of the larger entity of La Flor (see Maps 1 and 2 below), in the department of Rivas, located in Pacific Nicaragua in the Greater Nicoya Peninsula (see Map 3 below). Map 1 is the surrounding area of La Flor and Map 2 is the river and area of Conchal (see below). Map 3 is an overall map of the Greater Nicoya

Peninsula to illustrate the general location of Conchal (see below).

The site of Conchal is bounded to its south by the Rio La Flor; the river then flows westward to the Pacific Ocean. The prehistoric site is approximately 1 -2 km east of the Pacific Ocean. The name Conchal was inherited from the local population. It refers to the Concha, or shells, that are present throughout the site. These shells created the manmade mounds that are found throughout the site.

Figure 1 - Map 1: Illustrates the location of La Flor and its relation to the Pacific Ocean, which is on the left. Courtesy of maps.google.com

Figure 2 - Map 2: The location of Conchal, which is also along the Rio La Flor (south of the roadway). Courtesy of maps.google.com

Figure 3 - Map 3 from http://www.prehispanicpottery.com/costarica.htm

Sadly, Conchal has been looted several times and in multiple locations throughout the site. Very little has been done, archaeologically speaking, in regard to Conchal; both Drs. McCafferty and Lange assert that there was a limited excavation conducted by the Department of Cultural Patrimony of Nicaragua. The extent of which was the excavation of a 2m x 2m square (see Photo 1 below). An attempt was made to obtain the data and analysis pertaining to the

excavation, but no one at Cultural Patrimony could provide any information. The evidence of the investigation is still visible, as the excavators did not backfill the 2m x 2m. The test unit was documented and investigated; it was discovered that the previous investigators terminated excavations while there was still cultural material in the ground. It was not clear as to why excavations ceased. It is also unclear whether this excavation was sanctioned by the Department of Patrimony and the landowners did not know of any legal excavations that occurred prior to this project.

Figure 4 - Photo 1: Partially filled in 2x2 unit from previous archaeology at Conchal

The Setting

Conchal is located roughly 10 to 11 km north of the Nicaraguan-Costa Rican border. The land that Conchal is located on is owned by a cooperative of twelve men. The site and the surrounding land are located in the rain forest and are actively utilized today. The archaeological

site does not currently have any farming or human occupation on it. Much of the land surrounding the site is farmed. Cows, as well as other domesticated animals, often graze in and around Conchal. The men of the cooperative farm corn, among other types of agricultural products as their livelihood. There is an active population of Howler monkeys, as well as Spider monkeys that inhabit the rainforest portion of the site.

The physical landscape, particularly in the southern portion, is shaped by the Rio La Flor. This river periodically floods; especially during the rainy season. Two different floodplains have been created through the fluctuation of the Pacific Ocean and the Rio La Flor; these fluctuations are also observed along the riverbank where pieces of the mounds falling into the river. According to the local population, the river fluctuates up to ten meters. It has been observed to fluctuate as much as four to five m during the dry season transitioning to the rainy season.

Thirteen mounds exist (labeled A-M), most of which are located on or near the riverbank; some are partially consumed by the modern river. The site is bounded by the river to the southeast and a modern "road" that leads to the community of Tortuga to the northwest. It has a definitive shape and boundary that at its longest spans 360 m x 280 m. The area where Conchal is located is considered to be rainforest (Healy 1980; McCafferty 2005). Below are two photos of what Conchal typically looked like during the dry season (see Photos 2 & 3). The third photo is that of the site at the beginning of transects 20-36 (see photo 4). The first two, and at times three, shovel tests of each transect were typically located in an area that is represented in the third photo. This area is where the modern dirt road once passed through; it was shifted approximately 30-50 m in the last 10-20 years. The beginning of many transects were difficult to excavate due to the fact that it was once an old road and were very compact.

Figure 5 - Photo 2: In the heart of Conchal

Figure 6 - Photo 3: Typical view of Conchal

Figure 7 - Photo 4: The beginning and north of the beginning of transects 20-36, also the old roadbed.

Summary of Investigations and Excavations of Conchal

Encountering shell mounds in Nicaragua is rare; to my knowledge there have been none found and excavated in Pacific Nicaragua. Though in nearby Costa Rica, in the Bahía de Salinas, there have been coastal mounds (Lange 1971). There have been twenty shell middens identified, located and partially excavated on the Caribbean portion of Nicaragua. These middens have been dated using absolute dating methods (ceramic seriation) and are attributed to as early as 1500 BC and extend to AD 1000 (Balbé 2005).

Preliminary investigations of Conchal began in January of 2008. These investigations consisted of reconnaissance of the site and its possible catchment area to establish the relative boundaries, as well as the creation of rudimentary maps. There were no other mounds within a 2

km radius of Conchal. There was no other shell presence, other than within the site boundaries. These investigations began in the dry season; therefore the riverbed was investigated for a relatively long distance to ascertain whether the river cut through the site. It was determined that the river did not cut through Conchal based on the lack of both shell presence and mounds on the other (south) side of the river. It was determined that Conchal, therefore, terminated at the river.

The river was investigated and documented where and when possible. Much of the riverbed was exposed due to the time of year. In several locations along the riverbed, there were large pieces of ceramic. The pieces were examined and in all instances they were too degraded to date; with some appearing to be relatively modern ceramic pieces. When the riverbanks were examined the location of any ceramics or shells that were present in the riverbank was noted; this was then compared to the location of the mounds. It was determined that all instances of shells and presence in the riverbank were the result of a mound that had been eroded by the river.

A second field season for Proyecto La Flor began with subsurface excavations in January of 2009. From January to March, systematic shovel testing occurred. These shovel tests were along 36 transects that were spaced 10 m apart. The excavations sampled the area that included the shell mounds and up to approximately 50 m outside the shells mounds. The site undulated with old floodplains; initially these areas were tested at 10 m apart, in order to determine if there was potential for cultural material being encountered. When it was determined that the floodplain was not yielding any cultural material, the interval was extended to 20, then 30 m apart. Below there is a photo illustrating one of two floodplains that were encountered while excavating transects 18-26 (see photo 5). This illustrates a floodplain that actually consisted of two sections; the first section is approximately 1-2 m higher than the second section. The first section of the two floodplains in this area appeared older and no longer flooded. It was apparent

that the second floodplain, not pictured, still periodically flooded during the rainy season; this was due to the fact that it was less than a meter higher than the riverbed. In fact, it was found that the second floodplain flooded almost yearly while the first, slightly higher section rarely flooded.

Figure 8 - Photo 5: First Floodplain Encountered in Transects 18-26

Each shovel test measured approximately 40-50 cm in diameter and extended up to 100 cm below the surface. Initially, all cultural materials were saved, but this proved to be unrealistic and not in practice with other Nicaraguan archaeology. Dr. McCafferty provided input and it was determined that all diagnostic ceramic sherds were to be saved that measured larger than a "quarter"; all lithic materials that could be carried were kept; a representative sample of shells was saved, and; all faunal materials were kept. The percentage of shell concentration was noted on the surface, as well as within any and all shovel tests; the same methodology was continued

into the next field season with the units.

Originally when human remains were encountered they were bagged and labeled separately from the other materials encountered in the same of level of the STP; an example is shown from STP 15.8 and 8.13 below (see photos 6 & 7). In regard to human remains, Nicaragua does not have strict regulations as seen in the United States. Many archaeologists retain the remains and study them, with permission from Cultural Patrimony.

As the excavations continued to encounter human remains, it was determined that there was not enough time or experience to conduct a proper analysis of these remains. It was determined during the latter weeks when human remains were encountered, excavations would be halted and the remains were covered or reburied in situ; the remains were recorded in the excavation notes and GPSed so that at a later date, another individual would be able to conduct an analysis more specific to human remains. The current plan is to house them in either Granada or Managua to be studied by Nicaraguan archaeologists. Dr. McCafferty has received a grant to house and study human remains that have been encountered in Nicaragua. The remains found in Conchal will be housed and studied there with other remains (personal communication 2014).

Figure 9 - Photo 6: STP 15.8, Level 2 an example of human remains encountered

Figure 10 - Photo 7: Human remains encountered in STP 8.13, Level 2

The third and final field season took place from June to August of 2009. During this field season, a series of units—of varying sizes—were placed in areas identified as having a high artifact density that were found in the previous field season. The units were placed in a variety of locations to gain a better understanding of what occurred at Conchal. Units were placed in areas that were dense with shell concentrations and artifacts, as well as in areas that had a relatively high artifact density but lacked shells. A total of fourteen units were placed within the boundaries of Conchal; they varied in size and depth.

In the areas where shells were encountered, the artifact density was high; in areas where there was an absence of shells, the artifact density never compared to those with a shell presence. While many test pits were positive for cultural materials, it was difficult to find an area that had more than a few pieces of ceramic that did not have a shell presence.

The first unit was placed in an area that had an absence of shells. During the shovel testing of this area, a tall mound was encountered; this mound was considerably higher than any of the other mounds found at the site. This mound was constructed of dirt and there was a complete absence of shells in the mound. There were few artifacts encountered in and around the mound, but those that were encountered dated to the Sapoá period. Though the mound may have been created by individuals at a later date who moved the soil from the earlier time period, therefore it is unclear as to when the mound itself was created. It was decided that a unit would be placed near the base of this mound to better determine its origins. It was located four m west and three m east of STP 15.12.

The second unit to be excavated was placed in an area absent of shell presence, but where the surrounding test pits had a relatively high number of artifacts for non-shell presence. The placement was found to be serendipitous as an anomaly was encountered during the excavations.

The unit was placed near the shovel test 17.9; the southwest corner of the second unit was located four m east and four m north of STP 17.9. This unit was eventually expanded to a "mega unit". It was expanded to examine a previously buried stone floor that is discussed in more detail later.

The other units placed in Conchal were in the form of a .5 x 1 meter trench, which was to investigate Mound I. This was done following the advice provided by Dr. Geoffrey McCafferty; it was thought that there was no need to investigate and excavate every mound, as transects—and subsequently the shovel tests—clearly examine each mound encountered, as well as delineate each mound. The results from the shovel tests did not yield anything that was distinctly different in regard to the artifacts encountered at each mound; with some slight variations (e.g. slightly earlier or later ceramics). Mound I was chosen as the area to have a trench placed through it as there was a relative lack of large trees. Trees had made the excavation of unit two and those units associated with it difficult to conduct. Additionally, Mound I was in an area that was not in close proximity to the other groups of units that had already been placed in Conchal. This was done so that there would be a more comprehensive excavation of Conchal, as well as to investigate the differences from one part of the site to the other.

When examining Pacific Nicaraguan sites, it is important to have a general idea regarding the time period or time periods that may be encountered. The time periods that are most relevant to this project are the Tempisque, Bagaces, Sapoá and Ometepe. Please refer to the table below:

Figure 11 - Table 1: Table of the Time Periods in the Nicaraguan Greater Nicoya and the typical artifacts found with them:

Name of Time Period	**Dates of Time Period**	**Typical Artifacts of Time Period**
Tempisque	500 BC-AD 250/300	Bichrome Ceramics, jade from Mesoamerica(Dennett 2014) and metates
Bagaces	AD 250/300-	Polychrome Ceramics, shallow hemispherical tripod

	700/800	supports (also in Tempisque); jade begins to disappear (Dennett 2014)
Sapoá	AD 700/800-1250/1350	Polychrome Ceramics, nested burials in shoe-pots
Ometepe	AD 1250/1350-Contact	Polychrome Ceramics with Mexican-related motifs

The Artifacts

The excavations of this research, as an initial part of Proyecto La Flor, produced a variety of artifacts. These artifacts were classified into five major categories, as follows: Shells, ceramics, lithics, faunal material and human remains. Another significant characteristic of this site, that is not an actual category, it is the actual mounds themselves and their position within the landscape.

The following chapter discusses the theory utilized in the analysis of the data obtained from the excavations of Conchal. Landscape theory is used to analyze the data is that employed by Crumley and Marquardt (1987). It examines the dynamic relationship between the environment and people of Conchal. This theory examines the change in meaning that is placed on Conchal by its inhabitants.

Following that, the next chapter reviews the Central American region in general. This chapter explores the differences in the definitions of Mesoamerica and Central America. The chronologies of both the regions are compared; the chapter also discusses the interactions that occurred between the two regions. A final topic discussed is the history of the research that has occurred throughout Central America.

The next chapter is pertains to the methodology employed at Conchal, including the field, lab and analysis methodology utilized during the excavations of Conchal. This offers a broad explanation to what methodology was utilized for artifact collection, processing and storage.

The chapter that follows deliberates the lithic materials. This is an in-depth discussion regarding the analysis methodology utilized specifically for the lithic artifacts encountered during excavations. There is a discussion regarding how the artifacts illustrate a change in meaning for the site of Conchal.

Ceramic artifacts are the topic of the subsequent chapter following the lithic material discussion. This chapter addresses the methodology utilized in the analysis of the ceramics in particular. There is a discussion regarding the meaning of the vessel types and usage; much of the different types of data found regarding the ceramics illustrate the change in meaning of Conchal to its inhabitants.

The chapter pertaining to the analysis of faunal material mostly addresses the molluscs encountered at Conchal and follows along next. Most of the faunal artifacts found were shells, with very few originating from another living creature. This chapter addresses the possibility that the molluscs found in Conchal may have been fresh- and saltwater species and their suspected usage.

The human remains chapter discusses how the remains were analyzed. The remains originally were collected in full, but when the amount of remains became overwhelming, they were reinterred. This chapter discusses the meaning of the position of the burials within Conchal; most remains were found in the mounds, but there was a significant portion that were single burials outside the mounds. There is an analysis regarding the different type of burials and what they may indicate regarding the inhabitants of Conchal.

The chapter immediately before the Conclusion is that of the Analysis of Conchal. This chapter ties in all of the data types gathered from the excavations. The analysis indicates that the site was originally settled during the transition from the late Bagaces to the earliest Sapoá and

continued through the Sapoá and terminated during the transition from the late Sapoá to the early Ometepe period. This termination may have been due to the rise in sea levels, which affected other parts of the New World (McKillop 1995; McKillop and Sabloff 2005).

CHAPTER 2: THEORIES

It is the belief of this researcher that the natural landscape of Conchal is what attracted a pre-Columbian population to settle the area. This landscape held resources that were originally the only source of meaning to this population. The natural landscape was composed of gently sloping land that terminated at the riverbank of the Rio La Flor. Most of the site is rainforest, with plenty of edible flora and fauna. This area can be accessed by the river to the south and the rainforest/open field to the north.

As time elapsed the landscape transformed in meaning from the mundane to the ceremonial as the population of Conchal began to place a deeper meaning upon the area. They created a landscape that reinforced the natural landscape; this created landscape was in the form of shell mounds. These mounds were originally composed of homogeneous, domestic debris near the riverbank of La Flor from the resource processing of molluscs. Conchal was transformed into a habitation with symbolic meaning with ceremonial purposes such as the burial of loved ones in the immediate area. This is supported by the appearance of human remains and the more elaborate ceramics encountered during excavations.

The landscape and the environment are something that have been considered by multiple groups throughout history. Christians believe that the environment and its resources were given to them by god; they therefore are free to utilize these resources. Certain groups understood that altering the landscape may change the environment; the Romans were one such group. They utilized fertilizer (e.g. manure), terracing and allowing crops to lay fallow (Redman 1999). Many groups were and are cognizant of their environment and landscape.

The Landscape theory has been applied to Conchal in a manner similar to that utilized by Marquardt and Crumley (1987). The environments in which people live affect them consciously

and subconsciously. There is a constant changing dialectic between humans and their environment in general (Marquardt and Crumley 1987; Redman 1999) and in Conchal particularly. People constantly shape and change their environment; their environment reacts and thus changes, which then forces those inhabiting the environment also to change (Redman 1999; Smith 2003). The relationship between people and their environment is dynamic, never static.

People, past and present, make informed decisions throughout their daily life. Individuals are informed by previous decisions made by themselves, as well as others. These past experiences or decisions shape who a person is, as well as how he/she experiences things—including the landscape—around them (Pred 1981). The inhabitants of Conchal made these informed decisions when they utilized the molluscs and processed them at Conchal. They continued to repeat this same decision, which eventually changed their lifestyle and created a permanent settlement where there was none previously.

Much like Izapa (Kappelman 2001), the location of the mounds illustrates to the outsider that this area has been claimed. The surrounding natural landscape and the resources associated with it drew people to this area in the past and present. The inhabitants of Conchal recognized this draw and began to claim their territory shortly after their arrival. The claim was through the built landscape that was the creation of these mounds. Similarly to the rulers of El Tajín, the upper class citizens controlled these mounds (Kappelman 2001). By controlling the mounds, the upper class also controlled the population of Conchal.

Landscape Theory

One recent theoretical focus that has been applied to New World archaeology is Landscape theory. Landscape theory has been utilized by multiple disciplines to explore varying

avenues of research. Geography (Olwig 1996), Economics, History, Ecology (With and Crist 1995) Anthropology and Archaeology (Knapp and Ashmore 2003) have all employed their own adaptation of Landscape theory to analyze data. Geography was one of the first disciplines to employ the use of Landscape theory (Knapp and Ashmore 2003). Human geographers examined cultural landscape, initiated by Carl Sauer (Olwig 1996; Knapp and Ashmore 2003). As it became more popular in archaeology, British archaeologists were at the forefront of applying Landscape theory to their data (Tilley 1997: Bender 2001).

The Landscape theory that is currently in use began from an idea that was formed in the fifteenth and sixteenth centuries. It originated in the Renaissance through landscape paintings. It examined space and how it was constructed and conceptualized (Cosgrove 1985). Landscape theory comes into the discipline of Geography via the German word or idea of *landschaft* (Cosgrove 1985; Olwig 1996). This term meant area and was then utilized by Dickinson and Sauer to examine items that were visible (Cosgrove 1985).

There are many useful definitions of landscape. Denis Cosgrove states landscape is "…the totality of the external world as mediated through subjective human experience (Smith 2003:10)." Knapp and Ashmore define landscape as "…an entity that exists by virtue of its being perceived, experienced, and contextualized by people (2003:1)." Marquardt and Crumley maintain "landscape is the spatial manifestation of the relations between humans and their environments (1987:1)." A final definition of the term is given by Smith, which states that "…landscape is land transformed by human activity or perception. If land is an objective concept, a physical solid that composes the surface of the planet, then landscape can be understood as land that humans have modified, built on, traversed or simply gazed upon (2003: 10)."

Landscape Theory Applied in Archaeology

The discipline of Archaeology has taken Landscape theory and transformed it into an umbrella paradigm for "new" theoretical discussions. Landscape theory includes topics such as phenomenology, settlement archaeology and ecological/environmental archaeology, among others (Knapp and Ashmore 2003). Landscape theory and archaeology have the ability to be used to examine the political, ideological and social setting (Bender 2001; Smith 2003).

Ingold believes that the physical landscape communicates a story (1993). The actual perception of the landscape is done through remembering; this act is dynamic and is a dialogue between past activities and perceptions with current perceptions and activities. Landscape cannot be seen, it is not nature, but it surrounds and is all encompassing; it is heterogeneous and qualitative (Ingold 1993).

People are active in landscape and consequently define it and are defined by it; they change it, as well as they are changed by it. Each place is characterized by what an individual experiences while being there; it becomes a dialectic interaction between the individual and the place. The landscape is constantly changing and being redefined through this interaction. Landscape is alive because it is part of the world, which is actively moving and changing over time and space as people interact with it (Ingold 1993).

Landscape Theory in Latin American Archaeology

There are many examples of archaeological sites in Mesoamerica where landscape theory has been utilized (Koontz et al. 2001). One is the discussion of the perception of space and how power can be obtained by having control over a particular space. Reese-Taylor and Koontz analyzed the political power via cultural poetics. They examined how spaces were used for ritual

purposes to then harness political power. They apply their landscape theory to the site of El Tajín, which is located in Veracruz. The rulers of El Tajín asserted their authority by utilizing ritual areas and by raising banners. By controlling these areas, they controlled the population (Reese-Taylor and Koontz 2001).

Another example includes the analysis of the built environment and how the Pre-Columbian experienced it and gained power from it. Kappelman analyzes the site of Izapa and how the rulers used its monuments as ceremonial spaces. The monuments and their location on the altars conveyed a message to those who were being ruled. The river and the mountain area that Izapa is located on plays an important role in regard to those who enter the site of Izapa. The river and mountain form a dichotomy that links Izapa to the worldview of the inhabitants. The created landscape that is built, along with the natural landscape, combine in a way to form an area where the elite population can take power and exert it over the general population (Kappelman 2001).

By conducting ritual activities, the inhabitants of Izapa associated this landscape with their beliefs. Power was gained from associating the built landscape with the religious beliefs of the group. By continuously conducting rituals, the elite reinforced their control (Kappelman 2001); the rituals also associated the population with their ancestors, which further reinforced the legitimacy of the elite.

A final example pertains to one landscape that has multiple landscapes within it that overlap and combine with one another. The Mayan site of Chichén Itzá has multiple layers of landscape, with the main layer being a hub that was utilized for trade. The inhabitants used their trade and exchange status to take political and militaristic control over a large portion of Mesoamerica. The rulers of Chichén Itzá used its physical position to exert control over other

populations as they were able to control both maritime and terrestrial routes. The inhabitants went a step further and created long routes that extended deep into lower Central America, including routes to both Costa Rica and Nicaragua (Wren et al. 2001).

Lower Central America and Landscape Theory

While Mesoamerica (Koontz et al. 2001; Brady and Ashmore 2003 [1999]) and the Andes (Bourque 1997; Stanish 2001) have had Landscape theory applied to the data collected from multiple sites within their regions, by and large, lower Central America has not. There are only small regional studies that have been conducted in Nicaragua and none have truly utilized Landscape theory (González 1996; Niemel 2003).

There are two main issues concerning the application of Landscape theory to lower Central America. The first is the size of the settlements in Nicaragua and lower Central America, versus the size of settlements in Mesoamerica and the Andes. It is well-known that the societies that inhabited Mesoamerica developed monumental architecture with a high level of complexity. (Weaver 1972,; Healy 1980; Blanton et al. 1993 [1981]; Coe et al. 1996 [1980]; Adams 1997) Likewise, societies in the Andes during Pre-Columbian times (Weaver 1972; Coe et al. 1996 [1980]; Adams 1997) built complex landscapes. During Pre-Columbian times much, if not all of lower Central America never achieved a higher complexity than that of chiefdom level complexity (Healy 1980; Lange an Stone 1984; Lange 1992).

There was very little monumental architecture in lower Central America (e.g. pyramids); with the exception of the monumental architecture in prehistoric Honduras (Abrams and Bolland 1999). The western portion of Honduras is the frontier of the Maya culture and there is an obvious distinction, when examining lands outside of the Copán (Stomper 2001; Loker 2005), that those populations never rose above a chiefdom level. The inhabitants of Nicaragua—the

Nicarao—were rumored to have lived in groups with a cacique living in a larger living area. The cacique apparently had a few residential buildings with servants (Healy 1980). Other parts of lower Central America appear to be similar in their structure with a two class structure, if that, with larger residential compounds distinguishing between the two classes.

The lack of complexity of the society implies that any analysis of the landscape in Conchal must be done on a smaller scale. Any comparisons would have to be done with other sites/settlements that are roughly equal in size as Conchal. Conducting a comparison with settlements that are larger or ones outlying a major city-state, may give false interpretations and results.

The second issue regarding Landscape theory and the application to archaeological sites in lower Central America is that archaeological research has been stunted by impediments including climate, politics and a lack of funding (Healy 1980; Lange et al. 1992). This underdeveloped region lacks the data needed to compare Conchal to other sites in the region. It is hoped that Conchal will become the baseline to begin a regional comparison of other sites that exist along the Nicaraguan-Costa Rican Pacific coastline.

The application of Landscape theory to lower Central America would be advantageous to the discipline of archaeology, as well as the sub-discipline of Central American archaeology. While there may not have existed large populations with monumental architecture in lower Central America, the prehistoric inhabitants did find significance in their landscape. The different types of landscapes that populations gave meaning to in prehistoric Central America include the natural and built landscapes. The Nicarao found significance in Ometepe Island (Squier 1990); the inhabitants of Granada, Nicaragua found significance in the riverbank (Wilke et al 2011).

People always give meaning to their surroundings; this is regardless of whether they are in large groups with monumental structures or if they are part of a nomadic group that consists of one family. One landscape may have different meanings to different people who experience it at the same time, but that does not mean that one meaning is superior to the other. The landscape holds an importance to the person experiencing it and living in it. This is true in Conchal. The experiences of shell harvesting, living, dying and remembering were all important to the members of this society.

Landscape Theory Applied to Conchal

There are two entrances to Conchal. One is terrestrial; the other is by the Rio La Flor. Presently, the immediate area around the site is rainforest, which is directly surrounded by hilly pasture. When entering Conchal by land, it is apparent that there was a large amount of activity regarding shells. The shell presence begins slowly, but it unquestionably peppers the floor of the rainforest before the mounds become visible. Once the mounds become visible it is apparent that they were intentionally created. This intentionally built landscape indicates that the inhabitants claimed this area and this land was off limits to any outsider.

The other entrance to Conchal is through the Rio La Flor. During the rainy season this river flows high and borders the southern portion of Conchal and filling the second floodplain. During the dry season, the Rio La Flor reduces extensively and intermittently runs along the riverbanks of Conchal. When entering Conchal via the river, the mounds are visible but not striking; it is only when leaving the river to enter the land by the riverbank that the mounds become imposing. Upon entering the site, the mounds and the molluscs are the first items seen.

After the first few decades in the transition from the late Bagaces to the early Sapoá, a few low mounds were what the inhabitants saw every time they entered Conchal. A few

individuals would go out into the Pacific Ocean to harvest molluscs; these molluscs were originally harvested to supplement the terrestrial resources that were gathered from the surrounding area. Others would remain in the vicinity of the site to collect and process the terrestrial foodstuffs. This was the daily life for many generations of this family group and their descendants. Eventually, the mounds grew in size due to the daily, economic activities.

The increase in the size of the mounds led the inhabitants to place a meaning on their location and the mounds. These "newly" created mounds became a marker; a place for the small group of shell harvesters and food gatherers to convene. This was also where the first inhabitants were buried; this was their new home. This area marked their territory: It held their ancestors and now began to hold symbolic meaning. This area remained a place to conduct ordinary, daily activities and it also was transformed into a place for remembrance and ceremony. Here the harvesters could process their molluscs, remember their dead and recall past experiences. These mounds created a memory-provoking, symbolic place that held a deep significance in the inhabitants' minds.

As the mounds grew in size and number, the inhabitants placed more and more meaning on them. They would continue to harvest molluscs, return to Conchal, process the shells and remember their ancestors. These mounds acted like a modern-day cemetery and more; they were territorial markers, they were where people gathered to conduct both mundane and symbolic activities. These mounds were a place that marked their habitation.

As the population settled in Conchal, it grew and diversified. The permanent settlement of the site offered the inhabitants stability; this stability came in the form of known resources: Food. This stability of this resource allowed for the population to slowly transform from "just surviving" to thriving. The molluscs provided a cushion for the population; if a crop failed or

foraging did not yield enough food, there was always access to the molluscs. The mollusc harvesting was not necessarily conducted daily, but would have been frequently. This was due to the differentiation of activities that allowed the population access to a greater variety of resources as Conchal became a permanent settlement. During the Sapoá period, the group began to experience a division of labor. This occurred with the formation of different economic activities, which created separate classes in society over time.

During the transition to the Ometepe period, the inhabitants began to have a surplus of foodstuffs. The inhabitants may have utilized this surplus and traded it with the surrounding populations that were inland and possibly up and down the coastline. The ability to collect surplus materials allowed for the population to complete the formation of two different classes. The higher status class began to have the ability to control the access to the mounds, the access to the river and, therefore, the access to the surplus.

Analysis of the archaeological record illustrates the significance placed on the landscape that defines Conchal. This significance is supported by the analyzed data from the earlier level of the late Bagaces transitioning into the Sapoá period. Most of the material consisted of shells, a few human remains and broken pieces of utilitarian vessels. This period is marked by homogeneous artifacts that were deposited solely due to processing resources. Interring the dead began the transformation to a deeper meaning that was placed on Conchal. Data from the Sapoá and Ometepe levels illustrate that the population was stabilizing and growing, as well as diversifying in their status and activities. This is supported by: 1) The increase in burials, 2) the increase in the variety and amount of stone tools, 3) the increase in mollusc consumption and 4) the increase in the types and quantities of ceramics being used.

The analysis of the data from the late Sapoá into the early Ometepe levels show more

types of ceramics, as well as a higher percentage of shells. These ceramics are more intricate and decorative compared to the pieces encountered from the late Bagaces to the early Sapoá. There are more stone tools that are part of site furniture (Camilli 1989), including large manos and metates that were used to process foodstuffs. The tools indicate that there is more than simply the economic task of shell harvesting occurring at Conchal. These tools indicate that the inhabitants were processing tubers and possibly maize. The interments that date to this period occur at multiple locations throughout the site; originally during the Bagaces they were only found in the mounds, now the burials are found throughout the site. The different locations of the burials indicate a differentiation of classes between the people of Conchal.

The Coast

The largest quantity of artifacts recovered from the archaeological site of Conchal was molluscs. The coastal economy was essential for the prehistoric inhabitants of Conchal to survive. The riverbank was a perfect location considering the access to the river and maritime resources that the Pacific Ocean offers. This position also allowed for the inhabitants to potentially travel to other nearby settlements to trade their goods with other groups. The populations also had the ability to leave with relative ease if resources became scarce or if there was a conflict. This location also allowed for the access of terrestrial resources and agriculture.

The Mounds as a Feature of the Coastal Landscape

The heights of the mounds vary throughout the site. The analysis indicates that this is due to the different ages for the mounds, which was impacted by erosion from water/flooding. During the excavations, it was observed that the taller the mound the less area surrounding it had a presence of shells; the converse was found to be true as well. The lower the mound, a larger area surrounded it with a shell presence. The surrounding area's shell presence did not reach the

depth of the actual mound. This implies that the lower and more expansive the mound, the older it is and vice versa. This expansion occurred because of the elements—wind, rain and the river. The older the mound is, the longer it has been exposed to these elements.

The majority of artifacts encountered throughout the entire site come from the Sapoá period with a minority originating from the later period of the Ometepe and a few artifacts from Bagaces found in the deepest levels. The multiple periods encountered in the mounds indicate that there was small group of people inhabiting the area for consecutive blocks of time. These small groups were most likely a family group and their descendants; these family groups may have been composed of extended family members. This group specialized in the economic task of shell-harvesting. There was no break in cultural occupation in the archaeological record, which implies the prehistoric inhabitants frequently returned to Conchal and eventually chose to inhabit the area on a permanent basis. When the inhabitants permanently settled Conchal, they brought with them their tools and other types of immobile belongings and began using the site as a settlement.

There is no evidence in regard to the mounds being household or burial mounds. During excavations, it was apparent that the mounds were utilized prior to and subsequently after the burials that were encountered within them. Under and near the shell mounds, there was no evidence of a structure. Unlike in Lange's and McCafferty's excavations, there were no clear compact levels that were followed by cultural levels (1971; 2005). While the stratigraphy changed, there was no evidence of floors. Specifically, McCafferty (2005) encountered wattle and daub during the excavations at Santa Isabel. Lange also encountered a living, compacted floor during his excavations (1971). The only potential household floor was encountered in the units associated with Unit 2, which were not located in the mounds. This household is an earlier

part of the site due to the depth it was found and the artifacts that were found in the same context. According to the archaeological evidence of ceramic sherds, the floor was most likely from the late Bagaces or early Sapoá.

Later occupations may be located nearby, possibly just outside the rainforest portion of Conchal. These potential later occupations may have been those of higher status individuals moving away from the mounds, with the lower status protecting this area for the group. The reason for the higher status people moving away from the mounds may be due to the smell that would have been emitted from the recently processed shells. There is no obvious evidence that there were structures in the vicinity of the area; specifically there are no low house mounds, which is characteristic of this area in Nicaragua (McCafferty and Steinbrenner 2005). Further survey of the nearby area may shed light on whether there are later Sapoá and Ometepe higher status households that moved away from the shell mounds.

It is believed that further investigations will indicate that Conchal was a typical site of the Sapoá Period; the difference is that instead of simply relying on terrestrial resources, the population also utilized maritime resources. While there may have been a "big man" in the society, it is unlikely that Conchal was highly stratified. This does not indicate that there is no stratification (Palumbo 1987). The stratification that occurred is most likely due to sex, ability and age (Binford 1971). It is believed that there is not a higher stratification in the society because of a lack of monumental architecture; particularly when comparing lower Central American society with Mesoamerica (Flannery 1972; Abrams and Bolland 1999).

In regard to the creation of the mounds, separate generations of individuals—most likely different generations from the same family group—utilized Conchal for processing shells. The different generations continued to add domestic refuse to the mounds changing locations

when the mounds became too high to navigate; they also continued to add their dead. It is believed that the burials began in the mounds and then when two classes of individuals emerged, burials continued in the mounds as well as moved outside the mounds and nearer to the river.

The shell mounds appear to be both identity markers as well as debris from consuming food. Originally it is believed that the shells were obtained from the Pacific Ocean, brought back to Conchal, consumed then discarded. Eventually the continuous disposal of the shells created mounds, which then led to a continuous cycle along the riverbank of consuming and disposing of shells, with the continued creation of mounds.

The mounds at Conchal are their own entity and have a symbolic significance to the current population as well as the prehistoric population. The two most significant meanings ascribed to the mounds were the success of the harvest and their ties to their ancestors. The inhabitants gave this site, specifically the mounds, a meaning. The meaning was not only given to the mounds, but also to their placement. This is supported by the archaeological evidence, these mounds were placed along the riverbank; this riverbank gave access to the resources of the Pacific Ocean. This access in turn offered the population sustenance and eventually surplus.

The significance of the location of the shell mounds in regard to the origin of the molluscs is extremely important. The multiple species of mollusc inhabited a variety of locales. The effort of obtaining the shells, transporting them and processing them at the site, indicates an importance placed upon this location. This importance was then reinforced with the creation of the mounds through the domestic refuse from the collection and processing of the molluscs. This then created a cycle of increased importance that began as a simple location to process molluscs and transformed into a place of control and spiritual meaning. This cyclical activity continued to provide ceremonial and spiritual meaning to the people over the span of three time periods.

It is not believed that the mounds began as burial mounds. The cultural material encountered within the mounds does not resemble any of the contemporary mounds (Lange 1971; McCafferty 2005). The material found indicates that the mounds slowly began to accumulate discarded material, that may have been near early burials but it is not believed there is enough evidence to state that these mounds began as burial mounds. It is believed that when the mounds began to form, the population began to place meaning upon them. This is when the population began to place burials within them and nearby. These mounds signaled a sense of place for the population that then began to become a place to remember the dead.

It is believed that the mounds began by the small group that originally frequented Conchal intermittently. The descendants of these people began to inhabit Conchal and continued to create and form the landscape. This is seen by the use of the same ceramic tradition as well as the same type of lithic tools and materials that were utilized. It is believed that the human remains began to be deposited due to a need to dispose of them; whether this was due to smell or ideological reasons, is unclear. One possibility as to why the population began placing the human remains in the mounds could be to allow the flesh to decay and to then "properly bury" the individual nearby (O'Sullivan 2002). Thus it appears as though there is an inadvertent partial burial that begins to occur at Conchal. This is important in understanding what significance the mounds may have had to the population. The mounds were important enough to continue to create, as well as to hold—at least temporarily—a member of the population.

Mound Analysis

Mounds are the most obvious and potentially informative elements of the built landscape at Conchal. They are the focus of the Conchal Archaeological Project which is designed to investigate, document, map and excavate a portion of the site to establish baseline information.

Interpretation of the archaeological record of the site from a landscape perspective and will provide a better understanding of the meaning of this landscape for the pre-Columbian population.

The mounds were labeled sequentially A-M so that they could be differentiated during site recording, excavation, mapping and analysis. Mound A is found along Transects 7-10 (STP 7.11-7.16, 8.11-8.15, 9.10-9.15 and 10.11-10.12). The mound is approximately 50 m by 25 m and is about 3 m tall. There is a large surface presence of shells that surround this mound, which extends approximately 10 m beyond the actual mound. Mound A is located near the riverbank.

Mound B is located along Transect 12 (STP 12.15-12.17). This mound is approximately 28 m long by 8 m wide; it is about 2 to 3 m tall. Mound B extends out and drops off into the present-day river. Mound C is located along Transects 13 and 14 (STP 13.12-13.13 and 14.12-14.13). This mound is almost 20 m long and approximately 20 m wide; it is about 7 m in height. Mound C is the only mound that was not created with shells.

Mounds D, E, F and M overlap one another on the surface; only through subsurface testing were the mounds differentiated. Mound D is located along Transects 12 through 14 (STP 12.5-12.8, 13.5-13.8 and 14.6-14.8). The mound is approximately 38 m long by 32 m; it is between 1-2 m high. The western portion of Mound D has an area of high shell presence that blend in with the eastern portion of Mound M; this area is along Transect 11 (STP 11.7 and 11.8).

Mound E is located to the northeast of Mound D and they overlap between Transects 14 and 15. Mound E is located along Transects 15 and 16 (STP 15.3-15.8 and 16.4-16.5). It is approximately 56 m in length and up to 20 m in width and is about 1-2 m in height. There is a large shell presence along the northern portion of the mound (STP 15.2, 16.2-16.4). Mound E overlaps superficially with Mound F. They overlap between Transects 16 and 17 (STP 16.3-16.5

and 17.2-17.4).

Mound F is located along Transects 17 through 19 (STP 17.-17.4, 18.3-18.4 and 19.3-19.4). It is approximately 33 m in length and 17 m in width and about 1 m high. There is a considerably high presence of shells around the northwestern, northern and eastern sides of this mound. In the northern portion the presence of shells extend approximately 20 m from the mound. Mound E and F combine superficially to form an L-shape. These mounds are located closer to the modern-day road; though Mound M is thirty m north of the floodplain.

Mound G is located along Transect 19 (STP 19.14 and 19.15). It is approximately 18 m long and 9 m wide; it is about 1 m high. The western portion of this mound has been severely disturbed due to a modern-day cow path going through it. It is approximately 10-15 m west from the floodplain. Mound H is located in the very southern portion of the site; it is located along Transects 16 through 19 (STP 16.20-16.22, 17.21-17.25, 18.21-18.24 and 19.23). It is approximately 45 m in length by 22 m in width and is 3 m high. The entire western portion falls off into the river/floodplain.

Mound I is located on Transects 23 and 24 (STP 23.9-23.11 and 24.9-24.11); with a large shell presence extending beyond Transect 25 (STP 25.6-25.12). The mound itself is approximately 33 m in length and 21 m in width; it is about 1-2 m high. Including the high shell presence, the area is about 60 m long and 38 m wide. Mound I is located 20 m northeast from the floodplain; the shell presence of this mound is located 15 m northeast of the floodplain.

Mound J is located along Transect 27 (STP 27.3-27.4); with a shell presence that extends beyond 27.2. The mound is about 14 m long and 8 m wide, with a height of .5 m. The shell presence extends northward approximately 6 m. Mound J is located within 10 m of the modern road and approximately 95 m northeast of the floodplain.

Mounds K and L overlap between Transects 29 and 30. Mound K is located along transects 28 and 29 (STP 28.9-28.13 and 29.10-29.12). There is a large shell presence that surrounds Mound K, as well as Mound L, at some point extending 7 m beyond the mounds. Mound K is almost 50 m long and 20 m wide; its height is about 4 m. Including the shell presence, Mound K is almost 60 m long and 23 m wide.

Mound L is located along Transects 30 through 32 (STP 30.9-30.11, 31.8-31.12 and 32.8-32.11). The mound is about 43 m long by 27 m width and is about 4 m high. Including the shell presence, the entire area is about 55 m in length by 32 m in width. The northeastern portion of the mound drops off into the floodplain; a shell band can be seen in the riverbank (see Photo 8). Mound M spans from Transects 9 through 10, with high shell presence running into transect 11. It is approximately 28 m in length by about 22 m in width and is about 2 m high.

The shell mounds located in Conchal were of varying heights, widths and circumferences. This complicated tallying the exact number of the mounds. After analyzing the data, it was determined that there were 13 mounds in Conchal. Subsurface testing was required to determine the exact number because there was significant overlap in the materials on the surface. Virtually all of the mounds had material that was dated to the Sapoá period. From the analysis the relative ages of the 13 mounds can be determined within a relatively high degree of certainty. It is thought that the older mounds of the site are Mounds A, D, E, F and I. The first of the intermediate mounds were H, K and L after which are followed by B, G and J. The youngest mounds appear to be M and the non-shell mound C (Please see Table 12). Much of this was determined by the cultural material that was encountered along with the height and expanse of the surface shell presence.

Figure 12 - Table 2: A Chronology of the Time Periods and the Mounds associated with those periods:

Time Period	**Mounds Associated with the Period**
Transition of late Bagaces to early Sapoá	Mounds A, D, E, F and I
Sapoá Period	Mounds H, K and L
Transition from Sapoá to Ometepe	Mounds B, G and J
Ometepe to Present	Mounds M and C (present?)

The constant fluctuations of the water in the river have had a dramatic effect on the landscape at Conchal. The riverbed was surveyed and it was observed that many of the mounds were literally falling into the river during the reconnaissance portion of Proyecto La Flor (see Photo 8 below). The mounds are affected by a multitude of elements; wind, rain, animals and human beings impact the physical landscape daily.

Figure 13 – Photo 8: The riverbank in front of the ends of transects 31 and 32; notice the line of shells that have fallen down the riverbank

Curiously, during the unit excavations of Mound I, a banded rib was encountered (see Photo 9). This appears to be a human rib, but no other human remains were found with it. Also, no other artifacts can be definitively placed with this banded rib. The banded rib appears to have been part of a necklace worn around someone's neck; possibly a family member of the deceased. This ornamentation is probably not similar to the modified bone manufactured by the Maya. The modified bone found in middens in Dos Pilas is thought to be from bone tool manufacture (Emery 2008). Another curiosity regarding artifacts encountered during excavations was that there were burnt bones found with other bones that were not burnt (see photo 10). It is believed that the burned bones were deposited at a different phase in deposition, even if it was months after, and therefore became intermixed with the unburned bones.

Figure 14 - Photo 9: Banded Bone found in Unit 10

Figure 15 - Photo 10: The burnt bone is located in the bottom right portion of the photo, with the two pieces to its right and the one piece of bone to its left not burnt; these bones were found in STP 30.10

Chapter 3: Central American Region

Lower Central American archaeologists believe that there was a lot of interaction between the many cultural groups of Central America (Healy 1980; Lange et al 1992; Bruhns 2014; Dennett 2014; Steinbrenner 2014). These groups shared ideologies, religious beliefs, and languages, among many other intangible items. The groups that spanned from Mexico to Panama are believed to have migrated and traded across Mexico and Central America (Bruhns 2014; Dennett 2014). Migrations of people occurred for centuries before contact; this is how Nicaragua was settled (Healy 1980; Lange et al 1992; Lange 2014). When examining the ceramics in Central America, it is clear that many of the types found throughout the region were copied and traded (Dennett 2014). Trade is known to have occurred all throughout Central America. Trade leads to the exchanged of ideas, beliefs and goods (Muller 1987).

Nicaragua, prehistorically and historically, is geographically part of Central America. Nicaragua was influenced by Mesoamerica prehistorically; many of the cultural groups are thought to have been originally from Mesoamerica (Healy 1980; Lange et al 1992; Steinbrenner 2010). The populations throughout Nicaragua illustrate the influence that Mesoamerica had over the region during prehistory. Throughout Central America, Mesoamerican cultural traditions are seen to varying degrees. Therefore, Mesoamerica is an appropriate basis for understanding the cultures in Central America.

Mesoamerica and Central America are different entities that overlap one another. When the term Mesoamerica is utilized, the word and its meaning refer to a cultural area whose groups have many shared characteristics. These characteristics include religious beliefs, as well as shared worldviews (Sanders and Price 1968). The term Central America refers specifically to a geographical area (Coates 1997).

There have been additional definitions given to the term Mesoamerica. Weaver states that Mesoamerica encompasses southern and central Mexico, El Salvador, parts of Honduras, Guatemala, northern Costa Rica and Nicaragua. This boundary is specifically defined at the time of the Spanish Conquest. The southern portion only includes the Greater Nicoya of Nicaragua and Costa Rica (Weaver 1972).

The Mesoamerican area is composed of very distinct subareas; including areas that are extremely geographically diverse. Mesoamerica has coastal plains, mountainous terrain and limestone platforms in subtropical and tropical latitudes. This region encompassed at least thirty regional civilizations. What solidifies these cultures and connects them in this region is that they all shared the same types of worldviews, technologies and institutions (Adams 1997). An example of a shared characteristic includes agricultural practices; this began in Mesoamerica at the latest by 1500 BC (Weaver 1972; Adams 1997). Another shared characteristic includes the use of polychrome in ceramics (Bruhns 1996).

The northern and southern boundaries of Mesoamerica fluctuated during prehistory; this is largely due to the different degrees of expansions and contractions from the various cultures that inhabited that part of the region during different time periods. At the time of the Spanish Conquest, the northern boundary began in northwest Mexico at the Sinaloa River and shifted to the east toward the Soto la Marina River where it meets the Gulf of Mexico. The northern boundary is considered a “hard frontier”; this boundary separated the groups of people that were north of the Mesoamerican boundary. These peoples had no knowledge of agriculture from those of the Mesoamerican agricultural communities to the south. Furthermore, the communities to the south were sedentary, participated in farming, and had complex communities while those north of the Mesoamerica “boundary” were hunter-gatherers who led a semi-nomadic lifestyle

(Weaver 1972).

While there were fluctuations in the northern and southern frontiers, there is a core area of Mesoamerica. This core area is Guatemala, Belize and Mexico. There are core cultural groups of this region as well; they are the Maya, Aztecs, Olmecs and Toltecs (Healy 1980). At the time of Spanish conquest there were five groups of people in Mesoamerica; these groups include speakers of the linguistic families of Maya, Otomangue, Nahua and Hokan (Graham 1966). Nahua is further broken down into two groups Nahuatl and Nahuat (Canger 1988).

In regard to the southern boundary, the inclusion of Nicaragua and Costa Rica in the Mesoamerican definition has been called into question (Weaver 1972; Lange 1984). The area has been described as an 'Intermediate' area, where a variety of groups interacted (Weaver 1972; Lange et al. 1992). This area was culturally different from its Mesoamerican counterparts in that it had no monumental architecture (Healy 1980; Lange et al. 1992) and was seen as a less complex area (Weaver 1972; Lange et al. 1992). Lange maintains that Pacific Nicaragua and Northwestern Costa Rica are not part of Mesoamerica; this is due to the lack of state-level societies and cultural stability, coupled with an absence of wide-ranging cultural horizons (1992).

Mesoamerican Chronology

The Mesoamerican cultural groups have a longer prehistory and have been well-documented compared to those in lower Central America. The Mesoamerican timelines are considerably different compared to those of many Central American countries. The first span of time is 7000 BC and earlier; this period was marked by early hunter-gatherers who were semi-nomadic. The next time period for Mesoamerica is from 7000-5000 BC and is called the Early Archaic. During this time period the beginnings of agriculture emerge, but the early inhabitants were semi-nomadic (MacNeish 1967).

The span of time that follows is labeled as the Late Archaic, which includes the years 5000-3500 BC The types of domesticated plants increase dramatically during this time period, including: Corn, beans, local fruit, chili, squash, avocado, amaranth and zapote. During this time period there is evidence of a potential permanent settlement based on the sand dunes along the coast in Veracruz. The next time period is the Transitional, which extends from 3500-1500 BC. It is broken into two segments; the Abejas from 3500-2300 BC and the Purrón from 2300-1500 BC (MacNeish1967). The two segments differentiate between the pre-ceramic period and post-ceramic period.

The next phase is called the Formative Period, spanning from 1500-200 BC and is filled with a significant amount of innovation. This period has different divisions, all of which depend upon the region an individual is interested in examining. Following the Formative period is the Classic Period and spans from 200 BC to AD 700. This is when the lowland Maya saw a majority of their developments occur; in Tikal the Great Acropolis was constructed (MacNeish 1967).

The time period following the Classic Period is termed the Postclassic and spans from AD 700 to the conquest (MacNeish 1967). This period is characterized by the rise of the state-level society. Others simplify the time frames of Mesoamerica into three spans, which begin with the Preclassic from 2500 BC to AD 1. It is then followed by the Classic Period, which extends from AD 1-900. The final prehistoric period is the Postclassic and it spans from AD 900-1521 (Sluyter 1994).

Central America

Central America includes Guatemala, Belize, El Salvador, Honduras, Nicaragua, Costa Rica and Panama. Much of Central America has been divided into three smaller regions. These

regions are the Atlantic, the Central and the Pacific regions (Grieder 1993). Central American boundaries are defined based upon their environment. Many early investigators of Central America believed that the variety of eco-zones in this region actually hindered its development. Along the Atlantic watershed, small pockets of people settled along the middle-river-course formations and fertile levees. In the Pacific, populations of people were found in the estuary systems and embayment (Snarskis 1984).

Many different groups of prehistoric (and historic) peoples inhabited Central America; one prehistoric group of interest is the Pipils. The Southern part of Honduras, portions of the Pacific coast of Nicaragua and the majority of El Salvador was settled and inhabited by the Pipils (May 1966). Many believe that the Pipils were the first to inhabit the Pacific Coast of Central America (Ibid). Recent research points to the fact that the Pipils were interrelated to the Nicarao and were connected to the Toltecs (Fowler, Jr. 1985; 1989).

Other indigenous prehistoric groups of Central America include the Lencas, Matagalpa, Miskitos, Corobici, Rama, Guetar and Voto. The Lencas occupied parts of Honduras, El Salvador and Nicaragua. The Matagalpa occupied segments of Nicaragua and Honduras; the Miskitos also inhabited these two countries. The Corobici inhabited parts of Costa Rica and Nicaragua; the Rama occupied the southeastern part of Nicaragua; the Guetar lived in parts of Costa Rica and; the Voto lived in Costa Rica and Nicaragua. The Talamancans inhabited western Panama and eastern Costa Rica. The Guaymi lived in Panama and the Cuna lived in parts of Colombia and Panama. And, the Maya inhabited the countries of Belize and Guatemala; and eventually extended into part of Honduras (May 1966).

Lower Central America

Lower Central America is defined as most of Honduras and El Salvador, all of Nicaragua, Costa Rica and Panama (Linares 1979). It is a tropical region, with dense vegetation; with humidity that does not go below 50 percent (Healy 1980; Stone 1984). Earthquakes, lack of communication, treacherous terrain and floods occur frequently in this region (Stone 1984). Finally, there has been a considerable amount of political instability; this includes civil war, thus making the conditions very undesirable to work in (Healy 1980; Stone 1984).

Interactions

Trade and Exchange. In general trade carries significant connotations considering the implication of interactions among people. This implied interaction may be between two groups or within a group; this trade may also be among multiple groups that are part of a network. Trade occurs on multiple scales; firstly, the small scale, within a community, and secondly on a larger scale, regionally (Muller 1987). These scales may be interconnected, for example, interactions that involve members of a community who trade with one another and then take these goods and trade them over a long distance.

Examination of trade in Pre-Columbian times reveals that people traded goods on an individual level. People also worked for central authorities and traded goods that were controlled by these authorities (Muller 1987). When discussing trade in regard to the Mesoamerican and Central American regions, it is well known that interactions occurred between the two regions for centuries (Sharer 1984; Graham 1993). Items found on the Yucatán peninsula at Chichén Itzá were sourced to southern Costa Rica (Graham 1993). Similarly, items found in Costa Rica have been sourced to northern Mesoamerica (Sharer 1984).

An aspect to examine in regard to trade in the Greater Nicoya area is that of salt and molluscs. This sort of trade has been observed in the Late Classic period for the Maya, which

was from AD 600 to 900 (McKillop 1995; McKillop and Sabloff 2005). Much of the salt production took place on the coast of the Maya sites and the salt was then traded to the interior of Mesoamerica. After the end of the Late Classic period there was a rise in the sea level by one meter (McKillop 1995). When this occurred, many of the Maya sites that had been used to produce salt were then enveloped by the sea (Ibid). This affected the trade during this time period. This may have then opened up the salt trade to the Greater Nicoya area where it appears as though there existed salt trade until a little before contact (Lange 1971). The salt flats in Costa Rica appear to date to the Sapoá period (AD 800-1350), which would open the Bay of Salinas up for trade along the Pacific coast of Central America possibly to Conchal.

Migrations. Multiple migrations occurred throughout Mesoamerica and Central America (Healy 1980; Fowler, Jr. 1989; Lange et al. 1992; Niemel 2003). Many of the groups from Mesoamerica traveled down the Central America isthmus and settled. Generally, migrations of people occur for multiple reasons. One reason may be for colonizing a new area; this colonization may be due to disagreements among elites. In this situation, some disiadents leave and move to start a new settlement (Chapman and Hamerow 1997). Other types of migrations include forced, local and career migrations (Anthony 1997; Chapman and Hamerow 1997). Forced migrations occur during times of war or political strife (Chapman and Hamerow 1997). Whereas local migrations occur due to an area being a familiar one, where the person or group has knowledge of the location; this is a place where family or friends live nearby (Anthony 1997). Local migrations offer the comfort of familiarity, with a slightly different environment. Career migrations are made to bring an individual or group closer to an occupation (Anthony 1997). All of these types of migrations occurred in Mesoamerican and Central American prehistory (Healy 1980; Fowler, Jr. 1989; Anthony 1997; Niemel 2003).

During the period of the Classic Maya collapse, which began around AD 800, migrations were occurring in the lower Central American region (Steinbrenner 2010). This was the ideal time for the lower Central American people to begin exploiting salt production and the desire to consume it from those in the Mesoamerican region. Once these migrants arrived in lower Central America, they exploited their natural resources. These resources included the utilization of the sea to create salt flats. There are many locations of these salt flats that were encountered in the Bay of Salinas (Lange 1971).

When migrations occur, the dissemination of ideas allows for a different group to interpret ideas and utilize them how they see fit. The utilization of symbolism or ideas by the group that was not the originator may not be the same as original idea or purpose of the symbol. An example of this appropriation are the symbols found in lower Central America, specifically Nicaragua where the Pre-Columbian Nicaraguans utilized symbols (Healy 1980; Lange 1992; McCafferty 2005). The usage of symbols—typically gods and animals—were not the central part of the Mesoamerican world. The gods the Nicaraguans depicted were lesser gods; this implies that the Nicaraguans interacted with Mesoamericans and took what beliefs and symbols they liked and inserted them into their own practices and beliefs. This acquisition of knowledge was most likely from trade, as well as migrations.

The Mesoamerican data and analyses can be utilized as analogy to expand upon the unexplained data that Central American archaeologists have obtained. Because these regions overlap and there were migrations between them, as well as trade networks, the pre-Columbian cultures of Mesoamerica and Central America are related. This relation can only be drawn out in more detail with more research and examination of the archaeological data from both regions. It is imperative that Central American archaeologists apply theories and methodologies created and

utilized by Mesoamerican archaeologists. This application will aid in the procurement of more complete data, which will aid in superior analyses and conclusions.

Previous Archaeological Research

Archaeological research and excavations that have taken place in lower Central America in the 19th and 20th centuries (Healy 1980; Lange 1984; Lange & Stone 1984; Salgado 1996; Niemel 2003; McCafferty & Steinbrenner 2005; Steinbrenner 2010). Much of this research has been inconsistent and intermittent (Healy 1980). One of the first individuals to examine lower Central America was E. G. Squier, who was in Central America as a diplomat from the United States (Stone 1984). Squier also investigated the ethnology and archaeology of Nicaragua. He documented the living indigenous people of Nicaragua; he focused on the ceremonial/religious and political institutions of those populations. Further, he analyzed and compared the linguistic families of those in Nicaragua and the surrounding areas (Squier 1990 {1853]).

Another well-known, early cultural investigator was Walter Lehmann; he was especially intrigued by cultures in Central America that were not the Maya. He traveled from Costa Rica to El Salvador during the early 20th century. During those travels, Lehmann created drawings of artifacts and art. He sketched images found on the ceramic pieces he encountered at the prehistoric sites visited. While Lehmann was drawing, he also collected linguistic information from the indigenous groups he encountered. Lehmann was one of the first individuals to create a distinction between the southern and northern groups of indigenous cultures in the region of modern Central America (Stone 1984).

Thomas A Joyce has made a large impact on lower Central American archaeology. He began his research in the early 20th century, which was shortened due to World War I. He focused on the West Indies and the countries south of Honduras, which included Nicaragua,

Costa Rica and Panama. The research that Joyce conducted, led him to conclude that the prehistoric, southern Nicaragua was connected with northern Costa Rica. He came to these conclusions with his detailed investigation of the languages that were utilized, as well as the dress of the indigenous cultures. He investigated the types of ceramics that were utilized, as well as the lithic/tool technology (Joyce 1916).

One of the last early pioneers that made a large contribution to Central American archaeology is Samuel Kirkland Lothrop; he investigated the region in the mid-twentieth century. Lothrop was particularly interested in the prehistoric Costa Rican and Nicaraguan cultures; he studied, analyzed and published data regarding the ceramic sequences of both countries. Lothrop was one of the first to utilize stratified ceramics to identify cultural diversity, which he did via his excavations in El Salvador (Stone 1984).

A final archaeological pioneer in Central American archaeology is Wolfgang Haberland. Haberland was interested in the ceramic sequences of El Salvador, Nicaragua and Costa Rica. Through his examination of ceramics he created interpretations of burials, along with regional activities between the prehistoric cultures of lower Central America (Lange 1996). Haberland's early work was a thorough investigation of Ometepe Island (Healy 1980); Ometepe Island is located in Lake Nicaragua.

Lower Central American Chronology.

For a long period of time many lower Central American archaeologists sought to utilize the chronology that was established by the Mesoamerican archaeologists. However, the Mesoamerican chronology does not translate to lower Central America. Further, early prehistoric settlements in Nicaragua have been difficult to locate. There is one site known as El Bosque, which has been dated to 18,000 to 35,000 BP. These dates are implausible, though the

context with which these samples were taken are reliable. The radiocarbon sample was extracted from the same level as worked bone and a flake chopper that were with mastodon, horse and an extinct sloth (MacNeish 1983).

The first period that has been undeniably established begins when the region is populated and ends around 8000 BC and is called the Paleo-Indian. Very little is known pertaining to this earliest segment of time (Bruhns 2014). The next segment of time that has be.en defined is the Tropical Archaic, which begins around 8000 BC and ends around 4000 BC. Much like the Paleo-Indian period, little is known about this period of time. There are clear signs of groups settling during the Tropical Archaic throughout Central America, although this has not been documented thus far in Nicaragua. Because of this evidence in surrounding areas however, it has been assumed to have occurred in Nicaragua as well (Lange and Stone 1984b).

The next period is marked by the diversification and expansion of settlements and the introduction of ceramics and ranges from 4000 BC to 1000 BC This period saw a larger emphasis on harvesting root vegetables and corn, as well as clearing of forest via the slash and burn technology. The next period, which spans from 1000 BC to 500 AD is a segment that is marked by agriculture, sedentism, and widespread settlements. During the latter portion of this time span, stratified societies begin to appear in the archaeological record (Lange and Stone 1984b). The following time period, which is from 500 AD to 1000 AD, is characterized by an increase in politics and trade, as well as upheaval and change. The latter portion of this period also saw an increase in settlement and complexity of the Greater Nicoya region. The Greater Nicoya region has become a distinct entity by this time period, while the central portion of Nicaragua begins to resemble the Atlantic coast. This time period sees the beginning of the Tempisque pottery and is named as such (Lange and Stone 1984b; Hoopes 1994).

The final pre-Columbian time span is defined by secularization similar to Mesoamerica, along with highly-developed chiefdoms (Lange & Stone 1984b); it extends from AD 1000 to the Conquest (Hoopes 1994). These characteristics are generalizations; each group of individuals in lower Central America was different, but the data that has been collected in regard to these groups indicate that they were related.

The Greater Nicoya and Nicaragua

Nicaragua has very diverse geographical areas. The Pacific coast is where many populations lived during prehistory and this continues in present-day populations. This area had volcanic activity, which resulted in very fertile lowlands that attracted the prehistoric inhabitants. This geographical area includes the two lakes of Nicaragua, named Lakes Managua and Nicaragua (Healy 1980). The Pacific portion of Nicaragua is much like the rest of lower Central America as it has had more archaeological investigations conducted on the Pacific side compared to that of the Atlantic portion (Lange & Stone 1984b).

The next geographic region is the Mosquito Coast, which is located on the Atlantic side of Nicaragua and is shared with Honduras. It is characterized by swamps, leached savannas and rainforest; it has many rivers flowing through it via the central region of Nicaragua. This area is described as a miserable place that is humid, rainy, hot and filled with malaria (Healy 1980); it has very few roads running within it and the terrain is difficult to navigate in this area.

The final geographic region in Nicaragua is called the Central Highlands; in it there exists a mountainous area that originates in Honduras. Very few people inhabited this area during prehistory, though this area is the origination of several rivers that flow throughout Nicaragua. There is an active volcanic area that runs southward from the cordillera that is located in the Central Highlands. The northern portion of this region also has pockets of larger populations

(Healy 1980) and this region is where tobacco is now grown.

The Greater Nicoya (sometimes referred to as the Gran Nicoya) is defined as Nicaragua's Pacific coast and the northwestern portion of Costa Rica (Linares 1979; McCafferty 2008). This area originally had been referred to as a periphery of Mesoamerica, specifically considering the Postclassic time span (Linares 1979; McCafferty 2008). The Greater Nicoya borders a social area in Costa Rica called the Guanacaste. According to Creamer and Haas the prehistoric sites of Guanacaste and Greater Nicoya resemble one another, but do not share ceramics; this is particularly exhibited in regard to the time period leading up to the Conquest (Creamer and Haas1985).

Conchal is located in the southern portion of the Department of Rivas, which is part of the Pacific region of Nicaragua. This area has very fertile soil due to the volcanic activity from the volcanoes on Ometepe Island; this fertility allows for productive agriculture. The department of Rivas not only allows access to the Pacific, but also access to Lake Nicaragua. Rivas has a tropical climate with both dry and rainy seasons; the dry season is from December to May and the rainy season is from June to November. The humidity is almost always above 50 percent. Rivas is often protected from the actual rains, which tend to occur on the Mosquito Coast (Healy 1980).

The area that makes up the Department of Rivas had a wide variety of terrestrial resources in prehistory—both plants and animals. The department's plant life is classified as Semi-forest, which offers the ability to grow guava, pineapple, bananas, plantains, as well as many other types of flora. The animals that inhabited this portion of Nicaragua include deer, rabbit, iguanas, birds, spider and howler monkeys, wolves, coyotes, snakes, jaguars, crocodiles, dogs, turkeys and birds—macaws, parrots, hummingbirds, toucans, buzzards and herons. There

were and are maritime resources as well; these include bass, eel, tarpon, mackerel and sharks. A key maritime resource to the Rivas area is molluscs, which are found throughout many archaeological sites in the department of Rivas (Healy 1980).

Cultural History of the Greater Nicoya and Rivas

There were four indigenous groups that inhabited the Greater Nicoya area at the time of the Spanish Conquest; these groups were the Nicarao, Bagaces, Mangue and the Orotiña. The Mangue and Orotiña spoke languages that were in the Chorotegan group while the Nicarao and Bagaces spoke a form of Nahua. The Bagaces occupied a portion of the Guanacaste area and the Mangue inhabited the area of what is now Managua and León. The Orotiña were divided into three subgroups; one was the Orosí who lived in Guanacaste, the Nicoya who lived on the Nicoya Peninsula and the Orotiña proper who lived on the Gulf of Nicoya's eastern edge (Healy 1980).

The Nicarao lived on the Island of Ometepe and the isthmus of Rivas; their capital was said to be located in the present-day town of Rivas (Healy 1980) though it has not been uncovered (McCafferty personal communication). The Nicarao spoke Nahuatl; this links them linguistically to groups that inhabited Mesoamerica. Some of the theories regarding the Nicarao entrance into Nicaragua speculate that they were oppressed by their neighbors; another says that droughts forced them to move southward. Another speculation is that the Olmeca pushed the Nicarao out of the Valley of Mexico; their forced migration saw them slowly meander southward. This trek allowed them to pass through most of Central America, leaving pockets of populations behind; these pockets of people are known as the Pipils (Healy 1980).

After the Nicarao migrated through Honduras, one of their leaders had a prophecy before he died; this prophecy was concerning their settlement destination and proliferation. He believed

that they must search for an island that had two peaks located on a body of freshwater. The Nicarao lost their way on their quest for this island destination and ventured as far south as Panama. They then realized their misstep, turned around and found their way back to Lake Nicaragua and the two peaks on its volcanic island of Ometepe. This island was located in the modern-day Department of Rivas. When the Nicarao returned to Rivas, there was another group inhabiting their destined territory; the Nicarao then settled in the northwestern portion of Nicaragua. The Nicarao were not happy with their newfound settlement and wanted to settle where they were destined. They decided to, and did ultimately, take their promised land away from these interlopers. According to this myth, the group they conquered fled to Nicoya (Healy 1980).

McCafferty believes that the Greater Nicoya area may have been a permanent stop for multiple groups of people over a long period of time (2008); this area saw a series of migrations of groups from the north. The movements began around AD 800 and continued for the next few hundred years. Most of the peoples that migrated through the Greater Nicoya were Mesoamerican. Correspondingly, a significant amount of lower Central American archaeologists believe that the groups that settled throughout the many regions of Nicaragua were predominantly from the Mesoamerican region (McCafferty 2008).

Potential Issues with Chronology

From fieldwork conducted during 2000 - 2004 in Santa Isabel, Pacific Nicaragua, McCafferty encountered 12 carbon samples, sent for testing. The recent radiocarbon testing conducted by McCafferty in 2004 found that the Sapoá period continues until AD 1250, instead of AD 1200, which was initially believed. The date was even more recently changed to AD 1350 using Steinbrenner's doctoral analysis of the ceramics from Santa Isabel (2010). This shift in

chronology affects how multiple Pre-Columbian sites are interpreted within lower Central America. For instance, the site that McCafferty excavated was originally thought to have been occupied up until and during the Spanish Conquest. Now, due to the radiocarbon dates, there is no possibility this site was occupied during this time. This in turn changes the interpretation of what was occurring in the Rivas region of Pacific Nicaragua during the time period before the Spanish Conquest (McCafferty and Steinbrenner 2005).

In general, this change in the interpretation of the interactions between the groups that inhabited the area during the Sapoá and Ometepe period have now been called into question (McCafferty and Steinbrenner 2005). The radiocarbon dates do not match the ethno historical data that have been gathered, which place the migrations during the Ometepe period (Healy 1980; Niemel 2003) rather than the Sapoá period. The original culture history that was completed for Nicaragua matches the ethno historical data; now both do not match the science, which further complicates the theorized version of Nicaragua's Pre-Columbian history (McCafferty and Steinbrenner 2005). This shift now places the entrance of the Nicarao at AD 1300, which is now understood to be the beginning of the Ometepe period/end of the Sapoá.

Potential Issues with Interpretting Artifacts

A recent controversy regarding Nicaragua is that of their diet. Specifically, when manos and metates were encountered in archaeological excavations they were assumed to be utilized in processing maize (Lange 1971; Healy 1980). Microbotanical studies conducted on the manos and metates indicate that maize was not being processed; instead it is believed that tubers are what the Nicaraguan, and most likely Costa Rican, prehistoric groups were processing (McCafferty 2009).

Chapter 4: History of Coastal Archaeology

Coastal archaeology is different from that conducted inland. The methodology, as well as theory utilized for the analysis of coastal sites is different than those that are excavated inland. There are different factors that must be taken into account. For example, the access to the coast can be beneficial to a population year round or only seasonally; one must examine the coast when interpretting the usage of a site. Landscape is often what draws a group to this location. Coastal settlements are not accidental and must be examined in their natural environment; this natural environment influenced prehistoric decisions made by a group. Many prehistoric hunter-gatherers inhabit the coast, at least temporarily. A settlement along the coastline offers an individual or group access to multiple resources and is therefore useful to the group.

The settling of the coastlines in the Old World began more than 100,000 years ago; particularly in Africa and in the south of Europe. Living on a coast has many advantages for people in the present as well as in the past. Within this very limited geographical region there is a rather large assortment of terrestrial and marine life from which to select. This variety includes terrestrial animals and plants, crustaceans, molluscs, seaweed and the occasional beached large sea mammal. It has been shown that there is a steady supply of resources that originate in the terrestrial setting that is located near maritime access. While this was no forethought of prehistoric populations, there can be an excellent health benefit to life on the coast. Inhabiting this type of region offers a resistance to disease, as well as improved growth and nutrition (Bailey & Parkington 2009 [1988]).

A coastline is a very active area in which there can be a diversity of environmental changes that occur; these changes in turn modify the resources and the landscape. The shoreline can be particularly affected by vegetation, human use, plate tectonics and climate change.

Likewise, an increase in sediments or fluctuation in sea-level can cause devastation to coastlines (Bailey and Parkington 2009 [1988]), as well as the populations who inhabit them.

The accessibility to resources on coastlines varies both temporally and spatially. The ability to obtain the maritime resources depends upon skill as well as to the aptitude in targeting the type of marine resources that are most beneficial as a resource. In order to be successful when targeting marine mammals, an individual or group must be organized, skilled and have the proper technology. Temporally speaking, there are different cycles that affect marine species; particularly seasonal, inter-annual and tidal. Spatially, there are variations in ocean currents, climate and coastlines; these variations may cause larger fluctuations depending upon the location of the region (Bailey & Parkington 2009 [1988]).

It has been observed that coastal sites were quite probably the oldest areas of settlement in Central America—as well as much of the New World—and were frequently returned to by occupants (Voorhies 1978; Claassen 1998). This is one of the reasons as to why it is important that prehistoric sites, such as Conchal, be evaluated and analyzed. These sites, especially, have the ability to offer a glimpse at prehistoric groups and their way of life.

The main archaeological evidence of coastal settlements originated in the Holocene. The debate regarding the origination of the shell mounds has two distinct sides; the first is that the evidence is submerged due to rising sea-level. The other perspective is that during the Holocene there was a change in the diet of the prehistoric inhabitants and this included the addition of the marine life into the diet. This change in diet added to economic changes as well as to growth in the populations (Bailey & Parkington 2009 [1988]). There is a possibility that population pressure caused groups to expand their range and exploit different foodstuffs.

Middens began to appear in the Holocene as soon as the sea-levels stabilized. A few

examples of this include South Africa, Tasmania and northern Spain. This is indicative of consistent settlement and/or occupation of these areas that began in the Pleistocene and continued well into the Holocene; with the Pleistocene settlements now under the sea-level. Conversely, there is large difference in time between when the coastline became available and when they were actually settled along different coastlines during the Holocene (Bailey & Parkington 2009 [1988]).

During the transition from the Pleistocene to Holocene, sea-levels began to stabilize; the climate began to become what is considered to be 'modern'. This kind of stabilization was seen around 120,000 years ago. The interpretations of the changes that occurred to the environment during the Pleistocene are slowly being addressed with underwater examination. Advancements in the reconstructions of the paleoclimate have also recently begun to emerge as another method to examine prehistoric populations (Bailey & Parkington 2009 [1988]).

Prehistoric sites

There are existing shell mounds located along the coast in southeast Africa that date to the Pleistocene Epoch. The earliest coastal site to date is called Terra Amata, which has a context that is undisturbed; it is a well-documented site and has been dated to be 300,000 years old. Another site is located at the Klasies River Mouth Cave; it is a midden that dates to around 120,000 years ago. Within the Cave midden, there included the remains of seals and penguins. All of these sites had a large concentration of shell, which corresponds with shell mounds that originate in the Holocene Epoch. The one major distinction between the mounds of the Pleistocene and those of the Holocene is that the Holocene mounds had a presence of flying birds and fish, while these species were absent in the sites that date to the Pleistocene (Bailey & Parkington 2009 [1988]).

Ethnographic documentation has shed light on how these molluscs may have been harvested in prehistory. There has been much written in regard to groups that inhabit portions of South Africa, California, Australia and New Zealand. An example of an ethnographic account originates in Africa with the Southern Nguni. The women hand harvest shellfish, sometimes utilizing an iron bar. After obtaining a mollusc, the women place them in some sort of receptacle that they bring with them. Other examples of ethnographic accounts include the children and women who harvest molluscs from reefs using a rock or stick in Sonora (Waselkov 1987). The Yuki men (a California group) harvest mussels by swimming out to rocks and gathering the mussels in their baskets (Gifford 1937; Waselkov 1987).

Ethnographic documentation discusses deep water exploration to locate and obtain molluscs; this includes women, men and children. The diversity of the collectors has been reported in Panamá, Virginia, California, China and Japan. In Virginia, Barbour writes about the Powhatan boys diving to obtain mussels. In Japan, both women and men harvest molluscs and in China, children as well as women harvest oysters at low-tide (Waselkov 1987).

There are a few final sets of examples that pertain to the present-day Pacific Nicaragua region. One example was witnessed during the archaeological research that was conducted for Proyecto La Flor in Nicaragua. It was noted that men, women and children of Pacific Nicaragua partook in a variety of maritime activities. Another occurrence in Nicaragua that was frequently observed was when men and women waded into the shallow waters and obtained different types of molluscs. These individuals would harvest enough for a day and then terminate their harvesting activities; typically they would obtain no more than a dozen or so molluscs at a time. This daily activity occurred whenever a person had spare time in his/her day. A final occurrence that was witnessed in present-day Nicaragua is that of men deep sea diving; this was typically

done without the aid of scuba equipment of any kind.

Mesoamerican and Central American Coastal Economies

The Pre-Columbian coastal and river-based economies of Mesoamerica and Central America have been part of the long history of archaeological research in the New World. One main reason for coastal and river-based economies in Mesoamerican and Central America is due to the procurement of resources; another is access to trade routes (Brück and Goodman 2003). A large reason for early settlements along the coast and rivers pertains to the easy access of food resources (Ibid). While many of the earlier sites were seasonal (Voorhies 1978), they still give a glimpse at how Pre-Columbian Mesoamerican and Central American cultures subsisted and interacted with their environment. It is believed that these sites may have been the earliest settlements in the New World (Voorhies 1978; Niemel 2003).

There are multiple examples of Mesoamerican archaeological research that has been conducted in river based and coastal economies. One such project includes El Tajín, which is located in Veracruz, on the Gulf Coast of Mexico. This illustrated the usage of location in regard to cultural interaction and trade. The data analysis revealed that the people of El Tajín interacted with the central Mexicans as well as the Maya (Sarro 2001).

In the archaeological investigation that occurred on Ambergris Caye, Belize, there is evidence of Maya maritime trade and interactions with other groups of people. There were multiple types of trade that occurred on this "island" that included local, regional and long distance. Settlement patterns, population sizes, island/coastal architecture, mounds and trade that occurred in Pre-Columbian Mesoamerica were examined (Guderjan and Garber 1995).

The Olmec were the first group of people in Mesoamerica to become a state-level

civilization (Coe et al. 1980; Rust and Sharer 1988; Wendt 2005). The Olmec lived in an area that had soil that was rich from coastal flooding; there was plenty of precipitation and swamp land for year-round agricultural production (Coe et al. 1980; Wendt 2005). All of these coastal factors aided the Olmec to rise from a small group of people to a complex civilization (Coe et al. 1980). The goods of the Olmec were traded and emulated throughout Mexico and Central America (Coe et al. 1980; Wendt 2005). The Olmec location was in an area with coastal resources, allowed for its people to survive and thrive. The increase in population and complexity through the coastal economy, allowed for the Olmec to flourish and interact with the other groups around them.

Central American Research

Since the 1970s, there has been a considerable amount of effort and gains in understanding how coastal economies survived and thrived in Central America. There are multiple, early coastal sites that span as far south as Panama; they date to at least 3000 BC These sites are most likely seasonal sites that were only inhabited for their access to molluscs and other marine resources. There was no standard methodology to record data from coastal sites in Central America as of 1978 and there are no agreed upon standards in Central America regarding excavating coastal sites. There has been no examination of any type of exchange that may have occurred with the molluscs or other marine creatures (Voorhies 1978).

Settlement Patterns

There are many prehistoric coastal groups that did not utilize agriculture, but were sedentary (Bailey & Parkington 2009 [1988]). An example of this includes the Native groups from North America who lived along the northwest coast (Fritz 1995; Bailey & Parkington 2009 [1988]), as well as those that inhabited the Pacific Coast of South America. On the opposite end

of the spectrum there were groups that were mobile, moving to a different location between different seasons (Scheinsohn 2003).

The prehistoric coastal settlers are an anomaly as they typically fall in the middle of the spectrum of permanent versus seasonal (Bailey & Parkington 2009 [1988]). These groups would leave a stationary group at their permanent or base settlement, while certain members of the group would leave, for various amounts of time, to collect resources (Ibid). This occurred in Australia, New Zealand and California (Anderson 2009 [1988]). Difficulties determining the seasonality of the occupation and food storage—particularly portable containers—lead to conflicting interpretations as to whether the site was permanent or temporary (Renouf 2009 [1988]).

History of Settlement at Conchal

It is believed that Conchal began as either a temporary camp or a small base settlement for a family group of shell harvesters. After a few decades of this lifestyle, this coastal "settlement" turned into a permanent settlement; it went from temporarily utilizing the coast for its resources to a permanent settlement that used all of the surrounding resources. The landscape of Conchal evolved from a natural, coastal landscape to a sacred, manmade landscape. While the coastal landscape is what drew the settlers to Conchal originally, the created landscape kept the population here permanently.

Chapter 5: Methodology Utilized in the Conchal Archaeological Project

The methodology utilized for Proyecto La Flor began with surface survey to delineate features and site boundaries, as well as to facilitate site mapping. Site delineation was further accomplished by shovel testing. The shovel tests were excavated along 36 transects at 10 meter intervals forming a regular grid pattern to facilitate site mapping and a general understanding or artifact, feature and mound distribution. Transects terminated at the riverbank as shown on Figure 13 (site map) and in Photo 12. Feature identification and mound sampling was accomplished through the excavation of a series of larger test units, using preliminary shovel test data as a means of determining test unit placement. Test unit excavation allowed for obtaining larger and more diverse artifact samples from areas yielding cultural material, and obtaining views of soil profiles for understanding site formation processes and stratigraphy. Mapping of the cultural occupation showed areas of dense settlement interspersed with areas of less activity and material deposition. In conjunction with site mapping, digital photographs, distance and angle measurements were acquired for the key features within Conchal.

The site datum was set up for the first shovel test on the first transect to be placed 2 m south of the modern day road and 200 m west of the entrance to the settlement of Tortuga. In case the entrance gate or road is shifted, the first shovel test was also recorded on a portable GPS unit. Also, an approximate distance from another road was measured to the shovel test to aid in relocating the site datum in the future. This road was perpendicular to the road leading to Conchal and Tortuga; it is a major road that leads to Costa Rica.

Site mapping resulted in the identification of clear differences in the density of cultural materials at the site, both in terms of the built landscape and in terms of natural features on the landscape. The depths of different cultural deposits were observable through the data from the shovel tests and unit excavations. All excavation and artifact collection techniques and methods

were performed according to the accepted practices of Central American archaeologists (McCafferty and Steinbrenner 2005).

Informal interviews were conducted with present-day Nicaraguans concerning their practices regarding farming, harvesting and general resource acquisition and processing. Many of the modern-day inhabitants of the area are part-time farmers; the workers who aided in the excavations of Conchal farmed as part of a cooperative association. One of the most important pieces of information gained was that of how the modern population procures molluscs and other marine resources. Informal observations were made along the Pacific Coast of Nicaraguans conducting a variety of maritime subsistence activities. This was done to confirm that modern populations still collect and process molluscs, and the nature, duration and extent of that activity as it relates to the deposition of shell mounds and other artifact types. A competition regarding diving to obtain fish and other maritime resources was observed; most men free-style dive with no equipment other than a mask and at times a snorkel. Many of the men have talent in their ability to dive for a long period of time with no oxygen.

The Local Crew

The hired excavators were local men who cooperatively owned the land where Conchal was located. These men were typically day laborers, who also worked as a group in shifts on their land. Most of the men of the cooperative had worked in road construction and about half of the twelve had experience performing archaeology for Nicaraguan projects. These men were useful in their knowledge of the local activities and politics, as well as the local landscape. The men provided information regarding the water levels of the Rio La Flor at different times of the year, as well as what type and frequency of flooding activity that occurred.

The local workers who aided in the excavations of Conchal were informally interviewed

about the activities that occur in and around the site. The men told of the farming and grazing that occur to the north of the site; they also communicated that many of the livestock in the immediate area freely roam through the site.

Figure 16 - Photo 11: The Riverbank near termination of Transects 31 and 32. This is the edge of the site that falls into the riverbank. This is where the natural and created landscape meet at Mound L.

Below is the site map that was created from the shovel testing conducted during the second field season of Conchal, Proyecto La Flor. Note the position of the mounds throughout the site, as well as the riverbank and floodplains. The baseline for Proyecto La Flor was 50°. Each transect was placed perpendicular along this baseline and ran 140 °. An example includes the STP 1.1; it is the western most point of the site boundary. STP 36.1 is the northern most point of the site. STP 36.10 is the eastern most point of the site and STP 19.25 is the farthest south the site extends.

Site Map of Conchal, Proyecto La Flor

Figure 17 - Illustration 1: Overall map of Conchal

Shovel Test Pits. During the first field season, there was a total of 567 shovel test pits (STP) placed within the 36 transects, 488 of which contained cultural material. Almost every STP was excavated to a depth of 90-100cm. Pick-axes, shovels and trowels were utilized in the excavation for each test pit. The soil was often too compact to utilize a shovel alone, so picks were used to break up the earth, which was then shoveled into a sifting screen. Each STP measured approximately 40-45 cm in diameter (see Photos 12 & 13).

All of the soil excavated from each shovel test pits was screened through a 6 mm (¼ in) mesh screen. All artifacts were retained with the exception of mollusc shell samples and ceramic fragments. A sub-sample only, of molluscs and small ceramic fragments from each level of each shovel test pit was retained. In terms of ceramics, only diagnostic sherds larger than a quarter were saved, in keeping with current practice of Nicaraguan archaeology (McCafferty and Steinbrenner 2005). After the excavation of an STP occurred, the artifacts that were not retained were backfilled into the test pit with the remainder of the sifted dirt. The number of unsaved ceramic sherds was recorded for each test pit. Burnt ceramics were also noted as there was a large number of burnt artifacts and this condition is relevant for understanding the overall activity patterns at the site. The burnt ceramics were unusual in that this researcher had never not witnessed this in other excavations in Nicaragua.

All artifacts were collected according to their shovel test pit number and further separated according to stratigraphic level within the shovel test pit. The different levels were determined through variations in soil color and texture as well as artifact content and degree of compaction. Shovel test pits furthest from the mounds typically identified two-to-three different soil levels, while the pits closest in proximity to the mounds and/or river often had four to five soil changes. Shovel test forms were filled out for each test pit documenting the precise depth of each level, the soil type, Munsell color, artifact content and percentage of shell. Photographs were taken of

a sample of test pits.

Figure 18 - Photo 12: Example of a typical shovel test

Figure 19 - Photo 13: Another example of a typical shovel test

Test Unit Excavation

During the second field season of excavation at Conchal, a total of 14 test units were located in areas of highest artifact density, as encountered during the previous field season. These units were placed along the same grid as the STP of the previous field season. The goal was to further sample areas with high shell density as well as artifact-rich areas with little or no shell based on previous testing.

The larger sampling units varied in size, ranging from 0.5-1.0 m in width and 1.0 m in length. In several areas, special circumstances required units to be truncated, moved or extended. For example, a trench was placed in Mound I that was half a meter in length and extended for 6 m to explore the stratigraphy of the mound as well as the natural landscape adjacent to the mound. In another case, a unit that encountered a rock floor approximately 1 meter deep required altering of excavation plans and expansion of the unit. Excavations of units

ceased only when there was at least 20 cm of sterile subsoil. A shovel test measuring 50x50 cm was placed in a corner of each unit floor to conduct deep testing and to search for buried cultural levels. This technique also guarded against units becoming too dangerous to excavate due to depth. Several units were excavated to depths of 180 cm and the fear of collapse caused the termination of excavations. Every unit produced artifacts from every category, with the exception of Test Unit 14. Test Unit 14 did not produce any lithic materials.

Each unit was excavated in 10 cm arbitrary levels unless a natural soil change was encountered. Each level was screened with a 6 mm (¼ in) mesh screen. Much like the shovel test excavations, all artifacts were collected except un-diagnostic ceramic sherds and diagnostic sherds smaller than a quarter. A sample of the molluscs encountered was also collected. A form for each level of every unit was completed with the following information: Artifacts collected, depths at the beginning and termination of each level, soil texture, Munsell color, moisture content, percentage of shell and any specific issue to note in regard to a particular level. On the back of the form, quick sketch drawings were performed to illustrate features and other irregularities in the soil and/or to clarify any notes regarding the level.

Depending upon the unit, a profile was drawn of two walls to illustrate the soil changes, textures and depths. Drawings of the floor occurred in the large unit that encountered the large stone floor. Digital photographs were taken of every wall and floor at the unit's termination; they were also taken periodically to illustrate anything that was noted in a particular level's notes.

Unit Discussion

Unit 1: The southeastern corner was located 5 m west and three m north of STP 15.12. It was placed near STP 15.12 due to high artifact density and no shell presence being encountered

during the shovel testing phase. This unit was positioned to examine the area near an artificial mound, called Mound C. This was the only non-shell mound located at Conchal; it was also the highest, with an approximate height of 7 m. The rest of the mounds were gradually sloped and at most were 1-2 m in height. This unit was excavated in order to determine whether there was some sort of living area that was separate from the shell mounds.

Unit 1 was comprised of three stratigraphic levels. The measurements were taken from the SW corner and it was excavated to a depth of over 1 m. Below there are two illustrations of the profiles in Unit 1; they are of the northern and western wall (see Illustrations 2 and 3 below).

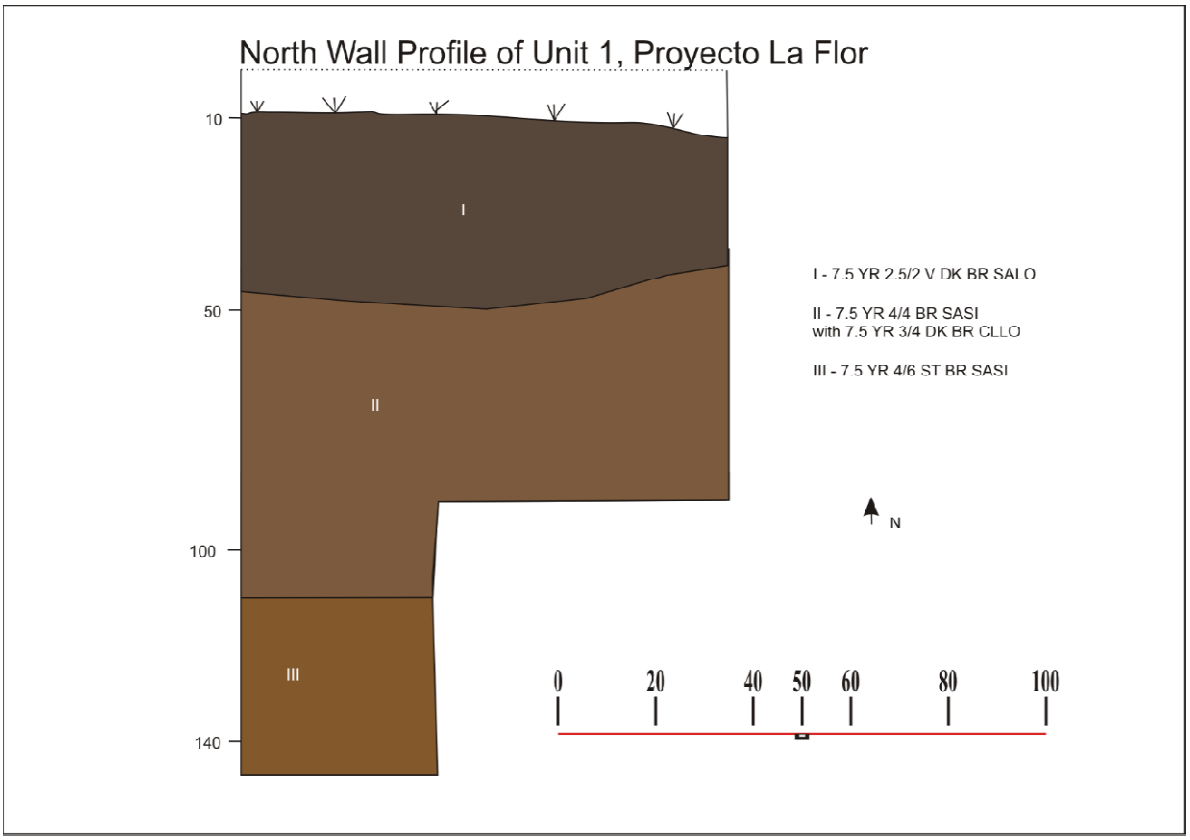

Figure 20 - Illustration 2: The Northern Wall of Unit 1

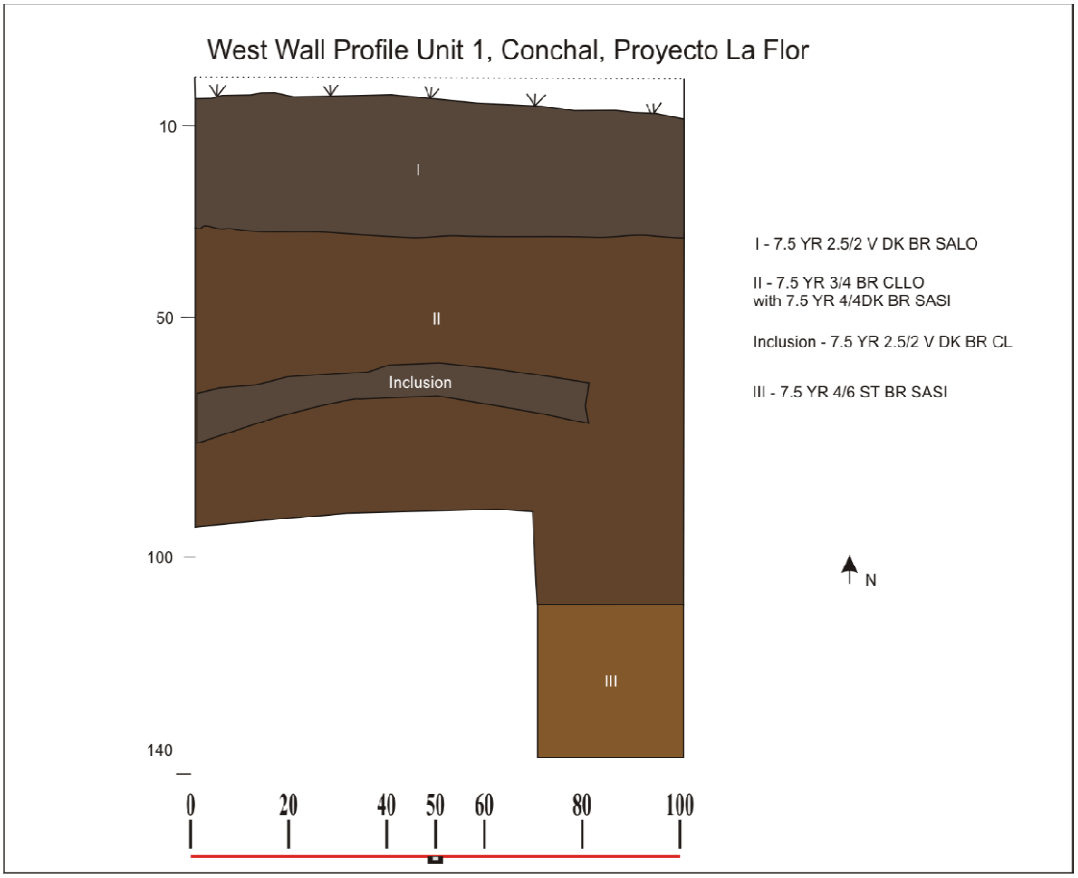

Figure 21 - Illustration 3: Western Wall of Unit 1

Unit 2: The southwest corner was located 4 m north and 4 m east of STP 17.9. It was placed in this area of Conchal due to minimal shell presence; this area did not have a mound, but some shell presence. This unit had three stratigraphic levels. The measurements were taken from the southwest corner and it was excavated to a depth of over 1 m. Very few shells were encountered; those that were appeared to be aged and/or weathered. At approximately 1 m below the surface, a rock floor was encountered. It encompassed roughly ¾ of the floor of the unit. Excavations were terminated at that point in order to open an adjoining unit to investigate the extent of the rock floor.

Unit 3: This unit was located 4 m north and 3 m east of STP 17.9. It adjoins Unit 2 and

shares its western wall, which becomes the eastern wall of Unit 3. It also shares the same datum, which is located in the southeastern corner of this unit. There were three distinct stratigraphic levels. The rock floor was encountered about 1 m below the surface and encompassed the entire floor of the unit. Excavations were halted to then open another adjoining unit to examine the length of the floor.

Unit 4: This unit was placed 5 m north and 3 m east of STP 17.9. It adjoins Unit 3 in its northern wall; the northern wall of Unit 3 becomes the southern wall of Unit 4. Six stratigraphic levels were encountered in this unit. This unit is the farthest north for the excavations of the "mega unit;" this was because the rock floor did not extend throughout the entire unit, only the southern portion.

The original datum was located in the southwest, but due to torrential rain it was shifted to the northwest; the measurements were adjusted accordingly. The rock floor only comprised the first 20 cm of the southern portion of the floor; it was encountered at approximately 1 m below the surface. After the rock floor was encountered, that portion of the unit was not excavated further. The portion of the unit that did not have the rock floor extended another 80 cm below the surface, totaling 180 cm below the surface. After approximately 10 cm of sterile soil, at 180 cm, a shovel test was placed in the northeast corner of the unit and the unit yielded no more cultural material.

Unit 5: This unit was positioned 4 m north and 2 m east of STP 17.9. It adjoins the west wall of Unit 3. Three stratigraphic levels were encountered. The measurements were taken from the northeast corner. The excavations of this unit did encounter the rock floor in the first 20 cm of the eastern portion of the unit; excavations of this portion of the unit were discontinued. The other portion was excavated another 30 cm with no cultural material encountered. An STP was placed in the western portion of the unit, which began at 130 cm below the surface. This STP is

located in the northwestern corner of the “mega unit”.

Unit 6: This unit was positioned 3.5 m north and 3 m east of STP 17.9. This unit is a one meter by half meter due to a large tree. The datum was in the southwest corner and four stratigraphic levels were encountered. Unit 6 shares the northern wall with Unit 3, which is the southern wall of Unit 3. The rock floor was encountered about 1 m below the surface and extended for 30 of the 50 cm of the floor of the unit. The other portion of the unit was excavated until the soil was sterile for 20 cm, which was approximately 140 cm below the surface; an STP was placed in the southeastern portion of the unit at the 140 cm point; this STP is considered to be in the location of what is the southeastern STP of the “mega unit”.

Unit 7: The unit was placed 3.5 m north and 4 m east of STP 17.9. This unit is a 1 m by ½ m due to a large tree. Unit 7 shares its northern wall with the southern wall ofUnit 2. Four stratigraphic levels were encountered in this unit. The datum was located in the southeast corner and its eastern wall is the same as Unit 6’s western wall. The rock floor was encountered around 1 m below the surface and it encompassed 30-35 cm of the 1 m length of the unit’s floor. The excavations were halted to further investigate the extent of the floor.

Unit 8: This unit was placed 3.5 m north and 2 m east of STP 17.9. It adjoins Unit 6 and shares its eastern wall with Unit 7’s western wall. Unit 8 also borders Unit 5; the northern wall to Unit 8 is the southern wall of Unit 5 and measures 1 m by ½ m. Clay pockets were also found throughout this unit. Three stratigraphic levels were encountered and excavated. Midway through excavations, the unit was temporarily abandoned due to torrential rains that caused flooding. After excavations resumed the datum had to be moved from the southwest corner to the southeast corner; all of the measurements were adjusted accordingly. The rock floor was never encountered in this unit. After 20 cm of no cultural material, an STP was placed in the southwestern portion of the unit. This STP is considered to be the southwestern STP for the

mega unit.

The four proceeding illustrations are illustrations of the floor plan of the “mega unit”; the first depicts the location of the rock floor in Units 2-7 (see Illustration 4). In this drawing, the bottom right corner is Unit 7 to the left of Unit 7 is Unit 6. The bottom left corner is Unit 8, in the upper left corner is Unit 5; to the right of Unit 5 is Unit 3. The most northern portion of the drawing is Unit 4, which is to the north of Unit 3. The final unit in this drawing is the upper right corner, which is Unit 2.

The second drawing is an illustration of the stratigraphy of the Southern wall of the mega unit; the drawing shows the walls of the Units 2, 3 and 5 (see Illustration 5). The third drawing is that of the Northern wall of Unit 4 (see Illustration 6); this is to illustrate the general stratigraphy in the north as it did not fluctuate when examining the northern walls of Units 2, 3 and 5. The northern profiles of Units 2, 3 and 5 were not drawn, a southern profile and western profile were illustrated. The final drawing is the West Wall of the mega unit and it includes the Units 5 and 8 (see Illustration 7).

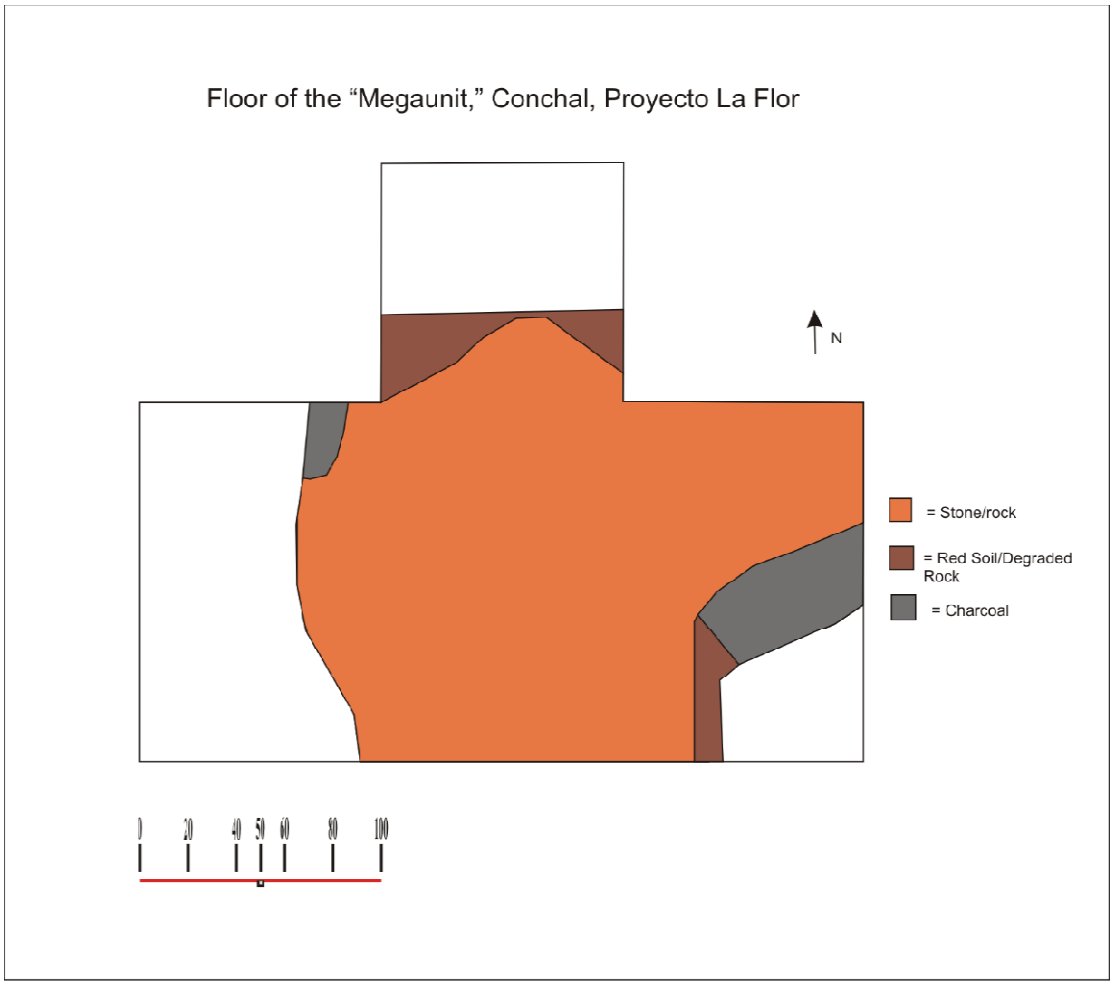

Figure 22 - Illustration 4: Floor Plan of the Mega unit

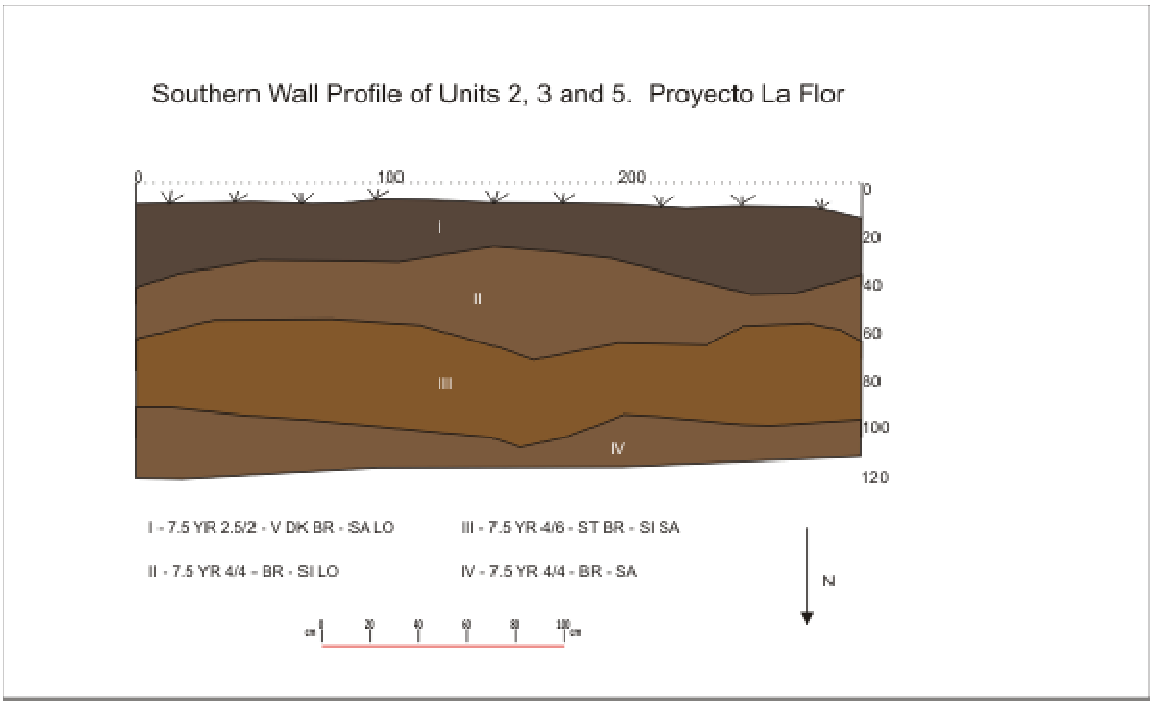

Figure 23 - Illustration 5: The Southern Wall of Units 2, 3 and 5re 23

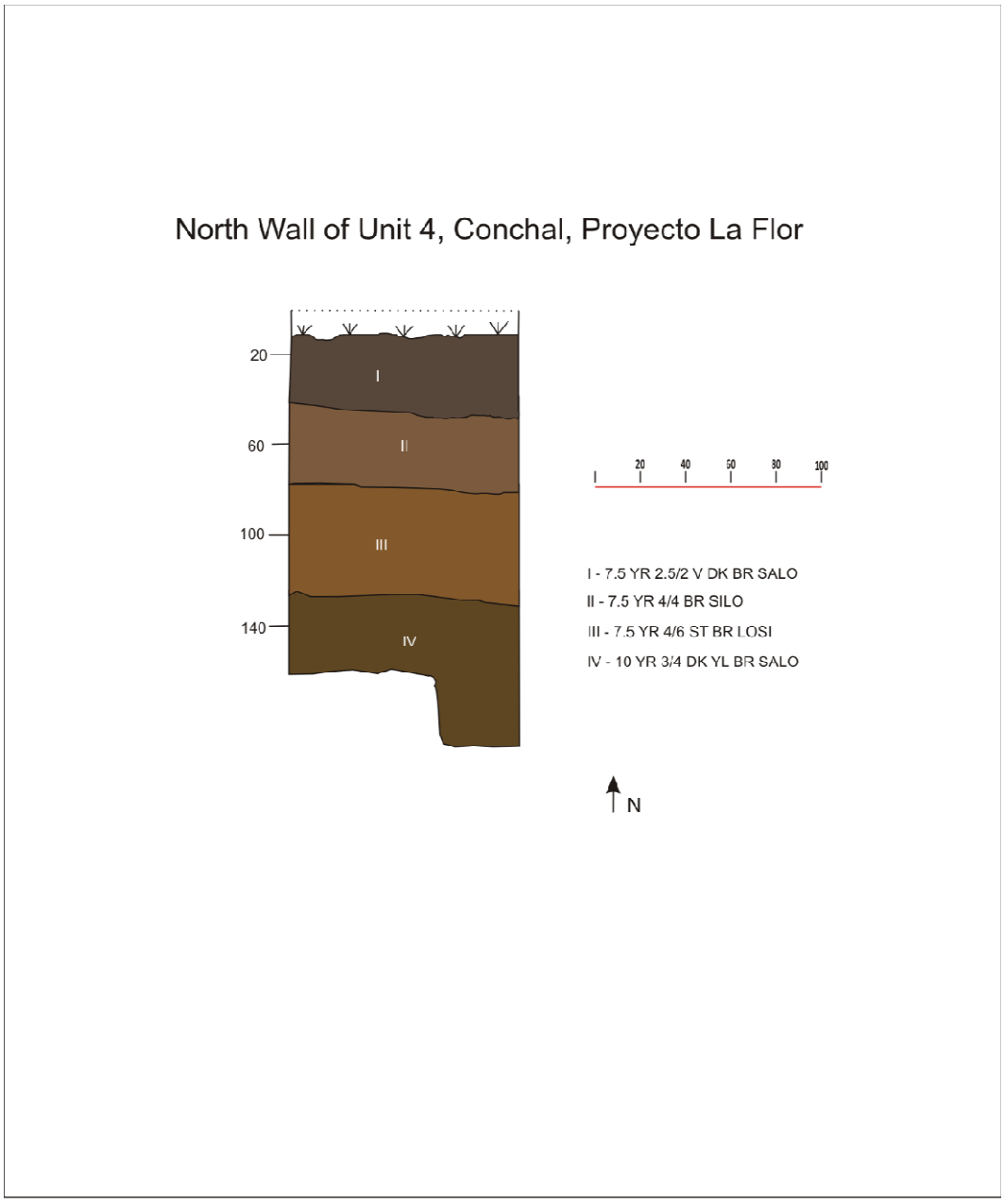

Figure 24 - Illustration 6: Northern Wall of Unit 4

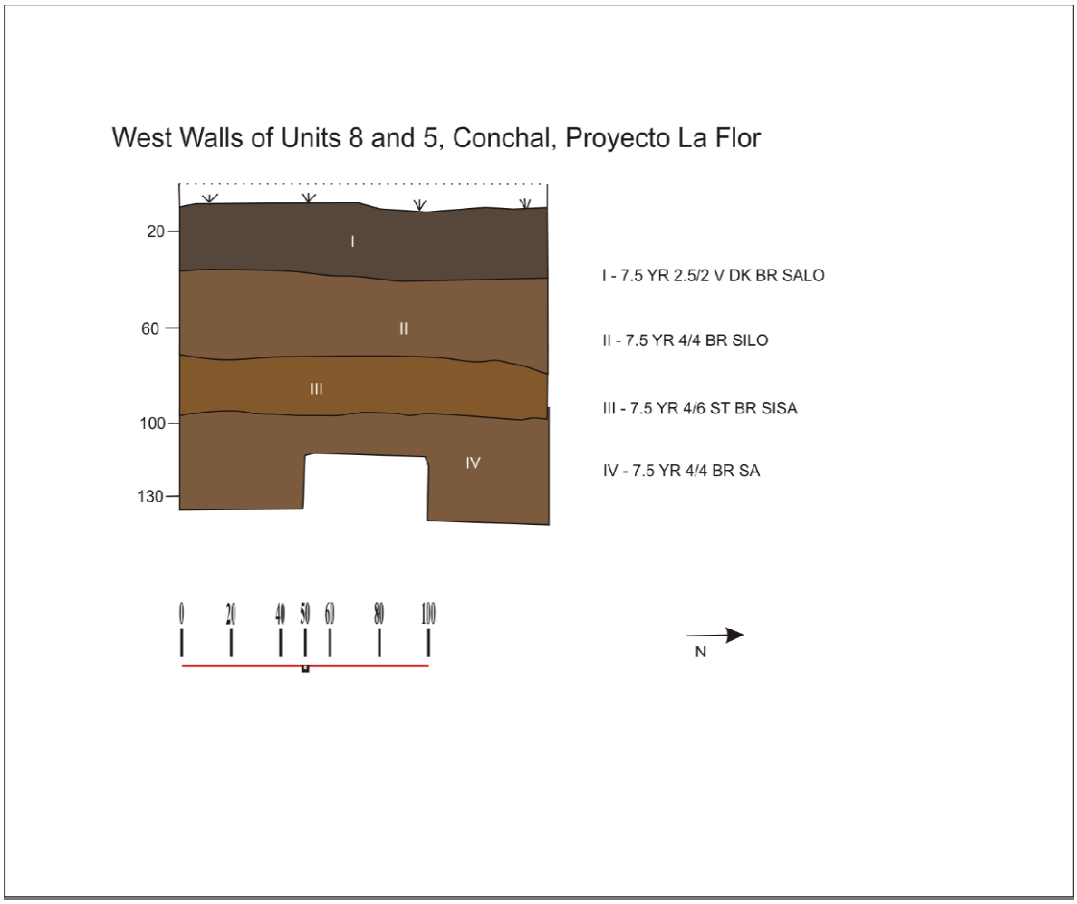

Figure 25- Illustration 7: West Wall of Units 5 and 8

Unit 9: This unit began the trench portion that was placed on Mound I and extended until there was very little shell presence from the shell mound (see Photo 14 below). It examined the stratigraphy of the mound and investigated the differences between the shell mound and non-shell mound areas of the site. This unit was 5 m north and 3 m west of STP 24.10; it was a 1 x .5m unit. The datum was in the southwest corner. A gravel layer was encountered at 110 cm below the surface. There were a total of four stratigraphic levels.

Figure 26 - Photo 14: the south end of the trench; Unit 9

Unit 10: This unit was placed directly north of Unit 9 and shared the northern wall of 9. The datum for this unit was the southwest corner of Unit 9. Gravel began to appear around 115 cm below surface and continued beyond 140 cm. There were five stratigraphic levels excavated. A 50 cm x 50 cm STP was placed in this unit rather than unit 9 to symbolize the southern boundary. This was done due to the relatively large angle between Units 9 and 14; the angle from Unit 9 to 14 was too large and therefore was not comparable.

Unit 11: This unit adjoined Unit 10 directly to the north and shared its southern wall with the northern wall of Unit 10. This unit was a 1 x .5. The datum was measured from the northwest corner of this unit; this unit is shifted slightly north-northeast due to a tree. Gravel began to increase and there was no cultural material encountered. Five stratigraphic levels were excavated.

Unit 12: This unit shared its southern wall with Unit 11's northern wall. The datum was in the southwest corner, which was the same datum as Unit 11. Gravel began to appear at about 75 cm below the surface and continued beyond 130 cm below the surface. There were a total of seven stratigraphic levels that were excavated.

Unit 13: This unit shared its southern wall with Unit 12's northern wall. The datum was in the southwest corner of Unit 12 and it is a 1 x .5m unit. By 110 cm below surface there is nothing but soil and gravel and the last 50 cm (60-110cm) had a combined total of artifacts of 5 pieces of ceramic and a handful of shell pieces. There were five stratigraphic levels in this unit.

Unit 14: This unit shared its southern wall with Unit 13's northern wall. The datum was in the southwest corner of Unit 12 and it is also a 1 x .5 m unit. This unit, as well as Unit 12 and 13, saw a dramatic decrease in the presence of shells. Shell presence within the first 20 cm was approximately 40-50% in Units 9 and 10 to 15% for Units 13 and 14. There was no gravel presence in this unit (see Photo 15). There were five stratigraphic levels encountered in this unit. After 20 cm of no cultural material, a 50 cm x 50 cm STP was placed in this unit. No cultural material was encountered.

Figure 27- Photo 15: the North End of the trench; Unit 14

Laboratory Methods

While in Nicaragua conducting the fieldwork, a separate room was rented to accommodate any artifacts brought back from the field. In this room there was equipment for the processing of artifacts; this included drying racks, wash basins, tables, toothbrushes and record keeping supplies. All artifacts were brought back each day from the excavations for processing. A separate lab notebook was maintained regarding all artifact handling and tabulation by artifact class for each level in each STP and test unit. Information recorded includes the presence of human remains and the total number of: artifacts, burnt artifacts, ceramic body sherds, ceramic rim sherds, ceramic base sherds, "special" artifacts, lithic artifacts and type, bones/faunal remains, molluscs, non-diagnostic ceramics discarded, artifact bags per level.

Different categories of artifacts were processed according to material type and preservation needs. All ceramic pieces were washed and brushed with a toothbrush; they were rinsed off to assure that any residue was removed. They were placed on drying racks according to their provenience and left to dry; due to the high humidity levels, the artifacts often needed to dry for more than one day. After the ceramic sherds were dry, an area on the piece was found that would be the least conspicuous and a strip of nail polish was placed on the piece. The area was typically the side of the ceramic that did not have decoration and was along an edge. The pieces were then placed back on the racks to dry for another day. The following day a Sharpee was utilized to label the piece according to the location it was found in the site (e.g. DA.DPC.09.09.1.1). The example given stands for a piece found in Test Unit 1 level 1. After all of the pieces were labeled from a specific provenience, they were placed in an unused bag and put into storage.

All of the smaller pieces of lithic materials were washed, while many of the larger pieces were not. All ground stone pieces were left untouched; only large pieces of soil were removed. The hope for the ground stone is that these pieces could be analyzed for trace elements in the future; specifically to examine the types of foodstuffs the ground stone pieces processed. The testing for the foodstuff is of particular interest as recently there has been a debate regarding what types of food the prehistoric populations were processing. Originally, it was assumed that these populations were processing maize; within the last few decades many have begun to question this and believe that maize was not grown in the area. It has been posited that they were processing tubers (McCafferty 2010). The pieces found at Conchal will aid in determining what at least some of the population were processing along the Pacific coast of Nicaragua.

Other lithic artifacts such as flakes, broken points and bladelets were washed in a bucket with a toothbrush. These pieces were rinsed off to remove residue. They were then placed on

drying racks for at least a 24-hour period, after they were dry they were then placed in individual bags with a label placed in a separate bag within the large bag; the label in each bag indicated the position in the site they were encountered. Cataloging deviated from traditional Nicaraguan protocol by not physically labeling the smaller lithic materials; microwear analysis should be conducted on these pieces at a later date.

Human and faunal remains, depending upon the fragility of the bone, were washed with a toothbrush. They were then rinsed and placed on drying racks. After the pieces were dried they were placed in a bag with a label (separately bagged) placed within this bag. The human remains were not placed in bags with other materials, they were bagged separately (Please see Photo 16 below). If a bone was too fragile to wash, it was dry brushed and then placed in a new bag with a label. The samples of the molluscs brought in from excavations were washed, rinsed and placed on a drying rack. After they were dry, they were placed in a separate bag with a label that was in another smaller bag.

Figure 28 - Photo 16: Human remains encountered in Shovel Test 16.22, level 1

Soil testing was not conducted in Nicaragua; this is due to the difficulties in obtaining Permits to bring the samples into the United States. There was no access to a float machine to do flotation while in Nicaragua. It is hoped that as Proyecto La Flor continues, soil cores will be taken from key areas around the site and tested. It is believed that understanding the types of resources the population processed is important in understanding the inhabitants.

Initially, a crude map was constructed after the first field season. A formal map was created in the lab after all of the data was compiled and the photographs were examined. Field notes were examined and supplemented in the lab. Notes were taken about the daily activities that occurred in the lab, with future goals for the field and lab work documented.

After fieldwork ceased and all of the artifacts were processed, digital documentation began. This documentation entailed photographing all artifacts with a Nikon SLR. All artifacts were photographed illustrating at least two different angles. The artifacts were always pictured with a label indicating their provenience, and with a scale. After the entire artifact assemblage

was digitally documented, most were prepared for long-term storage. During this preparation, a list was compiled for a Permit request to temporarily transport certain lithic and ceramic artifacts to the United States for further analysis.

After the artifacts for analysis were Permitted to leave Nicaragua, the remaining artifacts were placed in storage containers and stored in a shed. The artifacts that were placed in long-term storage include most of the ceramics, all of the human and faunal remains, all of the ground stone pieces as well as all of the samples of molluscs. The artifacts that were subsequently transported to the United States included all flakes, blades, bladelets and points; the ceramics that were transported include the more elaborately decorated sherds and ceramic balls typically found in the "feet" of certain ceramic vessels.

Analysis Methods

Data from Conchal is used to address research topics that are discussed later in this dissertation. These data are generated through the functional classification of artifacts and features, identifying their spatial and stratigraphic relationships and age associations. Data are gathered through typological and attribute analyses conducted on different sets of material culture, mainly mounds, features, ceramics, and chipped stone lithic artifacts. This information forms the basis of the interpretations used to define activity areas and determine site function(s). It also facilitates a comparison of the technologies, subsistence practices and settlement patterns represented by the site with other sites in the region. Site functions are determined by assessing the different types of tasks performed at the site, the scale of occupation as represented by artifacts and their distribution, and the kinds of mounds, features, ceramics and lithic technology represented. Occupation duration estimates are based on artifact density, artifact diversity, the depth and content of features and the size of mounds. Stone tool production techniques and the

use of ceramics were studied using their horizontal and vertical distribution as a data set, along with typological and attribute analyses of individual pieces. The results of the investigations of the site greatly enhance our understanding of local and regional land and resource use.

Site Structure and Function

Analysis of site structure was conducted through the study of artifact patterns and the vertical and horizontal distribution of landscape features. Activity areas were defined by grouping artifacts and features, mapping the distribution of different types of material evidence, and treating feature and artifact associations as analytic units. Site functions were defined based on the types of activities that could be attributed to particular occupations, using as a reference known archaeological patterns at a local and regional level. Stone tools and ceramics were categorized functionally and stylistically, where possible, in order to develop an understanding of activity patterns, production techniques, task performance and variations within the analytic units. Variation in the nature and distribution of the more numerous debitage fragments, in relation to finished tools and other remains, form the basis of the analysis of the site structure and the study of prehistoric land use during the time periods they were occupied (Please refer to Table 3 below).

Type of Settlement of Conchal	**Time Period of Conchal**	**Types of Artifacts Encountered During this Time Period at Conchal**
Early, Occasional Occupation	Late Bagaces/Early Sapoá Period (AD 750/800-950)	Heavily Degraded Utilitarian Pieces of Ceramic; a Few flakes and a Core. 1 Possible set of human remains
Middle Occupation: Full-time settlement	Sapoá Period (AD 950-1150)	Papagayo, Sacasa ceramic vessel pieces. More tools appear including scrapers, manos, metates, mortars, pestles. Human remains are interred in the mounds as group
Late Occupation: Full-time settlement with class differentiation	Late Sapoá/Early Ometepe (AD 1150-1350)	Vallejo, Sacasa, Madeira ceramic sherds. Wider diversity of tools appear, including: Celts, hammerstones and Hand axes. Human remains appear in two different forms: group and individual

Figure 29 - Table 3: Summary of Site Structure

Feature Analysis

Features were excavated by internal stratigraphic subdivisions where evident. A total of 15 features were found. Thirteen of which were the mounds, one was an ash layer and the other being the floor at the bottom of the expanded "mega unit." Analysis included information about the contents and dimensions of each feature, their internal strata, as well as the underlying subsoil in some cases. Feature analysis was an important tool for defining site structure and for reconstructing the subsistence and settlement patterns. Every attempt was made to classify features temporally and functionally. Artifacts and ecofacts from individual features were considered to be discrete occupation episodes for analytical purposes and were grouped by culture and time period, where possible, to form arbitrary analytic units. Conchal yielded chronological data from a number of sources. Stylistic and formal attributes of diagnostic lithic and ceramic artifacts provided temporal data.

Analysis of Ceramic Artifacts

The quantification of sherds from the site was used to define chronological and spatial areas that may have been used by specific groups, as well as to identify general activity areas across the site, such as cooking areas or living floors as separate from lithic production areas and shell mounds. Sherds were firstly separated into groups based on provenience then secondly on sherd class (rim, neck or collar, body, base, or fragment). Sherds were classified by the presence or absence of interior and/or interior fabric-impressions and/or surface decoration. Sherds were grouped by type and appearance to form vessel lots for analysis where possible. Reconstruction was done on sherds with obvious, easily-mendable fractures, however, due to time constraints, complete reconstruction was not feasible. Due to the poor ceramic preservation, it was difficult

to reconstruct vessel lots with sherds other than rims. Therefore, sherds were grouped into vessel lots on the basis of diagnostic decorative elements, when present, including body sherds. In this way, a minimum of approximately 4885 ceramic vessels were identified during the shovel testing phase. A minimum of 963 ceramic vessels were identified during the Test Unit excavations. There was a total of 40,573 sherds encountered during both field season two and three; of the 40,573 sherds, 5,690 sherds were kept (Please see page 171, Table 6; see also Appendix A).

Appendix A is a table of the ceramics encountered during the second and third field seasons of excavations at Conchal. The columns within this table include the location within the site, the level, the number of sherds, the minimum number of vessels and if known the type of ceramic encountered. The types of ceramics were identified by predominantly using Larry Steinbrenner's 2010 ceramic analysis of Nicaraguan ceramics, as well as Healy's book (1980). Many of the ceramics were difficult to determine due to weathering and/or burning. At times, the best guess was utilized.

Chapter 6: What the Lithic Tools Found at Conchal Tell About the Prehistoric Population

Lithic materials encountered at an archaeological site offer much pertaining to interpreting the past culture that inhabited the area. They inform the archaeologist on the prehistoric economy, organization and technology (Andrefsky, Jr 2001). The tools and other stone debris also inform on the daily tasks of the individuals; these tools not only illustrate the ordinary, but also the extraordinary.

Analysis Methodology: Lithic Analyses and How they Reflect Mobility

There are many in-depth manuals providing instruction on how to analyze lithic materials that are encountered during archaeological endeavors. In order to begin an analysis, the basic analytical unit must be defined. Typically, the basic unit of analysis is a complete flake. When examining the numbers of artifacts encountered, it is important to look at any increase, decrease or lack of change over time with the lithic artifact count. Also, the ability to obtain a quantitative summary regarding what changed in frequency during a period aids in the identification of what occurred during that time period. For example, was there an increase in manos and metates during period 'x' or was there a decrease in the use of chert in period 'y' (Carr & Bradbury 2001).

An increase in artifacts may signify that there was an increased focus on a particular task, which may further signify that there was a population shift. For example, an increase in the manos and metates at Conchal illustrate that the population was processing more foodstuffs compared to the earlier population that inhabited Conchal. A decrease in the number of a particular artifact may illustrate that a population is moving away from utilizing a particular resource, exploiting a different resource or that a population is declining. Conversely, the appearance of an artifact illustrates that a population is performing a new task. For example, the

appearance of manos and metates in Conchal during the Sapoá period indicates that the population was not only harvesting molluscs, but also obtaining and processing other foodstuffs. These foodstuffs were most likely tubers and other types of crops grown in the area.

Archaeologists typically classify stone tools into two types; informal and formal. There are clear cases of informal tool use and formal use of tools. Typically, formal tools are curated tools. An example of curation is the discovery of tool caches; when multiple tools are encountered in a hidden or concealed context it is determined that this was a tool kit of sorts and that the individual(s) planned on reutilizing in the future (Nash 1996).

The definition of the informal and formal tools is relative. Many archaeologists define them differently; some focus on reliability and efficiency, with function being a less important characteristic. More recently archaeologists focus on efficiency, but recognize that past groups were more complex in regard to their chosen tools and the way they were manufactured. Many archaeologists have altered the definitions of the categories, but there is no standard in regard to whether a tool is expedient, curated or in between (Nash 1996).

Binford believes that "…different modes of procurement, manufacture, use and discard of tools…are clues to, or correlations with, site functions within a settlement system (1979: 255)." In his ethnographic study of the Nunamiut, Binford describes three types of gear that the Nunamiut utilized. They had "insurance gear," which were tools that they stored throughout the region that were generic; they are in caches with multiple men from the group knowing where they are located. They also had "personal gear," which were tools that were necessities for daily life. These tools included cores, cutters, bows and arrow; these tools varied depending upon the season and the purpose of the trip. These tools were heavily curated and fairly new when taking a new trip. The third type of tool was the "situational gear," which was a tool kit; this is tailored

to the anticipated activity. The materials used by the Nunamiut to manufacture tools are incidentally procured. They look for materials wherever they are; even when they are taking part in a hunt (Binford 1979).

Determining Site Activities Through Lithic Data

"Technologies based on curation comprise tools that are effective for a variety of tasks, are manufactured in anticipation of use, maintained through a number of uses, transported from locality to locality for these uses, and recycled to other tasks when no longer useful for their primary purpose (Bamforth 1986: 38)." A group's technology is based on the resource availability; if materials are easily accessed, then the tool will be given less time investment as it is easy to replace (Bamforth 1986; Cowan 1999). Lithic materials are utilized differently depending upon the activities of an individual and/or group. This includes the types of tools that are manufactured; more mobile groups tend to produce different tools compared to more sedentary groups (Cowan 1999). A high frequency of retouched tools indicates maintenance and low frequencies of discarded unbroken, usable tools indicates recycling (Bamforth 1986).

Cowan maintains that the time invested in the manufacture of a tool indicates the mobility or sedentism of a group; this is evident when examining the types of by-products and products produced by manufacturing. An example of this is the creation of tools from useful material by simply flaking a piece of stone off a core. The flaked piece is perfectly functional as a quick tool. This type of tool creation is easy and takes minimal time investment. This type of tool manufacture is simple, it does not require much skill and is therefore not necessarily useful in regard to the need for more refined tasks (Cowan 1999).

Informal tools are those that are manufactured for one single purpose and are then discarded; they are typically less formal and simpler (Bamforth 1986). Another "type" of tool is

what Bleed refers to as the maintainable tool; this tool would be used by hunters. It is the type of tool that can be changed quickly and used in multiple scenarios. A reliable tool is a type of tool that gatherers use; this is a well-designed tool that has more time investment in it. The reliable tool is meant for one type of task (Bleed 1986).

The other alternative in regard to informal tool creation is time consuming and necessitates a better quality material; this is the formal tool. The individual who creates this tool is required to have a superior ability for this type of tool production compared to the expedient tool. The time investment pays off by typically allowing a longer life for the tool. If a portion of a tool is broken or wears to the point of being dull, the user may reshape or retouch it multiple times while still having a high degree of usefulness. This type of tool may actually preserve the materials used for tools as it recycles and reuses the materials (Cowan 1999).

Bifacial Tools

By manufacturing biface tools, individuals have the ability to produce multiple types of tools and create flakes that may be utilized as tools as well. The biface becomes something that keeps producing tools throughout its lifetime. Bifaces allow individuals to use them for various tasks and are easily modified. It is believed that this type of tool is perfect for a group that is highly mobile because of the variability in uses it possesses, as well as the relatively small size of the tool (Cowan 1999).

According to Kelly, there are three types of bifaces; cores, long use-life tools and byproducts of the two. There are two types of tools; reliable tools are tools that work when they are needed. Maintainable tools are tools that can be reformed if broken or can be changed into a different tool. The degree of curating a tool is relative to access to the raw material as well as the type of settlement system. A group must utilize the best raw material that can be obtained for the

type of activity that they are participating in. "Stones weigh too much for a mobile people to carry more than needed, yet tool needs cannot always be anticipated precisely; therefore, mobility simultaneously dictates tool needs and access to raw material (Kelly 1988: 718)."

Bifaces are a universal tool; they can be used as a tool or as a core. Flakes produced from a biface can be utilized as a tool, with these flakes being superior to ones produced by a core. Bifaces are useful for hunter-gatherers as they can be easily transported and a variety of tools can be manufactured from them. Bifaces are tools themselves; they can cut and if they become dull or break they can be retouched. Bifaces can be curated. There are fewer bifacial tools in groups that are predominantly sedentary; tools are often expedient. Curated tools are often used when raw materials are inaccessible or of poor quality, this often means that mobile groups bring bifaces with them on their journeys. If there is a change in the usage of the bifacial tools, this may indicate a change in the group's mobility (Kelly 1988).

Apart from formal and informal tools, there is another class of lithic tools that are found in archaeological sites. This class of tool is referred to as site furniture; site furniture is defined as a site-specific facility. Two examples of site furniture are roasting pits and metates. The concept behind site furniture is that it is freely available to any individual or group that inhabits a particular site. Regarding site furniture, it "…should be positively correlated with [the] number of locations where it is found and either have a negative or a non-significant correlation with intensity of use (Camilli 1989: 24)."

Site furniture is used by both sedentary (e.g. hearths) and mobile (e.g. hammerstones) groups. These are tools that may be stored when a group seasonally migrates; they may not be practical to carry (e.g. metates) or not useful in the next location in which a group was migrating. A group may only be migrating temporarily to another site to gain specific resources; therefore

the individuals may carry what is necessary and useful, while leaving site furniture and caches at another site/settlement (Binford 1979). Site furniture is a highly useful class of tools that are cached instead of discarded; this may be due to the time and effort placed in their manufacture or in the inability of a group to carry them to another location (Hayden et al 1996). Site furniture should be recognized as something that is useful for the group, available for all individuals of the group and is typically not portable.

Curating tools—for example site furniture—would have been desirable for the inhabitants of Conchal as members of the group would go in search for other resources. This would include instances in Conchal with the potential caching of metates to use after shell harvesting and/or obtaining other foodstuffs. Another possible piece of site furniture was the potential hearth encountered at STP 18.20; this hearth would be available for the members of Conchal to utilize after returning from a harvest. Other caches in Conchal would include hammerstones that the inhabitants cached near the mounds; the group would be able to return to Conchal and utilize these tools to process the molluscs that were brought back to Conchal after the harvest.

Specialization

It is important to determine the types of activities that occur in any particular settlement. This includes specialization in lithic tool manufacturing. The idea of a specialization may be verified through a few different methods. One of these methods includes determining where and how the products were received. A second way is to examine the similarities in the byproducts encountered; if they share similar characteristics then they are most likely produced by specialists. Another way is to examine the physical evidence at one site and determine whether the inhabitants manufactured a surplus of products (Johnson 1996).

When examining whether a site actually had individuals manufacturing products as a specialization, it is important to determine whether it is a part-time or full-time activity. The purpose for the specialization may be determined by analyzing the type of product that is manufactured; specifically if items are produced for simple, everyday activities they are most likely not used to distinguish the class of an individual. When there is a full-time lithic producing activity, the status of the producer is elevated in comparison to the average citizen. Determination of whether the products that were manufactured were utilized as a status symbol is an important piece of any archaeological analysis as it gives insight to the society (Johnson 1996).

Obsidian

Obsidian is a material that has been utilized in pre-Columbian Nicaragua tool manufacturing (Lowry et al 2014). It is important to be aware of what obsidian signifies, if it is encountered. When examining obsidian tools, it is often assumed that they are significant due to the contexts in which they are found as well as the access to the raw obsidian (Johnson 1996). It is difficult to access obsidian in many parts of Nicaragua as it occurs naturally in certain areas are around Lake Nicaragua. Many of the obsidian pieces that are found in prehistoric contexts in Nicaragua have, in fact, been elementally sourced to Guatemala and Honduras (Stross et al 1992).

An Example of a Semi-Sedentary Group and their tool use

To understand the use of tools and how it relates to the culture of a population, one can look to existing research; consider the inhabitants of Western New York. The types of tools utilized by the inhabitants of western New York during different time periods are examined to determine whether there is a different tool kit used by different types of groups. Three different

time periods are examined; these periods are the Late Archaic, the Early Woodland and the Late Woodland. During the Late Archaic, the groups of prehistoric peoples were mobile foragers; many of the bigger sites during this time period surround areas that are near access to water. This changes as the winter months arrive; the large settlements dissipate into smaller groups that inhabit more protected areas. This is supported by the archaeological evidence that indicates that the sites that were located away from water access yielded few artifacts and were relatively minor in size (Cowan 1999).

The next time period analyzed is the Early Woodland; the inhabitants of this time period maintain their previous settlement strategy of seasonal occupation, they also utilized their resources differently. They did not move as far from their settlements as their earlier counterparts. The last period studied is the Late Woodland period. This is when agriculture was being utilized and the prehistoric peoples had access to food that could be stored. The ability to have relatively stable access to food aided the Late Woodland inhabitants' capability to settle year-round. This is exhibited by the two types of Iroquoian settlements; there are the large villages and there are the small encampments (Cowan 1999).

During the Late Archaic, bifaces and cores were encountered as they were useful in creating a large assortment of tools. Tool kits are often encountered, along with a wide variety of tool types for this time period. During the Early Woodland, certain sites were utilized for specific functions. They concentrated on obtaining different resources and had specific tools for specific purposes. They typically used bifaces with a large quantity of flakes as a byproduct of their production. In comparison with the Late Archaic period, the Early Woodland saw a decrease in the variety of tool types (Cowan 1999).

Finally, during the Late Woodland the small sites had a wide variety of lithics attributed

to them; these lithic tools were made to address different procurement strategies and uses. There were two different types of small sites in this period with two very distinct types of lithic materials encountered. There were sites with individuals that had different, distinct tasks for the larger sites and there were the small sites that took care of the crops. The sites that were inhabited for specific functions had bifaces. The harvesting sites had a high frequency of flake production (Cowan 1999).

Many of the tools that archaeologists attribute to mobile or sedentary groups are utilized by both. When analyzing the tools, context must be taken into account to determine whether a group was mobile or sedentary, or possibly in between. The types of tools utilized by a group of people do indicate whether a society was sedentary or mobile. While, tool function has an obvious role in lithic technology, use-wear studies indicate that there are few consistent relationships between functions and morphological tool types (Kelly 1988). This has helped archaeologists determine the manner in which a tool was used (Adams 1988). Depending upon the action, the microscopic analysis will be different (Odell and Odell-Vereecken 1980; Adams 1988). Therefore, both the use-wear and context are important when determining what types of activities a group conducted.

Tool Types Encountered in Nicaragua and the Greater Nicoya

The manner in which lithic materials encountered during Lange's dissertation were analyzed first to determine what type of tool was found. The categories that he created include mortar, manos, ground stone, pestles, adobe, jade and flakes. Lange quantifies the lithic materials from each subarea he investigated for his survey; later in his analysis he discusses the uses for each of the categories. He mentions that manos were used for processing their subsistence; they could be used in processing maize, cacao and tubers. This is similar to metates

and how they were utilized in food processing; the same for mortar and pestles. Jade was often used for adornment purposes, not for processing food or other items (Lange 1971).

In the excavation of Santa Isabel, McCafferty encountered lithic material in every single area he excavated at the site. McCafferty created categories of the type of lithic materials he found; this includes andesite, jadeite/greenstone, red and white chert, as well as obsidian. Jadeite was utilized for more extravagant purposes in the pre-Columbian lower Central American societies. Jadeite was used to make jewelry such as pendants and beads, which are jewelry items typically found. Greenstone is utilized for spindle whorls and other types of textile manufacture, which is then utilized for weaving (McCafferty and Steinbrenner 2005).

Very few tools were found, with well over a thousand flakes that were made of chert being excavated. There was preference for red chert in regard to manufacturing points and other larger tools. Different tool types are categorized; bifaces, scrapers, choppers, points and perforators. The tools are then divided into subcategories depending upon what material they were constructed from (McCafferty and Steinbrenner 2005).

A final example of how lithic materials have been analyzed in the Greater Nicoya area is from Healy. His work was conducted in the Rivas region, which is located on the Pacific portion of Nicaragua. Healy categorized his stone tools first according to the material that had been utilized to manufacture the piece. One category Healy examined is that of the pestles and he created two subcategories of pestles. Another category was that of groundstone pieces, which he further broke down to metates, manos, axes and celts. Some of these categories were broken down even further (Healy 1980). Chipped stone was analyzed separately. This was encountered less often, when compared to the groundstone, throughout his excavations. The chipped stone category has five subcategories and these categories include flakes made of chert, obsidian flakes

and bladelets, knives or projectile points, hammerstones and choppers/pounders (Healy 1980).

In regard to the categories that do not concern the groundstone pieces, the chert flakes found in the Rivas region imply some sort of tool creation. Encountering obsidian was rare and only was found five times during excavations; one of which was a middle piece of a bladelet. Most of the obsidian pieces had originated from the Middle Polychrome period (Healy 1980). The term Middle Polychrome period is no longer used to refer to periods in Nicaragua; Healy is most likely referring to the Sapoá period.

These three examples illustrate the typical types of tools and materials encountered in Nicaragua. They also show the typical activities to which these tools are attributed. With Lange's discussion the tools illustrate that the coastal population focused not only on maritime activities, but also on processing terrestrial resources. This is seen with the abundance of manos and metates, as well as the mortars and pestles.

According to McCafferty's data, there were relatively few tools compared to the frequency of debitage. This indicates that the population was most likely living their lives and creating tools to suit their daily activities. When a tool became dull or broke, it was retouched; either a new tool was created or it was reduced in size. The presence of jadeite at Santa Isabel indicates there was a well-defined class difference.

As for Healy's data, it appears as though the population was focusing on processing terrestrial resources. This is specifically seen with the manos, metates, pestles and mortars. The low frequency of chipped stone may indicate that the population did not conduct the same activities as those who lived in McCafferty's site. Very little obsidian and no jadeite was encountered during Healy's excavations. This indicates that there was very little defined class differentiation in the pre-Columbian population.

By examining these three examples, the data encountered at Conchal is both similar and different to all three sites. Much like Lange's site, Conchal had the manos and metates; it is assumed that both populations conducted similar maritime and terrestrial activities. The one item that Conchal lacked, was that of jadeite. This may mean that the classes within the population were not as well-defined as those in the Bahía de Salinas or possibly that those in Conchal did not have access to jadeite.

Conchal is similar to McCafferty's site, Santa Isabel, considering the chert that was used as well as the manos and metates. Conchal is noticeably smaller and appears to have had a relatively higher frequency of tools compared to Santa Isabel. Conchal was also similar to Healy's site and also smaller in size. In fact, Conchal is considerably smaller than two of the three sites; Santa Isabel is larger, but not nearly as big as Healy's and Lange's sites.

These sites offer a glimpse of the other populations that inhabited the areas near Conchal, while Conchal was inhabited. They show the activities that were occurring during the same time period as Conchal. They show that, while Conchal was smaller in size, the inhabitants conducted very similar activities as their larger-sized neighbors. From this, one may infer that while Conchal focused more extensively on molluscs (e.g. using hammerstones to break shells), they also participated in gathering and processing tubers and possibly maize (e.g. using manos and metates).

The Lithic materials of Conchal. Compared to the amount of ceramics and molluscs found during the excavations of Conchal, the lithic materials were a very low percentage of artifacts. There were a total of 315 lithic artifacts found during the field seasons two and three. While this number is small, there is information that can be gained from analyzing these pieces; this includes the types of activities that were conducted during the settlement of Conchal. Most

of the lithic artifacts found are believed to be tools, which includes the flakes.

What Tools are Anticipated During the Different Time Periods at Conchal. It is believed that Conchal began as a site that was seasonally occupied during the late Bagaces/Early Sapoá. This early settlement period is expected to have curated tools, as there is access to raw materials throughout the Pacific Coast of Nicaragua. It is possible that some of this access is likely due to trade with other groups throughout the Central America. Tool caches may be found throughout the site, this would include hammerstones for breaking open molluscs. Other lithic materials that are anticipated during the early period are more flakes due to flaking cores and changing bifaces to a particular tool. As this site was originally only inhabited on a part-time basis, the overall lithic count would most likely be smaller in number compared to the later settlement. There should be less of a variety of tools during the period when the site was seasonally settled.

Later when the site is permanently settled, there will be more of a variety of tools, with tools that are specific for the daily tasks of hunting, gathering and mollusc harvesting. Other tools found during the later time period of the Sapoá and Sapoá to Ometepe will be for more complex activities at Conchal. This would include hand axes, choppers, pestles, scrapers, metates and manos. The manos and metates are two tools that are found in settlements throughout prehistoric Nicaragua (Healy 1980; Lange et al 1992; McCafferty and Steinbrenner 2005). As Conchal is permanently settled in the Sapoá period, it would be expected that the inhabitants would have similar tools to the surrounding settlements. This is due to the assumption that while this group relied heavily on molluscs, they also would have participated in other sustenance activities similar to their terrestrial neighbors. These activities would have included growing tubers, hunting peccary, deer, etc.

The first time period of Conchal, late Bagaces/early Sapoá, is expected to have mostly flakes and possibly a few cores; these tools indicate that the group was using informal tools. These informal tools indicate that the population is mobile or part-time sedentary. Also, caches of rocks should be encountered, as they illustrate that the inhabitants simply utilized nearby materials to conduct their processing activities and stored these tools for future use. This would illustrate that the initial population was mobile.

If specialization occurred at Conchal, one would expect to find high quality products and areas of the site that were devoted strictly to the tool manufacturing. It is believed that there will be no evidence for full-time specialization at Conchal due to the small size and lack of known sites with which the people would be able to depend solely on trade. It is believed that the members of Conchal had no need for full-time producers, nor could they afford to support any full-time tool manufacturers.

It is believed that very little obsidian and jade/jadeite will be observed in Conchal. These materials were symbolic of different classes (Healy 1980; McCafferty and Steinbrenner 2005) in Nicaragua and it is not believed that there will be much of these two materials found. While it is believed that the population of Conchal did begin to differentiate, this occurred during the latter settlement period. Even with slight class differentiation, as seen with Healy's material, very little obsidian was encountered. Finally, it is assumed that there was no need to seek obsidian to produce tools, as the chert that this population had access to was of relatively high quality.

Analysis Utilized at Conchal

From observations and discussions with Geoffrey McCafferty, it is known that the Pacific portion of Nicaragua had some access to high quality chert. Therefore, in either case of sedentism or mobility, groups would not necessarily need to rely on bifaces as some other groups

may have. But, if there was a wider-range of access to raw materials, there would most likely be more informal tools as there is no need to maintain the tool until there is another point of access to the raw material, as there is consistent access to the material (Kelly 1988). The most plausible use of a biface at Conchal would be as a by-product; this would be in the form of a haft, which would be utilized as a tool to acquire a specific type of resource.

The lithic analysis that was conducted began with a simple differentiation of the types of lithic artifacts encountered at Conchal. They were examined and differentiated according to the material used and their functionality. In regard to the analysis of the obsidian, there were only two pieces encountered at Conchal; one was a flake and the other was a broken bladelet. Therefore, there was no further analysis of the simple quantification conducted on obsidian due to the lack of sample size.

The overall distribution of lithics was also examined. The two illustrations below demonstrate the density of the lithic artifacts encountered during the excavations of Conchal. Please note that the contour interval is 1.5; the odd interval is due to the manner in which the contour lines are seen. Utilizing an interval of two, there is a large absence of lithic materials that ought to be accounted. Also, when utilizing an interval of one, the illustration gives an impression that more pieces were encountered than actually were.

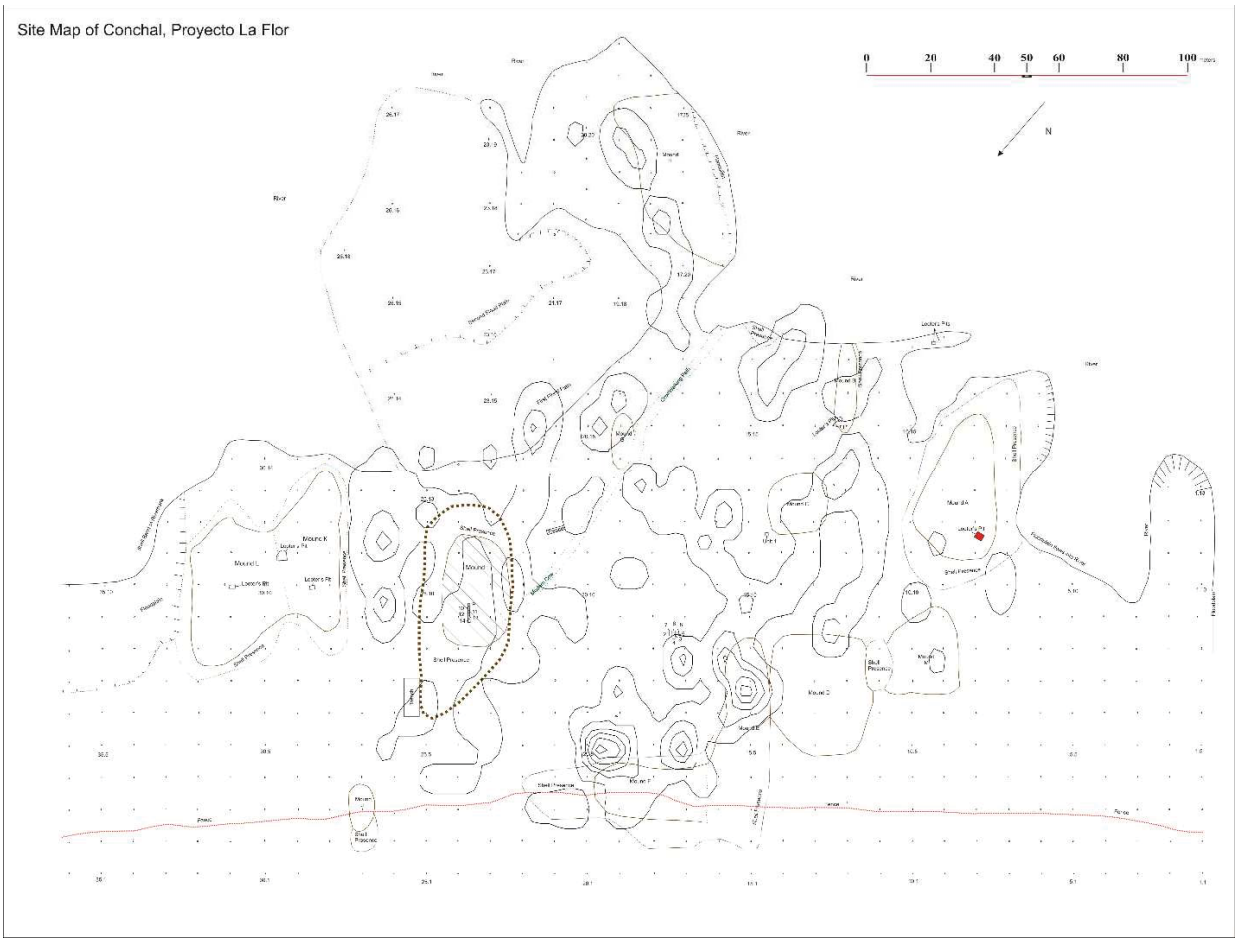

Figure 30 – Illustration of Lithic Distribution Throughout Conchal, Overlaying Site Map

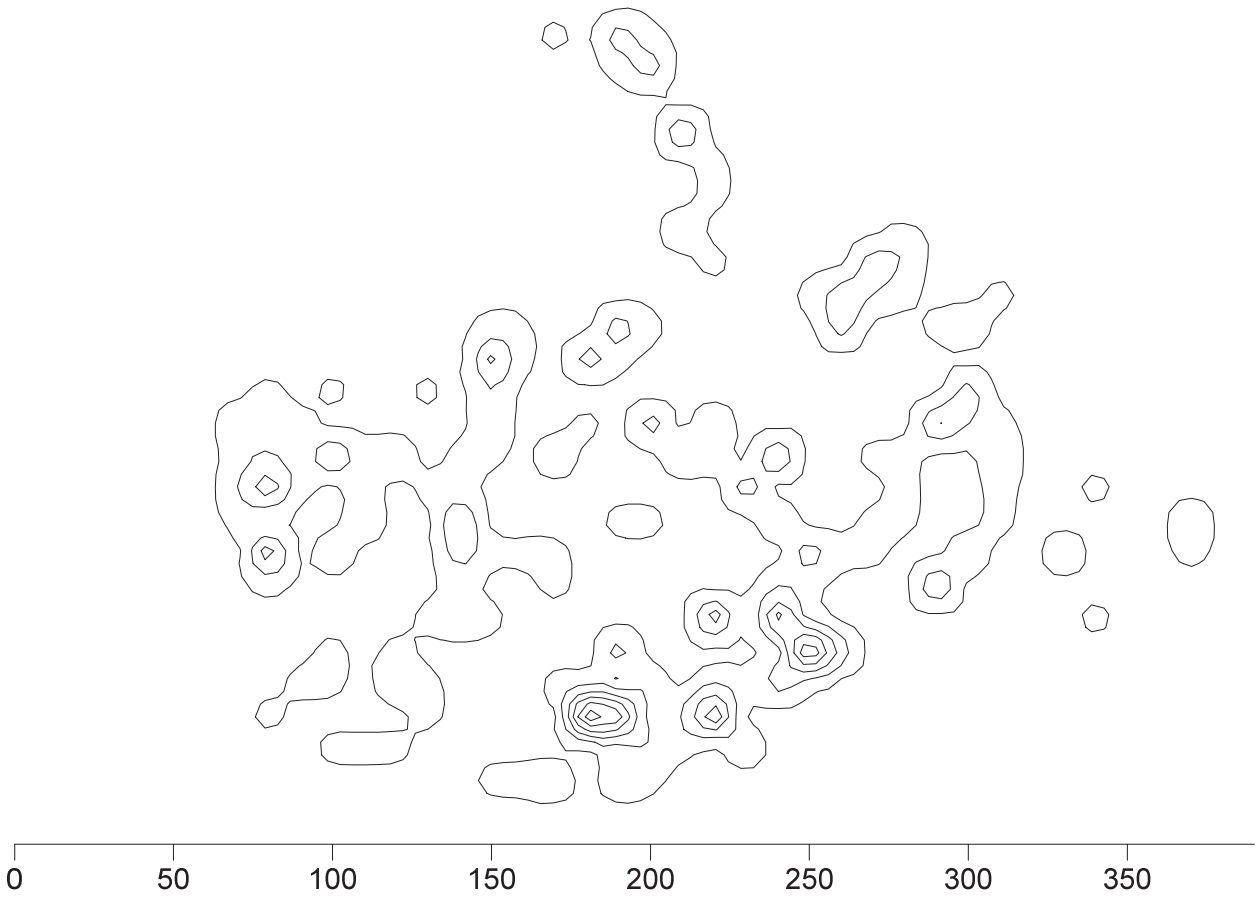

Figure 31 – Distribution of Lithic Materials Recovered During Conchal Excavations

The lithic illustrations in the two images above demonstrate that lithic artifacts were encountered throughout the entire site of Conchal. Much like the ceramics encountered during the excavations, it appears as though the first five to six transects were lighter in density compared to the rest of the site. The clusters of artifacts are typically found within the mounds, which is not surprising as the mounds held the largest amount of artifacts by far when compared to the rest of the site. The different time periods were not differentiated in the illustration as the images that were produced were not meaningful in any fashion.

Lithic materials were only collected in 145 test pits. There were five surface finds of

manos and metates that could not be attributed to any particular time period; these surface finds were included with the shovel test pits as they were all located during the shovel testing period. Units 1 through 13 also encountered lithic materials; Unit 14 is the only unit with no lithic materials attributed.

Primarily flakes were encountered during the STP portion of the project. This was followed by groundstone, which was typically in the form of manos, metates or pestles. There are two examples of the pestles found at Conchal that may be seen in the two photos below (see Photos 17 and 18). Finally, there were a few encounters with a sizeable quantity of natural rocks and these were thought to be distinctive as they were placed in unnatural positions and were clustered. For example, there were a few dozen rocks placed on top of human burials, placed as though they were holding down the buried individual. Others were placed above a dense layer of shells. Finally, other rock clusters were encountered with high shell concentrations. The rocks encountered with the shells are thought to have been utilized in the processing of the molluscs; specifically, the rocks were used to break open the molluscs.

Figure 32 - Photo 17: A broken pestle encountered in level 3 of STP 14.6- Photo 17: A broken pestle encountered in level 3 of STP 14.6

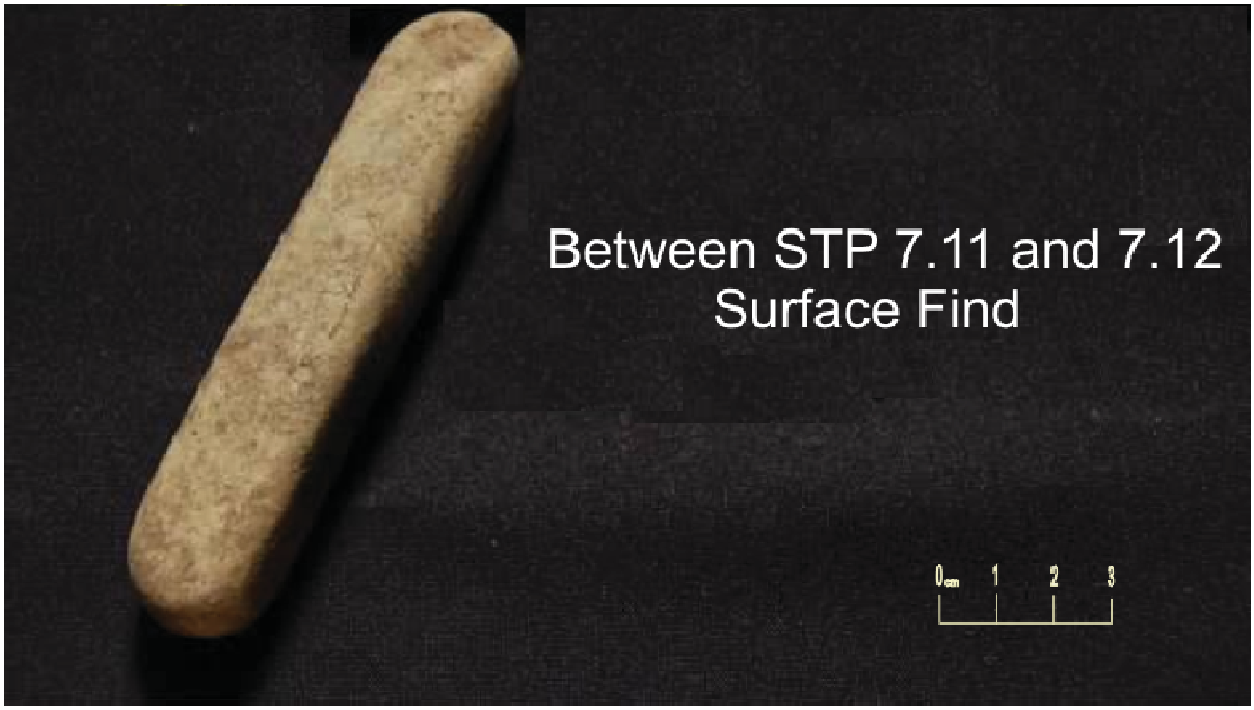

Figure 33 - Photo 18: Surface Find on Mound Between Transects 7 and 8

There were 158 flakes encountered during the shovel testing phase. There were 29 flakes encountered in the units; the total amount of flakes encountered was 187. There were 42 metate pieces in the STP and there were six pieces in the units. These pieces include leg pieces and are shown below in two photos (see Photos 19 & 20). Photo 21 illustrates a large metate piece that was found on the surface (see below). The total metate pieces found at Conchal was 48. There were 19 manos encountered in the STP and none found in the units. Below the metate leg pieces and the metate "body" piece, there is an example of a mano and both a mano and pestle found in STP (see Photos 22 and 23).

There were seven hammerstones found during the STP excavations and two encountered in the unit excavations, adding to a total number of nine. There were six pieces of debitage found while the STP were excavated, with three pieces found in the units, a total of nine all together. One piece found in the units had a hole drilled into it and this piece was determined to be used with a spindle whorl in the production of some type of thread; this thread was most likely used to produce a fishing net (McCafferty 2010).

Figure 34 -

Figure 35 - Photo 20: Metate Leg Piece Surface Find, Near STP 5.8

Figure 36– Photo 21: Probable Metate Pieces from STP 9.7, Level 2

Figure 37 - Photo 22: Mano encountered in the second level of STP 19.3

Figure 38 - Photo 23: Mano and pestle found with human remains in STP 14.7, Level 2

Only one bladelet was found during the STP excavations, which was manufactured out of obsidian. Two points were found at Conchal in total; both were found during the STP phase of the excavations. Both points were broken, see an example in the photo below (see photo 24). Five hand axes were encountered in total; all of them originated in the STP phase. Two pestles were found during the entire time of excavations; both of which were encountered in the STP phase. Eight cores/core fragments were encountered during the STP phase, while one was

uncovered during the unit phase, bringing the total of nine. An example of a core is in the photo following the broken point (see Photo 25, below the point).

Figure 39 - Photo 24: Broken Point Found in Shovel Test 17.3, level 1

Figure 40 - Photo 25: Core encountered in the third level of STP 19.22

There were six pieces of groundstone that were indeterminate; all of which were uncovered during the STP portion of excavations. These pieces were not counted as metates or manos as it was unclear as to their function. There were 14 celts encountered during the STP portion of the excavations, while there was one encountered in the units. There were 15 total number of celts uncovered at Conchal during the excavations. There were two scrapers found during the excavations of the STP; one was found in the units that were excavated. The total number of scrapers attributed to Conchal is three. The natural rocks encountered were typically found in locations that were in and around the mounds; these rocks were always found with a high concentration of molluscs.

Unit 8 had a very deep flake that was associated with the earliest occupation, most likely from the late Bagaces period. Units 5 and 11 had a few flakes that were associated with the

middle time period, Sapoá. Unit 5 had multiple pieces of groundstone including a mano and metate that could not be dated, but are to be assumed to be from the Sapoá period as that is what the other artifacts these pieces were found with are dated.

The heavy concentration of "natural" rocks found with the high density of shells at Conchal were most likely utilized to crack open the mollusc's shell. The cluster of these rocks is believed to be from the early Sapoá period. This concentration of rocks demonstrate a case of caching (Nash 1996); the inhabitants collected rocks that were useful in breaking open shells or to process other foodstuff. They were then left behind in the area after each episode of processing. Eventually, the inhabitants at Conchal either abandoned this manner of processing or utilized another tool to process their harvest. Finally, below is a table (Table 4) illustrating the lithic materials encountered and their location within Conchal. The second table (Table 5) illustrates the percentages of the lithic materials found at Conchal (e.g. flakes made up 58% of the stone artifacts encountered). Please refer to Figures 30 and 31 for maps of the distribution of the lithic materials encountered throughout the excavations at Conchal.

Figure 41 - Table 4: Lithic Data from Conchal:

Provenience	Tool type	Position in the site
STP 1.8 level 1	Debitage	3-4 m north of floodplain
STP 1.9 level 1	core fragment, 1 flake	3-4 m north of floodplain
STP 10.10 level 2	1 flake	4 m north of shell presence for Mound A
STP 10.11 level 1	1 flake	in shell presence for Mound A
STP 10.16 level 2	2 flakes	on riverbank
STP 10.9 level 1	large reduction flake	in shell presence for Mound M
STP 11.11 level 1	1 flake	8 m north of shell presence for Mound A
STP 11.16 level 1	2 flakes, 1 is a reduction flake	8 m northeast of riverbank, 7 m southwest of Mound B
STP 11.17 level 1	1 chert flake, 1 obsidian flake (2 total)	6 m northwest of riverbank
STP 11.17 level 2	1 flake	6 m northwest of riverbank
STP 11.8 level 2	tip of point	in shared area between Mounds M & D
STP 11.9 level 2	one flake	5 m east of Mound M
STP 12.16 level 1	1 mano; 2 metate pieces	in Mound B
STP 12.5 level 1	2 hand axes and 1 celt	in Mound D
STP 12.8 level 1	metate leg	in Mound D
STP 13.16 level 1	1 flake	5 m east of Mound B
STP 13.5 level 1	4 flakes + 2 reduction flakes (6 total)	in Mound D
STP 13.5 level 2	three flakes	in Mound D

STP 13.6 level 1	hand ax	in Mound D
STP 13.7 level 1	large piece of metate	in Mound D
STP 13.8 level 1	1 reduction flake	in Mound D
STP 13.8 level 2	2 flakes	in Mound D
STP 14.11 level 2	1 celt; 3 flakes (one large reduction one)	8 m north northeast of Mound C
STP 14.4 level 2	1 mano; 2 flakes	5 m west of Mound E
STP 14.5 level 2	1 metate piece	3 m north of Mound D, 5-6 m west of Mound E
STP 14.6 level 1	4 flakes	in Mound D
STP 14.6 level 2	metate piece	in Mound D
STP 14.6 level 3	Pestle	in Mound D
STP 14.7 level 2	1 celt; 1 mano	in Mound D
STP 14.9 level 1	2 flakes (one is a reduction flake)	5 m east of Mound D
STP 15.10 level 2	three flakes	15 m east of Mound D
STP 15.2 level 1	hammerstone; reduction flake	in shell presence for Mound E
STP 15.4 level 1	1 flake	in Mound E
STP 16.12 level 1	1 mano; leg of a metate	16 m north northeast of Mound C
STP 16.17 level 2	1 flake	8 m north northwest of riverbank
STP 16.19 level 1	one mano	1 m west of riverbank, 5 m north northwest of Mound H
STP 16.20 level 2	1 mano	in Mound H
STP 16.3 level 1	2 celts , 2 metate pieces, 1 flake	in area shared by Mounds E & F
STP 16.3 level 1	2 celts	in area shared by Mounds E & F
STP 16.4 level 1	metate leg piece	in Mound E
STP 16.4 level 2	1 scraper	in Mound E
STP 16.6 level 1	3 flakes and 2 pieces of debitage	2-3 m east of Mound E
STP 17.11 level 1	2 flakes	28 m northeast of Mound C
STP 17.18 level 1	2 flakes	5 m north of riverbank
STP 17.2 level 2	1 flake	in shell presence of Mound F
STP 17.21 level 1	4 flakes	in Mound H
STP 17.3 level 1	broken point (purple chert)	in Mound F
STP 17.3 level 2	1 flake	in Mound F
STP 18.1 level 2	1 flake	8 m north northwest of Mound F
STP 18.12 level 1	3 flakes	not within 20 m of any mounds or river
STP 18.15 level 1	1 flake	5 m south southwest of Mound G
STP 18.2 level 2	1 groundstone piece	in shell presence of Mound F
STP 18.22 level 2	1 large flake; 1 small flake, 1 scraper	in Mound H
STP 18.23 level 2	one flake	in Mound H
STP 18.3 level 1	1 flake	in Mound F
STP 18.4 level 4	1 mano, 1 flake	in Mound F
STP 18.9 level 1	1 flake	not within 20 m of any mounds or river
STP 19.1 level 2	2 metate pieces	9 m north of shell presence for Mound F
STP 19.14 level 2	Mano	in Mound G
STP 19.15 level 1	3 flakes	in Mound G
STP 19.2 level 1	1 lithic piece	4-5 m north of shell presence for Mound F
STP 19.21 level 1	one metate leg	5 m northeast of Mound H
STP 19.22 level 1	2 flakes	3 m north of Mound H
STP 19.22 level 3	purple chert core	3 m north of Mound H
STP 19.3 level 2	3 flakes, 1 mano, 2 metate pieces (one is a leg)	in Mound F
STP 19.3 level 3	1 metate piece, 1 hammerstone	in Mound F
STP 19.5 level 2	2 flakes; partial core	4 m east of shell presence for Mound F
STP 19.9 level 2	Flake	not within 20 m of any mounds or river
STP 20.12 level 2	1 large metate piece	not within 20 m of any mounds or river
STP 20.14 level 1	2 metate piece; 1 flake	7-8 m northeast of Mound G
STP 20.3 level 2	4 flakes; 2 hammerstones, 1 mano , 1 core, 1 celt piece, 1 metate piece	in shell presence for Mound F

STP 20.4 level 2	1 flake	in shell presence for Mound F
STP 21.1 level 1	1 celt	18 m north of shell presence for Mound F
STP 21.1 level 3	1 mano	18 m north of shell presence for Mound F
STP 21.11 level 1	1 metate leg piece; 1 flake	16 m west southwest of Mound I
STP 21.21 level 1 (was 21.18)	1 flake	not within 20 m of any mounds or river
STP 21.4 level 1	1 flake	in shell presence of Mound F
STP 21.7 level 2	1 core fragment	18 m northwest of Mound I
STP 21.8 level 1	1 large flake	18 m northwest of Mound I
STP 22.1 level 2	1 flake	18 m northwest of Mound F
STP 22.14 level 1	1 flake	2 m west of floodplain
STP 22.8 level 2	1 flake	7 m northwest of Mound I
STP 23.1 level 1	1 flake	18 m north of shell presence for Mound F
STP 23.11 levels 1 & 2	1 flake	in Mound I
STP 23.12 level 1	2 flakes	in shell presence of Mound I
STP 23.13 level 1	2 large reduction flakes	10 m northwest of floodplain
STP 23.14 level 1	hammerstone; 2 flakes (one is a reduction flake); 1 mano piece	on slope of riverbank
STP 23.6 level 2	large flake	7 m west of shell presence for Mound I
STP 23.8 level 1	1 large flake	in shell presence of Mound I
STP 24.10 level 1	mano piece	in Mound I
STP 24.11 level 1	one flake	in Mound I
STP 24.6 level 1	1 groundstone axe, 1 metate leg	4 m west of shell presence for Mound I
STP 24.7 level 1	large reduction flake	in shell presence of Mound I
STP 24.8 level 2	3 groundstone pieces (found w/ human bones)	in shell presence of Mound I
STP 24.9 level 1	1 core fragment; 1 pc of axe, 1 metate piece	in Mound I
STP 24.9 level 2	1 metate piece	in Mound I
STP 25.13 level 2	1 flake	7 m west of riverbank
STP 25.3 level 2	1 flake	16 m west southwest of Mound J
STP 25.4 level 2	1 flake	17 m southwest of Mound J
STP 25.6 level 1	1 flake	within 1 m of shell presence of Mound I
STP 26.11 level 1	1 large piece of metate, 1 mano	10 m southeast of shell presence of Mound I
STP 26.2 level 1	1 flake	5 northwest of shell presence of Mound J
STP 26.4 level 1	1 core	7 m south southwest of Mound J
STP 26.4 level 1	1 metate leg	7 m south southwest of Mound J
STP 26.5 level 1	1 flake	11 m north of shell presence for Mound I
STP 27.10 level 1	1 large flake	7 m northwest of Mound K
STP 27.11 level 1	1 flake	7 m northwest of Mound K
STP 27.2 level 2	1 flake	in shell presence from Mound J
STP 27.9 level 1	2 flakes	5 m west of Mound K
STP 28.11 level 1	1 large piece of groundstone, 1 metate leg, 1 flake	in Mound K
STP 28.11 level 2	1 stone	in Mound K
STP 28.13 level 1	1 flake	in Mound K
STP 28.2 level 1	1 celt	7 m northeast of shell presence from Mound J
STP 28.4 level 2	1 stone	6-7 m southeast of Mound J
STP 28.5 level 1	1 mano	12 m southeast of Mound J
STP 28.8 level 1	1 mano; hammerstone	in shell presence of Mound K
STP 29.10 level 1	1 flake	in Mound K
STP 29.12 level 1	1 hammerstone	in Mound K
STP 29.4 level 1	1 large reduction flake	18 m east southeast of Mound J
STP 30.10 level 1	5 flakes	in Mound L
STP 30.11 levels 1 & 2	1 metate piece; 1 flake	in Mound L
STP 30.12 level 2	1 flake	4 m southeast of Mounds L & K
STP 30.13 level 1	1 flake	7 m southeast of Mound K

STP 30.3 level 1	1 flake	not within 20 m of any mounds or river
STP 30.8 level 1	4 flakes; 1 metate piece	in shell presence of Mound L
STP 31.10 level 1	mano piece; 1 flake	in Mound L
STP 31.11 level 1	1 flake	in Mound L
STP 31.12 level 1	2 flakes	in Mound L
STP 31.9 level 2	1 flake	in Mound L
STP 4.10 level 1	1 celt	1 m north of river
STP 4.6 level 1	1 flake	not within 20 m of any mounds or river
STP 5.8 on surface	1 metate leg	not within 20 m of any mounds or river
STP 7.10 level 1	1 obsidian bladelet	8 m west of Mound A
STP 7.11 level 1	1 metate piece, 1 flake	in shell presence of Mound A
STP 7.12 level 1	1 metate piece	in shell presence of Mound A
STP 7.16 level 1	1 celt	in shell presence of Mound A; 5 m west of river
STP 7.9 level 1	1 flake	15 m west of shell presence of Mound A
STP 8.12 level 1	2 flakes	in Mound A
STP 8.13 level 1	1 celt	in Mound A
STP 8.13 level 2	2 metate pcs (found with human bones)	in Mound A
STP 8.15 level 1	1 celt; 1 reduction flake	in Mound A
STP 8.8 level 1	2 flakes	6 m southwest of Mound M
STP 9.12 level 1	2 reduction flakes, 1 piece of a mano, 1 groundstone chunk	in Mound A
STP 9.15 level 1	1 flake	3 m west of river
STP 9.7 level 2	3 metate pieces	in Mound M
STP 9.7 level 3	1 metate piece	in Mound M
STP From Feb 06, 2009	2 flakes	Ends of transects 9-12; near river
STP From Feb 09, 2009	1 large flake	Transects 12 or 13
STP From Feb 24, 2009	1 large core	Ends of transects 28-30; near river
STP unknown	1 metate leg	
Surface b/w 7.11 & 7.12	1 pestle	in shell presence of Mound A
Surface near 12.15	1 mano; 1 metate leg	in Mound B
Surface near 16.11	large metate pc	not within 20 m of any mounds or river
Surface STP 5.8	1 metate leg	not within 20 m of any mounds or river
STP 18.2 level 1	1 flake	in shell presence of Mound F
STP 29.11 level 1	1 nice, large reduction flake	In Mound K
STP 30.7 level 1	1 flake	10 m northwest of Mound L
STP 25.10 level 1	1 flake	in Shell presence of Mound I
STP 30.12 level 1	1 flake	within 3-4 m of Mound L & K
STP 13.4 level 1	1 flake	7 m north northwest of Mound D
STP 12.15 level 1	1 flake	in Mound B
From Units		
Unit 12 level 1	1 scraper, 2 flakes	in Mound I
Unit 3 level 5	1 flake	not within 10 m of any mounds or river
Unit 7 Strat II (levels 3, 4 or 5)	1 flake	not within 10 m of any mounds or river
Unit 5 level 9	1 flake	not within 10 m of any mounds or river
Unit 2 level 7	1 flake	not within 10 m of any mounds or river
Unit 9 level 4	1 core	in Mound I
Unit 3 level 7	1 large quart/quartzite flake	not w/in 10 m of any mounds or river
Unit 5 level 5	1 flake	not w/in 10 m of any mounds or river
Unknown	1 piece debitage	
unknown	1 broken piece of a celt	
unknown	1 hammerstone piece	

unknown	1 hammerstone	
unknown	1 flake	
Unit 2 level 2	2 flakes	not within 10 m of any mounds or river
Unit 6 level 4	1 flake	not within 10 m of any mounds or river
unknown	1 metate piece	
unknown	1 metate piece	
unknown	1 metate piece	
unknown	1 metate piece	
unknown	1 metate slab	
unknown	1 metate leg	
Unit 3 level 7	1 very large reduction flake	not within 10 m of any mounds or river
Unit 3 level 3	5 flakes total (3 large reduction flakes)	not within 10 m of any mounds or river
Unit 13 level 6	1 large reduction flake	in Mound I
Unit 9 level 2	1 large flake	in Mound I
Unit 8 level 10	1 beautiful flake with large platform	not within 10 m of any mounds or river
Unit 4 level 3	1 flake	not within 10 m of any mounds or river
Unit 5 level 3	3 flakes total (1 med/large reduction flake)	not within 10 m of any mounds or river
Unit 11 level 7	1 flake	in Mound I
Unit 9 level 1	1 stone with hole partially drilled into it	in Mound I
Unit 13 level 1	1 flake	in Mound I
Unit 5 level 9	1 flake	not within 10 m of any mounds or river
Unit 9 level 1	1 flake with a platform	in Mound I
Unit 12 level 6	1 rock	in Mound I

Figure 42 - Table 5: Percentages of types of Lithics Encountered in Conchal:

Total number for STP: 272	Percentage of total	Position in the site:	Percent
Flakes: 158	58%.	In between mounds: 11	4%
Metate pcs: 42	15%.	In mounds: 104	38%
Manos: 19	7%.	In shell presence: 40	15%
Celts: 14	5%.	Near Mounds (within 10 m): 39	14%
Scrapers: 2	less than 1%	Near Shell presence (within 10 m): 15	6%
Hammerstones: 7	3%.	Near River/floodplain: 24	9%
Debitage: 6	2%.	No Significance: 33	12%
Bladelets: 1	less than 1%	Near River and Mounds: 3	1%
Points: 2 (both broken)	less than 1%	Near Shell presence and River: 1	less than 1%
Hand axes: 5	2%.	Unknown: 2	Less than 1%
Pestles: 2	less than 1%	Total= 272	
Cores/core frags: 8	3%.		
Groundstone pcs: 6	2%.		
Total number in Units: 43	Percentages:	Position in the site:	Percentage:
Flakes: 29	67%.	In between mounds: 0	
Metate Pcs: 6	2%.	In mounds: 11	26%
Manos: 0	0%.	In shell presence: 0	
Celts: 1	2%.	Near Mounds (within 10 m): 0	
Scrapers: 1	2%.	Near Shell Presence (within 10 m): 0	
Hammerstones: 2	5%.	Near River/floodplain: 0	
Debitage: 3 (includes rock w/ hole)	7%.	No Significance: 21	49%
Bladelet: 0	0%.	Near River and Mounds: 0	
Points: 0	0%.	Near Shell Presence and River: 0	

Hand axes: 0	0%.	Unknown: 11	26%
Pestles: 0	0%.		
Cores/core frags: 1	2%.	Total= 43	
Groundstone pcs: 0	0%.		
Total number for the site: 315	Percentages:		
Flakes: 187	59%.		
Metate Pcs: 48	15%.		
Manos: 19	6%.		
Celts: 15	5%.		
Scrapers: 3	1%.		
Hammerstones: 9	3%.		
Debitage: 9	3%.		
Bladelets: 1	less than 1%		
Points: 2	less than 1%		
Hand Axes: 5	2%.		
Pestles: 2	less than 1%		
Cores/core frags: 9	3%.		
Groundstone pcs: 6	2%.		

The analysis of the lithic materials encountered at Conchal indicates that the inhabitants conducted typical daily activities for the average lower Central American pre-Columbian. Originally, the inhabitants of Conchal conducted maritime activities; specifically, they harvested molluscs. During the subsequent generations, the inhabitants partook in activities very similar to those conducted in the Greater Nicoya. Examples include the inhabitants of Bahía de Salinas and Santa Isabel.

The analysis of the data illustrates a progression from a small semi-nomadic/semi-permanent settlement to a settlement with a class differentiation. The early stone tools illustrate processing of molluscs and nothing more. This is supported by the relatively small amount of lithic materials encountered; flakes were the predominant artifact found for this period, as well as a few cores. These tools would be considered to be informal tools or made from informal tools. This informality indicates that the group brought with them bifaces and/or cores that would be

easily manufactured into a wide variety of tools depending upon what the group encountered and needed at a particular time. The flakes and few cores indicate this group was semi-mobile during the late Bagaces/early Sapoá period. The early caches of "natural rocks" also indicate the probability that the group was semi-nomadic as it was most likely unnecessary for them to carry these rocks with them when they left the area.

The analyses of the lithic materials that date to the Sapoá period illustrate a permanent settlement in which the inhabitants continued processing maritime resources, as well as the expansion to processing terrestrial resources. This is demonstrated through the usage of manos, metates, pestles, points, scrapers and mortars. The increase in the diversity of tools utilized by the inhabitants of Conchal is indicative of a more sedentary lifestyle with more activities being conducted daily. Most of the tools are considered to be formal tools, which is also indicative of a more sedentary group. The presence of these tools also indicate the processing of agricultural products, such as tubers and possibly maize.

The late Sapoá/early Ometepe shows that the population was beginning to differentiate into other activities, as well as differentiating in class. There were other types of tools that began to appear; these include celts, hammerstones and hand axes. The inhabitants still utilized previous tools as well—such as manos, metates, pestles, points, scrapers and mortars. The increase in tool types is indicative of a larger diversity in activities occurring in and around the site. This increase directly correlates with a sedentary society. When this site was abandoned, the population was on the verge of becoming a highly-differentiated society.

Chapter 7: Chronology through Ceramic Analysis

The Analysis of the Ceramics of Conchal, Nicaragua

Ceramic analysis is crucial when examining most archaeological sites, including Conchal. Of the man-made artifacts found, ceramics had the highest frequency of all artifacts. Over 40,000 ceramic sherds were encountered during the excavations, with approximately 10% identified. The first step in the analysis is to understand what ceramic pieces can tell about a prehistoric site.

Ceramic vessels have a variety of functions, many of which do not pertain to cooking. Rice states that the there are three general functions regarding vessels, which includes processing, transport and storage (2005 [1987]). When analyzing vessels, it must be noted that one "form" of a vessel may be utilized for multiple purposes. An example of this may be a large vessel that can be used for storing and transporting foodstuffs (Rice 2005 [1987]).

When archaeologists encounter ceramic vessels (or sherds in regard to Conchal), context may be useful in determining their functionality. For example, pieces found with burials may be interpreted as funerary objects. Sadly, most of the sherds encountered in Conchal were not encountered in a context that would lend to a plausible interpretation of the vessel's function. This is due to the fact that a large majority of the sherds were encountered in mixed contexts in the mounds. Therefore, the shape of the sherd—when available—was utilized to aid in the interpretation of the function of the ceramic piece.

When examining ceramic sherds to determine vessel functionality, the most useful piece is that of the rim, if an entire vessel is not encountered. The rim often conveys the type of vessel the piece once was. The next best useful piece in analysis is the base; while bases may not be as revealing as rims, they may be more precise in regard to the calculation of the minimum number

of vessels in a particular site. Finally, regarding body sherds, they are "…the most difficult to work with. This is unfortunate, because most archaeological ceramic collections consist primarily of body sherds…(Rice 2005 [1987]: 223)" Sadly, this was the main source for the analysis of the ceramic pieces encountered during excavations of Conchal.

The treatment of the surface of a ceramic vessel may not only be for aesthetic purposes, but possibly for functional reasons. An example would be striating a surface; striations are known to aid in gripping a vessel. This is particularly useful if a vessel is heavy and/or slippery. Striating large containers is typical in Mesoamerican prehistory (Rice 2005 [1987]).

The orifice size may explain for what activity a vessel was utilized. Large openings allow for the ability to have open access to the contents inside the vessel. Small, closed openings to vessels allow for the contents to be kept and stored. Supports and bases give vessels stability; they also offer for the manufacturer to add aesthetic decoration to the piece (Rice 2005 [1987]).

Chronology of Greater Nicoya Ceramics

The ceramics utilized in the Greater Nicoya Peninsula are similar if not the same during much of prehistory only diverging toward the latter Ometepe period (Healy 1980; McCafferty and Steinbrenner 2005; Niemel 2005). These ceramic traditions were found in the southwest Pacific Nicaragua and the northwest Pacific Costa Rica along the Greater Nicoya Peninsula (Healy 1980; Creamer and Haas 1985; Hoopes 1994; McCafferty 2008).

The chronology of the Greater Nicoya encompasses that of Conchal and its surrounding area. The ceramics traditions encountered in the Pacific portion of Nicaragua, as well as in northwestern Costa Rica, were originally defined in four time periods and were specifically designated for Costa Rica; later this chronology was transposed upon Nicaragua (Coe and

Baudez 1961; Niemel 2003). The first being the Zoned Bichrome period, which spanned from AD 1-300 (Coe and Baudez 1961; Niemel 2003). The second time span was the Early Polychrome period, which extended from AD 300-750 (Coe and Baudez 1961; Niemel 2003). Following the Early Polychrome period was the Middle Polychrome period, which dated to AD 750-1000 (Coe and Baudez 1961; Niemel 2003). The final time period was referred to as the Late Polychrome Period and spanned from AD 1000-conquest (Coe and Baudez 1961; Niemel 2003).

The chronology put forth by Coe and Baudez pertained to their research and data collection in Costa Rica. It was adjusted to correspond with Nicaraguan prehistory by Norweb. Norweb made alterations while he was examining the ceramics he recovered during his excavations in the areas of Managua, Masaya, Granada and Rivas. His adaptations were as follows: the Zoned Bichrome began 500/350 BC to AD 300/400 (Niemel 2003); Early Polychrome AD 300/400-800; Middle Polychrome AD 800-1200; and, Late Polychrome AD 1200 to conquest (Creamer 1992; Niemel 2003).

The definition of time periods changed in the 1990s (Niemel 2003) as well as in 2010, with an expansion in 2013 (Steinbrenner 2010; Steinbrenner 2013). The modern practitioners of Nicaraguan archaeology utilize the following time periods: The Tempisque - 500 BC-AD 250, Bagaces - AD 250-700/800 (Dennett, Platz and McCafferty 2011; Steinbrenner 2013), Sapoá - AD 700/800-1250/1350 and Ometepe - AD 1250/1350 to conquest periods (McCafferty and Steinbrenner 2005; McCafferty 2008; Steinbrenner 2010; Steinbrenner 2013). Types of ceramics characteristic of this time period include the Garcia Ridged, Schettel Incised and Rosales Zoned engraved (Niemel 2003).

The ceramics that characterize the Bagaces period are polychrome and have

anthropomorphic themes. The types of ceramics attributed to this phase include Chávez White on Red, Tola Trichrome and Red Band Espinoza. Others include Potosí Applique and Black Band Velasco. The typical colors utilized on these ceramics are tan, black, orange and red (Niemel 2003). The later portion of this phase is characterized by Papagayo: Culebra, Momta, Chavez and Agurcia (Niemel 2003; Steinbrenner 2013). There is a major ceramic tradition found in the later portion of the Bagaces is also found in the Sapoá. This ceramic tradition that continues into the Sapoá is the Papagayo polychromes (McCafferty 2008; Steinbrenner 2010). Other varieties of the Sapoá include Sacasa Striated, Mora Polychrome, Pataky Polychrome and Granada Polychrome (Steinbrenner 2010).

The early Ometepe period is characterized by polychrome ceramics. The typical ceramics of this time period include the Castillo Engraved and Vallejo and Madeira polychromes (Niemel 2003; McCafferty 2008). Vallejo and Madeira are most likely late Sapoá transitioning into Ometepe (Steinbrenner 2013). Other ceramic types include Banda, Luna, Bramadero Polychrome and Murillo Applique. The ceramics begin to exhibit motifs that are Mexican-related, with serpents and other gods that are associated with Central Mexico. The ceramics become more complex and the designs and array of colors utilized vary widely (Niemel 2003). Please refer to the table below (Table 6) for select examples of ceramics from each time period—including the transition periods between these periods.

Figure 43 - Table 6: Examples of ceramic types found in the four time periods of interest for Conchal:

Name of Time Period	**Dates**	**Ceramics that Characterize Period**
Tempisque	500 BC-AD 300	Shallow hemispherical bowls with tripod supports
Bagaces	AD 300	Potosi Applique, Momta, Red-slipped figurines
Transition from Bagaces to Sapoá	AD 800	Papagayo followed by Pataky and Granada

Sapoá	AD 1000	Papagayo, Pataky, Granada, Isabel, Vallejo
Late Sapoá to Ometepe	AD 1250	Madeira, Vallejo and El Menco

Classifications of Nicaraguan Ceramics of the Sapoá Period Encountered in the Department of Rivas:

Type: Bramadero Polychrome*
Variety: Bramadero
Established: By Steinbrenner (2010: 596-598) with a discussion regarding paste, slip and forms. Lange (1971: 96-120) with a brief discussion of this type encountered at the Las Marias site, which is a shell mound/midden site on an estuary or creek in Costa Rica.
Ceramic Group: Granada-Madeira Group
Ware: Nicoya Polychrome
Ceramic Complex: Late Sapoá
Ceramic Sphere: Nicoya Peninsula—both Pacific Nicaragua and Guanacaste, Costa Rica.
Description:

Principal Identifying Modes: Has an orange/cream or white slip and red and black paint.

Surface Finish and Decoration: Steinbrenner believes the interior band on all vessels was decorated with a red band. The exterior can be decorated in two ways; both are with red and black. The superhemispherical bowls have a cream or white slip on the exterior; with the interior being either wiped with a slip or fully slipped.

Forms: Steinbrenner states that every Bramadero Polychrome vessels encountered is a superhemispherical bowl with a direct rim. The rim is either tapered or rounded (2010).
Intra-site Locations and Contexts: Bramadero Polychrome sherds were encountered sporadically in Conchal. They were found in the shell presence of Mound A, in Mound A, shell presence of Mound F and in Mound F.
Inter-site Locations and Contexts: Bramadero was encountered in Santa Isabel (Steinbrenner 2010), as well as in Granada, Nicaragua (Salgado 1996) and in Las Marias, Costa Rica (Lange 1971).
Cultural Significance: Steinbrenner asserts that Vallejo, Madeira and El Menco are all contemporary with Bramadero; thus Bramadero dates to the Late Sapoá period.
Illustration: Please See Figure 42, Photo 26 Below

Figure 44 – Photo 26: Example of a Bramadero Rim Sherd

Type: Castillo Engraved
Variety: Castillo
Established: Originally, Lothrop gives a description of Castillo Engraved with an appearance of Orange-Brown, Black or Chocolate Monochrome Wares. Lothrop attributes these types as those being encountered in northwestern Costa Rica (1926: 227). Healy described this type variety in 1980 (97-104). Steinbrenner gives an in-depth, corrected discussion regarding this type (2010).
Ceramic Group: Lago Group*
Ware: Chocolate
Ceramic Complex: Sapoá
Ceramic Sphere: Pacific Nicaragua (northern Greater Nicoya)*
Description:

Principal Identifying Modes: Healy describes this as a black or brown colored slip, with Steinbrenner adding a red slip to this category (1980). The exterior of the vessel may be decorated with animal, triangular or linear motifs; almost always on the rim's exterior. Typical vessels include cylinders, tripod bowls with supports, necked ollas, hemispherical bowls, flat-bottomed bowls, superhemispherical bowls and periform vases (Steinbrenner 2010).

Paste and Temper Group: The base of the paste of Castillo is volcanic ash, not clay (Steinbrenner 2010). Originally, the temper was believed to be sand with andesite and feldspare (Healy 1980); this was before Dennett of the University of Calgary tested the paste.

Surface Finish and Decoration: The exterior slip is typically chocolate (or brown), black and red (or tan). The red color is less common, with the darker brown and black being more ubiquitous. It is believed that the different coloring—including the red—is due to the firing. Steinbrenner noted that there are vessels that have both red and a darker color, which he believes to be from the firing process. Periform vases were typically red, which Steinbrenner believes to be due to their size and the lack of ability to fire these objects as successfully as the smaller vessels (2010).

Forms: The vessel shapes are not easily determined based on the sherds alone (Steinbrenner 2010). There are hemispherical bowls and deep hemispherical bowls, which have been placed on a continuum by Steinbrenner. The rim sherds are thinner than those of the Papagayo-Vallejo group.
Intra-site Locations and Contexts: Castillo Engraved was found sporadically throughout Conchal. It was specifically found in shell presence of Mound A, in Mounds D, E, F, H, I and K.
Inter-site Locations and Contexts: Castillo was encountered during excavations at Ometepe Island (Healy 1980); Granada (Salgado 1996); Rivas (Niemel 2003); and Santa Isabel (Steinbrenner 2010).
Cultural Significance: Healy described Castillo as that being from the beginning of the Late Polychrome, which is around the Ometepe period (1980). Through his analysis, Steinbrenner has determined that Castillo in fact is indicative of the Sapoá period; it is believed to be the link between the ceramics of the Bagaces and the Sapoá period. Castillo is believed to have been used both ceremonially and in utilitarian contexts. The paste of some of the Castillo sherds originated from an unknown region (2010).
Illustrations: Please see Figures 43 and 44 (Photos 27 and 28) below; both are rims, with the second one being incised.

Figure 45– Photo 27: Rim of Castillo Vessel

Figure 46 – Photo 28: Rim of Castillo Vessel

Type: Combo Colander
Variety: Unspecified
Established: Healy established this in his doctoral work (1980: 113-115), with a sample size of over 200 body sherds. Steinbrenner also discusses this in his doctoral work (2010: 611-613).
Ceramic Group: Indeterminate
Ware: Indeterminate
Ceramic Complex: Sapoá
Ceramic Sphere: Pacific Nicaragua (northern portion of Greater Nicoya)
Description:

Principal Identifying Modes: Healy describes it as a slipped orange, polished surface; with "(2) punctation holes, usually aligned in rows, completely perforate vessel bottom, resulting in a strainer or colander, (3) tecomate-like form (1980: 113)."

Paste Group: Healy describes it as opaque feldspar and calcite (1980); Steinbrenner's analysis determined that the paste is unidentified with the one rim sherd having a "bright red paste (1980)."

Surface Finish and Decoration: the exterior is polished after firing and according to Healy is slipped orange and smoothed (1980); Steinbrenner maintains that vessels are red polished or dark orange, which ranges down the vessel. The perforations occur just above the shoulder, with the entire vessel being perforated (2010).
Forms: Steinbrenner says that all rims encountered were attributed to "…small ollas with stubby vertical necks ending in direct, squared rims…(2010: 611)" Unlike the name, it is not believed the vessel was utilized in food preparation. It is thought that it was possibly used as an incense burner (Steinbrenner 2010).
Intra-site Locations and Contexts: Combo Colander sherds were not encountered during excavations at Conchal.

Inter-site Locations and Contexts: Healy (1980) encountered this type of vessel in multiple contexts, as did Niemel (2003) and Steinbrenner (2010). They have also been encountered in other parts of Nicaragua, including Managua (Lange, ed. 1996) and Granada (Salgado, 1996).
Cultural Significance: There are other similar sherds encountered as far north as the Guatemala Highlands; these sherds are not thought to be the same type. The sherds found north of Nicaragua are attributed to the Preclassic Period, which is significantly earlier than the Sapoá period (Steinbrenner 2010).
Illustrations: None

Type: Craneo Polychrome*
Variety: Craneo
Established as a Type-Variety: Steinbrenner (2010), with the description based upon one complete vessel and five rims sherds.
Ceramic Group: Papagayo-Vallejo Group
Ware: Nicoya Polychrome
Ceramic Complex: Sapoá
Ceramic Sphere: Pacific Nicaragua (northern portion of Greater Nicoya)
Description:

Principal Identifying Modes: black and red paint; motif decoration on the exterior surface; horizontal red rim bands decorate the interior surface; tripod bowls with supports, and; white slip is present (Steinbrenner 2010).

Paste Group: Locally Rivas-made paste

Surface Finish and Decoration: Exterior and Interior surfaces are both white slipped. Exterior is decorated with a motif with bottom portion having a black border.

Forms: The tripod bowl with mammiform supports is the only form of ceramic attributed to this type. The Craneo vessel is very similar in form to the Papagayo tripod bowl (Steinbrenner 2010).

Intra-site Locations and Contexts: None were encountered/identified during excavations at Conchal. This may be due to the lack of knowledge of this new type by the author of this study.
Inter-site Locations and Contexts: Steinbrenner is the only known identified as Craneo (2010).
Cultural Significance: Unknown. Craneo is believed to be associated with the Papagayo-Vallejo Group.
Illustrations: None

Type: El Menco Polychrome
Varieties: El Menco, Leyenda, Quixote, Rojo and Simio
Established: Was proposed by Knowlton (1996), but not fully described until Steinbrenner (2010). Steinbrenner establishes the description and adds varieties to

the proposed type. There is an El Menco variety of the Luna Polychrome, which is not the same type.
Ceramic Group: "Transitional" Group
Ware: Nicoya Polychrome
Ceramic Complex: Late Sapoá
Ceramic Sphere: Pacific Nicaragua (Northern portion of the Greater Nicoya)
Description:

Principal Identifying Modes: off-white or cream slip; decorated with either orange-red, grey-brown or brown-black paint; a "winged head" motif decorates the exterior of the vessel; examples of vessels include flat-bottomed bowls, hemispherical bowls, complex bowls, periform vases and superhemispherical bowls (Steinbrenner 2010).

Paste Group: The paste is associated with Granada and Madeira pastes

Surface Finish and Decoration: Often mistaken as Luna in earlier excavations; this is due to similar paint colors. The paints of El Menco have poor preservation and has been rubbed off with vigorous cleaning or rubbing of the finger over the sherd. The "winged head" is characteristic of El Menco and was originally noted by Knowlton; this decoration is on the exterior surface. The typical vessels are complex bowls, hemispherical bowls and superhemispherical bowls. The superhemispherical bowls resemble Bramadero decorations (Steinbrenner 2010).
Forms: El Menco is associated with multiple vessel forms; these include hemispherical and superhemispherical bowls. There are also flat-bottomed bowls, which Steinbrenner believes to resemble Vallejo: Pica (subtype) vessels (2010).
Intra-site Locations and Contexts: El Menco was found sporadically throughout Conchal; it was encountered in 24 different contexts. A number of tests near Mounds A, D, F, I, L and M had a presence of El Menco; in the middle of the site near the cow path there were three tests with a presence and in the trench of Mound I there were multiple Test Units with El Menco being found in the later dated levels.
Inter-site Locations and Contexts: El Menco has been encountered in Costa Rica, as well as in other Nicaraguan sites. The largest problem with this type is that until recently it had been joined with Luna Polychrome (Steinbrenner 2010).
Cultural Significance: It is diagnostic of Late Sapoá period and is believed to have arrived after the Madeira and Vallejo polychromes, which are also associated with the Late Sapoá. Steinbrenner believes that El Menco may have been Luna Polychrome's predecessor. El Menco is associated with the burial practices of the Late Sapoá and is not believed to have been used as a serving ware (2010).
Illustrations: Please See Both Photos (29 and 30) Below; the first is an exterior image of a rim and the second is a photo of multiple rims most likely from either one or two vessels.

Figure 47 – Photo 29: Exterior Rim of an El Menco Sherd

Figure 48 – Photo 30: Multiple Rims from at least one El Menco Vessel

Type: Granada Polychrome
Varieties: Granada, Bandera and Sapo
Established as Type Varieties: Granada Polychrome was established by Norweb in 1964, with Healy elaborating on this type (1980). Originally only one variety was identified, with Steinbrenner adding two additional varieties (2010).
Ceramic Group: Granada-Madeira Group
Ware: Nicoya Polychrome
Ceramic Complex: Probable Early Sapoá
Ceramic Sphere: Pacific Nicaragua (Northern Portion of Greater Nicoya)
Description:

Principal Identifying Modes: Beige/Buff or Orange slip; black and red paint; decorated with jaguar-like animals; horizontal black bands and lines are found on the exterior wall surface, with red and/or black vertical bands along the base; the interior surface may also have the presence of horizontal bands (Steinbrenner 2010).

Paste Group: The same paste associated with Madeira and El Menco

Surface Finish and Decoration: Both interior and exterior surfaces are slipped and smoothed. Typically painted with red or black, with the black paint possibly being dark brown. Many of the Granada pieces analyzed by Steinbrenner were hemispherical bowl pieces. A unique vessel form to Granada Polychrome is that of the deep outflaring bowl. Granada also has tripod and/or flat-bottomed bowls (Steinbrenner 2010).

Forms: There are different vessels that are associated with Granada; these include the flat-bottomed, tripod bowls, deep outflaring bowls, periforms, effigy bowls and hemispherical bowls. The deep outflaring bowls are thought to resemble Papagayo: Culebra's pedestal bowl. The Bandera type has a rattle in its support pieces.
Intra-site Locations and Contexts: Granada Polychrome was encountered throughout the site in 240 different contexts. This includes near and in Mounds A, D, E, F, H, I, K, L and M; and near Mounds B, C and J. Granada was also encountered near the riverbank.
Inter-site Locations and Contexts: Granada Polychrome pieces have been encountered throughout the department of Rivas (Niemel 2003; Steinbrenner 2010), as well as in Granada (Salgado 1996).
Cultural Significance: Granada Polychrome marks the early Sapoá period for the Greater Nicoya region. It is contemporaneous with Pataky, Isabel and Papagayo. Steinbrenner believes that this eventually is replaced by Madeira Polychrome. Granada Polychrome is thought to have originated on Ometepe Island by Chibchan potting traditions that were associated with the larger ceramic group of Papagayo-Vallejo Polychromes. The Granada variety of Granada Polychrome may have been utilized in burial practices (Steinbrenner 2010).
Illustrations: See Photos 31 and 32; Photo 31 is of a Granada Support; the next Photo (32) is of a Granada-Madeira rim to a hemispherical bowl.

Figure 49 – Photo 31: Granada Support

Figure 50 – Photo 32: Granada-Madeira Rim to a Hemispherical Bowl

Type: Isabel Polychrome*
Variety: Isabel
Established as a Type Variety: Isabel Polychrome was established by Steinbrenner in 2010. The ceramics now classified as Isabel Polychrome were originally classified as the variety of Mombacho under Vallejo and Papagayo Polychromes. It is also believed that certain pieces classified as Pataky would now also be classified as Isabel Polychrome (Steinbrenner 2010).
Ceramic Group: Papagayo-Vallejo Group
Ware: Nicoya Polychrome
Ceramic Complex: Sapoá
Ceramic Sphere: Pacific Nicaragua (northern sector of Greater Nicoya)
Description:

Principal Identifying Modes: cream, buff or white slip; red and black paint; simple bands decorate the exterior with red motifs along the rim; black and red vertical lines alternating; undecorated interior except band along rim; vessels typically associated are hemispherical bowls, superhemispherical bowls, periform vases, shallow bowls/saucers and tripod bowls (Steinbrenner 2010).

Paste Group: The paste appears to be of local manufacture. Steinbrenner's analysis of the paste was problematic due to the fact that only after the sherds were collected was it realized there was a new ceramic type. Many of the bowls were originally classified as Papagayo (2010).

Surface Finish and Decoration: Typically white slipped, with some pieces having a buff or cream slip. The interior surface is not always fully slipped, particularly regarding the superhemispherical bowls, periform bases and hemispherical bowls.

Isabel Decorative Modes: The decoration is not as detailed as other polychromes encountered in Nicaragua. Isabel Polychrome is described as "…simplified versions of decorative modes associated with Papagayo and Vallejo, and unlike most Papagayo and Vallejo painted modes, Isabel painted modes in most cases appear to have been applied quickly without being outlined prior to being 'coloured in' (Steinbrenner 2010: 664)." Typically red and black paint are utilized, except for certain examples of light red filling in a motif of dark red.
Forms: Periform vases, saucers, tripod bowls, hemispherical bowls and superhemispherical bowls.
Intra-site Locations and Contexts: Isabel Polychrome was only found once in Conchal. It was encountered in Test Unit 1, level 4. This unit was placed near the only non-shell Mound of the site (Mound C). It may have been more prevalent in Conchal, but due to the lack of knowledge of the author, only one sherd was identified.
Inter-site Locations and Contexts: The sherds identified as Isabel in the department of Rivas by Steinbrenner. Steinbrenner believes that the ceramics found by Gorin in 1990 in Chontales, Nicaragua are actually Isabel. Also, other ceramic pieces found in Tola, Rivas and Ometepe should be classified as Isabel (2010).

Cultural Significance: Isabel Polychrome is believed to be related to Papagayo-Vallejo Polychromes. The motifs found on Isabel Polychromes resemble those found on Vallejo and Papagayo Polychromes; Isabel is also linked to Pataky Polychromes. Both Pataky and Isabel utilized the same colors in their design. Steinbrenner believes that the potting tradition that produced Pataky, Papagayo and Vallejo were connected with those who produced Isabel (2010: 672).
Illustration: Photo 33 is an image of an Isabel Polychrome body sherd

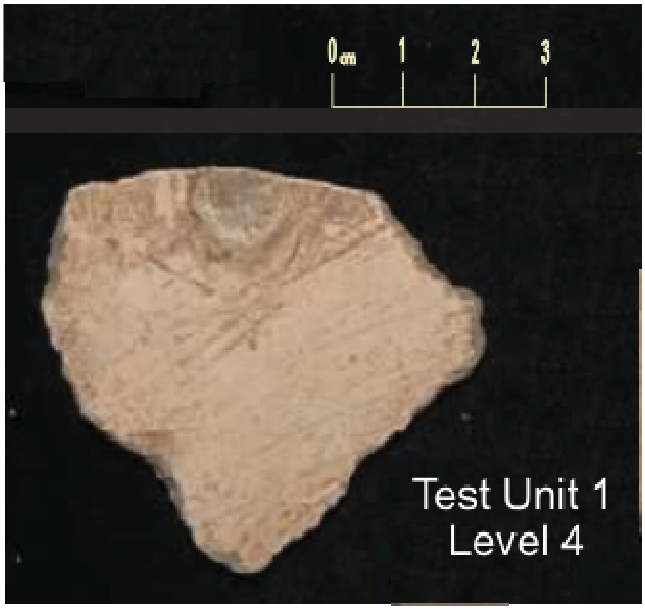

Figure 51 – Photo 33: Body sherd of an Isabel Polychrome

Type: Jorge Red-on-Buff*
Variety: Jorge
Established as a Type Variety: Steinbrenner 2010.
Ceramic Group: Indeterminate
Ware: Indeterminate
Ceramic Complex: Sapoá
Ceramic Sphere: Pacific Nicaragua (Northern Sector of Greater Nicoya)
Description:

Principal Identifying Modes: polished surfaces with tan or buff self-slipped vessels; upper part of vessel is painted light red; small vessels including bottle jars, basin-ollas, hemispherical bowls and short-necked ollas.

Paste Group: Associated with Monochrome pieces; specifically with Tolesmaida

Surface Finish and Decoration: Has a polished surface that is unique to any of the bichrome or monochrome identified in the department of Rivas; the upper body portion and rim is painted red. Apparently an earlier ceramic type called Apompua Modeled from the Tempisque period is similar to Jorge Red-on-Buff.
Forms: There were three types that of vessels that Steinbrenner identified with Jorge Red-on-Buff; these include the bottle jars, short-necked ollas and basin-ollas. It is

believed that there are composite silhouette and hemispherical bowls associated with this type, but the sherds most associated with these two type were not documented well (Steinbrenner 2010).
Intra-site Locations and Contexts: There were no Jorge Red-on-Buff sherds encountered during excavations at Conchal. This may be due to the lack of experience from the investigator and/or the lack of knowledge of the new type of ceramic identified.
Inter-site Locations and Contexts: Only Santa Isabel, department of Rivas (Steinbrenner 2010).
Cultural Significance: Jorge Red-on-Buff is linked to sites located on Lake Nicaragua's island sites. These types bear a resemblance to an early Costa Rican type called El Bosque Red-on-Buff.
Illustrations: None

Type: Lago Monochrome
Variety: Lago
Established as a Type Variety: Originally identified by Healy as the Lago Black Modeled in the Castillo Group (1980: 133). Steinbrenner modified this type by linking black slip and red slipped vessels (2010). The original modeled samples is believed to be an option for some Lago pieces.
Ceramic Group: Lago Group*
Ware: Chocolate Ware
Ceramic Complex: Sapoá*
Ceramic Sphere: Pacific Nicaragua (Northern Sector of Greater Nicoya)
Description:

Principal Identifying Modes: Black or red slip that is often polished or glossy; there are modeled supports on tripod bowls, modeled designs on vessel bodies, bottle jars and simple hemispherical bowls.

Paste Group: The same paste associated with Tolesmaida and Jorge Red-on-Buff

Surface Finish and Decoration: The slip of the rim on Lago can be chocolate to near-black to red; the texture may be polished/glossy or matte. The near-black and chocolate slips were the most preferred color. Appliqué designs are found on most of the complete vessels that Steinbrenner analyzed. Other designs on Lago vessels include turtles, birds, "caiman-like" creatures and monkey or human portraits.
Forms: There are multiple forms associated with Lago Monochrome. There are modeled support tripod bowls, periform vases, superhemispherical bowls and bottle jars (Steinbrenner 2010).
Intra-site Locations and Contexts: Lago Monochrome was found in 58 instances during excavations at Conchal. Sherds were encountered in Mounds A, C, D, E, F, H, I, J, K and L. As well as near the riverbank and in the shell presence of Mounds I, K and L. Lago Monochrome was also found in Test Unit 4, level 4; Test Unit 7, level 3,

and; Test Unit 10, levels 1 and 2, as well as Test Unit 11, level 2 (Trench through Mound I).
Inter-site Locations and Contexts: Lago Monochrome has been identified in Rivas through Healy and Niemel (1980; 2003), as well as in Santa Isabel (Steinbrenner 2010) and in Granada by Salgado (1996).
Cultural Significance: It is believed to have been utilized in ceremonial as well as utilitarian functions. This is a locally made ceramic and is linked to the earlier Bagaces Period traditions; particularly the Tierra Blanca and Potosí Appliqué types. There is also a strong link between Ricardo and Lago Bichrome (Steinbrenner 2010).
Illustrations: The Photo 34 below illustrates a rim to a small vessel.

Figure 52 – Photo 34: An example of a rim sherd to a Lago Monochrome Vessel

Type: Luna Polychrome
Variety: Altagracia*
Established as a Type Variety: Lothrop described this type in 1926; as did Healy (1980), with the Variety named Luna. There has been much dispute regarding the different varieties of Luna Polychrome with some archaeologists giving five different varieties to this type. Steinbrenner has conducted an in-depth analysis of the paste,

which is where he was able to distinguish this type of ceramic from El Menco (2010). He bases his categories on Knowlton's work (1992; 1996).
Ware: Nicoya Polychrome
Ceramic Complex: Late Sapoá/Ometepe
Ceramic Sphere: Pacific Nicaragua (Northern Sector of Greater Nicoya)
Description:

Principal Identifying Modes: Colored with orange, grey-brown or brown-black paint; heavily decorated exterior and interior surfaces with motifs; cream colored slip; hemispherical bowls, vases with outflaring rims and pedestal bases; tripod bowls, and; flat-bottomed bowls.

Paste Group: The same paste as Granada and Madeira

Surface Finish and Decoration: Buff or Cream colored slip; pastel colors fill in outlines of brown-black designs. Typically tripod bowls are fully decorated, with vases and hemispherical bowls having non-existent decoration on the bottom of the exterior surface. Alligator and 'earth monster' motifs are often part of the decoration found on the vessels.

Forms: There are four vessel forms for Luna: Altagracia; this includes Flat-bottomed bowls, vases with outflaring rims and pedestal bases, tripod composite silhouette bowls and hemispherical bowls (Steinbrenner 2010).
Intra-site Locations and Contexts: There were no instances of Luna being encountered during the excavations of Conchal. This may be due to the author's lack of knowledge and/or placing any possible Luna vessels in the category of El Menco. Another possibility is that the site was not inhabited this late in prehistory. Chemical testing of the El Menco sherds will give a more definitive answer in regard to whether Luna was encountered.
Inter-site Locations and Contexts: It has been found in Rivas (Healy 1980), Granada (Salgado 1996), Managua (Lange, ed. 1996), Ometepe Island (Knowlton 1996) and Santa Isabel (Steinbrenner 2010).
Cultural Significance: Luna Polychrome is believed to be the beginning of the Ometepe Period. Steinbrenner attributes the manufacture of Luna to the Chibcha or Chibchan associated people. This type of ceramic was manufactured until Spanish contact and was traded with the Spaniards during the contact period (Steinbrenner 2010).
Illustrations: None

Type: Madeira Polychrome
Varieties: Banda, Elegante, Gato, Las Marias, Madeira and Sapo
Established as a Type Variety: Was originally named by Norweb (1964); was expanded upon in Healy (1980); the variety Las Marias was described originally by Lange (1971), and; Steinbrenner added three more varieties to the Madeira type through his analysis of the Santa Isabel ceramics (2010).
Ceramic Group: Granada-Madeira Group

Ware: Nicoya Polychrome
Ceramic Complex: Sapoá
Ceramic Sphere: Pacific Nicaragua (Northern Sector of Greater Nicoya)
Description:

Principal Identifying Modes: Painted with bright red and black; white slip; decorated with black bands along exterior base and exterior wall; interior walls are often decorated with motifs, and; multiple types of vessels, such as hemispherical bowls, superhemispherical bowls, tripod periform vases and flat-bottomed bowls.

Paste: Locally made paste that is the same/similar as Granada and Luna

Surface Finish and Decoration: Most often slipped on both exterior and interior. Bright red and black paint are typically utilized, with some vessels having grey and orange.

Forms: Flat-bottomed bowls and hemispherical bowls are often decorated similarly with black horizontal lines near the rim. Superhemispherical bowls often have rim motifs and periform vases. "A distinguishing trait of Madeira vessels and ceramics associated with the Granada-Madeira Group in general is that they tend to feature walls that are noticeably thinner than those associated with ceramic types belonging to Papagayo-Vallejo Group…(Steinbrenner 2010:699)"

Intra-site Locations and Contexts: Madeira Polychrome was encountered throughout the site in 243 different contexts. This includes near and in Mounds A, D, E, F, H, I, K, L and M; and near Mounds B, C and J. Madeira was also encountered near the riverbank.

Inter-site Locations and Contexts: Much like Granada Polychrome, Madeira Polychrome has been identified in Chontales by Gorin (1990); in Granada by Salgado (1996); in Managua by Lange (editor, 1996); in Rivas by Niemel (2003) and in Santa Isabel by Steinbrenner (2010).

Cultural Significance: Madeira Polychrome was originally utilized to mark the beginning of the Ometepe Period, much like the Luna and Vallejo Polychromes. As with the Vallejo Polychrome, Madeira Polychrome has been found to actually be part of the Late Sapoá Period through Steinbrenner's analysis (2010). Madeira and Granada are thought to be closely related with Madeira's varieties seeming to develop from most of Granada's earlier varieties. Madeira Polychrome is also strongly related to Luna and El Menco. Chibcha or Chibcha-affiliated people most likely produced Madeira Polychromes on Ometepe Island; with this tradition being related to a larger tradition that includes the Papagayo-Vallejo Ceramic Group (Steinbrenner 2010).

Illustrations: The upper left piece in Photo 35 is a support to a Madeira Tripod Bowl; the second photo (36) is one of two Madeira rims, and; the third photo (37) is of a Madeira rim or base

Figure 53 – Photo 35: Upper left support piece is to a Madeira Tripod Bowl

Figure 54 – Photo36: Two Madeira Rims

Figure 55 – Photo 37: Madeira Rim or Base

Type: Mora
Varieties: Cinta, Mora
Established as a Type Variety: Originally established by Baudez (1967) and expanded upon by Healy (1980) and Steinbrenner (2010).
Ceramic Group: Indeterminate
Ware: Indeterminate
Ceramic Complex: Sapoá
Ceramic Sphere: Guanacaste, Costa Rica (Southern Portion of the Greater Nicoya)
Description:

Principal Identifying Modes: toothed lines with motifs and square panels that are either in red or black.

Paste: Indeterminate

Surface Finish and Decoration: Slipped with either white or orange; interior may have a motif along the rim and the exterior may have horizontal lines.

Forms: Simple hemispherical bowls and periform vases.
Intra-site Locations and Contexts: Mora was likely encountered twice in Conchal. Both times in the Shovel Tests; one was in Mound H, with the other being in the middle of the site.
Inter-site Locations and Contexts: This ceramic type is associated with the Costa Rican section of the Greater Nicoya. It was found in Santa Isabel (Steinbrenner 2010)
Cultural Significance: This type of Polychrome is linked to the Maya; Steinbrenner links Mora to Madeira, Bramadero and Granada Polychromes. It has been found in both burial and domestic contexts (2010).
Illustrations: See Photo 38 of a body below

Figure 56 – Photo 38: Body sherd of Mora Polychrome

Type: Murillo Appliqué
Variety: Murillo
Established as a Type Variety: Originally identified by Baudez (1967) and expanded upon by Steinbrenner (2010).
Ceramic Group: Indeterminate
Ware: Indeterminate
Ceramic Complex: Sapoá
Ceramic Sphere: Pacific Nicaragua, Guanacaste and Nicoya Peninsula, Costa Rica (both Northern and Southern Greater Nicoya)
Description:

Principal Identifying Modes: Black, red or brown monochromes, with polished surfaces; black is the most common. Appliqué motifs, appliquéd and incised necks.

Paste Group: Originally believed to be associated with Lago, Jorge Red-on-Buff, Tolesmaida Monochrome, Ricardo Monochrome and Castillo Engraved pastes due to appearance. Petrographic analysis determined that the paste is actually the same as Vallejo Polychrome.

Surface Finish and Decoration: The bottle jars have black, red or brown highly polished surface; exterior surfaces have an appliquéd decoration, and; the interior is not finished.
Forms: From Steinbrenner's analysis, bottle jars or necked ollas are the common form of vessel for Murillo Appliqué (2010).
Intra-site Locations and Contexts: Murillo Appliqué was encountered in 16 different occasions during excavations at Conchal. It was found near the riverbank, in Mounds G and I; also in Test Unit 5, level 10.
Inter-site Locations and Contexts: There are many accounts of Murillo Appliqué being found in Guanacaste, Costa Rica. It is contemporary with Madeira, Bramadero and Vallejo Polychromes and is believed to possibly be indicative of the Late Sapoá Period. Because the same type of paste is used for the Murillo and Vallejo types, Steinbrenner believes the Chorotega to be the manufacturers of this tradition (2010: 740).
Illustrations: See Photo 39 of a Rim Below

Figure 57– Photo 39: Murillo Appliqué Rim

Type: Papagayo Polychrome
Varieties: Alfredo, Casares, Cervantes, Cristóbal, Culebra, Fonseca, Mandador, Manta, Papagayo, Tablero and Tortuga
Established as a Type Variety: Was originally described by Norweb (1964) and discussed in further detail by Healy (1980; Niemel 2003). Papagayo Polychrome is present in both the Nicaraguan and Costa Rican portions of the Greater Nicoya; it is a marker for the Sapoá Period. There were eight varieties, with three more added by Steinbrenner (2010).
Ceramic Group: Papagayo-Vallejo Group
Ware: Nicoya Polychrome

Ceramic Complex: Sapoá
Ceramic Sphere: Both the Nicaraguan and Costa Rican portions of the Greater Nicoya
Description:

Principal Identifying Modes: Orange, red or black paint; white slip; interior surfaces are decorated with motifs; exterior surfaces have red bands.

Paste Group: Associated with Isabel, Pataky and Vallejo Polychromes

Surface Finish and Decoration: Interior surfaces have a motif decoration; there is a rim band; some exterior surfaces have "…white lines painted over black on interior surfaces (Steinbrenner 2010:745)." There are superhemispherical bowls, as well as annular bowls, hemispherical bowls, tripod bowls, vases with pedestal bases and effigy bowls.

Forms: In the Papagayo variety almost all appear to be superhemispherical bowls and annular bowls are characteristic of Alfredo variety (Steinbrenner 2010).
Intra-site Locations and Contexts: There are over 500 instances of encountered Papagayo in Conchal. Papagayo Polychromes were found near the riverbank; in the shell presence of Mounds A, D, E and M; in Mounds A, B, C, D, E, F, G, H, I, J, K, L and M (all Mounds of Conchal).
Inter-site Locations and Contexts: This type of ceramic is found throughout all of the Greater Nicoya—both in Nicaragua and Costa Rica. It has been found in Managua (Lange, ed. 1996), Granada (Salgado 1996), Rivas (Niemel 2003) and Santa Isabel (Steinbrenner 2010).
Cultural Significance: For the Greater Nicoya, Papagayo Polychrome signals the Sapoá Period's beginning. Papagayo Polychrome is contemporaneous with Pataky, Isabel and Granada; it remains an often utilized polychrome throughout the entire time period and is found with the Later Sapoá Polychromes such as Madeira, El Menco and Vallejo. It is also found with Tolesmaida, Castillo, Lago and Sacasa. Steinbrenner believes Papagayo to be the "parent" of the Vallejo type of tradition; it is also connected to the Pataky type (Steinbrenner 2010).
Illustrations: Please See Photo 40, the left piece is a support piece to a Papagayo: Cervantes Tripod Bowl; the next photo (41) is a support piece for a Papagayo vessel.

Figure 58 – Photo 40: Papagayo: Cervantes Support Piece

Figure 59 – Photo 41: Papagayo Support

Type: Pataky Polychrome
Varieties: Pataky, Rojo*, Ortega* and Francisca
Established as a Type Variety: Norweb was the original descriptor of Pataky (1964), with Healy (1980) and Steinbrenner (2010) expanding upon the description. Pataky has been encountered throughout the Greater Nicoya; it is believed that it was

manufactured in the Nicaraguan portion of the Greater Nicoya. There was originally one variety, with Steinbrenner adding three new ones (2010).
Ceramic Group: "Transitional" Group (most likely Papagayo-Vallejo)*
Ware: Nicoya Polychrome
Ceramic Complex: Sapoá
Ceramic Sphere: Pacific Nicaragua (Northern Portion of the Greater Nicoya)
Description:

Principal Identifying Modes: Multiple types of decorations, include feather headdresses, zoomorphic designs, painted bands; typically black with red and grey as accents; tripod bowls have effigy supports, and; mammiform supports on the periform vases.

Paste: Most similar to Papagayo paste

Surface Finish and Decoration: Typically white slipped on both interior and exterior surfaces. Black is the predominant color with red accenting; occasionally orange and grey are utilized as an accent. The motifs that are found on Pataky Polychrome are typically zoomorphic, rectangular panels, headdresses and black horizontal bands.

Forms: There are multiple vessels that include tripod bowls, small jars, goblets or cups. Periform vases with mammiform supports or pedestal bases, effigy vases, hemispherical bowls, silhouette bowls, flat-bottomed bowls and shallow superhemispherical bowls (Steinbrenner 2010).
Intra-site Locations and Contexts: Pataky was encountered 14 times during excavations at Conchal. It was found in Mounds A, D and K; the shell presence of Mound L, and; in Test Unit 4, Level 2 and Test Unit 6, Level 10.
Inter-site Locations and Contexts: Pataky Polychrome has been encountered throughout both the Northern and Southern Portions of the Greater Nicoya; it has been found in Managua (Lange, ed. 1996), in Granada (Salgado 1996) and in Santa Isabel (Steinbrenner 2010).
Cultural Significance: It has been assumed that this type of ceramic was influenced by Mesoamerica. A point to note is that Pataky Polychrome is only found in burial contexts in the Costa Rican Portion of the Greater Nicoya. Steinbrenner asserts that Pataky Polychrome was not only linked to the Granada-Madeira, but Papagayo-Vallejo groups (2010).
Illustrations: The first photo (42) is a rim and body to a bowl; the second photo (43) is the interior body piece of a bowl

Figure 60 – Photo 42: Rim and Body to a Pataky Bowl

Figure 61 – Photo 43: Body to a Pataky Bowl

Type: Ricardo Bichrome

Variety: Ricardo
Established as a Type Variety: Steinbrenner identified Ricardo Bichrome originally in 2002 and then clarified, defined and expanded upon this type of ceramic in his doctoral thesis (2010). He believes that previous studies would have placed Ricardo Bichrome into the type of Rivas Red.
Ceramic Group: Lago Group
Ware: Chocolate
Ceramic Complex: Sapoá
Ceramic Sphere: Pacific Nicaragua (Northern Sector of Greater Nicoya)
Description:

Principal Identifying Modes: Painted Black, with red slip that is polished or glossy; tripod bowls with modeled supports and flat bottoms; hemispherical bowls with appliqué or tab handles.

Paste Group: Jorge Red-on-Buff, Lago and Tolesmaida Monochrome

Surface Finish and Decoration: Ricardo Bichrome is slipped on both interior and exterior, with the texture ranging from glossy to matte. The bodies of the vessels at times have horizontal black bands, but are typically bare.

Forms: Steinbrenner has identified two forms of vessel that are attributed to Ricardo Bichrome (2010). These include tripod bowls and hemispherical bowls; both are similar in manufacture to the Lago Monochrome type. There is a potential third form of Ricardo Bichrome, this is a pot with pedestal base and flaring neck; the provenience for this was unknown and therefore was not included in Steinbrenner's analysis (2010).
Intra-site Locations and Contexts: Ricardo Bichrome was not identified in Conchal; the author is unsure whether this was lack of education regarding this new type of ceramic or if Ricardo Bichrome did not exist in Conchal. Some of the ceramics identified as Lago and Sacasa may actually be Ricardo Bichrome. Petrographic analysis and comparison to Steinbrenner's analysis will aid in the determination of whether Ricardo Bichrome was in Conchal.
Inter-site Locations and Contexts: Santa Isabel (Steinbrenner 2010).
Cultural Significance: It is believed that Ricardo Bichrome was utilized as a tableware. Castillo Engraved and Lago Monochrome are related to Ricardo Bichrome. Steinbrenner posits a possibility that Ricardo is a variety of Lago Monochrome that is painted (2010).
Illustrations: None

Type: Sacasa Monochrome
Varieties: Striated and Plain
Established: By Steinbrenner (2010); who discussed at length the detail regarding paste, slip and forms. Healy (1980: 215-219) identifies Sacasa only as one variety,

unlike Steinbrenner; he discusses paste, temper, surface and decoration. Also, Norweb (1964:559) briefly mentions it.
Ceramic Group: Tolesmaida Group*
Ware: Tolesmaida Ware*
Ceramic Complex: Sapoá
Ceramic Sphere: Pacific Nicaragua (Northern Sector of Greater Nicoya)
Description:

Principal Identifying Modes: The rims are red-slipped with unslipped bodies that are striated through brushing before firing; forms are typically urn-shaped ollas with bent rims; large necked ollas; hemispherical bowls that have bolstered rims; tecomates; short-necked small ollas; and, cazuelas with outflaring walls or bolstered rims.

Paste and Temper Group: The paste typically is spongy and orange and are more brittle than Tolesmaida Monochrome sherds. Temper coarse and sandy, with the temper being composed of mica, feldspar, andesite and quartzite.

Surface Finish and Decoration: The color to the slip rim varies from a dark maroon to pink red. The surface below the neck or rim is unslipped and brushed before being fired; this brushing creates a striated surface. The Sacasa Striated "shoe pots" do have appliquéd features; it is assumed that other striated forms have decorations on them, with none being recorded.

Forms: There are multiple forms found in the Sacasa Striated type: there are large Ollas with necks that have bolstered rims or outleaning or vertical collars; short-necked small ollas; hemispherical bowls; tecomates; bent-rim ollas; and cazuelas (Steinbrenner 2010).
Intra-site Locations and Contexts: Sacasa Striated rims were encountered throughout the site and was the most widely encountered ceramic type in Conchal; it was encountered in over 1200 instances. Sacasa Monochrome was found near the riverbank, in Mounds A, B, C, D, E, F, G, H, I, J, K, L and M (all Mounds of Conchal).
Inter-site Locations and Contexts: Sacasa Monochrome is believed to have been a local ceramic that is only found in the Department of Rivas. Steinbrenner believes that the Sacasa Striated sherds found in other regions are actually analogous locally-made ceramics (2010).
Cultural Significance: Sacasa is believed to have had a utilitarian use, specifically for household uses; the shoe pots were used in funerary circumstances. The striations on the vessels reinforce the belief that this type of vessel was utilized for utilitarian purposes. Sacasa Monochrome and Tolesmaida Monochrome are believed to be from the same potting tradition and are analogous, utilitarian types.
Illustrations: The first photo (44) is of two body pieces to a "shoe pot;" the second photo (45) is a rim.

Figure 62 – Photo 44: Two Sacasa "shoe pot" body sherds

Figure 63 – Photo 45: Sacasa Monochrome Rim

Type: Tolesmaida
Varieties: Tolesmaida and Striated

Established as a Type Variety: Steinbrenner 2010. Tolesmaida Monochrome is a utilitarian ware that was one of the most common utilitarian wares found in Santa Isabel. Steinbrenner believes that this type would have originally been classified in previous studies as Rivas Red or Istmo Plain. He designated two varieties for the type; Striated and Tolesmaida.
Ceramic Group: Tolesmaida Group
Ware: Tolesmaida Ware
Ceramic Complex: Sapoá
Ceramic Sphere: Pacific Nicaragua (Northern Sector of Greater Nicoya)
Description:

Principal Identifying Modes: Black or red slip; urn-shaped ollas; large necked ollas, and; cazuelas that have bolstered rims.

Paste Group: The same type of paste as Lago Monochrome and Ricardo Bichrome. Note: it does not share the same paste as other utilitarian wares such as Sacasa and Murillo Appliqué. Sherds are grey in nature and have more density compared to Sacasa Monochrome.

Surface Finish and Decoration: Tolesmaida Monochrome vessels typically have slips that are chocolate to black or red to maroon in color. Typically ollas are red more often than black; cazuelas were more often black compared to red in color. Rarely are Tolesmaida Monochrome pieces decorated; when they are, the decoration is located on the rim. Steinbrenner believes that it is most likely that appliqué modeling existed on the "shoe-shaped" vessels (2010).
Forms: There are four different vessel shapes attributed to Tolesmaida Monochrome; these include bent-rim ollas, large ollas with collars, and large ollas with outflaring necks and cazuelas with bolstered rims (Steinbrenner 2010).
Intra-site Locations and Contexts: Tolesmaida is believed to have been encountered 28 times during the excavations of Conchal. These locations include: along the riverbank; in the shell presence of Mound K; Mounds A, D, H, L and Mound M, and; in the Trench of Mound I in Test Unit 11, Level 2.
Inter-site Locations and Contexts: Steinbrenner believes this was local to the Department of Rivas, with corresponding types in Costa Rica (2010).
Cultural Significance: Tolesmaida Monochrome was a utilitarian ceramic that was related to other types including Castillo Engraved, Ricardo Bichrome and Lago Monochrome. These other types of ceramics are associated with ceremonial purposes, which leads to the possibility that Tolesmaida Monochrome may also have served in that capacity to some extent. Evidence for this is the appliqué modeling and appliqué animal heads. Also, through Steinbrenner's analysis, Sacasa Monochrome and Tolesmaida Monochrome are thought to be from the same tradition of potters (2010).
Illustration: The first photo (Photo 46) is a base, with the second photo (Photo 47) either being a base or handle.

Figure 64 – Photo 46: Base of a Tolesmaida Vessel

Figure 65 – Photo 47: Base or Handle piece to a Tolesmaida vessel

Type: Vallejo Polychrome
Varieties: Vallejo, Cara, Lazo, Mombacho, Pepa, Pica and Raya
Established as a Type Variety: Originally described by Coe (1962) and Norweb (1964); it was then expanded upon by Baudez (1967), Healy (1980) and Steinbrenner (2010). Steinbrenner added two varieties and renamed a third; the variety of Mombacho was renamed and the varieties Lazo and Cara were added (2010).

Ceramic Group: Papagayo-Vallejo Group
Ware: Nicoya Polychrome
Ceramic Complex: Late Sapoá
Ceramic Sphere: Pacific Nicaragua (Northern Sector of Greater Nicoya)
Description:

Principal Identifying Modes: Vallejo Polychrome may have red, black/brown-black, grey or light orange paint; some vessels are incised; either a white or matte cream slip; interior is often decorated with bands or paint, and; exterior has 'feathered serpent' or 'two-headed dragon' motifs (Steinbrenner 2010).

Paste Group: Paste is similar to Pataky, Papagayo and Murillo Appliqué

Surface Finish and Decoration: There are multiple types of vessels that with the white, matte slip; the paint tends to crack and chip away compared to Madeira, Pataky and Papagayo. Bands are painted along the bottom borders of many vessels; many times there are panels painted with orange as a design. There are zoomorphic faces, pyramid motifs, hummingbirds and earth monster designs on the exterior of some of the varieties of Vallejo Polychrome.

Forms: There are tripod bowls, silhouette bowls, superhemispherical bowls, vases that have pedestal bases, hemispherical bowls, flat-bottomed bowls and tripod bowls with mammiform supports (Steinbrenner 2010).

Intra-site Locations and Contexts: There are over 500 instances of encountering Vallejo within Conchal; most of these are Papagayo-Vallejo classified types. Though Vallejo was found in slightly more quantity than Papagayo. Vallejo Polychrome was found near the riverbank, as well as in Mounds A, B, C, D, E, F, G, H, I, J, K, L and M (all Mounds of Conchal).

Inter-site Locations and Contexts: Vallejo Polychrome is common in the northern sector of the Greater Nicoya (Nicaragua), but has been encountered in the Costa Rican portion as well. Steinbrenner believes that Vallejo was manufactured between the Departments of Managua and Rivas (2010: 870). Vallejo Polychrome is ubiquitous throughout the Department of Rivas, but has also been encountered in Chontales (Gorin 1990), Managua (Lange, ed. 1996), Granada (Salgado 1996), Granada (Salgado 1996) and Rivas (Niemel 2003; Steinbrenner 2010).

Cultural Significance: Originally Vallejo Polychrome was the signal of the Ometepe Period and the Nicarao's arrival. It is now believed that this type is a Late Sapoá Period type and is thought to have been the "child" of Papagayo Polychrome. The motifs found on Vallejo Polychromes are thought to link it to the Chorotega (Steinbrenner 2010).

Illustrations: Please See Photos 45-47; Photo 48 is an example of a rim from a Vallejo: Cara vessel; the next photo (Photo 49) is a rim to a Vallejo vessel, and the final photo (Photo 50) is of two support pieces to a Vallejo Polychrome Tripod (?) bowl.

Figure 66 – Photo 48: Rim Piece to a Vallejo: Cara Vessel

Figure 67 – Photo 49: Upper piece is a rim sherd to a Vallejo Vessel

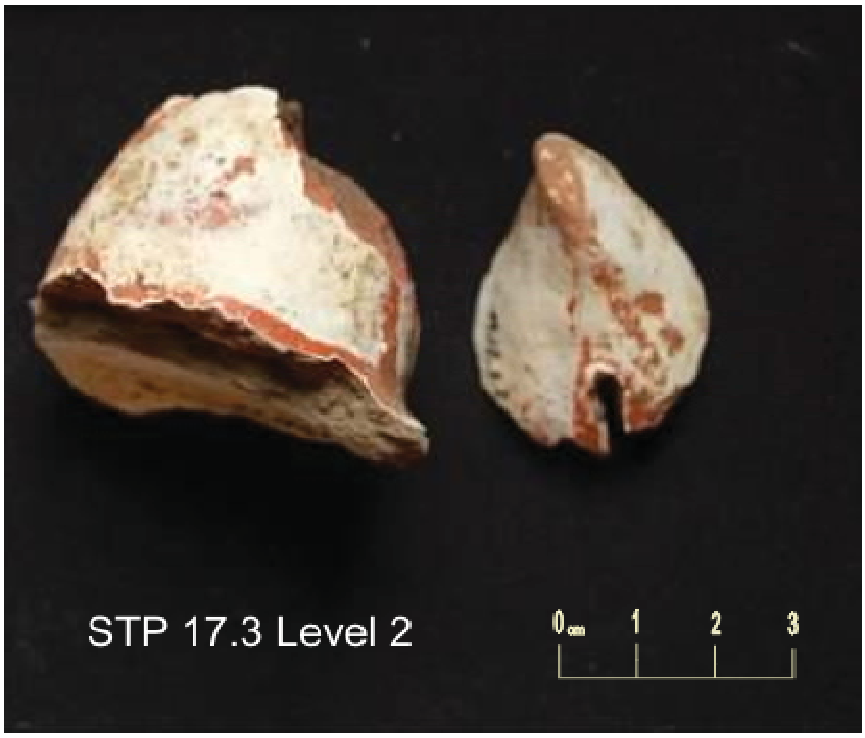

Figure 68 – Photo 50: Support Pieces to a Vallejo Tripod (?) Bowl

*indicates category was changed in Steinbrenner's analysis

None of the types of ceramic sherds encountered at Conchal that are attributed to the Bagaces Period were identified with a high degree of confidence. This was due to the degradation that occurred to the pieces. It was determined with a high level of confidence, especially when considering the paste, temper and appearance of the sherds that they were from the Bagaces Period. Some of the sherds found were believed to have red slip on them and were encountered in the earliest levels of the site, which indicated they were most likely Bagaces. Their position in the earliest levels led me to believe that these pieces were most likely late Bagaces Period.

Discussion regarding the Classification of Nicaraguan Ceramics

The prehistoric populations of Pacific Nicaragua created a vast array of ceramic designs

and forms. Many of these designs, particularly those that date to the Sapoá period and later, resemble Mesoamerican motifs (Healy 1980; Niemel 2003). These designs illustrate a population that had many influences and most likely many different origins. The Nicaraguan ceramics are useful in understanding how the population changed over time; these changes also include changes in migrations and interactions with outside groups.

Many of the monochrome and bichrome pieces have had little research conducted on their manufacturing processes. This is by and large due to the lack of decoration on the types; the Castillo Engraved is an exception. It is difficult to differentiate many of the monochromes due to their similar characteristics; an example of this is their use of color—all types utilize black, brown or red. Another example is their surfaces can be polished or matte (Steinbrenner 2010).

Ceramic sherds were the most frequently found artifact after molluscs. The following two illustrations show the distribution of ceramics encountered during the excavations of Conchal. They illustrate that the ceramics in general were found throughout the site, with virtually no absence regarding location. Specifically, the ceramic artifacts were found in mounds, near mounds, near the riverbanks and within the site not specifically located near features such as mounds.

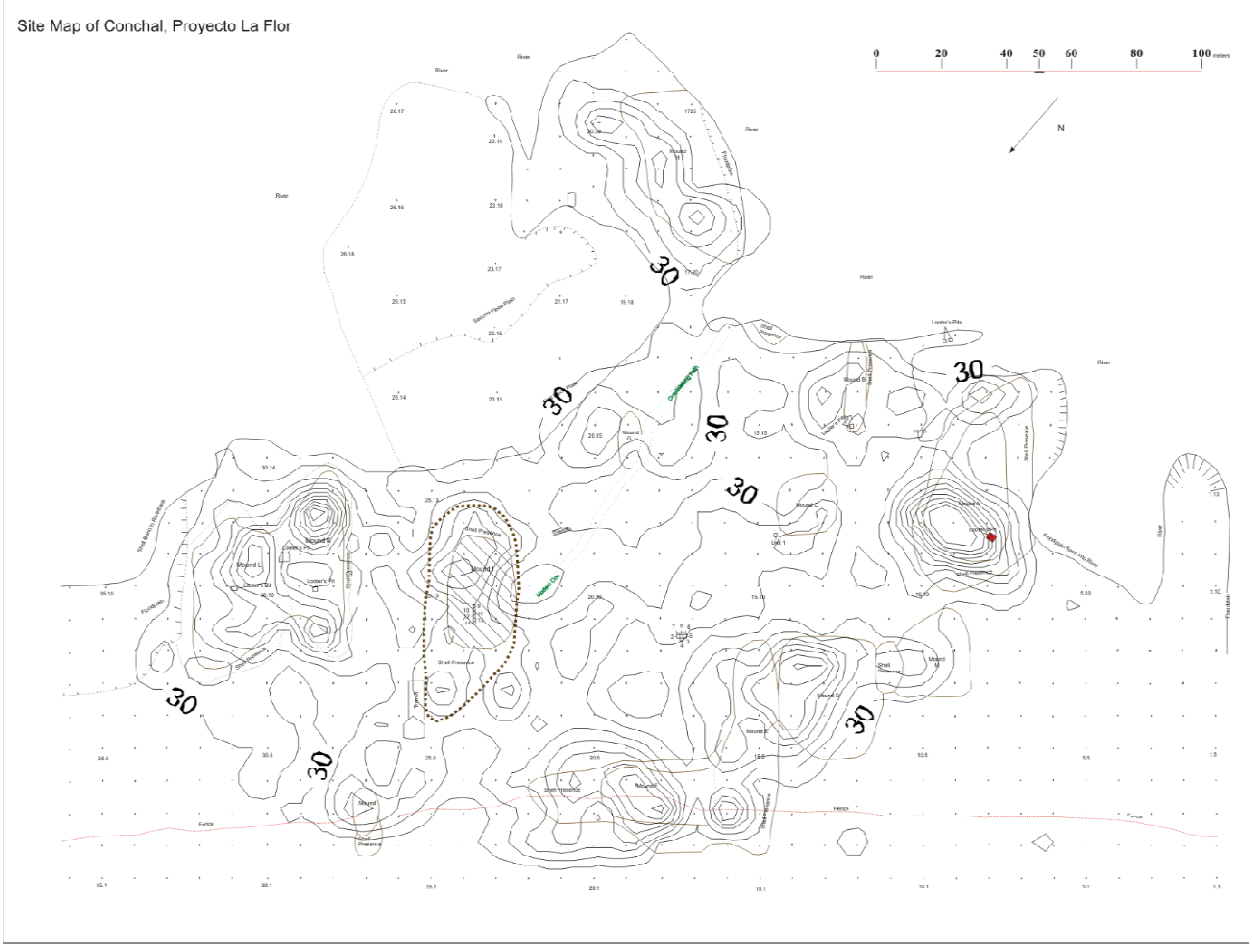

Figure 69 – Overall Ceramic Distribution with the Site Map underneath

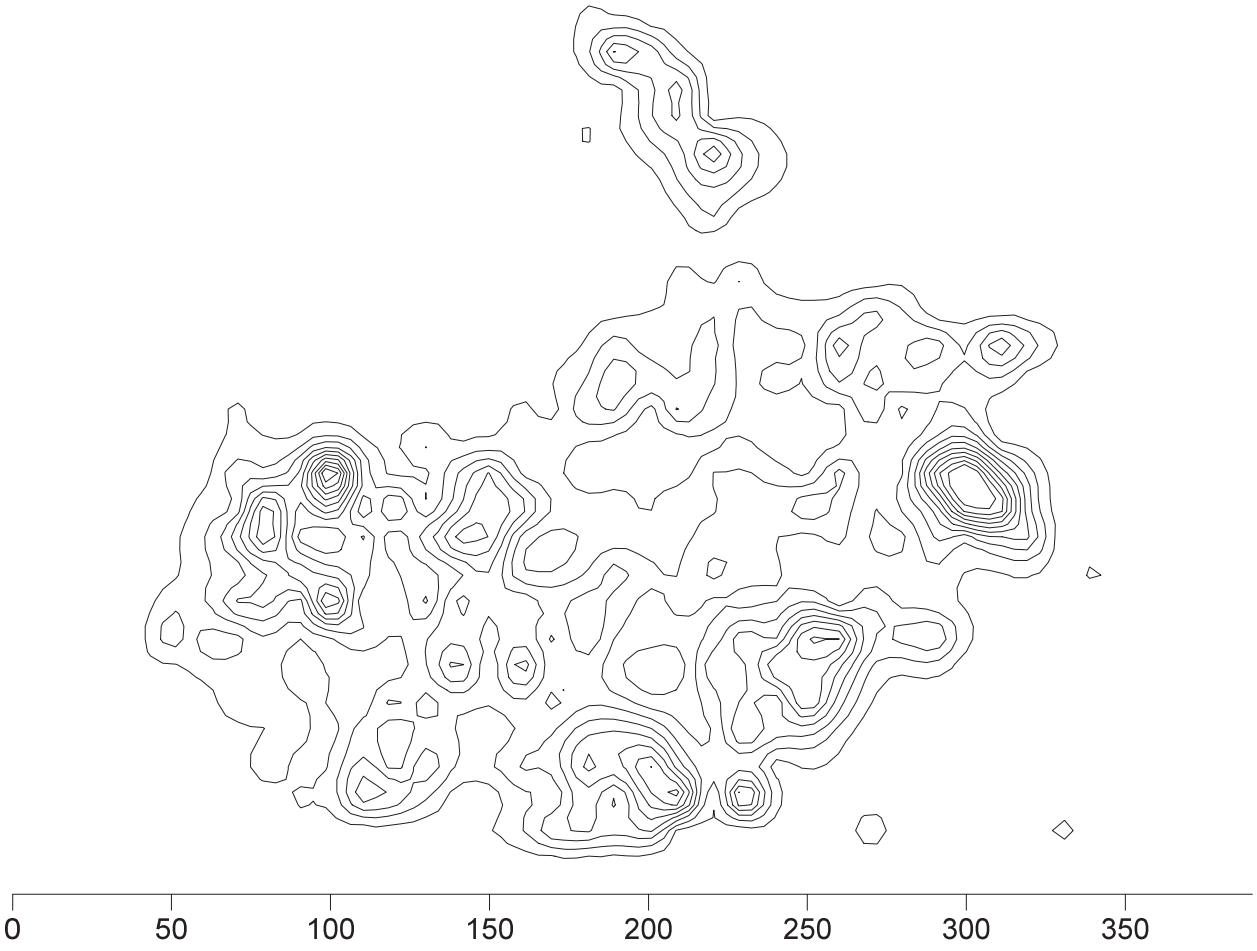

Figure 70 – Overall Ceramic Distribution of Conchal

The first illustration is the distribution of overall ceramics overlaying the site map of Conchal so as to give a clear picture of where the larger pockets of density are located, the second illustration is simply the distribution of the ceramics. Each contour line indicates an interval of 40 pieces. It must be noted that the first seven to ten transects have a very low to no density of ceramic distribution. Also, the mounds have the highest level of density in regard to ceramic concentration, this can be seen clearly in both illustrations. The ceramic density most likely indicates that a high level of activity occurred in and around the mounds. It also indicates that these areas were used to dispose of materials, as posited previously.

The utilitarian ceramics were by far the largest percentage found in Conchal, as well as in other Nicaraguan sites like El Rayo and Tepetate (McCafferty 2011; Wilke et al 2011; McCafferty 2013). This ceramic category originally included Istmo Plain, Rivas Red and Sacasa Striated. Istmo Plain and Rivas Red have not been linked to a specific cultural group, unlike Sacasa which has been linked to the Chorotega during the Sapoá. Although Healy has linked Rivas Red to the group(s) that inhabited Rivas before the Chorotega moved to the Nicoya area (1980), it has been posited recently that these groups may be the Lenca (Steinbrenner 2010; Steinbrenner 2013).

The second largest type of ceramics found during the excavations at Conchal was the Papagayo-Vallejo Group, with over 500 instances of Papagayo-Vallejo Polychromes being found. Steinbrenner recently combined the once separate categories of Papagayo and Vallejo; they are now known as Papagayo-Vallejo. The Papagayo Polychrome has been found throughout the Nicoya Peninsula and has been postulated that it only dates to the Sapoá period. It is reminiscent of the Tohil Plumbate, which is a Fine Orange Pottery. This type of ceramic variety was the first to emerge during the Sapoá period; the arrival of Papagayo has caused some to posit that the Nicoya Peninsula was coming under the influence of Mesoamerican groups (Steinbrenner 2010). Historically, the Papagayo Polychrome has been connected to the arrival of the Chorotega to the area (Healy 1980; Steinbrenner 2010). It is now believed that the Papagayo tradition existed before the entrada of the Chorotega. Rather, it has been posited that the Lenca may have been the group behind the Papagayo ceramics, with the Chorotega entering the Pacific Southwest of Nicaragua at a later date (Steinbrenner 2013).

In regard to the Vallejo Polychrome variety, Lothrop and Day have attributed this to the Mixteca-Puebla or Central Mexican style. This type of polychrome is often linked to the Pre-

Columbian Mexican beliefs due to the uses of gods and pyramids. Many lower Central American archaeologists have linked Vallejo with the arrival of the Nicarao who were thought to have originated from the Central Mexican region. Steinbrenner believes this line of evidence is faulty as the motifs are actually more similar to the Chorotega, not the Nicarao (2010). The radiocarbon dates have reaffirmed this position and now it is assumed that the Chorotega are the group that created Vallejo (Steinbrenner 2013). Vallejo and Papagayo are grouped together as they share so many similarities; two of which are the paste and the color scheme (Steinbrenner 2010). These two groups are so similar that they are often indistinguishable during analysis; which is especially true when the ceramic piece is degraded.

The Pataky Polychrome is believed to be related to the Papagayo-Vallejo Group and to a lesser extent to the Granada-Madeira Group. Pataky is associated to the Granada-Madeira Group due to the uses of birds and jaguars; these designs are attributed to an influence by Mesoamerican groups. The link between Papagayo-Vallejo and Pataky was reinforced after an analysis of the paste revealed a high degree of similarity in their paste. Pataky is considered to be a transitional group as it appears to be influenced by Mesoamerica. However, it cannot be attributed to a particular group (Steinbrenner 2010).

The third largest type of ceramic encountered during the excavations at Conchal was the Granada-Madeira Group; over 200 instances occurred. In Steinbrenner's analysis he combines Madeira and Granada and calls them the Granada-Madeira Group. Madeira is white-slipped and appeared later in the archaeological record than the orange-slipped Granada. They are grouped together due to their similarities, which make them difficult to distinguish from one another. This often occurs when the slip-color cannot be determined, typically due degradation. The frequency of the Granada-Madeira group is relatively rare to encounter in the general area of the

Greater Nicoya; though the archaeological site of Santa Isabel had an exceptionally high frequency of this group. During a paste analysis, Steinbrenner discovered a similarity in the composition of both the Granada-Madeira and Papagayo-Vallejo paste (Steinbrenner 2010).

Mora and Pataky Polychrome highly resemble the Madeira and Granada varieties. While Madeira and Granada are more common in Nicaragua, Mora and Pataky Polychrome are more common in Costa Rica. Mora and Pataky have a very low frequency in the archaeological record in the Nicaraguan portion of the Nicoya Peninsula. The difference between those found in Costa Rica, particularly the Mora, is that they are believed to be Mayan influenced. The Granada-Madeira Group shares decorations around their rims, such as squares that are dotted, with the Mora variety (Steinbrenner 2010).

Very little archaeological research has been conducted concerning both Madeira and Granada ceramics. There is no group that has been attributed to the manufacture of either of these two ceramic types; they are thought to have been influenced by Mesoamerica. These two types are thought to have been manufactured locally on Ometepe Island (Steinbrenner 2010). It is possible that these "later" styled ceramic traditions could be the entrance of the Nicarao.

El Menco has only recently been identified as a separate variety; this was classified by Knowlton in the 1990s. It is believed that prior to this new classification, earlier archaeologists would have put the new category of El Menco ceramics into the category of Luna Polychrome. The difference between the two is that the Luna Polychrome was in production during the contact period and was most likely manufactured on Ometepe Island, not the mainland; it is believed that the El Menco ceramics were produced on the mainland. Paste analyses have positioned El Menco into the group that includes Bramadero, Granada and Madeira (Steinbrenner 2010).

Luna Polychrome has been associated with both the Amazon and Mesoamerican regions; when it was first encountered it was attributed to the Amazon by Bransford. Later, Healy believed that it was more Mesoamerican and reflected the area of Cholula (1980). Haberland connected this pottery to Nicaragua's eastern portion. Regardless of which area it was influenced by, Luna was a local tradition that may have mirrored fluxing populations of the time (Steinbrenner 2010).

Isabel is very reminiscent of both Vallejo and Papagayo Polychrome; in fact, Steinbrenner calls Isabel a "shorthand version" of the Papagayo-Vallejo group (Steinbrenner 2010: 348). The manner in which the designs were drawn on the Isabel ceramics was very quick, whereas those on the ceramics from the Papagayo-Vallejo group are precise and complex (Steinbrenner 2010).

Analysis of the Ceramics Encountered During the Excavations of Conchal

During excavations, ceramics were discovered in every cultural level that was excavated. Never once was a complete vessel uncovered, with the exception of an almost complete incensario encountered in the level(s) of the youngest time period of the late Sapoá/early Ometepe period. Many of the over 40,000 ceramic sherds in Conchal were too small, too degraded or simply undiagnostic to be included in the analysis.

A critical examination of the ceramics is vital to the analysis and interpretation of the archaeological site (Rice 1987). Ceramics are ubiquitous throughout the Central American archaeological record (Lange and Stone 1984). This is especially true in regard to Nicaraguan archaeology (Healy 1980; Lange et al. 1992; González 1996; Niemel 2003; McCafferty and Steinbrenner 2005). The majority of research and data collection conducted in Nicaraguan archaeology is done with ceramics as the main focus; it is often what steers the general analysis. The emphasis on ceramics is due to the reality that they are easier to date and they are found

almost everywhere in Central America. They not only inform an archaeologist about what a group consumed, but it also enlightens him/her about the activities that of these identified people. The decorations drawn on the ceramics, if any, also give insight about the religious and political beliefs of the people who created them.

The first step in the analysis of the ceramics from Conchal was to determine the time period to which a sherd could be attributed. The determination of the time periods the ceramics were in, was key to establishing when Conchal was occupied. This in turn aided in establishing a chronology of the site, which allowed for Conchal to be placed in its pre-Columbian Nicaraguan context. The context then gives a glimpse as to what other groups the inhabitants of Conchal may have been interacting with, as well as to what group the inhabitants of Conchal may have belonged to (e.g. the Chorotega or Nicarao). The different vessels encountered also gives a glimpse of how the populace of Conchal utilized the resources of their landscape.

The second step was to determine the type of vessel a piece represented. While many pieces were too small or were not appropriate in shape to determine their size, there were hundreds of sherds that could be established. Determining the types of vessels utilized at Conchal, allowed for the establishment of the types of activities that occurred there. Change over time could be determined by examining the vessel shapes throughout the different stages of settlement at Conchal. Thus giving a glimpse at how the population grew, changed and placed meaning on different aspects of their society.

The Distribution of Select Types of Ceramics and Their Significance within Conchal

The distribution of all of the ceramics encountered in Conchal can be seen in the previous two illustrations (Illustrations 69 and 70). These illustrations demonstrate that the distribution of the ceramics is ubiquitous throughout Conchal, with the exception of the first seven to ten

transects. But, the type of ceramics utilized are typically utilitarian (e.g. Sacasa Striated); these utilitarian pieces show that the population was most likely conducting daily activities throughout the site.

Appendix A has a complete list of ceramic pieces found during the excavations of Conchal; Table 7 is a summary table for Appendix A. This summary table lists the total sherds found, sherds kept, burnt sherds and minimum number of vessels thought to have been encountered during field seasons two and three of the excavations at Conchal.

Figure 71 - Table 7: Summary Table for Appendix A:

Total Number of Sherds Encountered during Field Seasons Two and Three	40,573 ceramic pieces
Total Number of Sherds Kept	5,690 pieces
Total Burnt Ceramic Pieces Encountered	10,669 pieces
Minimum Number of Vessels Encountered	5,848 vessels
Identified Sacasa Sherds	2,556 sherds
Total Identified Pieces	4,359 pieces

The three most common ceramic types—Sacasa, Papagayo-Vallejo and Granada-Madeira—were ubiquitous throughout Conchal. Sacasa was the most frequently encountered and identified ceramic in Conchal, with almost 59% of the pieces identified being Sacasa sherds. These types indicate that Conchal was inhabited during the Early to Late Sapoá Period. The variety of vessels identified in Conchal (including tripod bowls, "shoe pot" rim sherds,

superhemispherical bowls, as well as many utilitarian pieces) indicate that a variety of tasks occurred in Conchal.

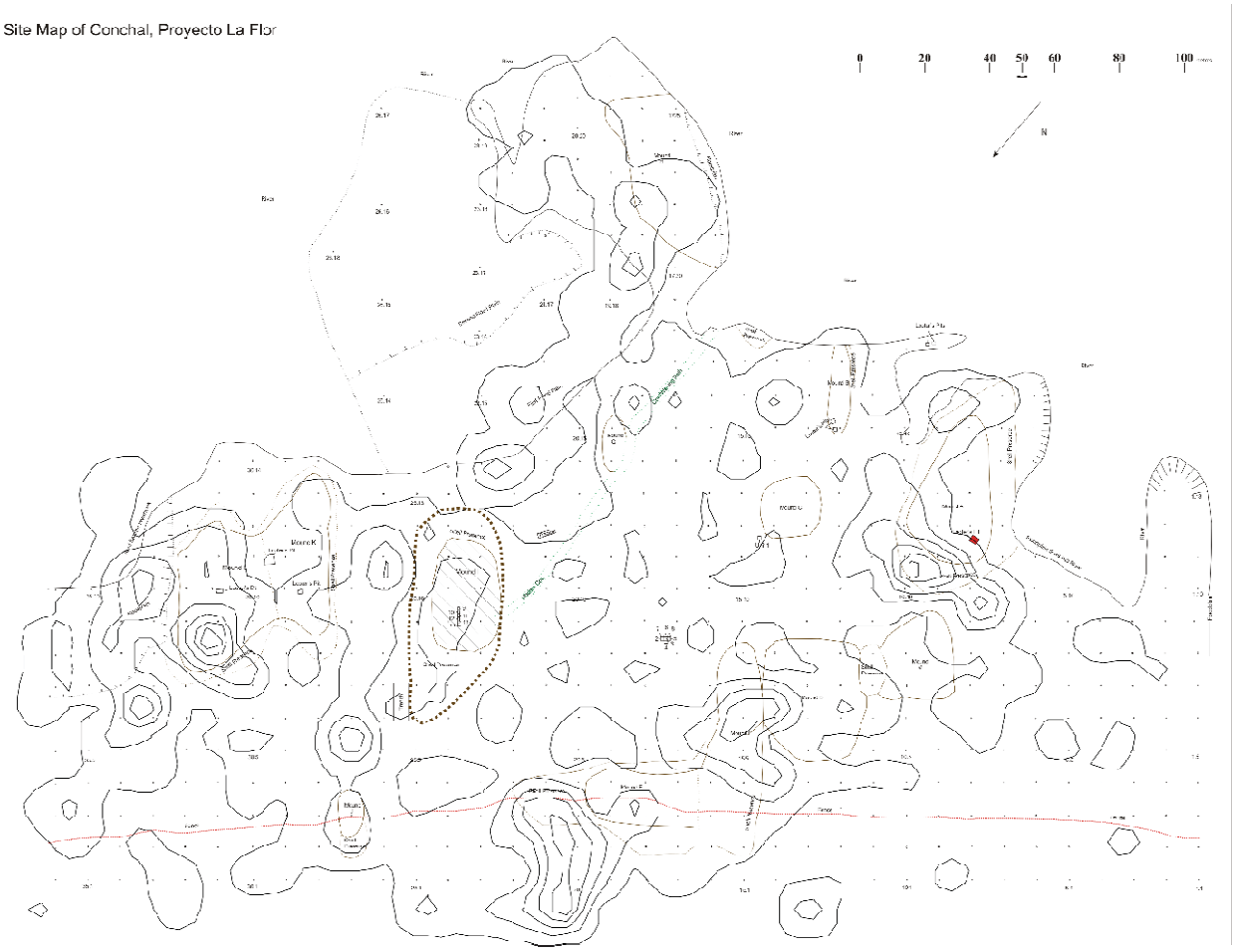

Figure 72 – Sacasa Distribution throughout Conchal Over the Site Map

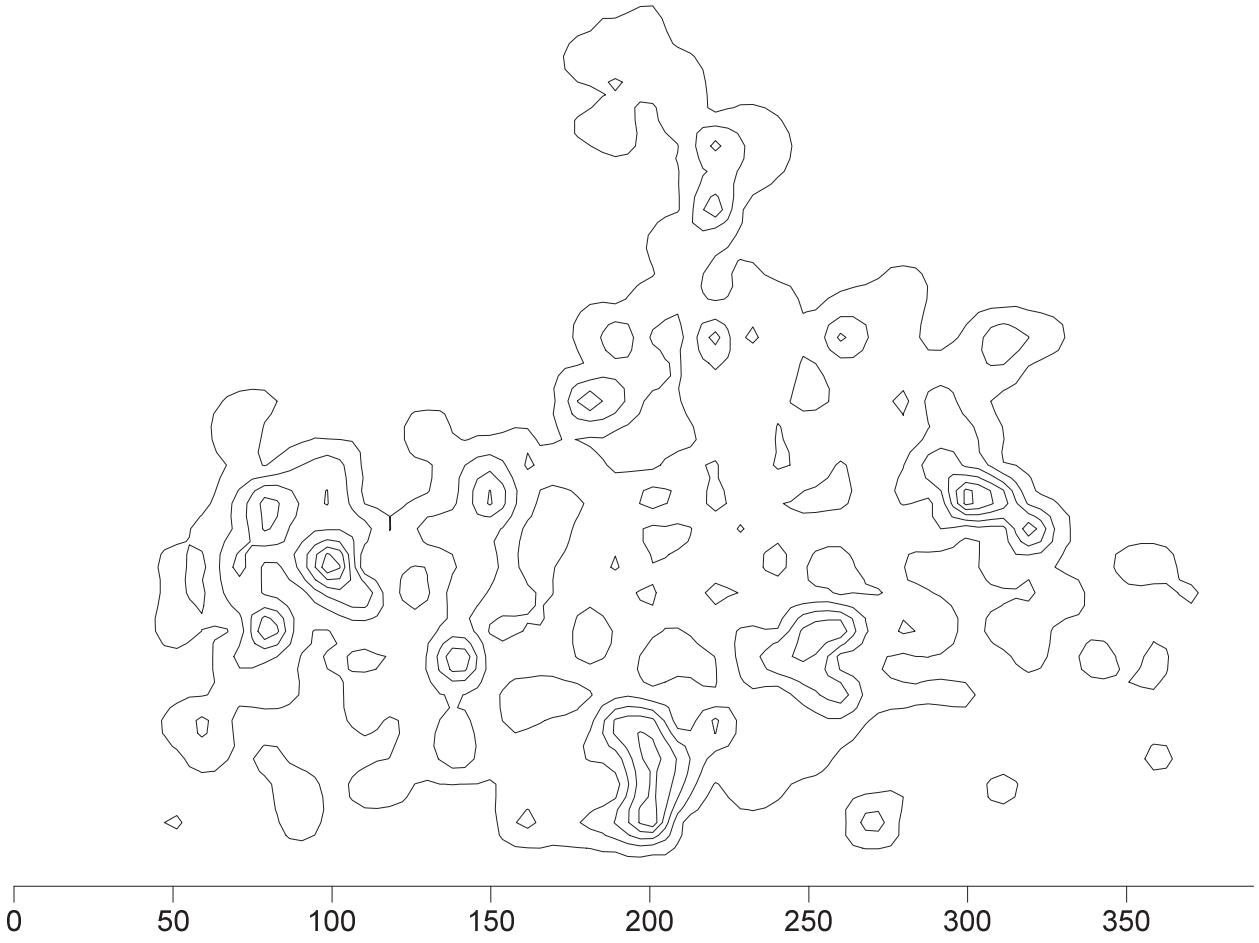

Figure 73 – Overall Distribution of Sacasa Sherds Throughout Conchal

The Sacasa Monochrome ceramic group was the type that was most easily identified during initial analysis compared to other ceramic types in Conchal. It was also the most frequent type of ceramic found in Conchal. The two maps above demonstrate the distribution of the Sacasa type throughout Conchal; the interval for the contour lines is six. The maps illustrate that Sacasa Monochrome was ubiquitous throughout Conchal, with the first five to six transects not having a high concentration; the first five to six transects were light in regard to their density of artifacts in general. Therefore, relatively speaking, Sacasa Monochrome had a high concentration throughout Conchal.

The high density indicates that the people of Conchal were partaking in activities that other population groups of the same culture during the Sapoá Period in the Department of Rivas were. This type is seen throughout the Department of Rivas and is known to be a ceramic ware that was utilized for multiple purposes (Healy 1980; Steinbrenner 2010). Sacasa Monochrome is known to have been utilized throughout the Sapoá Period and into the Ometepe Period. It is also thought to be a local ceramic ware that may have been related to other very similar types throughout Pacific Nicaragua (Steinbrenner 2010). The high density of Sacasa Monochrome throughout the site indicates that the inhabitants were indeed the same cultural group as other groups located throughout the Department of Rivas. The forms of vessel, mostly utilitarian, illustrate that the inhabitants of Conchal were conducting similar activities as their counterparts. Similar wares that were utilitarian in nature that were also found in Conchal, in a lesser density, include Castillo Engraved, Lago and Tolesmaida Monchromes.

With regard to the "shoe pot" sherds of the Sacasa Monochrome type, there is an indication that burials and other funerary activities occurred within the site of Conchal. It is believed that these "shoe pots" were burial urns (Steinbrenner 2010). During excavations at Santa Isabel, human remains were encountered inside these urns. While human remains were not encountered inside the urns at Conchal, it is assumed that they were associated—at least to some degree—with the human remains scattered throughout the site. Potentially in conjunction with these funerary activities, there may have been ceremonial activities. This is believed to have occurred throughout the Department of Rivas (Healy 1980 and Steinbrenner 2010).

The next group of ceramic ware that was encountered in a high frequency at Conchal is the Papagayo-Vallejo Group. There are two illustrations below demonstrating the distribution of

this ceramic ground found during excavations of Conchal. The contour interval for the illustration is four pieces.

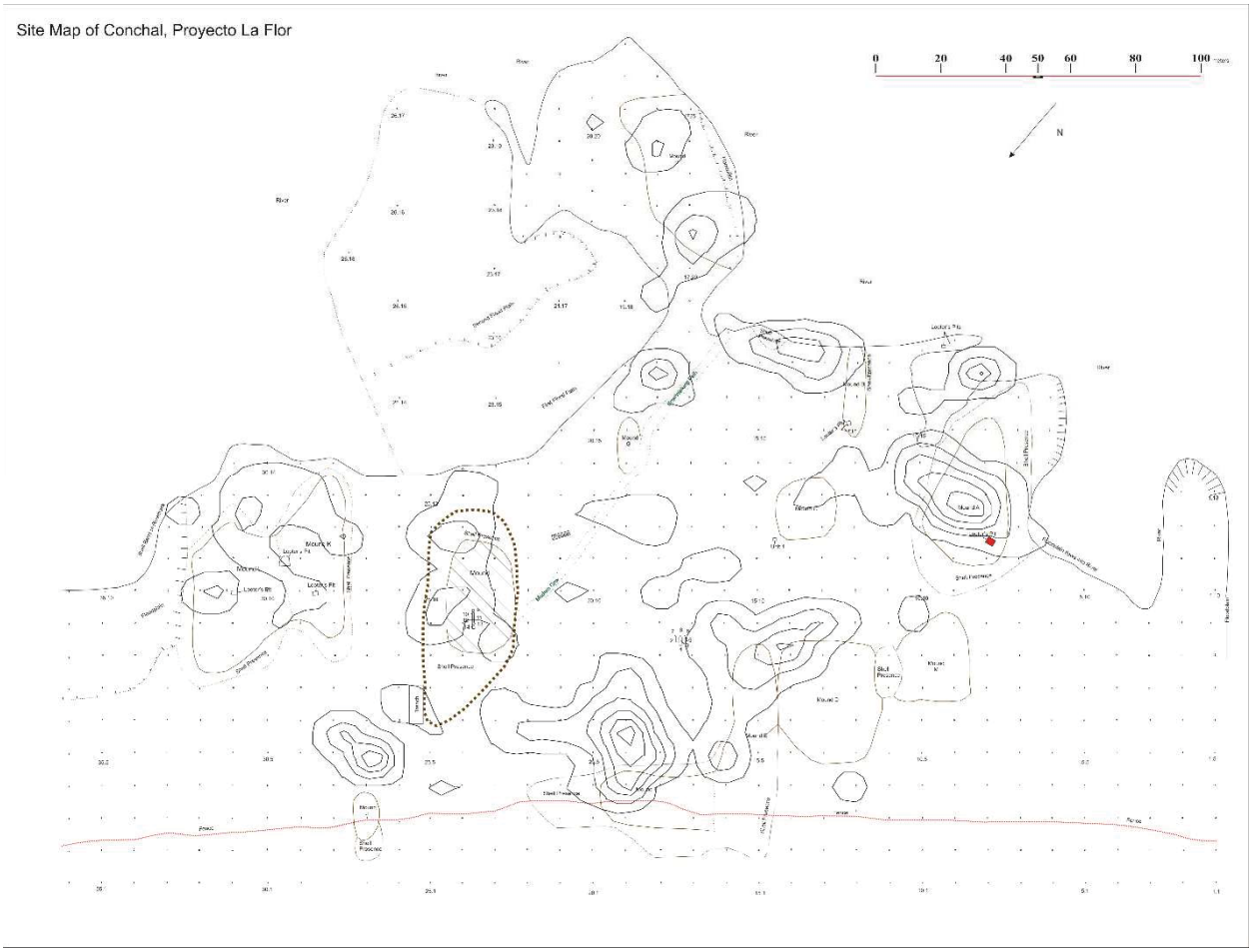

Figure 74 – The Distribution of the Papagayo-Vallejo Group over the Site Map of Conchal

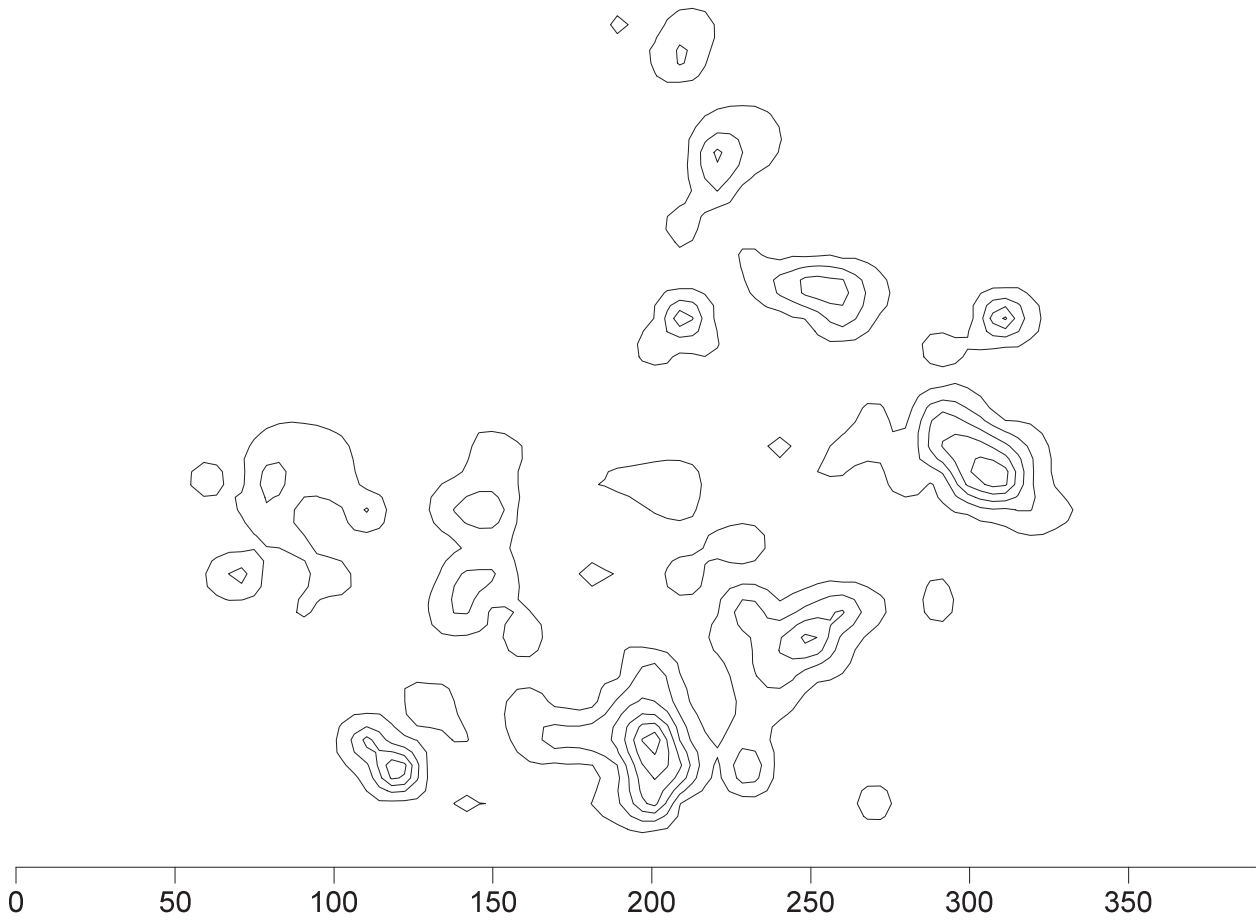

Figure 75 – Illustration of the Distribution of the Papagayo-Vallejo Group without the Site Map

The Papagayo-Vallejo Group is a ceramic group that has been encountered throughout Central America; it is known to have been traded widely (Healy 1980; Steinbrenner 2010). It has been found throughout Nicaragua, particularly in Chontales (Gorin 1990), Granada (Salgado 1996) Managua (Lange 1996) and Rivas (Niemel 2003; McCafferty 2005; Steinbrenner 2010). In regard to the population of Conchal and their neighbors, Papagayo-Vallejo is found throughout all of the Greater Nicoya Peninsula and is believed to have been manufactured by multiple groups throughout the region. This group is dated to the early Sapoá Period and continues throughout the entire period into the Late Sapoá. This ceramic group may be related to

other ceramic traditions in Honduras—the Ulua type—and the Las Vegas Polychrome of both Honduras and El Salvador. It is believed to have been produced by a Chibchan group that may have been imitating the Southeastern Mesoamerican traditions (Steinbrenner 2010).

The Papagayo-Vallejo Group illustrates a ceramic group that has more elaborate forms to it in comparison to Sacasa Monochrome. These forms were utilized in typical daily activities as well as religious and/or ceremonial activities. Examples found in Conchal of these forms of vessels include the Papagayo and Vallejo hemispherical bowls and the Papagayo: Cervantes Tripod Support. The Papagayo-Vallejo Group illustrates ceramic wares that were widespread throughout Nicaragua and utilized for a multitude of activities. The widespread usage indicates that the people of Conchal—or at least their culture group—knew of and interacted with outside groups. The high density in Conchal of this group indicates that they were conducting similar activities compared to their counterparts.

The third highest density of ceramic types encountered in Conchal are that of the Granada-Madeira Polychrome Group. The following two illustrations show the distribution of the ceramic sherds from this group. Please note the contour interval is two pieces.

Figure 76 – Illustration Demonstrating Granada-Madeira Distribution overlaying the Site Map

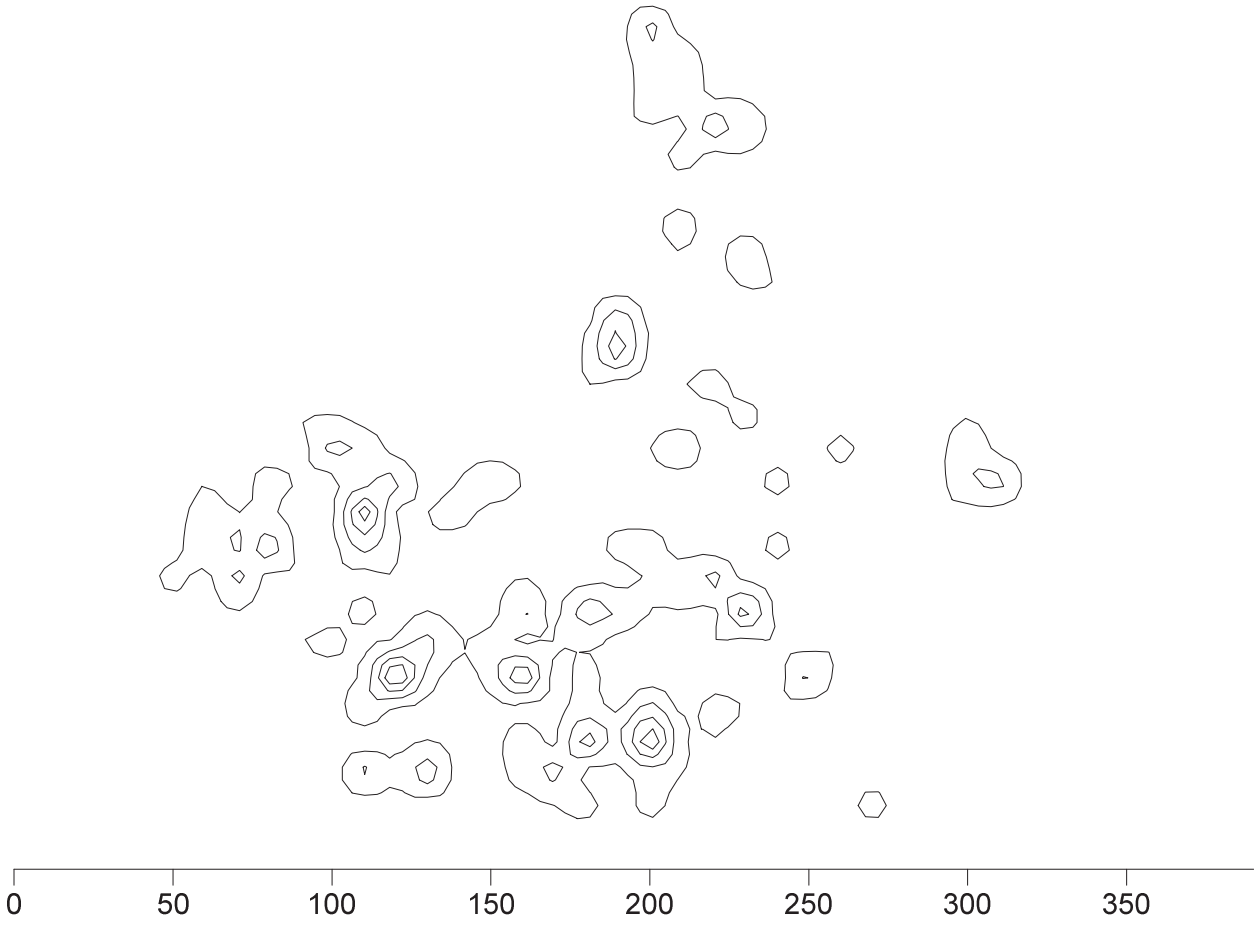

Figure 77 – Illustration Solely of the distribution of the Granada-Madeira Group

The Granada type of the Granada-Madeira Group signifies the beginning of the Sapoá Period. This then slowly fades away from the archaeological record and is replaced by Madeira Polychromes. Madeira ceramics are associated with the Late Sapoá Period. The Granada-Madeira distribution density is significantly less than that of the previous two types, but it is still worth noting. There were at least 188 occurrences of ceramic pieces attributed to the Granada-Madeira Group versus at least 368 occurrences of Papagayo-Vallejo Group. This is a significant difference in number. This can be explained by the distribution of this group; Granada and Madeira are both found in Chontales (Gorin 1990), Granada (Gonzalez 1996) and Rivas

(Steinbrenner 2010), where Papagayo and Vallejo are found throughout Central America (Steinbrenner 2010).

These types do not appear to be as widespread as the Papagayo-Vallejo Group, which seems to be the explanatioin as to why they are not as ubiquitous in Conchal's artifact collection. Steinbrenner assumes that the same potters who produced Papagayo-Vallejo did in fact produce the Granada-Madeira Polychromes; he also believes that both Granada and the later Madeira were utilized for funerary purposes. The group that produced Granada-Madeira is thought to have been located on Ometepe Island and were of Chibcha descent (Steinbrenner 2010).

The pieces of Granada-Madeira encountered at Conchal may be described as elaborate and utilitzed in a different manner than the Sacasa Monochrome. It appears as though some of the vessels identified as Granada-Madeira did take part in funerary rituals, much like Sacasa. Also, some of the pieces may have been utilized in a similar manner as Papagayo-Vallejo (e.g. other types of ceremonial activity). It appears as though the Granada-Madeira Group may served the population of Conchal as a blend of the Sacasa Monochrome and the Papagayo-Vallejo in terms of its utilization.

Another type of ceramic tradition to note include the El Menco variety. Conchal only had 23 instances of El Menco pieces being encountered. This is why there is no illustration of these pieces, it would not have been meaningful or useful. The El Menco variety dates to the Late Sapoá period and is an elaborate type of ceramic. El Menco Polychrome appears to have occurred later than any of the above mentioned ceramic types and is believed to have been manufactured on Ometepe Island as Granada-Madeira and Papagayo-Vallejo. This type is also associated with funerary contexts (Steinbrenner 2010).

As there are so few sherds of El Menco Polychrome compared to Papagayo-Vallejo, Granada-Madeira and Sacasa, it is believed that this indicates that Conchal was indeed slowly waning in the Late Sapoá Period. This type also illustrates that the inhabitants were still tied to other groups that are associated with the Department of Rivas during this time period and that this group was still partaking in similar activities as their ancestors were.

In regard to the popular ceramic type, Luna, found in the Department of Rivas, it was a surprise that Luna Polychrome was not encountered during excavations, as it was assumed that Conchal was a typical late Precolumbian site in the department of Rivas. One possibility as to why the Luna Polychrome tradition was not found may be due to misidentification. Another more likely reason is due to the probability that Conchal was slowly fading in importance by the time the Ometepe Period arrived. This can be seen by the small amount of ceramic pieces found in Conchal that are attributed to the Late Sapoá Period. It may be a combination of the above two reasons as well.

The ceramics of Conchal appear to position the site mostly in the time frame that it had been assumed to be a part. These pieces include Probable Bagaces body sherds, which places the original settlement in the Bagaces Period (AD 300-800). As there are so few sherds attributed to the phase, it is assumed that the site was intermittently settled during the end of the Bagaces Period. The types of ceramic pieces found in Conchal illustrate that there was a steady population throughout all of the Sapoá Period (AD 800-1350). The ceramic pieces that are attributed to the early Sapoá Period that were found in Conchal include: Granada, Lago and Papagayo. The ceramic pieces that are attributed to the Middle Sapoá Period include: Castillo, Isabel and Lago. The ceramic pieces that are attributed to the Late Sapoá Period include: Bramadero, El Menco, Madeira, Murillo Appliqué and Vallejo.

It is also evident by the pieces identified that Conchal was a larger settlement during the Early to Middle Sapoá Periods and then slowly began to fade as the inhabitants were situated in the Late Sapoá Period. This appears to be in line with other sites in Rivas (e.g. Santa Isabel). According to dating techniques recently used (McCafferty and Steinbrenner 2005), many of the sites in the Department of Rivas were actually on the decline. Specifically, sites originally dated to the Ometepe Period were resituated to the Late Sapoá Period. It is unclear why these populations slowly faded as there were some still living in Rivas when the Spaniards made Contact.

In regard to future usage of the ceramic artifacts found in Conchal, all researchers are more than welcome to study these pieces with permission from the Cultural Patrimony of Nicaragua. Appendix A will be made available to my colleagues, as well as a possibility that this data be released on a website for the Department of Rivas and/or the Cultural Patrimony of Nicaragua. Finally, the Office of Cultural Patrimony in Managua will receive a summary report in Spanish.

Chapter 8: Faunal Remains and Their Implications

Faunal materials have the ability to inform the archaeologist as to the dietary choices a community made in the past. This in turn gives insight into some of the daily activities in which the group participated (McCafferty 2008). The data regarding the faunal material at Conchal were mostly composed of molluscs, with a few small unidentified vertebrates.

Analysis Methodology

One drawback regarding molluscs is the fact that the shells preserve very well; this preservation is not seen with other types of artifacts. This preservation can lead to the assignment of erroneously greater significance being given to the molluscs in the archaeological record. Another drawback, when conducting archaeological excavations in shell mounds, is that there is the potential to have problems differentiating the different stratigraphic contexts under and within the levels of shells within the mound (Bailey & Parkington 2009 [1988]). The only way to account for these stratigraphic difficulties is to utilize other artifacts that were encountered with the molluscs, along with the general chronology of the artifacts encountered in the specific test; these artifacts most likely include ceramic and lithic materials.

Molluscs are easily harvested, especially in comparison to marine mammals. When analyzing molluscs, it is easy to determine when and where they were harvested. Different molluscs survive and thrive in different environments; salinity and specific areas of the ocean affect molluscs differently. This is also true in regard to other marine life, including sea mammals and fish (Bailey and Parkington 2009 [1988]).

Molluscs have growing seasons that are affected by the breeding cycles, seasonal variations and supply of food. These different seasons impact the size and taste of the mollusc.

At Conchal, these differences most likely did not determine when the molluscs were harvested; the molluscs were either harvested daily and/or harvested in periods of resource scarcity (Baily and Parkington 2009 [1988]). Therefore, the population is not necessarily interested in the best taste of the mollusc; they are more concerned with the ability of the mollusc to sustain the individuals in the group. It appears that the molluscs were used originally to provide sustenance and then later to supplement the diet of the inhabitants of Conchal.

Typically Gastropods and Bivalves are the two main molluscan classes to be encountered in shell middens. Less commonly encountered in an archaeological context are Scaphopoda, Cephalopoda and Polyplacophora. Much of the molluscs harvested are typically encountered in shallow sub-tidal and intertidal areas (Waselkov 1987) which allows for relative ease of harvesting.

The Molluscs of Conchal

The purpose of sampling the molluscs was to determine where shells existed in different locations of the site; the desire was to ascertain the particular mollusc species encountered. It was determined that the most beneficial manner in which to analyze the molluscs was to determine their relative frequency throughout the site and the different species that were collected. This frequency aided in determining the positions in the landscape of the processing of the molluscs. The different types of species aided in the determination of what was collected; also of interest was the environment in which these molluscs were typically encountered.

The largest quantity of artifacts recovered from the archaeological site of Conchal was molluscs. Analysis suggests that there were at least seven species of mollusc recovered at Conchal (see Photos 51 & 52 below). These shells were procured from both the freshwater and saltwater (O'Day & Keegan 2001) and in shallow as well as deep water (Mitchell & Foster

2000). *Strombus gigas* (O'Day & Keegan 2001), *Chione californiensis*, and *Trachycardium panamense* (Mitchell & Foster 2000) are a few examples of the various species encountered at Conchal. These shells were procured and then transported to Conchal to be processed. From there, the shells were cooked, dried (Mitchell & Foster 2000) and possibly prepared for transport to trade. There was no archaeological evidence to suggest that the molluscs were utilized in the production of dye or for the production of beads. If beads were being produced, there would be pre-formed mistakes of beads in the archaeological record, none of which were found. Also, the mounds were not the same in form as those found in other areas, including in prehistoric California (Erlandson et al 2005).

Figure 78 – Photo 51: Sample of shells from STP 12.7, Level 1

Figure 79 - Photo 52: Sample of Shells Encountered in STP 17.3, Level 1

Non-mollusc Faunal Remains

There were 30 pieces of non-mollusc faunal remains encountered during the excavations of Conchal. Typically they were small pieces of long bone, teeth or phalanges. Often these artifacts were encountered in close proximity to the shell mounds of Conchal. This indicates that they were simply disposed of with the rest of the garbage of the inhabitants. Below is a table illustrating the provenience and the positioning of the faunal material encountered in Conchal.

Figure 80 - Table 8: Non-human remains encountered at Conchal:

Non-human bones (unknown)	Position in the site
STP 8.8 level 1	6-7 m west of Mound M
STP 12.11 level 1	10 m west of Mound C
STP 12.8 level 2	in Mound D
STP 12.7 level 1	in Mound D
STP 14.6 level 1 (burnt bone)	in Mound D
STP 14.12 level 1	in Mound C
STP 18.3 level 2	in Mound F
STP 18.2 level 3	In shell presence of Mound H

STP 18.9 level 1	not within 20 m of a mound
STP 7.7 level 2	15 m southwest of Mound M
STP 10.13 level 1	5 m east of Mound A
STP 17.18 level 2	5 m north of riverbank
STP 22.3 level 1	5 m north of shell presence for Mound F
STP 22.8 level 2	7 m west of Mound I
STP 25.11 level 1	in shell presence of Mound I
STP 27.12 level 1	7 m southwest of Mound K
STP 29.9 level 2 after 50 cm	in shell presence for Mound K
STP 25.6 level 2	within 1 m of shell presence for Mound I
STP 11.13 level 2	10 m east of Mound A
STP 7.15 level 2	in shell presence for Mound A
STP 29.9 level 2 after 50 cm	in shell presence for Mound K
STP 25.11 level 1	in shell presence for Mound I
STP 33.7 level 1	5 m west of old floodplain
STP 27.12 level 1	7 m southwest of Mound K
STP 30.10 level 3	in Mound L
STP 30.8 level 1	in shell presence for Mound L
STP 5.10 level 1	4-5 m north of floodplain
STP 18.2 level 3	in shell presence for Mound F
total: 30	
Positions in the landscape:	Percentages of the total (30)
Within 10m of floodplain/river: 3	10%.
In a mound: 8	27%.
In shell presence: 8	27%.
Within 10 m of shell presence: 1	3%.
No significance in position: 3	10%.
	Total %= 100%

With the exception of the molluscs, the faunal remains were not thoroughly examined as it was too difficult to determine the vertebrate class any one piece belonged to. The species of mollusc were examined so as to determine where they were harvested; this offered insight into the lengths the inhabitants of Conchal went to in order to obtain their food. The data illustrate that the inhabitants indeed went to great lengths to obtain their food at times, while at other times they harvested whatever was easiest to acquire.

The analysis of data also illustrate that the early semi-nomadic inhabitants relied heavily on the molluscs when they inhabited Conchal. As the settlers remained permanently, they relied on the molluscs as a supplement to their diet, not as the main item. This is supported by the other artifacts appearing in the archaeological record along with the shells. The other faunal

remains indicate that the inhabitants of Conchal did participate in opportunistic game hunting. They also possibly conducted bird hunting, which is supported by the clay balls that were found.

The analysis of the data illustrate that shell harvesting was constant and always thought of as important to the inhabitants of Conchal; this is evident by the continuously high usage of molluscs. It must be noted that the actual percentage of shells consumed to the probable increase in population decreased (e.g. there was a higher percentage of inhabitants while the mollusc consumption appeared to stay the same). Toward the later periods of settlement at Conchal—during the Sapoá and late Sapoá/early Ometepe periods—the inhabitants may have continued to harvest molluscs because they enjoyed eating them.

Future research of the faunal material includes the study of the possible seasonality of the mollusc harvesting. It is the hope of the researcher that a graduate student in biology would analyze the remains to determine what types of species were found in Conchal. Also, it would be a future hope to examine the micro-wear the stone tools to determine what type of materials they were used to process—including faunal remains.

Chapter 9: The Human Burials of Conchal and Their Meaning

Encountering remains during the excavations at Conchal was an unexpected occurrence. When human remains were initially encountered they were noted in the field notes, indicated in field forms, placed in artifact bags with their provenience noted and were transferred to the lab. After dozens were found during the shovel test portion of the excavations, it was determined that analyzing the remains beyond their location within the site was beyond the scope of the project. After this decision was made, when remains were encountered during excavations it was determined that the excavations would halt and the remains would be reinterred. The locations of the remains within the site were noted on the field forms, the field notes and they were GPSed. Any artifacts that had been encountered with these remains were also noted and kept for future analysis. During the excavations of the units, there were a few human remains encountered. As there were very few encountered, they were placed in artifact bags and brought back to the lab.

Analysis Methodology

Theory Regarding Human Burials. The human interments encountered at Conchal, regardless of their location, indicate a form of social expression. "Philosophical-religious factors are found to explain a significant proportion of intra-societal variation in mortuary practices repeatedly across culture (Carr 1995: 107)." When individuals are interred in the same location without an individual marker, this is a sign of solidarity among the group. These centrally located individuals represent a regional culture; when burials begin to shift into individual interments, they begin to represent a local culture or identity (Keegan 2009). In order to understand a burial, an understanding of the relatedness of burials, identity and death must occur. Burials are not about the individual interred, but those participate in the actual burial of the person. The behavior of burial is a vessel of political and social change, which leads to an enhanced

consciousness of identity when an individual dies (Janes 2013).

A culture's beliefs are directly linked to the manner in which they conduct burials. According to Binford, burial practices are of major importance as they offer insight into understanding a group's utilization of symbolism and what the symbols mean. He believes there are three arguments regarding burial variability within a culture: Environmental limitations, interactions with outside groups and the relevant characteristics of the relationships between the dead and the living. Sex, social status and age are also factors as to why variability may exist in interments (Binford 1971).

Some archaeologists believe that young adults are the individuals that are given the highest status in burial situations. This is due to their high reproductive and labor value; this focus is seen with societies that have little hierarchy and are most likely horticulturalists and foragers. One of the reason as to why this occurs in these types of societies is the dependence upon their members to reproduce as well as to be an active member in their labor force. Thus if an adult at his or her prime dies, the group will undoubtedly suffer economically and reproductively (MacDonald 2001).

The act of a burial ritual involves two distinct actions: Ritual and technical. In regard to the ritual action, symbolic acts occur. These symbolic acts include rituals that have occurred in accordance with their religious beliefs. With technical actions, a decomposing body is taken away from a living group; this is done in case of predators and/or due to the odor of the body (Binford 1971). Saxe (1970) and Goldstein (1976) have theories regarding why individuals participate in specific mortuary practices. Saxe determined that mortuary practices stem from the ability to control and utilize resources; this was done by establishing a connection via the burial of an ancestor. The tie to a specific ancestor gives an individual or a group access to

restricted resources; this tie is often passed down through an inheritance. The location in which an individual is buried is reflected in their religious and/or social views; with the individual treated differently depending upon their status or identity within a society (Saxe 1970).

Goldstein maintains that the manner in which an individual is buried is a direct result of that person's relationships with others in their group. An examination of how individuals were buried leads to how the group was organized socially. Goldstein found that groups maintained and continuously utilized a burial area to assert control over resources that were connected to it. These resources are thought to be restricted and crucial for the group (Goldstein 1976). By utilizing a designated area, a group exhibits a higher sense of social organization. This group would most likely be related, either as an extended family, a moiety or a clan; this relatedness then ties the group together economically as well. By being a member of this group, an individual has access to the resources that have been claimed by this group (Curet and Oliver 1998).

By utilizing a communal area and not marking graves, the living members of the group may claim the resources concerning the area but does not single out any one particular person over another. This has been seen through ethnographic evidence in South America; specifically in Brazil with the Kalapalo. The communal mortuary practices bind the members of the group to one another, as well as to the area that they inhabit. Placing dead individuals in a communal place is essentially claiming the property. This claim to the property is continuously renewed by the placement of more individuals in the communal burial area. The claim and its renewal allows for the group to claim the resources that are associated with the area where the interments are located (Curet and Oliver 1998).

The Act of Burial

The act of burial is more important than examining the dead and the artifacts encountered with them. The burial is done by the living and what they focus on, not the deceased and his/her beliefs. The burial has symbolic meaning for the living and must be interpreted that way. The analyst must be cognizant of slow changes over time. Many people believe that they are still adhering to a belief system, even when they slightly change it. The change is due to each person's own history and his/her beliefs in general. These changes illustrate individuality and they may lead to a large change over time (Mizoguchi 1993).

The burial site, particularly one with middens, tends to be organized by a culture's cosmological beliefs. In Saladoid, the prehistoric population arranged their middens in a circular manner, with the center being sacred. These middens, along with their center were then utilized for public rituals. These burials made the landscape sacred and allowed the inhabitants to enter this sacredness for public ceremonies (Siegel 1996).

Mortuary Practices in Hunter-Gatherer and Egalitarian Societies

"Equality and inequality are not univocal concepts, even in early societies, for there are many different forms of equality, just as there are of inequality, which, despite appearances, reveal different systems of social relations and economic and political organizations of the communities (Frangipane 2007: 152-153)." There are societies that are basically egalitarian with the group having chief members that represent the ideology and politics of the society. This system is one made of kinship and gives a higher status to members that are in a "genealogical position" to govern the group. This would be a chiefdom or ranked society; there is no actual ranking, there is no actual differentiation of tasks (Frangipane 2007).

With this type of society, the dead are treated differently in regard to age; this is seen in Mesopotamia. Adults are buried in a cemetery, whereas juveniles and infants are buried within

the settlement. The early family groups of Ubaid and Samarra societies had egalitarian relationships, with one family group being the higher status/leader of the group. This group would then be controlled through religious beliefs, with the performance of rituals (Frangipane 2007).

Different hunter-gatherer populations placed meaning on the natural landscape; some believed that naturally occurring pieces of landscape were created by ancestors and/or spirits. These parts of the landscape include river, rocks and lakes. One example of burials within an egalitarian society is that of the Mesolithic. Many of the Mesolithic hunter-gatherer cemeteries are associated with shell-middens; examples of this occurrence have been found in Denmark, France, Portugal, Ireland and Sweden. These cemeteries had variations in interments, which indicate a different status; the burials typically were in groups or as a solitary individual. But, there is another "interment" occurrence that dates to the Mesolithic; this includes pieces of human remains being placed in shell middens found along the coast. Many of these pieces are teeth, skulls, feet, legs and hands. These bones had no signs of cut marks; it is believed that the individuals were placed on the middens for the flesh to rot away. After the individual had decomposed, most of the bones were collected and buried in another location; with some of the bones being left behind (O'Sullivan 2002).

In Ireland there is a location that has a coastal shell midden with a high significance; a population of the same cultural group returned to this location for hundreds of years. Near the middens, the population would harvest molluscs, process them and conduct other daily activities. It is thought that they used this location to obtain raw materials for the manufacture of lithic tools. This landscape held a strong significance to the group as they continued to return and utilize its resources for centuries (O'Sullivan 2002).

The middens found throughout the Mesolithic were meaningful points of the landscape, with multiple generations returning to them. This would have made the area perfect for the deposition of ancestors. The midden would have served as a place for social interactions, as well as for the interment of an individual related to the group. Many of the groups that lived during the Mesolithic believed death was a transformation into another state (O'Sullivan 2002).

Mortuary Practices in Latin America during Pre-Columbian Times

Puerto Rico offers an example of Pre-Columbian burial practices; one particular study involves the analysis of change over time and how changes in social organizations played a key role in the burial practices as they shifted. The shift in burial practices on the island of Puerto Rico is indicative of a change in social complexity, specifically, the rise of chiefdoms. It illustrates a shift in how the society was organized as well as how resource procurement and distribution changed. The burials shifted from a central location to a domestic interment due to the increase in economic and social complexity. The elites harness their control by distorting ideological beliefs for their own benefit. In effect, the elites utilize burial practices to create and maintain inequality (Curet and Oliver 1998).

There is an ancestor burial-cult in South American that buries their ancestors in the realm of the living, thus allowing a connection to be maintained between the deceased and the living. The belief that the living and dead may coexist in the same area with one another is one that is religious (Curet and Oliver 1998) and one that also leads to a political-economic control over an area.

There is a large amount of ethnographic evidence pertaining to the time of contact in the Greater Antilles; much of this evidence focuses on Hispaniola. It is thought that non-elites were not interred in the same fashion as elites; they were buried outside of their homes in the forest.

Other burial practices include saving certain bones and hanging them in baskets outside the home. The practice of retaining certain bones or digging up bones is a sign of ancestor worship (Curet and Oliver 1998).

Another example of mortuary practices in Latin America originates from the site of La Quemada in Mexico. La Quemada had a large building that held a group of interred individuals that dated to the period of AD 600-900. These individuals were placed here purposefully; this incorporates the beliefs of the living in their connection with the deceased. The individuals encountered at La Quemada were both adult and juvenile. Typically, the long bones and the hands were encountered; feet and vertebrae were generally absent (Nelson et al. 1992).

The individuals were not placed in this structure after its use was discontinued; the remains were placed on the floor while it was being utilized. The remains were not defleshed or dismembered. The individuals decomposed naturally and then the like bones were grouped together, possibly in a bundle. There was no trauma to the bones. There was no evidence in the processing or cooking of the human remains. It is assumed no cannibalism occurred. This terrace where the remains were found was built specifically for certain members of La Quemada to be interred (Nelson et al. 1992).

During the next time span of AD 600-900, there are six different categories of human burials that occurred. These include skull racks, bone piles, incomplete articulated skeletons, incomplete disarticulated skeletons, complete articulated skeletons and charnel structures, such as found in La Quemada. There were holes in the cranial bones and there were cut marks on the long bones. There were other bone piles that were encountered at La Quemada in the Hall of Columns. These piles were placed on the floor and were at some point disarticulated (Nelson et al. 1992).

The landscapes of the burial practices created by the Wari in Peru illustrate that culture's belief concerning the dead. The act of burying an individual was an extended ritual that occurred over time. The process gave the burial meaning and signified more than just disposing of a body. From AD 300-550 burials occurred in an open place and were not associated with architecture. The individuals were put in the bedrock flexed, typically with ceramics. From AD 550-700 burial practices began to shift during this period, with individuals being interred in patios and floors of other rooms. The areas where individuals were buried were part of large compounds and are thought to have been the ancestors of those who resided in the residences. In AD 850-1000 the most extravagant kinds of burials occurred. During this phase palaces are only being utilized as tombs and perhaps reused. There were also simple burial chambers during this time period (Isbell 2004).

In South America, the Moche's practice of burial was a large part of their spiritual beliefs. They utilized different types of burials, which included cemeteries, mounds and habitation rooms. They also had delayed burials; the delays may have been caused by war, lack of a shaman to oversee the ritual or the time of year the death occurred. Some graves were reopened and had another individual deposited into it at a later date, with the burial being resealed again. The Moche's specific location for their burials of an individual is indicative of a specific focus on their ancestors (Millaire 2004).

Prehistoric South American groups, particularly hunter-gatherers, manipulated the deceased. This was done by removing certain bones postmortem, which may have been part of a medicinal, social or funerary ceremony. In Tequendama there were midden burials, with some being burned and possibly cannibalized. There is a shell midden in Piedra Azul where a human femur was encountered with cut marks; these cut marks may have been either to move the

deceased individual or to eat the marrow, it is unclear. The dead were roasted at times, while other times they were salted so that they would be preserved (Santoro et al 2005).

Mortuary Practices in Nicaragua

Sacha Wilke, Geoffrey McCafferty and Brett Watson examined burial practices near Lake Nicaragua at the site of El Rayo. Also, Geoffrey McCafferty, along with Celise Chilcote, Andrea Waters-Rist and Sharisse McCafferty have examined human remains in Nicaragua's Pacific coast. El Rayo is associated with a pre-Columbian site called Tepetate; El Rayo is a secondary site in regard to Tepetate. The settlement of El Rayo occurred around 600 AD and terminated around 1250 AD (McCafferty et al. 2011). It is believed that around 800 AD the Chorotega entered into the area.

In the examination of the remains encountered at El Rayo, a variety of burials that all dated to the Sapoá period were encountered. The different burials included secondary burials and a few primary burials in the domestic portion of El Rayo. There were three burial types encountered throughout the three different loci that characterize the archaeological site of El Rayo. These types were a mass burial area, burials with urns and burials without urns. The urn burials were the majority of burials encountered at the site at Lake Nicaragua, with two of the three loci having secondary interments (Wilke et al. 2011).

El Rayo had numerous artifacts associated with the human burials. Shoe pots of the Sacasa Striated variety were utilized to inter the remains. This type of ceramic is only found in Pacific Nicaragua. This specific type of interment is characteristic of the shift to the Sapoá period from the Bagaces. The first area that human remains were encountered was a mass area with at least four shoe pot clusters. The clusters had artifacts associated with them including miniature vessels, beads and points. The second area had the primary burials in it and area is

associated with the Bagaces period. The third area was an area of disarticulated human burials and the fourth area had 18 shoe pots (Wilke et al. 2011). The first area was cut by a modern day road; the excavations here encountered many different types of artifacts and multiple crania. It is thought to have been utilized for hundreds of years as a cemetery for the surrounding population (Wilke et al. 2011).

While excavating the second area, three individuals were encountered; the third being represented only through a mandible and thought to not have been purposefully interred (Wilke et al. 2011). The remains were attributed to the Bagaces period, while the mandible is attributed to the transition of Bagaces to Sapoá. These interments were definitively associated with the Bagaces period and were complete skeletons. The interments associated with the Bagaces are solely in the extended or flexed pose and are primary burials (McCafferty et al. 2011); whereas the latter are in the shoe-pot urns (Wilke et al. 2011).

The third area was completely different in comparison with the first area. Vessels were buried in this area with artifacts that were utilized as offerings; human remains were found surrounding the vessels. All but one vessel has the toe of the shoe pot facing south and there were at least two depositional episodes that occurred (Wilke et al. 2011).

The secondary burials, in areas one and three, were all placed near water; they were either located on a hilltop or within 100 m of the modern shoreline of Lake Nicaragua. The multiple burials in area one occurred periodically and reveal a variety of different class structures in the prehistoric society that inhabited El Rayo. The clusters that were encountered in this area may represent family groups or individuals related to one another in some way (e.g. clan). There was continuity in regard to the utilization of the area for burial purposes that spanned at least from the Bagaces to the Sapoá period. Many of the burials were reused, which illustrates that the

group had a strong connection to the particular location (Wilke et al. 2011).

The primary burials illustrate a completely different type of interment; it seems to mimic that of Mesoamerica. There was an extra connection between the buried individuals and the area they were placed. Burying relatives under a domicile may have allowed for the maintenance of a legitimate land claim; or it may have been to simply have the dead relatives nearby. While shoe pots were encountered throughout area one, they were not encountered in the third area. This was most likely due to the area being a more ordered location that was utilized for a very short, continuous period. This area is one that has a related group of individuals; all appear to have similar artifacts that do not show a range of differing quality. The manner in which it was constructed illustrates a possible central area for a communal offering (Wilke et al 2011).

There was a shift in regard to burial practices during the Bagaces and Sapoá time periods; it is believed that the types of interment practices that occurred in El Rayo illustrate different classes among the inhabitants. There was a shift from a private burial practice to more of a public form, as well as an increase in burial goods (Wilke et al 2011). There was a change in type of ceramic utilized and an addition of volcanic rock and layered urns/broken ceramic (McCafferty et al. 2011). The shift in the number and types of burial goods are demonstrative of a more connected group of individuals inhabiting El Rayo during the Sapoá period (Wilke et al. 2011).

Another site that contained interred individuals in Nicaragua is Tepetate and is dated to the Sapoá period. Tepetate is a known Chorotegan site that was a regional center named Xalteva, located near modern day city of Granada. Of the three loci that were excavated the third locus was a burial area that consisted of two separate groups. Tepetate was inhabited for the short period of 1000 to 1200 AD (McCafferty et al. 2011).

Both burial groups utilized burial urns; ollas and shoe-pots were utilized. Remains were found on top of the urns, as well as inside them and many of the urns encountered were not intact. The individuals encountered were badly preserved. The urns were also sometimes encased in one another, at times being on top of other urns; appearing like an onion. The pottery found with these burials indicates these individuals were interred during the Sapoá period. Artifacts uncovered with these burials include an ear spool, bowls, vessels and a bead. Tepetate demonstrates that burial urns were not solely utilized for infants as has been typical in the Department of Rivas, Nicaragua (McCafferty et al. 2011).

The final investigation regarding burials in Nicaragua originates in Rivas, Nicaragua; the excavations took place at site called Santa Isabel (McCafferty and Steinbrenner 2005; McCafferty 2008). Santa Isabel is a site that dates to the Early Postclassic time period; during this period the Greater Nicoya was settled by the Chorotega. Immediately following the Chorotega, the area was inhabited by the Nicarao. The inhabitants of Santa Isabel were affiliated with both the Chibcha, who inhabited the area earlier than the Chorotega, and the Chorotega; the prehistoric inhabitants of Santa Isabel were most likely not of Nicarao descent (McCafferty 2008).

The mounds were of varying heights and widths; five mounds were excavated to at least the point of uncovering living surfaces. The mounds were formed by residents throwing trash alongside their houses; they were not intentionally created. There were a few instances of additional height being placed between living floors adding ceramics pieces and/or sand (McCafferty 2008).

Burials were encountered in the fifth mound, with two of the burials in urns. None of the excavations in the mounds encountered any building materials other than wattle and daub. Many

of the floors were formed from compacted soil, though some had inclusions of ceramic and/or sand. There were no foundations to these structures; the inhabitants created a mixture of adobe, soil and debris to create a typical floor. These structures were determined to have been constructed with items that were perishable. One mound was found to be inhabited for at least 450 years, with eight floors representing the time span. This is reminiscent of the mounds that Lange encountered in the Sapoá River Valley in Costa Rica (McCafferty 2008).

There were two types of burial practices at Santa Isabel (Chilcote and McCafferty 2005; McCafferty 2008). Shoe-pots were the predominate method of interment in the Pacific Nicaragua region, with infants/young children being the individuals interred. The ceramic type that is often affiliated with the shoe-pot is Sacasa Striated. Of the shoe-pot urns, a few were also interred with mature teeth from other individuals. Very rarely were offerings included with the shoe-pots, though a stingray spine was encountered with one infant burial. From other sites in the area, shoe-pot burials have been documented with older individuals being encountered (McCafferty 2008).

At Santa Isabel, the shoe-pot urns were typically encountered in abandoned mounds or in between the mounds. At times the urns were found in clusters or on top of one another. The other type of interment practice encountered were primary burials, which were placed directly into the ground. Three individuals have been encountered in this manner at Santa Isabel, two children and one adult. The male adult was encountered with weaving tools, some worked greenstone and a chert drill. The child's head was on a turtle shell and was facing the male. The other child was found in the sixth mound at Santa Isabel (McCafferty 2008).

The primary interments were located in the residential mounds of Santa Isabel; it is unknown if the individuals had any connection with the structure they were buried within. The

rarity of adult burials at Santa Isabel indicates that there were actual cemeteries where adult individuals were interred (McCafferty 2008). These cemeteries were not located within the bounds of the archaeological site of Santa Isabel.

Burials At Conchal

There were approximately 193 sets of human remains encountered during the excavations that occurred at Conchal. None of the remains encountered were complete; most typically were pieces of a long bone, phalanges or skull pieces. Human teeth were also encountered frequently. None of the burials were found in urns, which is different than El Rayo (McCafferty et al 2011). The remains were encountered all throughout Conchal; they were broken into categories including: Within the shell mounds, on the outskirts of the shell mounds (within 10 m), near the flood plain, in a mound's shell presence and in the middle of the site. Below is a table that illustrates the location of each set of human remains encountered (e.g. STP 11.16) and their position within Conchal (e.g. 10 m from a riverbank and 6 m from Mound B) (see Table 9 below). Following this table are two illustrations demonstrating the distribution of the human remains throughout Conchal.

Figure 81 - Table 9: Human Remains Encountered at Conchal:

Human bones/remains	**Position in the site**
STP 10.10 level 2	5 m north of Mound A
STP 10.11 level 1 (burnt)	in shell presence of Mound A
STP 10.15 level 1	on riverbank
STP 10.7 level 2	in shell Mound M
STP 11.13 level 2	directly between Mounds A & C
STP 11.14 level 1	10 m from riverbank
STP 11.16 levels 1&2	10 m from riverbank and 6 m from Mound B
STP 11.6 level 3	3-4 west of Mound D
STP 11.7 levels 1&2	in the shared area between Mounds M & D
STP 11.8 level 2	in the shared area between Mounds M & D
STP 12.12 level 1	7 m west of Mound C
STP 12.15 level 1	in Mound B
STP 12.16 levels 1&2	in Mound B
STP 12.17 levels 1&2	in Mound B and within 5 m of riverbank
STP 12.5 level 2	in Mound D
STP 12.6 level 2	in Mound D

STP 12.7 level 1	in Mound D
STP 12.9 level 1	6 m southeast of Mound D
STP 13.10 level 1	Between Mounds D & C
STP 13.11 level 1	8 m northwest of Mound C
STP 13.5 level 1	in Mound D
STP 13.6 levels 2&3	in Mound D
STP 13.7 levels 1,2&3	in Mound D
STP 13.8 level 1	in Mound D
STP 14.11 level 2	7 m north northwest of Mound C
STP 14.12 level 1	in Mound C
STP 14.17 level 1	5 m from riverbank
STP 14.4 level 3	4-5 m from Mound E
STP 14.5 levels 1&2 (w/animal remains)	3 m north of Mound D, 4-5 m west of Mound E
STP 14.6 levels 2&3	in Mound D
STP 14.7 levels 2&3	in Mound D
STP 14.8 level 2	in Mound D
STP 15.10 level 2	15 m southeast of Mound E
STP 15.11 level 1	8 m north of Mound C
STP 15.12 level 2	7 m northeast of Mound C
STP 15.13 level 1	7 m east of Mound C
STP 15.4 level 2	in Mound E
STP 15.5 levels 1&2	in Mound E
STP 15.7 levels 1&2	in Mound E
STP 15.8 levels 1&2	in Mound E
STP 15.9 level 1	6 m southeast of Mound E
STP 16.10 level 1	17 m east of Mound E
STP 16.12 level 1	17 m northeast of Mound C
STP 16.13 level 1	16 m east of Mound C
STP 16.17 level 2	10 m from riverbank
STP 16.19 level 1	on riverbank, 4 m west of Mound H
STP 16.20 level 2	in Mound H, 5 m east of riverbank
STP 16.21 levels 1&2	in Mound H, 3 m east of riverbank
STP 16.22 levels 1,2 & 3	in Mound H, on riverbank
STP 16.3 level 1	in the shared area between Mounds E & F
STP 16.4 level 2	in Mound E
STP 16.5 level 2	in Mound E
STP 16.6 level 2	3 m east of Mound E
STP 16.7 levels 1&2	2 m east of Mound E
STP 16.8 level 1	4 m east of Mound E
STP 17.10 level 1	16 m east of Mound E
STP 17.11 levels 1&2	not within 20 m of any mound
STP 17.14 level 1	not within 20 m of any mound
STP 17.15 level 1	not within 20 m of any mound
STP 17.16 levels 1&2	not within 20 m of any mound
STP 17.18 level 1	6 m north of riverbank
STP 17.19 levels 1&2	on isthmus within 4 m east of riverbank; 6 m west of floodplain
STP 17.2 level 2	shell presence of Mound F
STP 17.21 level 1	in Mound H
STP 17.22 level 2	in Mound H
STP 17.23 levels 1&3	in Mound H
STP 17.24 levels 1&2	in Mound H (5 m from riverbank)
STP 17.3 level 2	in Mound F
STP 17.4 levels 1&2	in Mound F
STP 17.7 level 2	12 m east of Mound E
STP 17.8 level 2	12 m east of Mound E

STP 18.1 level 1 (burnt)	9 m northwest of shell presence from Mound F
STP 18.10 level 2	not within 20 m of any mound
STP 18.12 level 1	not within 20 m of any mound
STP 18.15 level 2	6 m southwest of Mound G
STP 18.17 levels 1&2	6 m west of floodplain
STP 18.2 levels 1&2	in shell presence of Mound F
STP 18.22 level 2	in Mound H
STP 18.23 levels 1&2	in Mound H
STP 18.24 level 2	in Mound H
STP 18.25 level 1	6 m southeast of Mound H, 3 m from riverbank
STP 18.3 levels 1&3	in Mound F
STP 18.4 levels 1,2&4	in Mound F
STP 18.5 level 1	2-3 m east of Mound F
STP 18.9 level 1	not within 20 m of any mound
STP 19.1 level 2	10 m north of Mound F
STP 19.11 level 1	not within 20 m of any mound
STP 19.14 level 2	in Mound G
STP 19.15 levels 2&3 (burnt bone)	in Mound G
STP 19.18 level 3 (now called 19.20 level 3)	8 m northeast of Mound H
STP 19.21 level 1	6 m northeast of Mound H
STP 19.3 levels 2&3 maybe w/animal too	in Mound F
STP 19.4 level 3 w/ animal bones	in Mound F
STP 19.7 level 3	not within 20 m of any mound
STP 19.9 levels 1&2	not within 20 m of any mound
STP 20.11 level 1	not within 20 m of any mound
STP 20.14 level 1	8 m northeast of Mound G
STP 20.3 levels 1,2&3	in shell presence of Mound F
STP 20.4 level 2 (burnt)	in shell presence of Mound F
STP 20.6 level 2	13 m east of Mound F
STP 20.8 levels 1&2	not within 20 m of any mound
STP 21.1 level 3	in shell presence of Mound F
STP 21.11 level 1	16 m southwest of Mound I
STP 21.15 level 1	on riverbank/floodplain
STP 21.3 level 1 (burnt)	in shell presence of Mound F
STP 21.4 levels 1&2	in shell presence of Mound F
STP 21.8 level 1	15 m west of shell presence for Mound I
STP 21.9 level 2	15 m west of shell presence for Mound I
STP 22.10 level 1	5-6 m southwest of Mound I
STP 22.6 level 1	13-14 m west of shell presence for Mound I
STP 22.7 level 2	7 m west of shell presence for Mound I
STP 22.8 level 2	5-6 m west of Mound I
STP 23.11 levels 1&2 (w/ animal bones)	in Mound I
STP 23.12 level 1	in shell presence of Mound I
STP 23.13 levels 1&2	6 m southeast of shell presence of Mound I
STP 23.5 level 1	10 m east of shell presence for Mound F
STP 23.7 level 1	4 m west of shell presence for Mound I
STP 23.8 level 1	in shell presence for Mound I
STP 24.10 levels 1&2	in Mound I
STP 24.11 levels 1&2	in Mound I
STP 24.5 level 2	13 m northwest of shell presence for Mound I
STP 24.6 levels 1&2	3-4 m northwest of shell presence for Mound I
STP 24.8 level 2	in shell presence for Mound I
STP 24.9 level 1	in Mound I
STP 25.10 levels 1&2	in shell presence for Mound I
STP 25.13 level 2	7 m northwest of riverbank/floodplain
STP 25.3 level 2	15 m northeast of shell presence for Mound F

STP 25.6 levels 2&3	within 1 m of shell presence for Mound I
STP 25.8 level 1	in shell presence for Mound I
STP 25.9 level 1	in shell presence for Mound I
STP 26.2 level 1	5 m east of shell presence for Mound J
STP 26.7 level 2	8 m east of shell presence for Mound I
STP 27.10 level 1	7 m west of Mound K
STP 27.11 level 1	7 m west of Mound K
STP 27.13 level 1	7 m southwest of Mound K, 7 m northwest of riverbank
STP 27.2 level 2	shell presence of Mound J
STP 27.3 levels 1&2	in Mound J
STP 27.9 level 1	6 m west of Mound K
STP 28.11 levels 1&2	in Mound K
STP 28.12 levels 1&2	in Mound K
STP 28.13 levels 1&2	in Mound K
STP 28.14 level 2	5 m south of Mound K, 2 m northwest of riverbank
STP 28.5 level 1	Between I, J, K and L
STP 28.8 levels 1,2&3	in shell presence of Mound K
STP 29.11 levels 1&2	in Mound K
STP 29.12 level 1	in Mound K
STP 29.8 level 2	10 m north of Mound K
STP 29.9 levels 1&2	1-2 north of Mound K
STP 30.10 levels 1,2&3 (some burnt)	in Mound L
STP 30.11 levels 1&2 (burnt and w/ animal bones)	in Mound L
STP 30.14 level 1	5 m north of riverbank
STP 30.7 levels 1&2	10 m northeast of Mound L
STP 30.8 levels 1&2	in shell presence of Mound L
STP 30.9 levels 1&2	in Mound L
STP 31.12 levels 1&2	in Mound L
STP 31.7 level 2	6 m east of Mound L
STP 31.8 levels 1&2	in Mound L
STP 32.10 level 1	in Mound L
STP 32.6 level 1	11-12 m northwest of Mound L
STP 32.8 level 1	in Mound L
STP 32.9 levels 1&2	in Mound L
STP 33.2 level 1	not within 20 m of any mound
STP 6.10 level 1	10 m north of riverbank
STP 6.11 level 2	1-2 m north of riverbank
STP 7.11 levels 1&2 (burnt)	in shell presence of Mound A
STP 7.12 level 1	in shell presence of Mound A, 3 m north of riverbank
STP 7.15 level 2	in shell presence of Mound A
STP 8.10 level 1	8 m north northwest of Mound A
STP 8.12 levels 1,2&3	in Mound A
STP 8.13 levels 1&2	in Mound A
STP 8.15 levels 1&2	in Mound A
STP 9.11 level 1	in Mound A
STP 9.12 levels 1&2	in Mound A
STP 9.13 level 1	in Mound A
STP 9.14 level 2	in Mound A
STP 9.16 level 2	2-3 m from riverbank
STP 9.7 level 2 (burnt)	in Mound M
STP Feb 05, 2009	between Mounds A & M
STP Feb 06, 2009	near a river
STP Feb 20 or 23, 2009	in Mound I or near Mound K
STP Feb 20, 2009	in Mound I
STP unknown	
STP 20.2 level 2 (w/ animal jaw)	8 m north of shell presence for Mound F

STP 23.10	Mound I
STP 22.2	in shell presence of F
STP 11.17	Floodplain (near); near Mound B
STP 19.20	Floodplain (near)
STP 23.14	Floodplain (near)
STP 16.14	No significant location
STP 16.15	No significant location
STP 23.6	No significant location
STP 30.5	No significant location
Unit 9 at 45 cm below the surface human rib w/ bands	in the trench of Mound I
Unit 14 between 20-30 cm below surface	in the trench of Mound I
The Percentages of Human Remains found based solely on known locations	
Locations of where the remains were found:	Percentages (based on 193):
Between Mounds: 7	4%
Within 10 m of a Mound: 29	15%
In a Mound: 63	33%
Within 10 m from shell presence: 9	5%
In shell presence: 21	11%
Within 10 m of Riverbank/floodplain: 16	8%
More than 10 M from Anything Significant: 32	17%
In shell presence and near river: 1	Less than 1%
Unknown Location: 4	3%
The Percentages of Human Remains with the Probable locations included	
Including the Unknown Remains	**Percentages (based on 193)**
Between Mounds: 8	4%
Near a Mound: 29	15%
In a Mound: 65	34%
Near Shell Presence: 9	5%
In Shell Presence: 21	11%
Near Riverbank/floodplain: 16	8%
Insignificant: 32	17%
Near Mounds and River: 11	6%
In Shell Presence and Near River: 1	Less than 1%
Unknown Location: 1	Less than 1%

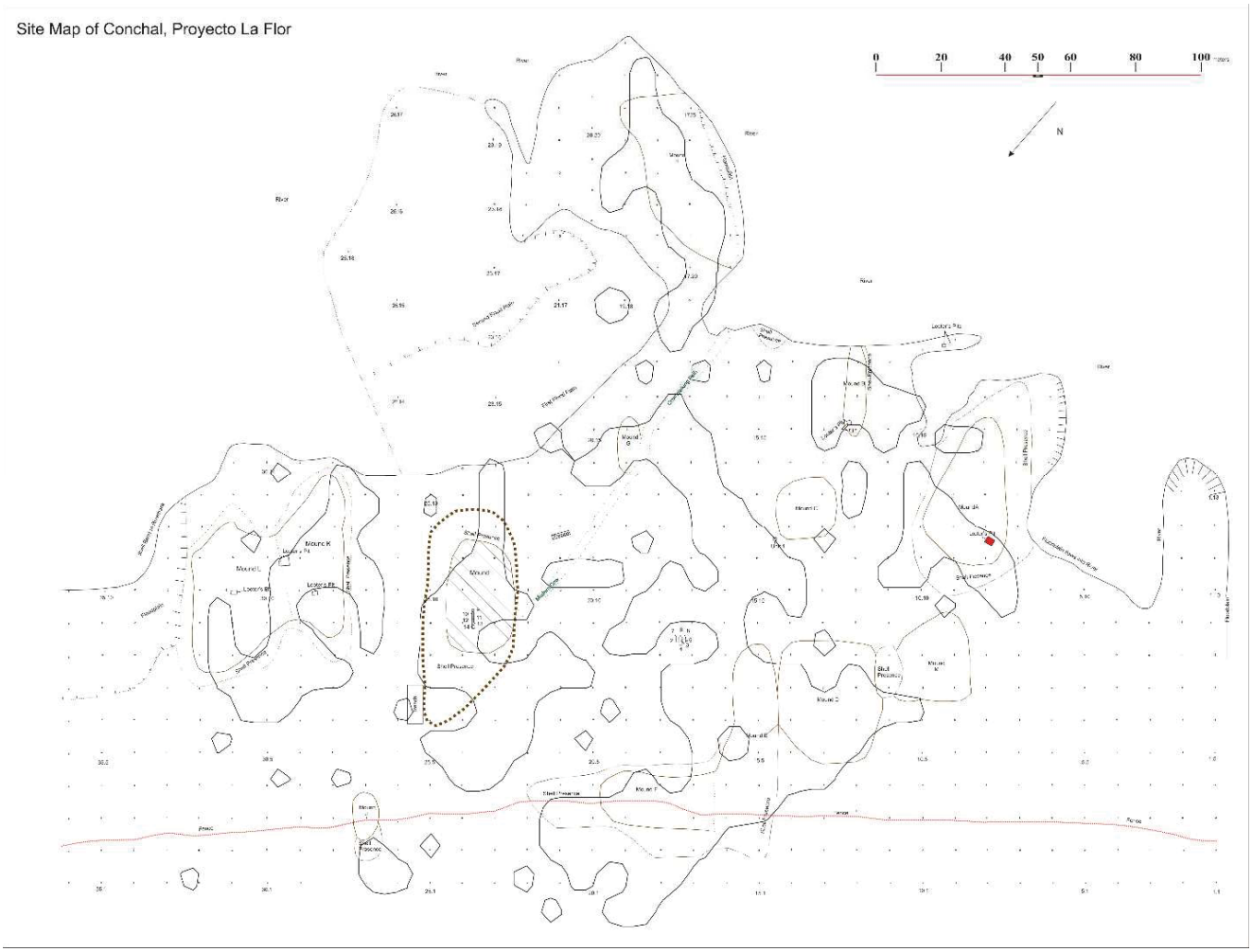

Figure 82 – Overall Human Remain Distribution in Conchal, overlaying the Site Map

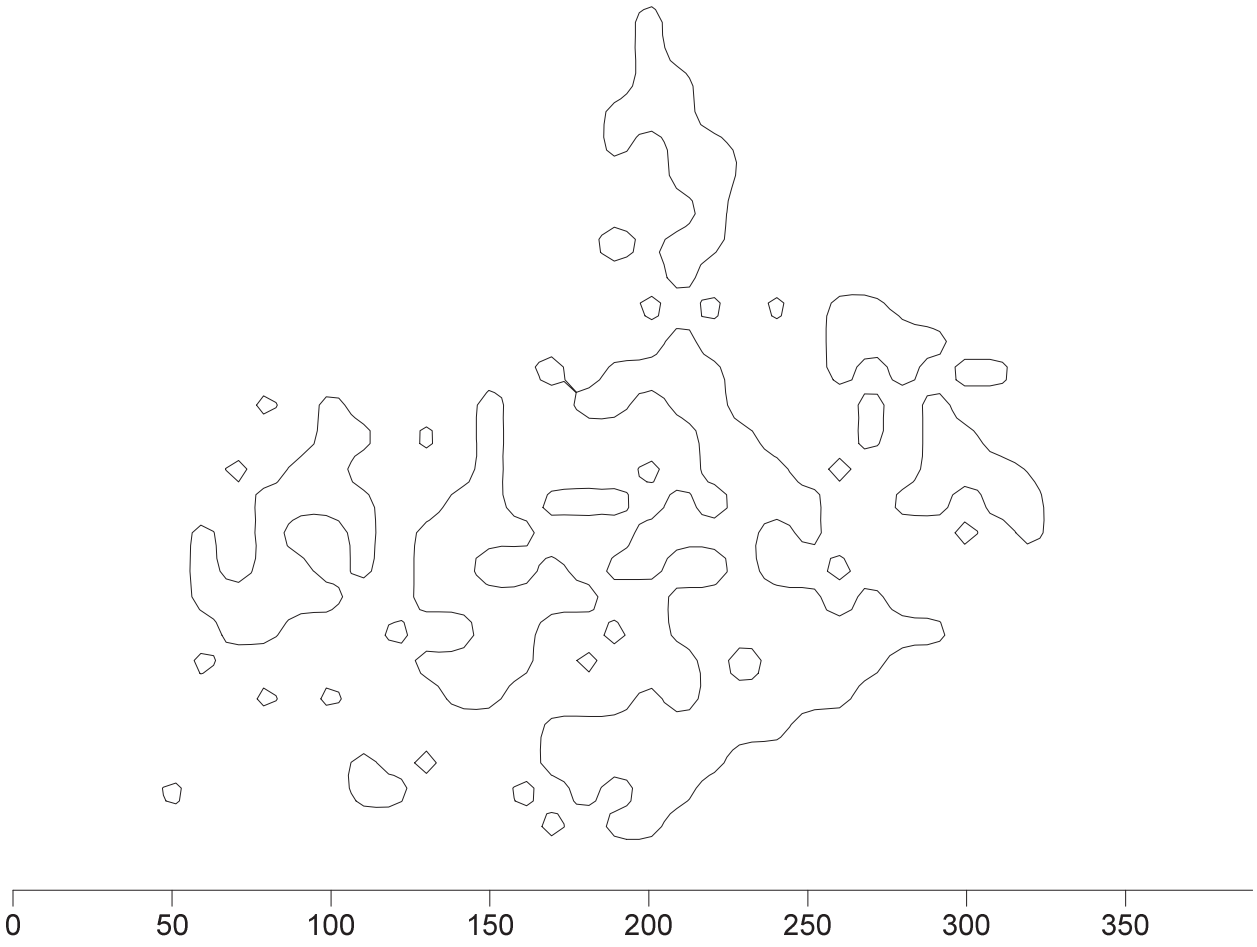

Figure 83 – The Human Remain Distribution Throughout Conchal

The two illustrations above demonstrate that human remains were in fact found throughout Conchal. The larger groupings are generally associated with the mounds, which reinforces the data that indicates a higher density of human remains in the mounds compared to the rest of the site. Again, like the ceramics and lithic materials discussed previously, the first five to six transects have little to no human remains encountered within them.

Over one-third of the remains encountered at Conchal were found in the mounds; this does not include the burials encountered in shell presence or those found within 10 m of the mounds. This high frequency of remains indicates that the mounds were significant to the

population of those who inhabited Conchal. The analysis of the data indicates that this significance began early on in the settlement of Conchal and continued throughout.

Artifacts Encountered with Remains

More than half of the human remains were encountered with artifacts; these artifacts typically were ceramic pieces. Approximately 120 remains were encountered with some type of artifact (Please see Table 10). Many of the human sets appear to be found with Sacasa pieces; Sacasa Striated is linked with utilitarian uses as well as with burials.

The high volume of Sacasa pieces that were encountered with the remains may be indicative that the individuals were potentially reburied. The initial burials may have been in another area and were then exhumed and reburied at a later date. During the reinterment, the Sacasa pieces that originally constructed the shoe pot that the individual was buried in may have been destroyed. These may have been secondary burials, much like those at El Rayo, where the Sacasa was utilized in the practice of allowing the remains to decompose and then burying the remains (Wilke et al. 2011). This theory cannot be substantiated, as no urns were found in Conchal, unlike those found at El Rayo.

While the majority of the remains were found with Sacasa sherds, they were also encountered with other ceramics that indicate the body was interred during the Sapoá period. The Vallejo, Papagayo and El Menco varieties, for example, are all attributed to the Sapoá period. Some remains were encountered with specialized ceramic pieces, such as ceramic balls, netsinkers and support pieces. There were a few sets of remains that were curious as they were found with unidentifiable ceramic materials.

An example of human remains found with unique ceramic materials includes STP 12.9. This set of remains was found with a Papagayo support and as of yet, an unidentifiable orange

ceramic. This ceramic may have been linked to other parts of Nicaragua or Costa Rica. A large piece of a Sacasa pot was encountered with human remains in STP 14.17. In STP 20.11, a broken netsinker was found in the same level as the remains. In STP 20.6, there is a burnt figurine that was found with a set of partial human remains. In the shovel test of 22.10, there was an engraved piece encountered with the partial set of human remains.

Some test pits had a combination of unique ceramics and lithic materials. One example includes STP 14.5 where directly above the human remains, a netsinker was encountered; a metate piece was encountered in the same level as the remains, as well as some animal remains. In STP 15.10, three flakes were encountered, as well as an unidentifiable yellow and cream ceramic piece with the remains. In STP 16.17, a flake and a burnt piece of Sacasa striated were encountered in the same level as the remains. In the STP 16.3, there were two celts, two metate pieces, one flake, one netsinker and one piece of orange ceramic that is yet to be identified.

Another example was located in STP 16.6, where two flakes were found in the level above and an unidentifiable grey piece with orange and black decoration was found with the remains. In STP 17.18, a Papagayo support piece and two flakes were encountered in the same level as the remains. In STP 17.2, one flake, a Vallejo support piece and a few unidentifiable grey ceramics were encountered with the remains. In STP 17.7, a Vallejo support, a large broken point and a flake were all found in the same level as the remains. In STP 18.1, there were Sacasa rims and a ceramic ball found with the burnt bones; a flake was encountered in the level below. In STP 18.15, there was one flake and the base to an unidentifiable orange/cream bowl. In STP 18.2, there was a burnt piece of Sacasa found with a hand axe and a flake; all of which were found in the same level as the remains.

In STP 18.9, there was a base of a Papagayo bowl below the remains and a flake

encountered in the same level as the remains. In STP 19.1, there were two metate pieces and an unidentifiable piece of grey ceramic. In 19.9, there was one flake and one unidentifiable red/grey/brown rim encountered with a burnt set of remains. In the shovel test of 20.3, there is a figurine/support piece, a ceramic sherd that is a Vallejo of the Cara variety and a hammerstone; all of which were encountered with the human remains. In STP 21.8, there was a partial core and a burned piece of Vallejo. In STP 24.6, there was a groundstone axe and some unidentifiable burnt orange pieces of ceramics.

In the shovel test for 24.8, there were groundstone pieces and a Bagaces sherd; the groundstone pieces were in the second level of the test, while the Bagaces piece was located in the third level. Both of these levels contained human remains. In STP 26.2, there was a piece of a Papagayo plate/bowl, a piece of a figurine and one flake; all of these were found in the same level as the human remains. In STP 27.2 there were large pieces of Sacasa sherds most likely from a shoe pot and a flake; these artifacts were found in the same level as the partial human remains. In STP 28.8, there was one hammerstone, one mano and a Papagayo Culebra sherd encountered with the remains.

In the shovel test at 30.8 there were four flakes, a metate piece and burnt Sacasa pieces found in the same level as the remains. In STP 7.11, there was one flake, one metate piece and shoe pot pieces, some burnt, encountered in the same level as the human remains. From the STP labeled February 06, 2009, there was a netsinker and two flakes encountered in the same level as the human remains. In the STP 20.2 there was a partial netsinker and an animal mandible encountered in the same level as the remains. In the shovel test for STP 23.6, there was one core, one flake and some burnt Sacasa pieces encountered in the same level as a partial set of human remains.

There were other artifacts encountered with the human remains; these include lithic materials and animal remains. An example of remains found with lithic materials includes STP 10.10, which was found with a flake. STP 10.11 and 11.16 both had two flakes found in the same context as remains. STP 11.8 had the tip of a point with it. Shovel test 14.11 had one celt and three flakes that were found in the same level as the human remains. In STP 14.4, a mano and two flakes were encountered directly above the human remains. In STP 16.12 a mano piece and a metate leg were encountered in the same level as the human remains. In STP 16.19, one mano was encountered in the same level as the remains. In STP 17.11 a core fragment and a flake were found in the same level as the remains.

In STP 18.12, three flakes were encountered in the same level as the human remains. In STP 19.21 there was a metate leg encountered in the same level as the remains. In the shovel test of 20.14, there was one flake and one metate piece encountered in the same level as the remains. In STP 20.4, there was one flake that was encountered with the remains. In STP 21.11, one flake and one metate leg piece were found in the same level as the human remains. In the shovel test pit of 21.4, one flake was encountered with the partial set of human remains. In STP 22.8, one flake was encountered in the same level as the human remains.

In STP 23.12, there were two flakes encountered in the same level as the partial set of human remains. In STP 23.13, there were two large flakes encountered in with the remains. In the shovel test of 23.8, there was one large flake encountered with the human remains. In STP 25.13, there was one flake encountered in the same level as the remains; the same occurred in STP 25.3. There was one flake encountered in the level above the remains in STP 25.6. One flake was encountered in the same level as the human remains during the testing of STP 27.10; the same occurred in the STP 27.11.

Two flakes were encountered in STP 27.9; both of which were found in the same level as the remains. During the testing for STP 28.5, a mano was encountered in the same level as the human remains. In STP 11.17, there was one flake encountered in the same level as the partial set of human remains. In the STP 23.14, there was a hammerstone and a reduction flake encountered in the same level as the remains. Table 10 summarizes the data mentioned above; it gives the shovel test pit of where the remains were encountered, the location of the shovel test (e.g. in a Mound) and the artifacts that were encountered with it (see Table 10 below).

The unique artifacts encountered with the human remains were of the Sapoá period. As the majority of them were in the same layer as the identifiable Sapoá ceramics. It is believed that these artifacts may have originated in either the northern Nicaragua area, El Salvador or Costa Rica and were imported into Conchal. Regarding the lithic materials encountered in the shovel test pits with the remains, they were most likely discarded and not specifically interred with the remains. Many of the materials are considered to be debitage and not worthy of being placed with human remains. The ones that include metates or manos may have had a particular association with the individual who was interred.

Figure 84 - Table 10: Human Remains, their position in Conchal and the artifacts found with them:

Human bones/remains	Position in the site	Artifacts found with it
STP 10.10 level 2	5 m north of Mound A	flake, sacasa rim; possibly burnt sacasa rim
STP 10.11 level 1 (burnt)	in shell presence of Mound A	flakes, sacasa body, lago, burnt papagayo support
STP 10.15 level 1	on riverbank	sacasa piece, vallejo body
STP 11.13 level 2	directly between Mounds A & C	vallejo, papagayo, burnt sacasa pieces, lago small rim vessel
STP 11.14 level 1	10 m from riverbank	burnt sacasa body
STP 11.16 levels 1&2	10 m from riverbank, 6 m from Mound B	1flake, burnt sacasa, vallejo, another reduction flake
STP 11.6 level 3	3-4 m west of Mound D	murillo or lago rims, sacasa
STP 11.7 levels 1&2	in the shared area between Mounds M & D	vallejo, burnt sacasa, papagayo
STP 11.8 level 2	in the shared area between Mounds M & D	tip of a point, vallejo, sacasa, vallejo support
STP 12.12 level 1	7 m west of Mound C	papagayo, sacasa
STP 12.9 level 1	6 m southeast of Mound D	papagayo support, orange piece*
STP 13.10 level 1	Between Mounds D & C	sacasa rim, vallejo support
STP 13.11 level 1	8 m northwest of Mound C	sacasa, lago/tolesmaida, sacasa with a support
STP 14.11 level 2	7 m north northwest of Mound C	celt, 3 flakes, vallejo, castillo, tolesmaida, sacasa
STP 14.17 level 1	5 m from riverbank	vallejo, piece of sacasa pot

STP 14.4 level 3	4-5 m from Mound E	vallejo, mano, 2 flakes, sacasa pcs (in level above)
STP 14.5 levels 1&2 (w/animal remains)	3 m n of Mound D, 4-5 m w of Mound E	metate piece, papagayo pieces, (netsinker sacasa and vallejo pcs in level above)
STP 15.10 level 2	15 m southeast of Mound E	3 flakes, 3 sacasa rims, a yellow and cream piece*
STP 15.11 level 1	8 m north of Mound C	large piece of sacasa
STP 15.12 level 2	7 m northeast of Mound C	sacasa rim, burnt ceramics
STP 15.13 level 1	7 m east of Mound C	sacasa rims, burnt el menco
STP 15.9 level 1	6 m southeast of Mound E	burnt support piece
STP 16.10 level 1	17 m east of Mound E	burnt support, vallejo piece, ricardo bichrome and sacasa handle
STP 16.12 level 1	17 m northeast of Mound C	mano piece, metate leg
STP 16.17 level 2	10 m from riverbank	flake, ometepe , burnt sacasa
STP 16.19 level 1	on riverbank, 4 m west of Mound H	one mano
STP 16.3 level 1	in the shared area between Mounds E & F	2 celts, netsinker, sacasa pcs, 2 metate pieces, 1 flake, 1 orange piece*
STP 16.6 level 2	3 m east of Mound E	2 flakes (above), grey piece with orange & black; sacasa pieces
STP 16.7 levels 1&2	2 m east of Mound E	sacasa rim, vallejo or similar piece
STP 16.8 level 1	4 m east of Mound E	vallejo/papagayo, support piece
STP 17.10 level 1	16 m east of Mound E	vallejo rim, support piece, papagayo pieces
STP 17.11 levels 1&2	not within 20 m of any mound	vallejo and sacasa rims; core frag and flake
STP 17.14 level 1	not within 20 m of any mound	papagayo; (below is isabel/vallejo)
STP 17.15 level 1	not within 20 m of any mound	pataky rojo, Potosí
STP 17.16 levels 1&2	not within 20 m of any mound	papagayo pcs, support piece, figurine
STP 17.18 level 1	6 m north of riverbank	papagayo support piece, 2 flakes
STP 17.2 level 2	shell presence of Mound F	support (vallejo), sacasa rims (some burnt pcs), 1 flake, el menco/Isabel grey pieces*
STP 17.7 level 2	12 m east of Mound E	vallejo support, 1 flake, sacasa rim, large broken point, Castillo
STP 17.8 level 2	12 m east of Mound E	sacasa body piece; vallejo pc (both in level above bones)
STP 18.1 level 1 (burnt)	9 m northwest of shell presence from Mound F	sacasa rims, ceramic ball, vallejo pieces, 1 flake (below)
STP 18.10 level 2	not within 20 m of any mound	papagayo pieces, 2 burnt pieces
STP 18.12 level 1	not within 20 m of any mound	3 flakes, papagayo frag
STP 18.15 level 2	6 m southwest of Mound G	1 flake, orange/cream base, papagayo, sacasa piece
STP 18.17 levels 1&2	6 m west of floodplain	Potosí handle, sacasa piece
STP 18.2 levels 1&2	in shell presence of Mound F	vallejo/similar pieces; sacasa rim, 1 flake, burnt sacasa, hand axe
STP 18.5 level 1	2-3 m east of Mound F	some burnt vallejo pieces, sacasa
STP 18.9 level 1	not within 20 m of any mound	base of papagayo bowl (below), w/ it--1 flake, Bramadero
STP 19.1 level 2	10 m north of Mound F	sacasa pcs, 2 metate pieces, one grey pc, papagayo plate pc, murillo
STP 19.11 level 1	not within 20 m of any mound	isabel/papagayo pc, Bramadero or Granada pc
STP 19.21 level 1	6 m northeast of Mound H	murillo pc, tolesmaida (below); 1 metate leg, sacasa pc (same level)
STP 19.7 level 3	not within 20 m of any mound	The level above had vallejo pc, papagayo rim & support; the same level had sacasa
STP 19.9 levels 1&2 (burnt)	not within 20 m of any mound	1 flake, sacasa, red w/brown/grey rim*
STP 20.11 level 1	not within 20 m of any mound	broken netsinker, el menco?
STP 20.14 level 1	8 m northeast of Mound G	1 metate pc, 1 flake, sacasa pieces
STP 20.3 levels 1,2&3	in shell presence of Mound F	figurine/support, vallejo (cara), hammerstone
STP 20.4 level 2 (burnt)	in shell presence of Mound F	flake, sacasa rims (burnt), vallejo rim
STP 20.6 level 2	13 m east of Mound F	sacasa rims, burnt figurine, vallejo/Bramadero/madeira
STP 20.8 levels 1&2	not within 20 m of any mound	Bramadero/madeira pc, burnt sacasa rims
STP 21.1 level 3	in shell presence of Mound F	el menco/isabel rims, sacasa rims, burnt sacasa shoe pot
STP 21.11 level 1	16 m southwest of Mound I	1 flake, 1 metate leg pc, vallejo/papagayo rim, madeira body
STP 21.15 level 1	on riverbank/floodplain	sacasa rim
STP 21.3 level 1 (burnt)	in shell presence of Mound F	vallejo support, el menco pcs (below); same=sacasa rim & body
STP 21.4 levels 1&2	in shell presence of Mound F	1 flake, papagayo rim
STP 21.8 level 1	15 m west of shell presence for Mound I	large flake/core, burned vallejo
STP 21.9 level 2	15 m west of shell presence for Mound I	sacasa rim(s), papa or vallejo support
STP 22.10 level 1	5-6 m southwest of Mound I	engraved piece
STP 22.6 level 1	13-14 m west of shell presence for Mound I	granada/madeira support; sacasa pcs, papagayo pcs

STP 22.7 level 2	7 m west of shell presence for Mound I	el menco rims, madeira/Bramadero rims, papa/pata pcs
STP 22.8 level 2	5-6 m west of Mound I	1 flake, papa/isabel rim, lago/toles , sacasa pcs; w/ bones burnt bramadero
STP 23.12 level 1	in shell presence of Mound I	sacasa rims (some burnt pcs), vallejo pc, 2 flakes
STP 23.13 levels 1&2	6 m southeast of shell presence of Mound I	2 large flakes, sacasa vessel pc, papagayo piece
STP 23.5 level 1	10 m east of shell presence for Mound F	sacasa pc (rim), bramadero rim (or madeira)
STP 23.7 level 1	4 m west of shell presence for Mound I	vallejo, support fragment, Pataky
STP 23.8 level 1	in shell presence for Mound I	sacasa rim, vallejo rim, 1 large flake
STP 24.5 level 2	13 m northwest of shell presence for Mound I	below burnt support pcs, tola trichrome; same sacasa rims, vallejo support
STP 24.6 levels 1&2	3-4 m northwest of shell presence for Mound I	sacasa rims, madeira/granada rim; same level--burnt orange pcs, groundstone axe
STP 24.8 level 2 & 3	in shell presence for Mound I	bagaces rim? (level 3); groundstone pcs (level 2), sacasa, isabel/el menco , vallejo raya base
STP 25.10 levels 1&2	in shell presence for Mound I	sacasa pieces, vallejo rim (& body)
STP 25.13 level 2	7 m northwest of riverbank/floodplain	1 flake, sacasa piece
STP 25.3 level 2	15 m northeast of shell presence for Mound F	1 flake, large sacasa vessel piece, toles/ricardo rim, burnt vallejo
STP 25.6 levels 2&3	within 1 m of shell presence for Mound I	above=1 flake, sacasa rim; same=papagayo
STP 25.8 level 1	in shell presence for Mound I	sacasa piece
STP 25.9 level 1	in shell presence for Mound I	sacasa rims, el menco rim
STP 26.2 level 1	5 m east of shell presence for Mound J	1 flake, body of madeira, murillo/lago rim, figurine, papagayo plate/bowl
STP 26.7 level 2	8 m east of shell presence for Mound I	papagayo rim, sacasa pieces
STP 27.10 level 1	7 m west of Mound K	burnt sacasa pcs, el menco/isabel; papa rim, 1 large flake
STP 27.11 level 1	7 m west of Mound K	1 flake, sacasa piece
STP 27.13 level 1	7 m southwest of Mound K, 7 m northwest of riverbank	murillo rim
STP 27.2 level 2	shell presence of Mound J	shoe pot pcs (sacasa); 1 flake, vallejo/isabel pcs
STP 27.9 level 1	6 m west of Mound K	2 flakes, bramadero/madeira rim, el menco, vallejo/papa base
STP 28.5 level 1	Between I, J, K and L	mano
STP 28.8 levels 1,2&3	in shell presence of Mound K	burnt sacasa, bramadero/madeira rim; w them papa culebra, murillo rim , celt, hammerstone, mano
STP 29.8 level 2	10 m north of Mound K	el menco/isabel/vallejo pcs, burnt sacasa, 2 murillo rims
STP 29.9 levels 1&2	1-2 north of Mound K	papa/isabel rims, sacasa body & rims
STP 30.8 levels 1&2	in shell presence of Mound L	4 flakes, metate pc, burnt sacasa, burnt rim (lago/murillo), madeira/bramadero rim
STP 31.7 level 2	6 m east of Mound L	sacasa pc
STP 33.2 level 1	not within 20 m of any mound	bramadero rims
STP 6.11 level 2	1-2 m north of riverbank	vallejo/papagayo/el menco/isabel pcs, burnt sacasa
STP 7.11 levels 1&2 (burnt)	in shell presence of Mound A	1 flake, papagayo, sacasa shoe pot pcs (& rims) some burnt, 1 metate pc, Potosí handle, vallejo/Isabel
STP 7.12 level 1	in shell presence of Mound A, 3 m n of riverbank	sacasa pcs, papagayo, metate pc, vallejo/el menco
STP 7.15 level 2	in shell presence of Mound A	pataky or tola (below)
STP 8.10 level 1	8 m north northwest of Mound A	below Pataky
STP 9.16 level 2	2-3 m from riverbank	pieces of Potosí?, vallejo, sacasa base
STP Feb 05, 2009	between Mounds A & M	isabel/papa, murillo
STP Feb 06, 2009	near a river	isabel, papagayo, 2 flakes, 1 netsinker
STP unknown		madeira or papagayo, sacasa pc (shoe pot pcs)
STP 20.2 level 2 (w/ animal jaw)	8 m north of shell presence for Mound F	partial netsinker, papagayo (cesares?), el menco, isabel
STP 22.2	Found with Ceramics (in shell presence of F)	support pc, vallejo/papagayo, murillo/castillo rim, madeira pcs?, tolesmaida pcs
STP 11.17	Floodplain (near); near Mound B	1 flake, sacasa rim, vallejo/papagayo pcs
STP 19.20	Floodplain (near)	sacasa rim, papagayo manta rim or ometepe red-slipped
STP 23.14	Floodplain (near)	hammerstone, reduction flake, madeira rim
STP 16.14	No significant location	papagayo pc, jorge red-on-buff vessel, lago monochrome,

		sacasa piece
STP 23.6	No significant location	1 large flake, murillo/sacasa pcs (some burnt), vallejo pc, core, vallejo/isabel rims
STP 30.5	No significant location	tolesmaida and/or murillo pcs (and/or lago)

- Denotes the ceramic pieces that were unknown

The majority of the remains were found with ceramics that date to the Sapoá period, with a few notable exceptions. The first being the set of partial remains encountered in STP 24.8; these would predate the other remains and are considered to be Bagaces. Another exception is the discovery of some pieces that date to the early Ometepe period. An example of this exception includes the artifacts found in the shovel tests for 16.17 and 19.20. The remains encountered with Ometepe period ceramics also had material that dated to the Sapoá period, indicating that the inhabitants were in the transition from the Sapoá and Ometepe.

The early exception indicates the beginnings of an early settlement at Conchal. The early burial represents the small, early occupation of Conchal. The latter period of Ometepe, represents the period that was before the period of the Spaniards. The low amount of burials during this time frame indicates the slow decline of Conchal.

Burned Human Remains. There were 12 sets of human remains encountered that had been burned in some manner. At times some bones had been burned, while others in the same context had not. Of the 12 sets, four were found to be in the mounds; four were in the shell presence of a mound; one was between two mounds; one was within 10 m of a mound; one was located within 9 m of the shell presence of a mound, and; one was in an insignificant location (Please refer to Table 11).

The four that were encountered in mounds are from the STP 9.7, 19.15, 30.10 and 30.11. STP 9.7 was located in Mound M. STP 19.15 was encountered during the testing of Mound G. Both STP 30.10 and 30.11 were located in Mound L. STP 30.10 had some remains that were burnt, while others were not. In regard to STP 30.11, these partial remains were encountered

with animal bones. The four sets of partial human remains encountered in the shell presence of mounds are from the STP 7.11, 10.11, 20.4 and 21.3. STP 7.11 and 10.11 were located in the shell presence of Mound A. STP 20.4 and 21.3 were located in the shell presence of Mound F.

The one test pit located between two mounds was STP 11.7 and was in the shared area between Mounds M and D. The STP located within 10 m of a mound was 30.7; it was encountered 10 m northeast of Mound L. The pit located near the shell presence of a mound was STP 18.1; it was located 9 m northwest of the shell presence from Mound F. The final pit where partial remains were encountered was found in an insignificant location; they were encountered at STP 9.9.

Many of the remains may have been partially burned due to clearing the refuse from the mounds. This burning was done to reduce the smell and possibly to deter rodents from consuming the remains and other materials in the mound. This may also explain the high number of burnt ceramics encountered during the excavations at Conchal; it is estimated that almost 1/3 of the ceramics encountered were burnt in some manner. Some of the bones encountered in locations other than in the mounds that were not specifically interred were most likely scavenged from the mounds. They may have been dropped and were eventually covered. The bones found in the shell presence/near mounds were likely moved via wind and/or rain over time, much like the shells that slowly moved off the mound.

Figure 85 - Table 11: Burnt Human Remains:

Burnt Remains	Location
STP 10.11 level 1 (burnt)	in shell presence of Mound A
STP 18.1 level 1 (burnt)	9 m northwest of shell presence from Mound F
STP 19.15 levels 2&3 (burnt bone)	in Mound G
STP 20.4 level 2 (burnt)	in shell presence of Mound F
STP 21.3 level 1 (burnt)	in shell presence of Mound F
STP 30.10 levels 1,2&3 (some burnt)	in Mound L
STP 30.11 levels 1&2 (burnt and w/ animal bones)	in Mound L
STP 7.11 levels 1&2 (burnt)	in shell presence of Mound A
STP 9.7 level 2 (burnt)	in Mound M
STP 11.7 level 1 (burnt)	in the shared area between Mounds M&D

STP 9.9 level 2 (burnt)	insignificant location
STP 30.7 level 1 (burnt)	10 m northeast of Mound L

The analysis also illustrates that the burials began when the site was only intermittently inhabited. The location of the remains in the earliest occupations was in what eventually became the mounds. As the settlers began to remain permanently, the interments continued to be placed in the same area, developing into mounds over time. As seen at El Rayo (Wilke et al., 2011), the burials in the mound laid claim to the area; this claim was most likely made by a family group and their descendants.

This slowly changed as some of the burials moved outside the mounds, but remained within fairly close proximity to them. The data pertaining to the human remains illustrate that all, with the possible exception of the remains found in STP 25.3, of those found outside the mounds date to the latest time period of the settlement. This indicates that there was a differentiation in status among the group members at Conchal. The mounds at this time were already at their present height, or higher, and therefore the demarcation of the property endured. The higher class therefore could be buried in a separate burial, which would set them apart and still link the person to the site. The individual burials allowed for their descendants to worship their specific relative, thus setting them as a family apart. This gave the family a higher status with the area, including the resources.

It is unclear whether there was an actual change in location for burials or if the partial remains encountered in the shell mounds are linked to the burials found throughout the site. Specifically, the inhabitants may have utilized the mounds to allow the deceased to decompose and then bury them (O'Sullivan 2002). If this occurred, then it is possible that skeletal pieces would remain in the mounds—particularly phalanges and teeth—after the deceased decomposed,

after which the larger skeletal pieces would be buried. More in-depth skeletal anlaysis will answer this question; hopefully with the aid of Dr. McCafferty and his grant, the remains will be studied and this question as well as other questions will be answered.

Chapter 10: The Landscape of Conchal and its place in Proyecto La Flor

Analysis of the data indicates that the first definitive time period of cultural activity at Conchal is the late Bagaces period. The lower, oldest archaeological levels at Conchal represent the beginning of the utilization of the area by prehistoric people. These early settlements were opportunistic, seasonal encampments. This area was originally utilized for the procurement of shells by a small family group. The first individuals lived here intermittently and only for access to the maritime resources.

The data recovered from the earliest time period includes very few ceramic sherds and very few small pieces of shell. There was one set of human remains found at STP 24.8 that are attributed to the Bagaces. Very few lithic materials are attributed to this time period, with the exception of a stray flake, possibly a core and a band of unmodified rocks. No other types of faunal remains were encountered. It is assumed that this indicates that Conchal was inhabited intermittently and by few people (Willey & McGimsey 1954) or, it was inhabited for long spans of time, but not permanently. This is supported by no breaks in the stratigraphy in regard to cultural occupation. The ceramic sherds that were encountered were predominantly un-diagnostic and heavily degraded. Those that could be determined, were dated to the late Bagaces period (e.g. Momta type of ceramic). The relative lack of lithic materials during this period indicates a lack of other activities occurring at Conchal. This site had one original sole purpose, which was to procure and process mollusc meat.

By the transition period of the Bagaces to the Sapoá, the group permanently settled Conchal. With the proximity of Conchal to the Pacific Ocean, as well as to terrestrial resources, it was an ideal location for permanent settlement. The inhabitants would not only have access to land that was fertile for agricultural purposes, but when the dry season arrived, it gave access to

maritime resources to supplement their diet.

At the beginning of the next time period there is a larger appearance of Sapoá materials. The descendants of the original family group utilized the resources of Conchal during this period, as well as increased their exploitation of the molluscs. The analysis of the data indicates that there was a population increase. This is reinforced by the large increase of ceramic materials and types; particularly Papagayo vessels and Sacasa pieces appear. More human burials occurred and there was a large increase of lithic materials. There were also more tool types, including manos and metates. The diversity in tools includes items that were used in processing tubers, as well as game (e.g. scrapers). And, the percentage of shells increased dramatically. The analysis indicates that the family group's descendants increased in size and level activity.

This settlement was not only for subsistence, but it also turned into a settlement that was growing in size and differentiating in activities. The analysis of the artifacts found at Conchal support the hypothesis that the site evolved from a small habitation to a settlement that had different activities occurring. The dozens of human remains illustrate a permanent settlement that is increasing in size and diversity; the living inhabitants are allowed the opportunity to be near their dead, as well as to remember them.

The increased amount of shells and the increase of the types of species exploited during this period supported the population increase. The increase in the amount and type of ceramics indicate that there is more than shell harvesting being conducted at Conchal. The typical pieces of vessel encountered were those utilized for storage as well as for consuming foodstuffs. There are more ornate vessels that are also attributed to this time period; the usage of tripod bowls and more decorative pieces indicate that this is a permanent settlement and not an occasional camp.

There is a particular type of ceramic tool that appears in the second time period that is

significant. This "tool" is a netsinker. The netsinker was often utilized in pre-Columbian lower Central America to obtain marine life (Healy 1980; Lange et al. 1992; McCafferty 2010; Wilke 2010). The netsinker appears in prehistoric Nicaragua during the beginning of the Sapoá period (Wilke 2010). This "tool" indicates that there is more of a reliance on procuring marine life in general, not necessarily on molluscs (Healy 1980; Wilke 2010). This shift in technology aided in supporting a different activity in which the inhabitants of Conchal participated; the netsinker indicates an increased level of social complexity to the inhabitants' way of life.

The appearance of larger and more differentiated lithic materials during the second time period also indicates that the group members were participating in activities other than shell harvesting (Andrefsky, Jr. 2001). The appearance of manos, metates and pestles implies that the population processed food stuffs (Ebeling and Rowan 2004), most likely tubers (McCafferty 2010). The expansion of activities at Conchal illustrates the expansion of how its inhabitants utilized the site and its surrounding area (Willey and McGimsey 1954). These tools illustrate the utilization of both terrestrial and maritime resources.

Human remains begin to appear in larger numbers during the Sapoá occupation. The style in which the inhabitants of Conchal buried their dead is that of a public burial. The high frequency of public burials is indicative of the Sapoá period. The scattering of the remains indicate a long period of time that the settlers inhabited this area (Wilke et al 2011). This continued usage of the landscape for the interment of relatives and the rituals associated with these burials, indicates a symbolic significance that is placed upon the natural and now the built landscape. This symbolic importance then creates the desire for the inhabitants to remain in their location and to continue to utilize it. The Sapoá period shows the population of Conchal establishing their territory via the burials (Curet and Oliver 1998).

The manner in which the individuals were interred has many similarities and differences in regard to the Latin American pre-Columbian population. McCafferty encountered shoe pot burials within abandoned mounds; while the burials at Conchal were found in mounds, they were found deep in the mounds as well as close to the surface. Other remains encountered outside of the mounds had rock layers associated with them, though their burials were not the same as those in Peru that had rock layers associated with them (Isbell 2004). Certainly, the burials at Conchal were placed there to claim their territory and this conscious claim began in the Sapoá period. This claim then began as a ritual that took part in the built landscape. Eventually, the ritual and the burials then turned into a control over the settlement.

The youngest time period, is the transition from the late Sapoá to the early Ometepe period. This phase saw a transition from the habitation of a few family groups to that of a larger, more organized group of individuals who not only harvested shells, but were possibly involved in a larger exchange network. During this period there is a marked increase in the amount of diagnostic ceramics, as well as molluscs and stone tools. Human burials continue to occur at the site; thus reaffirming the claim on the territory, which was "owned" by the population at Conchal. This time period sees the beginning of the single burials, which then allows the higher status individuals to begin to control the access to the maritime resources. The control that this higher status group wielded is very similar to the control that occurred in the Mesolithic Ireland landscape (O'Sullivan 2002).

There was also an appearance of figurines that supports mimicking the Mexican style motifs (Niemel 2003). The appearance of figurines illustrates an emphasis on more ideological concepts (Healy 1980; Lange et al. 1992). It is more of an outward display than what had been encountered at Conchal thus far and illustrates that the inhabitants are conducting more complex

activities compared to the previous time periods. This outward display is in part due to the interactions the inhabitants of Conchal had with other groups.

The ceramics that were encountered during this time period have a wider variety than the previous periods. Most of the vessels found were utilitarian and used for storage, much like in the previous period (Rice 2005 [1987]), but there is also the appearance of traded ceramic pieces. These pieces most likely came from Costa Rica; this is only a supposition. This assumption is based on the evidence that there was extensive interactions between the populations of the Greater Nicoya, this is largely based on the ceramics and lithic materials utilized by the various prehistoric groups of the region. The traded pieces indicate that the population, or at least a portion of the population, interacted with outside groups. Given the presence of shells, a possible item that the inhabitants of Conchal traded was the molluscs.

There was an appearance of supports, which typically resembled anthropomorphic or zoomorphic concepts (Healy 1980; González 1996). The concept of zoomorphic or anthropomorphic designs implies a belief or ideological system (Healy 1980; Lange et al. 1992). The depictions on both the supports and figurines highly resemble religious or ideological concepts of Mesoamerica and South America (Healy 1980; Lange et al. 1992). Further, this resemblance indicates a combination of trade, immigration and emulation (Anthony 1997).

These supports and different religious concepts are not due to a large immigration or incursion of people, as nothing else appeared to change in the archaeological record. There also is no evidence of violence in the archaeological record as supported by the human remains that were encountered (e.g. no cut marks were visible on the human bones). While the remains were not fully articulated, they did not exhibit signs of violence. Other evidence supporting a peaceful reason for change in motifs is that the original activities occurring at Conchal continued. The

molluscs were still being harvested and similar ceramics were being created and utilized; lithic materials such as points and manos and metates were also still present. The analysis of the archaeological data indicates that there is an increased connection and interaction with the people of Conchal and those outside of their settlement.

There was a slight decrease in the amount of stone tools at Conchal during the youngest period. There was a change in the type or function of tools, though there was no change in the materials used to create the tools (Andrefsky, Jr. 2001). There was a similar amount of pestles, manos and metates compared to the Sapoá. The tools that appeared include hammerstones and hand axes. Additionally, there was an increase in the sheer quantity of molluscs that were found in the youngest levels, indicating the inhabitants may have begun to focus on trade, therefore they increased their harvesting. The inhabitants of Conchal traded dried molluscs for transport during this time period.

Especially during the Sapoá and the Ometepe periods, it was almost a certainty that there was exchange between the inhabitants of Conchal and those of Mesoamerica, particularly the Maya. There is a highly probablility of interaction with the settlers that inhabited the Sapoá River Valley, due to their proximity and similar lifestyle. This lifestyle included the harvesting of molluscs, as well as the utilization of the same types of ceramics. Examples of the ceramics that were similar in regard to other parts of Central America—including the Greater Nicoya—are seen in the illustrations from the ceramic chapter (Illustrations 72-77).

The location of Conchal and the access to the Pacific Ocean created the vast amount of possibilities that the inhabitants had for a multitude of activities. This afforded the population an opportunity to trade with groups to the north and to the south. This in turn caused the people of Conchal to rely more on their maritime resources. In turn, this reliance and increased interaction

created the desire to add different motifs and ceramic styles to their repertoire.

The increase in diagnostic and elaborate ceramics may be indicative that there is now a division of labor. Conchal has now become a settlement that is controlled by those who control the access to the mounds. The class that controls the mounds also controls the access to the Rio La Flor and the access to the Pacific Ocean. Thus all of the maritime resources were under the control of the upper class of Conchal.

Trade and Migration

Colonization (Chapman and Hamerow 1997), forced migration, local and career migrations (Anthony 1997; Chapman and Hamerow 1997) are all types of migration that occurred during the pre-Columbian time period. These types of migrations affected the prehistoric inhabitants of Conchal (Healy 1980; Fowler, Jr. 1989; Anthony 1997; Niemel 2003). Migrations and trade are the two biggest factors contributing to a population making the conscious or subconscious decision to move to Conchal and the area that is to be part of the Proyecto La Flor survey. Whether it was forced or voluntary, there was a movement of individuals to the area surrounding Conchal that became permanent. This movement allowed the access to and exploitation of the terrestrial resources, as well as the maritime ones.

These early inhabitants not only traveled to this location, but they chose to settle and live there. The original settlers were comprised of a hunter-gatherer family group that was semi-nomadic. Traveling and settling along or near a coastline, particularly along the Pacific Ocean, allowed this group to easily obtain both terrestrial and maritime resources as needed and provided for the ability to leave when the resources became scarce. They remained here for a few months due to the access to and abundance of the food. Before leaving the area, during the late Bagaces period, at least one person died. The group buried this person at Conchal and left

for a short period of time. The group returned to the area for the resources and now for their dead ancestor. This ancestor offered a tie and a claim to this land for this group. After a few generations, during the Sapoá period, this group continued to stay and bury their dead at Conchal; this reinforced their claim to the land and added legitimacy to the group as they permanently settled Conchal.

Conchal's location within the natural landscape situated it in a perfect position that was along a pre-Columbian trade route. Conchal is located along the Rio La Flor, which flows to the Pacific Ocean; the position on the riverbank of La Flor allowed the inhabitants to access the Pacific Ocean and its many resources. The access to the Pacific Ocean also gave those of Conchal the ability to visit the surrounding territories. Some of these surrounding territories include the contemporary settlement in the Sapoá River Valley in Costa Rica. The data recovered by Lange indicates that there was trade being conducted in this area. This is reinforced by the evidence found at the nearby sites of the Sapoá River Valley in Costa Rica. These individuals were involved in trading salt from the salt produced at the salt flats (Lange 1971).

The proximity between the settlements of Conchal and the Sapoá River Valley indicates that there may have been a deeper relationship between the two groups. This connection is not indicative of just two trade partners, but two groups that are related. The data from Lange (1971) and from Conchal illustrates the same belief system and a possibly similar way of life. This illustrates a pattern among the pre-Columbian groups of lower Central America. The relatedness among the different groups that lived in the Greater Nicoya is evident in the usage of the same ceramic traditions, particularly Papagayo-Vallejo and Granada-Madeira, by these groups. It is believed that the later excavations that are part of Proyecto La Flor will reaffirm this assumption.

Evidence of trade in Conchal is observed by the unidentifiable ceramic pieces encountered at Conchal. While there were only a few dozen unidentifiable pieces, many of them were found with human remains. This demonstrates an importance that the inhabitants of Conchal placed on the pieces. Another form of evidence that illustrates the populations of Conchal and the Sapoá River Valley were related are the ceramics that they utilized. They both used Vallejo, Papagayo and Madeira, among many other types (Lange 1971). These ceramics are characteristic of the Sapoá period (Healy 1980; McCafferty 2005; Niemel 2005; Steinbrenner 2010).

The analysis of the data from Conchal does not indicate why the site was abandoned. A possibility emerges when examining other sets of data from Mesoamerica and Central America in the form of a rise in the sea levels. It is known that the Maya abandoned their sites (McKillop 1995; McKillop and Sabloff 2005) around the end of the Sapoá period. Future excavations as part of Proyecto La Flor will hopefully determine why Conchal was abandoned.

Conclusions

While Conchal is a world away from Australia and Ireland, there are similarities that the prehistoric populations share. All of the groups utilized the coast and both valued the resources it supplied. Lastly, the most important concept that these three groups shared is the symbolic meaning placed on their landscapes (O'Sullivan 2002; McNiven 2003).

In Australia, the prehistoric indigenous people who lived along the coast used the sea to "construct their seascapes" that became "spiritscapes" that where filled with spirits that could be called upon during rituals. Most of the indigenous population of Australia who inhabited the coast utilized terrestrial and maritime resources. These populations placed mythological meanings on the sea; this included areas near the sea and within it. Reefs, tides, islands and

sandbanks all held a special, symbolic meaning. These features were associated with their ancestors; rituals were held out in the sea as well as on the land. Ritual sites include inter-tidal zones, sites built with bones, shells and stones; each ritualistic site held similar meaning, they were used to control wind and rain (McNiven 2003).

O'Sullivan studied Mesolithic groups and found that these populations placed meaning on their natural landscape, they also created a built, symbolic landscape. Many of the hunter-gatherers of the Mesolithic had cemeteries that were associated with shell middens. Particularly around the coasts, human remains are found in these middens. Many of these remains are pieces—which includes teeth, skulls, feet, legs and hands. There are no cut marks on the bones, which leads to the assumption that these individuals were not cannibalized or killed. O'Sullivan believes that the population left a recently deceased person on the mounds to decompose; after decomposition, the bones were collected and buried in another location. He also believes that while most of the remains were removed, the shell middens continued to hold a significance for the populations for centuries (O'Sullivan 2002).The natural landscape was originally a geographical formation for the prehistoric occupants of Conchal to stop and process their daily harvest. It is likely that a family group larger than a nuclear family lived at Conchal. This extended family group procured the molluscs to supplement their diet. The data recovered from the earliest time period includes few ceramic sherds and a few small pieces of shell. Very few lithic materials are attributed to this time period, which includes a few stray flakes and a band of unmodified rock. Other than molluscs, no other types of faunal remains were encountered. The fact that there were very few cultural materials encountered in the lower levels indicates that this area may have been inhabited intermittently and by only a few people (Willey & McGimsey 1954).

The analysis of the data indicates that that there was no break in the stratigraphy in regard to cultural occupation. During the earliest settlement, the ceramic sherds encountered were predominantly undiagnostic and heavily degraded. Those that could be determined were transitional Bagaces to Sapoá. There were other ceramic sherds that were found below the Bagaces that were also too degraded to classify; these artifacts were possibly Tempisque.

The relative lack of lithic materials during this period also indicates a lack of other activities occurring at Conchal (Andrefsky, Jr. 2001). This supports the assumption that the site had one original sole purpose, which was to procure, process, and ingest mollusc meat. The many unaltered stones that were found in conjunction with the shells in the later levels and time periods further supports this assumption.

The beginning of the next phase of settlement is marked by a permanent settlement and dates to the Sapoá period. The proximity to the Pacific Ocean and to terrestrial resources made Conchal an ideal location for a permanent settlement. The inhabitants had access to land that they could use for agriculture, as well as access to maritime resources during times of difficulty. The analysis of the archaeological evidence shows a dramatic increase of ceramic materials, human remains, large relative increase of lithic materials and massive amount of shell presence attributed to this phase.

The transformation to the year-round habitation of Conchal is what characterizes this second phase. This was an opportunity for a marginal group of people to permanently move to this site and exploit its resources (Chapman & Hamerow 1997). This permanent settlement allowed the population to interact with other populations to the north and to the south; with the inhabitants of Conchal most likely interacting with those in the eastern El Salvador, as well as eastern Honduras (Bruhns 2014; Dennett 2014). The proximity to the Sapoá River Valley to

Conchal also makes the prehistoric inhabitants likely to have interacted with one another.

Artifacts encountered during the Sapoá show that they are larger in number and in size. These artifacts include the large metates that are considered to be site furniture (Camilli 1989). There was a large increase in the amount of human burials, which allowed the living inhabitants to be near their dead, as well as to remember them. There was an increase in the amount of shells and also an increase in the types exploited during this period. Additionally, there was an increase in the amount and type of ceramics, which assumes that there is more than shell harvesting being conducted at Conchal. The ceramics found were determined to be mostly utilitarian. There were pieces of vessel encountered that would have been utilized for storage as well as for consuming foodstuffs. There were more elaborate pieces of ceramics encountered; the usage of tripod bowls and more decorative pieces indicate an attitude that this is not an occasional settlement.

Human remains begin to appear in large number during the Sapoá occupation. This is assumed to indicate there was an increase in population and a change to sedentism. The inhabitants of Conchal buried their dead in a public burial, which is indicative of the Sapoá period. The scattering of the remains indicates a long period of occupation (Wilke et al 2011), this can be seen in the illustrations in the chapter pertaining to human remains (Illustrations 82 and 83). This long time span indicates a significance that is placed on the landscape, which then creates the desire for the inhabitants to remain in their location. The Sapoá period shows the population of Conchal establishing their territory by means of the burials (Curet and Oliver 1998).

The youngest time period, Ometepe, is when Conchal begins to stabilize and potentially wane. Conchal is still a permanent settlement with its inhabitants conducting daily tasks, such as

shell harvesting and processing tubers (McCafferty 2013). This group was possibly involved in trading, as indicated by the unidentifiable ceramic pieces. The waning of Conchal does not come as a surprise; as this is also seen throughout other locations in lower Central America, particularly Nicaragua. Many of the sites along the Pacific portion of Nicaragua peak during the Sapoá period and slowly fade during the Ometepe (McCafferty personal communication).

The analysis of the data shows that during the Ometepe period the mollusc procurement declines slightly while at the same time there is an increase in diversity of stone tools as well as with ceramic types and subtypes (e.g. Vallejo or Sacasa Striated). Human burials continue to occur at the site, with primary burials occurring outside of the mounds. The population continued to maintain their control over the landscape of Conchal.

Figurines and supports attributed to this time period were found with more frequency; some of the types of ceramics encountered can be attributed to those that mimic the Mexican style motifs (Niemel 2003). The appearance of figurines illustrates an emphasis on more ideological concepts (Healy 1980; Lange et al. 1992). The inhabitants are conducting more complex activities compared to the previous time periods. This outward display is influenced by the interactions the inhabitants of Conchal had with other groups.

The variety of ceramics that were encountered during this time period increased more than the previous periods, but decreased in quantity (Please refer to Appendix A). Most of the vessels found were utilitarian and used for storage, much like in the previous period (Rice 2005 [1987]). There was an appearance of supports, which typically resembled anthropomorphic or zoomorphic concepts (Healy 1980; González 1996). The depictions on both the supports and figurines highly resemble religious or ideological concepts of Mesoamerica and South America (Healy 1980; Lange et al. 1992). This resemblance indicates trade, immigration or emulation

(Anthony 1997). There is an increased connection and interaction with the people of Conchal and those outside of their region. Especially during the late Sapoá and early Ometepe periods, the inhabitants of Conchal may have taken part in exchange with the Maya or middlemen. The proximity to the Pacific Ocean afforded the population an opportunity to trade with groups to the north and to the south.

The shifting landscape of Conchal is evident when analyzing the change in artifact types and density. This site and its importance in regard to its landscape is seen when it is first inhabited. The original importance was due to access to resources for a small family group. The symbolic meaning of the landscape increased when the inhabitants began a year-round habitation. This increase was due to the access to molluscs, as well as the terrestrial resources and was important enough to compel the population to permanently move to Conchal.

This second period offered the inhabitants of Conchal the ability to connect to and begin trading with outside groups. For the final period, the landscape and its resources offered greater access to potential trade routes, as well as the ability to reinforce and strengthen connections to outside groups. The landscape presented the pre-Columbian inhabitants with a chance to succeed in daily activities, as well as to harness the landscape and use it to gain and retain control over the landscape of Conchal.

The physical landscape is what drew the original extended family to Conchal. Here the inhabitants first settled the area to be near terrestrial and maritime resources. As the occupation and its resources proved to be beneficial, the inhabitants took advantage of this and controlled the access. This is evident with the large mounds and the ancestral burials throughout the landscape, giving the inhabitants of Conchal claim over the area and its resources. The mounds held their ancestors, including their friends and family. These ancestors were interred in the

surrounding area to mark their territory. This mark gave the inhabitants a history and meaning as well as a claim.

The access to the molluscs and the river drove the inhabitants to create visual markers demonstrating their inhabitation of this area. These visual markers began in the shape of the mounds, being created by the debris and dead relatives left interred within. The inhabitants continued to bury their ancestors. This maintained their ownership of the area and the control of the resources; it also illustrated to outsiders that this area was not available. Additionally, the different types of burials encountered at Conchal leads to the possibility that there was a difference in class. Particularly during the Sapoá and Ometepe periods, burials appear to be different.

Individuals are buried in both the mounds and the surrounding area during the two latter settlement periods. Most of the burials that occur outside of the mounds have more thought involved in the interment. For example, the individuals were often buried with artifacts, while those in the mounds were buried with broken materials. Those who were interred outside of the mound were of the higher class that began to emerge in Conchal. This higher class emerged from the success that the inhabitants of Conchal gained from their maritime exploits and trade with the groups surrounding them.

When an individual of the upper class died, they were interred near the markers that claimed their group's territory. But, they were buried separately so as to have their own burial. This separate burial with artifacts gave a person their own identity apart from those who were buried together in the mounds. To bury a person separately requires more energy and focus on that individual. More physical work is required to create a space in the ground for a person; this extra labor indicates more veneration for this person (Saxe 1970; Goldstein 1976).

The burials created their own symbolic landscape, by their position in the natural landscape and the way the landscape was utilized. An example of this is seen with the Wari, who created a built landscape that utilized their natural surroundings (Isbell 2004). The inhabitants of Conchal utilized the river and the riverbanks and created the mounds from what existed naturally.

The location of Conchal placed them along a potential pre-Columbian trade route that involved those to their north and south. It is likely they were in contact with the inhabitants of the Sapoá River Valley as they both were located close to one another, as well as involved in similar activities during the same time period. These two groups shared the same cultural beliefs and traditions; they also shared the same ceramic tradition.

It was at the end of the Sapoá/beginning of the Ometepe that saw both groups slowly disappear from the archaeological record. This can be seen in the frequency and density of ceramics found during excavations and it can be seen in the illustrations of these different types of ceramics found and their distribution (Please refer to Illustrations 72-77 in the Ceramic Chapter). The analysis of the data suggests that the inhabitants of Conchal may have continued to inhabit their area slightly longer than those of the Sapoá River Valley, but it is evident that the pre-Columbian residents of Conchal had already left the area when the Spaniards made contact.

Future Research, Potential Ramifications

The local population of Conchal and Tortuga are attempting to build a museum to showcase the artifacts found at the site. They would like to educate the public about the prehistory of the southern Pacific Coast of Nicaragua. This museum would aid in the education of the community and help to combat looting, as well as bring in some economic stimulus.

If funds are available in the future, x-ray diffraction should be conducted on the chert

artifacts encountered at Conchal. A small portion of the artifact must be ground into a powder to then be tested. This analyzes the minerals found within the lithic materials of Conchal (Kooyman 2000) to determine the origin of the lithic materials. A comparison would be made with chert sources that are within the nearby area of approximately 20 km. This analysis will determine whether there were interactions between the pre-Columbian inhabitants of Conchal with those in the immediate area. It may also indicate whether the inhabitants of Conchal obtained the materials on their own and/or traded for them. Explorations of the potential interactions with other groups that were located at a longer distance must also be conducted. This would include obtaining comparison material from locations in Costa Rica and northern Nicaragua, and possibly even farther north with Honduras and El Salvador.

X-ray diffraction should also be conducted on the ceramics encountered at Conchal. This will add to the ongoing database that Dr. Larry Steinbrenner and Carrie Dennett have been building; currently these ceramics are of sites located near Granada and the site of Santa Isabel. Though Ms. Dennett has been examining ceramics from El Salvador, Honduras and Costa Rica; she believes that these ceramic pieces are all made by a related population group (2014). By determining the source of clay and the type of temper used in the ceramics found in Conchal, the cultural group will be either reinforced or brought into question.

With Dr. McCafferty's grant to store and study skeletal material of Nicaragua, it is hoped that the skeletal remains of Conchal will be included and studied more in-depth. It is assumed the age and sex of the individuals found will be recorded and analyzed. Also, it is the researcher's hope that other studies will take place in regard to the skeletal materials; hopefully this will include testing of the Strontium and Barium levels in the teeth. This type of testing would be to determine diet and possible migration of the individuals who inhabited Conchal.

Future archaeological investigations in Latin America, particularly Nicaragua, need to

address the lack of theoretical focus. There is a strong need to continue to archaeologically investigate many regions and sites within Latin America, as well as to analyze and report on them properly. At present, there have been few systematic investigations in much of Latin America. Many of the excavations go unreported or only give an abbreviated version of the data gained. The lack of theory prevents others from building upon the data, which further impedes work that is being conducted in the field. There is a need to conduct more excavations to utilize their analysis for regional studies, which can in turn be utilized to compare other regions within and outside Latin America (Politis 2003). Finally, there is a need for the reporting and providing an analysis not only in English, but in Spanish as well. This will allow local and regional archaeologists to have easier access to archaeological research in their own language.

Impact on Lower Central American Understanding

The excavations of Conchal were the first phase of a larger regional study, Proyecto La Flor. This Permitted project will most likely last for decades, the goal is to analyze coastal sites within a 70-100 km radius to examine the potential interactions between these yet undiscovered sites along the coast. Trade will be examined as it has been posited that there was a network of trade that may have gone from Mesoamerica to Panama (Dennett 2014). The definite quantity of these sites is unknown because no one has conducted an archaeological survey of this area, which will be a necessary next step (or several steps). After subsequent excavations, the analysis from Conchal will then be added to a larger database and compared to the data of the as yet to located and excavated pre-Columbian sites. As mentioned previously, the excavation and analysis of Conchal is the first of many projects that will form the regional analysis of Proyecto La Flor; it is the baseline for a much larger, regional project.

The regional landscape research project of Proyecto La Flor, will need to analyze and obtain data regarding the environment and geology for Nicaragua throughout the last few thousand years. This type of data would include river locations, Pacific Ocean location, water-level fluctuations and core samples of soil to examine any microfloral/pollen evidence at Conchal. The environmental and geological data informs under what conditions the prehistoric population lived, which then adds to understanding the daily lives of the inhabitants. This assists a researcher in determining why decisions to leave or settle area occurred. Other similar sites within the area need to be examined, excavated and analyzed to determine whether there was a relationship between those at the other sites and Conchal. Finally, data needs to be gathered concerning other sites throughout the lower Central American region to be added to the regional landscape model.

There are a few prehistoric sites located near Conchal; one is in the present-day site of Ostional. This site is on the bank of an old tributary that has intermittent water flow. The water flows only during the rainy season. This water originates directly from the Pacific Ocean. Evidence of shells are along the riverbanks, but it is unclear if there are any mounds. There are ceramic pieces that are found along the ground. When fences were constructed near the river bank, the dirt that was pulled out to create room for poles to be placed in the ground had many pre-Columbian ceramic sherds in it. This site is potentially another small settlement near the Pacific Ocean that may have been part of a trade network. This site is located between Conchal and the Sapoá River Valley. Determining how this site was involved in the region should be further researched.

As seen throughout Precolumbian Mesoamerica and Central America, there were many groups who capitalized on the coastal resources. Often these coastal sites were utilized seasonally, but were often used over multiple seasons. This is how Conchal began, as a typical

Central American seasonal site. A semi-nomadic group utilized the coastline of Pacific Nicaragua around AD 600. It was after a few hundred years that the descendants of the original group settled Conchal and transformed it to a meaningful settlement.

While this dissertation demonstrates that there is so much work that needs to be done regarding cultural groups that inhabited Pacific Nicaragua, as well as Lower Central America, the excavations that were undertaken at Conchal contribute a substantial piece of information to Nicaraguan archaeologists. The data and analysis offer a glimpse of the same cultural group that inhabited other parts of the Greater Nicoya Peninsula with the inhabitants conducting a different activity, but still participating in many similar ones.

The act of harvesting molluscs, while it happened to a much lesser degree in other areas of the Greater Nicoya, sets the inhabitants of Conchal apart. Future researchers can use this new piece of evidence to examine what this group was doing during the Sapoá and see how they fit in with their counterparts.

Conchal offers a glimpse into other small Precolumbian sites throughout Central America. It offers a perspective of daily activities and how many of the sites may have transformed to permanent settlements that held meaning to their population. While Conchal was not a monumental site, it does not mean that it was less significant to the population then or now. The data and analysis of the site offer a perspective on the average individual's life and the activities that occurred daily. With this information, future archaeologists can utilize this data as well as data from around the region to establish, with a relatively high degree of certainty, what activities and roles all levels of society undertook and how they interacted with one another.

The analysis of Conchal adds a new element of activities to the culture that was extant during the Sapoá Period in the Department of Rivas. This illustrates that the population not only utilized the inland areas, the Lake (Lake Nicaragua near Santa Isabel), but also utilized the

coastline. And, the inhabitants of Conchal not only were originally related to these peoples, but still maintained their relations with them. This is evident by the ceramics that were found in Conchal as well as at other sites in the Department of Rivas.

The ceramics encountered in Conchal spanned at least 600 years and remained the same type of design as those utilized on Ometepe Island, Santa Isabel and in Rivas—with changes being reflected in Conchal's archaeological record as well as the others during the same time periods. All of this evidence points to dynamic populations willing to exploit different types of environments and have the ability to utilize the same types of tools and ceramic pieces for similar, as well as different tasks. These populations also interacted with one another with a relatively high frequency, which is observed by the same type of ceramics used by all the populations in the region, as well as the lithic materials utilized.

Appendix A

Location	Level/Strat	Type of Ceramic	Number of Ceramic Sherds/Pieces	Minimum Number of Vessels	Comments and Descriptions
STP 1.5	1	Unidentified	1	1	Unidentifiable Body
STP 1.8	1	Sacasa	3	2	Sacasa Bodies
STP 1.8	1	Unidentified	3	1	Unidentifiable Bodies
STP 2.3	1	Sacasa	4	2	Sacasa Bodies
STP 2.5	1	Sacasa	2	1	Sacasa Bodies
STP 2.6	1	Sacasa	3	1	Sacasa Bodies
STP 2.7	1	Unidentified	3	1	Unidentifiable Bodies
STP 2.7	1	Sacasa	2	1	Sacasa Bodies
STP 2.8	2	Unidentified	1	1	Ceramic Ball
STP 2.9	1	Unidentified	8	3	Unidentifiable Bodies
STP 2.9	1	Sacasa	5	2	Sacasa Bodies
STP 3.5	1	Sacasa	1	1	Sacasa Body
STP 3.5	1	Sacasa	1	1	Sacasa Rim
STP 3.6	1	Sacasa	1	1	Sacasa Body
STP 3.8	1	Sacasa	1	1	Sacasa Body
STP 3.9	1	Sacasa	2	1	Sacasa Bodies
STP 3.9	1	Sacasa	2	1	Sacasa Rims
STP 3.9	1	Unidentified	7	1	Unidentifiable Bodies
STP 4.1	1	Sacasa	1	1	Sacasa Handle
STP 4.1	1	Sacasa	1	0	Sacasa Rim
STP 4.10	1	Sacasa	1	0	Sacasa Body
STP 4.10	1	Unidentified	5	1	Unidentifiable Bodies
STP 4.6	1	Sacasa	3	2	Sacasa Rims
STP 4.6	1	Sacasa	2	0	Sacasa Bodies
STP 4.6	1	Unidentified	12	2	Unidentifiable Bodies
STP 4.7	1	Sacasa	1	1	Sacasa Body
STP 4.9	1	Unidentified	1	1	Rim
STP 4.9	1	Unidentified	2	1	Engraved Bodies
STP 4.9	1	Unidentified	40	1	Unidentifiable Bodies
STP 5.10	1	Sacasa	3	2	Sacasa Rims
STP 5.10	1	Papagayo-Vallejo	3	1	Bodies
STP 5.10	1	Unidentified	1	1	Rim
STP 5.10	1	Unidentified	40	5	Bodies
STP 5.5	1	Utilitarian	1	1	Base
STP 5.6	2	Unidentified	1	1	Unidentifiable Body
STP 5.7	1	Unidentified	3	1	Unidentifiable Bodies
STP 5.8	1	Sacasa	2	0	Bodies
STP 5.8	1	Sacasa	3	1	Rims
STP 5.8	1	Sacasa	2	2	Handle Pieces
STP 5.8	1	Sacasa	1	0	Base

STP 5.8	1	Unidentified	20	2	Unidentifiable Bodies
STP 6.10	1	Unidentified	126	10	Unidentifiable Bodies
STP 6.10	1	Sacasa	12	3	Rims
STP 6.10	1	Sacasa	11	2	Bodies
STP 6.10	1	Sacasa	4	0	Handle Pieces
STP 6.10	1	Papagayo-Vallejo	1	1	Rim
STP 6.10	1	Papagayo-Vallejo	2	1	Bodies
STP 6.10	1	Papagayo-Vallejo	3	1	Bases
STP 6.11	2	Unidentified	92	7	Unidentifiable Bodies
STP 6.11	2	Papagayo-Vallejo	1	1	Base
STP 6.11	2	Papagayo-Vallejo	2	1	Bodies
STP 6.11	2	Papagayo-Vallejo	1	0	Support Piece
STP 6.11	2	Papagayo-Vallejo	1	0	Rim
STP 6.11	2	Sacasa	1	1	Rim
STP 6.11	2	Sacasa	1	0	Body
STP 6.12	1	Granada-Madeira	1	1	Rim
STP 6.12	1	Utilitarian	2	1	Rims
STP 6.12	1	Unidentified	4	1	Unidentifiable Bodies
STP 6.14	1	Sacasa	1	1	Body
STP 6.14	1	Sacasa	2	1	Bases
STP 6.14	1	Sacasa	1	0	Rim
STP 6.14	1	Unidentified	10	1	Unidentifiable Bodies
STP 6.14	2	Papagayo-Vallejo	3	1	Bodies
STP 6.14	2	Sacasa	1	1	Body
STP 6.14	2	Sacasa	1	0	Base
STP 6.14	2	Sacasa	2	1	Rims
STP 6.14	2	Unidentified	78	7	Unidentifiable Bodies
STP 6.2	1	Sacasa	1	1	Base or Rim
STP 6.3	1	Sacasa	1	1	Body
STP 6.4	1	Sacasa	2	1	Bodies
STP 6.6	1	Sacasa	4	2	Rims
STP 6.6	1	Unidentified	9	2	Unidentifiable Bodies
STP 6.7	1	Sacasa	2	1	Bodies
STP 6.7	1	Sacasa	2	1	Bases
STP 6.7	1	Sacasa	1	0	Rim
STP 6.7	1	Unidentified	4	1	Unidentifiable Bodies
STP 6.8	1	Sacasa	1	1	Burnt Sacasa Handle or Support Piece
STP 6.8	1	Unidentified	10	2	Unidentifiable Bodies
STP 6.9	1	Sacasa	1	1	Base
STP 6.9	1	Sacasa	2	1	Rims
STP 6.9	1	Papagayo-Vallejo	1	1	Body
STP 6.9	1	Unidentified	34	4	Unidentifiable Bodies

STP 7.10	1	Sacasa	2	1	Rims
STP 7.10	1	Papagayo-Vallejo	2	1	Bodies
STP 7.10	1	Papagayo-Vallejo	2	0	Supports
STP 7.10	1	Unidentified	124	7	Unidentifiable Bodies
STP 7.11	1	Sacasa	11	2	Rims
STP 7.11	1	Sacasa	4	1	Handle Pieces
STP 7.11	1	Sacasa	1	0	Body
STP 7.11	1	Sacasa	1	0	Base
STP 7.11	1	Utilitarian	3	1	Bodies
STP 7.11	1	Papagayo-Vallejo	5	2	Rims
STP 7.11	1	Papagayo-Vallejo	4	1	Support Pieces
STP 7.11	1	Papagayo-Vallejo	4	0	Bodies
STP 7.11	1	Unidentified	208	19	Unidentifiable Bodies
STP 7.11	2	Granada-Madeira	1	1	Base
STP 7.11	2	Granada-Madeira	3	1	Rims
STP 7.11	2	Sacasa	8	2	Rims
STP 7.11	2	Sacasa	2	0	Bodies
STP 7.11	2	Sacasa	1	0	Base
STP 7.11	2	Papagayo-Vallejo	5	1	Rims
STP 7.11	2	Papagayo-Vallejo	2	1	Support Pieces
STP 7.11	2	Papagayo-Vallejo	3	1	Bodies
STP 7.11	2	Unidentified	2	1	Rims
STP 7.11	2	Unidentified	1	1	Base
STP 7.11	2	Unidentified	166	19	Unidentifiable Bodies
STP 7.12	1	Unidentified	220	69	Unidentifiable Bodies
STP 7.12	1	Papagayo-Vallejo	3	2	Support Pieces
STP 7.12	1	Papagayo-Vallejo	1	1	Vessel Rim
STP 7.12	1	Papagayo-Vallejo	5	3	Bodies
STP 7.12	1	Papagayo-Vallejo	2	1	Rims
STP 7.12	1	Papagayo-Vallejo	1	0	Base
STP 7.12	1	Sacasa	2	2	Bases
STP 7.12	1	El Menco	1	1	Rim
STP 7.12	1	Vallejo	1	1	Superhemispherical Bowl Body
STP 7.13	1	Sacasa	2	1	Bases
STP 7.13	1	Sacasa	1	0	Body
STP 7.13	1	Vallejo	5	2	Rims
STP 7.13	1	Vallejo	1	0	Body
STP 7.13	1	Utilitarian	2	1	1 Burnt Rim, 1 Not Burned
STP 7.13	1	Unidentified	1	1	Support Piece
STP 7.13	1 m SW on Surface	El Menco	1	1	Rim
STP 7.15	1	Sacasa	1	1	Rim
STP 7.15	1	Unidentified	34	3	Unidentifiable Bodies
STP 7.15	2	Sacasa	5	2	Bodies

STP 7.15	2	Sacasa	2	0	Rims
STP 7.15	2	Unidentified	17	3	Unidentifiable Bodies
STP 7.15	3	Unidentified	3	1	Unidentifiable Bodies
STP 7.15	4	Papagayo	1	1	Tripod Bowl Piece
STP 7.15	4	Unidentified	11	2	Unidentifiable Bodies
STP 7.16	1	Papagayo-Vallejo	11	2	Bowl/Vessel Pieces
STP 7.16	1	Sacasa	3	2	Rims
STP 7.16	1	Sacasa	4	2	Handle Pieces
STP 7.16	1	Papagayo-Vallejo	2	1	Rims
STP 7.16	1	Unidentified	126	23	Unidentifiable Bodies
STP 7.16	2	Bramadero	1	1	Rim
STP 7.16	2	Papagayo-Vallejo	3	1	Rims, 1 Burnt
STP 7.16	2	Papagayo-Vallejo	1	1	Body
STP 7.16	2	Unidentified	29	3	Unidentifiable Bodies
STP 7.16	3	Sacasa	2	1	Rims
STP 7.16	3	Sacasa	5	1	Bodies
STP 7.16	3	Unidentified	19	2	Unidentifiable Bodies
STP 7.2	1	Sacasa	4	2	Bodies
STP 7.2	1	Unidentified	7	1	Unidentifiable Bodies
STP 7.3	1	Unidentified	1	1	Unidentifiable Bodies
STP 7.4	1	Utilitarian	1	1	Base
STP 7.6	1	Unidentified	2	1	Unidentifiable Bodies
STP 7.7	1	Sacasa	2	1	Bodies
STP 7.7	1	Sacasa	3	1	Handle Pieces
STP 7.7	1	Unidentified	1	1	Body
STP 7.8	1	Sacasa	1	1	Sacasa Handle
STP 7.8	1	Unidentified	8	1	Unidentifiable Bodies
STP 7.9	1	Sacasa	3	1	Bodies
STP 7.9	1	Sacasa	3	1	Rims
STP 7.9	1	Sacasa	1	0	Base
STP 7.9	1	Unidentified	21	2	Unidentifiable Bodies
STP 8.10	1	Sacasa	1	1	Rim
STP 8.10	1	Utilitarian	1	1	Body
STP 8.10	1	Unidentified	29	3	Unidentifiable Bodies
STP 8.10	2	Papagayo-Vallejo	1	1	Base
STP 8.10	2	Papagayo-Vallejo	1	0	Rim
STP 8.10	2	Sacasa	1	1	Burnt Rim
STP 8.10	2	Unidentified	30	3	Unidentifiable Bodies
STP 8.11	1	Sacasa	11	3	Rims
STP 8.11	1	Sacasa	4	0	Bodies
STP 8.11	1	Sacasa	2	1	Bases
STP 8.11	1	Unidentified	91	9	Unidentifiable Bodies
STP 8.11	2	Sacasa	14	3	Rims

STP 8.11	2	Sacasa	6	1	Handle Pieces
STP 8.11	2	Sacasa	4	0	Bases
STP 8.11	2	Papagayo-Vallejo	3	1	Rims
STP 8.11	2	Papagayo-Vallejo	11	2	Bodies
STP 8.11	2	Papagayo-Vallejo	4	1	Bases
STP 8.11	2	Granada-Madeira	3	1	Rims
STP 8.11	2	Unidentified	257	16	Unidentifiable Bodies
STP 8.12	1	Sacasa	1	1	Handle
STP 8.12	1	Sacasa	1	0	Rim
STP 8.12	1	Sacasa	2	1	Bases
STP 8.12	1	Sacasa	1	0	Body
STP 8.12	1	Sacasa	1	1	1 large rim with body
STP 8.12	1	Granada-Madeira	1	1	Body
STP 8.12	1	Papagayo-Vallejo	2	1	Rims
STP 8.12	1	Papagayo-Vallejo	1	0	Body
STP 8.12	1	Unidentified	232	23	Unidentifiable Bodies
STP 8.12	2	Vallejo	1	1	Tripod Bowl Rim
STP 8.12	2	Papagayo-Vallejo	8	1	Body Pieces
STP 8.12	2	Papagayo-Vallejo	1	0	Rim
STP 8.12	2	El Menco	1	1	Rim
STP 8.12	2	Sacasa	2	1	Large Rim, 1 small rim
STP 8.12	2	Sacasa	3	1	2 Burnt Bases, 1 Base
STP 8.12	2	Granada-Madeira	1	1	Rim
STP 8.12	2	Unidentified	95	13	Unidentifiable Bodies
STP 8.12	3	Papagayo-Vallejo	2	1	Rims
STP 8.12	3	Papagayo-Vallejo	3	1	Bodies
STP 8.12	3	Sacasa	1	1	Rim
STP 8.12	3	Granada-Madeira	1	1	Rim to hemispherical bowl
STP 8.12	3	Unidentified	2	1	Burnt support pieces
STP 8.12	3	Unidentified	133	16	Unidentifiable Bodies
STP 8.13	1	Sacasa	3	1	Burnt Rims
STP 8.13	1	Unidentified	63	5	Unidentifiable Bodies
STP 8.13	2	Papagayo-Vallejo	4	2	Rims
STP 8.13	2	Granada-Madeira	1	1	Rim
STP 8.13	2	Papagayo-Vallejo	3	0	Bodies
STP 8.13	2	Sacasa	4	2	Rims
STP 8.13	2	Sacasa	2	0	Bases
STP 8.13	2	Unidentified	88	13	Bodies
STP 8.13	3	Sacasa	2	1	Bodies
STP 8.13	3	Unidentified	3	1	Bodies
STP 8.14	1	Sacasa	4	2	Rims
STP 8.14	1	Sacasa	1	0	Body
STP 8.14	1	Papagayo-Vallejo	1	1	Body

STP 8.14	1	Unidentified	65	5	Bodies
STP 8.15	1	Pataky	1	1	Rim
STP 8.15	1	Papagayo-Vallejo	2	1	Rims
STP 8.15	1	Utilitarian	1	1	Rim
STP 8.15	1	Unidentified	30	3	Bodies
STP 8.15	2	Sacasa	2	1	Rims
STP 8.15	2	Sacasa	4	1	Bases
STP 8.15	2	Unidentified	6	1	Bodies
STP 8.16	1	Sacasa	3	1	Rims
STP 8.16	1	Vallejo	1	1	Body
STP 8.16	1	Unidentified	55	4	Bodies
STP 8.3	1	Utilitarian	1	1	Rim
STP 8.4	1	Sacasa	1	1	Rim
STP 8.5	1	Sacasa	2	1	Bodies
STP 8.5	1	Sacasa	1	0	Rim
STP 8.7	1	El Menco	1	1	Rim to hemispherical bowl
STP 8.7	1	Unidentified	40	4	Unidentifiable Bodies
STP 8.8	1	Papagayo-Vallejo	1	1	Rim
STP 8.8	1	Unidentified	21	2	Unidentifiable Bodies
STP 8.9	1	Papagayo	1	1	Cervantes Tripod Support
STP 8.9	1	Sacasa	1	1	Rim
STP 8.9	1	Unidentified	26	2	Unidentifiable Bodies
STP 9.1	1	Pataky	1	1	Rim
STP 9.1	1	Unidentified	2	1	Unidentifiable Bodies
STP 9.10	2	Sacasa	5	1	Rims
STP 9.10	2	Sacasa	1	1	Base
STP 9.10	2	Sacasa	1	0	Handle
STP 9.10	2	Sacasa	1	0	Body
STP 9.10	2	Papagayo-Vallejo	1	1	Rim
STP 9.10	2	Granada-Madeira	1	1	Rim
STP 9.10	2	Unidentified	109	11	Unidentifiable Bodies
STP 9.11	1	Lago	1	1	Rim
STP 9.11	1	Sacasa	2	1	Rims
STP 9.11	1	Unidentified	69	5	Unidentifiable Bodies
STP 9.11	2	Sacasa	1	1	Rim
STP 9.11	2	Sacasa	2	0	Handle Pieces
STP 9.11	2	Sacasa	1	1	Base
STP 9.11	2	Netsinker	1	1	Netsinker made of unknown ceramic
STP 9.11	2	Castillo	1	1	Engraved body
STP 9.11	2	Bramadero	1	1	Rim
STP 9.11	2	Papagayo-Vallejo	1	1	Body
STP 9.11	2	Unidentified	88	5	Unidentifiable Bodies

STP 9.12	1	Pataky	1	1	Body sherd
STP 9.12	1	Papagayo-Vallejo	3	1	Rims
STP 9.12	1	El Menco	3	2	Rim
STP 9.12	1	Sacasa	13	3	5 burnt rims, 8 non-burnt rims
STP 9.12	1	Sacasa	1	0	Body
STP 9.12	1	Papagayo-Vallejo	7	1	Support Pieces
STP 9.12	1	Papagayo-Vallejo	1	0	Large Base Piece
STP 9.12	1	Papagayo	1	1	Body
STP 9.12	1	Utilitarian	1	1	Base
STP 9.12	1	Red on Black	1	1	Base
STP 9.12	1	Unidentified	1	1	Burnt Rim
STP 9.12	1	Unidentified	166	21	Unidentifiable Bodies
STP 9.12	2	Sacasa	7	2	Rims
STP 9.12	2	Papagayo-Vallejo	1	1	Rim
STP 9.12	2	Papagayo-Vallejo	1	1	Large Hemispherical Bowl Rim
STP 9.12	2	Papagayo-Vallejo	1	0	Support Piece
STP 9.12	2	El Menco	1	1	Rim
STP 9.12	2	Unidentified	125	10	Unidentifiable Bodies
STP 9.13	1	Papagayo-Vallejo	3	1	Support Pieces
STP 9.13	1	Papagayo-Vallejo	1	0	Rim
STP 9.13	1	Papagayo-Vallejo	6	1	Bodies
STP 9.13	1	Sacasa	8	2	Rims
STP 9.13	1	Unidentified	1	1	Decorative Body Piece
STP 9.13	1	Unidentified	68	8	Unidentifiable Bodies
STP 9.13	2	Sacasa	1	1	Burnt Rim
STP 9.13	2	Papagayo-Vallejo	2	1	Rims
STP 9.13	2	Unidentified	4	1	Burnt Rims
STP 9.13	2	Unidentified	20	3	Unidentifiable Bodies
STP 9.14	1	Sacasa	3	1	Rims
STP 9.14	1	Sacasa	1	1	Body
STP 9.14	1	Unidentified	36	3	Unidentifiable Bodies
STP 9.14	2	Sacasa	5	2	Rims
STP 9.14	2	Sacasa	3	0	Handle Pieces
STP 9.14	2	Sacasa	1	0	Base
STP 9.14	2	Unidentified	21	3	Unidentifiable Bodies
STP 9.15	1	Sacasa	2	1	Handles
STP 9.15	1	Sacasa	2	1	Rims
STP 9.15	1	Papagayo	1	1	Support Piece
STP 9.15	1	Papagayo-Vallejo	3	1	Bodies
STP 9.15	1	Papagayo-Vallejo	2	0	Bases
STP 9.15	1	Tolesmaida	1	1	Rim
STP 9.15	1	Unidentified	2	1	Burnt Rims
STP 9.15	1	Unidentified	70	7	Unidentifiable Bodies

STP 9.16	1	Sacasa	4	1	Rims
STP 9.16	1	Sacasa	2	1	Bodies
STP 9.16	1	Unidentified	16	1	Unidentifiable Bodies
STP 9.16	2	Sacasa	6	2	Rims
STP 9.16	2	Sacasa	2	0	Bodies
STP 9.16	2	Sacasa	1	0	Base
STP 9.16	2	Murillo	1	1	Rim
STP 9.16	2	Granada-Madeira	5	1	Rims
STP 9.16	2	Unidentified	1	1	Rim
STP 9.16	2	Unidentified	106	14	Unidentifiable Bodies
STP 9.3	1	Utilitarian	1	1	Body
STP 9.5	1	Sacasa	3	1	Bodies
STP 9.5	1	Unidentified	3	2	Unidentifiable Bodies
STP 9.6	2	Sacasa	1	1	Body
STP 9.6	2	Granada-Madeira	1	1	Base/Rim
STP 9.6	2	Unidentified	46	4	Unidentifiable Bodies
STP 9.7	2	Sacasa	2	1	Handles
STP 9.7	2	Sacasa	2	1	Rims
STP 9.7	2	Unidentified	67	5	Unidentifiable Bodies
STP 9.7	3	Papagayo-Vallejo	4	1	Bodies
STP 9.7	3	Vallejo	4	1	Support Pieces
STP 9.7	3	Vallejo	1	0	Rim to base bowl piece
STP 9.7	3	Sacasa	3	1	Rims
STP 9.7	3	Sacasa	1	1	Base
STP 9.7	3	Utilitarian	1	1	Body
STP 9.7	3	Engraved	1	1	Engraved rim/body
STP 9.7	3	Unidentified	83	10	Unidentifiable Bodies
STP 9.8	1	Papagayo-Vallejo	2	1	Bodies
STP 9.8	1	Sacasa	2	2	Two Rims, one with decoration
STP 9.8	1	Unidentified	34	3	Unidentifiable Bodies
STP 9.9	2	Papagayo-Vallejo	1	1	Burnt Base
STP 9.9	2	Unidentified	73	3	Unidentifiable Bodies
STP 10.10	1	Vallejo	1	1	Rim
STP 10.10	1	Sacasa	1	1	Handle Piece
STP 10.10	1	Unidentified	11	1	Unidentifiable Bodies
STP 10.10	2	Sacasa	1	1	Rim
STP 10.10	2	Lago	1	1	Base
STP 10.10	2	Unidentified	3	1	Unidentifiable Bodies
STP 10.11	1	Papagayo	1	1	Rim to tripod bowl
STP 10.11	1	Sacasa	1	1	Rim
STP 10.11	1	Sacasa	1	0	Body
STP 10.11	1	Sacasa	1	0	Handle
STP 10.11	1	Unidentified	1	1	Burnt Support Piece

STP 10.11	1	Unidentified	39	3	Unidentifiable Bodies
STP 10.11	2	Sacasa	3	1	Rims
STP 10.11	2	Sacasa	2	1	Handles
STP 10.11	2	Sacasa	1	0	Body
STP 10.11	2	Sacasa	1	0	Base
STP 10.11	2	Papagayo-Vallejo	3	2	Rims
STP 10.11	2	Papagayo-Vallejo	2	0	Bodies
STP 10.11	2	Papagayo-Vallejo	1	0	Support Piece
STP 10.11	2	Unidentified	26	3	Unidentifiable Bodies
STP 10.12	1	Sacasa	3	1	Rims
STP 10.12	1	Sacasa	2	1	Bodies
STP 10.12	1	Granada-Madeira	1	1	Rim
STP 10.12	1	Unidentified	36	2	Unidentifiable Bodies
STP 10.12	2	Sacasa	2	1	Rims
STP 10.12	2	Sacasa	1	0	Body
STP 10.12	2	Papagayo-Vallejo	2	1	Bodies
STP 10.12	2	Unidentified	20	2	Unidentifiable Bodies
STP 10.13	1	Sacasa	2	1	Rims
STP 10.13	1	Unidentified	38	4	Unidentifiable Bodies
STP 10.14	1	Murillo	1	1	Base
STP 10.14	1	Unidentified	18	3	Unidentifiable Bodies
STP 10.15	1	Sacasa	2	1	Rims
STP 10.15	1	Sacasa	2	0	Base
STP 10.15	1	El Menco	1	1	Body
STP 10.15	1	Unidentified	108	8	Unidentifiable Bodies
STP 10.16	1	Lago	2	1	Rim to base pieces
STP 10.16	1	Sacasa	6	2	Rims
STP 10.16	1	Sacasa	1	1	Burned Body
STP 10.16	1	Sacasa	1	1	Large Punctate Body
STP 10.16	1	Unidentified	21	2	Unidentifiable Bodies
STP 10.16	2	Utilitarian	1	1	Base
STP 10.16	2	Unidentified	18	2	Unidentifiable Bodies
STP 10.2	2	Sacasa	2	1	Rims
STP 10.2	2	Unidentified	3	1	Unidentifiable Bodies
STP 10.4	1	Sacasa	1	1	Rim
STP 10.5	1	Sacasa	1	1	Rim
STP 10.5	1	Sacasa	2	0	Bodies
STP 10.5	1	Unidentified	2	1	Unidentifiable Bodies
STP 10.6	2	Papagayo	2	1	Base Pieces
STP 10.6	2	Unidentified	35	3	Unidentifiable Bodies
STP 10.7	2	Sacasa	5	2	Rims
STP 10.7	2	Sacasa	4	0	Bodies
STP 10.7	2	Sacasa	1	1	Decorative Body Piece

STP 10.7	2	El Menco	1	1	Rim
STP 10.7	2	Vallejo	1	1	Tripod Bowl Rim
STP 10.7	2	Granada-Madeira	1	1	Rim
STP 10.7	2	Unidentified	1	1	Burnt Rim
STP 10.7	2	Unidentified	114	12	Unidentifiable Bodies
STP 10.8	1	Sacasa	1	1	Rim
STP 10.8	1	Sacasa	1	1	Netsinker
STP 10.8	1	Unidentified	34	3	Unidentifiable Bodies
STP 10.8	2	Papagayo-Vallejo	1	1	Base
STP 10.8	2	Sacasa	1	1	Rim
STP 10.8	2	Unidentified	14	1	Unidentifiable Bodies
STP 10.9	1	Tolesmaida	1	1	Rim
STP 10.9	1	Sacasa	1	1	Rim
STP 10.9	1	Unidentified	21	2	Unidentifiable Bodies
STP 10.9	2	Papagayo-Vallejo	1	1	Body
STP 10.9	2	Sacasa	1	1	Handle Piece
STP 10.9	2	Unidentified	18	2	Unidentifiable Bodies
STP 11.1	1	Sacasa	5	1	Rims
STP 11.1	1	Sacasa	4	1	Bodies
STP 11.1	1	Sacasa	5	1	Handle Pieces
STP 11.1	1	Papagayo-Vallejo	2	1	Rims
STP 11.1	1	Papagayo-Vallejo	3	1	Bodies
STP 11.1	1	Granada-Madeira	2	1	Bodies
STP 11.1	1	Unidentified	44	6	Unidentifiable Bodies
STP 11.10	1	Sacasa	1	1	Rim
STP 11.10	1	Unidentified	21	2	Unidentifiable Bodies
STP 11.10	2	Sacasa	1	1	Body
STP 11.10	2	Unidentified	1	1	Body
STP 11.2	1	Utilitarian	1	1	Base
STP 11.2	1	Unidentified	2	0	Unidentifiable Bodies
STP 11.4	2	Bagaces	1	1	Body
STP 11.4	2	Unidentified	1	1	Body
STP 11.5	1	Sacasa	3	1	Rims
STP 11.5	1	Pataky	1	1	Rim
STP 11.5	1	Unidentified	18	2	Unidentifiable Bodies
STP 11.5	2	Sacasa	1	1	Rim
STP 11.5	2	Sacasa	1	0	Base
STP 11.5	2	Lago	1	1	Rim
STP 11.5	2	Unidentified	6	1	Unidentifiable Bodies
STP 11.6	2	Sacasa	1	1	Rim
STP 11.6	2	Sacasa	1	0	Body
STP 11.6	2	Unidentified	4	1	Unidentifiable Bodies
STP 11.6	3	Madeira	2	1	Burnt Rims

STP 11.6	3	Utilitarian	3	1	Bodies
STP 11.6	3	Unidentified	1	1	Rim
STP 11.6	3	Unidentified	1	1	Handle
STP 11.6	3	Unidentified	47	4	Unidentifiable Bodies
STP 11.7	1	Sacasa	1	1	Base/body
STP 11.7	1	Sacasa	1	0	Body
STP 11.7	1	Sacasa	1	0	Support Piece
STP 11.7	1	Papagayo-Vallejo	1	1	Base
STP 11.7	1	Granada-Madeira	1	1	Rim
STP 11.7	1	Unidentified	49	4	Unidentifiable Bodies
STP 11.7	2	Papagayo-Vallejo	2	1	Body Pieces
STP 11.7	2	Papagayo-Vallejo	1	0	Support Piece
STP 11.7	2	Sacasa	2	1	Rims
STP 11.7	2	Sacasa	1	0	Handle
STP 11.7	2	Unidentified	54	6	Unidentifiable Bodies
STP 11.8	2	Vallejo	1	1	Support Piece
STP 11.8	2	Vallejo	3	1	Bodies
STP 11.8	2	Vallejo	1	0	Rim
STP 11.8	2	Sacasa	1	1	Rim
STP 11.8	2	Unidentified	3	3	Rims
STP 11.8	2	Unidentified	106	8	Unidentifiable Bodies
STP 11.9	1	Sacasa	3	2	Rims
STP 11.9	1	Sacasa	1	0	Body
STP 11.9	1	Unidentified	8	1	Unidentifiable Bodies
STP 11.9	2	Sacasa	1	1	Rim
STP 11.9	2	Sacasa	1	0	Base/Handle
STP 11.9	2	Papagayo-Vallejo	1	1	Rim
STP 11.9	2	Unidentified	1	1	Burnt Rim
STP 11.9	2	Unidentified	36	3	Unidentifiable Bodies
STP 11.10	1	Sacasa	1	1	Rim
STP 11.10	1	Unidentified	22	2	Unidentifiable Bodies
STP 11.10	2	Bagaces	1	1	Body
STP 11.10	2	Unidentified	1	1	Body
STP 11.11	1	Sacasa	2	1	Rims
STP 11.11	1	Sacasa	1	0	Handle Piece
STP 11.11	1	Sacasa	1	0	Base
STP 11.11	1	Unidentified	18	2	Unidentifiable Bodies
STP 11.11	2	Sacasa	1	1	Rim
STP 11.11	2	Unidentified	3	1	Unidentifiable Bodies
STP 11.12	1	Papagayo-Vallejo	1	1	Support Piece
STP 11.12	1	Sacasa	1	1	Rim
STP 11.12	1	Unidentified	22	2	Unidentifiable Bodies
STP 11.12	2	Sacasa	2	1	Rims

STP 11.12	2	Sacasa	1	0	Body
STP 11.12	2	Papagayo-Vallejo	2	1	Bodies
STP 11.12	2	Unidentified	12	1	Unidentifiable Bodies
STP 11.13	1	Sacasa	2	1	Rims
STP 11.13	1	Sacasa	1	0	Body
STP 11.13	1	Papagayo-Vallejo	2	1	Suppport Pieces
STP 11.13	1	Unidentified	12	2	Unidentifiable Bodies
STP 11.13	2	Sacasa	4	2	Rims
STP 11.13	2	Papagayo-Vallejo	1	1	Rim
STP 11.13	2	Papagayo-Vallejo	1	0	Body
STP 11.13	2	Unidentified	36	3	Unidentifiable Bodies
STP 11.14	1	Sacasa	2	1	Handle Pieces
STP 11.14	1	Sacasa	2	0	Bodies
STP 11.14	1	Sacasa	2	1	Rims
STP 11.14	1	Lago or Murillo	1	1	Rim
STP 11.14	1	Unidentified	101	8	Unidentifiable Bodies
STP 11.15	1	Sacasa	2	1	Rims
STP 11.15	1	Sacasa	1	0	Body
STP 11.15	1	Sacasa	1	1	Handle Piece
STP 11.15	1	Unidentified	41	4	Unidentifiable Bodies
STP 11.16	1	Papagayo-Vallejo	2	1	Rims
STP 11.16	1	Sacasa	1	1	Rim
STP 11.16	1	Sacasa	1	0	Base
STP 11.16	1	Unidentified	34	3	Unidentifiable Bodies
STP 11.16	2	Sacasa	5	2	Burnt Rims
STP 11.16	2	Unidentified	36	3	Unidentifiable Bodies
STP 11.17	1	Papagayo-Vallejo	1	1	Base
STP 11.17	1	Papagayo-Vallejo	1	0	Body
STP 11.17	1	Sacasa	2	1	Bases
STP 11.17	1	Sacasa	1	1	Rim
STP 11.17	1	Unidentified	45	3	Unidentifiable Bodies
STP 11.17	2	Sacasa	2	1	Rims
STP 11.17	2	Papagayo-Vallejo	2	1	Rims
STP 11.17	2	Unidentified	80	5	Unidentifiable Bodies
STP 12.3	1	Sacasa	1	1	Rim
STP 12.3	1	Unidentified	20	2	Unidentifiable Bodies
STP 12.4	1 and 2	Sacasa	3	1	Rims
STP 12.4	1 and 2	Sacasa	2	1	Bases
STP 12.4	1 and 2	Sacasa	1	0	Body
STP 12.4	1 and 2	Orange on Cream	1	1	Rim
STP 12.4	1 and 2	Unidentified	42	5	Unidentifiable Bodies
STP 12.5	1	Sacasa	6	2	Rims
STP 12.5	1	Sacasa	1	0	Body

STP 12.5	1	Sacasa	1	0	Base
STP 12.5	1	Papagayo-Vallejo	1	1	Support Piece
STP 12.5	1	Papagayo-Vallejo	1	0	Rim
STP 12.5	1	Unidentified	33	5	Unidentifiable Bodies
STP 12.5	2	Sacasa	5	2	Rims
STP 12.5	2	Sacasa	3	1	Handles
STP 12.5	2	Sacasa	3	0	Bodies
STP 12.5	2	Unidentified	63	7	Unidentifiable Bodies
STP 12.5	3	Bagaces	2	1	Bodies
STP 12.5	3	Unidentified	2	1	Rims
STP 12.5	3	Unidentified	9	1	Unidentifiable Bodies
STP 12.6	2	Papagayo-Vallejo	3	2	Rims
STP 12.6	2	Papagayo-Vallejo	1	0	Support Piece
STP 12.6	2	Granada-Madeira	1	1	Rim
STP 12.6	2	Sacasa	1	1	Rim
STP 12.6	2	Sacasa	1	0	Base
STP 12.6	2	Sacasa	1	0	Probable Handle Piece
STP 12.6	2	Vallejo	1	1	Burnt Rim
STP 12.6	2	Unidentified	2	1	Support Pieces
STP 12.6	2	Unidentified	178	9	Unidentifiable Bodies
STP 12.7	1	Papagayo-Vallejo	5	1	Bodies
STP 12.7	1	Papagayo-Vallejo	3	1	Rims
STP 12.7	1	Lago	1	1	Rim
STP 12.7	1	Sacasa	8	2	Rims
STP 12.7	1	Sacasa	4	0	Bodies
STP 12.7	1	Sacasa	1	1	Handle
STP 12.7	1	Tolesmaida	1	1	Rim
STP 12.7	1	Unidentified	215	19	Unidentifiable Bodies
STP 12.7	2	Vallejo	2	1	Tripod Support Pieces
STP 12.7	2	Vallejo	2	1	Rims
STP 12.7	2	Sacasa	9	2	Rims
STP 12.7	2	Sacasa	1	0	Handle
STP 12.7	2	Sacasa	4	1	Bodies
STP 12.7	2	Papagayo-Vallejo	2	1	Bodies
STP 12.7	2	Papagayo-Vallejo	1	0	Rim
STP 12.7	2	Pataky	1	1	Body
STP 12.7	2	Unidentified	64	7	Unidentifiable Bodies
STP 12.8	1	Sacasa	1	1	Rim
STP 12.8	2	Vallejo	1	1	Burnt Support Piece
STP 12.8	2	Unidentified	27	2	Unidentifiable Bodies
STP 12.9	1	Vallejo	1	1	Support Piece
STP 12.9	1	Vallejo	2	1	Rims
STP 12.9	1	Unidentified	46	3	Unidentifiable Bodies

STP 12.10	1	Sacasa	2	1	Rims
STP 12.10	1	Unidentified	33	3	Unidentifiable Bodies
STP 12.10	2	Sacasa	1	1	Rim
STP 12.10	2	Sacasa	1	0	Body
STP 12.10	2	Unidentified	45	5	Unidentifiable Bodies
STP 12.11	1	Sacasa	1	1	Rim
STP 12.11	1	Sacasa	2	0	Bodies
STP 12.11	1	Unidentified	59	5	Unidentifiable Bodies
STP 12.11	2	Sacasa	4	1	Rims
STP 12.11	2	Sacasa	2	0	Bodies
STP 12.11	2	Sacasa	1	1	Handle Piece
STP 12.11	2	Papagayo-Vallejo	2	1	Rims
STP 12.11	2	Unidentified	29	4	Unidentifiable Bodies
STP 12.12	1	Papagayo-Vallejo	2	1	Rims
STP 12.12	1	Papagayo-Vallejo	1	0	Body
STP 12.12	1	Sacasa	3	1	Rims
STP 12.12	1	Sacasa	1	1	Base/Handle
STP 12.12	1	Unidentified	86	7	Unidentifiable Bodies
STP 12.12	2	Sacasa	2	1	Rims
STP 12.12	2	Sacasa	2	1	Bases
STP 12.12	2	Sacasa	1	1	Olla Body
STP 12.12	2	Granada-Madeira	1	1	Rim
STP 12.12	2	Granada-Madeira	1	0	Body
STP 12.12	2	Unidentified	30	3	Unidentifiable Bodies
STP 12.13	1	Sacasa	3	1	Rims
STP 12.13	1	Utilitarian	1	1	Body
STP 12.13	1	Unidentified	15	2	Unidentifiable Bodies
STP 12.14	2	Sacasa	3	2	Rims
STP 12.14	2	Unidentified	11	2	Unidentifiable Bodies
STP 12.15	1	Papagayo	1	1	Support/Figurine Piece
STP 12.15	1	Papagayo	3	0	Bodies
STP 12.15	1	Sacasa	2	1	Bodies
STP 12.15	1	Unidentified	1	1	Rim
STP 12.15	1	Unidentified	120	11	Unidentifiable Bodies
STP 12.15	2	Sacasa	2	1	Rims
STP 12.15	2	Sacasa	1	0	Body
STP 12.15	2	Unidentified	7	1	Unidentifiable Bodies
STP 12.16	1	Sacasa	6	2	Rims
STP 12.16	1	Sacasa	2	0	Bases
STP 12.16	1	Sacasa	1	0	Handle
STP 12.16	1	Papagayo-Vallejo	2	1	Rims
STP 12.16	1	Papagayo-Vallejo	4	1	Body Pieces
STP 12.16	1	Papagayo-Vallejo	1	0	Support Piece

STP 12.16	1	Unidentified	2	1	Bases
STP 12.16	1	Unidentified	2	1	Rims
STP 12.16	1	Unidentified	109	17	Unidentifiable Bodies
STP 12.16	2	Sacasa	4	1	Bases
STP 12.16	2	Sacasa	1	0	Body
STP 12.16	2	Sacasa	2	1	Rims
STP 12.16	2	Papagayo-Vallejo	2	1	Rims
STP 12.16	2	Unidentified	43	6	Unidentifiable Bodies
STP 12.17	1	Sacasa	2	2	Rims
STP 12.17	1	Sacasa	1	0	Body
STP 12.17	1	Papagayo-Vallejo	10	1	Tripod Pieces
STP 12.17	1	Unidentified	15	2	Unidentifiable Bodies
STP 12.17	2	Papagayo-Vallejo	2	1	Rims
STP 12.17	2	Sacasa	1	1	Rim
STP 12.17	2	Unidentified	24	2	Unidentifiable Bodies
STP 13.3	1	Sacasa	3	1	Bodies
STP 13.3	1	Sacasa	2	1	Rims
STP 13.3	1	Unidentified	17	2	Unidentifiable Bodies
STP 13.3	2	Granada	1	1	Body
STP 13.3	2	Granada	1	1	Probable Rim to Base Piece
STP 13.3	2	Sacasa	1	1	Rim
STP 13.3	2	Unidentified	14	1	Unidentifiable Bodies
STP 13.4	1	Vallejo	4	1	Vessel Pieces
STP 13.4	1	Vallejo	4	0	Support Pieces
STP 13.4	1	Sacasa	1	1	Rim
STP 13.4	1	Unidentified	69	6	Unidentifiable Bodies
STP 13.4	2	Sacasa	1	1	Rim
STP 13.4	2	Sacasa	1	0	Base
STP 13.4	2	Unidentified	40	3	Unidentifiable Bodies
STP 13.5	1	Sacasa	4	2	Rims
STP 13.5	1	Sacasa	2	0	Handle Pieces
STP 13.5	1	Utilitarian	4	1	Bodies
STP 13.5	1	Papagayo-Vallejo	1	1	Rim
STP 13.5	1	Papagayo-Vallejo	1	0	Body
STP 13.5	1	Unidentified	100	10	Unidentifiable Bodies
STP 13.5	2	Papagayo-Vallejo	1	1	Rim to Base
STP 13.5	2	Sacasa	4	1	Rims
STP 13.5	2	Sacasa	1	1	Handle
STP 13.5	2	Sacasa	1	1	Base
STP 13.5	2	Sacasa	1	0	Body
STP 13.5	2	Granada-Madeira	4	1	Bodies
STP 13.5	2	Papagayo	1	1	Rim
STP 13.5	2	Unidentified	175	15	Unidentifiable Bodies

STP 13.6	1	Sacasa	4	1	Handle Pieces
STP 13.6	1	Sacasa	3	2	Rims
STP 13.6	1	Unidentified	58	7	Unidentifiable Bodies
STP 13.6	2	Sacasa	8	3	Rims
STP 13.6	2	Papagayo-Vallejo	4	2	Rims
STP 13.6	2	Papagayo-Vallejo	1	1	Base
STP 13.6	2	Papagayo-Vallejo	8	1	Bodies
STP 13.6	2	Orange and Black	1	1	Body
STP 13.6	2	Papagayo	2	1	Rims
STP 13.6	2	Unidentified	76	8	Unidentifiable Bodies
STP 13.6	3	Sacasa	5	2	Rims
STP 13.6	3	Sacasa	1	0	Handle
STP 13.6	3	Papagayo-Vallejo	3	1	Bodies
STP 13.6	3	Papagayo-Vallejo	1	0	Rim
STP 13.6	3	Unidentified	68	8	Unidentifiable Bodies
STP 13.7	1	Sacasa	2	1	Handle Pieces
STP 13.7	1	Sacasa	7	2	Rims
STP 13.7	1	Sacasa	4	0	Bodies
STP 13.7	1	Papagayo	1	1	Hemispherical Bowl Body
STP 13.7	1	Papagayo-Vallejo	7	1	Bodies
STP 13.7	1	Traded?	1	1	Body
STP 13.7	1	Unidentified	1	1	Rim
STP 13.7	1	Unidentified	261	24	Unidentifiable Bodies
STP 13.7	2	Sacasa	1	1	Body
STP 13.7	2	Sacasa	4	1	Bases
STP 13.7	2	Sacasa	6	1	Rims
STP 13.7	2	Probable Sacasa	1	1	Large base to Olla
STP 13.7	2	Unidentified	31	3	Unidentifiable Bodies
STP 13.8	1	Sacasa	1	1	Rim
STP 13.8	1	Sacasa	1	0	Probable Base
STP 13.8	1	Unidentified	1	1	Handle
STP 13.8	1	Unidentified	55	4	Unidentifiable Bodies
STP 13.8	2	Sacasa	1	1	Rim
STP 13.8	2	Unidentified	59	4	Unidentifiable Bodies
STP 13.9	2	Sacasa	1	1	Base
STP 13.9	2	Papagayo-Vallejo	1	1	Body
STP 13.9	2	Murillo Appliqué	1	1	Rim
STP 13.9	2	Unidentified	29	2	Unidentifiable Bodies
STP 13.10	1	Sacasa	1	1	Rim
STP 13.10	1	Papagayo-Vallejo	1	1	Rim
STP 13.10	1	Unidentified	23	2	Unidentifiable Bodies
STP 13.10	2	Sacasa	3	1	Rims
STP 13.10	2	Sacasa	1	1	Burnt Base

STP 13.10	2	Unidentified	19	2	Unidentifiable Bodies
STP 13.11	1	Sacasa	2	1	Rims
STP 13.11	1	Sacasa	2	1	Bodies
STP 13.11	1	Pataky	1	1	Support
STP 13.11	1	Unidentified	68	5	Unidentifiable Bodies
STP 13.11	2	Sacasa	2	1	Burnt Rims
STP 13.11	2	Sacasa	3	2	Rims
STP 13.11	2	Sacasa	1	0	Body
STP 13.11	2	Papagayo	1	1	Rim
STP 13.11	2	Papagayo-Vallejo	2	1	Bodies
STP 13.11	2	Unidentified	63	6	Unidentifiable Bodies
STP 13.11	3	Bagaces	2	1	Bodies
STP 13.11	3	Unidentified	6	1	Bodies
STP 13.12	1	Sacasa	2	1	Rims
STP 13.12	1	Papagayo	1	1	Rim
STP 13.12	1	Unidentified	5	1	Unidentifiable Bodies
STP 13.12	2	Lago or Sacasa	1	1	Rim
STP 13.12	2	Papagayo-Vallejo	1	1	Rim to hemispherical bowl
STP 13.12	2	Unidentified	2	1	Unidentifiable Bodies
STP 13.13	1	Sacasa	4	2	Rims
STP 13.13	2	Sacasa	2	2	Rims
STP 13.13	2	Sacasa	1	0	Body
STP 13.14	1	Granada-Madeira	1	1	Body
STP 13.14	1	Unidentified	14	1	Unidentifiable Bodies
STP 13.15	1	Papagayo-Vallejo	1	1	Vessel Base
STP 13.15	1	Unidentified	28	3	Unidentifiable Bodies
STP 13.16	1	Vallejo	1	1	Rim
STP 13.16	1	Vallejo	1	0	Body
STP 13.16	1	Papagayo-Vallejo	2	1	Rims
STP 13.16	1	Sacasa	2	1	Rims
STP 13.16	1	Unidentified	16	1	Unidentifiable Bodies
STP 13.17	1	Papagayo-Vallejo	1	1	Base
STP 13.17	1	Papagayo-Vallejo	3	1	Rims
STP 13.17	1	Papagayo-Vallejo	10	0	Bodies
STP 13.17	1	Unidentified	5	1	Unidentifiable Bodies
STP 13.17	2	Vallejo	13	1	Vessel Pieces
STP 13.17	2	Unidentified	1	1	Base
STP 13.17	2	Unidentified	14	2	Unidentifiable Bodies
STP 14.2	2	Sacasa	2	1	Bodies
STP 14.2	2	Unidentified	5	1	Unidentifiable Bodies
STP 14.2	3	Sacasa	1	1	Burnt Rim
STP 14.2	3	Unidentified	34	3	Unidentifiable Bodies
STP 14.3	1	Sacasa	1	1	Rim

STP 14.3	1	Sacasa	1	0	Body
STP 14.4	1	Unidentified	15	2	Unidentifiable Bodies
STP 14.4	2	Sacasa	1	1	Rim
STP 14.4	2	Granada-Madeira	1	1	Rim
STP 14.4	2	Unidentified	2	1	Bases
STP 14.4	2	Unidentified	2	1	Rims
STP 14.4	2	Unidentified	79	6	Unidentifiable Bodies
STP 14.4	3	Papagayo-Vallejo	1	1	Rim
STP 14.4	3	Papagayo-Vallejo	3	0	Bodies
STP 14.4	3	Sacasa	1	1	Body
STP 14.4	3	Unidentified	22	2	Unidentifiable Bodies
STP 14.5	1	Sacasa	3	1	Rims
STP 14.5	1	Papagayo-Vallejo	1	1	Netsinker
STP 14.5	1	Papagayo-Vallejo	2	1	Support Pieces
STP 14.5	1	Papagayo-Vallejo	1	0	Rim
STP 14.5	1	Unidentified	56	4	Unidentifiable Bodies
STP 14.5	2	Papagayo-Vallejo	3	1	Support Pieces
STP 14.5	2	Papagayo-Vallejo	1	1	Rim
STP 14.5	2	Papagayo-Vallejo	1	0	Body
STP 14.5	2	Castillo	1	1	Engraved rim to base
STP 14.5	2	Sacasa	1	1	Handle
STP 14.5	2	Unidentified	38	5	Unidentifiable Bodies
STP 14.6	1	Sacasa	1	1	Burnt Rim
STP 14.6	1	Sacasa	2	1	Rims
STP 14.6	1	Sacasa	1	0	Base
STP 14.6	1	Papagayo-Vallejo	1	1	Base
STP 14.6	1	Papagayo-Vallejo	1	0	Rim
STP 14.6	1	Papagayo-Vallejo	2	0	Bodies
STP 14.6	1	El Menco	1	1	Burnt Rim
STP 14.6	1	Unidentified	3	1	Burnt Rims
STP 14.6	1	Unidentified	55	4	Unidentifiable Bodies
STP 14.6	2	Sacasa	10	3	Rims
STP 14.6	2	Sacasa	2	0	Bodies
STP 14.6	2	Sacasa	3	1	Bases
STP 14.6	2	Tolesmaida	2	1	Rims
STP 14.6	2	Tolesmaida	1	0	Handle
STP 14.6	2	Granada-Madeira	1	1	Rim
STP 14.6	2	Papagayo-Vallejo	4	2	Rims
STP 14.6	2	Papagayo-Vallejo	1	0	Body
STP 14.6	2	Pataky	1	1	Rim
STP 14.6	2	Unidentified	183	26	Unidentifiable Bodies
STP 14.6	3	Papagayo-Vallejo	1	1	Base
STP 14.6	3	Sacasa	1	1	Rim to an Olla

STP 14.6	3	Unidentified	13	1	Unidentifiable Bodies
STP 14.7	1	Utilitarian	16	2	Unidentifiable Bodies
STP 14.7	2	Sacasa	2	1	Rims
STP 14.7	2	Sacasa	1	0	Base
STP 14.7	2	Castillo	1	1	Engraved Body
STP 14.7	2	Papagayo-Vallejo	2	1	Bodies
STP 14.7	2	Unidentified	21	2	Unidentifiable Bodies
STP 14.7	3	Sacasa	2	1	Bases
STP 14.7	3	Sacasa	1	1	Handle
STP 14.7	3	Madeira	1	1	Tripod Support
STP 14.7	3	Madeira	2	1	Rims
STP 14.7	3	Madeira	3	0	Bodies
STP 14.7	3	Unidentified	74	7	Unidentifiable Bodies
STP 14.8	2	Sacasa	1	1	Large rim of an Olla
STP 14.8	2	Sacasa	4	2	Rims
STP 14.8	2	Unidentified	63	5	Unidentifiable Bodies
STP 14.9	1	Sacasa	7	2	Bodies
STP 14.9	1	Granada-Madeira	1	1	Rim
STP 14.9	1	Granada-Madeira	1	0	Base
STP 14.9	1	Unidentified	59	5	Unidentifiable Bodies
STP 14.9	2	Sacasa	3	1	Rims
STP 14.9	2	Sacasa	2	1	Handle Pieces
STP 14.9	2	Unidentified	8	1	Unidentifiable Bodies
STP 14.10	2	Sacasa	4	2	Rims
STP 14.10	2	Sacasa	3	0	Bodies
STP 14.10	2	Lago or Castillo	1	1	Engraved Body
STP 14.10	2	Unidentified	61	5	Unidentifiable Bodies
STP 14.11	1	Unidentified	3	1	Unidentifiable Bodies
STP 14.11	2	Sacasa	6	2	Rims
STP 14.11	2	Sacasa	2	1	Bases
STP 14.11	2	Granada-Madeira	1	1	Rim
STP 14.11	2	Granada-Madeira	1	0	Body
STP 14.11	2	Unidentified	75	6	Unidentifiable Bodies
STP 14.11	3	Bagaces	1	1	Red Body
STP 14.11	3	Unidentified	5	1	Unidentifiable Bodies
STP 14.12	1	Papagayo-Vallejo	2	1	Rims
STP 14.12	1	Papagayo-Vallejo	1	0	Body
STP 14.12	1	Sacasa	1	1	Probable Base
STP 14.12	1	Unidentified	1	1	Rim
STP 14.12	1	Unidentified	46	4	Unidentifiable Bodies
STP 14.13	1	Unidentified	1	1	Unidentifiable Body
STP 14.13	2	Sacasa	1	1	Rim/body
STP 14.13	2	Unidentified	2	1	Unidentifiable Bodies

STP 14.14	1	Sacasa	2	1	Rims
STP 14.14	1	Sacasa	1	0	Body
STP 14.14	1	Madeira	1	1	Rim
STP 14.14	1	Unidentified	6	1	Unidentifiable Bodies
STP 14.15	1	Sacasa	3	1	Rims
STP 14.15	1	Sacasa	2	1	Handle Pieces
STP 14.15	1	Sacasa	2	0	Bases
STP 14.15	1	Unidentified	12	1	Unidentifiable Bodies
STP 14.16	1	Sacasa	3	2	Rims
STP 14.16	1	Sacasa	1	0	Body
STP 14.17	1	Sacasa	1	1	Body
STP 14.17	1	Sacasa	1	1	Large Burnt Body
STP 14.17	1	Sacasa	5	1	Rims
STP 14.17	1	Sacasa	1	1	Handle
STP 14.17	1	Utilitarian	4	1	Rim to base pieces
STP 14.17	1	Papagayo-Vallejo	8	1	Bodies
STP 14.17	1	Granada-Madeira	1	1	Rim
STP 14.17	1	El Menco	1	1	El Menco or Papagayo-Vallejo Rim
STP 14.17	1	Unidentified	41	3	Unidentifiable Bodies
STP 15.2	1	Papagayo-Vallejo	1	1	Rim
STP 15.2	1	Papagayo-Vallejo	2	0	Bodies
STP 15.2	1	Papagayo-Vallejo	4	1	Support Pieces
STP 15.2	1	Sacasa	3	1	Bodies
STP 15.2	1	Unidentified	82	9	Unidentifiable Bodies
STP 15.2	2	Sacasa	3	2	Rims
STP 15.2	2	Papagayo-Vallejo	2	1	Rims
STP 15.2	2	Papagayo-Vallejo	1	0	Body
STP 15.2	2	Unidentified	27	3	Unidentifiable Bodies
STP 15.2	3	Papagayo-Vallejo	1	1	Body
STP 15.2	3	Papagayo-Vallejo	1	1	Netsinker
STP 15.2	3	Lago	1	1	Rim
STP 15.2	3	Sacasa	1	1	Rim
STP 15.2	3	Granada-Madeira	1	1	Rim
STP 15.2	3	Unidentified	175	16	Unidentifiable Bodies
STP 15.3	1	Papagayo-Vallejo	4	1	Bodies
STP 15.3	1	Papagayo-Vallejo	1	0	Support Piece
STP 15.3	1	Sacasa	1	1	Body
STP 15.3	1	Unidentified	3	2	Rims
STP 15.3	1	Unidentified	50	4	Unidentifiable Bodies
STP 15.3	2	Sacasa	2	1	Rims
STP 15.3	2	Sacasa	2	1	Bodies
STP 15.3	2	Unidentified	12	1	Unidentifiable Bodies

STP 15.3	3	Bagaces	2	1	Bodies
STP 15.3	3	Unidentified	2	2	Rims
STP 15.3	3	Unidentified	2	1	Unidentifiable Bodies
STP 15.4	1	Sacasa	2	1	One large body, one smaller body
STP 15.4	1	Papagayo-Vallejo	1	1	Body
STP 15.4	1	Granada-Madeira	1	1	Body
STP 15.4	1	Lago	1	1	Decorative Body Piece
STP 15.4	1	Unidentified	54	3	Unidentifiable Bodies
STP 15.4	2	Sacasa	2	1	Rims
STP 15.4	2	Sacasa	1	0	Body
STP 15.4	2	Papagayo-Vallejo	2	1	Bodies
STP 15.4	2	Unidentified	152	15	Unidentifiable Bodies
STP 15.5	1	Sacasa	1	1	Rim
STP 15.5	1	Sacasa	1	0	Body
STP 15.5	1	Papagayo-Vallejo	1	1	Support Piece
STP 15.5	1	Papagayo-Vallejo	1	0	Body
STP 15.5	1	Unidentified	61	4	Unidentifiable Bodies
STP 15.5	2	Sacasa	3	2	Rims
STP 15.5	2	Sacasa	2	0	Bases
STP 15.5	2	Sacasa	1	1	Handle
STP 15.5	2	Papagayo-Vallejo	2	1	Rims
STP 15.5	2	Papagayo-Vallejo	1	0	Support Piece
STP 15.5	2	Unidentified	81	5	Unidentifiable Bodies
STP 15.6	1	Sacasa	9	3	Rims
STP 15.6	1	Papagayo-Vallejo	2	1	Rims
STP 15.6	1	Papagayo-Vallejo	1	0	Body
STP 15.6	1	Papagayo-Vallejo	1	0	Support Piece
STP 15.6	1	Vallejo	1	1	Support Piece
STP 15.6	1	Unidentified	1	1	Burnt Support Piece
STP 15.6	1	Unidentified	92	7	Unidentifiable Bodies
STP 15.6	2	Sacasa	2	1	Rims
STP 15.6	2	Papagayo-Vallejo	1	1	Support/Base
STP 15.6	2	Unidentified	19	2	Unidentifiable Bodies
STP 15.7	1	Sacasa	5	2	Rims
STP 15.7	1	Sacasa	3	1	Bodies
STP 15.7	1	Papagayo-Vallejo	1	1	Rim
STP 15.7	1	Papagayo-Vallejo	1	0	Base
STP 15.7	1	Granada-Madeira	4	1	Bodies
STP 15.7	1	Granada-Madeira	1	0	Base
STP 15.7	1	Granada-Madeira	1	0	Rim
STP 15.7	1	Papagayo-Vallejo	7	1	Support Pieces
STP 15.7	1	Unidentified	120	13	Unidentifiable Bodies

STP 15.7	2	Papagayo-Vallejo	1	1	Rim
STP 15.7	2	Granada-Madeira	1	1	Rim
STP 15.7	2	Sacasa	1	1	Rim
STP 15.7	2	Castillo	1	1	Engraved Rim
STP 15.7	2	Unidentified	40	3	Unidentifiable Bodies
STP 15.8	1	Sacasa	1	1	Small Rim
STP 15.8	1	Unidentified	18	2	Unidentifiable Bodies
STP 15.8	2	Sacasa	1	1	Rim
STP 15.8	2	Unidentified	26	2	Unidentifiable Bodies
STP 15.9	1	Papagayo-Vallejo	1	1	Support Piece
STP 15.9	1	Unidentified	25	3	Unidentifiable Bodies
STP 15.9	2	Sacasa	3	2	Handle Pieces
STP 15.9	2	Sacasa	2	0	Bases
STP 15.9	2	Lago	1	1	Rim
STP 15.9	2	Papagayo-Vallejo	3	1	Rims
STP 15.9	2	Papagayo-Vallejo	2	0	Bodies
STP 15.9	2	Unidentified	60	5	Unidentifiable Bodies
STP 15.10	1	Unidentified	2	1	Unidentifiable Bodies
STP 15.10	2	Sacasa	1	1	Rim
STP 15.10	2	Tolesmaida	3	2	Rim
STP 15.10	2	Unidentified	1	1	Rim
STP 15.10	2	Unidentified	1	0	Base
STP 15.10	2	Unidentified	92	6	Unidentifiable Bodies
STP 15.11	1	Sacasa	1	1	Handle
STP 15.11	1	Sacasa	2	1	Rims
STP 15.11	1	Sacasa	1	0	Base
STP 15.11	1	Sacasa	1	0	Body
STP 15.11	1	Unidentified	78	6	Unidentifiable Bodies
STP 15.12	2	Sacasa	2	1	Rims
STP 15.12	2	Sacasa	1	1	Handle
STP 15.12	2	Unidentified	39	3	Unidentifiable Bodies
STP 15.12	3	Sacasa	3	2	Rims
STP 15.12	3	Sacasa	1	0	Body
STP 15.12	3	Papagayo-Vallejo	1	1	Rim
STP 15.12	3	Unidentified	32	2	Unidentifiable Bodies
STP 15.13	1	Sacasa	2	1	Rims
STP 15.13	1	Granada-Madeira	1	1	Base
STP 15.13	1	Unidentified	4	1	Unidentifiable Bodies
STP 15.13	2	Sacasa	2	1	Rims
STP 15.13	2	Sacasa	2	0	Bodies
STP 15.13	2	Sacasa	2	1	Handle Pieces
STP 15.13	2	Sacasa	1	0	Base
STP 15.13	2	Granada-Madeira	1	1	Rim

STP 15.13	2	Unidentified	20	1	Unidentifiable Bodies
STP 15.14	1	Sacasa	2	1	Rims
STP 15.14	1	Unidentified	3	1	Unidentifiable Bodies
STP 15.14	2	Sacasa	1	1	Rim
STP 15.14	2	Unidentified	11	1	Unidentifiable Bodies
STP 15.15	1	Sacasa	3	2	Rims
STP 15.15	1	Sacasa	1	0	Base
STP 15.15	1	Papagayo-Vallejo	2	1	Bodies
STP 15.15	1	Unidentified	9	1	Unidentifiable Bodies
STP 15.17	2	Sacasa	1	1	Rim
STP 15.17	2	Sacasa	1	0	Handle Piece?
STP 15.17	2	Papagayo-Vallejo	2	1	Rims
STP 15.17	2	Granada-Madeira	1	1	Rim
STP 15.17	2	Unidentified	9	1	Unidentifiable Bodies
STP 15.18	1	Sacasa	1	1	Rim
STP 15.18	1	Sacasa	1	0	Handle
STP 15.18	1	Unidentified	1	1	Figurine Piece
STP 15.18	1	Unidentified	1	1	Ceremonial Cup
STP 15.18	1	Unidentified	51	4	Unidentifiable Bodies
STP 15.18	2	Granada-Madeira	2	1	Rims
STP 15.18	2	Granada-Madeira	1	0	Body
STP 15.18	2	Papagayo-Vallejo	1	1	Rim
STP 15.18	2	Papagayo-Vallejo	2	0	Bodies
STP 15.18	2	Sacasa	1	1	Rim
STP 15.18	2	Sacasa	1	0	Base
STP 15.18	2	Unidentified	19	2	Unidentifiable Bodies
STP 16.3	1	Sacasa	5	1	Bodies
STP 16.3	1	Sacasa	1	1	Handle Piece
STP 16.3	1	Granada-Madeira	1	1	Netsinker
STP 16.3	1	Unidentified	40	3	Unidentifiable Bodies
STP 16.3	2	Papagayo-Vallejo	1	1	Body/Support Piece
STP 16.3	2	Unidentified	19	1	Unidentifiable Bodies
STP 16.4	1	Sacasa	9	3	Rims
STP 16.4	1	Sacasa	4	0	Handle Pieces
STP 16.4	1	Sacasa	3	0	Bodies
STP 16.4	1	Sacasa	1	1	Base
STP 16.4	1	Granada-Madeira	2	1	Rims
STP 16.4	1	Unidentified	31	3	Unidentifiable Bodies
STP 16.4	2	Sacasa	1	1	Rim
STP 16.4	2	Vallejo	3	2	Possibly Cara Variety
STP 16.4	2	Utilitarian	2	2	Rims
STP 16.4	2	Unidentified	4	1	Unidentifiable Bodies
STP 16.5	1	Unidentified	4	1	Unidentifiable Bodies

STP 16.5	2	Papagayo	1	1	Rim
STP 16.5	2	Papagayo	2	0	Support Pieces
STP 16.5	2	Sacasa	1	1	Base
STP 16.5	2	Unidentified	80	7	Unidentifiable Bodies
STP 16.6	1	Granada-Madeira	1	1	Rim
STP 16.6	1	Unidentified	40	2	Unidentifiable Bodies
STP 16.6	2	Sacasa	1	1	Rim
STP 16.6	2	Papagayo-Vallejo	1	1	Rim
STP 16.6	2	Papagayo-Vallejo	1	0	Base
STP 16.6	2	Papagayo-Vallejo	1	0	Body
STP 16.6	2	Unidentified	107	10	Unidentifiable Bodies
STP 16.7	1	Sacasa	1	1	Rim
STP 16.7	1	Papagayo-Vallejo	1	1	Body
STP 16.7	2	Sacasa	3	2	Rims
STP 16.7	2	Sacasa	2	0	Handle Pieces
STP 16.7	2	Vallejo	1	1	Rim
STP 16.7	2	Unidentified	46	3	Unidentifiable Bodies
STP 16.8	1	Granada-Madeira	3	1	Bodies
STP 16.8	1	Granada-Madeira	1	0	Rim
STP 16.8	1	Lago	1	1	Rim
STP 16.8	1	Lago	1	1	Decorative Body Piece
STP 16.8	1	Lago	1	0	Body
STP 16.8	1	Unidentified	52	4	Unidentifiable Bodies
STP 16.9	1	Sacasa	1	1	Handle
STP 16.9	1	Sacasa	1	0	Base
STP 16.9	1	Unidentified	87	6	Unidentifiable Bodies
STP 16.9	2	Sacasa	3	1	Rims
STP 16.9	2	Papagayo-Vallejo	1	1	Rim
STP 16.9	2	Papagayo-Vallejo	2	0	Bodies
STP 16.9	2	Unidentified	35	3	Unidentifiable Bodies
STP 16.10	1	Sacasa	4	1	Rims
STP 16.10	1	Sacasa	1	0	Body
STP 16.10	1	Granada-Madeira	1	1	Rim
STP 16.10	1	Unidentified	1	1	Rim
STP 16.10	1	Unidentified	1	0	Base
STP 16.10	1	Unidentified	74	5	Unidentifiable Bodies
STP 16.11	1	Lago	5	1	Bodies
STP 16.11	1	Unidentified	59	3	Unidentifiable Bodies
STP 16.12	1	Papagayo	1	1	Rim
STP 16.12	1	Papagayo	2	0	Bodies
STP 16.12	1	Castillo	2	1	Engraved Rims
STP 16.12	1	Sacasa	1	1	Rim
STP 16.12	1	Unidentified	1	1	Rim

STP 16.12	1	Unidentified	66	5	Unidentifiable Bodies
STP 16.13	1	Sacasa	2	1	Rims
STP 16.13	1	Sacasa	2	1	Bases
STP 16.13	1	Unidentified	12	1	Unidentifiable Bodies
STP 16.14	1	Sacasa	1	1	Rim
STP 16.14	1	Sacasa	5	1	Handle Pieces
STP 16.14	2	Sacasa	2	1	Rims
STP 16.14	2	Papagayo-Vallejo	2	1	Rims
STP 16.14	2	Granada-Madeira	2	1	Rims
STP 16.14	2	Unidentified	1	1	Base
STP 16.14	2	Unidentified	39	3	Unidentifiable Bodies
STP 16.15	2	Sacasa	3	2	Rims
STP 16.15	2	Sacasa	2	0	Bodies
STP 16.15	2	Sacasa	3	0	Handle Pieces
STP 16.15	2	Papagayo-Vallejo	2	1	Bodies
STP 16.15	2	Madeira	1	1	Rim
STP 16.15	2	Unidentified	70	7	Unidentifiable Bodies
STP 16.16	1	Sacasa	4	2	Rims
STP 16.16	1	Sacasa	2	1	Handles
STP 16.16	1	Sacasa	1	0	Base
STP 16.16	1	Papagayo-Vallejo	1	1	Rim
STP 16.16	1	Unidentified	24	2	Unidentifiable Bodies
STP 16.16	2	Sacasa	3	2	Bases
STP 16.16	2	Sacasa	1	0	Rim
STP 16.16	2	Sacasa	1	1	Decorative "shoe pot" body
STP 16.16	2	Sacasa	6	1	Bodies
STP 16.16	2	Unidentified	39	3	Unidentifiable Bodies
STP 16.16	3	Unidentified	4	1	Unidentifiable Bodies
STP 16.17	1	Unidentified	3	1	Unidentifiable Bodies
STP 16.17	2	Sacasa	2	1	Rims
STP 16.17	2	Unidentified	68	5	Unidentifiable Bodies
STP 16.17	3	Unidentified	4	1	Unidentifiable Bodies
STP 16.18	1	El Menco	1	1	Burnt Rim
STP 16.18	1	Unidentified	21	2	Unidentifiable Bodies
STP 16.19	1	Sacasa	3	1	Rims
STP 16.19	1	Sacasa	1	0	Body
STP 16.19	1	Unidentified	1	1	Unidentifiable Bodies
STP 16.20	1	Sacasa	12	3	Rims
STP 16.20	1	Sacasa	4	0	Bodies
STP 16.20	1	Sacasa	5	1	Handle Pieces
STP 16.20	1	Papagayo-Vallejo	3	2	Rims
STP 16.20	1	Papagayo-Vallejo	2	0	Bodies
STP 16.20	1	Papagayo-Vallejo	1	0	Support Piece

STP 16.20	1	Granada	1	1	Rim
STP 16.20	1	Granada	2	0	Bodies
STP 16.20	1	Unidentified	37	5	Unidentifiable Bodies
STP 16.20	2	Papagayo-Vallejo	1	1	Rim
STP 16.20	2	Unidentified	1	1	Rim
STP 16.20	2	Unidentified	6	1	Unidentifiable Bodies
STP 16.20	3	Utilitarian	5	1	Unidentifiable Bodies
STP 16.21	1	Sacasa	2	1	Rims
STP 16.21	1	Papagayo-Vallejo	2	1	Rims
STP 16.21	1	Unidentified	32	2	Unidentifiable Bodies
STP 16.21	2	Sacasa	3	1	Rims
STP 16.21	2	Sacasa	1	1	Large Body
STP 16.21	2	Papagayo-Vallejo	4	2	Rims
STP 16.21	2	Papagayo-Vallejo	3	0	Bodies
STP 16.21	2	Unidentified	54	5	Unidentifiable Bodies
STP 16.21	3	Papagayo-Vallejo	2	1	Rims
STP 16.21	3	Papagayo-Vallejo	1	0	Body
STP 16.21	3	Madeira	1	1	Rim
STP 16.21	3	Sacasa	2	1	Rims to an Olla
STP 16.21	3	Unidentified	10	1	Unidentifiable Bodies
STP 16.22	1	Sacasa	9	3	Rims
STP 16.22	1	Sacasa	1	0	Body
STP 16.22	1	Sacasa	2	0	Bases
STP 16.22	1	Papagayo	1	1	Cesares hemispherical bowl rim
STP 16.22	1	Papagayo-Vallejo	2	1	Rims
STP 16.22	1	Papagayo-Vallejo	1	0	Body
STP 16.22	1	Papagayo-Vallejo	1	0	Support
STP 16.22	1	Mora	2	1	Rims
STP 16.22	1	Papagayo	1	0	Body
STP 16.22	1	Granada-Madeira	1	1	Base
STP 16.22	1	Granada-Madeira	1	0	Body
STP 16.22	1	Utilitarian	1	1	Rim
STP 16.22	1	Utilitarian	3	1	Bodies
STP 16.22	1	Unidentified	132	15	Unidentifiable Bodies
STP 16.22	2	Sacasa	1	1	Handle
STP 16.22	2	Papagayo	2	1	Rims
STP 16.22	2	Papagayo	2	0	Bodies
STP 16.22	2	Papagayo	2	1	Support Pieces
STP 16.22	2	Unidentified	26	2	Unidentifiable Bodies
STP 16.22	3	Sacasa	3	1	Rims
STP 16.22	3	Sacasa	1	0	Body
STP 16.22	3	Papagayo	1	1	Tripod Bowl Support Piece
STP 16.22	3	Papagayo	3	1	Rims

STP 16.22	3	Papagayo	1	0	Body
STP 16.22	3	Granada-Madeira	1	1	Rim
STP 16.22	3	Unidentified	40	5	Unidentifiable Bodies
STP 17.2	1	Sacasa	3	1	Rims
STP 17.2	1	Sacasa	2	1	Handle Pieces
STP 17.2	2	Papagayo-Vallejo	9	2	Support Pieces
STP 17.2	2	Sacasa	1	1	Rim
STP 17.2	2	Sacasa	1	0	Body
STP 17.2	2	Granada-Madeira	1	1	Rim
STP 17.2	2	Unidentified	1	1	Complete Support
STP 17.2	2	Unidentified	142	14	Unidentifiable Bodies
STP 17.2	3	Papagayo-Vallejo	2	1	Supports
STP 17.2	3	Papagayo-Vallejo	2	1	Rims
STP 17.2	3	Papagayo-Vallejo	1	0	Body
STP 17.2	3	Sacasa	2	1	Handles
STP 17.2	3	Sacasa	1	0	Body
STP 17.2	3	Sacasa	4	1	Rims
STP 17.2	3	Utilitarian	3	2	Burnt Rims
STP 17.2	3	Utilitarian	2	0	Bodies
STP 17.2	3	Unidentified	178	17	Unidentifiable Bodies
STP 17.3	1	Sacasa	9	3	Rims
STP 17.3	1	Sacasa	3	0	Bodies
STP 17.3	1	Sacasa	2	0	Handles
STP 17.3	1	Sacasa	2	1	Bases
STP 17.3	1	Granada-Madeira	1	1	Body
STP 17.3	1	Papagayo-Vallejo	2	1	Bodies
STP 17.3	1	Papagayo-Vallejo	1	0	Rim
STP 17.3	1	Unidentified	32	2	Unidentifiable Bodies
STP 17.3	2	Sacasa	1	1	Rim
STP 17.3	2	Papagayo-Vallejo	3	1	Bodies
STP 17.3	2	Papagayo-Vallejo	1	0	Rim
STP 17.3	2	Vallejo	2	1	Support Pieces
STP 17.3	2	Castillo	1	1	Engraved Rim
STP 17.3	2	Unidentified	75	6	Unidentifiable Bodies
STP 17.3	3	Sacasa	1	1	Rim
STP 17.3	3	Unidentified	10	1	Unidentifiable Bodies
STP 17.4	1	Papagayo-Vallejo	1	1	Burnt Rim
STP 17.4	1	Papagayo-Vallejo	1	1	Support Piece
STP 17.4	1	El Menco	1	1	Burnt Rim
STP 17.4	1	Unidentified	71	6	Unidentifiable Bodies
STP 17.4	2	Sacasa	2	1	Rims
STP 17.4	2	Papagayo-Vallejo	1	1	Rim
STP 17.5	1	Unidentified	4	1	Unidentifiable Bodies

STP 17.5	2	Sacasa	3	1	Rim Pieces
STP 17.5	2	Sacasa	3	1	Handle Pieces
STP 17.5	2	Lago	1	1	Rim
STP 17.5	2	Lago	1	0	Base
STP 17.5	2	Lago	1	0	Handle
STP 17.5	2	Papagayo-Vallejo	1	1	Burnt Rim
STP 17.5	2	Unidentified	33	3	Unidentifiable Bodies
STP 17.6	2	Unidentified	3	1	Unidentifiable Bodies
STP 17.7	2	Sacasa	1	1	Rim
STP 17.7	2	Granada-Madeira	1	1	Rim
STP 17.7	2	Unidentified	29	2	Unidentifiable Bodies
STP 17.7	3	Sacasa	1	1	Rim
STP 17.7	3	Papagayo	1	1	Body
STP 17.7	3	Unidentified	12	1	Unidentifiable Bodies
STP 17.8	1	Sacasa	1	1	Large Body Piece to an Olla
STP 17.8	1	Papagayo-Vallejo	1	1	Base
STP 17.8	1	Unidentified	37	3	Unidentifiable Bodies
STP 17.8	2	Papagayo-Vallejo	2	1	Rims
STP 17.8	2	Papagayo-Vallejo	2	0	Bodies
STP 17.8	2	Papagayo-Vallejo	1	0	Base
STP 17.8	2	Granada-Madeira	1	1	Rim
STP 17.8	2	Granada-Madeira	1	0	Body
STP 17.8	2	Sacasa	3	1	Rims
STP 17.8	2	Sacasa	1	1	Base
STP 17.8	2	Sacasa	1	0	Body
STP 17.8	2	Unidentified	41	3	Unidentifiable Bodies
STP 17.9	1	Unidentified	4	1	Unidentifiable Bodies
STP 17.9	2	Sacasa	2	1	Handles
STP 17.9	2	Sacasa	2	1	Rims
STP 17.9	2	Unidentified	58	5	Unidentifiable Bodies
STP 17.10	1	Madeira	1	1	Rim to Base
STP 17.10	1	Papagayo-Vallejo	1	1	Body
STP 17.10	1	Papagayo-Vallejo	1	0	Support Piece
STP 17.10	1	Papagayo-Vallejo	1	1	Burnt Rim
STP 17.10	1	Granada-Madeira	1	1	Rim
STP 17.10	1	Unidentified	54	4	Unidentifiable Bodies
STP 17.11	1	Papagayo-Vallejo	2	1	Rims
STP 17.11	1	Papagayo-Vallejo	1	0	Support Piece
STP 17.11	1	Sacasa	2	1	Bases
STP 17.11	1	Sacasa	1	1	Burnt Decorative Piece
STP 17.11	1	Sacasa	1	0	Rim
STP 17.11	1	Unidentified	39	3	Unidentifiable Bodies
STP 17.11	2	Sacasa	3	1	Rims

STP 17.11	2	Sacasa	1	0	Base
STP 17.11	2	Papagayo-Vallejo	2	1	Rims
STP 17.11	2	Unidentified	16	2	Unidentifiable Bodies
STP 17.12	1	Sacasa	3	1	Rims
STP 17.12	1	Sacasa	2	1	Handle Pieces
STP 17.12	1	Granada-Madeira	2	1	Rims
STP 17.12	1	Granada-Madeira	1	0	Body
STP 17.13	1	Papagayo-Vallejo	1	1	Support Piece
STP 17.13	1	Unidentified	10	1	Unidentifiable Bodies
STP 17.14	1	Granada-Madeira	1	1	Rim
STP 17.14	1	Papagayo-Vallejo	1	1	Body
STP 17.14	1	Unidentified	84	5	Unidentifiable Bodies
STP 17.14	2	Sacasa	2	1	Rims
STP 17.14	2	Papagayo-Vallejo	1	1	Rim
STP 17.14	2	Unidentified	40	3	Unidentifiable Bodies
STP 17.15	1	Sacasa	1	1	Handle
STP 17.15	1	Murillo Appliqué	3	1	Rims
STP 17.15	1	Papagayo-Vallejo	1	1	Body
STP 17.15	1	Unidentified	55	5	Unidentifiable Bodies
STP 17.16	1	Papagayo-Vallejo	6	1	Support Pieces
STP 17.16	1	Papagayo-Vallejo	3	1	Bodies
STP 17.16	1	Unidentified	2	2	Rims
STP 17.16	1	Unidentified	37	3	Unidentifiable Bodies
STP 17.16	2	Papagayo-Vallejo	2	1	Bodies
STP 17.16	2	Papagayo-Vallejo	3	1	Rims
STP 17.16	2	Papagayo-Vallejo	1	0	Probable Base
STP 17.16	2	Unidentified	4	1	Unidentifiable Bodies
STP 17.17	2	Sacasa	2	1	Rims
STP 17.17	2	Unidentified	31	3	Unidentifiable Bodies
STP 17.18	1	Granada-Madeira	1	1	Support Piece
STP 17.18	2	Sacasa	4	2	Rims
STP 17.18	2	Sacasa	2	0	Bases
STP 17.18	2	Papagayo-Vallejo	1	1	Rim
STP 17.18	2	Papagayo-Vallejo	1	0	Body
STP 17.18	2	Unidentified	5	1	Unidentifiable Bodies
STP 17.19	1	Sacasa	3	1	Rims
STP 17.19	1	Sacasa	2	0	Bodies
STP 17.19	1	Sacasa	1	1	Base
STP 17.19	1	Papagayo-Vallejo	2	1	Rims
STP 17.19	1	Papagayo-Vallejo	2	0	Bodies
STP 17.19	1	Unidentified	5	1	Unidentifiable Bodies
STP 17.19	2	Sacasa	2	1	Rims
STP 17.19	2	Sacasa	1	0	Base

STP 17.19	2	Granada-Madeira	2	1	Bodies
STP 17.20	1	Sacasa	1	1	Burnt Rim
STP 17.20	1	Unidentified	21	2	Unidentifiable Bodies
STP 17.21	1	Sacasa	1	1	Decorative Piece
STP 17.21	1	Unidentified	63	5	Unidentifiable Bodies
STP 17.21	2	Sacasa	1	1	Rim
STP 17.21	2	Granada-Madeira	2	1	Rims
STP 17.21	2	Unidentified	7	1	Unidentifiable Bodies
STP 17.22	1	Vallejo	1	1	Tripod Bowl Support Piece
STP 17.22	1	Tolesmaida	1	1	Burnt Rim (may be Sacasa)
STP 17.22	1	Unidentified	1	1	Rim
STP 17.22	1	Unidentified	53	4	Unidentifiable Bodies
STP 17.22	2	Sacasa	1	1	Body
STP 17.22	2	Sacasa	1	0	Support Piece
STP 17.22	2	Unidentified	31	3	Unidentifiable Bodies
STP 17.23	1	Sacasa	4	2	Rims
STP 17.23	1	Granada-Madeira	2	1	Rims
STP 17.23	1	Unidentified	67	5	Unidentifiable Bodies
STP 17.23	2	Sacasa	3	1	Body/Base Pieces
STP 17.23	2	Sacasa	1	0	Rim
STP 17.23	2	Engraved	1	1	Body
STP 17.23	2	Unidentified	71	5	Unidentifiable Bodies
STP 17.23	3	Granada-Madeira	1	1	Rim
STP 17.23	3	Unidentified	13	1	Unidentifiable Bodies
STP 17.24	1	Castillo	1	1	Engraved Vessel Rim
STP 17.24	1	Sacasa	3	1	Bodies
STP 17.24	1	Sacasa	5	2	Rims
STP 17.24	1	Papagayo-Vallejo	2	1	Rims
STP 17.24	1	Papagayo-Vallejo	4	1	Bodies
STP 17.24	1	Papagayo-Vallejo	1	0	Support Piece
STP 17.24	1	Granada-Madeira	3	1	Bodies
STP 17.24	1	Unidentified	1	1	Base
STP 17.24	1	Unidentified	1	1	Handle
STP 17.24	1	Unidentified	1	1	Support
STP 17.24	1	Unidentified	117	9	Unidentifiable Bodies
STP 17.24	2	Papagayo-Vallejo	1	1	Rim
STP 17.24	2	Unidentified	39	3	Unidentifiable Bodies
STP 17.25	1	Papagayo-Vallejo	3	1	Rims
STP 17.25	1	Papagayo-Vallejo	1	1	Base
STP 17.25	1	Papagayo-Vallejo	1	0	Body
STP 17.25	1	Sacasa	1	1	Rim
STP 17.25	1	Unidentified	32	3	Unidentifiable Bodies
STP 18.1	1	Sacasa	4	1	Rims

STP 18.1	1	Sacasa	1	1	Base
STP 18.1	1	Sacasa	1	0	Body
STP 18.1	1	Papagayo-Vallejo	2	1	Bodies
STP 18.1	1	Unidentified	28	3	Unidentifiable Bodies
STP 18.1	2	Sacasa	14	3	Rims
STP 18.1	2	Sacasa	12	2	Bodies
STP 18.1	2	Sacasa	2	1	Base
STP 18.1	2	Papagayo-Vallejo	7	1	Support Pieces
STP 18.1	2	Papagayo-Vallejo	8	2	Bodies
STP 18.1	2	Special	1	1	Clay Ball
STP 18.1	2	Granada-Madeira	2	1	Bodies
STP 18.1	2	Unidentified	2	2	Rims
STP 18.1	2	Unidentified	86	7	Unidentifiable Bodies
Surface near 18.2	1.5 m NW	Sacasa	1	1	Large Handle
STP 18.2	1	Sacasa	4	2	Rims
STP 18.2	1	Sacasa	1	1	Decorative Piece from a Shoe Pot
STP 18.2	1	Tolesmaida	1	1	Base
STP 18.2	1	Papagayo-Vallejo	3	1	Bodies
STP 18.2	1	Papagayo-Vallejo	1	0	Rim
STP 18.2	1	Papagayo-Vallejo	4	1	Support Pieces
STP 18.2	1	Lago	1	1	Rim
STP 18.2	1	Lago	1	0	Handle
STP 18.2	1	Bramadero	1	1	Possibly Grananda rim
STP 18.2	1	Bramadero	1	0	Body
STP 18.2	1	Unidentified	102	8	Unidentifiable Bodies
STP 18.2	2	Sacasa	3	1	Rims
STP 18.2	2	Sacasa	2	1	Body to base
STP 18.2	2	Sacasa	1	0	Body
STP 18.2	2	Sacasa	2	1	Handles
STP 18.2	2	Granada-Madeira	2	1	Rims
STP 18.2	2	Papagayo-Vallejo	1	1	Rim
STP 18.2	2	Papagayo-Vallejo	1	0	Base
STP 18.2	2	Unidentified	22	2	Unidentifiable Bodies
STP 18.2	3	Sacasa	7	2	Bodies
STP 18.2	3	Sacasa	3	1	Bases
STP 18.2	3	Sacasa	3	0	Rims
STP 18.2	3	Sacasa	1	1	Large Handle to Body Piece
STP 18.2	3	Papagayo-Vallejo	7	2	Bodies
STP 18.2	3	Papagayo-Vallejo	1	1	Base
STP 18.2	3	Papagayo-Vallejo	2	0	Rims
STP 18.2	3	Unidentified	75	7	Unidentifiable Bodies
STP 18.3	1	Papagayo-Vallejo	4	1	Rims

STP 18.3	1	Papagayo-Vallejo	1	1	Base
STP 18.3	1	Papagayo-Vallejo	1	0	Body
STP 18.3	1	Sacasa	3	1	Rims
STP 18.3	1	Sacasa	3	1	Bodies
STP 18.3	1	Granada-Madeira	4	2	Bodies
STP 18.3	1	Unidentified	70	6	Unidentifiable Bodies
STP 18.3	2	Sacasa	6	2	Rims
STP 18.3	2	Sacasa	3	0	Bodies
STP 18.3	2	Sacasa	2	1	Bases
STP 18.3	2	Sacasa	1	0	Handle
STP 18.3	2	Papagayo-Vallejo	2	1	Rims
STP 18.3	2	Papagayo-Vallejo	2	0	Bodies
STP 18.3	2	Papagayo-Vallejo	1	1	Rim to Base piece
STP 18.3	2	Papagayo-Vallejo	2	1	Support Pieces
STP 18.3	2	Lago	2	1	Rims
STP 18.3	2	Utilitarian	1	1	Body
STP 18.3	2	Unidentified	73	6	Unidentifiable Bodies
STP 18.3	3	Sacasa	5	1	Rims
STP 18.3	3	Sacasa	1	1	Burnt Rim
STP 18.3	3	Sacasa	1	0	Base
STP 18.3	3	Sacasa	1	1	Burnt Base
STP 18.3	3	Sacasa	1	0	Handle
STP 18.3	3	Sacasa	2	0	Bodies
STP 18.3	3	Sacasa	1	0	Burnt Body
STP 18.3	3	Papagayo-Vallejo	5	1	Support Pieces
STP 18.3	3	Papagayo-Vallejo	2	1	Rims
STP 18.3	3	Papagayo-Vallejo	7	0	Bodies
STP 18.3	3	Granada-Madeira	1	1	Base
STP 18.3	3	Granada-Madeira	3	1	Rims
STP 18.3	3	Granada-Madeira	2	1	Base to Rim
STP 18.3	3	Unidentified	108	11	Unidentifiable Bodies
STP 18.3	4	Lago	1	1	Rim with Handle
STP 18.3	4	Engraved	1	1	Base
STP 18.4	1	Sacasa	2	1	Rims
STP 18.4	1	Sacasa	1	0	Base/handle
STP 18.4	2	Sacasa	1	1	Large Rim to an Olla
STP 18.4	2	Sacasa	6	2	Rims
STP 18.4	2	Sacasa	3	0	Handles
STP 18.4	2	Papagayo-Vallejo	3	1	Rims
STP 18.4	2	Papagayo-Vallejo	1	0	Body
STP 18.4	2	Lago	1	1	Rim
STP 18.4	2	Granada-Madeira	3	1	Rims
STP 18.4	2	Granada-Madeira	1	1	Body

STP 18.4	2	Unidentified	20	2	Unidentifiable Bodies
STP 18.4	4	Sacasa	8	2	Rims
STP 18.4	4	Sacasa	2	0	Bodies
STP 18.4	4	Sacasa	3	1	Bases
STP 18.4	4	Papagayo	2	1	Rims
STP 18.4	4	Papagayo-Vallejo	1	1	Body to a bowl
STP 18.4	4	Papagayo-Vallejo	5	2	Rims
STP 18.4	4	Papagayo-Vallejo	1	0	Support
STP 18.4	4	El Menco	5	2	Rims
STP 18.4	4	Madeira	1	1	Rim
STP 18.4	4	Unidentified	1	1	Burnt Rim
STP 18.4	4	Unidentified	88	7	Unidentifiable Bodies
STP 18.5	1 and interface with 2	Papagayo-Vallejo	5	2	Rims
STP 18.5	1 and interface with 2	Papagayo-Vallejo	5	1	Bodies
STP 18.5	1 and interface with 2	Sacasa	1	1	Base
STP 18.5	1 and interface with 2	Sacasa	1	0	Rim
STP 18.5	1 and interface with 2	Unidentified	27	2	Unidentifiable Bodies
STP 18.6	2	Unidentified	3	1	Unidentifiable Bodies
STP 18.7	1	Unidentified	3	1	Unidentifiable Bodies
STP 18.7	2	Sacasa	1	1	Rim
STP 18.7	2	Sacasa	2	0	Handle Pieces
STP 18.7	2	Granada-Madeira	1	1	Rim
STP 18.7	2	Unidentified	46	4	Unidentifiable Bodies
STP 18.8	1	Unidentified	4	1	Unidentifiable Bodies
STP 18.8	2	Sacasa	1	1	Burnt Rim
STP 18.8	2	Granada-Madeira	1	1	Rim
STP 18.8	2	Unidentified	1	1	Rim
STP 18.8	2	Unidentified	42	3	Unidentifiable Bodies
STP 18.9	1	Granada-Madeira	1	1	Rim
STP 18.9	1	Unidentified	21	2	Unidentifiable Bodies
STP 18.9	2	Sacasa	1	1	Handle
STP 18.9	2	Sacasa	1	0	Base
STP 18.9	2	Netsinker	1	1	Netsinker of unknown ceramic
STP 18.9	2	Granada-Madeira	1	1	Base
STP 18.9	2	Unidentified	55	4	Unidentifiable Bodies
STP 18.10	1	Unidentified	5	1	Unidentifiable Bodies
STP 18.10	2	Papagayo-Vallejo	2	1	Bodies

STP 18.10	2	Utilitarian	2	1	Bodies/Rims
STP 18.10	2	Unidentified	29	3	Unidentifiable Bodies
STP 18.11	2	Sacasa	8	2	Rims
STP 18.11	2	Sacasa	2	0	Bodies
STP 18.11	2	Sacasa	2	1	Handle Pieces
STP 18.11	2	Papagayo-Vallejo	2	1	Support Pieces
STP 18.11	2	Papagayo-Vallejo	2	0	Rims
STP 18.11	2	Unidentified	4	1	Unidentifiable Bodies
STP 18.11	3	Unidentified	5	1	Unidentifiable Bodies
STP 18.12	1	Granada-Madeira	1	1	Rim
STP 18.12	1	Unidentified	1	1	Rim
STP 18.12	1	Unidentified	22	2	Unidentifiable Bodies
STP 18.14	2	Unidentified	5	1	Unidentifiable Bodies
STP 18.14	3	Bagaces	1	1	Rim
STP 18.14	3	Unidentified	2	1	Unidentifiable Bodies
STP 18.15	1	Sacasa	4	1	Rims
STP 18.15	1	Papagayo-Vallejo	2	1	Rims
STP 18.15	1	Papagayo-Vallejo	1	0	Body
STP 18.15	1	Unidentified	1	1	Base
STP 18.15	1	Unidentified	1	0	Rim
STP 18.15	1	Unidentified	70	7	Unidentifiable Bodies
STP 18.15	2	Sacasa	2	1	Olla Body Pieces
STP 18.15	2	Papagayo-Vallejo	1	1	Rim
STP 18.15	2	Unidentified	22	2	Unidentifiable Bodies
STP 18.16	1	Papagayo-Vallejo	1	1	Body
STP 18.16	1	Sacasa	1	1	Body
STP 18.16	1	Unidentified	28	2	Unidentifiable Bodies
STP 18.17	1	Sacasa	2	1	Rims
STP 18.17	1	Utilitarian	1	1	Handle
STP 18.17	1	Unidentified	23	2	Unidentifiable Bodies
STP 18.17	2	Sacasa	4	1	Bodies
STP 18.17	2	Unidentified	3	1	Unidentifiable Bodies
STP 18.18	1	Sacasa	1	1	Rim
STP 18.18	1	Unidentified	3	1	Unidentifiable Bodies
STP 18.20	1	Unidentified	2	1	Unidentifiable Bodies
STP 18.20	2 in ash portion	Sacasa	1	1	Rim to base of small vessel
STP 18.21	1	Lago	1	1	Base
STP 18.21	1	Sacasa	1	1	Decorative Body Piece
STP 18.21	1	Granada-Madeira	1	1	Body
STP 18.21	1	Papagayo-Vallejo	1	1	Base
STP 18.21	1	Unidentified	49	4	Unidentifiable Bodies
STP 18.22	1	Granada-Madeira	2	1	Rims
STP 18.22	1	Papagayo-Vallejo	1	1	Rim

STP 18.22	1	Unidentified	98	9	Unidentifiable Bodies
STP 18.23	1	Sacasa	3	1	Handle Pieces
STP 18.23	1	Sacasa	1	0	Rim
STP 18.23	1	Sacasa	1	0	Body
STP 18.23	1	Papagayo-Vallejo	1	1	Rim
STP 18.23	1	Unidentified	57	5	Unidentifiable Bodies
STP 18.23	2	Sacasa	1	1	Rim
STP 18.23	2	Granada-Madeira	2	1	Rims
STP 18.23	2	Papagayo-Vallejo	1	1	Rim
STP 18.23	2	Unidentified	18	1	Unidentifiable Bodies
STP 18.23	3	Unidentified	1	1	Body
STP 18.24	1	Granada-Madeira	3	1	Rims
STP 18.24	1	Granada-Madeira	1	1	Body
STP 18.24	1	Unidentified	2	1	Support Pieces
STP 18.24	1	Unidentified	3	2	Rims
STP 18.24	1	Unidentified	97	8	Unidentifiable Bodies
STP 18.24	2	Sacasa	2	1	Rims
STP 18.24	2	Sacasa	1	1	Base
STP 18.24	2	Sacasa	1	0	Body
STP 18.24	2	Unidentified	37	3	Unidentifiable Bodies
STP 18.25	1	Sacasa	2	1	Rims
STP 18.25	1	Sacasa	1	0	Body
STP 18.25	1	Papagayo	1	1	Rim
STP 18.25	1	Unidentified	5	1	Unidentifiable Bodies
STP 19.1	2	Sacasa	3	1	Rims
STP 19.1	2	Sacasa	2	1	Bases
STP 19.1	2	Sacasa	9	1	Bodies
STP 19.1	2	Sacasa	1	0	Handle
STP 19.1	2	Sacasa	1	1	Decorative Piece from a Shoe Pot
STP 19.1	2	Papagayo-Vallejo	2	1	Burnt Bodies
STP 19.1	2	Papagayo-Vallejo	3	1	Bodies
STP 19.1	2	Papagayo-Vallejo	1	1	Ceramic Ball
STP 19.1	2	Castillo	3	1	Engraved Bodies
STP 19.1	2	Unidentified	105	9	Unidentifiable Bodies
STP 19.2	1	Papagayo-Vallejo	4	1	Support Pieces
STP 19.2	1	Unidentified	2	1	Handles
STP 19.2	1	Unidentified	22	2	Unidentifiable Bodies
STP 19.2	2	Sacasa	1	1	Base
STP 19.2	2	Sacasa	1	0	Rim
STP 19.2	2	Sacasa	2	0	Bodies
STP 19.2	2	Unidentified	20	2	Unidentifiable Bodies
STP 19.2	3	Papagayo-Vallejo	1	1	Support Piece

STP 19.2	3	Utilitarian	2	2	Rims
STP 19.2	3	Unidentified	23	2	Unidentifiable Bodies
STP 19.3	1	Granada-Madeira	1	1	Netsinker most likely Granada-Madeira
STP 19.3	1	Papagayo-Vallejo	1	1	Burnt Support Piece
STP 19.3	1	Lago	2	1	Rims
STP 19.3	1	Papagayo	1	1	Cervantes Support
STP 19.3	1	Sacasa	1	1	Handle Piece
STP 19.3	1	Unidentified	18	1	Unidentifiable Bodies
STP 19.3	2	Papagayo-Vallejo	2	1	Rims
STP 19.3	2	Papagayo-Vallejo	1	1	Support Piece
STP 19.3	2	Papagayo-Vallejo	5	0	Bodies
STP 19.3	2	Papagayo-Vallejo	1	1	Burnt Rim
STP 19.3	2	Sacasa	4	1	Rims
STP 19.3	2	Sacasa	2	1	Handles
STP 19.3	2	Sacasa	1	1	Burnt Handle
STP 19.3	2	Sacasa	1	0	Base
STP 19.3	2	Sacasa	1	0	Body
STP 19.3	2	Vallejo	1	1	Rim
STP 19.3	2	Vallejo	1	0	Body
STP 19.3	2	Granada-Madeira	1	1	Rim
STP 19.3	2	Papagayo	1	1	Cervantes Support
STP 19.3	2	Unidentified	1	1	Rim
STP 19.3	2	Unidentified	128	12	Unidentifiable Bodies
STP 19.3	3	Bramadero	2	1	Bodies
STP 19.3	3	Sacasa	1	1	Body
STP 19.3	3	Papagayo-Vallejo	2	1	Bodies
STP 19.3	3	Unidentified	34	3	Unidentifiable Bodies
STP 19.4	1	Sacasa	3	1	Burnt Rims
STP 19.4	1	Sacasa	1	1	Rim
STP 19.4	1	Sacasa	2	0	Bodies
STP 19.4	1	Sacasa	3	1	Handle Pieces
STP 19.4	1	Papagayo-Vallejo	3	1	Support Pieces
STP 19.4	1	Papagayo-Vallejo	2	0	Bodies
STP 19.4	1	Unidentified	111	12	Unidentifiable Bodies
STP 19.4	2	Sacasa	8	2	Bodies
STP 19.4	2	Sacasa	3	1	Rims
STP 19.4	2	Sacasa	4	0	Handle Pieces
STP 19.4	2	Papagayo-Vallejo	2	1	Rims
STP 19.4	2	Papagayo-Vallejo	1	0	Body
STP 19.4	2	Unidentified	38	4	Unidentifiable Bodies
STP 19.4	3	Sacasa	1	1	Burnt Body
STP 19.4	3	Bagaces	3	1	Probable Bagaces Bodies

STP 19.4	3	Utilitarian	3	1	Bodies
STP 19.4	3	Unidentified	11	1	Unidentifiable Bodies
STP 19.5	2	Sacasa	4	1	Rims
STP 19.5	2	Sacasa	1	0	Body
STP 19.5	2	Madeira	2	1	Rims
STP 19.5	2	Papagayo-Vallejo	1	1	Body
STP 19.5	2	Unidentified	70	6	Unidentifiable Bodies
STP 19.5	3	Utilitarian	2	1	Rims
STP 19.5	3	Utilitarian	1	0	Body/Support Piece
STP 19.5	3	Utilitarian	1	0	Handle
STP 19.6	2	Sacasa	3	1	Rims
STP 19.6	2	Sacasa	2	1	Handles
STP 19.6	2	Sacasa	1	0	Base
STP 19.6	2	Papagayo-Vallejo	2	1	Rims
STP 19.6	2	Unidentified	24	2	Unidentifiable Bodies
STP 19.7	1	Unidentified	5	1	Unidentifiable Bodies
STP 19.7	2	Sacasa	1	1	Handle
STP 19.7	2	Sacasa	1	0	Rim
STP 19.7	2	Sacasa	1	0	Base
STP 19.7	2	Sacasa	3	0	Bodies
STP 19.7	2	Granada-Madeira	3	1	Rims to a small vessel
STP 19.7	2	Unidentified	42	3	Unidentifiable Bodies
STP 19.7	3	Sacasa	1	1	Rim
STP 19.7	3	Unidentified	8	1	Unidentifiable Bodies
STP 19.8	1	Utilitarian	12	2	Unidentifiable Bodies
STP 19.8	2	Sacasa	1	1	Rim
STP 19.8	2	Sacasa	1	0	Body
STP 19.8	2	Papagayo-Vallejo	1	1	Rim
STP 19.8	2	Papagayo-Vallejo	1	0	Support Piece
STP 19.8	2	Unidentified	78	6	Unidentifiable Bodies
STP 19.9	1	Sacasa	1	1	Rim
STP 19.9	1	Unidentified	1	1	Rim
STP 19.9	1	Unidentified	76	6	Unidentifiable Bodies
STP 19.9	2	Sacasa	5	1	Rims
STP 19.9	2	Sacasa	2	1	Handles
STP 19.9	2	Sacasa	2	1	Bases
STP 19.9	2	Granada-Madeira	2	1	Rims
STP 19.9	2	Unidentified	48	5	Unidentifiable Bodies
STP 19.10	1	Sacasa	2	1	Rims
STP 19.10	1	Sacasa	2	1	Handles
STP 19.10	1	Unidentified	18	2	Unidentifiable Bodies
STP 19.10	2	Unidentified	24	3	Unidentifiable Bodies
STP 19.10	3	Unidentified	3	1	Unidentifiable Bodies

STP 19.11	1	Papagayo-Vallejo	3	1	Support Pieces
STP 19.11	1	Sacasa	3	1	Rims
STP 19.11	1	Sacasa	1	0	Body
STP 19.11	1	Unidentified	37	3	Unidentifiable Bodies
STP 19.12	1	Sacasa	1	1	Rim
STP 19.12	1	Unidentified	3	1	Support Pieces
STP 19.12	1	Unidentified	18	2	Unidentifiable Bodies
STP 19.13	1	Unidentified	12	2	Unidentifiable Bodies
STP 19.14	1	Sacasa	5	2	Rims
STP 19.14	1	Papagayo-Vallejo	1	1	Base
STP 19.14	1	Papagayo-Vallejo	1	0	Body
STP 19.14	1	Unidentified	26	2	Unidentifiable Bodies
STP 19.14	2	Sacasa	3	1	Rims
STP 19.14	2	Sacasa	2	0	Handles
STP 19.14	2	Sacasa	1	1	Base
STP 19.14	2	Murillo Appliqué	1	1	Rim
STP 19.14	2	Murillo Appliqué	1	0	Support
STP 19.14	2	Murillo Appliqué	1	0	Body
STP 19.14	2	Unidentified	73	8	Unidentifiable Bodies
STP 19.15	1	Granada-Madeira	5	1	Rims
STP 19.15	1	Granada-Madeira	1	1	Base
STP 19.15	1	Sacasa	1	1	Rim
STP 19.15	1	Unidentified	1	1	Rim
STP 19.15	1	Unidentified	17	1	Unidentifiable Bodies
STP 19.15	2	Sacasa	1	1	Body
STP 19.15	2	Granada-Madeira	1	1	Rim
STP 19.15	2	Utilitarian	12	1	Bodies
STP 19.15	2	Unidentified	63	5	Unidentifiable Bodies
STP 19.15	3	Sacasa	3	1	Rims
STP 19.15	3	Sacasa	1	1	Body
STP 19.15	3	Unidentified	39	3	Unidentifiable Bodies
STP 19.16	1	Granada-Madeira	2	1	Rims
STP 19.16	1	Sacasa	3	1	Bases
STP 19.16	1	Sacasa	1	1	Decorative Body Piece
STP 19.16	1	Sacasa	1	0	Body
STP 19.16	1	Sacasa	1	0	Rim
STP 19.16	1	Papagayo-Vallejo	1	1	Rim
STP 19.16	1	Unidentified	89	7	Unidentifiable Bodies
STP 19.17	1	Sacasa	1	1	Base
STP 19.17	1	Unidentified	1	1	Support/Rim Piece
STP 19.17	1	Unidentified	16	1	Unidentifiable Bodies
STP 19.20*	1	Sacasa	1	1	Rim
STP 19.20*	1	Sacasa	3	0	Bodies

STP 19.20*	1	Granada-Madeira	1	1	Rim
STP 19.20*	1	Unidentified	7	1	Unidentifiable Bodies
STP 19.21*	1	Sacasa	4	2	Rims
STP 19.21*	1	Unidentified	17	2	Unidentifiable Bodies
STP 19.22*	1	Sacasa	1	1	Rim
STP 19.22*	1	Unidentified	10	1	Unidentifiable Bodies
STP 19.23*	1	Tolesmaida	2	1	Bases
STP 19.23*	1	Tolesmaida	2	1	Bodies
STP 19.23*	1	Lago	2	1	Rims
STP 19.23*	1	Lago	1	0	Support Piece
STP 19.23*	1	Sacasa	2	1	Rims
STP 19.23*	1	Sacasa	3	1	Handle Pieces
STP 19.23*	1	Sacasa	1	0	Body
STP 19.23*	1	Sacasa	1	0	Base
STP 19.23*	1	Papagayo-Vallejo	3	1	Support Pieces
STP 19.23*	1	Unidentified	179	12	Unidentifiable Bodies
STP 19.23*	2	Tolesmaida	1	1	Body to Rim Piece--possibly Sacasa
STP 19.23*	2	Sacasa	1	1	Base
STP 19.23*	2	Unidentified	18	1	Unidentifiable Bodies
STP 19.24*	1	Sacasa	1	1	Rim
STP 19.24*	1	Papagayo-Vallejo	1	1	Support Piece
STP 19.24*	1	Unidentified	12	1	Unidentifiable Bodies
STP 19.24*	2	Unidentified	15	1	Burnt Bodies
STP 19.24*	2	Unidentified	2	1	Unidentifiable Bodies
STP 19.24*	3	Bagaces	3	1	Bodies
STP 19.24*	3	Unidentified	3	1	Unidentifiable Bodies
STP 19.25*	1	Unidentified	5	1	Unidentifiable Bodies
STP 20.1	1	Sacasa	2	1	Rims
STP 20.1	1	Sacasa	1	0	Body
STP 20.1	1	Unidentified	137	11	Unidentifiable Bodies
STP 20.1	2	Papagayo-Vallejo	2	1	Bodies
STP 20.1	2	Sacasa	1	1	Rim
STP 20.1	2	Sacasa	2	0	Bodies
STP 20.1	2	Sacasa	2	1	Decorative Body Pieces
STP 20.1	2	Sacasa	2	0	Handles
STP 20.1	2	Granada-Madeira	2	1	Bodies
STP 20.1	2	Unidentified	18	2	Unidentifiable Bodies
STP 20.2	1	Utilitarian	7	2	Unidentifiable Bodies
STP 20.2	2	Lago	2	1	Rims
STP 20.2	2	Netsinker	1	1	Netsinker of unknown ceramic
STP 20.2	2	Papagayo	1	1	Support
STP 20.2	2	Sacasa	1	1	Rim

STP 20.2	2	Sacasa	1	0	Body
STP 20.2	2	Unidentified	169	20	Unidentifiable Bodies
STP 20.3	1	Granada-Madeira	1	1	Body
STP 20.3	1	Granada-Madeira	2	0	Support Pieces
STP 20.3	1	Unidentified	34	3	Unidentifiable Bodies
STP 20.3	2	Sacasa	1	1	Decorative Body
STP 20.3	2	Sacasa	5	2	Rims
STP 20.3	2	Sacasa	2	0	Bodies
STP 20.3	2	Papagayo-Vallejo	1	1	Rim
STP 20.3	2	Papagayo-Vallejo	4	1	Bodies
STP 20.3	2	Papagayo-Vallejo	3	0	Support Pieces
STP 20.3	2	Vallejo	1	1	Cara type Rim
STP 20.3	2	Vallejo	1	0	Body of Cara type
STP 20.3	2	Granada-Madeira	4	2	Bodies
STP 20.3	2	Unidentified	1	1	Burnt Rim
STP 20.3	2	Unidentified	176	15	Unidentifiable Bodies
STP 20.3	3	Sacasa	1	1	Base
STP 20.3	3	Papagayo-Vallejo	1	1	Body
STP 20.3	3	Unidentified	14	1	Unidentifiable Bodies
STP 20.4	1	Sacasa	1	1	Handle
STP 20.4	1	Unidentified	19	2	Unidentifiable Bodies
STP 20.4	2	Sacasa	1	1	Burnt Rim
STP 20.4	2	Sacasa	1	0	Burnt Base
STP 20.4	2	Sacasa	2	1	Rims
STP 20.4	2	Granada-Madeira	2	1	Rims
STP 20.4	2	Unidentified	157	16	Unidentifiable Bodies
STP 20.5	1	Tolesmaida	1	1	Base
STP 20.5	1	Tolesmaida	1	0	Rim
STP 20.5	1	Tolesmaida	1	0	Body
STP 20.5	1	Granada-Madeira	1	1	Rim
STP 20.5	1	Granada-Madeira	1	0	Body
STP 20.5	1	Papagayo-Vallejo	1	1	Rim
STP 20.5	1	Papagayo-Vallejo	1	0	Support Piece
STP 20.5	1	Unidentified	2	1	Tripod Support Pieces
STP 20.5	1	Unidentified	87	8	Unidentifiable Bodies
STP 20.6	1	Sacasa	3	1	Rims
STP 20.6	1	Unidentified	2	1	Tripod Support Pieces
STP 20.6	1	Unidentified	1	1	Figurine/Head
STP 20.6	1	Unidentified	45	5	Unidentifiable Bodies
STP 20.6	2	Sacasa	7	2	Rims
STP 20.6	2	Granada-Madeira	1	1	Base
STP 20.6	2	Unidentified	4	2	Rims
STP 20.6	2	Unidentified	35	3	Unidentifiable Bodies

STP 20.6	3	Unidentified	4	1	Unidentifiable Bodies
STP 20.7	1 and 2	Sacasa	8	2	Rims
STP 20.7	1 and 2	Sacasa	1	0	Body
STP 20.7	1 and 2	Sacasa	1	0	Handle
STP 20.7	1 and 2	Sacasa	2	0	Bases
STP 20.7	1 and 2	Lago	1	1	Body
STP 20.7	1 and 2	Granada-Madeira	2	1	Bases
STP 20.7	1 and 2	Granada-Madeira	3	1	RIms
STP 20.7	1 and 2	Unidentified	141	17	Unidentifiable Bodies
STP 20.8	1	Sacasa	2	1	Rims
STP 20.8	1	Sacasa	1	0	Body
STP 20.8	1	Papagayo-Vallejo	1	1	Rim
STP 20.8	1	Papagayo-Vallejo	2	0	Bodies
STP 20.8	1	Unidentified	75	6	Unidentifiable Bodies
STP 20.8	2	Sacasa	4	2	Rims
STP 20.8	2	Unidentified	47	6	Unidentifiable Bodies
STP 20.9	1	Sacasa	1	1	Rim
STP 20.9	1	Unidentified	5	2	Rims
STP 20.9	1	Unidentified	6	0	Unidentifiable Bodies
STP 20.9	2	Sacasa	2	1	Rims
STP 20.9	2	Sacasa	1	0	Base
STP 20.9	2	Papagayo-Vallejo	1	1	Rim
STP 20.9	2	Utilitarian	2	1	Bodies
STP 20.9	2	Unidentified	39	3	Unidentifiable Bodies
STP 20.9	3	Unidentified	5	1	Unidentifiable Bodies
STP 20.10	1	Sacasa	2	1	Rims
STP 20.10	1	Sacasa	2	0	Bodies
STP 20.10	1	Papagayo-Vallejo	1	1	Rims
STP 20.10	1	Unidentified	29	3	Unidentifiable Bodies
STP 20.11	1	Utilitarian	20	2	Unidentifiable Bodies
STP 20.11	2	Netsinker	1	1	Netsinker of unknown ceramic
STP 20.11	2	Sacasa	1	1	Rim
STP 20.11	2	Sacasa	1	0	Base
STP 20.11	2	Papagayo-Vallejo	1	1	Base
STP 20.11	2	Papagayo-Vallejo	1	0	Body
STP 20.11	2	Unidentified	20	2	Unidentifiable Bodies
STP 20.12	1	Sacasa	3	1	Rims
STP 20.12	1	Sacasa	1	1	Base
STP 20.12	1	Sacasa	1	0	Body
STP 20.13	1	Sacasa	1	1	Rim
STP 20.13	1	Unidentified	24	3	Unidentifiable Bodies
STP 20.14	1	Sacasa	13	3	Rims
STP 20.14	1	Sacasa	6	1	Bodies

STP 20.14	1	Granada-Madeira	1	1	Base
STP 20.14	1	Unidentified	85	7	Unidentifiable Bodies
STP 20.14	2	Sacasa	1	1	Rim
STP 20.14	2	Sacasa	1	0	Body
STP 20.15	1	Sacasa	1	1	Rim
STP 20.15	1	Granada-Madeira	1	1	Support Body
STP 20.15	1	Unidentified	37	2	Unidentifiable Bodies
STP 20.15	2	Unidentified	21	3	Unidentifiable Bodies
STP 20.16	1	Tolesmaida	2	1	Rims
STP 20.16	1	Sacasa	3	2	Rims
STP 20.16	1	Sacasa	1	0	Body
STP 20.16	1	Unidentified	23	4	Unidentifiable Bodies
STP 20.17	1	Granada-Madeira	1	1	Body
STP 20.17	1	Unidentified	9	1	Unidentifiable Bodies
STP 20.18	1	Sacasa	1	1	Base
STP 20.18	1	Unidentified	26	2	Unidentifiable Bodies
STP 20.18	2	Sacasa	1	1	Base
STP 20.18	2	Sacasa	1	1	Burnt Base
STP 20.18	2	Sacasa	1	0	Support Piece
STP 20.18	2	Unidentified	10	1	Unidentifiable Bodies
STP 20.19	1	Unidentified	4	1	Unidentifiable Bodies
STP 20.19	2	Unidentified	2	1	Unidentifiable Bodies
STP 20.20	1	Sacasa	5	2	Rims
STP 20.20	1	Sacasa	3	0	Bodies
STP 20.20	1	Unidentified	20	2	Unidentifiable Bodies
STP 20.21	1	Sacasa	1	1	Rim
STP 20.21	1	Unidentified	45	6	Unidentifiable Bodies
STP 20.22	1	Sacasa	1	1	Rim
STP 20.22	1	Unidentified	30	2	Unidentifiable Bodies
STP 20.22	2	Sacasa	1	1	Body; either Sacasa or Granada-Madeira
STP 21.1	1	Granada-Madeira	1	1	Body
STP 21.1	1	Unidentified	15	1	Unidentifiable Bodies
STP 21.1	3	Sacasa	1	1	Rim
STP 21.1	3	Sacasa	3	1	Bodies; 1 large body
STP 21.1	3	Sacasa	1	0	Handle
STP 21.1	3	Sacasa	1	0	Base
STP 21.1	3	Papagayo-Vallejo	1	1	Support Piece
STP 21.1	3	Unidentified	1	1	Rim
STP 21.1	3	Unidentified	135	16	Unidentifiable Bodies
STP 21.2	1	Granada-Madeira	4	1	Bodies; one possibly a base
STP 21.2	1	Sacasa	1	1	Base
STP 21.2	1	Sacasa	1	0	Body

STP 21.2	1	Vallejo	1	1	Burnt Rim
STP 21.2	1	Unidentified	49	6	Unidentifiable Bodies
STP 21.3	1	Sacasa	3	1	Rims
STP 21.3	1	Sacasa	1	1	Base
STP 21.3	1	Unidentified	67	10	Unidentifiable Bodies
STP 21.3	2	Papagayo-Vallejo	7	1	Support Pieces
STP 21.3	2	Papagayo-Vallejo	2	0	Bodies
STP 21.3	2	Sacasa	1	1	Rim
STP 21.3	2	Unidentified	44	5	Unidentifiable Bodies
STP 21.4	1	Papagayo-Vallejo	1	1	Rim
STP 21.4	1	Sacasa	3	1	Rims
STP 21.4	1	Utilitarian	25	2	Bodies
STP 21.4	1	Unidentified	44	6	Unidentifiable Bodies
STP 21.4	2	Unidentified	35	4	Unidentifiable Bodies
STP 21.5	1	Unidentified	42	6	Unidentifiable Bodies
STP 21.5	2	Utilitarian	10	2	Bodies
STP 21.6	1	Sacasa	4	1	Rims
STP 21.6	1	Granada-Madeira	1	1	Body
STP 21.6	1	Unidentified	51	4	Unidentifiable Bodies
STP 21.6	2	Utilitarian	15	2	Bodies
STP 21.7	1	Sacasa	1	1	Burnt Base
STP 21.7	1	Sacasa	1	1	Rim
STP 21.7	1	Papagayo-Vallejo	1	1	Body/Support Piece
STP 21.7	1	Unidentified	35	2	Unidentifiable Bodies
STP 21.7	2	Utilitarian	15	2	Bodies
STP 21.8	1	Sacasa	2	1	Rims
STP 21.8	1	Unidentified	2	1	Rims
STP 21.8	1	Unidentified	100	8	Unidentifiable Bodies
STP 21.9	2	Granada-Madeira	1	1	Body
STP 21.9	2	Sacasa	2	1	Rims
STP 21.9	2	Unidentified	22	2	Unidentifiable Bodies
STP 21.10	1	Unidentified	10	2	Unidentifiable Bodies
STP 21.11	1	Papagayo-Vallejo	1	1	Burnt Rim
STP 21.11	1	Unidentified	69	9	Unidentifiable Bodies
STP 21.12	1	Unidentified	11	2	Unidentifiable Bodies
STP 21.12	2	El Menco	3	1	Leyenda tripod body pieces
STP 21.12	2	Sacasa	3	1	Rims
STP 21.12	2	Sacasa	1	0	Support
STP 21.12	2	Sacasa	1	0	Body
STP 21.12	2	Pataky	2	1	Rims
STP 21.12	2	Pataky	1	0	Body
STP 21.12	2	Unidentified	16	2	Unidentifiable Bodies
STP 21.13	1	Papagayo	1	1	Support

STP 21.13	1	Papagayo	1	0	Rim
STP 21.13	1	Sacasa	1	1	Rim
STP 21.13	1	Unidentified	58	5	Unidentifiable Bodies
STP 21.14	1	Sacasa	1	1	Rim
STP 21.14	1	Unidentified	10	1	Unidentifiable Bodies
STP 21.15	1	Sacasa	1	1	Rim
STP 21.15	1	Unidentified	29	2	Unidentifiable Bodies
STP 21.19*	1	Unidentified	12	3	Unidentifiable Bodies
STP 21.20*	1	Unidentified	17	3	Unidentifiable Bodies
STP 21.21*	1	Papagayo-Vallejo	1	1	Support
STP 21.21*	1	Unidentified	4	1	Unidentifiable Bodies
STP 21.22*	1	Utilitarian	5	1	Unidentifiable Bodies
STP 21.23	1	Unidentified	8	2	Unidentifiable Bodies
STP 22.1	2	Murillo Appliqué	2	1	Rims
STP 22.1	2	Murillo Appliqué	1	0	Base
STP 22.1	2	Papagayo-Vallejo	1	1	Body
STP 22.1	2	Sacasa	6	1	Rims
STP 22.1	2	Sacasa	2	1	Bases
STP 22.1	2	Sacasa	2	1	Support Pieces
STP 22.1	2	Sacasa	1	0	Body
STP 22.1	2	Unidentified	55	7	Unidentifiable Bodies
STP 22.2	1	Sacasa	2	1	Rims
STP 22.2	1	Sacasa	1	0	Base
STP 22.2	1	Sacasa	1	0	Body
STP 22.2	1	Papagayo-Vallejo	1	1	Support Piece
STP 22.2	1	Granada-Madeira	1	1	Rim
STP 22.2	1	Granada-Madeira	1	0	Body
STP 22.2	1	Castillo	1	1	Engraved Rim
STP 22.2	1	Unidentified	46	3	Unidentifiable Bodies
STP 22.2	2	Sacasa	1	1	Rim
STP 22.2	2	Unidentified	4	1	Unidentifiable Bodies
STP 22.3	1	Granada-Madeira	2	1	Rims
STP 22.3	1	Granada-Madeira	1	0	Body
STP 22.3	1	Papagayo-Vallejo	1	1	Support Piece
STP 22.3	1	Sacasa	2	1	Bases
STP 22.3	1	Unidentified	72	7	Unidentifiable Bodies
STP 22.3	2	Papagayo-Vallejo	1	1	Rim
STP 22.3	2	Papagayo-Vallejo	2	1	Bodies
STP 22.3	2	Unidentified	44	5	Unidentifiable Bodies
STP 22.4	1	Papagayo-Vallejo	2	1	Tripod Support Pieces
STP 22.4	1	Papagayo-Vallejo	2	1	Handle Pieces
STP 22.4	1	Sacasa	1	1	Body
STP 22.4	1	Unidentified	39	3	Unidentifiable Bodies

STP 22.4	2	Sacasa	1	1	Rim
STP 22.4	2	Papagayo-Vallejo	2	1	Support Pieces
STP 22.4	2	Unidentified	27	2	Unidentifiable Bodies
STP 22.5	1	Granada-Madeira	7	2	Bodies
STP 22.5	1	Granada-Madeira	1	0	Rim
STP 22.5	1	Unidentified	1	1	Handle
STP 22.5	1	Unidentified	1	1	Support
STP 22.5	1	Unidentified	99	8	Unidentifiable Bodies
STP 22.6	1	Sacasa	3	2	Rims
STP 22.6	1	Sacasa	2	0	Bodies
STP 22.6	1	Papagayo-Vallejo	1	1	Rim
STP 22.6	1	Papagayo-Vallejo	1	1	Support
STP 22.6	1	Papagayo-Vallejo	3	0	Bodies
STP 22.6	1	Unidentified	197	31	Unidentifiable Bodies
STP 22.6	2	Unidentified	31	5	Unidentifiable Bodies
STP 22.7	1	Unidentified	15	3	Unidentifiable Bodies
STP 22.7	2	Sacasa	1	1	Support
STP 22.7	2	Sacasa	1	0	Body
STP 22.7	2	Papagayo-Vallejo	2	1	Rims
STP 22.7	2	Granada-Madeira	4	2	Rims
STP 22.7	2	Unidentified	113	9	Unidentifiable Bodies
STP 22.8	1	Unidentified	61	8	Unidentifiable Bodies
STP 22.8	2	Sacasa	2	1	Base Pieces
STP 22.8	2	Sacasa	1	1	Rim
STP 22.8	2	Granada-Madeira	1	1	Rim
STP 22.8	2	Papagayo-Vallejo	1	1	Rim
STP 22.8	2	Unidentified	89	11	Unidentifiable Bodies
STP 22.9	1	Unidentified	22	4	Unidentifiable Bodies
STP 22.10	1	Sacasa	1	1	Rim
STP 22.10	1	Vallejo	1	1	Superhemispherical Bowl Rim
STP 22.10	1	Utilitarian	7	1	Bodies
STP 22.10	1	Unidentified	36	4	Unidentifiable Bodies
STP 22.11	1	Sacasa	1	1	Burnt Support Piece
STP 22.11	1	Sacasa	1	1	Rim
STP 22.11	1	Sacasa	2	0	Bodies
STP 22.11	1	Papagayo-Vallejo	1	1	Rim
STP 22.11	1	Granada-Madeira	1	1	Rim
STP 22.11	1	Red Cream	1	1	Rim; possible trade item
STP 22.11	1	Unidentified	115	12	Unidentifiable Bodies
STP 22.11	2	Sacasa	1	1	Body
STP 22.11	2	Unidentified	24	3	Unidentifiable Bodies
STP 22.11	3	Unidentified	35	6	Unidentifiable Bodies
STP 22.12	1	Sacasa	1	1	Rim

STP 22.12	1	Papagayo-Vallejo	2	1	Support Pieces
STP 22.12	1	Unidentified	1	1	Rim
STP 22.12	1	Unidentified	51	7	Unidentifiable Bodies
STP 22.13	1	Sacasa	1	1	Handle
STP 22.13	1	Sacasa	1	1	Engraved Body
STP 22.13	1	Unidentified	29	2	Unidentifiable Bodies
STP 22.13	2	Sacasa	1	1	Rim
STP 22.13	2	Unidentified	12	1	Unidentifiable Bodies
STP 22.14	1	Granada-Madeira	1	1	Support Piece
STP 22.14	1	Unidentified	38	5	Unidentifiable Bodies
STP 22.15	1	Utilitarian	6	1	Unidentifiable Bodies
STP 22.16	1	Sacasa	1	1	Body
STP 22.16	1	Unidentified	7	1	Unidentifiable Bodies
STP 23.1	1	Papagayo-Vallejo	2	1	Tripod Support Pieces
STP 23.1	1	Granada-Madeira	1	1	Rim
STP 23.1	1	Unidentified	26	2	Unidentifiable Bodies
STP 23.2	2	Sacasa	1	1	Body
STP 23.3	1	Sacasa	1	1	Handle
STP 23.3	1	Sacasa	1	1	Base
STP 23.3	1	Sacasa	1	0	Body
STP 23.3	1	Unidentified	65	10	Unidentifiable Bodies
STP 23.4	1	Sacasa	2	1	Rims
STP 23.4	1	Sacasa	1	1	Base
STP 23.4	1	Unidentified	22	2	Unidentifiable Bodies
STP 23.4	2	Utilitarian	9	1	Bodies
STP 23.4	3	Utilitarian	1	1	Body
STP 23.5	1	Sacasa	1	1	Rim
STP 23.5	1	Sacasa	1	0	Base
STP 23.5	1	Granada-Madeira	1	1	Rim
STP 23.5	1	Granada-Madeira	1	0	Body
STP 23.5	1	Unidentified	60	4	Unidentifiable Bodies
STP 23.5	2	Sacasa	1	1	Body
STP 23.5	2	Utilitarian	11	1	Unidentifiable Bodies
STP 23.6	1	Granada-Madeira	2	1	Rims
STP 23.6	1	Unidentified	33	2	Unidentifiable Bodies
STP 23.6	2	Sacasa	2	1	Rims
STP 23.6	2	Sacasa	1	1	Base
STP 23.6	2	Sacasa	1	0	Handle
STP 23.6	2	Papagayo-Vallejo	1	1	Body
STP 23.6	2	Unidentified	24	2	Unidentifiable Bodies
STP 23.7	1	Papagayo-Vallejo	1	1	Rim
STP 23.7	1	Utilitarian	1	1	Rim
STP 23.7	1	Unidentified	86	9	Unidentifiable Bodies

STP 23.8	1	Sacasa	4	1	Rims
STP 23.8	1	Sacasa	2	1	Bases
STP 23.8	1	Papagayo-Vallejo	4	1	Bodies
STP 23.8	1	Papagayo-Vallejo	2	1	Rims
STP 23.8	1	Unidentified	1	1	Handle
STP 23.8	1	Unidentified	45	3	Unidentifiable Bodies
STP 23.8	2	Sacasa	1	1	Rim
STP 23.8	2	Papagayo-Vallejo	1	1	Rim
STP 23.8	2	Lago	1	1	Body
STP 23.8	2	Unidentified	43	3	Unidentifiable Bodies
STP 23.8	3	Unidentified	2	1	Unidentifiable Bodies
STP 23.9	1	Sacasa	11	3	Rims
STP 23.9	1	El Menco	2	1	Rims
STP 23.9	1	Papagayo-Vallejo	2	1	RIms
STP 23.9	1	Papagayo-Vallejo	1	0	Body
STP 23.9	1	Whorl	1	1	Spindle whorl made from unknown ceramic
STP 23.9	1	Unidentified	138	20	Unidentifiable Bodies
STP 23.10	1	Sacasa	3	1	Rims
STP 23.10	1	Papagayo-Vallejo	1	1	Rims
STP 23.10	1	Papagayo-Vallejo	3	0	Bodies
STP 23.10	1	El Menco	2	1	Rims
STP 23.10	1	Unidentified	70	8	Unidentifiable Bodies
STP 23.10	2	Sacasa	5	2	Rims
STP 23.10	2	Sacasa	1	1	Large rim to base vessel piece
STP 23.10	2	Lago	1	1	Rim
STP 23.10	2	Papagayo-Vallejo	6	1	Support Pieces
STP 23.11	1 and interface of 2	Sacasa	8	2	Rims
STP 23.11	1 and interface of 2	Sacasa	2	0	Handle Pieces
STP 23.11	1 and interface of 2	Sacasa	1	0	Base
STP 23.11	1 and interface of 2	Sacasa	1	0	Body
STP 23.11	1 and interface of 2	Castillo	1	0	Engraved Body
STP 23.11	1 and interface of 2	Castillo	1	1	Engraved Rim
STP 23.11	1 and interface of 2	Castillo	1	0	Support Piece
STP 23.11	1 and	Granada-Madeira	3	1	Rims

STP 23.11	interface of 2 1 and interface of 2	Murillo Appliqué	1	1	Rim
STP 23.11	1 and interface of 2	Papagayo-Vallejo	2	1	Support Pieces
STP 23.11	1 and interface of 2	Papagayo-Vallejo	1	0	Rim
STP 23.11	1 and interface of 2	Unidentified	1	1	Rim
STP 23.11	1 and interface of 2	Unidentified	110	11	Unidentifiable Bodies
STP 23.11	2	Sacasa	7	2	Rims
STP 23.11	2	Sacasa	3	1	Bases
STP 23.11	2	Sacasa	2	0	Handle Pieces
STP 23.11	2	Papagayo-Vallejo	1	1	Rim
STP 23.11	2	Unidentified	84	9	Unidentifiable Bodies
STP 23.12	1	Sacasa	3	1	Rims
STP 23.12	1	Sacasa	2	1	Handle Pieces
STP 23.12	1	El Menco	1	1	Rim
STP 23.12	1	Papagayo-Vallejo	1	1	Body
STP 23.12	1	Unidentified	91	10	Unidentifiable Bodies
STP 23.12	2	Sacasa	6	2	Rims
STP 23.12	2	Sacasa	2	1	Handle Pieces
STP 23.12	2	Papagayo-Vallejo	2	1	Rims
STP 23.12	2	Papagayo-Vallejo	1	0	Body
STP 23.12	2	Unidentified	90	11	Unidentifiable Bodies
STP 23.13	1	Sacasa	1	1	Body
STP 23.13	1	Unidentified	18	2	Unidentifiable Bodies
STP 23.14	1	Granada-Madeira	1	1	Rim
STP 23.14	1	Utilitarian	14	2	Bodies
STP 23.20	1	Unidentified	1	1	Body
STP 24.1	1	Sacasa	1	1	Rim
STP 24.1	2	Papagayo-Vallejo	2	1	Rims
STP 24.1	2	Papagayo-Vallejo	1	1	Support Piece
STP 24.1	2	Unidentified	21	3	Unidentifiable Bodies
STP 24.3	1	Sacasa	5	1	Bodies
STP 24.3	1	Sacasa	1	1	Rim
STP 24.3	1	Papagayo-Vallejo	2	1	Bodies
STP 24.3	1	Unidentified	5	1	Unidentifiable Bodies
STP 24.3	2	Papagayo-Vallejo	1	1	Rim
STP 24.3	2	Sacasa	4	1	Rims
STP 24.3	2	Sacasa	1	1	Handle

STP 24.3	2	Sacasa	1	1	Base
STP 24.3	2	Sacasa	2	0	Bodies
STP 24.3	2	Unidentified	42	4	Unidentifiable Bodies
STP 24.4	1	Sacasa	1	1	Base
STP 24.4	1	Papagayo-Vallejo	1	1	Burnt Rim
STP 24.4	1	Unidentified	28	2	Unidentifiable Bodies
STP 24.4	2	Vallejo	1	1	Tripod Support
STP 24.4	2	Sacasa	4	1	Rims
STP 24.4	2	Sacasa	2	1	Bases
STP 24.4	2	Unidentified	25	4	Unidentifiable Bodies
STP 24.4	3	Sacasa	3	1	Bodies
STP 24.4	3	Sacasa	1	1	Rim
STP 24.4	3	Unidentified	3	1	Unidentifiable Bodies
STP 24.5	1	Sacasa	1	1	Rim
STP 24.5	1	Unidentified	1	1	Support Piece
STP 24.5	1	Unidentified	22	1	Unidentifiable Bodies
STP 24.5	2	Sacasa	3	1	Rims
STP 24.5	2	Sacasa	1	1	Base
STP 24.5	2	Sacasa	1	0	Body
STP 24.5	2	Sacasa	2	0	Handle Pieces
STP 24.5	2	Papagayo-Vallejo	1	1	Support Piece
STP 24.5	2	Unidentified	50	5	Unidentifiable Bodies
STP 24.5	3	Papagayo	3	1	Burnt Support Pieces
STP 24.5	3	Unidentified	2	1	Unidentifiable Bodies
STP 24.6	1	Sacasa	5	1	Rims
STP 24.6	1	Sacasa	5	1	Bodies
STP 24.6	1	Sacasa	2	1	Bases
STP 24.6	1	Lago	1	1	Rim
STP 24.6	1	Granada-Madeira	1	1	Rim
STP 24.6	1	Unidentified	2	1	Support Pieces
STP 24.6	1	Unidentified	1	1	Rim
STP 24.6	1	Unidentified	127	9	Unidentifiable Bodies
STP 24.6	2	Sacasa	3	1	Rims
STP 24.6	2	Sacasa	6	2	Bases
STP 24.6	2	Sacasa	1	0	Handle
STP 24.6	2	Sacasa	1	0	Body
STP 24.6	2	Papagayo-Vallejo	1	1	Rim
STP 24.6	2	Unidentified	1	1	Burnt Rim
STP 24.6	2	Unidentified	55	6	Unidentifiable Bodies
STP 24.6	3	Sacasa	5	2	Rims
STP 24.6	3	Sacasa	2	0	Bodies
STP 24.6	3	Sacasa	1	1	Base
STP 24.6	3	Unidentified	7	2	Unidentifiable Bodies

STP 24.7	1	Sacasa	1	1	Rim
STP 24.7	1	Utilitarian	32	3	Unidentifiable Bodies
STP 24.7	2	Papagayo-Vallejo	7	1	Support Pieces
STP 24.7	2	Papagayo-Vallejo	1	1	Burnt Rim
STP 24.7	2	Sacasa	9	3	Rims
STP 24.7	2	Papagayo	1	1	Vessel Rim
STP 24.7	2	Unidentified	1	1	Rim
STP 24.7	2	Unidentified	77	6	Unidentifiable Bodies
STP 24.7	3	Unidentified	7	1	Burnt Bodies
STP 24.8	1	Sacasa	1	1	Handle
STP 24.8	1	Unidentified	19	1	Unidentifiable Bodies
STP 24.8	2	Papagayo-Vallejo	3	1	Support Pieces
STP 24.8	2	Sacasa	2	1	RIms
STP 24.8	2	Sacasa	1	0	Body
STP 24.8	2	Madeira	1	1	Rim
STP 24.8	2	Unidentified	124	14	Unidentifiable Bodies
STP 24.8	3	Sacasa	4	1	Rims
STP 24.8	3	Sacasa	3	1	Handle Pieces
STP 24.8	3	Sacasa	2	0	Bodies
STP 24.8	3	Papagayo-Vallejo	2	1	Rims
STP 24.8	3	Papagayo-Vallejo	2	0	Bodies
STP 24.8	3	Unidentified	17	2	Unidentifiable Bodies
STP 24.9	1	Sacasa	1	1	Rim
STP 24.9	1	Sacasa	2	1	Bases
STP 24.9	1	Sacasa	4	0	Bodies
STP 24.9	1	Papagayo-Vallejo	1	1	Rim
STP 24.9	1	Unidentified	38	4	Unidentifiable Bodies
STP 24.9	2	Sacasa	1	1	Burnt Rim
STP 24.9	2	Unidentified	40	6	Unidentifiable Bodies
STP 24.10	1	Sacasa	2	1	Rims
STP 24.10	1	Sacasa	2	1	Handles
STP 24.10	1	Papagayo-Vallejo	1	1	Rim
STP 24.10	1	Papagayo-Vallejo	1	1	Burnt Rim
STP 24.10	1	Papagayo-Vallejo	2	0	Support Pieces
STP 24.10	1	Papagayo-Vallejo	1	0	Body
STP 24.10	1	Lago	1	1	Rim
STP 24.10	1	Granada-Madeira	2	1	Rims
STP 24.10	1	Unidentified	55	4	Unidentifiable Bodies
STP 24.10	2	Sacasa	3	1	Rims
STP 24.10	2	Sacasa	2	1	Bases
STP 24.10	2	Sacasa	1	0	Body
STP 24.10	2	Papagayo-Vallejo	1	1	Rim
STP 24.10	2	Papagayo-Vallejo	2	0	Bodies

STP 24.10	2	Unidentified	161	11	Unidentifiable Bodies
STP 24.10	3	Bagaces	4	2	Rims
STP 24.10	3	Utilitarian	5	1	Bodies
STP 24.10	3	Unidentified	14	2	Unidentifiable Bodies
STP 24.11	1	Sacasa	4	1	Rims
STP 24.11	1	Sacasa	2	1	Bases
STP 24.11	1	Granada-Madeira	1	1	Base
STP 24.11	1	Papagayo-Vallejo	1	1	Rim
STP 24.11	1	Papagayo-Vallejo	1	0	Base
STP 24.11	1	Unidentified	1	1	Rim
STP 24.11	1	Unidentified	77	5	Unidentifiable Bodies
STP 24.11	2	Sacasa	1	1	Large burnt body
STP 24.11	2	Unidentified	42	4	Unidentifiable Bodies
STP 24.12	1	Sacasa	6	2	Rims
STP 24.12	1	Sacasa	1	0	Body
STP 24.12	1	Papagayo	1	1	Rim
STP 24.12	1	Papagayo-Vallejo	1	1	Rim
STP 24.12	1	Unidentified	101	11	Unidentifiable Bodies
STP 24.12	2	Utilitarian	4	1	Bodies
STP 24.13	1	Papagayo-Vallejo	2	1	Support Pieces
STP 24.13	1	Unidentified	14	2	Unidentifiable Bodies
STP 24.14	1	Unidentified	18	2	Unidentifiable Bodies
STP 24.14	2	Sacasa	1	1	Rim
STP 24.14	2	Unidentified	1	1	Body
STP 25.1	1	Sacasa	1	1	Body
STP 25.2	1	Granada-Madeira	1	1	Base
STP 25.2	1	Granada-Madeira	4	1	Bodies
STP 25.2	1	Unidentified	71	7	Unidentifiable Bodies
STP 25.3	1	Sacasa	1	1	Body
STP 25.3	1	Unidentified	5	1	Unidentifiable Bodies
STP 25.3	2	Sacasa	1	1	Rim with Body
STP 25.3	2	Sacasa	1	0	Handle
STP 25.3	2	Sacasa	1	1	Rim
STP 25.3	2	Sacasa	2	0	Bodies
STP 25.3	2	Granada-Madeira	1	1	Rim
STP 25.3	2	Unidentified	2	1	Rims
STP 25.3	2	Unidentified	140	9	Unidentifiable Bodies
STP 25.4	1	Utilitarian	10	1	Bodies
STP 25.4	2	Sacasa	1	1	Base
STP 25.4	2	Sacasa	2	0	Handles
STP 25.4	2	Sacasa	3	1	Rims
STP 25.4	2	Papagayo-Vallejo	5	1	Support Pieces
STP 25.4	2	Papagayo-Vallejo	2	1	Bodies

STP 25.4	2	Unidentified	67	6	Unidentifiable Bodies
STP 25.5	1 and 2	Sacasa	5	2	Rims
STP 25.5	1 and 2	Granada-Madeira	2	1	Support Pieces
STP 25.5	1 and 2	Lago	1	1	Rim
STP 25.5	1 and 2	Unidentified	38	2	Unidentifiable Bodies
STP 25.6	1	Sacasa	5	2	Rims
STP 25.6	1	Sacasa	1	1	Base
STP 25.6	1	Sacasa	1	0	Handle
STP 25.6	1	Sacasa	1	0	Body
STP 25.6	1	Granada-Madeira	3	1	Rim
STP 25.6	1	Granada-Madeira	1	1	Support Piece
STP 25.6	1	Unidentified	1	1	Rim
STP 25.6	1	Unidentified	35	3	Unidentifiable Bodies
STP 25.6	2	Papagayo-Vallejo	1	1	Rim
STP 25.6	2	Unidentified	52	4	Unidentifiable Bodies
STP 25.7	1	Sacasa	3	1	Rims
STP 25.7	1	Sacasa	1	1	Body
STP 25.7	1	Papagayo-Vallejo	1	1	Rim
STP 25.7	1	Papagayo-Vallejo	1	0	Body
STP 25.7	1	Granada-Madeira	1	1	Body
STP 25.7	1	Unidentified	1	1	Handle/Rim
STP 25.7	1	Unidentified	95	8	Unidentifiable Bodies
STP 25.7	2	Unidentified	3	1	Unidentifiable Bodies
STP 25.8	1	Sacasa	1	1	Rim Found with Human Remains
STP 25.8	1	Unidentified	16	1	Unidentifiable Bodies
STP 25.9	1	Sacasa	2	1	Rims
STP 25.9	1	Granada-Madeira	1	1	Rim
STP 25.9	1	Unidentified	46	3	Unidentifiable Bodies
STP 25.10	1	Papagayo-Vallejo	1	1	Rim
STP 25.10	1	Papagayo-Vallejo	1	0	Body
STP 25.10	1	Sacasa	5	2	Rims
STP 25.10	1	Sacasa	1	1	Base
STP 25.10	1	Sacasa	1	0	Body
STP 25.10	1	Granada-Madeira	1	1	Body
STP 25.10	1	Unidentified	120	8	Unidentifiable Bodies
STP 25.10	2	Sacasa	3	1	Rims
STP 25.10	2	Sacasa	1	1	Base
STP 25.10	2	Sacasa	2	0	Bodies
STP 25.11	1	Papagayo-Vallejo	1	1	Body
STP 25.11	1	Sacasa	2	1	Rims
STP 25.11	1	Unidentified	14	3	Unidentifiable Bodies
STP 25.12	1	Unidentified	8	1	Unidentifiable Bodies
STP 25.12	2	Lago	1	1	Handle

STP 25.12	2	Tolesmaida	1	1	Rim
STP 25.12	2	Sacasa	1	1	Body
STP 25.12	2	Unidentified	10	1	Unidentifiable Bodies
STP 25.13	1	Sacasa	5	2	Rims
STP 25.13	1	Sacasa	2	0	Bodies
STP 25.13	1	Sacasa	1	0	Handle Piece
STP 25.13	1	Unidentified	18	2	Unidentifiable Bodies
STP 25.13	2	Sacasa	1	1	Handle
STP 25.13	2	Granada-Madeira	1	1	Body
STP 25.13	2	Unidentified	57	7	Unidentifiable Bodies
STP 26.2	1	Sacasa	3	1	Rims
STP 26.2	1	Granada-Madeira	1	1	Body
STP 26.2	1	Papagayo-Vallejo	1	1	Support Piece
STP 26.2	1	Unidentified	93	8	Unidentifiable Bodies
STP 26.2	2	Papagayo-Vallejo	15	1	Vessel Pieces
STP 26.2	2	Papagayo-Vallejo	3	1	Rims
STP 26.2	2	Papagayo-Vallejo	1	1	Base
STP 26.2	2	Papagayo-Vallejo	2	0	Bodies
STP 26.2	2	Sacasa	1	1	Body
STP 26.2	2	Unidentified	32	2	Unidentifiable Bodies
STP 26.3	1	Sacasa	1	1	Rim
STP 26.3	1	Unidentified	31	4	Unidentifiable Bodies
STP 26.3	2	Sacasa	1	1	Rim
STP 26.3	2	Papagayo-Vallejo	1	1	Body
STP 26.3	2	Unidentified	2	1	Unidentifiable Bodies
STP 26.4	1	Sacasa	1	1	Body
STP 26.4	1	Papagayo-Vallejo	1	1	Rim
STP 26.4	1	Unidentified	11	1	Unidentifiable Bodies
STP 26.4	2	Utilitarian	11	2	Bodies; six are burnt
STP 26.5	1	Granada-Madeira	11	1	Support Pieces
STP 26.5	1	Unidentified	108	9	Unidentifiable Bodies
STP 26.5	2	Sacasa	4	2	Rims
STP 26.5	2	Papagayo-Vallejo	2	1	Bodies
STP 26.5	2	Unidentified	13	1	Unidentifiable Bodies
STP 26.6	1	Sacasa	1	1	Rim
STP 26.6	1	Sacasa	1	0	Base
STP 26.6	1	Granada-Madeira	1	1	Burnt Rim
STP 26.6	1	Unidentified	15	1	Unidentifiable Bodies
STP 26.6	2	Mora	1	1	Body; could be Granada-Madeira
STP 26.6	2	Unidentified	22	3	Unidentifiable Bodies
STP 26.7	1	Sacasa	1	1	Burnt Rim
STP 26.7	1	Unidentified	28	3	Unidentifiable Bodies
STP 26.7	2	Sacasa	2	1	Rims

STP 26.7	2	Sacasa	2	0	Bodies
STP 26.7	2	Papagayo-Vallejo	1	1	Rim
STP 26.7	2	Unidentified	31	4	Unidentifiable Bodies
STP 26.8	1	Sacasa	1	1	Rim
STP 26.8	1	Sacasa	1	0	Base
STP 26.8	1	Granada-Madeira	1	1	Rim
STP 26.8	1	Unidentified	1	1	Rim
STP 26.8	1	Unidentified	114	20	Unidentifiable Bodies
STP 26.9	1	Sacasa	1	1	Rim
STP 26.9	1	Sacasa	2	1	Handle Pieces
STP 26.9	1	Utilitarian	30	4	Bodies
STP 26.9	2	Granada-Madeira	1	1	Rim
STP 26.9	2	Utilitarian	12	1	Bodies
STP 26.9	2	Unidentified	1	1	Support Piece
STP 26.9	2	Unidentified	31	4	Unidentifiable Bodies
STP 26.10	1	Sacasa	1	1	Rim
STP 26.10	1	Utilitarian	18	2	Bodies
STP 26.10	2	Unidentified	5	1	Burnt Bodies
STP 26.11	1	Granada-Madeira	1	1	Rim
STP 26.11	1	Granada-Madeira	1	1	Support
STP 26.11	1	Granada-Madeira	2	0	Bodies
STP 26.11	1	Sacasa	1	1	Body
STP 26.11	1	Tolesmaida	2	2	Bases
STP 26.11	1	Tolesmaida	2	0	Bodies
STP 26.11	1	Unidentified	185	9	Unidentifiable Bodies
STP 26.12	1	Unidentified	14	2	Unidentifiable Bodies
STP 26.13	1	Utilitarian	26	2	Bodies
STP 27.2	1	Utilitarian	11	1	Bodies
STP 27.2	2	Sacasa	4	1	Bodies
STP 27.2	2	Sacasa	1	1	Rim
STP 27.2	2	Papagayo-Vallejo	1	1	Body/Rim
STP 27.2	2	Papagayo-Vallejo	1	1	Rim
STP 27.2	2	Papagayo-Vallejo	1	0	Body
STP 27.2	2	Granada-Madeira	2	2	Rims
STP 27.2	2	Granada-Madeira	2	0	Bodies
STP 27.2	2	Unidentified	167	12	Unidentifiable Bodies
STP 27.3	1	Sacasa	1	1	Base
STP 27.3	1	Orange and Cream	1	1	Body of unknown ceramic type
STP 27.3	1	Papagayo-Vallejo	1	1	Rim
STP 27.3	1	Unidentified	33	2	Unidentifiable Bodies
STP 27.3	2	Papagayo-Vallejo	4	1	Support Pieces
STP 27.3	2	Papagayo-Vallejo	2	1	Rims
STP 27.3	2	Papagayo-Vallejo	5	1	Bodies

STP 27.3	2	Lago	1	1	Rim
STP 27.3	2	Unidentified	95	11	Unidentifiable Bodies
STP 27.4	1	Sacasa	1	1	Burnt Rim
STP 27.4	1	Sacasa	1	0	Burnt Handle
STP 27.4	1	Granada-Madeira	1	1	Rim
STP 27.4	1	Granada-Madeira	1	0	Probable Support Piece
STP 27.4	1	Granada-Madeira	1	1	Burnt Base
STP 27.4	1	Unidentified	62	4	Unidentifiable Bodies
STP 27.4	2	Sacasa	1	1	Burnt Rim
STP 27.4	2	Unidentified	31	3	Unidentifiable Bodies
STP 27.5	1	Sacasa	4	2	Rims
STP 27.5	1	Granada-Madeira	1	1	Body
STP 27.5	1	Unidentified	40	5	Unidentifiable Bodies
STP 27.6	1 and 2	Sacasa	1	1	Rim
STP 27.6	1 and 2	Vallejo	1	1	Support Piece
STP 27.6	1 and 2	Unidentified	33	4	Unidentifiable Bodies
STP 27.7	1	Granada-Madeira	2	1	Rims
STP 27.7	1	Sacasa	3	2	Rims
STP 27.7	1	Unidentified	2	1	Support Pieces
STP 27.7	1	Unidentified	65	5	Unidentifiable Bodies
STP 27.7	2	Sacasa	1	1	Rim
STP 27.7	2	Sacasa	1	0	Body
STP 27.7	2	Papagayo-Vallejo	2	1	Support Pieces
STP 27.7	2	Unidentified	40	3	Unidentifiable Bodies
STP 27.8	1	Sacasa	10	2	Bodies
STP 27.8	1	Utilitarian	18	2	Bodies
STP 27.8	2	Sacasa	11	2	Bodies
STP 27.8	2	Utilitarian	28	3	Bodies
STP 27.9	1	Granada-Madeira	2	1	Rims
STP 27.9	1	Granada-Madeira	1	1	Base
STP 27.9	1	Granada-Madeira	1	0	Body
STP 27.9	1	Unidentified	2	1	Rims
STP 27.9	1	Unidentified	117	8	Unidentifiable Bodies
STP 27.10	1	Granada-Madeira	7	2	Bodies
STP 27.10	1	Sacasa	3	1	Handles
STP 27.10	1	Sacasa	2	1	Rims
STP 27.10	1	Sacasa	1	1	Base
STP 27.10	1	Sacasa	2	0	Bodies
STP 27.10	1	Papagayo-Vallejo	3	2	Rims
STP 27.10	1	Papagayo-Vallejo	2	2	Burnt Rims
STP 27.10	1	Papagayo-Vallejo	1	0	Support Piece
STP 27.10	1	Unidentified	2	2	Rims
STP 27.10	1	Unidentified	132	11	Unidentifiable Bodies

STP 27.10	2	Sacasa	1	1	Rim
STP 27.10	2	Sacasa	1	1	Base
STP 27.10	2	Sacasa	2	0	Bodies
STP 27.10	2	Papagayo-Vallejo	1	1	Rim
STP 27.10	2	Granada-Madeira	1	1	Rim
STP 27.10	2	Granada-Madeira	1	0	Body
STP 27.10	2	Unidentified	3	1	Unidentifiable Bodies
STP 27.11	1	Granada-Madeira	1	1	Rim
STP 27.11	1	Granada-Madeira	1	1	Base
STP 27.11	1	Unidentified	10	1	Unidentifiable Bodies
STP 27.12	1	Granada-Madeira	1	1	Rim
STP 27.12	1	Granada-Madeira	2	1	Support Pieces
STP 27.12	1	Sacasa	1	1	Rim
STP 27.12	1	Unidentified	69	5	Unidentifiable Bodies
STP 27.12	2	Utilitarian	23	3	Bodies
STP 27.13	1	Lago	1	1	Monochrome type or Murillo Appliqué body
STP 27.13	1	Sacasa	1	1	Rim
STP 27.13	1	Unidentified	33	3	Unidentifiable Bodies
STP 28.2	1	Utilitarian	7	2	Bodies
STP 28.2	1	Unidentified	33	3	Unidentifiable Bodies
STP 28.3	1	Papagayo-Vallejo	1	1	Rim
STP 28.3	1	Unidentified	28	4	Unidentifiable Bodies
STP 28.4	1	Sacasa	1	1	Body
STP 28.4	1	Unidentified	4	1	Unidentifiable Bodies
STP 28.5	1	Sacasa	1	1	Rim or Base
STP 28.5	1	Unidentified	32	4	Unidentifiable Bodies
STP 28.6	1	Granada-Madeira	1	1	Rim
STP 28.6	1	Granada-Madeira	1	0	Support
STP 28.6	1	Sacasa	3	1	Rims
STP 28.6	1	Tolesmaida	1	1	Body
STP 28.6	1	Unidentified	29	2	Unidentifiable Bodies
STP 28.7	1	Sacasa	1	1	Rim
STP 28.7	1	Sacasa	1	0	Body
STP 28.7	1	Unidentified	64	8	Unidentifiable Bodies
STP 28.8	1	Sacasa	6	2	Rims
STP 28.8	1	Sacasa	2	1	Bases
STP 28.8	1	Sacasa	1	0	Support
STP 28.8	1	Tolesmaida	2	1	Rims; May be Lago
STP 28.8	1	Papagayo-Vallejo	2	1	Support Pieces
STP 28.8	1	Papagayo-Vallejo	1	0	Body
STP 28.8	1	Granada-Madeira	1	1	Rim
STP 28.8	1	Unidentified	135	11	Unidentifiable Bodies

STP 28.8	2	Tolesmaida	1	1	Base
STP 28.8	2	Papagayo-Vallejo	1	1	Base to plate/vessel
STP 28.8	2	Unidentified	52	7	Unidentifiable Bodies
STP 28.8	3	Sacasa	3	1	Rims
STP 28.8	3	Sacasa	1	1	Base
STP 28.8	3	Sacasa	2	0	Handles
STP 28.8	3	Lago	1	1	Rim
STP 28.8	3	Papagayo-Vallejo	1	1	Body
STP 28.8	3	Unidentified	148	20	Unidentifiable Bodies
STP 28.9	1	Sacasa	20	3	Bodies
STP 28.9	1	Unidentified	53	7	Unidentifiable Bodies
STP 28.9	2	Sacasa	15	2	Bodies
STP 28.9	2	Unidentified	44	6	Unidentifiable Bodies
STP 28.9	3	Sacasa	9	2	Bodies
STP 28.9	3	Unidentified	22	3	Unidentifiable Bodies
STP 28.10	1	Sacasa	13	3	Bodies
STP 28.10	1	Unidentified	44	6	Unidentifiable Bodies
STP 28.11	1	Sacasa	2	1	Rims
STP 28.11	1	Sacasa	1	1	Decorative Body
STP 28.11	1	Papagayo-Vallejo	1	1	Base
STP 28.11	1	Papagayo-Vallejo	1	0	Body
STP 28.11	1	Unidentified	2	1	Bases
STP 28.11	1	Unidentified	52	5	Unidentifiable Bodies
STP 28.11	2	Sacasa	6	2	Rims
STP 28.11	2	Sacasa	3	1	Handles
STP 28.11	2	Sacasa	3	1	Bases
STP 28.11	2	Papagayo-Vallejo	4	2	Rims
STP 28.11	2	Pataky	1	1	"Foot" Support
STP 28.11	2	Pataky	1	0	Rim
STP 28.11	2	Castillo	1	1	Engraved Rim
STP 28.11	2	Utilitarian	1	1	Rim
STP 28.11	2	Utilitarian	1	0	Handle
STP 28.11	2	Utilitarian	1	0	Base
STP 28.11	2	Unidentified	166	20	Unidentifiable Bodies
STP 28.12	1	Sacasa	4	1	Rims
STP 28.12	1	Sacasa	1	1	Base
STP 28.12	1	Granada-Madeira	1	1	Rim
STP 28.12	1	Papagayo-Vallejo	1	1	Rim
STP 28.12	1	Papagayo-Vallejo	1	0	Body
STP 28.12	1	Unidentified	1	1	Rim
STP 28.12	1	Unidentified	145	19	Unidentifiable Bodies
STP 28.12	2	Sacasa	4	1	Rims
STP 28.12	2	Sacasa	2	1	Bases

STP 28.12	2	Sacasa	1	0	Handle
STP 28.12	2	Sacasa	1	0	Body
STP 28.12	2	Lago	1	1	Rim
STP 28.12	2	Papagayo-Vallejo	1	1	Rim
STP 28.12	2	Papagayo-Vallejo	1	1	Support Piece
STP 28.12	2	Granada-Madeira	2	1	Rims
STP 28.12	2	Granada-Madeira	1	0	Body
STP 28.12	2	Unidentified	339	45	Unidentifiable Bodies
STP 28.13	1	Granada-Madeira	1	1	Rim
STP 28.13	1	Unidentified	67	8	Unidentifiable Bodies
STP 28.13	2	Vallejo	1	1	Body
STP 28.13	2	Unidentified	1	1	Rim
STP 28.13	2	Unidentified	19	2	Unidentifiable Bodies
STP 28.14	1	Sacasa	1	1	Rim
STP 28.14	1	Unidentified	4	1	Unidentifiable Bodies
STP 28.14	2	Utilitarian	2	1	Bodies
STP 28.14	2	Unidentified	6	1	Unidentifiable Bodies
STP 29.1	1	Sacasa	6	1	Bodies
STP 29.1	1	Unidentified	17	2	Unidentifiable Bodies
STP 29.2	1	Sacasa	1	1	Rim to Base
STP 29.2	1	Unidentified	29	4	Unidentifiable Bodies
STP 29.2	2	Sacasa	5	2	Bodies
STP 29.2	2	Unidentified	3	1	Unidentifiable Bodies
STP 29.3	1	Utilitarian	13	2	Bodies; nine are burnt
STP 29.4	1	Sacasa	1	1	Rim
STP 29.4	1	Utilitarian	7	1	Bodies
STP 29.4	1	Unidentified	31	2	Unidentifiable Bodies
STP 29.4	2	Utilitarian	10	1	Bodies
STP 29.5	1	Sacasa	1	1	Rim
STP 29.5	1	Sacasa	1	1	Large body to an Olla
STP 29.5	1	Utilitarian	6	1	Bodies
STP 29.5	1	Unidentified	15	1	Unidentifiable Bodies
STP 29.5	2	Utilitarian	8	1	Bodies
STP 29.6	1	Sacasa	1	1	Base
STP 29.6	1	Granada-Madeira	1	1	Rim
STP 29.6	1	Unidentified	12	1	Unidentifiable Bodies
STP 29.7	1	Sacasa	3	1	Rims
STP 29.7	1	Papagayo-Vallejo	3	2	Rims
STP 29.7	1	Unidentified	24	2	Unidentifiable Bodies
STP 29.8	1	Murillo Appliqué	2	1	Rims
STP 29.8	1	Sacasa	1	1	Rim
STP 29.8	1	Sacasa	1	0	Body
STP 29.8	1	Granada-Madeira	1	1	Rim

STP 29.8	1	Unidentified	24	2	Unidentifiable Bodies
STP 29.8	2	Sacasa	1	1	Base/Support
STP 29.8	2	Sacasa	1	0	Body
STP 29.8	2	Papagayo-Vallejo	1	1	Base
STP 29.8	2	Unidentified	42	3	Unidentifiable Bodies
STP 29.9	1 and interface of 2	Sacasa	13	3	Rims
STP 29.9	1 and interface of 2	Sacasa	1	1	Large burnt body
STP 29.9	1 and interface of 2	Papagayo	2	1	Rims
STP 29.9	1 and interface of 2	Papagayo	4	1	Bodies
STP 29.9	1 and interface of 2	Papagayo-Vallejo	1	1	Rim
STP 29.9	1 and interface of 2	Papagayo-Vallejo	1	0	Body
STP 29.9	1 and interface of 2	Unidentified	2	1	Rims
STP 29.9	1 and interface of 2	Unidentified	175	21	Unidentifiable Bodies
STP 29.9	2	Sacasa	2	1	Rims
STP 29.9	2	Papagayo-Vallejo	1	1	Body to Base Piece
STP 29.9	2	Unidentified	20	3	Unidentifiable Bodies
STP 29.10	1	Sacasa	1	1	Burnt Rim
STP 29.10	1	Utilitarian	1	1	Rim
STP 29.10	1	Unidentified	37	3	Unidentifiable Bodies
STP 29.10	2	Sacasa	8	2	Bodies
STP 29.10	2	Unidentified	43	3	Unidentifiable Bodies
STP 29.11	1	Sacasa	3	1	Rims
STP 29.11	1	Sacasa	3	2	Burnt Rims
STP 29.11	1	Sacasa	1	0	Burnt Support Piece
STP 29.11	1	Granada	2	1	Support Pieces
STP 29.11	1	Papagayo-Vallejo	1	1	Rim
STP 29.11	1	Unidentified	49	3	Unidentifiable Bodies
STP 29.11	2	Sacasa	6	2	Rims
STP 29.11	2	Papagayo-Vallejo	1	1	Burnt Rim
STP 29.11	2	Papagayo-Vallejo	1	1	Rim
STP 29.11	2	Madeira	1	1	Rim
STP 29.11	2	Granada-Madeira	1	1	Rim
STP 29.11	2	Unidentified	2	1	Rims

STP 29.11	2	Unidentified	47	4	Unidentifiable Bodies
STP 29.12	1	Sacasa	2	1	Rims
STP 29.12	1	Sacasa	1	1	Rim/Handle
STP 29.12	1	Papagayo-Vallejo	2	1	Supports
STP 29.12	1	Papagayo-Vallejo	1	1	Rim
STP 29.12	1	Unidentified	100	12	Unidentifiable Bodies
STP 29.12	2	Sacasa	3	1	Rims
STP 29.12	2	Sacasa	1	1	Base
STP 29.12	2	Sacasa	1	1	Base/Handle
STP 29.12	2	Papagayo-Vallejo	1	1	Rim
STP 29.12	2	Papagayo-Vallejo	1	0	Support Piece
STP 29.12	2	Unidentified	31	3	Unidentifiable Bodies
STP 29.13	1	Granada-Madeira	1	1	Rim
STP 29.13	1	Papagayo-Vallejo	1	1	Rim
STP 29.13	1	Utilitarian	4	2	Rims
STP 29.13	1	Unidentified	32	4	Unidentifiable Bodies
STP 29.14	1	Sacasa	1	1	Burnt Body
STP 29.14	1	Unidentified	9	1	Unidentifiable Bodies
STP 29.14	2	Utilitarian	2	1	Bodies
STP 30.2	2	Sacasa	1	1	Body
STP 30.3	1	Murillo Appliqué	1	1	Rim
STP 30.3	1	Murillo Appliqué	1	0	Body
STP 30.3	1	Lago	1	1	Rim
STP 30.3	1	Sacasa	1	1	Rim
STP 30.3	1	Sacasa	1	0	Base
STP 30.3	1	Sacasa	2	1	Burnt Support Pieces
STP 30.3	1	Papagayo-Vallejo	1	1	Body
STP 30.3	1	Unidentified	58	7	Unidentifiable Bodies
STP 30.4	1	Papagayo-Vallejo	1	1	Support Piece
STP 30.4	1	Lago	1	1	Rim
STP 30.4	1	Unidentified	25	2	Unidentifiable Bodies
STP 30.5	1	Sacasa	3	1	Rims
STP 30.5	1	Sacasa	1	1	Decorative Body
STP 30.5	1	Sacasa	1	0	Body
STP 30.5	1	Lago	1	1	Rim
STP 30.5	1	Unidentified	38	3	Unidentifiable Bodies
STP 30.6	1	Sacasa	7	2	Bodies
STP 30.6	1	Unidentified	35	4	Unidentifiable Bodies
STP 30.7	1	Sacasa	25	5	Bodies
STP 30.7	1	Unidentified	14	2	Unidentifiable Bodies
STP 30.7	2	Sacasa	6	1	Bodies
STP 30.7	2	Unidentified	27	4	Unidentifiable Bodies
STP 30.8	1	Sacasa	3	1	Rims

STP 30.8	1	Sacasa	2	1	Handle Pieces
STP 30.8	1	Sacasa	1	0	Body
STP 30.8	1	Pataky	1	1	Rim
STP 30.8	1	Unidentified	137	16	Unidentifiable Bodies
STP 30.8	2	Lago	1	1	Rim
STP 30.8	2	Unidentified	28	4	Unidentifiable Bodies
STP 30.9	1 and 2	Sacasa	3	1	Rims
STP 30.9	1 and 2	Sacasa	2	1	Handle Pieces
STP 30.9	1 and 2	Granada-Madeira	1	1	Support
STP 30.9	1 and 2	Granada-Madeira	1	1	Burnt Rim
STP 30.9	1 and 2	Granada-Madeira	2	1	Rims
STP 30.9	1 and 2	Granada-Madeira	1	0	Body
STP 30.9	1 and 2	Papagayo-Vallejo	1	1	Rim
STP 30.9	1 and 2	Papagayo-Vallejo	1	0	Body
STP 30.9	1 and 2	Unidentified	133	10	Unidentifiable Bodies
STP 30.10	1	Sacasa	1	1	Rim
STP 30.10	1	Sacasa	2	1	Burnt Handle Pieces
STP 30.10	1	El Menco	1	1	Rim
STP 30.10	1	Granada	1	1	Rim
STP 30.10	1	Unidentified	98	8	Unidentifiable Bodies
STP 30.10	2	Figurine	1	1	Frog Figurine
STP 30.10	2	Papagayo-Vallejo	2	1	Support Pieces
STP 30.10	2	Papagayo-Vallejo	1	0	Rim
STP 30.10	2	Sacasa	1	1	Rim
STP 30.10	2	Sacasa	1	0	Handle
STP 30.10	2	Granada-Madeira	1	1	Body
STP 30.10	2	Unidentified	71	8	Unidentifiable Bodies
STP 30.10	3	Sacasa	15	4	Rims
STP 30.10	3	Sacasa	1	0	Handle
STP 30.10	3	Sacasa	1	1	Burnt handle/base
STP 30.10	3	Madeira	5	2	Rims
STP 30.10	3	Papagayo-Vallejo	2	1	Rims
STP 30.10	3	Papagayo-Vallejo	1	0	Body
STP 30.10	3	Tolesmaida	1	1	Rim
STP 30.10	3	Unidentified	116	10	Unidentifiable Bodies
STP 30.11	1	Sacasa	15	3	Rims
STP 30.11	1	Sacasa	1	0	Body
STP 30.11	1	Granada-Madeira	1	1	Rim
STP 30.11	1	Lago	4	2	Rims
STP 30.11	1	Lago	1	0	Body
STP 30.11	1	Papagayo-Vallejo	7	1	Support Pieces
STP 30.11	1	Papagayo-Vallejo	1	1	Ceramic Ball
STP 30.11	1	Unidentified	264	32	Unidentifiable Bodies

STP 30.11	2	Granada-Madeira	1	1	Netsinker
STP 30.11	2	Sacasa	7	2	Rims
STP 30.11	2	Sacasa	1	0	Handle
STP 30.11	2	Papagayo-Vallejo	1	1	Body
STP 30.11	2	Orange and Black	2	1	Rims
STP 30.11	2	Orange and Black	1	0	Body
STP 30.11	2	Vallejo	1	1	Body
STP 30.11	2	Unidentified	22	2	Unidentifiable Bodies
STP 30.12	1	Papagayo-Vallejo	4	2	Rims
STP 30.12	1	Sacasa	1	1	Burnt Body
STP 30.12	1	Unidentified	68	8	Unidentifiable Bodies
STP 30.13	1	Papagayo-Vallejo	1	1	Support
STP 30.13	1	Granada-Madeira	1	1	Body
STP 30.13	2	Unidentified	5	1	Unidentifiable Bodies
STP 30.14	1	Sacasa	3	1	Bodies
STP 31.2	1	Papagayo-Vallejo	2	1	Support Pieces
STP 31.2	1	Unidentified	10	1	Unidentifiable Bodies
STP 31.3	1	Sacasa	1	1	Body
STP 31.3	1	Unidentified	3	1	Unidentifiable Bodies
STP 31.4	1	Utilitarian	2	1	Bodies
STP 31.4	1	Unidentified	14	1	Unidentifiable Bodies
STP 31.5	1	Sacasa	3	1	Rims
STP 31.5	1	Unidentified	54	7	Unidentifiable Bodies
STP 31.5	2	Unidentified	4	1	Unidentifiable Bodies
STP 31.6	1	Sacasa	10	2	Bodies
STP 31.6	1	Unidentified	34	3	Unidentifiable Bodies
STP 31.7	1	Utilitarian	8	1	Bodies
STP 31.7	2	Sacasa	1	1	Burnt Body
STP 31.7	2	Granada-Madeira	1	1	Handle Piece
STP 31.8	1 and 2	Sacasa	8	2	Rims
STP 31.8	1 and 2	Sacasa	2	0	Bodies
STP 31.8	1 and 2	Sacasa	1	1	Handle Piece
STP 31.8	1 and 2	Sacasa	2	1	Base Pieces
STP 31.8	1 and 2	Papagayo-Vallejo	7	2	Rims
STP 31.8	1 and 2	Papagayo-Vallejo	2	1	Support Pieces
STP 31.8	1 and 2	Granada	1	1	Rim
STP 31.8	1 and 2	Granada-Madeira	3	1	Rims
STP 31.8	1 and 2	Granada-Madeira	1	1	Support Piece
STP 31.8	1 and 2	Unidentified	133	18	Unidentifiable Bodies
STP 31.9	1	Tolesmaida	1	1	Rim
STP 31.9	1	Tolesmaida	1	0	Base
STP 31.9	1	Sacasa	1	1	Rim
STP 31.9	1	Papagayo	1	1	Rim

STP 31.9	1	Unidentified	45	5	Unidentifiable Bodies
STP 31.9	2	Sacasa	17	3	Bodies
STP 31.10	1	Lago	1	1	Burnt Rim
STP 31.10	1	Papagayo-Vallejo	1	1	Rim turned into holder for Spindle whirl
STP 31.10	1	Unidentified	55	4	Unidentifiable Bodies
STP 31.10	2	Sacasa	7	2	Rims
STP 31.10	2	Sacasa	1	0	Body
STP 31.10	2	Tolesmaida	2	1	Bases
STP 31.10	2	Papagayo-Vallejo	1	1	Body
STP 31.10	2	Granada-Madeira	1	1	Rim or Support Piece
STP 31.10	2	Unidentified	97	8	Unidentifiable Bodies
STP 31.10	3	Utilitarian	4	1	Bodies
STP 31.11	1	Sacasa	7	2	Rims
STP 31.11	1	Sacasa	2	1	Bodies
STP 31.11	1	Lago	1	1	Rim
STP 31.11	1	Unidentified	36	3	Unidentifiable Bodies
STP 31.11	2	Utilitarian	6	2	Bodies
STP 31.12	1	Sacasa	1	1	Rim
STP 31.12	1	Sacasa	1	0	Handle
STP 31.12	1	Granada-Madeira	1	1	Rim
STP 31.12	1	Papagayo-Vallejo	1	1	Body
STP 31.12	1	Unidentified	77	6	Unidentifiable Bodies
STP 31.12	2	Utilitarian	20	3	Bodies
STP 31.12	3	Unidentified	7	1	Bodies
STP 31.13	1	Sacasa	10	2	Bodies
STP 31.13	1	Unidentified	31	5	Unidentifiable Bodies
STP 31.14	1	Sacasa	2	1	Rims
STP 31.14	1	Sacasa	1	1	Handle Piece
STP 31.14	1	Lago	1	1	Base
STP 31.14	1	Unidentified	38	3	Unidentifiable Bodies
STP 32.2	2	Utilitarian	5	1	Bodies
STP 32.2	2	Unidentified	8	2	Unidentifiable Bodies
STP 32.3	1	Sacasa	1	1	Base
STP 32.3	1	Sacasa	1	1	Rim
STP 32.3	1	Sacasa	1	0	Decorative Body
STP 32.3	2	Sacasa	2	1	Bodies
STP 32.4	1	Sacasa	11	2	Bodies
STP 32.5	1	Sacasa	1	1	Handle
STP 32.5	1	Papagayo-Vallejo	1	1	Rim
STP 32.5	1	Unidentified	5	1	Unidentifiable Bodies
STP 32.6	1	Utilitarian	15	2	Bodies
STP 32.6	2	Utilitarian	5	1	Bodies

STP 32.6	2	Unidentified	23	4	Unidentifiable Bodies
STP 32.7	1	Sacasa	1	1	Base
STP 32.7	1	Sacasa	1	0	Handle Piece
STP 32.7	1	Figurine	1	1	Figurine
STP 32.8	1	Papagayo-Vallejo	1	1	Rim
STP 32.8	1	Sacasa	1	1	Handle
STP 32.8	1	Utilitarian	15	2	Bodies
STP 32.8	1	Unidentified	26	3	Unidentifiable Bodies
STP 32.8	2	Papagayo-Vallejo	1	1	Rim
STP 32.8	2	Unidentified	19	2	Unidentifiable Bodies
STP 32.8	3	Unidentified	1	1	Body
STP 32.9	1	Granada-Madeira	3	2	Rims
STP 32.9	1	Unidentified	50	7	Unidentifiable Bodies
STP 32.9	2	Utilitarian	10	2	Bodies
STP 32.10	1	Sacasa	2	1	Rims
STP 32.10	1	Sacasa	1	1	Large Rim to an Olla
STP 32.10	1	Sacasa	1	0	Handle
STP 32.10	1	Granada-Madeira	1	1	Rim
STP 32.10	1	Granada-Madeira	1	0	Support Piece
STP 32.10	1	Unidentified	44	3	Unidentifiable Bodies
STP 32.11	1	Papagayo-Vallejo	2	1	Support Pieces
STP 32.11	1	Papagayo-Vallejo	1	0	Rim
STP 32.11	1	Papagayo-Vallejo	1	1	Base
STP 32.11	1	Papagayo-Vallejo	1	0	Body
STP 32.11	1	Granada-Madeira	1	1	Body
STP 32.11	1	Unidentified	1	1	Rim
STP 32.11	1	Unidentified	42	3	Unidentifiable Bodies
STP 32.12	1	Utilitarian	11	2	Bodies
STP 32.13	1	Unidentified	2	1	Unidentifiable Bodies
STP 33.1	2	Sacasa	3	1	Bodies
STP 33.1	2	Unidentified	3	1	Unidentifiable Bodies
STP 33.3	1	Unidentified	4	1	Unidentifiable Bodies
STP 33.4	1	Papagayo-Vallejo	1	1	Support Piece
STP 33.4	1	Sacasa	1	1	Rim
STP 33.4	1	Sacasa	2	1	Handle Pieces
STP 33.4	1	Sacasa	1	0	Body
STP 33.4	1	Unidentified	10	1	Unidentifiable Bodies
STP 33.5	1	Lago	1	1	Body
STP 33.5	1	Unidentified	10	1	Unidentifiable Bodies
STP 33.6	1	Sacasa	1	1	Rim
STP 33.6	1	Unidentified	19	2	Unidentifiable Bodies
STP 33.7	1	Granada	3	2	Rims; may be Bramadero
STP 33.7	1	Sacasa	3	1	Rims

STP 33.7	1	Sacasa	1	1	Base
STP 33.7	1	Sacasa	1	1	Decorative Body
STP 33.7	1	Unidentified	101	9	Unidentifiable Bodies
STP 33.8	1	Granada-Madeira	2	1	Rims
STP 33.8	1	Papagayo-Vallejo	1	1	Rim
STP 33.8	1	Sacasa	2	1	Rims
STP 33.8	1	Sacasa	1	1	Body
STP 33.8	1	Unidentified	50	7	Unidentifiable Bodies
STP 33.8	2	Utilitarian	9	2	Bodies
STP 33.9	1	Sacasa	4	1	Bodies
STP 33.9	1	Utilitarian	11	3	Bodies
STP 33.10	1	Sacasa	1	1	Rim
STP 33.10	1	Unidentified	20	3	Unidentifiable Bodies
Surface Find 10 m EES (102 degrees from 33.11)	Riverbank	Papagayo-Vallejo	1	1	Rim
Surface Find 10 m EES (102 degrees from 33.11)	Riverbank	Sacasa	1	1	Handle
STP 33.12	1	Sacasa	2	1	Bodies
STP 33.12	1	Utilitarian	2	1	Bodies
STP 34.2	1	Sacasa	4	1	Bodies
STP 34.2	1	Utilitarian	6	2	Bodies
STP 34.3	1	Unidentified	4	1	Unidentifiable Bodies
STP 34.4	1	Sacasa	1	1	Body
STP 34.4	1	Unidentified	4	1	Unidentifiable Bodies
STP 34.5	1	Unidentified	1	1	Body
STP 34.6	1	Sacasa	4	1	Bodies
STP 34.6	1	Unidentified	11	3	Unidentifiable Bodies
STP 34.7	1	Lago	1	1	Rim
STP 34.7	1	Unidentified	12	2	Unidentifiable Bodies
STP 35.3	1	Unidentified	2	1	Unidentifiable Bodies
STP 35.4	1	Unidentified	1	1	Body
STP 35.5	1	Unidentified	3	1	Unidentifiable Bodies
STP 35.6	1	Utilitarian	8	2	Bodies
STP 35.7	1	Sacasa	1	1	Rim
STP 35.7	1	Sacasa	1	0	Body
STP 35.7	1	Unidentified	18	2	Unidentifiable Bodies
STP 35.8	1	Utilitarian	4	1	Bodies
STP 36.2	1	Sacasa	1	1	Body

STP 36.3	1	Sacasa	1	1	Body
STP 36.4	1	Unidentified	3	1	Unidentifiable Bodies
STP 36.7	1	Granada-Madeira	1	1	Rim
STP 36.7	1	Utilitarian	20	3	Bodies
STP 36.8	1	Utilitarian	1	1	Body
Unknown; either Transects 12 or 13, dated 09 February 2009	Unknown	Sacasa	1	1	Base/Handle
Unknown; either Transects 12 or 13, dated 09 February 2009	Unknown	Lago	1	1	Rim; may be Tolesmaida
Unknown; either Transects 12 or 13, dated 09 February 2009	Unknown	Papagayo-Vallejo	1	1	Support Piece
Unknown; most likely STP 18.3 Dated 28 January 2009	Unknown	Sacasa	2	1	Rims
Unknown; most likely STP 18.3 Dated 28 January 2009	Unknown	Sacasa	1	0	Body
Unknown; most likely STP 18.3 Dated 28 January 2009	Unknown	Tolesmaida	1	1	Rim; may be Lago
Unknown; most likely STP 18.3 Dated 28 January 2009	Unknown	Papagayo-Vallejo	1	1	Rim
Unknown; most likely STP 18.3 Dated 28 January 2009	Unknown	Granada-Madeira	2	1	Rims

Unknown; most likely STP 18.3 Dated 28 January 2009	Unknown	Unidentified	46	6	Unidentifiable Bodies
Unknown; either Transects 9 or 10, dated 05 February 2009	Unknown	Sacasa	2	1	Rims
Unknown; either Transects 9 or 10, dated 05 February 2009	Unknown	Sacasa	1	1	Base
Unknown; either Transects 9 or 10, dated 05 February 2009	Unknown	Sacasa	2	0	Bodies
Unknown; either Transects 9 or 10, dated 05 February 2009	Unknown	Granada-Madeira	1	1	Rim
Unknown; either Transects 9 or 10, dated 05 February 2009	Unknown	Unidentified	36	4	Unidentifiable Bodies
Unknown; Second Bag. Either Transects 9 or 10, dated 05 February 2009	Unknown	Sacasa	1	1	Rim
Unknown; Second Bag. Either Transects 9 or 10, dated 05 February 2009	Unknown	Papagayo-Vallejo	1	1	Rim

Unknown; Second Bag. Either Transects 9 or 10, dated 05 February 2009	Unknown	Papagayo-Vallejo	1	0	Body
Unknown; Second Bag. Either Transects 9 or 10, dated 05 February 2009	Unknown	Granada-Madeira	1	1	Rim
Unknown; Second Bag. Either Transects 9 or 10, dated 05 February 2009	Unknown	Granada-Madeira	1	0	Probable Base
Unknown; Second Bag. Either Transects 9 or 10, dated 05 February 2009	Unknown	Unidentified	1	1	Burnt Support
Unknown; Second Bag. Either Transects 9 or 10, dated 05 February 2009	Unknown	Unidentified	31	4	Unidentifiable Bodies
Unknown; Likely from Transects 9-12, Dated 06 February 2009	Unknown	Sacasa	4	2	Rims
Unknown; Likely from Transects 9-12, Dated 06 February 2009	Unknown	Papagayo-Vallejo	1	1	Rim

Unknown; Likely from Transects 9-12, Dated 06 February 2009	Unknown	Papagayo-Vallejo	1	1	Tripod Vessel Rim
Unknown; Likely from Transects 9-12, Dated 06 February 2009	Unknown	Papagayo-Vallejo	5	0	Bodies
Unknown; Likely from Transects 9-12, Dated 06 February 2009	Unknown	Unidentified	60	5	Unidentifiable Bodies
Unknown; Most likely Transects 28-30, Dated 24 February 2009	Unknown	Granada-Madeira	1	1	Rim
Unknown; Most likely Transects 28-30, Dated 24 February 2009	Unknown	Granada-Madeira	2	1	Support Pieces
Unknown; Most likely Transects 28-30, Dated 24 February 2009	Unknown	Unidentified	3	1	Unidentifiable Bodies
Unknown; Either Transects 24 or 25 or STP 26.13, Dated 20 February 2009	Unknown	Sacasa	2	1	Rims
Unknown; Either Transects 24 or 25 or STP 26.13, Dated 20 February 2009	Unknown	Granada-Madeira	2	1	Rims

Unknown; Either Transects 24 or 25 or STP 26.13, Dated 20 February 2009	Unknown	Unidentified	26	4	Unidentifiable Bodies
Test Unit 1	1	Sacasa	3	1	Bodies
Test Unit 1	2	Sacasa	2	1	Rims
Test Unit 1	2	Sacasa	1	1	Handle
Test Unit 1	2	Sacasa	2	0	Bodies
Test Unit 1	2	Granada-Madeira	1	1	Body
Test Unit 1	2	Unidentified	11	1	Unidentified Bodies
Test Unit 1	3	Sacasa	3	1	Rims
Test Unit 1	3	Sacasa	2	1	One large body, the other smaller
Test Unit 1	3	Sacasa	1	1	Handle
Test Unit 1	3	Papagayo-Vallejo	5	1	Bodies
Test Unit 1	3	Unidentified	58	5	Unidentified Bodies
Test Unit 1	4	Sacasa	6	2	Rims
Test Unit 1	4	Sacasa	3	1	Bodies
Test Unit 1	4	Papagayo-Vallejo	3	1	Bodies
Test Unit 1	4	Isabel	1	1	Body
Test Unit 1	4	Unidentified	56	7	Unidentified Bodies
Test Unit 1	5	Sacasa	8	3	Rims
Test Unit 1	5	Sacasa	3	1	Handles
Test Unit 1	5	Sacasa	3	1	Supports
Test Unit 1	5	Sacasa	1	0	Base
Test Unit 1	5	Sacasa	3	0	Bodies
Test Unit 1	5	Papagayo	1	1	Support
Test Unit 1	5	Papagayo-Vallejo	4	1	Bodies
Test Unit 1	5	Unidentified	74	10	Unidentified Bodies
Test Unit 1	6	Sacasa	10	3	Bodies
Test Unit 1	6	Unidentified	68	9	Unidentified Bodies
Test Unit 1	7	Sacasa	3	1	Bodies
Test Unit 2	1	Sacasa	1	1	Body
Test Unit 2	1	Unidentified	24	2	Unidentified Bodies
Test Unit 2	2	Sacasa	12	4	Rims
Test Unit 2	2	Sacasa	1	1	Base
Test Unit 2	2	Sacasa	11	1	Bodies
Test Unit 2	2	Papagayo-Vallejo	3	1	Rims
Test Unit 2	2	Papagayo-Vallejo	3	1	Support Pieces

Test Unit 2	2	Papagayo-Vallejo	1	0	Body
Test Unit 2	2	Granada	2	1	Support Pieces
Test Unit 2	2	Granada	1	1	Rims
Test Unit 2	2	Granada	1	0	Base
Test Unit 2	2	Madeira	1	1	Support Piece
Test Unit 2	2	Unidentified	1	1	Rim
Test Unit 2	2	Unidentified	277	29	Unidentified Bodies
Test Unit 2	3	Sacasa	4	1	Rims
Test Unit 2	3	Sacasa	1	1	Handle
Test Unit 2	3	Sacasa	1	0	Body
Test Unit 2	3	Papagayo-Vallejo	2	1	Bodies
Test Unit 2	3	Unidentified	64	8	Unidentified Bodies
Test Unit 2	4	Sacasa	1	1	Rim
Test Unit 2	4	Granada-Madeira	1	1	Rim
Test Unit 2	4	Papagayo-Vallejo	1	1	Base of a Support
Test Unit 2	4	Unidentified	19	3	Unidentified Bodies
Test Unit 2	5	Sacasa	4	1	Bodies
Test Unit 2	5	Unidentified	2	1	Unidentified Bodies
Test Unit 2	6	Papagayo-Vallejo	3	1	Bodies
Test Unit 2	6	Unidentified	9	1	Unidentified Bodies
Test Unit 2	7	Sacasa	2	1	Bodies
Test Unit 2	7	Unidentified	5	1	Unidentified Bodies
Test Unit 2	8	Unidentified	2	1	Support Pieces
Test Unit 2	8	Unidentified	11	2	Bodies
Test Unit 2	9	Sacasa	4	2	Rims
Test Unit 2	9	Sacasa	1	1	Base
Test Unit 2	9	Sacasa	2	0	Bodies
Test Unit 2	9	Unidentified	16	2	Unidentified Bodies
Test Unit 2	10	Sacasa	1	1	Burnt Rim
Test Unit 2	10	Sacasa	3	1	Bodies
Test Unit 2	10	Unidentified	19	2	Unidentified Bodies
Test Unit 3	1	Sacasa	3	1	Bodies
Test Unit 3	1	Unidentified	6	2	Unidentified Bodies
Test Unit 3	2	Sacasa	2	1	Rims
Test Unit 3	2	Sacasa	1	1	Handle
Test Unit 3	2	Papagayo-Vallejo	1	1	Rim
Test Unit 3	2	Unidentified	41	5	Unidentified Bodies
Test Unit 3	3	Sacasa	17	6	Rims
Test Unit 3	3	Sacasa	1	1	Rim to Base
Test Unit 3	3	Sacasa	3	1	Bases
Test Unit 3	3	Sacasa	2	1	Handles
Test Unit 3	3	Sacasa	5	0	Bodies
Test Unit 3	3	Papagayo-Vallejo	1	1	Rim

Test Unit 3	3	Papagayo-Vallejo	10	1	Bodies
Test Unit 3	3	Papagayo-Vallejo	3	1	Support Pieces
Test Unit 3	3	Unidentified	1	1	Engraved Rim
Test Unit 3	3	Unidentified	208	25	Unidentified Bodies
Test Unit 3	4	Sacasa	10	2	Bodies
Test Unit 3	4	Unidentified	25	4	Unidentified Bodies
Test Unit 3	Levels 1-4 (wall scrape)	Sacasa	4	1	Bodies
Test Unit 3	Levels 1-4 (wall scrape)	Unidentified	8	1	Unidentified Bodies
Test Unit 3	5	Sacasa	1	1	Burnt Rim
Test Unit 3	5	Unidentified	4	1	Burnt Unidentified Bodies
Test Unit 3	6	Sacasa	1	1	Body
Test Unit 3	6	Papagayo-Vallejo	1	1	Large Body to a Vessel
Test Unit 3	6	Unidentified	26	4	Unidentified Bodies
Test Unit 3	7	Granada	1	1	Body
Test Unit 3	7	Papagayo-Vallejo	1	1	Body
Test Unit 3	7	Sacasa	1	1	Body/Base
Test Unit 3	7	Unidentified	9	2	Unidentified Bodies
Test Unit 3	8	Sacasa	1	1	Body
Test Unit 3	8	Sacasa	1	1	Engraved Body
Test Unit 3	8	Granada-Madeira	2	1	Bodies
Test Unit 3	8	Unidentified	8	1	Unidentified Bodies
Test Unit 3	9	Sacasa	9	2	Bodies
Test Unit 3	9	Unidentified	16	2	Unidentified Bodies
Test Unit 3	10	Sacasa	6	2	Bodies
Test Unit 3	10	Unidentified	8	2	Unidentified Bodies
Test Unit 4	1	Sacasa	1	1	Body
Test Unit 4	2	Sacasa	4	1	Rims
Test Unit 4	2	Sacasa	2	1	Handles
Test Unit 4	2	Sacasa	2	0	Bodies
Test Unit 4	2	Granada-Madeira	1	1	Support
Test Unit 4	2	Granada-Madeira	1	0	Rim
Test Unit 4	2	Pataky	1	1	Burnt Rim
Test Unit 4	2	Unidentified	65	8	Unidentified Bodies
Test Unit 4	3	Sacasa	9	2	Bodies
Test Unit 4	3	Unidentified	184	30	Unidentified Bodies
Test Unit 4	4	Lago	1	1	Rim
Test Unit 4	4	Sacasa	2	1	Rims
Test Unit 4	4	Sacasa	1	1	Body
Test Unit 4	4	Papagayo-Vallejo	6	1	Support Pieces
Test Unit 4	4	Papagayo-Vallejo	1	1	Base
Test Unit 4	4	Unidentified	1	1	Rim

Test Unit 4	4	Unidentified	97	12	Unidentified Bodies
Test Unit 4	5	Sacasa	3	1	Bodies
Test Unit 4	5	Unidentified	4	1	Unidentified Bodies
Test Unit 4	6	Sacasa	4	1	Bodies
Test Unit 4	6	Unidentified	7	2	Unidentified Bodies
Test Unit 4	7	Sacasa	5	2	Bodies
Test Unit 4	8	Sacasa	6	2	Bodies
Test Unit 4	8	Unidentified	8	2	Unidentified Bodies
Test Unit 4	9	Sacasa	8	2	Bodies
Test Unit 4	9	Unidentified	17	3	Unidentified Bodies
Test Unit 4	10	Sacasa	17	4	Bodies
Test Unit 4	10	Unidentified	24	3	Unidentified Bodies
Test Unit 4	11	Sacasa	3	1	Bodies
Test Unit 4	12	Bagaces	2	1	Bodies
Test Unit 4	12	Unidentified	1	1	Unidentified Bodies
Test Unit 4	13	Bagaces	1	1	Body
Test Unit 5	1	Sacasa	4	1	Bodies
Test Unit 5	1	Unidentified	4	2	Unidentified Bodies
Test Unit 5	2	Sacasa	12	3	Rims
Test Unit 5	2	Sacasa	1	1	Base
Test Unit 5	2	Sacasa	3	0	Bodies
Test Unit 5	2	Papagayo-Vallejo	1	1	Support Piece
Test Unit 5	2	Unidentified	35	5	Unidentified Bodies
Test Unit 5	3	Sacasa	3	1	Rims
Test Unit 5	3	Sacasa	1	1	Base/Body
Test Unit 5	3	Papagayo-Vallejo	1	1	Rim or Support Piece
Test Unit 5	3	Unidentified	81	10	Unidentified Bodies
Test Unit 5	4	Sacasa	3	1	Rims
Test Unit 5	4	Sacasa	1	0	Body
Test Unit 5	4	Papagayo-Vallejo	1	1	Rim
Test Unit 5	4	Papagayo-Vallejo	2	1	Bodies
Test Unit 5	4	Unidentified	61	5	Unidentified Bodies
Test Unit 5	5	Sacasa	4	1	Bodies
Test Unit 5	5	Unidentified	4	1	Unidentified Bodies
Test Unit 5	6	Sacasa	6	2	Bodies
Test Unit 5	6	Unidentified	8	1	Unidentified Bodies
Test Unit 5	7	Sacasa	6	2	Bodies
Test Unit 5	7	Unidentified	3	1	Unidentified Bodies
Test Unit 5	8	Sacasa	3	1	Bodies
Test Unit 5	8	Unidentified	10	2	Unidentified Bodies
Test Unit 5	9	Sacasa	3	1	Bodies
Test Unit 5	9	Sacasa	1	1	Handle
Test Unit 5	9	Papagayo-Vallejo	1	1	Rim

Test Unit 5	9	Unidentified	8	1	Unidentified Bodies
Test Unit 5	10	Sacasa	1	1	Rim
Test Unit 5	10	Sacasa	3	1	Bodies
Test Unit 5	10	Castillo Engraved	1	1	Body
Test Unit 5	10	Murillo Appliqué	1	1	Body
Test Unit 5	10	Unidentified	34	5	Unidentified Bodies
Test Unit 6	2	Sacasa	7	2	Bodies
Test Unit 6	3	Sacasa	8	3	Rims
Test Unit 6	3	Sacasa	3	2	Bases
Test Unit 6	3	Sacasa	2	0	Bodies
Test Unit 6	3	Papagayo-Vallejo	4	2	Rims
Test Unit 6	3	Papagayo-Vallejo	2	1	Support Pieces
Test Unit 6	3	Papagayo-Vallejo	3	0	Bodies
Test Unit 6	3	Granada-Madeira	4	2	Rims
Test Unit 6	3	Granada-Madeira	3	1	Bodies
Test Unit 6	3	Unidentified	48	6	Unidentified Bodies
Test Unit 6	4	Sacasa	11	3	Rims
Test Unit 6	4	Sacasa	8	2	Handle Pieces
Test Unit 6	4	Papagayo-Vallejo	5	2	Rims
Test Unit 6	4	Papagayo-Vallejo	2	1	Support Pieces
Test Unit 6	4	Papagayo-Vallejo	3	0	Bodies
Test Unit 6	4	Granada-Madeira	2	1	Bodies
Test Unit 6	4	Unidentified	48	5	Unidentified Bodies
Test Unit 6	5	Papagayo-Vallejo	1	1	Body
Test Unit 6	5	Sacasa	1	1	Body
Test Unit 6	5	Unidentified	7	1	Unidentified Bodies
Test Unit 6	6	Sacasa	1	1	Rim
Test Unit 6	6	Granada-Madeira	1	1	Rim
Test Unit 6	6	Unidentified	8	2	Unidentified Bodies
Test Unit 6	7	Granada-Madeira	1	1	Body
Test Unit 6	7	Sacasa	1	1	Netsinker
Test Unit 6	7	Unidentified	3	1	Unidentified Bodies
Test Unit 6	9	Sacasa	1	1	Netsinker
Test Unit 6	9	Granada-Madeira	1	1	Body
Test Unit 6	10	Sacasa	3	1	Rims
Test Unit 6	10	Sacasa	1	0	Body
Test Unit 6	10	Pataky	1	1	Rim
Test Unit 6	10	Unidentified	1	1	Base
Test Unit 6	10	Unidentified	23	3	Unidentified Bodies
Test Unit 6	11	Unidentified	2	1	Unidentified Bodies
Test Unit 7	2	Sacasa	4	1	Bodies
Test Unit 7	2	Unidentified	2	1	Unidentified Bodies
Test Unit 7	3	Papagayo-Vallejo	1	1	Netsinker

Test Unit 7	3	Lago	1	1	Rim or Handle
Test Unit 7	3	Sacasa	4	2	Rims
Test Unit 7	3	Sacasa	1	1	Base
Test Unit 7	3	Sacasa	1	0	Body
Test Unit 7	3	Unidentified	1	1	Burnt Netsinker
Test Unit 7	3	Unidentified	51	5	Unidentified Bodies
Test Unit 7	4	Sacasa	10	3	Rims
Test Unit 7	4	Sacasa	3	1	Bases
Test Unit 7	4	Sacasa	6	1	Bodies
Test Unit 7	4	Papagayo-Vallejo	1	1	Rim
Test Unit 7	4	Papagayo-Vallejo	1	1	Support Piece
Test Unit 7	4	Papagayo-Vallejo	7	1	Bodies
Test Unit 7	4	Unidentified	64	7	Unidentified Bodies
Test Unit 7	5	Sacasa	1	1	Rim
Test Unit 7	5	Sacasa	1	1	Base/Handle Piece
Test Unit 7	5	Sacasa	2	0	Bodies
Test Unit 7	5	Papagayo-Vallejo	1	1	Probable Support Piece
Test Unit 7	5	Unidentified	1	1	Support
Test Unit 7	5	Utilitarian	1	1	Rim
Test Unit 7	5	Unidentified	22	3	Unidentified Bodies
Test Unit 7	6	Sacasa	3	1	Bodies
Test Unit 7	6	Unidentified	3	1	Unidentified Bodies
Test Unit 7	7	Sacasa	1	1	Rim
Test Unit 7	7	Sacasa	3	0	Bodies
Test Unit 7	8	Sacasa	2	2	Bodies
Test Unit 7	9	Sacasa	3	1	Bodies
Test Unit 7	10	Bagaces	3	2	Bodies
Test Unit 7	10	Unidentified	24	4	Unidentified Bodies
Test Unit 8	1	Sacasa	1	1	Rim to Body Piece
Test Unit 8	2	Sacasa	5	2	Bodies
Test Unit 8	2	Unidentified	9	1	Unidentified Bodies
Test Unit 8	3	Sacasa	16	3	Bodies
Test Unit 8	3	Unidentified	43	6	Unidentified Bodies
Test Unit 8	4	Sacasa	2	1	Rims
Test Unit 8	4	Papagayo-Vallejo	1	1	Rim
Test Unit 8	4	Papagayo-Vallejo	1	0	Body
Test Unit 8	4	Unidentified	48	6	Unidentified Bodies
Test Unit 8	5	Sacasa	2	1	Rims
Test Unit 8	5	Unidentified	5	1	Unidentified Bodies
Test Unit 8	6	Sacasa	3	1	Bodies
Test Unit 8	7	Sacasa	2	1	Bodies
Test Unit 8	8	Sacasa	2	1	Bodies
Test Unit 8	8	Unidentified	1	1	Body

Test Unit 8	9	Utilitarian	1	1	Body
Test Unit 8	10	Sacasa	5	1	Bodies
Test Unit 8	10	Unidentified	6	1	Unidentified Bodies
Test Unit 8	11	Bagaces	2	2	Bodies
Test Unit 8	11	Utilitarian	4	1	Bodies
Units 2-8	Floor Clean	Sacasa	6	2	Bodies
Units 2-8	Floor Clean	Unidentified	7	1	Unidentified Bodies
Test Unit 9	1	Sacasa	6	2	Rims
Test Unit 9	1	Granada-Madeira	1	1	Rim
Test Unit 9	1	Papagayo-Vallejo	1	1	Support
Test Unit 9	1	Unidentified	64	6	Unidentified Bodies
Test Unit 9	2	Sacasa	4	2	Rims
Test Unit 9	2	Sacasa	2	0	Bodies
Test Unit 9	2	Papagayo-Vallejo	3	1	Rims
Test Unit 9	2	Papagayo-Vallejo	1	1	Base
Test Unit 9	2	Unidentified	89	7	Unidentified Bodies
Test Unit 9	3	Sacasa	1	1	Rim
Test Unit 9	3	Sacasa	1	0	Body
Test Unit 9	3	Papagayo-Vallejo	2	1	Bodies
Test Unit 9	3	Papagayo	1	1	Tripod Vessel Support
Test Unit 9	3	Unidentified	110	12	Unidentified Bodies
Test Unit 9	4	Sacasa	6	2	Rims
Test Unit 9	4	Sacasa	1	0	Body
Test Unit 9	4	Papagayo-Vallejo	1	1	Body
Test Unit 9	4	Orange and Black	1	1	Body
Test Unit 9	4	Unidentified	83	11	Unidentified Bodies
Test Unit 9	5	Sacasa	4	2	Rims
Test Unit 9	5	Sacasa	2	1	Bodies
Test Unit 9	5	Papagayo-Vallejo	2	1	Rims
Test Unit 9	5	Papagayo-Vallejo	1	0	Body
Test Unit 9	5	Papagayo-Vallejo	1	1	Support
Test Unit 9	5	Unidentified	69	6	Unidentified Bodies
Test Unit 9	6	Sacasa	2	1	Rims
Test Unit 9	6	Sacasa	2	1	Bases
Test Unit 9	6	Madeira	1	1	Rim
Test Unit 9	6	Madeira	1	0	Body
Test Unit 9	6	Papagayo-Vallejo	2	1	Bodies
Test Unit 9	6	Unidentified	1	1	Support
Test Unit 9	6	Unidentified	1	1	Body
Test Unit 9	7	Utilitarian	1	1	Body
Test Unit 9	8	Sacasa	2	1	Rims
Test Unit 9	9	Sacasa	9	1	Bodies

Test Unit 9	9	Sacasa	1	1	Rim
Test Unit 9	9	Sacasa	1	1	Handle
Test Unit 9	9	Unidentified	4	1	Unidentified Bodies
Test Unit 9	10	Sacasa	1	1	Rim
Test Unit 9	10	Sacasa	3	0	Bodies
Test Unit 9	10	Papagayo-Vallejo	1	1	Support Piece
Test Unit 10	1	Sacasa	1	1	Handle
Test Unit 10	1	Sacasa	2	0	Bodies
Test Unit 10	1	Lago	2	1	Rims
Test Unit 10	1	Vallejo	1	1	Rim
Test Unit 10	1	Vallejo	1	0	Body
Test Unit 10	1	El Menco	1	1	Rim
Test Unit 10	1	Unidentified	59	5	Unidentified Bodies
Test Unit 10	2	El Menco	2	1	Rims
Test Unit 10	2	El Menco	1	1	Body
Test Unit 10	2	Sacasa	4	2	Rims
Test Unit 10	2	Sacasa	1	0	Body
Test Unit 10	2	Lago	1	1	Base of a Vessel
Test Unit 10	2	Unidentified	80	10	Unidentified Bodies
Test Unit 10	3	Sacasa	6	2	Rims
Test Unit 10	3	Sacasa	3	1	Handle Pieces
Test Unit 10	3	Sacasa	2	1	Bases
Test Unit 10	3	Sacasa	3	0	Bodies
Test Unit 10	3	Papagayo-Vallejo	2	1	Rims
Test Unit 10	3	Papagayo-Vallejo	1	0	Support Piece
Test Unit 10	3	El Menco	1	1	Body
Test Unit 10	3	Unidentified	99	13	Unidentified Bodies
Test Unit 10	4	Sacasa	8	2	Rims
Test Unit 10	4	Sacasa	2	2	Bases
Test Unit 10	4	Papagayo-Vallejo	2	1	Bodies
Test Unit 10	4	Unidentified	74	9	Unidentified Bodies

Test Unit 10	5	Papagayo	1	1	Support Piece
Test Unit 10	5	Unidentified	86	7	Unidentified Bodies
Test Unit 10	6	Sacasa	4	1	Rims
Test Unit 10	6	Sacasa	2	1	Handle Pieces
Test Unit 10	6	Sacasa	1	0	Body
Test Unit 10	6	Granada-Madeira	1	1	Rim
Test Unit 10	6	Unidentified	11	2	Unidentified Bodies
Test Unit 10	7	Sacasa	3	1	Burnt Bodies
Test Unit 10	8	Sacasa	1	1	Rim
Test Unit 10	8	Sacasa	1	0	Body
Test Unit 10	9	Sacasa	1	1	Body
Test Unit 10	10	Bagaces	1	1	Rim
Test Unit 10	11	Sacasa	3	1	Burnt Bodies
Test Unit 11	1	Sacasa	9	3	Rims
Test Unit 11	1	Sacasa	1	1	Base
Test Unit 11	1	Sacasa	2	0	Bodies
Test Unit 11	1	Papagayo-Vallejo	2	1	Rims
Test Unit 11	1	Papagayo-Vallejo	1	0	Body
Test Unit 11	1	Unidentified	50	5	Unidentified Bodies
Test Unit 11	2	Sacasa	15	3	Rims
Test Unit 11	2	Sacasa	1	1	Rim to Base
Test Unit 11	2	Sacasa	2	1	Handle Pieces
Test Unit 11	2	Sacasa	1	0	Body
Test Unit 11	2	Lago	1	1	Rim
Test Unit 11	2	Tolesmaida	1	1	Rim
Test Unit 11	2	Papagayo-Vallejo	1	1	Support Piece
Test Unit 11	2	Papagayo-Vallejo	1	1	Burnt Rim
Test Unit 11	2	Papagayo-Vallejo	2	0	Bodies
Test Unit 11	2	Unidentified	76	7	Unidentified Bodies
Test Unit	3	Sacasa	18	5	Rims

11					
Test Unit					
11	3	Sacasa	3	1	Handle Pieces
Test Unit					
11	3	Sacasa	2	1	Bases
Test Unit					
11	3	Sacasa	3	0	Bodies
Test Unit					
11	3	Granada-Madeira	1	1	Rim
Test Unit					
11	3	Granada-Madeira	1	1	Base
Test Unit					
11	3	Granada-Madeira	2	0	Support Pieces
Test Unit					
11	3	Granada-Madeira	2	0	Bodies
Test Unit					
11	3	Unidentified	1	1	Rim
Test Unit					
11	3	Unidentified	178	25	Unidentified Bodies
Test Unit					
11	4	Papagayo-Vallejo	2	1	Rims
Test Unit					
11	4	Papagayo-Vallejo	1	1	Body
Test Unit					
11	4	Sacasa	2	1	Rims
Test Unit					
11	4	El Menco	1	1	Rim
Test Unit					
11	4	Engraved	1	1	Base
Test Unit					
11	4	Unidentified	2	1	Support Pieces
Test Unit					
11	4	Unidentified	49	4	Unidentified Bodies
Test Unit					
11	5	Sacasa	2	1	Bodies
Test Unit					
11	5	Sacasa	1	1	Rim
Test Unit					
11	6	Sacasa	1	1	Large Body
Test Unit					
11	6	Unidentified	52	8	Unidentified Bodies
Test Unit					
11	7	Sacasa	1	1	Handle
Test Unit					
11	7	Sacasa	1	0	Body
Test Unit					
11	7	Unidentified	2	1	Unidentified Bodies
Test Unit					
12	1	Sacasa	12	3	Rims
Test Unit					
12	1	Sacasa	4	2	Handles
Test Unit					
12	1	Sacasa	3	1	Bases
Test Unit					
12	1	Sacasa	5	1	Bodies
Test Unit					
12	1	Papagayo-Vallejo	3	1	Rims
Test Unit					
12	1	Papagayo-Vallejo	1	1	Base

Test Unit 12	1	Papagayo-Vallejo	2	0	Bodies
Test Unit 12	1	Utilitarian	1	1	Rim
Test Unit 12	1	Unidentified	125	17	Unidentified Bodies
Test Unit 12	2	Sacasa	4	2	Bases
Test Unit 12	2	Papagayo	6	2	Rims
Test Unit 12	2	Papagayo	1	1	Body
Test Unit 12	2	Papagayo-Vallejo	2	1	Rims
Test Unit 12	2	Vallejo	1	1	Rim
Test Unit 12	2	Utilitarian	1	1	Base
Test Unit 12	2	Unidentified	1	1	Rim
Test Unit 12	2	Unidentified	138	22	Unidentified Bodies
Test Unit 12	3	Sacasa	1	1	Large, Burnt Body to an Olla
Test Unit 12	3	Sacasa	1	1	Smaller, Olla Body
Test Unit 12	3	Unidentified	166	19	Unidentified Bodies
Test Unit 12	4	Vallejo	5	1	Support Pieces
Test Unit 12	4	Vallejo	1	1	Rim
Test Unit 12	4	Sacasa	2	1	Rims
Test Unit 12	4	Sacasa	1	0	Body
Test Unit 12	4	Unidentified	1	1	Rim
Test Unit 12	4	Unidentified	64	8	Unidentified Bodies
Test Unit 12	5	Granada	1	1	Rim
Test Unit 12	5	Unidentified	11	2	Unidentified Bodies
Test Unit 12	6	Sacasa	1	1	Body
Test Unit 12	6	Sacasa	1	1	Large Body to Base Piece
Test Unit 12	6	Unidentified	3	1	Unidentified Bodies
Test Unit 12	7	Bagaces	1	1	Body
Test Unit 13	1	Sacasa	1	1	Rim
Test Unit 13	1	Sacasa	1	0	Base
Test Unit 13	1	Papagayo	2	1	Tripod Support Pieces
Test Unit	1	Unidentified	102	9	Unidentified Bodies

13					
Test Unit 13	2	Sacasa	8	2	Rims
Test Unit 13	2	Sacasa	7	2	Handle Pieces
Test Unit 13	2	Papagayo-Vallejo	1	1	Rim
Test Unit 13	2	Papagayo-Vallejo	1	1	Support Piece
Test Unit 13	2	Papagayo-Vallejo	1	0	Body
Test Unit 13	2	Unidentified	2	1	Burnt Support Pieces
Test Unit 13	2	Unidentified	1	1	Rim
Test Unit 13	2	Unidentified	158	18	Unidentified Bodies
Test Unit 13	3	Sacasa	17	5	Rims
Test Unit 13	3	Sacasa	3	2	Bases
Test Unit 13	3	Sacasa	3	1	Handle Pieces
Test Unit 13	3	Sacasa	4	0	Bodies
Test Unit 13	3	Granada-Madeira	4	2	Rims
Test Unit 13	3	Granada-Madeira	2	0	Bodies
Test Unit 13	3	Papagayo-Vallejo	3	2	Rims
Test Unit 13	3	Papagayo-Vallejo	4	1	Support Pieces
Test Unit 13	3	Papagayo-Vallejo	2	0	Bodies
Test Unit 13	3	Unidentified	97	9	Unidentified Bodies
Test Unit 13	4	Sacasa	10	3	Rims
Test Unit 13	4	Sacasa	3	1	Handle Pieces
Test Unit 13	4	Papagayo-Vallejo	1	1	Rim
Test Unit 13	4	Papagayo-Vallejo	1	0	Support Piece
Test Unit 13	4	Unidentified	112	15	Unidentified Bodies
Test Unit 13	5	Sacasa	3	1	Rims
Test Unit 13	5	Sacasa	2	1	Bases
Test Unit 13	5	Vallejo	3	1	Bodies
Test Unit 13	5	Unidentified	29	3	Unidentified Bodies
Test Unit 13	6	Sacasa	2	1	Handle Pieces
Test Unit 13	6	Sacasa	4	1	Bodies

Test Unit 13	6	Granada-Madeira	2	1	Bodies
Test Unit 13	6	Unidentified	18	2	Unidentified Bodies
Test Unit 13	7	Utilitarian	2	1	Rims
Test Unit 13	7	Utilitarian	1	1	Body
Test Unit 13	7	Unidentified	1	1	Body
Test Unit 13	9	Utilitarian	1	1	Rim
Test Unit 13	Wall Fall	Unidentified	1	1	Support
Test Unit 14	1	Sacasa	3	1	Rims
Test Unit 14	1	Granada-Madeira	1	1	Body
Test Unit 14	1	Papagayo-Vallejo	1	1	Body or Base
Test Unit 14	1	Unidentified	60	8	Unidentified Bodies
Test Unit 14	2	Sacasa	12	3	Rims
Test Unit 14	2	Sacasa	5	2	Handle Pieces
Test Unit 14	2	Sacasa	1	1	Base
Test Unit 14	2	Sacasa	1	1	Rim with Decorative Body
Test Unit 14	2	Papagayo-Vallejo	2	1	Rims
Test Unit 14	2	Granada-Madeira	1	1	Rim
Test Unit 14	2	Granada-Madeira	4	1	Support Pieces
Test Unit 14	2	Granada-Madeira	1	0	Body
Test Unit 14	2	Unidentified	162	20	Unidentified Bodies
Test Unit 14	3	Sacasa	8	2	Rims
Test Unit 14	3	Sacasa	3	1	Bases
Test Unit 14	3	Sacasa	2	1	Handle Pieces
Test Unit 14	3	Sacasa	4	1	Bodies
Test Unit 14	3	Granada-Madeira	3	1	Rims
Test Unit 14	3	Granada-Madeira	2	1	Bodies
Test Unit 14	3	Unidentified	110	14	Unidentified Bodies
Test Unit 14	4	Sacasa	4	2	Rims
Test Unit 14	4	Sacasa	1	1	Base
Test Unit	4	Sacasa	2	0	Bodies

14					
Test Unit 14	4	Papagayo-Vallejo	1	1	Rim
Test Unit 14	4	Papagayo-Vallejo	2	1	Bodies
Test Unit 14	4	Unidentified	38	4	Unidentified Bodies
Test Unit 14	5	Papagayo-Vallejo	2	1	Rims
Test Unit 14	5	Unidentified	19	3	Unidentified Bodies
Test Unit 14	6	Sacasa	1	1	Rim
Test Unit 14	8	Utilitarian	1	1	Rim
Test Units 9-14	Unknown	Unidentified	1	1	Support

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