

## ***Nuevo Corinto: A Chiefly Village in Northeastern Costa Rica***

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*Archaeological research at Nuevo Corinto has provided information on the emergence of complex village patterns in northeastern Costa Rica. This includes an improved chronology of in situ culture change over a 3000-year period. The consolidation of an architectural core began ca. AD 400-600 with the principal period of construction of circular elevated platforms for supporting domestic structures, reaching peak construction ca. AD 700-1100. Nuevo Corinto, together with neighboring sites, appears to have been a major node in trade networks extending from the Caribbean to the Pacific coasts. Our research has provided details on the emergence and growth of architectural units and hydraulic features in this village, a center of manufacturing, trade, and social hierarchy in the Caribbean lowlands.*

*La investigación arqueológica en Nuevo Corinto ha proporcionado información sobre la aparición de patrones complejos de aldeas en el noreste de Costa Rica. Esto incluye una cronología mejorada del cambio de cultura in situ durante un período de 3000 años. La consolidación de un núcleo arquitectónico comenzó ca. 400-700 d.C. con el período principal de construcción de plataformas elevadas circulares para soportar estructuras domésticas, llegando a la cima de la construcción ca. 700-1100 d.C. Nuevo Corinto, junto con los sitios vecinos, parece haber sido un nodo importante en las redes comerciales que se extienden desde el Caribe hasta las costas del Pacífico. Nuestra investigación ha proporcionado detalles sobre el surgimiento y crecimiento de unidades arquitectónicas y características hidráulicas en este pueblo, un centro de fabricación, comercio y jerarquía social en las tierras bajas del Caribe.*

*La recherche archéologique à Nuevo Corinto a fourni des informations sur l'émergence de modèles de villages complexes dans le nord-est du Costa Rica. Cela comprend une chronologie améliorée des changements de culture in situ sur une période de 3000 ans. La consolidation d'un noyau architectural a commencé ca. 400-600 ap. J.-C. avec la période principale de construction de plates-formes circulaires surélevées pour soutenir les structures domestiques, atteindre la construction de pointe ca. 700-1100 ap. J.-C. Nuevo Corinto, ainsi que les sites voisins, semble avoir été un nœud majeur dans les réseaux commerciaux s'étendant des Caraïbes aux côtes du Pacifique. Notre recherche a fourni des détails sur l'émergence et la croissance des unités architecturales et des éléments hydrauliques dans ce village, un centre de fabrication, de commerce et de hiérarchie sociale dans les basses terres des Caraïbes.*

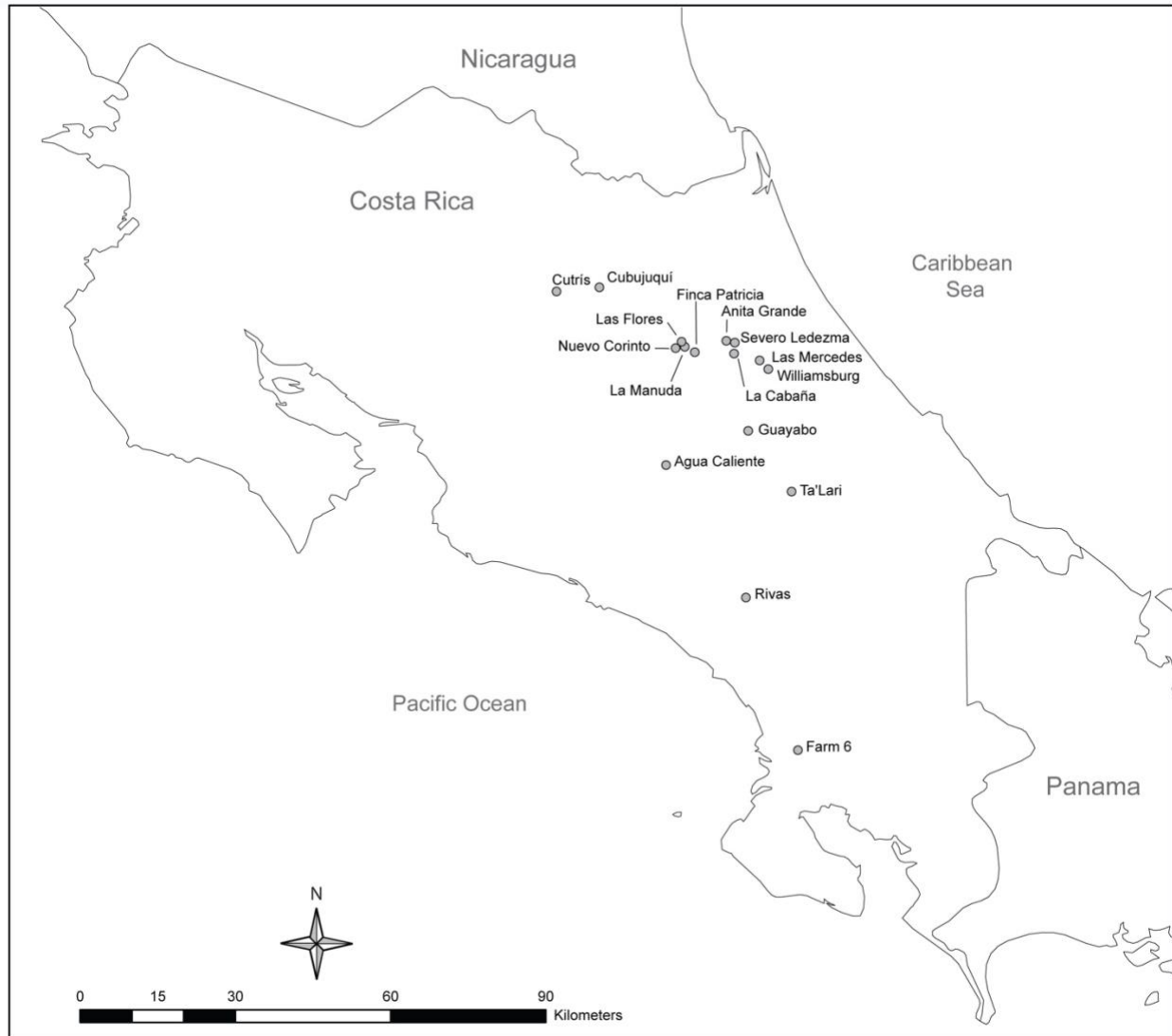
## Introduction

The archaeological site of Nuevo Corinto (L-72 NC) is situated in the *Línea Vieja* (“Old Line”) district in Limón Province, northeastern Costa Rica, a subregion of the Isthmo-Colombian Area (Hoopes and Fonseca 2003), near the confluence of several rivers that join to form the Río Chirripó, a major water route to the Caribbean Sea. Situated at an altitude of 240 m above sea level, near the western edge of where the Caribbean lowland plain meets the foothills of the volcanic highlands, and covering approximately 6 ha, Nuevo Corinto is one of the largest pre-Hispanic settlements in the Caribbean watershed (**Figure 1**). It appears to have been a major node in the movement of people and goods between the Caribbean coast and the central highlands throughout several centuries of occupation. Vázquez and Rosenswig (2016) identify it as a significant sociopolitical center together with Las Mercedes and Guayabo. This article reports on the initial systematic mapping and excavation of major features at Nuevo Corinto. The site has evidence of a 3000-year period of occupation, though principal construction dates to AD 700-1100. It appears to have been a manufacturing center for ceramic and lithic artifacts as well as functioning as a major node in long-distance exchange networks before its apparent decline after AD 1100.

The *Línea Vieja* district is named for a principal spur of a railroad first constructed by entrepreneur Minor C. Keith in the late 19<sup>th</sup> century (Stewart 1964). Its archaeological record has been the object of both uncontrolled looting and controlled scientific excavations since the late 19<sup>th</sup> century (Aguilar B. 2010). The resultant corpus of information has provided material relevant to the study of complex societies

identified as nascent and mature rank or chiefly societies (*sociedades cacicales*, Ibarra 1990), *cacicazgos*, or chiefdoms, a significant theme in the archaeology of Costa Rica and the Isthmo-Colombian area. We can now recognize its indigenous populations as having participated in long-distance interaction networks that emerged over several centuries of occupation.

Nuevo Corinto was first described in the 1950s (Stone 1958: 17), prior to the broader studies of the Caribbean watershed undertaken by Stirling (1969, Stirling and Pugh 1997), Kennedy (1968, 1975, 1976) and Snarskis (1978, 1984, 1992). However, archaeologists did not undertake a systematic evaluation of the site until 2001, when renewed interest resulted in documentation of architectural and mortuary features that placed them in chronological and cultural contexts, resulting in a more detailed reconstruction of changes that accompanied the waxing and waning of indigenous social complexity (Aguilar and Petreyquín 2003). Historical sources specific to the immediate area of the settlement are limited, making archaeological inferences about the pre-Hispanic period especially relevant. Given a dramatic post-Contact decline in the local indigenous population, we still cannot positively identify direct descendants of indigenous peoples who may have inhabited Nuevo Corinto and its vicinity. They may have been Votos, Huetars, or Ramas (the last of which is still identifiable on the basis of culture, language, and genetics; cf. Baldi 2013), speakers of in the Chibchan languages related to Malekus, Bribris, and Cabécars (Constenla 1991; Hoopes and Fonseca 2003). Nonetheless, an increasingly detailed archaeological framework has facilitated interpretation of the site's significance.



**Figure 1. Map of Costa Rica with sites mentioned in the text.**

### Methods

Nuevo Corinto is located in a district known for extensive looting of pre-Hispanic cemeteries. For a period of several decades prior to the early 1960s, the National Museum of Costa Rica issued permits to professional looters. These secured a first right of refusal for unique objects that became property of the museum while allowing the looters to engage in commerce in pre-Hispanic antiquities, among them highly valued objects of jadeite and gold. Looting became a source of revenue for residents of the region, in some cases generating significant income for individuals who became intermediaries for antiquities trafficking within the country and

internationally. When the Costa Rican government made these practices illegal, residents of the district thought this was capricious and unjust. Their resultant distrust towards archaeologists impeded implementation of regional surveys. It also contributed to attitudes that limited our investigations until it was possible through dialogue and education to gain the trust of local landowners.

Although we have documented other sites in the vicinity, our research focused on Nuevo Corinto, a single site on property dedicated primarily to livestock husbandry for which the owners requested the least possible damage to grazing areas. We initially undertook an

opportunistic survey, examining 100% of this property on foot and taking samples of ceramic and lithic artifacts from areas where the surface was visible. Our objectives included determining the continuity, density, and chronology of the occupation and documenting architectural layout and complexity through detailed topographic mapping (**Figures 2-5**). We sought to identify

remains of domestic and mortuary activities, to document materials that represented specialized local production, and to identify imported artifacts indicative of long-distance, interregional interaction. Fernández, at the time working for the Banco Central de Costa Rica, had a special interest in assessing evidence for local metallurgical production.



**Figure 2. Topographic map of Nuevo Corinto.**

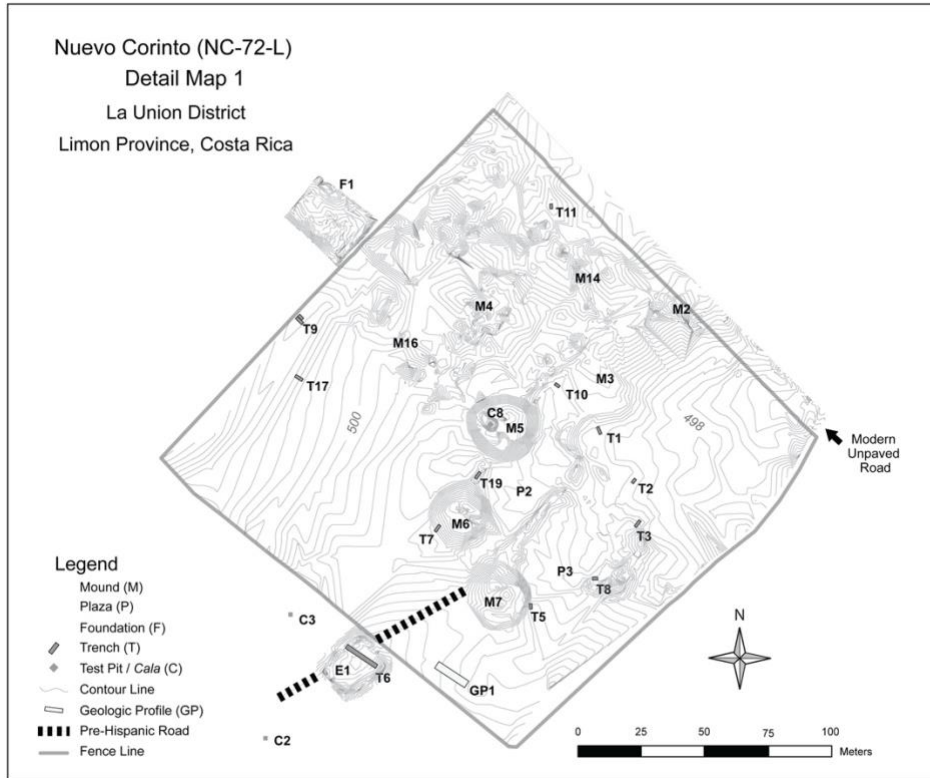


Figure 3. Topographic map of Nuevo Corinto (SW Sector).

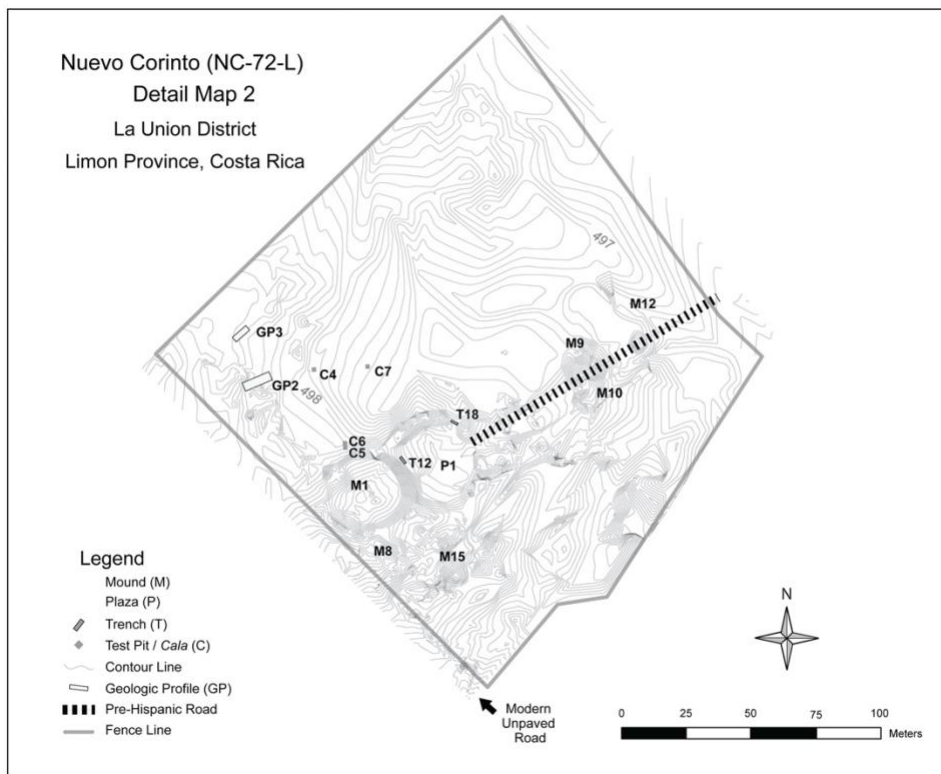
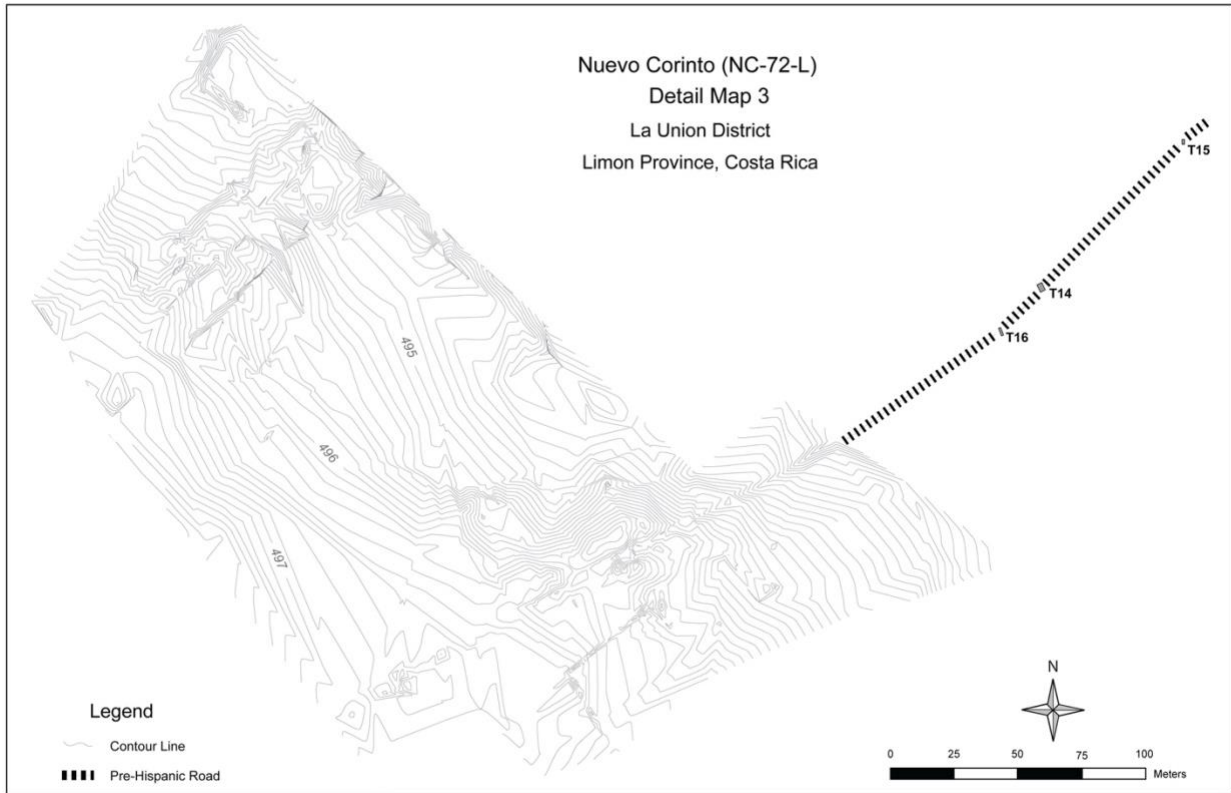


Figure 4. Topographic map of Nuevo Corinto (Central Sector).



**Figure 5. Topographic map of Nuevo Corinto (NE Sector).**

Using an initial GPS survey followed by measurement with a total station, we examined and mapped of a large portion of the site. We also undertook excavations in the form of shovel tests (172), test pits (8), and trenches (22), in order to understand the stratigraphy of the site, particularly in its central area, as well as to locate and characterize as many architectural features as possible. We undertook geophysical survey with proton magnetometry and resistivity to identify buried pavements and a drainage canal. We also excavated three backhoe trenches to evaluate the site’s geomorphology. We have established the general spatial and temporal limits of Nuevo Corinto, produced a detailed topographic map of the principal features (**Figures 2-5**), identified

cultural components and their general distribution, and documented relative densities of material over a large area. Through excavations, we have documented residential architecture as well as mortuary features that correspond to both cemeteries and individual tombs in larger structures. Our interpretation of site chronology is based upon comparative ceramic analysis and direct radiocarbon dating (**Table 1**). Our results affirm long-term continuity in occupation from a small settlement beginning ca. 1500 BC, increased management of hydraulic and agricultural resources starting ca. 300 BC and continuing through AD 700, a peak in construction activity ca. AD 700-1100, and subsequent decline and abandonment.

Lab No.	YEARS BP	2 $\sigma$ CAL BP	2 $\sigma$ CAL CE	Intercept(s)	Context	Phase
Beta-310714	340 $\pm$ 30	490-310	1460-1640	1520 1590 1620	Pit 4	La Cabaña?
Beta-301716	870 $\pm$ 30	900-860 820-810 810-720	1050-1090 1130-1140 1140-1230	1170	Trench 7	La Unión – La Cabaña
Beta-301717	970 $\pm$ 30	940-800	1020-1040 1100-1120	1030	Trench 5, Mound 7	La Unión
Beta-333411	1020 $\pm$ 30	970- 920	980-1030	1020	Pit 8, Mound 5	La Unión
Beta-301715	1210 $\pm$ 30	1240-1200 1190-1060	710-750 760-890	780	Pit 6	La Union? La Selva?
Beta-322675	1250 $\pm$ 30	1270 to 1120 1110 to 1080	680-830 840-870	730 740 770	Trench 8, Plaza 3	La Selva
Beta-333412	1310 $\pm$ 30	1290-1220 1210-1180	660-730 740-770	680	Mound 5	La Selva
Beta-333413	1710 $\pm$ 30	1700-1540	250-410	340	Trench 15	El Bosque

**Table 1. Radiocarbon dates from Nuevo Corinto. All radiocarbon dates were processed on charcoal samples of carbonized wood by Beta Analytic, Inc. of Miami, Florida.**

### Sociocultural Change at Nuevo Corinto

Snarskis (c.f. 1978, 1981, 1984, 1992, 2003) offered an interpretive model of sociocultural change in the Caribbean lowlands of Costa Rica that has served as the basis for hypothesis testing at Nuevo Corinto. In his model, the initial, sedentary La Montaña phase (1500-300 BC) societies had a subsistence system based on horticulture with crop rotation and a settlement system based on dispersed, isolated houses and hamlets. In the subsequent El Bosque phase (300 BC – AD 300), a significant increase in nucleated villages accompanied major demographic expansion. Snarskis suggested this growth resulted from improved agricultural technology that focused on land clearing with stone axes and improved maize cultivation (Horn 2006; Snarskis 1992). During the following La Selva phase (AD 300-700), an elaborate lapidary industry focused on ground and polished stone, including imported jadeite, for production of sumptuary objects whose symbolism was associated with ritualization of the agricultural cycle and especially maize production. Patterns of dispersed villages and cemeteries with corridor tombs continued into the early part of the La Selva phase (AD 300-700; Snarskis 1981: 55) which saw the marked emergence of social

complexity as part of a general pattern in the Isthmo-Colombian area (Hoopes 2005).

Clear indication of rank societies in settlements of the Caribbean lowlands is evident by AD 600 in the form of nucleated sites with circular residential mounds made from stone retaining walls filled with earth, plazas with entrances defined by stone walls, paved walkways at entrances to settlements and connecting features within sites, and hydraulic features such as stone-lined aqueducts. Settlements also have mortuary features in sectors of the architectural core. Lapidary art in the form of both jewelry and sculpture includes representations of political and spiritual leaders, warriors, and prisoners of war (Snarskis 1981). Snarskis (1978, 2003) suggested there was increased importation and perhaps local production of gold metallurgy accompanied by a gradual but significant decline in jadeite and greenstone lapidary production. He interpreted a cessation of jadeite acquisition as evidence for changing relationships with Mesoamerica, perhaps linked to the decline of Teotihuacan and Late Classic warfare in the Maya lowlands, and cited increasing external contacts and relationships with cultures of northern Colombia.

During the La Cabaña phase (AD 1100-1500), the final pre-Hispanic phase of the sequence for the Caribbean Watershed, Snarskis identified a process of territorial demarcation and social hierarchization, with increases in population concentration and construction at sites such as Las Mercedes, Guayabo de Turrialba, and La Cabaña. The rapid reduction and dispersal of indigenous populations at the beginning of the 16<sup>th</sup> century appears to be consistent with the abandonment or destruction of major centers of population, perhaps the result of epidemic disease and resultant social disruption accompanying the arrival of Spanish explorers and colonists. However, it is important to note that the principal occupations of sites such as Las Mercedes occurred several centuries before the Conquest, ca. 1100-1300 BC, and that these may have been in decline before the arrival of the Spanish, who did not encounter these settlements.

What we have learned from Nuevo Corinto supports Snarskis' general interpretative model. However, there are some differences, especially with respect to details of chronology. While the El Bosque phase does appear to be one of both construction and mortuary activity, initial site nucleation may actually first occur in the late La Selva phase (ca. AD 600). Emergent social complexity beginning in the El Bosque phase (300 BC – AD 300) is followed by increasingly larger and more complex architecture, eventually forming a coherent site nucleus of platforms and plazas, and by the presence of high-status artifacts and long-distance trade by the newly defined La Unión phase (AD 700-1100). Major construction associated with an elite social group appears to have occurred at this time. However, phytoliths suggest significant contributions from other crops, such as the tuber *lerén* (*Calathea* spp.), perhaps indicating reliance upon a mixed economy of root and tree crops in addition to seed crops. Nuevo Corinto, together with the neighboring sites of Las Flores and La Manuda, may have served as an important node in long-distance trade networks that extended not only to other sites in the Línea Vieja region but from the Caribbean to the Pacific coasts and the Central Valley of Costa Rica. Paved walkway segments and unpaved paths marked by swales suggest that Nuevo Corinto had close relationships with these other sites, perhaps representing distinct lineages

that collaborated as a local administrative node in larger networks. Nuevo Corinto appears to have been a key node in communication networks that extended from the Caribbean Sea into the central highlands and the Pacific coast. However, the settlement appears to have gone into decline as a chiefly center after about AD 1100.

### **Cultural and Environmental Setting**

Investigators such as Stone (1977) referred to the Línea Vieja region as a cultural unit whose boundaries were delimited by the Río Pacuare to the southeast, the Río San Juan to the north, the Guatuso plains to the northwest, and the piedmont of the Turrialba, Irazú, Barva, and Poás volcanoes to the west. Its characteristics included monumental architecture in the form of mounds, enclosures, and elevated pavements that connected major structures. Architectural features extended to nearby rivers, often accessed by staircases. Benfer (2012), based on our project's data, has proposed a distinct La Unión archaeological district defined by remains on the alluvial terrain between the slopes of the Cordillera Central and the Río Toro Amarillo and the Santa Clara plains. This district is located in the southwest portion of the Guápiles quadrangle (3445 IV) of the Instituto Geográfico de Costa Rica, and includes the environs of Pococí and Guápiles.

### **Historical Background**

Stone (1958: 17) was the first investigator to describe Nuevo Corinto. She situated it within La Unión (so named for the conjunction of a railroad spur with the main line), a zone divided into North and South sectors that extended along the tracks of a northern spur of the San José-Limón railroad. The Línea Vieja district had been subject to looting from the time of the initial construction of the railroad in 1872. The discovery of jadeite ornaments, stone sculpture, and especially the discovery of dozens of gold artifacts in the roots of a toppled tree at Las Mercedes, a farm owned by United Fruit Company founder Minor C. Keith, attracted massive looting. Additional looting associated with the construction of the railroad eventually provided Keith with a private collection of over 15,000 antiquities, portions of which are now in the collections of the National Museum of Costa Rica, the American Museum of



Natural History, the Brooklyn Museum, and the National Museum of the American Indian (Benítez 2013; Mason 1945; Stewart 1964; Vázquez and Rosenswig 2016).

Scientific archaeology in the Caribbean watershed of Costa Rica began with the work of Alfaro (1892) at Guayabo and Hartman (1901) at Las Mercedes. Subsequent exploration of sites there was undertaken by Stirling (1969; Stirling and Pugh 1997) and by Stone and Balsler (1965), but little was done to establish a regional chronology. The work of Aguilar (1972), Kennedy (1968, 1975, 1976), and especially Snarskis (1978, 1984, 1992), through systematic excavation of stratigraphic deposits, artifact seriation, comparative cross-dating, and associations of assemblages with absolute dates, established the sequence of phases that is now standard for this region. Snarskis was the first to collect macrobotanical samples, identifying cultigens such as maize (*Zea mays*) and pejibaye (*Bactris gasipaes*) in archaeological deposits.

Stone's assessment of Nuevo Corinto and other sites near La Unión was based on observations of nonscientific excavations, local collections, and reports from landowners and *huaqueros*. La Unión was a source for looted anthropomorphic statuary and "flying panel" metates with elaborate, three-dimensional carvings depicting mythical scenes (cf. Benson 1981, Pl. 51). Stone noted production of metates with sculpted designs and white paint as well as an abundance of lance heads and burials aligned with heads to the south. She identified Nuevo Corinto, along with Las Mercedes, Williamsburg, and Guácimo, as a source of the highest-quality polished jade artifacts and La Unión Sur as the source of "axe-gods" (now referred to as anthropomorphic celtiform pendants) with distinctive squared noses and hats. Stone may have been alluding to the site near Guácimo known initially as El Tres and subsequently as Severo Ledesma (Snarskis 1978; Stone 1966; Stone and Balsler 1965). She noted the site had both local and imported ceramics, including Papagayo Polychrome, from northwestern Costa Rica, and Plumbate, subsequently demonstrated to have been produced in eastern Soconusco, a district that includes coastal regions of Chiapas, Mexico, and Guatemala (Neff and Bishop 1988). Benson (1968) noted that most of the jadeite

items in her study came from the vicinity of Guácimo. Items in the collections with clear proveniences in the region include elaborate metates, stone sculptures, jade pendants, ornaments of gold-copper alloy (known as *tumbaga* or *guanín*), and pottery. An improved understanding of Nuevo Corinto helps establish a detailed cultural context for these objects as well as answer questions about sociocultural change in pre-Hispanic indigenous populations of the region.

Nuevo Corinto received little additional attention from archaeologists until 2001, when the landowners, who were familiar with its pre-Hispanic architecture and associated artifact collections, expressed interest in developing the site for tourism and contacted archaeologists at the University of Costa Rica. Aguilar and Peytrequín (2003) completed a tape-and-compass map and reported structures, plazas, and cemeteries that had been damaged by looting over approximately 15 ha. They recorded features such as a no longer extant cobble stairway to the Río Corinto and interpreted the site as similar to Williamsburg, Las Mercedes, Anita Grande, and Cubujuquí. They identified Nuevo Corinto as the center of a *cacicazgo* last occupied ca. AD 800–1550. Although the condition of the site has been adversely affected by decades of nonscientific excavation, commercial construction, and damage by livestock, the landowners are to be commended for their interest in preserving what pre-Hispanic features remain.

In 2007, Salgado (University of Costa Rica) and Hoopes (University of Kansas) initiated additional fieldwork in collaboration with UCR geologist Mario Arias. This was augmented in 2010 by the participation of Aguilar and Fernández and students from the UCR and KU, with fieldwork continuing in brief seasons through 2012.

### General Aspects

The principal visible features of Nuevo Corinto are large mounds, plazas, and paved walkways (*calzadas*). Most pre-Hispanic construction used heavy, well-rounded, elongated andesite cobbles carried from the nearby riverbed of the Río Chirripó (Sanabria 2015). At least five mounds (M1, M2, M4, M8, M14, and M16) represent circular foundation platforms built

using multiple courses of cobbles as retaining walls for soil. There are two plazas (P2 and P3) enclosed by low cobble walls. The circular mounds range from 26 - 36 m in diameter, with heights of 1.5 - 2.5 m, and the plazas also vary in dimensions and forms. The mounds served as elevated bases of residences or other roofed structures similar to the conical dwellings known for historical Bribri (Stone 1962, González 1989), while plazas may have had different uses, both private and public. A once-roofed rectangular structure with a low foundation wall (Enclosure 1) appears to have sheltered a work area. Some plazas may have served as seasonal or year-round water reservoirs. Drainage canals, raised walkways, and the location of the architectural center in a swampy zone that appears to have contained a circular reservoir suggest that water management was a significant element of the site's dynamics.

There are no remaining public monuments in the form of sculpture. However, we noted evidence for the production of stone statues. One of these was the incomplete preform of an anthropomorphic statue, found in a looted tomb atop Mound 5 (**Figure 6, left**). Large boulders throughout the site core show facets and scars resulting from the production, especially finishing, of ground stone artifacts such as celts.

Lithic and ceramic artifacts assemblages testify a high level of local production (Sanabria 2015).

The platform structures do not appear to have been aligned with any salient features of the landscape, such as distant volcanoes—Turrialba, Barva, and Cerro Negro—that can be seen on clear days. However, the location was strategic for control of water routes to and from the Caribbean Sea via the Río San Juan and its tributaries and terrestrial routes to and from the Central Valley via valley and ridgetop trails. There appear to have been two principal routes from the vicinity of Nuevo Corinto into the highlands. One followed the eastern sector of the valley up the canyon of the Río Sucio, skirting the Irazú Volcano and continuing towards and beyond the site of Altos de Cardal (Cavallini 2011). The other, corresponding roughly to the historical Carrillo Road, ascended the Río Chirripó and followed its tributary the Río Patria towards Bajo de la Hondura and then into the Central Valley (Benfer 2012: 135). Benfer identified another potential route, a least-cost-path (LCP) that headed directly south, upslope towards the Irazú Volcano (Benfer 2012: Fig. 20), but its use remains to be documented. There were at least two walkways connecting nearby sites. One appears to have run northeast of Las Flores while the other connects Las Flores and La Manuda.



**Figure 6. Left, statuary preform from Mound 5; Right, unfinished stone statuary.**

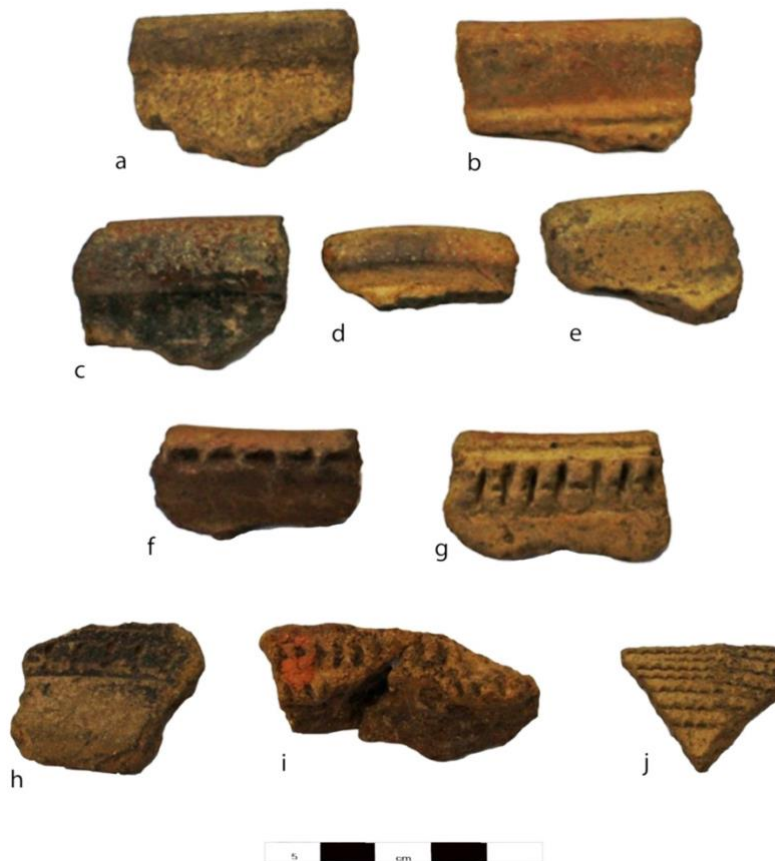
### Chronology of Occupation

We constructed a chronology of the site's occupation using a combination of ceramic cross-dating and associated radiocarbon dates from all but the La Montaña phase. Absolute dates must be considered in light of observations by Rojas (2012) that not only are determinations relatively scarce for Costa Rica, but that resolution of chronological units tends to be coarse. The most extensive series of comparable absolute dates in association with related assemblages come from projects at Las Mercedes (Vázquez et al. 2010; Vázquez and Chapdelaine, 2005) and Guayabo (Alarcón 2012), though chronological control based on cross-dating of trade wares from Greater Nicoya is also relevant.

#### *La Montaña Phase (1500 – 300 BC)*

We identified fewer than 25 sherds of the Early Formative La Montaña phase (**Figure 7**). These included remains of tecomates with

inverted rims and vessels with zoned decoration in maroon paint and wide incisions as well as shell-stamping, fingernail-stamping, and punctuation. There was one *budare* rim, of a vessel associated with the preparation of manioc (cf. Snarskis 1978; R1). These were found across the site in no identifiable pattern and had been redeposited in contexts from all subsequent phases. We interpret them as evidence for an early but dispersed settlement, such as a decentralized hamlet. Early to Middle Formative societies of Costa Rica were groups with low population levels and mixed economies whose ceramics suggest common origins and subsequent divergence (cf. Corrales 2000; Hoopes 1987, 1992; Sánchez 2002). Reyes (2008) has suggested that the mobility of these groups and their interactions across large territories is evident in shared ceramic traits and that periodic festivities that strengthened relationships among them.



**Figure 7. La Montaña ceramics.**

*El Bosque Phase (300 BC – AD 300)*

El Bosque ceramics were more numerous than those of the previous phase. They were also the most spatially dispersed, suggesting population increase. At least one structure, a cemetery, and the first public architecture date to this phase. The residents also initiated specific architectural designs that included hydraulic control in response to flooding. The architectural features include a site entrance in the southeast with a walkway that connects with Feature X, a rectangular stone feature with an opening on the west and a narrow (< 2 m) adjoining stone walkway on the east that appears to have also had a drainage function.

Beneath Mound 5, at the bottom of a test pit excavated from the top of the mound to a depth of 3.10 m, we found evidence for an ancient riverbed on which the site emerged. Between 2.70 and 2.90 m, the ceramic and lithic remains indicate domestic activity in the site's core. Pottery of the El Bosque phase represent 89.5% of the total collected sherds (n = 120). Some vessels had large (> 20 cm) diameters. There were two partial pots and sherds with charred residues. The lithic artifacts included worked flakes, a scraper, and a core, indicating domestic activity at the site's core. The remaining 11.5% (n = 14) ceramic shreds were from the La Selva period, probably representing an intrusion from upper strata in which the percentage of La Selva period pottery is greater.

In Trench 15, at a depth of 55-65 cm, we uncovered a rectangular, pounded sand floor with El Bosque ceramics, lithics, and macrobotanical remains below a stratum that appears to have been an alluvial deposit. The abundance of charcoal and ash, sherds with charcoal residues on their interiors, and large vessels support its interpretation as a domestic feature. A single radiocarbon date of AD 251-398 (Beta-333413) is consistent with the El Bosque phase. Flood activity subsequent to construction of the sand floor may have displaced a road or path that ran from the Río Corinto to an emerging, nucleated site core. Hydrological analysis by Roger Mesén suggested the swale of this path also provided drainage. We used Trench 14, placed transversely across this feature, to identify the path's temporal association. Mortuary features in the southwestern sector, although altered by looting,

are similar to ones dating to the El Bosque phase at Severo Ledezma (Snarskis 1978, 1992). We excavated a single tomb in a looted, single-component cemetery marked by rounded cobbles and containing diagnostic ceramics, the fragment of a flying-panel metate, and a metate leg.

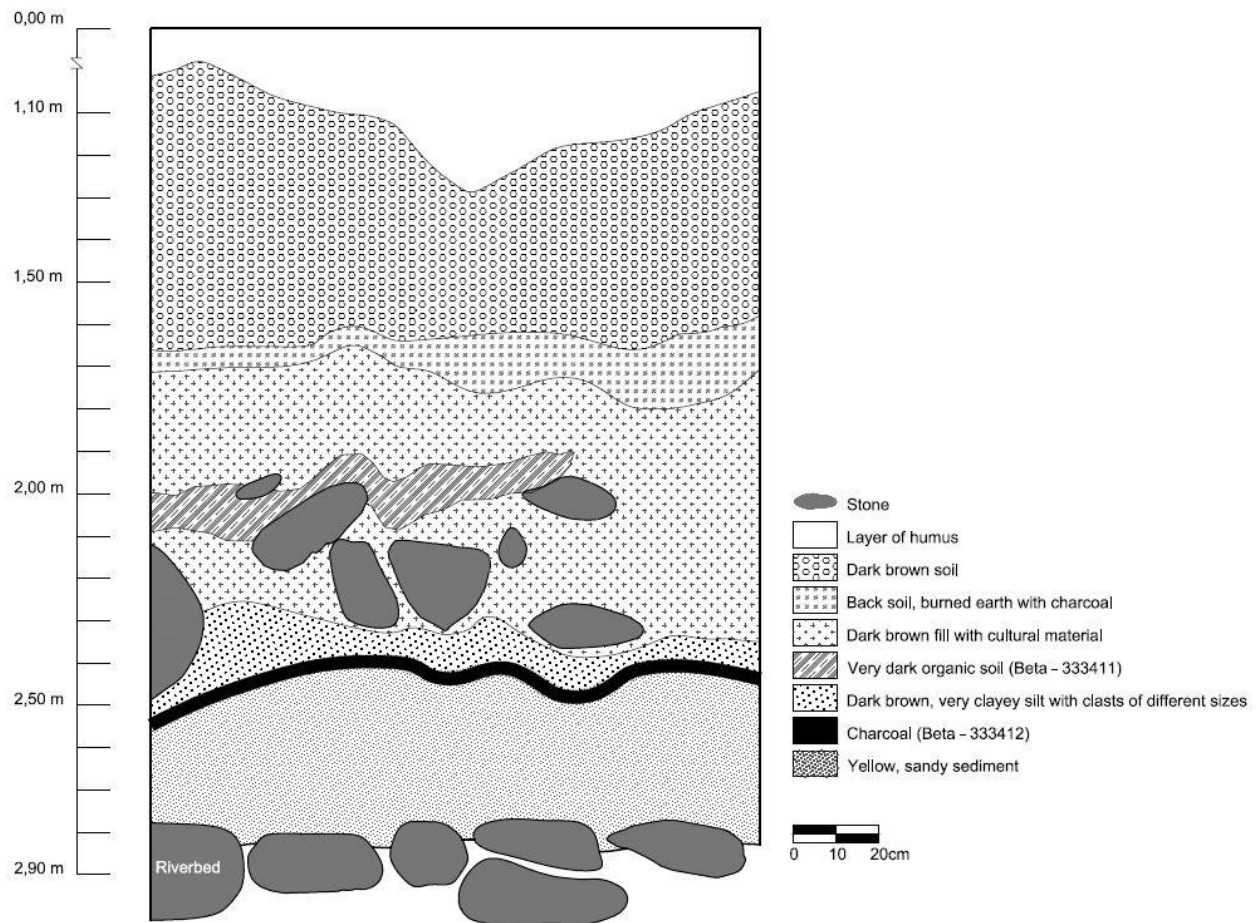
El Bosque ceramics include all of the types identified by Snarskis (1978, 1982) and a variety of vessels that represent the range of activities associated with food preparation, serving, and storage as well as ritual activity such as mortuary offerings. However, at Nuevo Corinto, a large number of vessels of the type Molino Channeled have polished, orange-slipped surfaces, with characteristics similar to those of the contemporaneous Pavas phase in the Central Highlands. These suggest early interaction with the Central Highlands, also supported by the presence of Pavas phase ceramics that we identified in direct association with an ancient road that connects Nuevo Corinto with El Cardal (Benfer 2012; Cavallini 2011; Cavallini and Mesén 2012). The El Bosque phase is characterized by the earliest use of jadeite at sites in the Caribbean lowlands, a material whose only documented sources are in the Río Motagua of southern Guatemala and in the Greater Antilles (Harlow et al. 2016). Jadeite use in the latter is only known from a relatively late time period. Therefore, the evidence suggests that the El Bosque phase was a time during which there was long-distance interaction, most likely via the Caribbean coast, that connected Early Classic Maya settlements with those in northeastern Costa Rica.

*La Selva Phase (AD 300 – 700)*

The La Selva phase had the second largest spatial occupation, one that extended from the southeastern site boundary to the vicinity of Feature X and its associated walkway, whose use may have continued into this phase. La Selva ceramics are abundant in almost all trenches and pits and were present in what became the architectural core. The landowners discovered a cemetery at the extreme southwest of the site when ceramics, jade, metates, and lithic artifacts were recovered during excavations of modern drainage ditches. Its use apparently began at the end of the El Bosque phase.

Approximately 67% of the total ceramic sample at Nuevo Corinto was comprised of ceramics from either the El Bosque or the La Selva phase. The La Selva ceramic artifacts show clear continuities from those of El Bosque in formal and decorative elements. However, material from the two phases can be stratigraphically differentiated in Trench 15 and the road or drainage excavated by Trench 16, with domestic spaces in Test Pits 7 and 8. Ceramics from Test Pit 7, to the northwest of Plaza 1, included undecorated body sherds with charcoal residues, suggesting a domestic or funerary context.

We identified a La Selva phase platform in a test pit excavated in Mound 5 (**Figure 8**). We also detected a feature of burned organic material in this mound. A charcoal sample from a thin stratum in this unit (Table 1) dated to AD 660-700 and 740-770 (Beta- 333412) marks the mound's initial construction. It overlaps the late La Selva phase in time, but we interpret it to represent activity at the beginning of the La Unión phase. Underlying levels contained both La Selva and La Cabaña sherds, the latter presumably mixed from superimposed levels.



**Figure 8.** West Profile of excavation in Mound 5.

*La Unión Phase (AD 700 – 1100)*

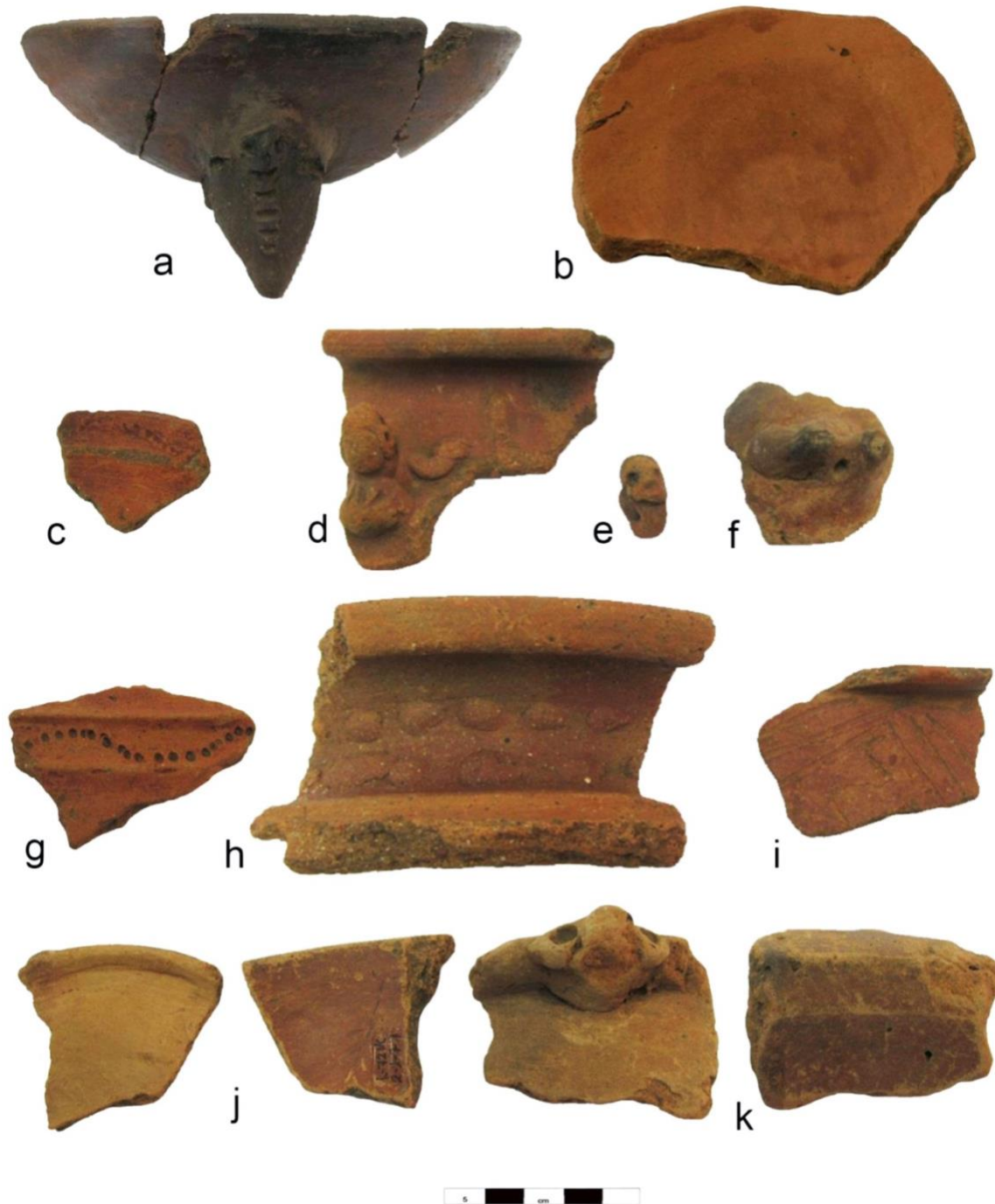
We have defined a new phase, designated La Unión (AD 700-1100), on the basis of data from Nuevo Corinto. Vázquez and Chapdelaine (2005: 66) previously affirmed the necessity of an intermediate phase between the La Selva and La Cabaña phases based on research at Las Mercedes. They noted that an absence of stone cist tombs, diagnostic of Period VI (AD 1000-1550), as well as the associations and chronology of Las Mercedes Tomb 1. This feature, dated to AD 1000-1170 (Vázquez and Chapdelaine 2005: 90), contained Mercedes White Line ceramics and a *sartén* of the type Cabaña Fine as well as the type Cabaña Modeled. This tomb also contained objects of Highland Polychrome and the Chircot variety of Mora Polychrome, pottery manufactured in Greater Nicoya (Vázquez and Chapdelaine 2005: 66). These types are among those associated with what we identify as distinguishing the ceramic complex associated with the La Unión phase at Nuevo Corinto, especially in Trench 8, a mortuary context (see below).

It was during this phase that the occupants of Nuevo Corinto constructed the principal architectural elements of the site's core that are still visible on the surface today. We think a process of restructuration of the settlement as a nucleated village occurred in conjunction with the emergence of what is known as a rank or chiefly society (*sociedad cacical*). During the La Unión phase, Nuevo Corinto, in close association with Las Flores and La Manuda, became a political-administrative unit that controlled the passage of goods and people to both the Caribbean and the Central Valley via the Río Corinto, Río Chirripó, and Río Costa Rica. However, in the absence of more detailed mortuary information or evidence for Nuevo Corinto's political dominance over other sites, we

cannot yet affirm its status as the center of a chiefdom.

We base our identification of the La Unión phase (AD 700-1100) in part on an affirmation of patterns in ceramic styles associated with a total of five radiocarbon dates (Beta-333412, 322675, 301715, 333411, and 301717), whose contexts and associations will be discussed below. Two dates, with ranges of AD 656-727 and 737-769 (Beta-333412) and AD 1012-1154 (Beta-301717), bracket the phase. The La Unión phase is defined in part by several ceramic types that Snarskis (1978: 214-220) tentatively associated with a provisional unit that he called the Madera complex. However, these diagnostic types are quantitatively and qualitatively more significant at Nuevo Corinto than at the sites where the Madera complex was first documented (Snarskis 1978: 191, 240). It is important to note that during the La Unión phase people used ceramics that have been associated with the transition between the La Selva and La Cabaña phases (**Figure 9**).

La Unión phase pottery represents the most significant single ceramic component at Nuevo Corinto. The phase is represented by ceramics from well-defined stratigraphic units from various key sectors and is especially evident in the site's architectural core. However, the La Unión phase is also characterized by ceramic types that represent a continuity of production from the preceding La Selva phase and by types whose production continued into the succeeding La Cabaña phase. Most importantly, it appears to be characterized by shifts in cultural practice that included mortuary rituals and the construction of monumental platforms as the foundations for high-status residences as well as human statuary and elaborate metates whose decorations were highlighted with white pigment.



**Figure 9. Madera complex ceramics.**

Snarskis (1978: 191) originally noted that La Selva phase ceramics and his hypothetical Madera complex shared similar modes with spatial and cultural variations. However, he was hesitant to reify the Madera complex without additional data (1986: 311). Magdalena León

(personal communication, 2011) asserts he was working on a reformulation of the Madera complex prior to his death in 2010, driven in part by the as-yet unpublished proposal of a corresponding Heredia phase in the Central Valley by León and Valerio, among others. For

Snarskis, Madera Complex ceramics included the types Tuís Negative and Mercedes White Line (Snarskis 1983: 214) as well as Mila Orange-Red Engraved, a type also found at Guayabo. Snarskis (1978: 191) estimated the temporal range of the Madera Complex to be between the 7<sup>th</sup> or 8<sup>th</sup> century AD, possibly extending as late as AD 1100 (uncalibrated). Arce and García (2013) have studied the Mercedes White Line type from Nuevo Corinto in detail. Mercedes White Line is characterized by incisions infilled with white pigment that is rare at other sites in the region. Arce and García concluded that this type is more common at Nuevo Corinto than at any other site in the Caribbean watershed. They also found that its compositional aspects suggest local production. The source of the white pigment is unknown, but its use on both ceramics and ground stone objects may have been a characteristic of Nuevo Corinto. For example, Stone (1958)

reported the use of white pigment to fill incised lines on metates from this site. García and Arce (2012: 121) also determined that the Mercedes White Line was associated with the types Tuis Fino and Negative, Tayutic Inciso, Selva Café and Bere Rojo in domestic, public, and funeral contexts, although the latter was only found in two out of the ten contexts they studied. Subsequent research has shown that, in addition to these types, the Cabaña-Pavones Group (Snarskis 1978: 266-268) is also present. Also present is an unnamed monochrome ceramic type with stick-polished surfaces on reddish-orange slips (**Figure 10**). Snarskis (1978: 2014) described this without specifically identifying it within a type or group even though surface treatment is similar to that of Mercedes Línea Blanca but without incised or painted decoration. As mentioned later, this pottery is abundant in Nuevo Corinto.

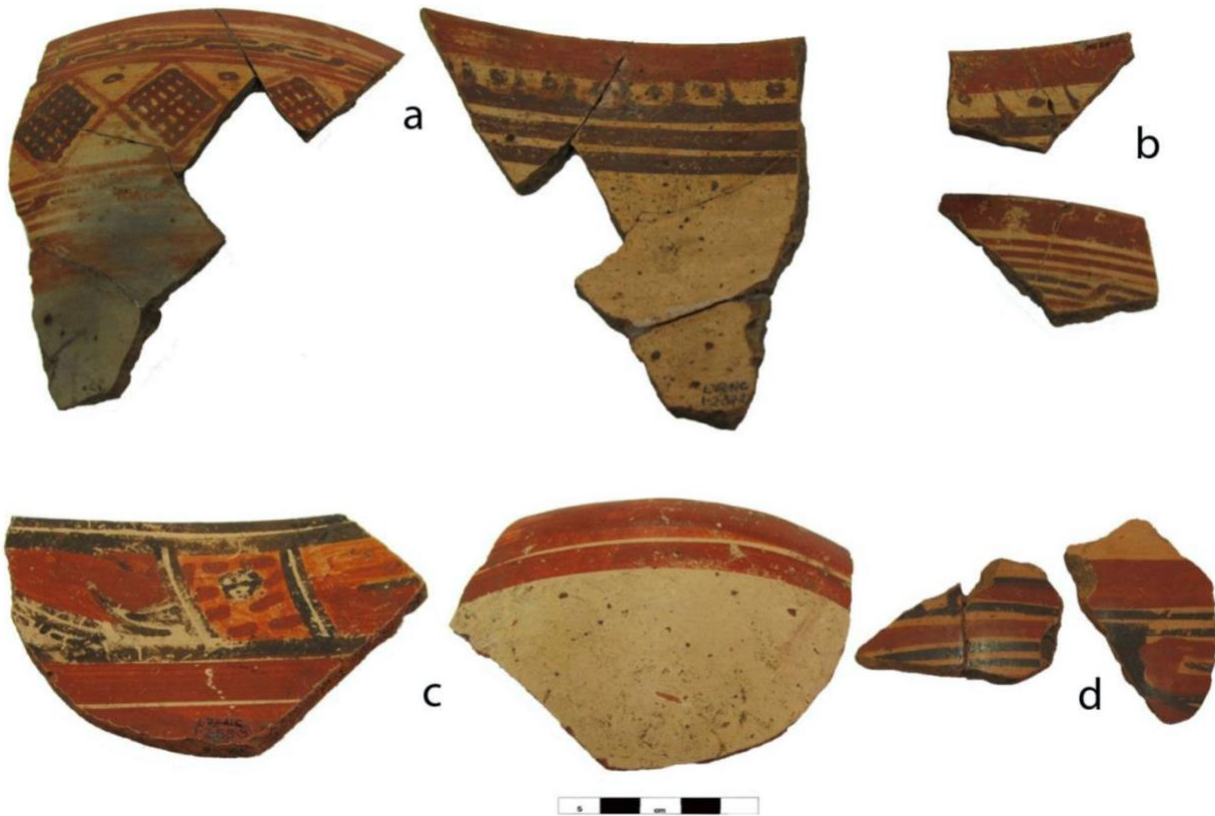


**Figure 10.** Stick-burnished vessel from Trench 8.



We also identified imported sherds of Mora Polychrome and Papagayo Polychrome, Greater Nicoya types (**Figure 11**). These date to the Sapoá period (AD 800-1300; McCafferty and Steinbrenner 2005, McCafferty and Dennett 2013, Solís and Herrera 2011). Greater Nicoya

polychrome types make their first appear in La Unión phase contexts and provide significant evidence for long-distance exchange of exotic pottery vessels, a process that extended into the Caribbean lowlands as far south as sites Sitio El Drago in Bocas del Toro, Panama (Wake 2014).

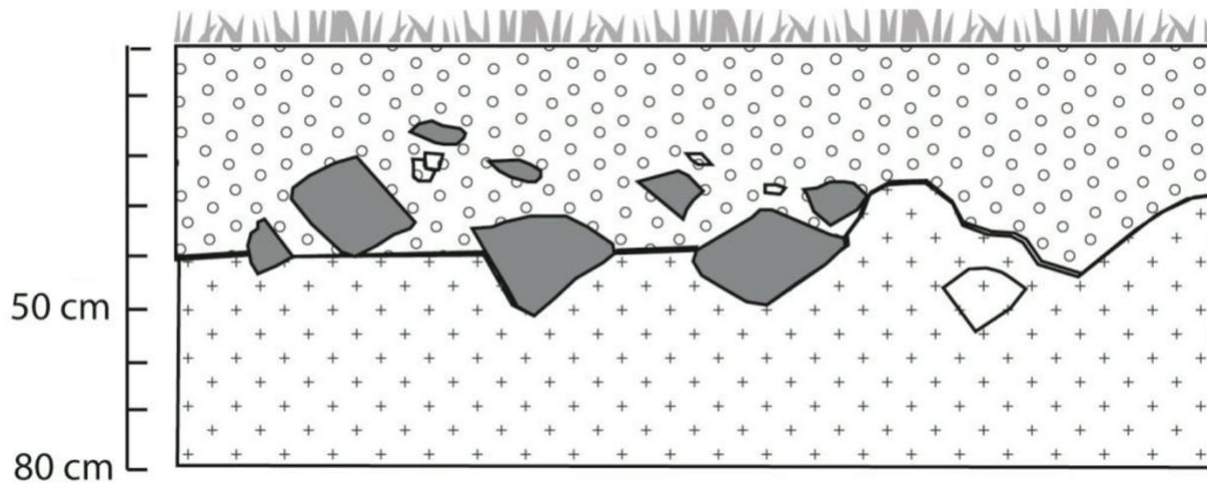


**Figure 11. Greater Nicoya ceramics from Nuevo Corinto.**

### Mortuary Features

Three mortuary features dated to the La Unión phase. Fernández excavated a feature in in the northwest sector of P3 (Trench 8) burial with a large number of associated sherds (>2300). This feature contained a specific, time-constrained ceramic assemblage and represents a significant deposit for defining the La Unión phase (**Figure 12**). It consisted of two major deposits of sherds. In the first, on top of the mortuary feature, we recovered 1122 sherds, most oriented exterior-side up within a matrix of dark brown soil. The identified diagnostic types from on top of the mortuary feature were Tayutic Incised (n=28), Mercedes White Line (n=7), Cabaña-Pavones

(n=4), Tuis Negative (n=1), as well as Mora Polychrome: Mora Variety (n=3), Birmania Polychrome (n=1), and Altiplano Polychrome (n=1) from sources in Guanacaste and the Papagayo Polychrome (n=2) and Vallejo Polychrome (n=1) from southwestern Pacific Nicaragua. These represent 4.5% of the sherds that covered the mortuary feature. Another 17% (n=191) were not identified by type. The remaining 78.5% (n=883) were undecorated body fragments, of which about 70 % (n=785) were characterized by a having the polished, orange slips indicated by Snarskis (1978: 2014) as common in the Madera complex.



**Figure 12. West profile of Trench 8.**

A second deposit of 1118 sherds appears to have been placed on top of where the corpse, whose remains did not survive, had lain. Cobbles underlying the second deposit of sherds are interpreted as a prepared tomb floor. The mortuary offerings included “frying pan” (*sartén*) censers—which may have had a specific ritual role in the context of funerals—as well as jars, plates, and tecomates. This pottery associated with this feature included types diagnostic of the La Unión phase, especially La Selva Brown ( $n = 25$ ), Tayutic Incised ( $n = 13$ ), Mercedes White-Line ( $n = 6$ ), and Cabaña-Pavones ( $n = 8$ ), as well as Birmania Polychrome ( $n = 1$ ) and Altiplano Polychrome ( $n = 2$ ) from Guanacaste and Papagayo Polychrome: Papagayo Variety ( $n = 1$ ) and Papagayo Polychrome; Mandador Variety ( $n = 1$ ) from Nicaragua. Together, these types make up 5% ( $n = 57$ ) of the assemblage, while the remaining diagnostic sherds correspond to 4.5% ( $n = 51$ ) of the total. 67.5% ( $n = 756$ ) sherds of pots, plates and bowls had polished, orange-slipped surfaces of undefined types. The remaining 23% ( $n = 254$ ) of the sherds in the assemblage remain unidentified.

A single radiocarbon sample from a dark stain sobre el piso de la tumba dated to AD 666-885 (Beta-322675) con una media de AD 775, dates the feature within the La Unión phase. The association of diagnostic ceramic types within the mortuary feature coincides with those identified by García and Arce (2012: 121) as being similar

to the Madera Complex. According to the latest dates, the production Greater Nicoya polychrome types diagnostic of the Sapoá period, including Vallejo Polychrome, previously considered to be later, begins around AD 800 (McCafferty and Dennett 2013: 199, Dennett 2016: 285).

We excavated test pit in the center of Mound 5 to its base at a depth of approximately 3 m. The stratigraphy in the upper part had been altered down to 1.1 m by a deep, illicit excavation made vertically from the top of the mound. A charcoal sample from a thin stratum of charcoal-rich sediment in this unit (Table 1) dated to AD 660-700 and 740-770 (Beta-333412) marks the mound’s initial construction overlaps the late La Selva phase. It may represent activity in the construction layer during which the mound was raised ca. AD 700, at the end of La Selva phase and beginning of the La Unión phase. However, there had been both earlier and later activity. A stratum underlying the one indicating initial mound construction contained remains of vessels with large ( $> 20$  cm) diameters as well as worked flakes, a scraper, and a core, representing domestic activity in the site’s core during the La Selva phase. We encountered a funerary feature marked by a set of boulders and a layer of organic soil in the upper part of Mound 5 dated by a radiocarbon sample with a calibrated range of AD 968-1046 within 94% probability, one placed in the mound several centuries after its initial construction.

### Architectural Features

There are several prominent architectural features dating to this phase, including circular house platforms, a residential structure elevated no more than 10 cm with defined a well-defined rectangular foundation, rectangular enclosures, plazas, walls, and paved walkways, and unpaved path segments (linear continuations of walkways but without paving stones). The principal method of construction of all built features was a careful placement of uniform, elongated river cobbles to create stable walls that, in the case of platforms, retained an earthen fill (**Figure 13**). Associated pottery and radiocarbon dates indicate that some were initially constructed during the El Bosque phase, expanded during the La Selva phase (during which mortuary features were emplaced), and had a final occupation during the La Unión phase.



**Figure 13. Cobble construction in Mound 7.**

### Mound 1

Mound 1 (M1) represents a circular foundation approximately 26 m in diameter (mound diameters are measured for the top surface of the mound) and 3 m in height. It was associated with Plaza 1 (P1), a water-saturated depression immediately to the east. The foundations of two walls on the north and south sides of the plaza extend from the eastern wall of the foundation. We excavated several units Mound 1 and Plaza 1, among them Test Pit 5 on the north perimeter of the mound, Test Pit 6 on the north exterior base, Trench 12 at the base of the east wall (where it meets the plaza), and Trench 18 at an opening in the northeastern wall of the plaza. This last corroborated the existence of a drainage also apparent in hydrological analysis.

A line of cobbles in Trench 12 represented part of the foundation of the mound. Another well-preserved line of cobbles in Test Pit 5, on the north wall of M1, represented its retention wall. Ceramics from the El Bosque through La Cabaña phases were found below the level of the plaza and appear to have been redeposited. These included La Unión phase types as well as a

fragment of Papagayo Polychrome. A looted tomb on the surface of M1 yielded La Selva and La Unión phase ceramics as well as one sherd of Papagayo Polychrome: Culebra Variety, a Greater Nicoya ceramic variety produced during the Sapoá period (AD 800-1300), its initial portion contemporaneous with the La Unión phase. A single radiocarbon date from carbonized residue on a sherd from Test Pit 6 dated to 764-891, 710-745, and 695-700 (Beta-301715). The only diagnostic ceramics from this excavation were two sherds of Tayutic Incised.

### Mound 5

Mound 5 (M5) represents a circular foundation approximately 20 m in diameter and 2.9 m in height. As noted above, we used Test Pit 8 to explore a large, looted mortuary feature in Mound 5. It revealed details of a cobble-lined tomb on its surface that contained a large preform of an unfinished stone statue, as well as details of the mound's construction. The fill of the mound contained a significant number of El Bosque and La Selva phase sherds, probably from levels disturbed during its construction. However, La Unión phase ceramics predominated and

diagnostic La Cabaña sherds, represented only 2.4% of the total by number, are considered to be either intrusive or of types that continued into the La Cabaña phase. We also found lithic artifacts, including flake cores, hammerstones, a mano, and a scraper within the fill. One radiocarbon sample corresponding to an event associated with an early stage of mound construction provided a date of AD 656-727 and 737-769 (Beta-333412). Another from the wall of Test Pit 8, dating to AD 968-1046, 1094-1120, and 1141-1147 (Beta-333411), was associated with the looted tomb. These two dates bracket the principal time of use of this feature and suggest a lapse of 250-350 years between initial construction of the mound and the mortuary feature excavated into its upper surface.

#### *Mound 6*

Mound 6 (M6) represents a circular foundation approximately 20 m in diameter. We tested M6 with a small excavation (Trench 7) on the lower portion of its western sector in order to explore its retaining wall, a possible stairway, and associated features. This recovered many fragments of ceramic jars, bowls, censers, plates, and tecomates. Lithic implements included two chipped-stone knives, a mano, a nutting stone, a core, and axe, two polishing stones, and a small stone statue fragment, suggesting domestic activity.

Guaria Cárdenes analyzed a series of stratigraphic columns in Trench 7, finding a line of charcoal at its base similar to that in Mound 5 that may also represent an event associated with initial construction of the mound. Radiocarbon analysis provided a date of AD 1045-1094, 1120-1141, and 1146-1250 (Beta-301716), one that raises the possibility of additional construction at the beginning of the La Cabaña phase, although La Cabaña phase ceramics were rare.

#### *Mound 7*

Mound 7 (M7) represents a circular foundation approximately 20 m in diameter. It has one of the best-preserved cobble walls at the site, in which several courses of uniform, rounded cobbles are evident. Trench 5, excavated along on the eastern wall of M7, revealed stratigraphic associations of its base. A line of cobbles about 20 cm below the current plaza surface indicated

the presence of an earlier foundation. The excavated area contained ceramics of the La Unión phase such as Tayutic Incised, Mercedes White Line, and Tuis Fine Modeled as well as ones from Greater Nicoya, including Birmania, Highland, Mora, and Papagayo Polychrome. Both earlier and later ceramics were rare. A charcoal sample recovered beneath the earlier foundation, 69 cm below the mound surface, dated to AD 1012-1154 (Beta-301717). This suggests construction occurred ca. AD 1100, at the end of the La Unión phase.

Ceramic and lithic artifacts from activity on the mound or from redeposited fill suggest domestic activity. The former includes a predominance of large jars, bowls, and plates. Lithic artifacts and debitage were abundant and included a metate fragment, two manos, a nutting stone, a polished axe, three polishing stones, a chisel, four cores, two hammerstones, two flake cores, one knife, one drill, and a large quantity of residual flakes.

#### *Enclosure 1*

Enclosure 1 (E1), a rectangular feature of stone walls measuring 17 x 21 m, was the farthest western feature in this sector besides the paved walkway and footpath to the Cordillera Central. This feature was originally referred to as Plaza 4, but was renamed due to its size and the possibility that it had been a roofed structure rather than an open plaza. An entrance on its northeastern side connects it with the site's architectural core.

We excavated a 1 x 19 m unit (Trench 6) to explore the enclosure. While it seems likely that it at one time this feature had a stone pavement of cobbles, it has been altered by heavy bioturbation. The floor is inclined towards a drainage indicated by a depression that crosses the feature in an east-west direction and passes through an opening in one of the walls about 5 m from the eastern entrance. Material from the trench appears to be post-abandonment sedimentation. Ceramics included Mercedes White Line, Tuis Negative, Tayutic Incised, Selva Café, and Greater Nicoya types such as Highland, Birmania, Mora, and Papagayo Polychrome. Most of the associated material pertains to the La Unión phase, with a smaller percentage pertaining to La Cabaña. A large quantity of lithic debris and nearby boulders with

abraded facets and linear scars suggest one of its uses was as an area for manufacturing polished stone celts.

#### *Foundation 1*

Foundation 1 (F1) was a non-mound feature near the architectural core that appeared to represent a different form of La Unión phase domestic structure. Materials associated with this foundation included the types Mercedes White Line, Tuis Negative, Selva Café, and the Greater Nicoya type Papagayo Polychrome: Culebra Variety, consistent with a construction and use during the La Unión phase.

#### **Observations on the La Unión Phase**

During the La Unión phase, residents of the site are thought to have expressed unequal power through architecture in the context of a nucleated village. However, we base this interpretation only on the existence of relatively large domestic structures. We assume that smaller residences were present, but these have not been documented at this time. At this time, there was a dramatic increase in architectural activity as well as ceramic and lithic production. Production of statuary representing warriors and seated figures (*sukias*)—as indicated by the unfinished preforms (Figure 2)—suggests the presence of elites seeking aggrandizement.

The results of an intervisibility analysis by Róger Mesen Delgado (cf. Conolly and Lake 2006; O’Sullivan and Unwin 2003) undertaken using a Digital Elevation Model (DEM) in ArcGIS 10.0 based on elevation curves reveal that the architectural design of Nuevo Corinto accomplished successful visual isolation, probably for ideological and defensive reasons. People approaching the site via Camino A, the walkway to the northeast of the site, were unable to see any of the structures in the village core until they passed a point near Mounds 12 and 13. These were apparently constructed as a formal entrance to the site during the La Unión phase, with some use during the subsequent La Cabaña phase. That is, a substantial amount of architecture was located in such a way that the size of the village could not be visually determined until one had actually entered the architectural complex. This may correspond to the defensive function ascribed to Suerre, a 16<sup>th</sup>

century settlement (Ibarra 1990, 2003: 38). Similar physical and social control of sightlines and movement has been documented at Guayabo (Troyc 1998, 2002: 65), Cutrís (Vázquez and Chapdelaine 2005, 2008), and others in the Caribbean lowlands (Vázquez 2006). A concealing function of eroded footpaths entering sites has also been noted in the Arenal region (Sheets 2009).

The presence of ceramic objects imported from Greater Nicoya in almost all of the excavated structures is a clear indication of interregional interaction. The exact routes by which these arrived at the site remain unclear. Greater Nicoya types are also found with a wide distribution in the Central Valley (cf. Snarskis and Ibarra, 1985 y Ibarra and Salgado, 2010), the northern plains (Vázquez, Guerrero, and Sánchez 2005), the Central Pacific (Corrales y Quintanilla 1992; Ibarra and Salgado 2010), and on the Caribbean coast, including the Bocas del Toro region of Panama (Wake 2014). The easiest route from villages in Greater Nicoya to Nuevo Corinto may have been from southwestern Costa Rica via Lake Nicaragua, the San Juan, and Chirripó Rivers. Ceramics from Greater Nicoya were transported to the Central Valley, so another route would have been via the Central Valley to the Caribbean, passing the Irazú Volcano (Cavallini 2011; Cavallini and Mesén 2012) from Aguacaliente (Peytrequín 2009), a major site visible from El Cardal. This is supported by the presence of Early Postclassic Plumbate ceramics from southern Mesoamerica at both Aguacaliente (Aguilar y Peytrequín, 2007) and Nuevo Corinto (Stone 1958). As noted above, Benfer (2012: 135) suggests that other routes from the Central Valley to Nuevo Corinto may have been via: 1) a route that passed through the General River Valley and the Desengaño Depression, historically used as mule train route, 2) another that passed through the Hondura River Valley and the La Palma Depression, known historically as the Camino Carrillo, and 3) a direct route downslope from the Irazú Volcano. Rare examples of Las Vegas Polychrome, probably manufactured in the Comayagua Valley of Honduras, may have arrived via fluvial networks that included coastal Guanacaste.

### La Cabaña Phase (AD 1100 - 1550)

The La Cabaña phase was weakly characterized at Nuevo Corinto, which appears to have lost significance as a chiefly center after AD 1100. Not a single structure, feature, or context can be clearly ascribed to the La Cabaña phase. However, diagnostic La Cabaña ceramics included Cartago Red Lined, Irazú Yellow Lined, Cabaña Fine Modelled, Pavones Plain, Cot Black Line, Parismina Fine and Coarse, and La Cabaña Fine and La Cabaña Coarse. We recovered these in small quantities in several different contexts.

There is no clear evidence for conflict or ecological change that would have precipitated population decline or abandonment of the site at the end of the La Unión phase. Changes in the social landscape at Nuevo Corinto may have occurred when Las Mercedes, 30 km to the east, rose in prominence as a regional center at this time. The overall size and extent of construction at Las Mercedes and Guayabo is greater than that of Nuevo Corinto, which may also reflect shifts in the scale of territorial control.

Nuevo Corinto differs from sites with significant La Cabaña phase components such as La Cabaña and Guayabo that are characterized by large, paired mounds. With exceptions of Mounds 1 and 5, it also lacks stone cist tombs with flat stone (*laja*) lids, a clear mortuary pattern at other La Cabaña phase sites (Snarskis 1978). Gold and gold-alloy metallurgy is one of the hallmarks of the La Cabaña phase. Although Fernández placed special emphasis on searching for evidence of metallurgy in the form of recognizable crucibles, molds, slag, and scrap, especially in Enclosure 1 and Plaza 3, we found none.

### General Observations on Lithics at Nuevo Corinto

Stone (1958) observed the presence of decorated metates, statuary, polished axes, and cross-shaped chipped lance points in her initial references to Nuevo Corinto. Our fieldwork confirmed the presence of all of these, with examples found in many different contexts (Sanabria 2015, 2018). There were fragments of “flying panel” metates, including portions of borders decorated with small, stylized trophy heads. We recovered one example of a sculpted jaguar head of the kind found on decorated

jaguar-effigy metates. Some metates and metate plate fragments had clear indications of use wear. Manos for grinding on metate surfaces were also present, mostly in the form of circular, convex handstones. We found fragments of metates in a number of contexts ranging from surface finds to architecture. For example, broken and partially reworked metates were occasionally included in stone walls

In general, chipped stone lithics were made of poor-quality raw materials. Expedient flakes for cutting and scraping, worn polishers, and hammerstones were common. With the possible exception of Enclosure 1, it has not yet been possible to identify specific lithic workshops, although the quantity of flaked stone debitage and the large boulders with both linear and flat wear facets suggests their presence. Ground stone artifacts were manufactured primarily from andesite that was obtained from the nearby riverbed of the Río Chirripó (Sanabria 2018).

We have identified a number of objects from sites in the La Unión district in the collections of the National Museum of Costa Rica. In a systematic search, Mónica Aguilar identified a number of examples of both finished and unfinished sculpture, including a standing “warrior” and seated *sukia* figures. These suggest significant production in the district of stone statuary and other ground stone objects that may have been traded to other parts of Costa Rica.

### Consideration of Nuevo Corinto and Other Projects

Our project has sought to test and refine models for the emergence and decline of rank or chiefly societies. Many indigenous groups were reportedly organized as *cacicazgos* (often translated as “chiefdoms”) in the 16<sup>th</sup> century. This form of organization continued in one form or another until the early 20<sup>th</sup> century, when Antonio Saldaña, the last *cacique* or “king” of the Bribris, was assassinated in 1910. With this, principal traditional hierarchical indigenous political structure declined rapidly and virtually disappeared despite the persistence of matrilineal clans.

Evidence from other projects supports a model for significant population growth and village formation during the El Bosque phase. This was a conclusion of the Angostura Project

(Vázquez 2002) even though the project excavated only mortuary areas. Stone features at the Canadá site suggest remains of an El Bosque phase settlement. At Las Mercedes, non-mortuary architecture in the El Bosque phase appears in the form of a 1 m high stone platform (R29) measuring 37 x 10 m (Vázquez et al. 2010: 49-64) that was located 400 m to the southeast of the core architectural group, parallel to the Pocora walkway. Its associated artifacts include a fragment of a pyrite mirror of Mesoamerican origin, an artifact type also reported from El Tres (Severo Ledesma) near Guácimo (Stone and Balser 1965). There are El Bosque phase sites along an ancient road that descends from the El Cardal site on the Irazú Volcano to Nuevo Corinto (Cavallini 2011). Long-distance contacts within Costa Rica may have been a factor in the emergence of hierarchical societies.

Snarskis suggested continuity from El Bosque phase settlements into the early La Selva phase. Data from the Angostura Project indicate that the transition from El Bosque to La Selva was associated with demographic expansion (Vázquez 2002). Some investigators have dated the construction of the core of Guayabo to the La Selva phase (Fonseca 1981, Fonseca and Hurtado 1984), though Alarcón (2012) maintains that the stratigraphy and the dates indicate principal construction during the La Cabaña phase. Cutrís, in the northern plains 47 km northwest of Nuevo Corinto, provides a clear case of architectural monumentality in the La Selva phase. At Aguacaliente, near Cartago, a site that eventually had the greatest expanse of monumental architecture in the Reventazón Valley, construction began in the La Selva phase (Peytrequín and Aguilar 2007).

The significance of the La Unión phase at Nuevo Corinto resonates with Snarskis' identification of a significant increase in hierarchy in the late La Selva phase although the data are ambivalent with respect to the emergence of social hierarchy in the La Selva phase. The dense deposits of La Selva phase material near Plaza 1 and in strata underlying Mound 5 suggest greater nucleation in the site's architectural core at this time. El Abuelo, situated a few kilometers to the southeast of Nuevo Corinto, offers testimony to how the basic elements of the architectural design of the chiefly nucleated

villages of the Caribbean had already begun to emerge by the end of the El Bosque phase or the beginning of the La Selva phase. This included integration of hydraulic control in architectural design in the form of artificial drainages whose use may support Snarskis' hypothesis regarding ritualization of the agricultural cycle at this time.

The La Cabaña phase is characterized by site growth, apparently for purposes of territorial defense, a decrease in the number of settlements, but with increases in population size, density, and nucleation. Increases in architectural construction in principal centers may have accompanied unstable alliances among political-administrative centers (Vázquez and Rosenswig 2016). For example, the Angostura Project noted a decrease in the number and size of sites at the same time that there was marked growth in the size of Guayabo and the sites connected to it by walkways (Vázquez 2002). Ta'Lari (Hurtado, Acuña and Castillo 1985, Hurtado and Castillo 1985, Hurtado and Gómez 1987) would be another example of a nucleated site. It is similar to Guayabo, although at a smaller scale, and apparently played a central role in the political integration of the region during the La Cabaña phase. However, based on absolute chronology and our interpretations of the ceramic sequence, Nuevo Corinto appears to have reached its peak use prior to the principal period of occupation at Las Mercedes. We do not yet know what the nature of interaction between these two sites may have been.

## Conclusions

Detailed investigation at Nuevo Corinto has provided general corroboration of models based on limited data for the emergence of social complexity in the Caribbean lowlands of Costa Rica. Among the patterns that have emerged is one of long-term (ca. 3000-year) continuity of the use of this landscape by sedentary, agricultural populations. The emergence of ranking and social hierarchy first occurred during the El Bosque phase, with increasing complexity through subsequent phases. This is consistent with patterns noted previously at sites such as Severo Ledesma, Guayabo, and Las Mercedes. The people of Nuevo Corinto were engaged in long-distance exchange of pottery and perhaps also of lithic raw materials. Questions that remain

include those about the relative importance of various categories of foods, including fish, wild game, nondomesticated plants, and cultigens.

There are now a number of comparable projects occurring in Costa Rica and neighboring countries. Manuel Murillo is investigating social processes in San Ramón (Bergoeing and Murillo 2012). Corrales and Badilla (2013) are examining these at Farm 6 and related sites in the Southern Zone, where Maureen Sánchez is also

researching similar sites. Additional research at Nuevo Corinto will provide a clearer understanding of the characteristics of indigenous societies in southern Central America prior to the 16<sup>th</sup> century. Among our future priorities are augmenting sequences of absolute dates associated with the construction, use, and modification of specific structures and mortuary features in order to understand the chronology of culture change in greater detail.

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