Markets and the Socio-Economic Integration of Caracol, Belize:

Investigating Residential Groups and Public Architecture in the Vicinities of the Monterey Residential Group and the Puchituk Terminus: Caracol Archaeological Project Investigations for 2019

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with two appendices:

Epigraphic Report on Recently Discovered Altars at Caracol, Belize by Christophe Helmke University of Copenhagen, Denmark

> Photographing the Monuments of Caracol, Belize by Bruce Love

report submitted to: Belize Institute of Archaeology and Alphawood Foundation

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The 2019 field season constituted the second year of a three-year program supported by the Alphawood Foundation that was designed to investigate how the market economy at Caracol actually worked. Since previous field seasons had collected significant amounts of artifactual materials and primary deposits close to the site epicenter and in association with two of the southeastern market plazas, this three-year program sought to work further afield. Research was accordingly carried out in two exterior areas, specifically in the vicinities of the Puchituk market plaza and the public architecture associated with the Monterey residential group in the northeastern section of the site (Figure 1). The Puchituk Terminus is 3 kilometers distant from the site epicenter, and the public architecture associated with Monterey is 5.5 kilometers distant from the site epicenter. The 2019 field season ran from the middle of January through the middle of March and involved 32 individuals (see Table 1). The 2019 field season excavated in two parts of the site (Figure 1). The first area selected for investigation included three residential groups (colloquially labeled Barracuda, Tuna, and Snapper) to the immediate east of the Puchituk Terminus (Figure 2), in accord with our research design presented to the Alphawood Foundation; these investigations also were designed to be part of PhD research by Adrian Chase and were further supported by a dissertation grant from the National Science Foundation (NSF#1822230). The second area selected for intensive investigation was the public architecture associated with a part of the site informally known as "Monterey." Two residential groups (colloquially labeled Pebble and Boulder) and the public architecture in this area were investigated during the 2019 field season (Figure 2). A looted tomb in Structure C69 south of the site epicenter was also recorded during the 2019 field season.

Background

Within the last decade researchers in Maya archaeology have begun to significantly alter long-standing views regarding the complexity and composition of Classic Period society. The use of LiDAR has demonstrated that many Classic Period Maya cities were quite large in areal extent (e.g., Canuto et al. 2018; A. Chase and D. Chase 2016, 2017a; A. Chase et al. 2011) and archaeological research has also shown that ancient Maya marketplaces were located at many of these Late Classic (500-800 C.E.) Maya centers (e.g., Dahlin et al. 2010; King 2015). The existence of sizeable cities correlated with both urbanism and a market economy were topics that had been long debated in Maya archaeology (e.g., Becker 1979). Because economic discussions are largely absent in the Classic Period hieroglyphic texts that have been recovered (see Tokavinine and Beliaev 2013), interpretations about Maya society did not initially focus on economic transactions in markets, but rather discussed tribute, gifting, and household production (e.g., Foais 2013: 140-144; MacAnany 1993). Even though plentiful status and trade goods have long been recognized among the excavated households of the Maya (e.g., Willey 1956), the mechanisms for the distribution of these materials to households were either largely ignored or alternatively focused on elite-controlled redistribution and gifting (e.g., Foias 2013: 190-191). Then-standard economic models used in anthropology did not view market systems as being possible for ancient societies like the Maya (eg., Polyani 1957; Sahlins 1972). However, researchers have now recognized that markets could indeed exist in ancient non-western economies (Feinman and Garraty 2010; Garraty and Stark 2010). Thus, the relatively recent realization that the ancient Maya had market systems has major ramifications for our understanding of how their society functioned economically (Masson et al. 2020; Paris 2021).

Even before the current paradigm shift in Maya archaeology, our research at Caracol, Belize had postulated the existence of markets at the site based on the distribution and connectivity of public plazas (A. Chase 1998; D. Chase and A. Chase 2004); we have subsequently amplified our views on how these markets functioned as a system within Classic Period society (A. Chase and D. Chase 2015a; A. Chase et al. 2015a; D. Chase and A. Chase 2014, 2020). We also now know that different kinds of markets existed within the Maya area. Some focused on the supply of foodstuffs for the populace and employed small market stalls, as at Chuchucmil, Mexico (Dahlin et al. 2007, 2010; Hutson 2017). Others were centered in vaulted stone buildings, as at Tikal (Becker 2015; Jones 1996, 2015). Still others focused on the use of large plaza areas, as at Buenavista, Belize (Cap 2015), Motul de San Jose, Guatemala (Bair and Terry 2012), and Yaxnohcah, Mexico (Anaya Hernandez et al. 2021). No matter what their form, these public loci served to make a variety of goods – such as imported fineware and quotidian ceramics (A. Chase and D. Chase 2012), jadeite (D. Chase and A. Chase 2017), and obsidian (Martindale Johnson 2016) – available to the inhabitants of a given site.

The market system at Caracol is a relatively elaborate one. It consists of a deendritic system of seven main-plaza markets that are directly connected to the epicenter of the site (see D. Chase and A. Chase 2017: fig. 1). The Caracol market system used plazas, buildings, and stalls in different combinations (see A. Chase et al. 2015); smaller platform buildings lined the sides of the plazas and stalls lined some of the causeways where they joined the public plazas. Excavation has shown that these non-epicentral markets were constructed at the beginning of the Late Classic Period and were either added to formerly independent centers or purposefully built as separate units within the city landscape (A. Chase and D. Chase 2001a), providing easy access for the site's inhabitants; no one had to walk more than 3 km to reach a marketplace (D. Chase and A. Chase 2014:243).

Each marketplace also effectively served a different spatial segment of Late Classic Caracol; these spatial segments are referred to as "districts" (A.S.Z. Chase 2016), following the earlier use of this term in reference to other cities (Smith 2010; Smith and Novic 2012). Because of limited archaeological data on more distant parts of Caracol (including market plazas), we are only beginning to understand how these markets functioned both within the broader city and within the communities they served. Thus, the research that is being carried out from 2018 through 2020 helps define how the Caracol market system served different neighborhoods distributed across the city's landscape and also provides some idea of time depth for the Caracol market system.

The Problem: Markets, Distribution, and Integration of Caracol's Late Classic Society

While now recognizing that ancient Maya markets existed and that they likely appeared at many sites (Hirth and Pillsbury 2013; Hutson 2017; King 2015), researchers still do not know exactly how they functioned within Classic Period Maya society. Because of the history of Maya research with its focus on elite control of long-distance trade (for background, see: Becker 1973 and Tourtellot and Sabloff 1972), there is disagreement over whether institutional (prestige goods) and domestic (household necessities) economies were part of the same market system (e.g., Scarborough and Valdez 2009, but see Isaac 2013 and Masson and Freidel 2012). However, excavations within residential groups at most Maya sites often recovered what are considered to be prestige items (see Willey 1965 for Barton Ramie; Becker 1999 and Haviland 1985, 2014 for Tikal; Hutson 2016 for Chunchucmil), leading to questions as to whether or not these items derived from gifting or from market exchange. While previously limited archaeological research permitted a less complex viewpoint, as more and more excavations have been undertaken in residential groups it has become clear that the volume of items recovered in households strongly argues against gifting and redistribution as the predominant means for site-wide household provisioning. At Caracol, in particular, it is possible to demonstrate that obsidian was distributed through the market system (Martindale Johnson 2016), that jadeite was distributed through the market system (D. Chase and A. Chase 2017:225, 2020); and that marine shell and polychrome pottery were also available through this system (D. Chase and A. Chase 2004, 2017:215, 2020). The widespread distribution of Belize Red ceramics, imported into Caracol from the Belize Valley 55 km due north, also must have been accomplished through the site's market system (A, Chase and D. Chase 2012). Yet, the presence of specific forms of Belize Red in some parts of the

site and not in others (e.g., D. Chase and A. Chase 2014:246) is strongly suggestive of either centralized control or the differential distribution of certain items to the site's multiple markets based on other factors.

This research program examines the distribution of artifactual materials within two different parts of Caracol that would have used different marketplaces, particularly comparing and contrasting items found in residential groups with access to the epicentral market (using archaeological data collected during earlier field seasons) with items found in residential groups with access to the Puchituk market. An extensive amount of data has been collected that relates to goods that would have been available through the epicentral market. Between 2010 and 2014, two different neighborhoods with access to the epicentral marketplace were investigated. To the immediate northwest of the epicenter, seven co-located residential groups were investigated that yielded a series of Late Classic deposits that can be compared and contrasted with other parts of the site. To the southeast of the epicenter nineteen co-located residential groups have been investigated that also yielded a series of Late Classic deposits that can be similarly used for analysis. While there are differences between these two epicentral neighborhoods in terms of Late Classic burial patterns, both areas had access to imports from outside of Caracol, presumably obtained through the site's epicentral market.

A settlement pattern program focusing on the northeast sector of Caracol was carried out between 1994 and 1996, recording the Puchituk Causeway and Terminus (a distance of 3 km from the epicenter) and also the public architecture at Monterey (located 5.5 km from the epicenter). This settlement pattern program block-mapped some 8 sq km of residential groups (Figure 2) and 2 sq km of agricultural terraces (A. Chase and D. Chase 1998) in the northeast portion of the site. Small non-structural test-pits were excavated in 22 dispersed residential groups (usually within the associated plazas); only four groups in this portion of the site were more intensively excavated (2 near Puchituk and 2 near Monterey). Seven open tombs, four chultuns, 20 non-tomb burials, and 36 caches were recovered in the northeast sector of the site as

a result of these investigations. The data recovered in the course of this research suggest some variances in access to goods within this portion of the site when compared to the data from the epicentral neighborhoods, implying that differential availability of items possibly existed within Caracol's markets. For instance, there are differences in ceramic forms recovered from the northeastern burials, even though they date to the Late Classic and overlap temporally with those known from the epicentral neighborhoods. But, prior to this work the sample was too small to say whether the variation was meaningful, which is why this more intensive research needed to be undertaken.

Further excavation within the northeast sector helps better define the Late Classic social and economic systems for the city of Caracol by permitting the comparison and contrast of Late Classic residential patterns and artifactual materials that would have been derived from the Puchituk market with patterns and residential materials derived from the epicentral market. It is also likely that these data will permit new insight to be gained into the presence and distribution of different status groups within the urban matrix. Because of the test-pits undertaken in the 1990s, we know that this northeastern sector of the site shared in the broader Caracol patterns associated with inlaid teeth (n=9) and ritual caching (see D. Chase and A. Chase 2004, 2017), but the burials we have from this part of the site hint at differences from those in the epicenter in terms of a paucity of certain goods (such as stone spindle whorls). Thus, this research permits an understanding to be gained of how market distribution patterns relate to broader patterns of site integration based on similar material culture.

This research also provides some data on time depth for Caracol's markets. While the Puchituk Terminus mimics the same architectural configuration seen at the other two inner ring termini (e.g., Conchita and Ramonal; A. Chase and D. Chase 2001a; A. Chase et al. 2015a:242-243; D. Chase and A. Chase 2014), the public architecture at Monterey was never connected to the Late Classic causeway system. Yet, Monterey exhibits a ball court and an eastern temple. Excavations undertaken during 2019 documented a Late Preclassic date for this public

architecture and also showed continued use of these groups through the Terminal Classic Period, matching data gathered for the Monterey residential group immediately south of the ballcourt, excavated in 1995 and included in this report because of its comparative value relative to vaulted architecture (northern building), Late Preclassic ritual deposits (A. Chase and D. Chase 2006, Lomitola 2012), and Late Classic and Terminal Classic artifactual remains (e.g. A. Chase and D. Chase 2004: fig. 16.8). These data suggest a truncated developmental sequence, but do not explain why this architecture was not linked to the formal causeway system. Thus, data from the Monterey area was selected to help better contextualize Late Classic Caracol, its spatial order, and sequence of development.

Research Carried Out during the 2018 Field Season

The 2018 field season concentrated on better defining the Puchituk market plaza (Figure 2) through soil testing and the associated excavations of residential groups in the immediate vicinity of the plaza. The excavations in these residential groups yielded material for comparison with the neighborhood excavations conducted in the vicinity of the epicenter (D. Chase and A. Chase 2017:198). In addition to conducting excavations that identified architectural and material remains, the Puchituk plaza was sampled for soil testing, as has been previously done for the Conchita and Ramonal plazas of Caracol (A. Chase et al. 2015). Following the protocol outlined by Terry and his colleagues (2015:142-143), a sampling grid of 5 m intervals was laid out across the open space of the Puchituk plaza and surface soil samples were gathered once the leaf litter has been removed. Soil samples were collected and analyzed under the supervision of Dr. Matthew Lachniet, a UNLV geoscientist; the samples were then be tested for phosphorus concentrations (see Terry et al. 2000) and for extractable trace metal concentrations (see Lindsay and Norvell 1978 and Parnell et al. 2002) by ASSET Laboratories in Las Vegas. A cursory excavation (2 m by 4 m) undertaken on the summit of the eastern building associate with the Puchituk Plaza in 1994 revealed a plastered floor that rose in three 1 m deep segments steps to abut a rear wall, an arrangement clearly not meant for occupation.

A program of soil testing during 2018 was also carried out in the Monterey area on the raised platform and large terrace area that supports the ballcourt, as these places appeared to be the best venues for useable public space and could serve to provide comparative results to the Puchituk Plaza and from earlier sampling at Conchita and Ramonal (A. Chase et al. 2015). This testing was also supervised by Dr. Matthew Lachniet and the collected samples were processed by ASSET Laboratories in Las Vegas, Nevada.

Excavations during 2018 focused on residential groups that are co-located in the vicinity to the Puchituk Plaza (see Figure 2) in order to identify artiactual remains that can be used to compare and contrast distribution systems within the site. Two groups adjacent to the Puchituk Plaza were more intensively excavated in 1994 and saw new investigation in 2018. The residential group immediately southwest of the plaza had its eastern building trenched and had two collapsed chultuns investigated; these excavations yielded 1 small tomb, 3 other burials, and 2 caches. The sizeable group directly east of Puchituk plaza was investigated in 1994 with a small trench placed in the plaza to the front of the eastern building. This plaza trench yielded part of a carved stela (that was redrawn in 2018) and 2 caches; it also uncovered a basal shrine doorway associated with the eastern pyramid that was not penetrated. During the 2018 field season, both the eastern and southern structures in this group were areal investigated and trenched. These investigations yielded a three-door range building that was once vaulted embedded in the base of the eastern pyramid. The partial carved stela had been reset in the plaza in front of the central door; its original base was not located and is suspected to be elsewhere at Caracol. The front room of the southern building was also areal excavated during the 2018 field season and the northeast exterior corner of this structure (which had been the locus of looting) was also exposed and drawn.

Besides the Puchituk eastern residential group (Figure 2), an additional three other residential groups were investigated during 2018 with a combination of trenching and areal excavations to begin to garner an archaeological sample for comparison to the two epicentral

neighborhoods. These groups were co-located in close spatial proximity to the Puchituk Terminus. The first new group investigated during 2018 was located about 100 m southeast of the Puchituk Plaza. The eastern building was trenched and an alleyway between two northern buildings was also excavated. These investigations produced two burials in the eastern building, including an Early Classic tomb. A second new group investigated during 2018 was located about 100 m west-northwest of the Puchituk Plaza. An axial trench was placed on the eastern construction in this construction and dug to bedrock, producing 1 burial dating to the Late Classic Period and 2 caches. The third new group excavated during the 2018 field season was approximately 200 m west of the Puchituk Plaza adjacent to the causeway running back to the epicenter. The eastern building in this group was trenched, producing six Late Classic special deposits. An open chultun on the northeast corner of the north building was also investigated, producing a deposit dating to the Early Classic Period.

Research Carried Out During the 2019 Field Season

The research carried out in 2019 built upon previous seasons of field work funded by the Alphawood Foundation that has examined the site core, outlying residential groups, and neighborhood development. As in 2018, the 2019 field season again focused on examining the differential economic distributions of items at the site as evidenced through its living areas. Thus, residential groups near Puchituk Terminus were investigated as well as both residential groups and more public architecture in the Monterey area.

During 2019 three co-located residential groups to the east of Puchituk were investigated as part of Adrian Chase's dissertation research; these are located on a ridge across a deep valley east of the Puchituk public architecture (Figure 2, Groups A, B, C). Also during the 2019 field season, the public architecture located at Monterey was investigated (Figure 2, Group E) as were two tangent residential groups (Figure 2, Groups D and F). Previous investigation in the Monterey area had ffocused on two residential groups, one of them the group (Figure 2, Group G) directly south of the ballcourt where five buildings were trenched, recovering four burials and

seven caches (the records for these investigations are included in this field report); these deposits indicated an occupation for this group that ran from the Late Preclassic Period (A. Chase and D. Chase 2006: fig. 2) through the Terminal Classic Period (A. Chase and D. Chase 2004: fig. 16.8). The cache deposits recovered within the eastern building of this group, dating from the end of the Late Preclassic through the Early Classic Period, are of the kind usually found in public architecture. Two other parts of Monterey also exhibit clear public architecture: the platform with the ballcourt and the eastern pyramid directly east of the ballcourt (Figure 2, Groups E). Monterey ballcourt investigations during 2019 yielded an uncovered circular altar in the center of the playing alley, similar to what occurred in both epicentral ballcourts at Caracol (see A. Chase and D. Chase 1987; A. Chase et al. 1991; Helmke et al. 2006) and similar to what is known from Hatzcap Ceel (Thompson 1931: 264-266); unlike these other ballcourt markers, however, the Monterey marker has no texts or portraiture. The eastern pyramid on the side of the hill east of the ballcourt was also investigated during 2019 and yielded two Late Preclassic caches, helping to confirm the earlier dating of the Monterey public architecture. Another residential group directly east of the Monterey public architecture atop a hill was also investigated and revealed extensive Late-Terminal Classic activity (Figure 2, Group D). Finally, the residential group immediately west of the Monterey public architecture was investigated (Figure 2, Group F), again confirming extensive Late Classic construction activity in this area. Most of these Late Classic residential groups likely derived their materials from the Puchituk market and should shed insight on how Caracol's Late Classic market system functioned, also permitting an assessment of how well residential groups that were located further from away from market locales were integrated into the socio-economic fabric of the site.

Barracuda Residential Group: Structures 4D4-4D8

The Barracuda Residential Group (Figure 3) was located on the summit of a very high hill directly east of the Puchituk Terminus. The group consisted of five structures set upon a raised platform. The northern and eastern structures in Barracuda were both axially trenched and

a small test excavation was placed tangent to the corner of one of the western buildings. There was no evidence of looting in this group.

Structure 4D5

Structure 4D5 was the designation given the eastern building in Barracuda (Figures 4). The mounded structure rose some 1.6 m above the associated plaza. No formal construction could be seen on the mound before excavation.

Operation C216B was assigned to an axial trench into the eastern building of the Barracuda Group (Figures 5 and 15). The trench measures 7.3 m east-west by 2 m north-south. Excavation revealed a multi-course front step to the building and the remnants of possibly two other steps (Figure 6, 7). An earlier facing was found deep in the core of the structure. A collapsed tomb could be barely discerned in the rear of the building prior to excavation. While pieces of floors were encountered in the core of the construction, the almost continuous fills suggested that the axial portion of the structure had been repeatedly disturbed. Operation C216B recovered 1 tomb, 2 simple burials, and 7 caches in association with Caracol Structure 4D5. The ceramics recovered in association with the building ranged in date from Preclassic to Late Classic material in the building core (Figure 8). Artifactual materials recovered from the building fill (Figure 9) included a worked speleothem fragment, a fragment of a bark beater, and some limestone bars (possibly from disturbed caches).

SD C216B-1 was a tomb at the summit of the building that had originally encompassed 1.43 cubic meter of space. Only three capstones for this chamber were recovered in situ (Figure 10); these were located 80 cm above the floor of the tomb. The tomb measured 1.8 m north to south by 1.0 m east west; a lower step down area, measuring 1.0 m north-south by 0.5 m east-west and possibly once functioning as the entryway, was uncovered attached to the southwest corner of the tomb (Figures 11, 12, and 13). Based on the recovered bone, two individuals were present; one was an adult of unspecified sex while the other was likely an older adult female based on the mandible. This older adult exhibited resorption of all teeth in the

mandible. The other adult was likely between the ages of 35 to 45 at time of death. One potential subadult tooth was also recovered from the chamber. Nine ceramic vessels and one large olla sherd were recovered from within the chamber (Figure 14), but the chamber was devoid of any other associated smaller artifacts. The ceramic vessels may all be dated to the early part of the Late Classic Period.

SD C216B-2 (Figure 16) consisted of a single inverted finger bowl (Figure 17a) set in plaza fill on axis to the building and approximately 1.4 m west of the lowest step. This deposit is probably of Late Classic date.

SD C216B-3 (Figure 16) was a cache of three partial vessels (Figure 17b-d) – one a lid, one the base of a cache, and the other a face cache body – set directly in front of and beneath the front step of the building at the southern excavation limit for Operation C216B. The deposit dates to the Late Classic Period.

SD C216B-4 (Figure 16) was a large complete face cache (Figure 18) set directly in front of and beneath the front steps of the building slight south of the building axis. This deposit dated to the Late Classic Period.

SD C216B-5 (Figure 16) was assigned to a partial lidded face cache and probable lid (Figure 17e) that had been set directly in front of and beneath the front step of the building on the structure axis. This deposit dated to the Late Classic Period.

SD C216B-6 (Figure 16) was assigned to a small cache vessel (Figure 17f) set upright into a depression in the bedrock approximately 0.5 m west of the much later building step; it is Early Classic in date.

SD C216B-7 (Figure 19) was assigned to human remains of an older adult recovered in the front fill of the building approximately 1 m east of the tomb centerline. The individual appears to have been placed in a north-south extended orientation, but had been disturbed in antiquity. A single capstone was found at the southern end of the deposit. A partial mastoid suggests that the individual may have been male.

SD C216B-8 was assigned to two vessels located just above bedrock within the front core of the building (Figures 20 and 21). The two vessels were located in the same matrix and, so, are grouped together, but they may actually represent two different deposits. Small pieces of each vessel are missing and were not present in the excavated area. The shoe pot and cache bowl date to the early part of the Early Classic Period.

SD C216B-9 was assigned to human bone (tibia, fibula, small fragments) recovered on bedrock in the center of the building, but south of SD C216B-8. It is unlikely that this interment goes with SD C216B-8. The date of the burial cannot be ascertained, but was likely early.

Structure 4D4

The single northern structure in the Barracuda residential group, Structure 4D4, rises 1.4 m above its associated plaza (Figure 22). No formal construction was visible before excavation.

Operation C216C was an axial trench placed on the front slope of the northern building in the Barracuda Group (Figure 23). It measured 5.6 m north-south by 2 m east-west. The excavation was dug to bedrock and revealed a single phase construction built in the Late Classic Period. Only two facings were recovered during excavation (Figure 24); one represented the lower step and the other the upper step for the building summit. A carved shell disc (Figure 25f) was recovered just above bedrock in the core of the building, as was part of a censer with appliqued spikes (Figure 8d); a fragmentary green obsidian point was also recovered from the core of the building (Figure 25d).

Structure 4D7

Structure 4D7 was a low, small western building at the edge of the raised platform. There appeared to be a hole in the plaza at its southeastern corner.

Operation C216D was a smaller excavation placed tangent to the southeast corner of Structure 4D7 (Figure 26). It measured 1.25 east-west by 1 m north-south and was set over what appeared to be a sump, but excavation found no indications of subsidence in this locale. The

excavation was not dug to bedrock, but did penetrate plaza fill that yielded a metate fragment, chert flakes and cores, and a fragmented shell.

Tuna Residential Group: Structures 4D9-4D12

The Tuna Residential Group was located approximately 60 m southeast of the Barracuda Residential Group at a lower elevation. The group consisted of four structures (Figure 27). The northern building was a long, elevated platform. There were two smaller platforms on the western and southern sides of the raised plaza. The eastern side of Tuna supported an eastern shrine building that had the remains of a still standing, but broken, plain stela in front of the structure, making this only the third residential group at Caracol to have such an important marker (the others are 1.5 km southeast of the epicenter and in the Plaza of the Two Stela). The eastern building in this group was axially trenched.

Structure 4D10

Structure 4D10 rose just over 1 m above its associated plaza (Figure 28). A single still upright plain monument was set 3.5 m west of the front step and on axis to the building; excavation showed that this stone shaft was 0.4 m thick by 0.6 m wide and originally 1.5 m in height (Figure 33). No formal construction could be discerned associated with the building prior to investigation.

Operation 217B was assigned to an axial trench set over the eastern building in the Tuna Group. The excavation measured 7.2 m east-west by 2 m north-south and the trench was dug to bedrock (Figure 29). Two steps were recovered pertaining to the final building (Figure 30). While there were likely earlier versions of Structure 4D10 based on the dating of its deposits, the evidence for these was not recovered on the axis of the building, most likely because of the intense ritual activity associated with this structure and stela. Besides quotidian goods, like metate fragment (Figure 31), out-of-context ritual items like a fragmentary limestone bar (Figure 32b) were recovered in association with Structure 4D10. In addition to the remains of a Late Classic building, eleven distinct deposits were recovered within this investigation. Seven caches were

recovered in front of Structure 4D10. Six interments were also recovered in association with the building, three in the core of the structure and three in the plaza in front of the building and behind the stela. The dating for these materials ranged from the Early Classic through Late Classic Periods.

SD C217B-1 (Figures 34 and 44) was assigned to a bird face cache and lid (Figures 35b and 36) that was set into the core of the plaza to the southeast of the stela.

SD C217B-2 (Figure 34) was assigned to a face cache (Figure 35c) that was lacking its rim that had been set into the core of the plaza 0.50 m west of the stela.

SD C217B-3 (Figure 34) was assigned to a lidded face cache (Figure 35a) that had been set at the front base of the stela, being deposited into a hole cut into bedrock.

SD C217B-4 (Figure 34) was assigned to lip-to-lip finger bowls (Figure 37a) set approximately 0.50 m due north of the stela into the plaza core.

SD C217B-5 (Figure 34) was assigned to three finger bowls (Figure 37b,c) set approximately 1 m northeast of the stela into the core for the plaza flooring.

SD C217B-6 (Figure 34) was assigned to the lower part of a face cache (Figure 37d) set 0.4 m east of SD C217B-5. The disturbed nature of this cache was likely the result of later building activities at this locus after it had been placed.

SD C217B-7 was assigned to a crypt interment behind a step on the structure slope. Several capstones were in place over this interment (Figure 38), but the burial was completely covered with fill that contained a variety of chert debitage, among other partial objects (Figure 40). The human bone in the crypt was not articulated (Figure 39), but analysis revealed that the crypt held two individuals based on the recovered teeth. Both were adults and no sex identifications were possible. One of the lower molars had an extra root.

SD C217B-8 (Figure 41) was assigned to a finger bowl (Figure 37e) located 0.2 m north of the capstones for SD C217B-11 in plaza fill; a fragmentary obsidian blade (Figure 42a) also accompanied this deposit.

SD C217B-9 was assigned to a cist interment cut into bedrock (Figures 43, 44, and 45). The cist held the remains of an articulated adult individual with head to the south. While assorted long bones were present, only six teeth were recovered; none were incisors; the teeth exhibit both tarter and wear. Three complete and unused obsidian blades accompanied the interment (Figure 42b-d) as well as a modified spondylus shell (Figure 42e).

SD C217B-10 was assigned to a bundle burial set into a cut into bedrock immediately west of SD C217B-9 and separated from that deposit by a stone line (Figures 43 and 44). The bundled bone yielded the remains of two older adults based on femur, humerus, nuchal areas of skull, and mandible counts. With the exception of a lower incisor with use-related wear, no teeth were recovered. The mandibles are both from older adults with ante-mortem tooth loss of all teeth and bone resorption. One of the mastoids is moderate in size and possibly male, but there are no other supporting skull features preserved to double-check against. One mandible exhibits potentially female characteristics.

SD C217B-11 was assigned for a small tomb carved out of bedrock in the plaza in front of the structure and covered with capstones (Figures 41). When originally constructed, the chamber encompassed 0.45 cubic m of space (Figures 43, 44, 46,and 47). Multiple individuals were recovered on the bedrock floor for this chamber. One older adult was placed on the bedrock in extended supine position with head to the north (Figure 43). The other individuals were secondary placements and were concentrated in the southern portion of the chamber (Figure 47). The recovered human bone indicates that 2 to 3 adults and 1 sub-adult were present in this interment. The sub-adult was 3-4 years old based on the humeri and teeth. The adults include one older adult and 1 to 2 adults that would have both been about 35 years of age based on wear charts. One of the adults had no teeth remaining in the portion of the mandible that was preserved (and, thus, the thought that there might be 3 adults rather than 2). Sex identification is difficult as to typical features were preserved. The 35 year-old with the mandible and teeth appear to be male (but, again, no other supporting features are apparent in the skeletal remains). Two filed teeth,

both central upper incisors exhibiting Romero C9 decoration, were also recovered in the interment. Obsidian blade fragments and a modified conch shell were recovered during excavation (Figure 42f-j). Several ceramic vessels were found in this small chamber (Figure 48). A bowl and a dish were recovered at the southern end of the chamber along with a large sherd. Pieces of a largely complete lidded cache vessel were distributed throughout the burial, as well, perhaps indicative of a re-entry event (e.g., D. Chase and A. Chase 2003, 2011). All of the vessels are Late Classic in date.

SD C217B-12 was assigned to a tomb in the rear summit of Structure 4D10 (Figures 50 and 52) that contained a minimum of 4 individuals based on mandibles and teeth. Only three slabs capping the chamber were recovered in situ (Figure 49). The chamber included thirteen and a half ceramic vessels (Figure 53), as well as numerous small artifacts (Figures 54-57). The ceramic vessels all date to the early part of the Late Classic Period. Included among the artifacts were an obsidian lancet (Figure 54v), a bone awl (Figure 55a), a deer antler tool (Figure 55b), a perforated and carved jaguar tooth (Figure 55d), a perforated dog tooth (Figure 55e), two spindle whorls (Figure 55f,g), a jadeite bead (Figure 55i), a jadeite pendent (Figure 55l), a large assortment of carved shell ear ornaments (Figure 56), and 22 olivella beads (Figure 57). The chamber encompassed 0.85 cubic m of space (Figures 50 and 51). The four recovered individuals represent the remains of 3 older adults and 1 adult. There could have been more individuals present as two of the mandibles are from older adults with few or no teeth still in situ and with subsequent resorption of bone. Some teeth had caries and others showed some evidence of wear. Two individuals had inlays in their upper teeth. One individual had two teeth with hematite inlays (upper right lateral incisor and upper right canine). The other had a jadeite inlay in the upper right canine and an inlay hole in the upper right central incisor. One individual displayed use-wear on the central lower right incisor. Multiple individuals are also indicated by cranial and post-cranial remains. At least one individual and possibly two were male based on sciatic notches.

SD C217B-13 was assigned to an crypt interment set on bedrock with vertical stone slabs forming the side walls of the crypt (Figures 52, 59 and 60). The crypt was sealed by capstones (Figure 58) and contained the disarticulated remains of a single adult as well as four ceramic vessels (Figure 61) that date to the Early Classic Period. No sex identification was possible. Only 3 teeth were recovered and the amount of cranial and post-cranial material recovered was also small. A perforated and notched shell disc was also recovered in association with the interment (Figure 42k). The ceramic vessels all date to the Early Classic Period.

The Snapper Residential Group: Structures 4D13-4D16

The Snapper Residential Group was located approximately 150 m southeast of the Tuna Residential Group but on the same slope at a lower elevation. The group consisted of a series of very low indistinct buildings on a raised platform (Figure 62). Two of these low constructions were excavated; both appeared to be single phase constructions dating to the Late Classic Period. **Structure 4D14**

Oddly positioned within the north-central part of the raised plaza southeast of the northern building, Structure 4D14 was selected for investigation largely because of its anomalous character (Figure 63). Because of a slight central east-west depression, it appeared before excavation that the structure faced west.

Operation C218B was assigned to what was thought to be an axial excavation in Structure 4D14 based on the scatter of surface stones (Figure 65). The excavation measured 4.5 m east-west by 1.5 m north-south and was dug to bedrock (Figure 64). Pieces of a plastered plaza surface were recovered to the east of the structure (Figure 66), but no formal construction was recovered with the building itself. Investigation showed that the building was constructed as a single-phase construction at this locus; fill material indicate a Late Classic date.

Structure 4D15

Structure 4D15 was assigned to a small eastern platform associated with the Snapper Residential Group (Figure 63).

Operation C218C was assigned to an axial excavation placed over the eastern construction in the Snapper Group. The excavation measured 3 m east-west by 2 m north-south (Figure 67). No architectural features were recovered and it appeared that the platform was built directly on bedrock as a single phase construction. Fill materials indicate a Late Classic date.

The Pebble Residential Group: Structures 8S9-8S13

The Pebble Residential Group was located on top of a hill directly east of the Monterey public architectural groups (Figure 68). The raised plaza that supported the residential group had two buildings on its northern side with a single structure on its eastern and southern sides. A larger pyramidal building occupied the north-central portion of the residential plaza. Three structures were investigated in 2019.

Structure 8S12

Structure 8S12 was a square pyramidal structure set into the middle of the Pebble Residential Plaza (Figure 69). It rose 4.9 m above the plaza and had been looted; a crude, but deep, trench ran through the southern side of the summit building, penetrating into the midpoint coring of the building. This looting activity had cut through the southern wall and bench of the summit structure and disrupted the interior medial wall and doorway area, but does not appear to have discovered any special deposits.

Operation C219B was assigned to an axial trench placed into the center building in the Pebble Residential Group (Figure 70). The excavation measured 10.2 m east-west by 2 m northsouth, but also involved cleaning out the southern looters' trench and exposing the southern part of the front room of the building. A lower step for the pyramid was uncovered, but none of the upper steps (Figure 71). Based on the recovered data, it was possible to reconstruct the form of the upper summit building (Figure 72). The structure had base-walls, but was probably not vaulted based on the lack of roofing collapse in the interior of the building. The building had two rooms with central doorways and with a step-up to the rear room. The rear wall was oddly bedded within the fill at a much deeper level than would have been used. Metate fragments were

recovered on the interior floor of the front room (Figures 75 and 76). Artifacts recovered in association with the building included unslipped ollas (Figure 73) as well as one whole and two fragmentary chert points (Figure 74a-c). No formal deposits were recovered with the building even though both the front and rear rooms were dug to bedrock; however, a recovered clam shell (Figure 74d) and limestone bar (Figure 74e) suggest that these might have once been present.

Structure 8S10

Structure 8S10 was a northern structure set upon the raised plaza for Pebble (Figure 77). It rose some 2.4 m above the associated plaza floor and appeared from the surface to represent a collapsed room with doorway. Excavation did not prove this to be the case. Instead, the excavation revealed a very complex situation in which the structure had been repeatedly dug through and modified with no real identifiable architectural features except for deep plaza floors in the building interior.

Operation C219C was a 6.1 m north-south by 2 m wide excavation through the apparent axis of Structure 8S11. This section revealed a jumble of architectural features and floors that had been cut through in antiquity. Accordingly, sections were done of both the eastern (Figure 78) and western (Figure 79) walls of the investigation in order to show how disconnected they were, something also see in the associated plans (Figure 80). An intact mano and metate were found associated with a deeply buried floor in the core of the structure (Figures 81, 82, and 83a). No deposits were encountered in this investigation and the fill materials suggest that most of the construction was Late Classic in date. A single fill C-14 date was obtained from this excavation from material located just above bedrock in the front part of the building. This date was consistent with the building being constructed in the late Late to Terminal Classic Period (676-779 cal AD [1274-1171 BP] or 790-870 cal AD [1160-1080 BP]; Beta 53778).

Structure 8S11

A long, range platform was set in the northeast corner of the Pebble Residential Group on the east side of the plaza (Figure 77). This construction rose 0.90 m above the plaza. No formal construction features were observed prior to excavation.

Operation C219D was assigned to a trench placed on axis to Structure 8S11 (Figure 84). It measured 4.95 m north-south by 2.0 m east-west. The excavation succeeded in finding a plaster summit floor for the last building, but also revealed that the bedrock had been formed into a stepup on a much earlier horizon (Figure 85). Although some Preclassic materials were recovered in the fill, the bulk of the recovered fill ceramics (Figure 86) date to the Late Classic Period.

Monterey Public Architecture: Structure 8R12-8R15

The Monterey public architecture was distributed into two groups (Figure 87). The lower group consisted of a large plaza located in a saddle between two hills. To the east of this public plaza placed into the hillside was another plaza area with a small low northern structure and an eastern pyramid that overlooked both plazas. A broad causeway led down from this higher plaza to the ballcourt plaza.

Structure 8R13

The eastern pyramid, which was set against the hillside to gain extra height, rose 7.8 m above its associated western plaza. Excavations focused on the summit and base of the structure (Figure 88). These investigations revealed that the latest use of the plaza was during the Terminal Classic Period, as reflected in the pottery collected from the basal excavation (Figure 93). However, the construction of the pyramid clearly dates to the Late Preclassic Period based on two recovered caches and on carbon dates associated with these deposits.

Operation C220B was assigned to the excavation of Structure 8R13. As laid out, the excavation was 15.2 m east-west by 2 m north-south (Figures 89, 90, and 91). While the summit of the building was deeply penetrated (Figure 95) and the plaza area was also excavated to expose the lowest steps, the intermediate part of the building on the slope was only cursorily cleared.

Plaza investigations revealed two plaza floors. The summit excavation revealed a two-roomed building with central doors (Figure 92). The frontal jambs had slid down the slope, but the central jambs were both in place. The rear room had benches set to both its sides with a lower central floor leading to the back wall. A total of six super-positioned floors were recorded beneath the summit rooms and fragmentary remains of earlier stairways were discovered just west of these floors. Two caches were found sealed in the dry core fill beneath the fifth summit floor. Both of these caches dated to the Late Preclassic Period. Other ritual activity had likely occurred at this locus based on the recovery of a partial limestone bar in building fill (Figure 94d).

SD C220B-1 (Figure 96) was assigned to a lip-to-lip cache (Figure 97a) set deep into the building core and sealed by five floors. The two vessels housed a single jadeite bead (Figure 100a).

SD C220B-2 (Figure 95 and 96) was assigned to a lidded urn (Figure 98) that was also sealed in dry-core fill beneath the fifth floor. It contained 2 jadeite beads, 3 flamingo tongue shell beads, and 10 other small shell beads (Figures 99 and 100b-r). Carbon from within the urn was dated to the Late Preclassic era (0 cal BC – 130 cal AD [1950-1820 cal BP]; Beta-537760). The placement of these caches can be even better dated because of a second carbon date. Excavation beneath the two caches penetrated a sixth floor. In the fill for this lowest floor, the remains of other early ceramics (Figure 97b,c), including a potential cache vessel, were found. Carbon associated with these earlier materials dated slightly later in time (74-226 cal AD [1876-1724 BP]; Beta-537761). Thus, the placement of SD C220B-2 into the core of Structure 8R13 likely occurred between 74-130 cal AD, consistent with its stylistic placement relative to other Caracol urn caches (i.e., A. Chase and D. Chase 1987: fig.8; 2006: figs. 2,3,5,6).

Structures 8R14 and 8R15

Set at the eastern end of a large rectangular plaza directly west and below Structure 8R13 was a ballcourt whose playing alley ran north-south and measured approximately 16.5 m (Figure

101). Structures 8R14 and 8R15 were both approximately 2 m in height and the distance between the centers of their two summits measured approximately 17 m (Figure 102).

Operations C220C and C220D was assigned for an excavation that ran the north-south length of the ballcourt playing alley in an attempt to locate ballcourt markers. Operation C220C measured 8.7 m by 1 m. Operation C220D measure 7.3 m by 1m. The two excavations were separated by a 0.5 m balk in the center part of the court. Both were dug down to a presumed surface level, although the plaster was not preserved. At the southern end of Operation C220C, a stone ballcourt marker was located and a small eastern extension (0.5 m east by 1.0 m northsouth) was made to the excavation in order to see the entire monument (Figures 103 and 104). The circular stone altar was located almost in the exact center of the ballcourt playing field.

Caracol Altar 27 was the designation given to the new monument found in the center of the Monterey ballcourt. The altar is circular in shape and is uncarved. It measures 0.86 m in diameter and is 0.6 m thick. It was backfilled in place after recording.

Boulder Residential Group: Structures 8R1-8R6

The Boulder Residential Group is located approximately 100 m west of the Monterey public plaza on the summit of a low-lying hill. It consists of a plaza grouping of some seven buildings situated on a raised platform (Figure 105). The eastern edge of the raised platform was well preserved and can be seen in Figure 107.

Structure 8R3

A well-defined square structure was situated on the eastern edge of the Boulder Residential Group (Figure 106). The structure had a clearly defined rear wall and rose approximately 1 m above its associated plaza. Although the rear wall of the building could be seen before excavation, other architectural features associated with the latest building were not recovered, nor were any formal deposits recovered with this eastern structure. When mapped in 1994, part of a Terminal Classic burner was recovered in front of Structure 8R3 (Figure 109). **Operation C221B** was assigned to a 7.6 m east-west by 2 m north-south excavation placed on axis to Structure 8R3 (Figure 107). The western part of this investigation was dug to bedrock and uncovered an odd circular bedrock cut into which a large boulder had been inserted, but nothing else. No formal architecture was found within the core of the building, although minimally two construction walls were encountered (Figure 108). All indications are that this was an accumulative construction carried out over a relatively short period of time. Although not formally designated, one potential cache was located in the dry-core fill of the construction (Figure 110); this potential deposit consisted of two complete obsidian blades (Figure 111a,b) and two fragmentary sea shells (Figure 111f,g). A carbon-14 date was obtained from carbon just above bedrock within the front of this excavation; it dated to the transition of the Early Classic to Late Classic Period (428-498 cal AD [1522-1452 cal BP] or 505-610 cal AD [1445-1340 cal BP]; Beta-537759). Although not in primary context, this date indicates that the structure was probably built in the Late Classic Period.

Monterey Residential Group: Structures 8S14-8S20

The Monterey residential group was intensively investigated during the 1996 field season. It consisted of seven buildings, five of which were excavated (Figure 112). The northern building was constructed of stone and had a vaulted roof; a large pad, possibly supporting a perishable structure lay to its east. Three buildings were on the eastern side of the plaza and the central one proved to have been a ritual locus that was in use from the Late Preclassic through Terminal Classic Periods. The write-up of this group is included here because this locus was ritually integrated with the Monterey public architecture during the Late Preclassic Period. Directly north of the Monterey Residential Group is a large constructed reservoir and a causeway from the public plaza leads directly to this body of water, showing the integration of this plaza with the other public architecture.

Structure 8S15

A large, but low, two-tier substructure occupied the northeastern part of the Monterey Residential plaza. It was selected for investigation to see if it may have functioned as a kitchen, a function ruled out because of a lack of associated domestic artifactual materials.

Operation C118B was assigned to an axial trench and associated areal excavation placed over Structure 8S15 (Figures 113 and 114). The axial trench measured 9 m east-west by 1.5 m north-south and, while clearing the humus from the entire area, only penetrated the summit of the construction. The southwestern portion of the front part of the structure platform was also areally cleared with an excavation tangent to the original trench that extended 3.4 m to the south and exposed the front 4.6 m (east-west) of the platform. Some Late Classic ceramic incensario fragments were recovered in the course of these investigations.

Structure 8S20

The western building in the Monterey Residential Group consisted of a long low platform set on the edge of the plaza. Structure 8S20 rose approximately 1 m above its associated plaza surface on a raised platform that was elevated an additional 1.5 m above the "natural" ground to its west.

Operation C118C was the designation given to investigations in this western locus. Two sections were done because of the way that the building was excavated (Figures 115 and 116). The investigation actually consisted of an areal excavation of the front part of the building that measured 4.5 m north-south by 4.5 n east-west (Figure 117). The building was then half-section and a deeper excavation made that eventually reached bedrock on one side of the building. A front stoop and several facings were was uncovered for the latest building and earlier construction episodes were also evident in the core of the platform. No formal deposits were recovered, although one of the fill lots contained a human vertebrae, tarsal, and two teeth (upper incisor and upper premolar). Turtle bone was recovered just above bedrock. A shell disc (Figure 134a) was

recovered in construction fill and a shell pendent (Figure 134b) was recovered on bedrock in this investigation.

Structure 8S14

Structure 8S14, located at the northern extent of the plaza, was the most commanding building in the Monterey Residential Group. The edifice rose 4.15 m above the associated plaza surface. No formal architecture was visible prior to excavation.

Operation C118D was assigned to an axial trench placed on axis to Structure 8S14 (Figure 118). The trench measured 12.5 m north-south by 2 m east-west and recovered a multitude of architectural information. The latest stairs for the summit building were in relatively good shape (Figure 119). A small vessel of unusual form was recovered during clearing (Figure 133a). The trench revealed the remains of a vaulted construction at the summit of this structure, passing through the central doorway of the building and detailing its western jambs. The building plan showed a tandem room construction. The rear room was originally elevated with a single course step-up that was later elevated another 45 cm. Both the front and rear rooms were 2.1 m deep. The medial jamb was still preserved to a height of 1.7 m, while the front one was only 0.7 m tall. The northeastern portion of the front room also was occupied by a bench that protruded 1.7 m into the room from the medial wall and was raised 0.8 m; a small niche with a door defined its eastern side (Figure 121). Some earlier plastered surfaces were recovered in the core of the construction (Figure 120), but no formal deposits were found. The building should be of Late Classic date.

Structure 8S18

A long low platform supporting a structure defined the southern side of the Monterey Residential Group. The structure rose 0.65 m above its associated plaza level, but 1.6 m above the terrain on its southern side, indicative of the height of the raised platform here.

Operation C118E was assigned for a combination trench and areal excavation on the southern building. A trench measuring 3.6 m north-south by 1.5 m east-west was placed on the

axis of the building (Figure 122) and an additional areal excavation extended 2.6 m west of this trench at the front of the construction and was 1.1 m deep (Figure 123). The trench was dug to a depth of 1.5 m and did not reveal any other architecture at this locus.

Structure 8S16

The eastern construction in the Monterey Residential Group, evinced a long sequence of ritual deposits that spanned the Late Preclassic through Terminal Classic Periods. Eleven deposits were recovered in association with Structure 8S16 and an infilled tomb in the front of the building was left unexcavated. Typical of many of Caracol shrine buildings, no raised construction was recovered on its surface. The building rose 2.2 m above the plaza surface.

Operation C118F was assigned to an axial excavation placed over Caracol Structure 8S16 (Figure 124). The trench measured 8.4 m east-west by 1.5 m north-south and recovered both a series of earlier plastered surfaces as well as eleven deposits. The earlier deposits were all located in the core of the construction while the Late to Terminal Classic deposits were located in the front of the building. It is likely that an infilled tomb (labeled SD C118F-10) existed beneath the capstones upon which SD C118-9 had been placed, but it was not excavated during the 1996, instead being backfilled at the end of the field season. For the most part the steps in the front of the building (Figure 125) were severely disturbed by all the re-entries made to place finger caches and from the ravages of time. Portions of plastered floors were recovered from the interior of the building (e.g., Figure 126), clearly marking temporal distinctions between the various deposits.

SD C118F-1 was assigned for a finger bowl cache (Figure 127a) found in the eastern limit of Operation C118F along the northern excavation limit (Figure 129).

SD C118F-2 was assigned for a lip-to-lip finger bowl cache (Figure 127b,c) recovered in the eastern part of Operation C118F (Figure 130) associated with three human finger bones.

SD C118F-3 was assigned for a cache recovered on the summit of Structure 8S16 (Figures 128a and 131). The cache vessels were associated with a jadeite ball (Figure 134c) as well as 15 jadeite chips.

SD C118F-4 was assigned to a crypt burial in the front of Structure 8S16 (Figures 129 and 132). The burial can be dated to the Terminal Classic Period based on a modeled burner that accompanied it (Figure 133a). Seven speleothem fragments, a jadeite chip, and 3 olivella shells (2 shown in Figure 134d,e) also were recovered in association with this burial. This burial contained a minimum of two individuals. One is an older adult whose mandible shows much resorption and ante-mortem tooth loss. Some bone fragments, including cranium, are heavily burnt. The second individual is likely an adult male based on its massive teeth; the central upper incisor shows evidence of hypoplasia; this individual was likely 25 years old at the time of death.

SD C118F-5 was assigned to disarticulated human remains found in the rear (eastern side) of the building and resting on an eroded floor level (Figure 135). The human remains represent two individuals based on teeth and were accompanied by a single ceramic finger bowl (Figure 127d). One of the individuals was an adult with inlays and filing on the maxillary teeth; this individual display an "IK" pattern on its two central incisors and both incisors were probably inlaid with jadeite (one inlay missing); a lateral right incisor has notching and two inlays, one of hematite and the other of jadeite; a notched left upper canine is inlaid with pyrite. The other individual in this deposit was a sub-adult, approximately 15 years of age; the skull was present. No filing and no inlays on the central upper incisors, but they do show evidence of shoveling and hypoplasia; there is calculus on a lower premolar; supernumerary teeth are also present.

SD C118F-6 was assigned for a sealed cache in the core of Structure 8S16 that contained a lion's paw shell over a host of smaller items (Figures 136 and 137) that included 2 soapstone figurines, 2 shell figurines, and 6 large shell beads (Figure 138); also in the vicinity of this cache were 31 jadeite chips and 15 pyrite chips (what has been referred to elsewhere as "cache dirt"; see A. Chase and D. Chase 2006). This deposit likely dates to the Early Classic Period.

SD C118F-7 was assigned to a lidden urn cache (Figures 128b, 139-141) that was sealed in a pit below a deeply buried plaster floor in the core of Structure 8S16. The urn contained a host of smaller items (Figure 142) that included one large "serpentine" figurine (that may actually be

obsidian), two smaller figurines (one of stone and one of shell), 4 flamingo-tongue shells (two illustrated), 2 small clam shells, and three beads (one each of quartzite, jadeite, and shell). This deposit is transitional between the Late Preclassic and Early Classic Period.

SD C118F-8 was assigned for a cache sealed beneath a floor deeply buried in the core of Structure 8S16 (Figures 136, 143, and 144). The cache consisted of a lidded urn plus three finger bowls (Figure 128c-f); one of the finger bowls was associated with a middle human phalange; a first row proximal human phalange was also recovered in association with the deposit. The urn held a total of six shell beads (illustrated in A. Chase and D. Chase 2006: fig. 2). Three jadeite chips were also recovered in association with this deposit.

SD C118F-9 was assigned to an articulated interment placed in the front of Structure 8S16 above a set of capstones (Figure 145). The individual was flexed at the knees and placed on its right side with head to the south (extending into the section. All teeth were present; some showed evidence of calculus and hyploplasia; the incisors showed shoveling. The individual was an adult, but with virtually no wear on the third molars and little wear on the other teeth. Probably 18-25 years of age at time of death. A shell earing of Late Classic date (Figure 134f) accompanied the interment.

SD C118F-10 was assigned to an unexcavated burial found beneath the capstones upon which SD C118F-9 had been placed. An eastern facing for the chamber or crypt was located (Figure 146) and some long bone fragments were recovered. However, the interment was never dug because it was found too late in the 1996 field season.

SD C118F-11 was the designation given to a set of finger bowl caches consisting of three vessels (Figure 127e,f) that were placed just north of SD C118F-9 (Figure 145) and above what appears to have been an infilled tomb.

Looted Tombs Clean-Up

One of the goals of the 2019 field season was to clean-up looted deposits. Two such deposits were located, one to the northeast of the epicenter (Operation C122B) and one south of

the South Acropolis. Materials were collected in the looted areas of the northeastern group and an open tomb was noted in the northern building, but no excavation was done. In contrast, the tomb to the south of the epicenter was excavated at the beginning of the field season (Operation C215B).

Structure C69

Located in the valley directly south of the epicentral South Acropolis and west of the Pajaro-Ramonal Causeway was a small residential group whose eastern building had been looted. This looted tomb (Figure 147), located in Structure C69 (see A. Chase and D. Chase 1987: fig. 51 for location), was excavated and recorded at the beginning of the 2019 field season.

Operation C215B

When complete, the tomb had encompassed 1.98 cubic meters of space (Figures 148, 149, and 150). Although no capstones were in place, its northern end indicated that the chamber was 1.4 m in height; it was 2.1 m in length by 0.8 m in width No pottery was recovered and the only artifact recovered that may have originated from the tomb was a perforated shell disc (Figure 151a). Two adult teeth were collected from the chamber, but no other bone. One tooth was a right central incisor showing lateral notching for "Tau" (Romero B4) decoration. The other recovered tooth was a lower left molar.

Significance

After two field seasons of archaeological work in the Puchituk and Monterey districts of Caracol that has built upon an earlier settlement pattern program in these areas, it is possible to derive some preliminary conclusions from this research. First, while the inhabitants of Caracol all shared in the site's prosperity, specific markets at the site appeared to have promoted slightly different products during the Late Classic Period. The ceramic differences in terms of ceramic plate distributions that was noted for the northeast sector of Caracol (D. Chase and A. Chase 2014: 246, fig. 6), as a result of the earlier settlement pattern program, still holds, even with the newer research.

Archaeological investigation in the Monterey area has documented both early and late materials. Monterey clearly fluoresced during the Late Preclassic Period, as indicated by the ritual deposits that have been recovered. Yet, this area never seems to have been independent, as it did not develop an E Group complex like its neighbors Caracol proper and Cahal Pichik (see A. Chase and D. Chase 2017b). There was Late Classic occupation in this area, but it does not appear to have utilized mortuary structures in the same way as the rest of the site, as indicated by excavation in sizeable eastern buildings in both the Boulder and Pebble residential groups. It also would appear that the Monterey ballcourt plaza did not function as a market area during the Late Classic Period, which is consistent with it not being linked to the Caracol causeway system. Yet, there is a significant overlay of Terminal Classic materials in the Monterey area, as can be seen in the Terminal Classic interment from the Monterey residential group and from late ceramic materials recovered in association with the eastern pyramid in the Monterey public architecture.

Excavation in the Puchituk area has revealed patterning that is consistent with the Caracol epicentral residential groups. Interments, tombs, and caches all match patterns seen in the southern portions of Caracol. While no Late Preclassic occupation has been uncovered in the Puchituk region, a substantial amount of Early Classic Period material has, indicating that there was a fair amount of population in this part of the site during this era, something consistent with the establishment of the Puchituk public plaza in the early part of the Late Classic Period as a market area. Excavation in the residential groups in the immediate vicinity of Puchituk Plaza also suggest that there may have been the production of some product that required large unslipped ollas, especially as relatively large numbers of this class of ceramics were found on the floors of the stone buildings in the elite residential group and in two neighboring residential plazas. In contrast to the Monterey area, little in the way of Terminal Classic material has been recovered in the Puchituk region.

The work in both the Monterey and Puchituk regions has also raised questions about the populations that occupy these areas and how heterogenous they were. Urban environments attract

people and we know that there were people from outside of Caracol present in the city during the Terminal Classic Period (A. Chase and D. Chase 2020; Freiwald 2011). It is similarly likely, given Caracol's history (D. Chase and A. Chase 2017), that there were other immigrant populations living at the site throughout its history. Thus, some of the patterning that is being recovered in terms of the inclusion of burial items may, in fact, be reflective of group origin from outside the Caracol area. For instance, we suspect that a Peten-style footed dish found in some of Caracol's early Late Classic interments may be a marker for populations emigrating to Caracol from that portion of the Maya lowlands. DNA testing was started by Rick Smith during the 2019 field season on some of the individuals from the Puchituk area, and we are hopeful that these results may help answer such questions.

Research into Maya markets and market systems promises to significantly augment our understanding of the Classic Period Maya. The archaeological work at Caracol has documented that the site had a solar market system and that residential groups had access to a wide variety of quotidian, prestige, and ritual items that were provided to the inhabitants of the city through its markets. Excavation and analysis also has suggested that different kinds of goods were likely available and produced in different quantities in various parts of the site. The work undertaken in the vicinities of Puchituk Terminus and the Monterey area on both the public architecture and on the adjacent residential groups is fleshing out our understanding of a functioning urban market system as well as of social differences related to status or wealth that occurred in different parts of Caracol. Minimally, this research permits an investigation of "down-the-line" economic exchange and integration through the comparison of spatially discrete data sets from the Caracol epicenter, the Puchituk area, and the Monterey area. Thus, this research is demonstrating several things. First, it permits an archaeological determination of whether or not the same items were available in different parts of Caracol through its market system, providing an indirect measure of centralized versus distributed control of the site's economic system. Second, these investigations are yielding a large sample of residential deposits and materials that are not associated with the

central part of the city, providing a better view of socio-economic variability at the site. Third, the excavations in the vicinities of Monterey and Puchituk also provide a comparative sample of residential groups and public architecture that has substantial time depth. This research has confirmed the purposeful placement and construction of Puchituk on the cityscape during the early part of the Late Classic Period. Excavations in the Monterey area have revealed earlier remains and provide insight for an area of public architecture that was never connected to Caracol's causeway system. Finally, this research better explains how an ancient market system worked to socio-economically integrate a Maya city, something of interest to a broad spectrum of researchers working in Mesoamerica and elsewhere.

Appendix 1: Epigraphic Report on Recently Discovered Altars at Caracol, Belize

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This report follows up on an analogous account on the more recently discovered stelae (Helmke 2018) by providing new drawings and descriptions of the most recently discovered altars, which are presented in ascending numerical order. These monuments were documented and inspected by the author during the 2018 field season, securing measurements and photographs with a combination of natural light and artificial raking light, as well as field sketches. Scaled and othorectified photographs were used as templates for the drawings that were printed and then inked on high-silicate paper, which were then scanned and corrected in a raster graphic editor program, for final output as black and white line art. The conventions used in these drawings follow those developed and employed by the Corpus of Maya Hieroglyphic Inscriptions project (Graham 1975), with minor amendments suited to the particular monument, such as using differential stippling to indicate depth of relief, with sparser and thinner stippling representing shallow relief and the denser stippling denoting higher relief.

The Caracol Corpus

The epigraphic corpus of Caracol was first synthesized in the foundational study by Carl Beetz and Linton Satterthwaite (1981), reporting on the 21 stelae and 19 altars then known. Since that study, the epigraphy of Caracol has been covered in state-of-art treatments by Stephen Houston (1987, 1991), Nikolai Grube (1994) as well as Arlen and Diane Chase (Chase et al. 1991). These later studies in large part focused on Stelae 22 and 23 as well as Altars 21, 22 and 23 found as part of the Caracol Archaeological Project, under the direction of Arlen Chase and Diane Chase. With continued investigations at the archaeological site of Caracol, additional carved monuments have come to light since 1995, counting a total of four further stelae (Stela 24, 25, 26 and 27), two altars (Altar 25 and 26) and a ballcourt marker (Ballcourt Marker 4). In addition to references made in the progress reports of the respective field seasons (Chase and Chase 1996:7, 2001b:2, 2002:5), two studies have appeared, one on the B Group ballcourt markers (Helmke et al. 2006) and another on Altar 26 (Chase and Chase 2015b). With the exception of these two monuments, the more recently discovered monuments as a whole had not been the subject of a more detailed epigraphic treatment until last season's report (Helmke 2018). With renewed attention, new drawings of Altar 21, as well as Stelae 2 and 8 have also been drafted and publications prepared (Awe and Helmke 2014; Helmke et al. 2019; Martin 2005), and it is hoped that future efforts will likewise concentrate on other monuments including Stelae 7 and 22.

A Comment on Designations

The decision was made in 1991 to designate the recently discovered Giant Ajaw altar of the Chaquistero group (located 5.22 km north-northwest of the epicenter of Caracol) as Altar 24, in the same designatory sequence as that used for the monuments of Caracol proper, which is to say from the monumental epicenter (see Grube 1994:100-101, Fig. 9.9) (Figure 152). This is in keeping also with the designation of the carved stela of the Puchituk causeway terminus complex, as Stela 24 (Helmke 2018:28-29, Fig. 93), although the latter is the closest terminus to the epicenter, being located just 2.75 km to the northeast. Extending the radius slightly to 5.5 km around the epicenter of Caracol (covering an area of about 95 km²), inevitably means that all monuments found in the future at intervening locations in that area, as well as the terminus complexes of Ceiba (to the northwest), San Juan (to the west), Retiro (to the southwest), Ramonal (to the south), Conchita and Terminus C (to the southeast), will necessarily have to be incorporated in the monument designations of Caracol proper. This radius also allows the monuments of the earlier centers of Mountain Cow (to the east), and of the complexes of Cahal Pichik and Hatzcap Ceel in particular, as well as the site of La Rejolla (to the west, in what is now Guatemala) to have their own, site-specific monument designations, following the precedent that
has already been established in the scientific literature (Grube and Martin 2004:37, 40, 79, 88; Morris 2004; Thompson 1931). This is also in keeping with the designation of the Giant Ajaw altar found at the subsidiary site of Caballo, located some 11 km north of Caracol (Chase et al. 2014), which has received the site-specific designation of Caballo Altar 1 (Grube 1994:100, Fig. 9.10). It also follows, that causeway termini such as Cohune (to the north), Terminus A, New Maria Camp (to the northeast), Terminus B (to the east) and Round Hole Bank (to the south) should each have their own monument designations in the future, should this prove necessary.

Altar 24

Illustration: Figure 153.

Metrics: w: 204 cm. h: 140.5 cm. th: 16 cm. f-b: 212 mm. det: c. 2 mm.¹ Giant Ajaw altars at Caracol range in diameter between 1.07 and 2.25 m with the mean at around 1.69 m. This makes Altar 24 one of the three largest such Giant Ajaw altars, with the comparable, albeit fragmentary, Altar 1 at Caballo measuring in excess of 1.33 m in diameter (see Grube 1994:Fig. 9.10).²

Context: The altar was discovered at the start of the 1991 field season in an isolated plaza group named El Chaquistero, located some 5 km north-northwest of the monumental epicenter (Grube 1994:100; see also Chase et al. 2011:Fig. 1; Murtha 2009). The altar was found *in situ*, facing upwards, in front of the second largest structure of the group.

 $^{^{1}}$ w = width, h = height, th = thickness, f-b = foreground to background relief, det = detailed of incised carving. All measurements are expressed as maxima.

² Following the discovery of Altar 1 at Caballo in 1991, it was relocated as part of reconnaissance efforts conducted by members of the Social Archaeology Research Programme, operating in the northern Vaca Plateau. Exploring ancient Maya settlements to the south of Minanha and following up on reports of locals about the existence of a carved monument in the area, they relocated the altar, at which juncture it was realized that this was none other than the previously reported Caballo Altar 1, although evidently the site was clearly known by another name at the time (Gyles Iannone, pers. comm. 2005).

- Description: The altar has a rounded rectangular from with a quadrilobate frame that encloses a large central Tzolk'in date. The monument has fractured in the middle with two triangular sections missing, one from the central base and another at the upper right corner.
- Dating: The sole glyph on this monument provides the Period Ending date 7 Ajaw.
 Assuming that this a k'atun Period Ending in Baktun 9 (see Satterthwaite 1951:37, 1954), the most plausible anchor is the Long Count date 9.7.0.0.0, corresponding to AD 573. This dating would make the altar one of six dedicated during the reign of *Yajawte' K'inich* II (r. AD 553-593+) (see Martin and Grube 2008:88-90). Based on present evidence, the tradition of erecting Giant Ajaw altars at Caracol spanned from AD 495 and rapidly wanes after the reign of K'an II (r. AD 618-658) (Table 2).³
- Epigraphy: Altar 24 is a Giant Ajaw monument with a large Period-Ending date, written
 7-AJAW, for [ta] huk[te'] ajaw, 'on seven Ajaw', providing the Tzolk'in date of the larger Calendar Round 7 Ajaw [3 K'ank'in] of 9.7.0.0.0.
- Iconography: Aside from the large 7-Ajaw that dominates the center of the altar, the date is placed within a quadrilobate frame. Such frames are typically used to define supernatural portals (*e.g.*, Stone and Zender 2011:26, 231) and as such the date can be thought to emerge from an otherworldly realm or to demarcate an alternate

³ Based on present evidence the last securely dated Giant Ajaw altars are those dedicated during the reign of K'an II. One exception may be Altar 3, bearing the date 11 Ajaw. This altar is typically ascribed to the reign of K'an I and is thought to mark the Period Ending of 9.5.0.0.0 or AD 534. Assuming that this altar dedicates a k'atun Period Ending of Baktun 9, the only alternate placement is 9.18.0.0.0 of AD 790. This date is plausible and could be one of the earliest monuments of *Tum Yohl K'inich* (Ruler VIII)—who was active before the accession of *K'inich Joy K'awil* in AD 799 (Helmke et al. 2006). Yet, at present, there are no other monuments dating to this period, making this temporal assignation premature.

realm dominated by this date. Despite these conjectures, the precise motivations for the use of such a frame remain unknown.

Altar 25

Illustration: Figure 154.

Metrics:	w : 44 cm. h : 42.5 cm. th : 35.5 cm. f-b : 4.5 mm. det : 1 mm. With a diameter of
	0.44 m, Altar 25 is the smallest altar discovered at the site to date.

Context: The altar was found at the start of the 2001 field season in the eastern courtyard adjoining the Barrio palace compound (Chase and Chase 2001b:2).

Description: The altar has a squared form with rounded corners. Based on cross-section it broadly resembles the drum altars that are better known from Tikal, whereas the form of the upper surface compares to the column altars of Tikal. The upper surface is decorated with a single large full-figure glyph.

- Dating: Without associated text and given its unstratified, surface context, it is not possible to assign a specific date to this monument. Nevertheless, as the altar was found in the Barrio palace compound, and considering its relatively small size, I suggest that this is a Terminal Classic monument. The Barrio compound exhibited continued and intensive usage and refurbishments in the Terminal Classic making this temporal assignation probable (Chase and Chase 2001b). This is reinforced by the observation that all Giant Ajaw altars predate AD 652 (9.11.0.0.0) and that Terminal Classic altars generally exhibit a trend of decreasing diameter size, with Altar 23 dated to AD 800 (2.04 m dia.) leading to Altar 12 and 13 in AD 820 and 830 (mean dia. 1.59 m) and ending on to Altar 26 in AD 884 (0.78 m dia.) (see Table 2 and Figure 155).
- Iconography and Epigraphy: The carved upper surface is decorated with a single large full-figure glyph. The glyph in question is a stylized moon crescent (T683 in Thompson

1962:283-289) that encloses a seated female silhouette. This is undoubtedly a representation of the moon goddess (see Stone and Zender 2011:146-147). Her hair is bound in a cloth wrap, and she is shown wearing a *huipil* dress and a large necklace, with a string of beads running down her back. The larger element before her face is indistinct, but based on comparable depictions, undoubtedly represents a large and elaborate flower, such as a water lily blossom. A circular element at her nose probably symbolizes her breath (see Houston and Taube 2000:265-273; Kettunen 2005). Rather than representing female individual with the traits of the moon goddess, it may be possible that the altar represents an exalted and ancestral maternal figure deified in the guise of the moon goddess. The same type of motif is known from the monuments of Yaxchilan, for instance. In the case of Yaxchilan, the deceased parents are represented in the heavens, as witnesses over historical scenes and actors, with fathers typically represented within sun disks, whereas mothers appears in lunar crescents (see Tate 1991). If the same symbolism was intended at Caracol, we may assume that another, as yet undiscovered, altar is to be found within the Barrio compound, representing a seated male figure within a solar disk, the two altars once forming part of a set, perhaps paired with another upright monument, such as a stela.

Altar 26

Illustration: Figure 156.

Metrics: w: 65 cm. h: 78 cm. th: >12 cm. f-b: 4.5 mm. det: 1 ~ 2 mm.

Context: The monument was found on the surface in January 2015, at the summit of Structure A13, directly to the west of the archaeological camp at the site (Chase and Chase 2015b:47). Based on its context and the relative thinness of the monument it is supposed to be in a secondary context.

- Description: The altar is a somewhat elongated, although mostly circular, figurative altar. The upper surface is carved and based on its relatively thin section, appears to have spalled off a much larger original monument. As such, the more massive butt is, quite possibly, still located *in situ* at its original locus, with the uppermost carved surface moved in antiquity to the summit of Str. A13 (Arlen Chase, pers. comm. 2018).
- Dating: Based on the preserved Calendar Round at the onset of the glyphic caption, which reads 8 Ajaw 8 Mol, the most plausible anchor to the Long Count is 10.2.15.0.0 or AD 884 (Chase and Chase 2015b:47-48). With this date, the longevity of the glyphic corpus of Caracol is extended by 25 years, from AD 859, previously the latest date on the all-glyphic Stela 10 (Beetz and Satterthwaite 1981:42-43; Houston 1987:Fig. 71b).
- Iconography: The imagery represents two seated male individuals. The larger and more dominant figure of the two is seated at the right and wears a large turban-like headdress around a cloth head-wrap, topped by what appears to be a skeletal bird's head. The smaller and more subservient figure at the left wears a comparable headdress with part of a large circular goggle tied to the front. Such goggles are frequently depicted with priestly officiants bearing the title of *yajaw k'ahk'* or 'vassal of fire' (Zender 2004:195-210). In addition to tending ritual fires, such ritual specialists also minded ritual regalia at temples, served martial functions on the battlefield, including the preparation of captives, and also assisted the monarch at court. Both men wear simple loincloths, wristlets and necklaces consisting of a single large, threaded tubular bead. Given their hand gestures, with pointed index fingers, and a right hand across the chest (as a sign of deference), the two individuals appear to be negotiating or discussing, and

thereby conform to the traits and characteristics of "confrontation scenes" that are typical of Terminal Classic Maya imagery (see Chase 1985).

Epigraphy: The scene is accompanied by a glyphic caption that provides some supplementary information to the iconography. The text can be divided into two main parts: Larger glyphs in high-relief comprising the first clause, and smaller glyphs incised into the background that together make up a secondary clause. The reading order of the primary text appears to be in vertical columns, with the central column read first and then from left edge inwards back towards the center. The secondary clause was apparently for information that was deemed less significant, perhaps naming the subsidiary figure. As we have seen, the text opens with the Calendar Round 8 Ajaw 8 Mol (A1-A2) that corresponds to the remarkably late, Long Count date 10.2.15.0.0 or AD 884. The main event that transpired on this date is provided right away and although segments are eroded, can be made out as **u-CHOK-wa** (A3a) {**ch'a**}-**ja** (A3b), for *u-choko'w ch'aj*, or 'he scattered drops'. This is a very significant ritual that was carried out at important calendrical stations in an emulation of agricultural rites (see Jovobbá et al. 2018). The text then goes on to mention who conducted this ritual. The first part of the name is initiated by the honorific k'inich (B1), written K'INICH-chi**ni** (see Colas 2003), which precedes and indistinct animal head with a syllabogram as subfix (C2), and a glyph block of three phonograms including what appear to be **ta**, **ma** (or **ya**) and **na** (C3). The main clause is closed by the protagonist's title, here written somewhat surprisingly as **[ba]hi-ka-ba** for *baah*kab, literally 'head-earth' or "chief of the land" in more figurative terms. The incised secondary clause then follows as a separate column. Being incised rather shallowly, it has not preserved well and is thereby not all too clear. Nonetheless, what may be part of the Caracol dynastic title seems to be represented here

(Chase and Chase 2015b:48). This title then appears to specify that one of the figures was the ruler of Caracol, although it is unclear whether this is the same person as the one bearing the title *baahkab*. Nevertheless, the imagery makes it clear that this monument commemorates not only an important Period Ending late in the ninth century, but also an important meeting between two elite figures, one of regal status and the other serving in a priestly capacity. Despite the turmoil of the age, Altar 26 makes it clear that the remaining elite attempted to persevere and maintain the rituals of old and the concomitant social structure.

Acknowledgements: Many thanks to the project directors, Arlen and Diane Chase for inviting me to serve as epigrapher on their project. I would also like to thank Sergei Vepretskii and Ivan Savchenko for their helpful comments and observations on the text of Altar 26.

Apprendix 2: Photographing the monuments of Caracol, Belize

Bruce Love

New photographs were made for many of the monuments of Caracol by me for use by the Caracol Archaeological Project during a 2019 field visit lasting from March 1 to March 8 with a one-day follow up on March 22. During the day the monuments were visited, cleaned, measured, sketched, and snap shots were taken; at night they were photographed using a Nikon d500s and a Bolt electronic battery-operated flash.

Two kinds of photographs were taken: (1) portrait shots, that is, straight-on photographs shot with side-raking light, that would later be used in reports and publications, and (2) drawing aids, that is, multiple close-up detail shots with multiple side-raking light angles that would not be published but would be used by the project illustrator(s) to make drawings of the monuments.

After leaving the field, the original RAW images were imported into Adobe Lightroom and Adobe Photoshop for developing, and the resulting portraits were reduced to JPGs for this report.

At the time of the field visit, many of the monuments were in the process of being moved into the newly erected Monument Building while others remained in the field at their original locations. Over the course of nine days and nights, forty monuments were photographed, all presented here is this report.

I thank project director Arlen Chase for facilitating my work, UNLV student archaeologist Angel Robledo for helping me with the night-time work, as well as Emiddio Cruz, Park Manager, and Jorge Can, Conservator in charge of monuments, all of whose close collaboration made this work possible.

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TABLE 1:
Caracol Project Members: 2019 Field Season

Staff:			
	Directors		
		Arlen F. Chase	C1
		Diane Z. Chase	C2
	Lab and Field	Directors	
		Melissa Badillo	C166
		Maureen Carpenter	C56
		Adrian S.Z. Chase	C154
	Field Supervis	sors	
		Brooke Barteaux	C238
		Roxayn Povidas	C244
		Eric Fries	C247
	Field Assistan	ts	
		Mayra Arzate	C248
		Haley Dougherty	C249
		Lauren Salazar	C250
		Angelo Robledo	C251
	Specialists		
		Bruce Love (photography)	C252
		Rick Smith (DNA)	C253
	Detailed Draw	ving	
		Lisa Johnson	C183
		Lucas Johnson	C134
Polizo	an Lahan		
Denze	Kitohon		
	Kitchen	Angelica Manasas	
		Angenea Meneses	
		Dinua Autora Meneses	
		Nusita Isauuta Luiwalli Orfalia Maralaa	
		Offena Morales	

Field

Carlos Mendez
Saul Galeano
Jaime Iglesias
Asterio Moralez
Julio M. Trujillo
Jorge Israel Itza
Flavio Pirir
Gustavo Adolfo Mendez
Abner David Mendez
Jose Lopez
Gerardo Ismael Magana
Edwin Rafael Chan

Table 2:The altars of Caracol presented in chronological sequence of their dedication.
Note that data entries in black font refer to Giant Ajaw altars, whereas gray data
entries are for non-Giant Ajaw altars (based on Beetz and Satterthwaite
1981:110-111; Houston 1987:99-100; Grube 1994:111-112, with amendments by
the author for particular altars where alternate temporal placements are
warranted).

Monument	Ajaw	Long Count	Julian	Reign	Max. dia.	Comment
Altar 4	2 Ajaw 13?	9.3.0.0.0	495	Yajawte' K'inich I	1.77 m	precursor to Altar 17
Altar 2	Ajaw	9.4.0.0.0	514	Yajawte' K'inich I	1.17 m	
Altar 3	11 Ajaw	9.5.0.0.0	534	K'an I	1.78 m	9.18.0.0.0 (alternate)
Altar 14	11 Ajaw	9.5.0.0.0	534	K'an I	1.82 m	
Altar 5	9? Ajaw	9.6.0.0.0	554	Yajawte' K'inich II	1.93 m	precursor to Altar 21
Altar 6	7 Ajaw	9.7.0.0.0	573	Yajawte' K'inich II	2.25 m	
Altar 16	7 Ajaw	9.7.0.0.0	573	Yajawte' K'inich II	1.07 m	
Altar 24	7 Ajaw	9.7.0.0.0	573	Yajawte' K'inich II	2.04 m	
Altar 1	5 Ajaw	9.8.0.0.0	593	Yajawte' K'inich II	2.07 m	
Altar 18	5 Ajaw	9.8.0.0.0	593	Yajawte' K'inich II	1.60 m	
Altar 11	3? Ajaw	9.9.0.0.0	613	Knot Ajaw	1.67 m	
Altar 15	3? Ajaw	9.9.0.0.0	613	Knot Ajaw	2.00 m	
Altar 19	1 Ajaw	9.10.0.0.0	633	K'an II	1.81 m	
Altar 21	1 Ajaw	9.10.0.0.0	633	K'an II	1.26 m	preceded by Altar 5
Altar 7	12 Ajaw	9.11.0.0.0	652	K'an II	1.38 m	
Altar 17	12 Ajaw	9.11.0.0.0	652	K'an II	1.36 m	preceded by Altar 4
Altar 23	10 Ajaw	9.18.10.0.0	800	K'inich Joy K'awil K'inich Tilbil	2.04 m	
Altar 22	9 Ajaw	9.19.0.0.0	810	Yopaat K'inich Tilbil	0.95 m	
Altar 12	8 Ajaw	9.19.10.0.0	820	Yopaat K'inich Tilbil	1.58 m	
Altar 13	7 Ajaw	10.0.0.0.0	830	Yopaat	1.60 m	
Altar 10		10.0.19.6.14	849	K'an III	1.15 m	
Altar 26	8 Ajaw	10.2.15.0.0	884	Ruler XIII?	0.78 m	
Altar 25				?	0.44 m	probably 800-860

Figures

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Figure 166:	Caracol Ballcourt Markers 1 and 2 (photographed by Bruce Love).
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Figure 1: Map of ground-surveyed settlement at Caracol showing the location of Puchituk and Monterey, the areas of focus for the 2018-2020 field seasons.



Figure 2: Map showing location of excavated groups within the northeast sector of Caracol. The groups excavated during 2018 and 2019 were more intensively investigated that the residential groups excavated during 1994 through 1996 (with two exceptions; G = Monterey [included in this report]). The 2019 investigations focused on three co-located groups on a ridge directly east of the Puchituk Terminus (A = Barracuda; B = Tuna; C = Snapper) and on the Monterey public architecture (E) and residential groups located east (D = Pebble) and west (F = Boulder) of it. Additionally, this report contains information on a residential group excavated in 1994 that clearly articulates with the Monterey public architecture (G = Monterey).

Barracuda







Figure 4: Photographs of excavations related to Operation C216B: The summit of Caracol Structures 4D5 (upper) and deeper excavation of tomb (lower).



Caracol Structure 3D5 excv. C216B





Figure 6: Plans of the front parts of Operation C216B.









Figure 8: Ceramics recovered in association with Caracol Structures 4D4 (d) and 4D5 (a-c): a. probably eroded Tinaja Red; b. undesignated ceramic bottle neck; c. eroded Saxche Orange Polychrome; d. probably Miseria Appliqued.



Figure 9: Artifactual materials recovered in association with Operation C216B: a., b. chert drills; c. obsidian flake; d.-g. chert flakes; h. fragmentary chert core platform; i.,j. fragmentary obsidian blades; k.-n. chert blades; o. worked speleothem fragment; p. chert core; q. chert flake tool r. celt fragment; s. fragmentary river cobble; t. fragmentary limestone bark-beater; u.-y. limestone bars; z. ceramic applique.



Figure 9: Artifactual materials recovered in association with Operation C216B: a., b. chert drills; c. obsidian flake; d.-g. chert flakes; h. fragmentary chert core platform; i.,j. fragmentary obsidian blades; k.-n. chert blades; o. worked speleothem fragment; p. chert core; q. chert flake tool r. celt fragment; s. fragmentary river cobble; t. fragmentary limestone bark-beater; u.-y. limestone bars; z. ceramic applique.





Figure 10: Plan of capstones over SD C216B-1.





Figure 11: North-south cross-section through SD C216B-1.

SD C216B-1



Figure 12: Plan of SD C216B-1, showing pottery vessels.




Figure 13: Plan of SD C216B-1, showing underlying human bone.



Figure 14: Ceramic vessels associated with SD C216B-1: a., e. eroded Molino Black; b. Palmar Orange Polychrome; c. eroded Bontifela Orange; d., f., g. Machete Orange-Polychrome; h. Molino Black; i. Saxche Orange-Polychrome; j. Valentin Unslipped.



Figure 14: Ceramic vessels associated with SD C216B-1: a., e. eroded Molino Black; b. Palmar Orange Polychrome; c. eroded Bontifela Orange; d., f., g. Machete Orange-Polychrome; h. Molino Black; i. Saxche Orange-Polychrome; j. Valentin Unslipped.



Figure 15: Photographs of Operation C216B: caches located in the vicinity of the front step for Structure 4D5 (upper) and deeper excavation into the building (lower).

excv C216B







Figure 17: Cache vessels associated with Operation C216B, all Ceiba Unslipped except f. which is probably Paila Unslipped: a. SD C216B-2; b.-d. SD C216B-3; e. SD C216B-5; f. SD C216B-6; g. partial cache recovered in structure fill.



Figure 18: Face cache from SD C216B-4 (Hebe Modeled) with outline of paint still visible.



SD C216B-7

Figure 19: Plan of SD C216B-7, a burial placed into the fill at the summit of Caracol Structure C4D5.

SD C216B-8



Figure 20: Plan of SD C216B-8, two vessels just above bedrock in the middle of Caracol Structure C4D5.



Figure 21: Ceramic vessels associated with SD C216B-8: a. Paila Unslipped, b. Corriental Appliqued.



Figure 22: Photograph of excavation into Structure 4D4 (Operation C216C).







Figure 23: Section through Structure 4D4, as revealed by Operation C216C.



Figure 24: Plan of Operation C216C, showing the two facings recovered.

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Figure 25: Artifactual materials recovered in association with Operation C216C: a. greenstone celt fragment; b. river cobble fragment; c. chert blade; d. fragmentary green obsidian point; e. ceramic figurine fragment (foot); f. worked shell disc.

Caracol Structure **4**D7 excv. C216D















Figure 28: Photographs of Caracol Structure 4D10 and Operation C217B: general trench (upper) and reconstructed stela (lower).







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Figure 31: Granite metate fragment and limestone mano fragment associated with Operation C217B.



Figure 32: Artifacts associated with Operation C217B: a. limestone abrader; b. fragmentary limestone bar; c. chert core tool; d. chert drill; e. chert flake.



Figure 33: Section through frontal stela showing reconstructed height of monument based on fragments recovered.





Figure 34: Plan of the front of Operation C217B showing location of stela and locations and plans of SDs C217B-1, C217B-2, C217B-3, C217B-4, C217B-5, and C217B-6.



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Figure 35: Face caches (Hebe Modeled) recovered from Operation C217B-1: a. SD C217B-3; b. SD C217B-1; c. SD C217B-2.

SD C217B-1





Figure 36: Detailed plan of interior of SD C217B-1.









Figure 37: Finger bowls and cache base (Ceiba Unslipped) recovered from Operation C217B-1: a. SD C217B-4; b., c. S.D. C217B-5; d. S.D. C217B-6; e. S.D. C217B-8.





Figure 38: Plan of Capstones over SD C217B-7.





Figure 39: Plan of SD C217B-7.



Figure 40: Lithics associated with SD C217B-7: a., b. chert cores; c., d. chert flakes; e. chert nodule; f., g. quartz drills; h.-j. fragmentary obsidian blades.





Figure 41: Plan of capstones over SD C217B-11 and SD C217B-8 just north of the capstones.



Figure 42: Artifacts associated with SDs C217B-8 (a), C217B-9 (b-e), C217B-11 (f-j), and C217B-13 (k): a. fragmentary obsidian blade; b.-d. complete obsidian blades; e. modified spondylus shell; f.-i. obsidian blade and flake fragments; j. modified conch shell; k. spondylus shell adorno.







Figure 44: Photographs of SD C217B-1 (upper) and SDs C217B-9, -10, and -11 (lower).

SD C217B-9



Figure 45: Lower plan of SD C217B-9.



SD C217B-11

Figure 46: Cross-section through SD C217B-11.





Figure 47: Detailed plans of southern end of SD C217B-11.


Figure 48: Ceramic vessels associated with SD C217B-11: a. Ceiba Unslipped; b. Palmar Orange Polychrome; c. eroded Machete Orange Polychrome; d. Valentin Unslipped.

excv C217B



Figure 49: Plan of capstones over SD C217B-12.



Figure 50: Detailed plans of SD C217B-12.









Figure 51: Cross-section through SD C217B-12.



Figure 52: Photographs of SD C217B-12 (upper) and SD C217B-13 (lower).



Figure 53: Ceramic vessels associated with SD C217B-12: a., d. Ceiba Unslipped (d. with black exterior trickle/burning); b., i., j., l. Machete Orange Polychrome; c. Canoa Incised; e., f. Saxche Orange Polychrome; g. Molino Black; h. Veracal Orange; k., m., n. Pajarito Orange Polychrome.



Figure 53: Ceramic vessels associated with SD C217B-12: a., d. Ceiba Unslipped (d. with black exterior trickle/burning); b., i., j., l. Machete Orange Polychrome; c. Canoa Incised; e., f. Saxche Orange Polychrome; g. Molino Black; h. Veracal Orange; k., m., n. Pajarito Orange Polychrome.



Figure 53: Ceramic vessels associated with SD C217B-12: a., d. Ceiba Unslipped (d. with black exterior trickle/burning); b., i., j., l. Machete Orange Polychrome; c. Canoa Incised; e., f. Saxche Orange Polychrome; g. Molino Black; h. Veracal Orange; k., m., n. Pajarito Orange Polychrome.



Figure 54: Lithics associated with SD C217B-12: a., b., i., j., k. chert flake tools; c., d. quartz drills; e. obsidian fragment; g., h., q.-u. obsidian blades; v. obsidian lancet.



Figure 55: Artifacts associated with SD C217B-12: a. bone awl; b. deer antler tool; c. bone awl fragment; d. incised and perforated jaguar tooth; e. drilled dog tooth; f. limestone spindle whorl; g. incised quartzite spindle whorl; h. ear-shell plug with jadeite pebble interior; i. perforated jadeite bead; j., k. jadeite chips; l. jadeite pectoral; m. censerware handle.





Shell artifacts associated with SD C217B-12: a. pair of incised conch shell discs; b. pair of perforated conch shell discs; c., d. open ring conch shell discs; e., f., p., q. perforated conch shell discs; g., h. partial conch sell discs; i., j. shell beads with drop design of flowers; k., l. conch shell discs; m. notched conch shell disc; n. perforated spondylus disc; o. perforated square conch shell; r. incised and perforated conch shell earing in shape of star; s. star-shaped perforated conch shell earing; t. partial conch shell ring; u. partial clam shell ring; v. incised conch shell disc; w. star-shaped conch adorno; x., y. drilled square conch shell adornos; z., bb., gg. conch shell ear plugs; aa. conch bead; cc.-ff. clam shell fragments; hh. conch shell debitage; ii. incised and perforated conch shell disc.



Figure 57: Olivella beads associated with SD C217B-12, except for w., which is moon shell.

SD C217B-13



Figure 58: Plan of capstones over SD C217B-13.





S.D. C217B-13



Figure 60: Cross-section of SD C217B-13.



Figure 61: Ceramic vessels associated with SD C217B-13: a. Valentin Unslipped; b. eroded Veracal Orange; c. eroded Pajarito Orange Polychrome; d. Dos Arroyos Orange Polychrome.

Snapper



Figure 62: Plan of Snapper Group, showing locations of Operations C218B and C218C.



Figure 63: Photographs of Operation C218B (upper) and Operation C218C (lower).





Figure 64: Section through Caracol Structure 4D14, as revealed in Operation C218B.

Caracol Structure **4D14** excv. C218B



Figure 65: Plan of Caracol Structure 4D14.



Figure 66: Plan of floor segments recovered in the eastern end of Operation C218B.



Figure 67: Section of Caracol Structure 4D15, as revealed in Operation C218C.



Figure 68: Plan of Pebble Residential Group, showing location of Operations C219B, C219C, and C219D.



Figure 69:

Photographs of Caracol Structure 8S12 and Operation C219B: the summit of the building (upper); the axial trench (lower).









Figure 71: Plan of lower step for the substructure supporting Caracol Structure 8S12.



Figure 72: Plan of the summit building for Caracol Structure 8S12.



Figure 73: Partial ceramic vessels associated with Operation C219B: a. eroded Palmar Orange-Polychrome; b., c. Valentin Unslipped.



Figure 74: Artifactual materials associated with Operation C219B: a. chert point; b. fragmentary chert point; c. fragmentary chert biface; d. clam shell; e. limestone bar; f. chert flake.



Figure 75: Groundstone metate fragments on summit floor of Caracol Structure 8S2.



Figure 76: Granite metate fragment from the summit floor of Caracol Structure 8S2.



Figure 77: Photographs of Operations C219C (upper) and C219D (lower).



Figure 78: Eastern wall of section through Caracol Structure 8S10, revealed in Operation C219C.



Figure 79: Western wall of section through Caracol Structure 8S10, revealed in Operation C219C.






excv C119C



Figure 81: Plan of mano and metate on lower floor in northern extension of Operation C219C.



Figure 82: Metate from lower floor in Operation C219C.



Figure 83: Artifactual materials associated with Operation C219C (a., c.) and Operation C219D (b.): a. mano from lower floor; b. quartz flake; c. drilled olivella shell.



Caracol Structure 8S11

excv. C219D

Figure 84: Section through Caracol Structure 8S11, revealed in Operation C219D.





Figure 85: Plans of Operation C219D.



Figure 86: Partial ceramics associated with Operation C219D: a. undesignated type (unslipped with appliqued shoulder decoration); b. Valentin Unslipped; c. probably Palmar Orange-Polychrome; d. San Pedro Impressed (Belize Red); e. eroded Tialipa Brown.





Figure 88: Photograph of the Caracol Structure 8R13 axial trench (upper) and the summit excavation (lower).















Figure 93: Partial ceramic vessels associated with Operation C220B: a. Chaquiste Impressed; b., h. Tinaja Red; c. Tialipa Brown Composite; d., f. Valentin Unslipped; e. eroded Tinaja Red.; g. Roaring Creek Red.



Figure 94: Artifactual materials associated with Operation C220B: a., d. limestone bar fragments; b. chert core; c. granite mano; e.-h. jute shells.



Figure 95: Photographs of Operation C220B, showing deep summit excavation (upper) and SD C220B-2 (lower).



excv C220B

Figure 96: Plan of Operation C220B, showing the locations of SD C220B-1 and SD C220B-2.



Figure 97: Ceramics from Operation C220B, all Paila Unslipped, associated with SD C220B-1 (a) and materials sealed beneath the floor under the two SDs (b., c.).









Figure 99: Detailed drawing of the contents of the urn in SD C220B-2.



Figure 100: Artifactual materials associated with SD C220B-1 (a) and SD C220B-2 (b-r): a. jadeite bead; b.-d. flamingo-tongue shells; e.-h. tubular shell beads; i.-p. circular shell beads; q., r. jadeite beads.



Figure 101:Photograph of Monterey ballcourt and Operation C220C, showing alleyway
excavation (upper) and new ballcourt marker (lower).





excv C220C





Figure 103: Plan of Monterey ballcourt maker in Operation C220C.

excv C220C



Figure 104: Section through Monterey ballcourt marker in Operation C220C.



Boulder

Figure 105: Plan of Boulder Residential Group, showing location of Operation C221B.



Figure 106: Photograph of Caracol Structure 8R3 and Operation C221B.







Figure 108: Plan of Operation C221B.



Figure 109: Burner collected from Boulder Residential Group in 1994: Monterey Modeled.





Figure 110: Detailed plan of potential deposit in front fill of Operation C221B.



Figure 111: Artifactual materials associated with Operation C221B: a., b. obsidian blades; c. chert biface fragment; d. limestone bar fragment; e. quartzite ball; f. fragmentary incised and shaped shell disc; g. bivalve mussel shell; h. jute shell.



Figure 112: Plan of Monterey Residential Group, showing location of Operation C118 excavations.







Figure 114: Plan of Operation C118B.





Figure 115: Southern section through Caracol Structure 8S20, as represented by Operation C118C.




Figure 116: Northern section through Caracol Structure 8S20, as represented by Operation C118C.

Caracol Structure 8S20 excv. C118C



Figure 117: Plan of upper structure exposed in Operation C118C.





Caracol Structure 8S14 excv. C118D



Figure 119: Plan of stairs found in Operation C118D.



Caracol Structure 8S14 excv. C118D

Figure 120: Plans associated with northern end of Operation C118D.



Figure 121: Detailed plan of front room and bench recovered in Operation C118D.



Caracol Structure 8S18

Figure 122: Section through Caracol Structure 8S18, as represented by Operation C118E.





Figure 123: Plan of Operation C118E.





Caracol Structure 8S16 excv. C118F



Figure 125: Plan of front section of Operation C118F.





Figure 126: Detailed plans of floors recovered in Operation C118F.



Figure 127:Cache vessels recovered in Operation C118F, all Ceiba Unslipped:
a. SD C118F-1; b., c. SD C118F-3; d. SD C118F-5; e., f. SD C118F11.



Figure 128: Earlier cache vessels recovered in Operation C118F (a., d.-f. Ceiba Unslipped; b., c. undesignated): a. SD C118F-2; b. SD C118F-7; c., d.-f. SD C118F-8.

excv. C118F



Figure 129: Detailed plan showing locations of SD C118F-1 and SD C118F-4.





Figure 130: Detailed plan showing location of SD C118F-2.

excv. C118F



Figure 131: Detailed plan showing location of SD C118F-3.









excv. C118F





excv. C118F

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Figure 133: Ceramic vessels associated with Operations C118D (a) and C118F (b): a. undesignated unslipped; b. Monterey Modeled (associated with SD C118F-4).



Figure 134: Artifactual materials associated with Operation C118C (a., b.) and C118F (c.-f.): a. shell disc (C118C/15); b shell pendant (C118C/24); c. polished jadeite ball (SD C118F-3); d., e. Olivella shells (SD C118F-4); f. carved shell earplug (SD C118F-9).



Figure 135: Detailed plan of SD C118F-5.



Figure 136: Photographs of SD C118F-6 (upper) and SD C118F-8 (lower).

S.D. C118F-6



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Figure 137: Detailed plan of SD C118F-6.





Figure 138: Artifacts associated with SD C118F-6: a. Lion's Paw shell; b.,d. soapstone figurines; c.,e. carved shell figurines; f.-k. carved shell beads.



Figure 139: Photographs of SD C118F-7, showing excavation (upper) and contents (lower).





Figure 140: Plans and section relating to S.D. C118F-7.



Figure 141: Detailed plans of the interior of S.D. C118F-7.



Figure 142: Artifactual material associated inside S.D. C118F-7: a. serpentine Charlie Chaplin figure; b. stone Charlie Chaplin figure; c. shell Charlie Chaplin figure; d., e. flamingo tongue shells; f., g. clam shells; h. quartzite bead; i. jadeite bead; j. shell bead.







Figure 143: Plan and section relating to SD C118F-8.



Figure 144: Detailed plans of SD C118F-8.





Figure 145: Detailed plan of SD C118F-9 and SD C118F-11.



S.D. C118F-10

Figure 146: Detailed plan of SD C118F-10.



Figure 147: Photograph of excavated tomb in Structure C69, Operation C215B.










Figure 150: Plan of tomb in Operation C215B.



0 1 2 cm

Figure 151: Artifacts association with Operation C215B: a. perforated shell disc; b. obsidian flake.



Figure 152: Map of the Caracol region showing the distribution of causeways and termini as well as the 5.5 km radius that encompasses epicentral monument designations (map by Christophe Helmke, based on Chase et al. 2011:Fig. 1).



Figure 153: Upper surface of Altar 24 (drawing by Christophe Helmke, after a drawing by Nikolai Grube, in Grube 1994:Fig. 9.9).



Figure 154: Upper surface of Altar 25 (drawing by Christophe Helmke).



Figure 155: Plot of the maximal diameter of Caracol altars, plotted chronologically. Note the distribution of altars dating to the Middle Classic and those dating to the Terminal Classic. The linear trendline reveals the general trend of decreasing diameter (chart by Christophe Helmke).



Figure 156: Upper surface of Altar 26 (drawing by Christophe Helmke).



Figure 157: Caracol Altars 1 and 2 (photographed by Bruce Love).



Figure 158: Caracol Altars 3 and 4 (photographed by Bruce Love).



Figure 159: Caracol Altars 5 and 6 (photographed by Bruce Love).



Figure 160: Caracol Altars 11 and 12 (photographed by Bruce Love).



Figure 161: Caracol Altars 14 and 15 (photographed by Bruce Love).



Figure 162: Caracol Altars 16 and 17 (photographed by Bruce Love).



Figure 163: Caracol Altars 19 and 21 (photographed by Bruce Love).



Figure 164: Caracol Altars 22 and 23 (photographed by Bruce Love).



Figure 165: Caracol Altars 24 and 26 (photographed by Bruce Love).



Figure 166: Caracol Ballcourt Markers 1 and 2 (photographed by Bruce Love).



Figure 167: Caracol Ballcourt Markers 3 and 4 (photographed by Bruce Love).



Figure 168: Caracol Stelae 1 and 7 (photographed by Bruce Love).



Figure 169: Caracol Stelae 8 and 9 (photographed by Bruce Love).



Figure 170: Caracol Stelae 10 and 11 (photographed by Bruce Love).



Figure 171: Caracol Stelae 12 and 13 [back] (photographed by Bruce Love).



Figure 172: Caracol Stelae 14 and 18 (photographed by Bruce Love).



Figure 173: Caracol Stela 19 (photographed by Bruce Love).



Figure 174: Caracol Stela 20 and a possible A Group stela (photographed by Bruce Love).



Figure 175: Caracol Stela 21 and 22 (photographed by Bruce Love).



Figure 176: Caracol Stelae 25, 26, and 27 (photographed by Bruce Love).