

EARTHWATCH INSTITUTE FIELD REPORT

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Earthwatch Institute uses the UNESCO Definition of a Sustainable Environment: *A sustainable environment is one in which the natural environment, economic development and social life are seen as mutually dependent - and the interaction between them contributes to the sustainability and enhancement of the quality of people's lives and the natural environment.*

This field report will be publicized on our weblink with the United Nations Environment Program (UNEP) World Conservation Monitoring Centre (WCMC) at www.unep-wcmc.org. This website is available to the general public.

Project Title: Guatemala's Ancient Maya

Principal Investigator (s): Jonathan Kaplan, Ph.D.

Position/Affiliations: Adjunct Assistant Professor, Department of Anthropology, University of New Mexico; Research Associate, Office of Archaeological Studies, Museum of New Mexico

Research Site(s): Chocolá, Suchitepéquez, Guatemala; Latitude 14.62, Longitude 91.43

Local Management Status of the Research Site(s): Based on information provided by the project, the archaeological site will be declared part of the cultural patrimony of Guatemala and thus protected from destructive activities or developments

Key Research Objectives:

- The material substrate and cultural process underpinnings of the rise to complex society and high culture in the trajectory towards Classic Maya civilization in the seminal Southern Maya Zone
- ancient hydraulics, intensive monocrop agriculture of cacao and control of ancient trade routes; core-periphery relations early in Maya prehistory
- ethnic interaction and the construction of Maya identity
- early urbanism and the development of core Maya ideology

Data Collection and Results

a) Give a concise account of the data you have collected during the past field season.

Data recovered indicate the spatial extent, age, and duration of the ancient remains and provide information about the social, political, and economic organisation as demonstrated through excavation of ancient structures. In addition to GPS transect survey, which extended the area of the ancient remains of Chocolá to 5.5 by 2.0 k, grid excavation and mapping by Total Station was undertaken of three important cobble-built

Preclassic constructions: 1) a large elite apparent palace, 2) a very large platform with apparent *alfardas* (piers) and *escalinatas* (stairways), 3) a very extensive subterranean canal system.

The palace, measuring 12 x 6 m and oriented to the cardinal directions, is located in the northern precincts of the ancient city, an area of many massive low platform mounds and which, from information from excavations in 2003 and 2004, contains other residential structures. Built of river-smoothed and artificially reshaped cobbles retrieved from the Chocolá River 100 m to the east and down a steep embankment, the edifice is novel in its design and offers fundamentally new information about early architecture in the seminal Southern Maya Zone. Discovery of sophisticated construction of sub floor canals and specifically of smaller conduits, drawing water from a massive canal system placed outside of the palace and delivering water to an inner well or cistern, demonstrate that the ancient *Chocolenses* not only diverted water to avoid erosive effects to their structures but redirected it into residences for domestic uses. A whole vessel recovered from a cistern or well in the centre of the palace probably was used to draw water up from the well.

The platform, situated 3.5 k to the south of the elite palace, measures 45 x 40m and also is oriented exactly to the four directions. The eight-course walled edifice includes apparent *alfardas* framing an *escalinata* on the east side, suggesting a main access, and, possibly, another *escalinata* on the west side. Like platforms at Takalik Abaj, Chocolá's great near neighbour, sculpture seems to have been placed at intervals around the periphery of the platform; a large fragment of a cupule monument was found off the east wall. Pits dug near the centre of the platform revealed a burned clay feature that may represent an ancient *horno*.

Excavation revealed a canal system (Figure 3), constructed ingeniously of large cobbles, flat capstones, and *taxcal*, a natural water-impermeable substance occurring abundantly at Chocolá (and at Takalik Abaj), extending at least 30 m just outside and to the south of the elite residence. Discoveries from test pits excavated in 2003 and from intervention efforts by the project within the modern pueblo of Chocolá in 2004 indicate that the canal water distribution network extended through much of the northern half of the ancient site or throughout a roughly 2 x 2 k area. The necessity for a northern intake point for the water farther north than Mound 15 indicates that the canal system extended many k to the north of the ancient urban area as well as to the south. Varied construction techniques emphasize the sophistication of the system, dependent on immediately local physical conditions but also on specific engineering needs. At least four different types of construction were documented that reflect engineering choices to permit curvature, bifurcation, impedance and opening of flow, delivery of water within residences, and controlled dispersal through graded descent, i.e., miniature waterfalls.

A total of 29,678 ceramics, including 16 whole vessels, and 3,527 pieces of obsidian were collected and washed, and all ceramics were marked. Fifty figurines or figurine fragments (Figure 5) and a large number of groundstones, such as *metates*, *manos*, *machacadores*, and other stone tools used for food preparation, were collected. Making the distinction between ritual sculptures and utilitarian monuments - therefore, not including many cupule stones whose functions probably were as grinding media - and including several found *in situ*, the project at present formally numbers the sculptural corpus of Chocolá at 25; including the cupule stones, the number is much higher. One monument, Stela 1, was known hitherto from Chocolá; in unpublished notes Burkitt, an

early investigator, described nine more. From reconnaissance and informant information, the project has ascertained which monuments today lacking provenience (e.g., in private collections) hitherto either associated with Chocolá or ascribed to other sites did, in fact, originate from Chocolá, where they are at present; stylistic analysis is addressing how the corpus exhibits local as well as regional styles early in the art historical sequence of the Southern area. The catalogue includes *barrigones* or .potbellies, flat uncarved stelae, massive round altars, cupule altars (used as ritual surfaces), monuments shaped like *tambures*, massive zoomorphs with *caritas*, full round 'capture' monuments, full round bench sculptures, and other forms.

b) What progress have you made towards achieving your original objectives?

It is difficult to gauge our progress in a comparative sense since, ironically, so little work has been done hitherto in the region, the heart of the seminal Southern Maya Zone. Accordingly, any new information would have to be considered very valuable. We can say that in a relatively very short time we have been able to construct a rough picture of the span of occupation and social organisation of a very large regional centre in the heart of the seminal Southern Maya area in the Late Preclassic period. Given the lack of comparative examples, and because of the discovery of two large and sophisticated structures in only the first two intensive (grid) excavations, it seems reasonable to describe the progress as truly significant. In addition to the social organisation, a picture is forming of the ideology of an early Maya site in a hitherto almost completely uninvestigated but universally considered important time and place in the trajectory of Maya civilization. A clearer sense of the economic and bureaucratic character of early Maya society has been obtained as well, through documentation of a highly sophisticated and extensive system of water control and of durable and sophisticated cobble architecture, and recovery of beautiful artifacts expressing a highly developed aesthetics. One of the major research goals, study of intensive monocropping of cacao for export and, presumably, control of trade in this prestige commodity with pan-Mesoamerican demand has advanced, but more slowly. Soils were collected for macrobotanical and microbotanical analysis, but results must await more analysis and further excavation and sampling.

c) Please provide a summary of your results (even if they are preliminary).

With the specific research objectives in mind we have demonstrated the existence of a very extensive and highly sophisticated system of water management early in the Maya trajectory. In addition to insights obtained about how the water control system must have required division of labour, with administrators or governors overseeing a bureaucracy in turn overseeing workers, our sense of a social hierarchy in place early on at Chocolá was gained with the discovery of an elite palace on the one hand and, 3.5 k to the south, a very large administrative platform mound on the other. The great majority of provenienced artifacts date to the Middle and Late Preclassic, or from ca. 900 BC-AD 200, temporally placing Chocolá and its achievements in a span including the earliest Maya hieroglyphic writing, Popol Vuh and other core Maya ideology, urbanism, and great trade networks, all of which developed earliest in the region in which Chocolá is so centrally situated.

Significance/Benefits of Research

What is/are the significance/benefits of your research at the following levels?

Local:

Impact on the local community has been very positive. In concrete economic terms, the project employed upwards of 50 local persons, including excavators and labourers, watchmen, housekeepers, and kitchen staff, providing members of the community and their families with ready cash, a commodity in very short supply in a town with great unemployment and little or no recourse in emergencies. Not only those employed directly by the project but the wider town population as whole benefited through several public talks and other types of exposure to the research work by learning about the ancient history beneath their town and their fields and about how scientific research is undertaken. With respect to a sustainable alternative to the current failing dependence of the small farmers on coffee, the townspeople are being educated about the value of the great archaeological resource under and around their homes, and of future jobs and income in eco- and archaeo-tourism. The project is working with local politicians and with the officials of the town to make these sustainable forms of development a reality.

National:

For the sake of *Chocolenses* as well as for Guatemala as a whole, the project has sought and obtained a declaration by the Guatemalan cultural authorities setting aside the ancient remains of Chocolá as part of the cultural patrimony and thus protected from destructive developments.

International:

Maya, Mesoamerican-wide, and worldwide comparative anthropological and archaeological scholarship have been served. Maya culture history and processes of cultural evolution are becoming clearer through the research; and the material substrates hypothesized by the project (hydraulics, intensive monocropping of the prestige commodity, cacao, control of cacao trade) highly significant to the development of Mesoamerican and specifically Maya civilization, and as these may add to comparative understanding worldwide of human history and cultural and social achievements, also have been documented, albeit much more work needs to be done to confirm project hypotheses and to verify specific articulations of these processes.

b) How do your findings contribute to issues of sustainability?

Gaining the cooperation of the modern townspeople is essential if the archaeological treasure of ancient Chocolá is going to be preserved. At the same time, the research inevitably must try to preserve the viability of the lives and meaningful culture of the present-day *Chocolenses*. Our work is undertaken in the context of an extremely poor, rural, peasant farm community that has been marginalised by colonialism, post-colonialism, and globalism, specifically through the continuation of legacies of coffee cultivation for export. Globalism works to squeeze local small producers into a grid of highly manipulated global supposed supply and demand with the result that any freedom to adapt via capital fluidity is impossible and, at the local level, falling off the grid means cultural annihilation and physical starvation; almost literally, the worth of an individual cash-poor, land-rich coffee farmer in Chocolá can be counted by the grains of coffee he can hold in his hand, weighed against vast, remote agency-mediated, economic forces and processes. Without even recourse to sell their *parcelas* for enough to pay high

coyote fees to take them illegally, as *mojados*, to the United States, many *Chocolenses* simply resort for survival, for example, to illegally cutting wood, and to selling archaeological artifacts for a few dollars to *huecheros*, middlemen profiting by selling the same artifacts for much greater amounts to international collectors. The unreliability of any survival stratagem in Chocolá is evident from the number of homeless men and children in the streets of the village, cast off because they cannot contribute to the family's survival. Forced to remain in Chocolá, many build little houses or *casitas* of crude plank and lamina construction, unfortunately often destroying archaeological edifices and context in the process. At the same, consumerism is encroaching upon the immediate region around Chocolá. New constructions are destroying ancient settlements quite similar to ancient Chocolá; the project has tried to record what is left of some of these. Between the twin pressures of globalism, extinguishing the agriculture life and culture of *Chocolenses*, and consumerism, which casts off in an imbalanced trade all that is not marketed and packaged for quick consumption - ironically the products of which derive from global agents such as *maquiladoras* and their corporate owners exploiting Third World producer-end individuals and their cultures - the sustainability of Chocolá as a living cultural and physical entity, with an extraordinary ancient history, will be a miracle. Much more will have to be done to make this miracle come true.

The project has worked very hard to integrate the impoverished local residents of the modern town of Chocolá into the project as paid workers but also through dissemination of information through various means and venues, including general town meetings and talks at primary and secondary schools, about the value of the ancient heritage below ground. Corollary to education about Chocolá's Precolumbian history is education about modern day necessities for health and sanitation - if the archaeological remains are to be protected, only a viable town can help protect it; the project has helped the town develop a trash pick-up service and has paid for large-scale garbage removal from within the town and its standing ancient mounds. Given their desperate straits, *Chocolenses* have been remarkably accepting of the project's stated motives and intentions, as evidenced not only by the official cooperation extended to us by the *junta directiva* of the cooperative, but also by the many donations that have come into the project of figurines, worked stones, and other precious artefacts; one must keep in mind that it is difficult to distinguish between desperate need for employment on the project and uncoerced friendliness. It does seem that the argument that progress and prosperity can come to Chocolá in the form of long-term eco- and archaeotourism has met with interest not only among the local politicians but also among many town residents. The pressure to relieve the suffering is great, however, and only with substantial support from First World sources can both the archaeology and the people of Chocolá - the one needing the other be saved.

Dissemination of Results

a) Have you provided details of results from your research to or within:

Scientific papers

- In press Chocolá, an Apparent Regional Capital in the Southern Maya Preclassic: Findings from the 2003 Season of the Proyecto Arqueológico Chocolá (PACH) (with Juan Antonio Valdés); Mexican

Management plans and reports

- Informe No. 1: Primera Temporada 2003, Proyecto Arqueológico Chicolá. Report submitted to the Instituto de Antropología e Historia de Guatemala, 2003 (with Juan Antonio Valdés)
- Informe Preliminar No. 2: Segunda Temporada 2004, Proyecto Arqueológico Chicolá. Report submitted to the Instituto de Antropología e Historia de Guatemala, 2004

Presentations

Organized Sessions (PI)

- 2004 Chair of a session to be presented at the American Anthropological Association annual meeting, San Francisco: Building Mesoamerica: The Origins of Monumental Architecture
- Chair and co-organizer of a session presented at the Society for American Archaeology Annual Meeting, Montreal: Recent Research in Pacific Chiapas and Guatemala

Presentations (PI)

- 2004 Early Middle Preclassic Architecture at Chicolá, Guatemala. Paper to be presented at the American Anthropological Association annual meeting, San Francisco
- Métodos, Teorías y Avances del Proyecto Arqueológico Chicolá. Paper presented at the XVIII Simposio de Arqueología Guatemalteca, Guatemala City
- Estrategias y Metodologías de Mapeo en Chicolá: Especulaciones sobre el Diseño de la Ciudad. Paper presented at the XVIII Simposio de Arqueología Guatemalteca, Guatemala City (with Juan Pablo Herrera and Juan Antonio Valdés)
- Agua, Drenajes y Cultivos en Chicolá. Paper presented at the XVIII Simposio de Arqueología Guatemalteca, Guatemala City (with Federico Paredes Umaña and Juan Antonio Valdés)
- A New Chapter in Maya Archaeology: Results from the First Season at Chicolá, a Major New Site in the Heart of the Seminal Southern Maya Preclassic (with Juan Antonio Valdés and Oscar Gutiérrez). Paper presented as part of a session, Recent Research in Pacific Chiapas and Guatemala, Society for American Archaeology Annual Meeting, Montreal
- Mapping Strategies and Methodologies at Chicolá, in Guatemala.s Boca Costa: Speculations about Ancient City Design in the Southern Maya Preclassic (with Juan Pablo Herrera and Juan Antonio Valdés). Paper presented as part of a session, Recent Research in Pacific Chiapas and Guatemala, Society for American Archaeology Annual Meeting, Montreal
- Mound 15, Chicolá, Guatemala: Evidence of Water Management and Control at the Southern Guatemalan Piedmont site of Chicolá (with Federico Paredes Umaña, Cristina Vidal, Juan Antonio Valdés and Diana Belchas-Luín). Paper presented as part of a session, Recent Research in Pacific Chiapas and Guatemala, Society for American Archaeology Annual Meeting, Montreal
- 2003 Chicolá: un centro intermedio entre la bocacosta y el altiplano de Guatemala durante el Preclásico Tardío (with Juan Antonio Valdés, Oscar

Gutiérrez, Juan Pablo Herrera and Federico Paredes Umaña). Paper presented at the XVII Simposio de Arqueología Guatemalteca, Guatemala City

Popular articles or films (in progress or completed)

The Beginnings of Maya Civilization.. American Archaeology, Fall, 2004, Volume 8 (3): 31-39