

# **THE BELIZE RIVER ARCHAEOLOGICAL SETTLEMENT SURVEY PHASE 1983 - 1984**

## **REGIONAL SURVEY AND TEST EXCAVATIONS IN THE UPPER BELIZE RIVER AREA**

by

Anabel Ford  
MesoAmerican Research Center  
Community and Organization Research Institute  
University of California  
Santa Barbara

Interpretation of regional settlement patterns from the central Maya lowlands (Figure 1) has provided a foundation for understanding the subsistence base of the ancient Maya. Despite our growing knowledge of Maya residential land use and its change over time, however, little has been done to explain the social differentiation among the identified settlements and their residents. Moreover, the published data on the Maya tend to emphasize settlements at centers at the expenses of the rural component. What is needed now is information on residences in order to evaluate variability among settlements. The Belize River Archaeological Settlement Survey (BRASS), under my direction, has developed an important data base on patterns of domestic production and consumption in central and rural components as reflected in residential middens (trash deposits). These data suggest that subsistence structured the nature of most social processes from hierarchical resource control to cottage craft production. The major analysis of these BRASS data is complete. The summary of the field work is covered below.

The BRASS project was designed to investigate settlement-environment relationships in the peripheral upper Belize River area. Each of the survey transects was located to include identified environments of the area and was oriented to crosscut the valley and bisect a local center (Figure 2). The settlement survey and testing phase was explicitly designed to collect information on central and non-central settlement locations and the temporal sequence of occupation at the identified settlements.

The upper Belize River area (Figure 2) can be categorized geographically into (1) the open undulating valley and savannas east of the confluence of the eastern and western branch of the Belize River and (2) the foothills and uplands to the west (Jenkin et al. 1978; Wright et al. 1959). The center of Baking Pot and the settlement of Barton Ramie are only a few kilometers down river in the open valley. In addition to the BRASS project, current research is ongoing at the centers of Cahal Pech (Awe, pers. comm.), Buena Vista, and Xunantunich (Ball, pers. comm.) up river in the constricted valley zone.

Most of the survey of the BRASS project, undertaken in two five-month seasons (1983 and 1984), encompassed six major activities: 1) transit mapping of the four centers, 2) establishment of two 5-km baselines and one 10-km baseline to serve as the axes of the transects, 3) settlement survey of 125 meters on each side of the baseline (500 hectares), 4) mapping of all obtrusive cultural remains within the 250-meter-wide transect (348 residential units), 5) test excavation in residential middens of a 12.5% stratified random sample of one-in-eight residential units (48 total) grouped based upon distance from the river, and 6) the definition of land resource zones within the survey transect areas. In 1985 and 1989, further settlement survey and midden test excavations were conducted around the identified obsidian production site in the community of El Latón, 4.5 km south of El Pilar. The 1986 season focused on the centralization process in the area by examining construction sequences exposed in the looters' trenches\*\* at the four identified centers: El Pilar, Alta Vista, Yaxox, and Bacab Na (see Figure 2). Finally, the 1987 season was designed to cover selected unsurveyed zones, based on soil type and topography, to confirm the interpreted environment-settlement relations identified from the 1983-84 transect surveys.

A total of 500 ha (hectares) was covered in the surveys. All cultural remains were mapped within a 250m wide area. Mapped residential settlements (348) were scattered in varying densities within each transect (Figure 3). Other types of remains mapped included limestone quarries, chultunes (storage pits into limestone bedrock), and chert quarries. Evidence of looting was also noted.

Residential excavations within the three major transect surveys focused on middens located directly adjacent to the residential structures. Residential middens were excavated as they reflect the discards of the adjacent residential unit occupants and would be more indicative of actual residential activities than structure fill, with midden debris from unknown localities, and floor surfaces in construction sequences that are generally clean.

Excavations at centers were dependent upon the location and exposure of looter's trenches. The excavations at the centers were designed to rescue information that will be lost as buildings collapse and to provide a baseline chronology of public building to correlate with the settlement data gathered from the transects. Efforts were made to acquire information from all areas at each center. Test pits in plazas were also excavated to identify the nature of rebuilding in open areas.

Three chert quarries were identified in the course of the survey (see Figure 2). Two were in the valley foothills, in tributary drainage exposures. The larger of the two, the Yaxox quarry, was located about 2.5 km north of the river at the edge of the Yaxox transect. The smaller quarry was located within 1 km of the river on the Pilar transect; this site is referred to as 272-229 and was one of the residential unit selected in the test excavations. Both quarries are loci of considerable lithic reduction from cobbles. The third quarry recorded by the BRASS project was adjacent to the large center of El Pilar. This major quarry and reduction site, known as the LDF chert site\*, is the largest recorded in the area. It displays evidence of biface reduction over a 50 by 50 m area.

All excavated material was screened, and collections retained by ¼" mesh screens in test pit excavations and column samples (residential units and centers) and ½" screen in looters' trench extensions (centers) were processed and cataloged in the field laboratory. Soil and flotation samples were taken from each excavated level for evidence of smaller fraction items. Major artifact classes included in the collections are ceramics, chert, ground stone, obsidian, and other rare exotics (shell, minerals, etc.). Diagnostic ceramics collected from all excavated locations were

sorted chronologically in the field laboratory and final assessments, assigned in the course of later analysis, were made through association with typed ceramics illustrated in reports and comparative collections available for the region. These data provide the basis of the settlement chronology.

The ceramic collections of the BRASS study indicate initial occupation by the Middle Preclassic Period in all zones. Growth is clear from the Middle Preclassic to the Late Preclassic, during which time occupation nearly doubles and the majority of all residential zones are occupied. There appears to be significant building and rebuilding associated with uncontaminated Late Preclassic fill at El Pilar and Yaxox which pushes back the initial period of centralization in the area from the Late Classic, around 600 A.D., to the Preclassic, around 250 B.C.

The dating of the Early Classic is problematic. It seems that the foundation of the Maya chronology is based on description of ceramics from the major core area centers of Tikal and Uaxactún. There is a limited understanding of Early Classic ceramic forms outside the core area. Early Classic diagnostics in the Belize River area are rare (3% of all ceramics). They are largely composed of elite forms such as basal flange bowls (65% of the Early Classic materials) and virtually no common domestic utility vessels, such as cooking jars and serving bowls, have been recovered in any context. Despite the limited number of Early Classic diagnostic forms, building is evident during the Early Classic at El Pilar and at Yaxox.

Late Classic diagnostics are abundant in the study area. Settlement is well represented in the Late Classic, with 98% of the residential sites occupied. This growth appears to correlate with the major building activity at centers in the valley, including large public construction undertakings at all the centers of the BRASS study area.

The expected decline in settlement during the Terminal Classic and Postclassic periods is exhibited in the BRASS settlement data. Only 48% of the tested residential sites exhibit occupation during the Terminal Classic, about half that of the Late Classic period. Even so, ceremonial building construction continues into the Terminal Classic period at El Pilar and Yaxox. Postclassic occupation is even less than that of the Terminal Classic, dropping to 21% of the total residential sites with settlement concentration in the valley. Coinciding with the valley settlement focus, there is some evidence of construction at Yaxox during this period.

The BRASS data represent an important corpus of data on the ancient Maya, incorporating investigations of residential and administrative center settlement as well as resources in the Belize Valley and the immediate northern upland interiors. Greater diversity in settlement patterns of the Belize River area was discovered by the BRASS project than had been anticipated from previous work. Instead of being homogeneous and restricted to the valley only, settlement of the Belize River area appears in a variety of environmental zones of the valley and interior.

Fundamental settlement pattern differences between the uplands, foothills, and valley resource zones suggest differences in local community organization which should be evident in aspects of the residential unit artifact assemblages. Distinctions should be apparent in the organization of activities at individual residential units. Indeed, the current investigation of residential production and consumption through the analyses of midden samples will directly assess the level of integration and organizational differences and similarities which exist within the area.

Settlement patterns and evidence of domestic activities seem to vary according to resource zones. These variations appear to relate to the subsistence activities in the area and indicate differences in the range of domestic production. We need to examine how these zones were integrated and to what degree they were interdependent. These issues can begin to be resolved through an examination of data from the BRASS residential units themselves. The data presented here represent the preliminary results of the regional survey and test excavation phase of a long term project designed to analyze the role of the residential organization and the development of complex societies such as the Maya.

\*\* Illicit excavation to "loot" or rob ancient Maya tombs and votive caches for sale on the illegal antiquities market is an escalating problem destroying the archaeological record in the region.

\* This site is named after Larry De Forest, the individual who first identified the location.