

RECONNAISSANCE AND SETTLEMENT PATTERNS AT THE SIERRA DEL LACANDÓN, PETÉN

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In May of 2004, a team of archaeologists, agronomists and curators initiated the second season of the Sierra del Lacandón Regional Archaeological Project (PRASL), a sub-project of the Piedras Negras Regional Project directed by Defensores de la Naturaleza (*Nature's Defenders*), a NGO that jointly with CONAP co-manages the Sierra del Lacandón National Park. The major goal of PRASL is to conduct a regional archaeological investigation of the area between the Classic period Maya capitals of Piedras Negras in Guatemala, and Yaxchilan in Mexico (Figure 1).

Based on a regional perspective and examining the growth and changing distribution of the secondary political centers ruled by noble lords subordinated to the rulers of Piedras Negras and Yaxchilan, and examining the changes in settlement patterns around these secondary sites, PRASL seeks to respond to a number of interrelated questions, such as:

- Do the secondary political centers reflect the gradual populational growth and the increase of local authority in rural areas?
- Did these centers, established like political satellites –perhaps of a military nature- belong to a centralized political authority?
- Do the localization, form and rank of growth in the secondary political centers indicate the formal establishment of social and political frontiers among the kingdoms during the Classic period?
- What was the nature of the rural populations located in frontier territories between kingdoms integrated within the structure of one of these two political entities?

- How do the settlement and the organization of the secondary centers relate with the control of agricultural surplus or of any other natural resource necessary to sustain urban centers such as Piedras Negras and Yaxchilan?

A second goal of this investigation is to provide the authorities of the park and the Guatemalan government with a full “cultural inventory” of the region. This inventory will include not only relevant evidence on prehispanic settlements, but also the record of relevant information on colonial and republican sites, including villages of the Lacandon ethnic group, camps where gum is collected, and civil war refugee camps. This information will help park authorities to design an assessment of viable impact and a management plan of the cultural resource according to the needs and requirements of the changing political and environmental situation along the Usumacinta River, to protect the cultural heritage of Guatemala.



Figure 1. Map showing the region of study; Sierra de Lacandón National Park, Guatemala.

The first field season conducted in 2003 has already revealed the significant contribution that may be made in this area with some reconnaissance in the field (Figure 2). In three weeks of work in the field and with only five archaeologists, the PRASL researchers succeeded in discovering four archaeological sites not previously documented. Two such sites, Texcoco and Tecolote, have vaulted monumental architecture, which in this region of the Lowlands is restricted to primary and secondary political centers. One of the vaulted buildings at Tecolote is almost intact and contains large well preserved fragments of polychromed murals.

Two additional sites, Fajardo and Esmeralda, have much smaller central areas, and do not include vaulted architecture. Given what is known about sites like El Cayo, La Pasadita, and other similar ones, evidence points to a regional hierarchy, with Piedras Negras and Yaxchilan like primary centers; El Cayo and Texcoco subordinated to Piedras Negras; La Pasadita and Tecolote subordinated to Yaxchilan; and Fajardo and Esmeralda like tertiary political centers integrated to the polity of Piedras Negras through secondary centers (Golden *et al.* 2004).

Nevertheless, it was clear that by the end of the 2003 season there was plenty of research to do to complete the history of the region; therefore, a team of researchers and curators returned in May of 2004 to continue with the investigation.



Figure 2. Map showing the sites located in the region.

RECONNAISSANCE

Reconnaissance is obviously the preliminary phase of investigation in the unexplored areas of the Sierra del Lacandon and it provides us with a preliminary count of archaeological sites for the cultural inventory; and in this way, begin to understand the nature and density of the ancient settlements within the park. In 2004, the reconnaissance was conducted by the authors, assisted by the park rangers and guides from the town of Santa Rita, Petén. Altogether, two entire weeks were spent away from the base camps to conduct this reconnaissance.

The reconnaissance was accomplished through transects, as well as taking advantage of occasional discoveries and information supplied by the guides. The transects consisted of walks between the sites already known. The transects between these sites should have ideally followed straight lines, but difficulties encountered with the irregular topography of the Usumacinta basin have made that kind of transect impossible. During one particular day, it was possible to walk only 4.5 km in approximately twelve hours, moving from the swamp towards the Sierras del Lacandón. For this reason, and using a GPS, a road between sites was outlined, and the guides supplied local information about the available access routes between the beginning and the end of the transect. Given the setbacks and the difficulties involved in the reconnaissance, the site maps were not drawn. However, the GPS units provided accurate coordinates to identify these sites in future visits, while field notes and photographs contribute additional documentation on the nature of the site scheme and its architecture.

The longest transect was completed in a four-day walk divided in two sections: from Piedras Negras to Esmeralda, and from Esmeralda to Tecolote -, altogether approximately 27 km (Figure 2). The transect crossed swamps and flooded lowlands, as well as the sierra adjacent to the Usumacinta River. Five sites were identified in this transect: Pedrito, Rábano, Vladimir, Tejón and Bayal. All these sites consisted of a group of one or more patio groups, and probably representing small rural communities. None of them seems to be as large and complex as the great rural center of Esmeralda, though some of them, particularly Pedrito, Vladimir and Tejón, feature rather large platforms (over 4 m tall) that support large patios.

In addition to the transects, the park rangers and guides provided invaluable information about the archaeological sites that had previously been observed. Working jointly with the guides, researchers moved to the east of Tecolote for approximately 11.5 km, documenting the villages of El Túnel and Capukal. Closer to Tecolote, the site of Argueta was identified, together with a fourth site, El Chico, which probably represent the “sub-urban” area of Tecolote. Unfortunately, it was not possible to investigate the reported undocumented monumental architecture in the area of study –including the vaulted buildings and monuments- due to the potential danger represented by park invaders to the south of Tecolote.

The reconnaissance not only revealed the anticipated archaeological sites, but also produced some rather unexpected results. For example, the GIS models produced as of the existing satellite information and maps (Anaya 2002), suggested that the movement

of people and objects in prehispanic times was accomplished through the river, or across the central valley that runs from north to south through the park and which opens, like the river, on the floodable plains of Tabasco.

While the east side of the basin may be easier to pass, our reconnaissance proved that the journey along the west side, dominated by extended lowlands and lands covered with tall grass is extremely difficult. Even though these features may have been modified by the prehispanic Maya to make transportation easier (grass, for example, may be kept low by means of controlled burning), the sierra adjacent to the river constitutes an easier route. A number of passes open several paths through the hills from south to north, and represent a virtual route, along which the sites spread. This route provides the only easy access to Tecolote, which otherwise can only be reached across several steep hills.

In addition, just north of Tecolote, a number of seemingly defensive fortifications were found (Figure 3). These wall foundations have not been excavated so far, but apparently they were built with stone and rubble and no mortar, and are approximately 1 m high and a little over 2 m wide. They seem to have constituted palisade bases. The first of these features was discovered 4.5 km north of Tecolote. Several hundred meters south of this wall, there was a small group of structures, designated with the site name of Bayal. Moving further south, at approximately 3.7 km from Tecolote, another barrier was located. To the east from Tecolote, archaeologists identified at least two features of this type between the sites of La Pasadita and El Túnel, and likewise, similar walls were observed during the reconnaissance of La Pasadita in 1998 (Golden 2003).



Figure 3. Map of the sites in the region, showing the location of the walls found in 2004.

Needless to say, without an excavation it is not possible to date these features to then associate them with the history of the regional centers. However, speculation is possible. It has been presumed that the research area represented the ancient political frontier between the kingdoms of Piedras Negras and Yaxchilan, with centers like La Pasadita and Tecolote playing the role of outposts of the Yaxchilan border. The defensive features seem to support this hypothesis and suggest that this frontier once

was a fortification. The extension of the wall system is uncertain, but this will be considered a major research issue in future field seasons.

In this field season, an additional site was documented through reconnaissance: Macabilero. Although Macabilero was first identified by Linton Satterthwaite and a sketch was drawn by Edwin Shook in the thirties (Shook 1998), previous attempts to locate the site based on Shook's and Satterthwaite's notes were unsuccessful. Once again, the guides provided crucial information to locate the site, and in the last two weeks of the field season, they led Luis Romero and Daniel Bair right to Macabilero.

The site is dominated by large platforms with multiple terraces and is located on the summit of a hill with a view of the Usumacinta River (Figure 4). At one side of the platform, the hill crags down forming a cliff of approximately 20 m high. The opposite side may only be crossed through a few places, as it presents caves and other cavities. The architecture, which is not of the vaulted type, is monumental, and includes large preserved and exposed terraces, as well as altars and columns. On the east slope of the hill there are several smaller structures.

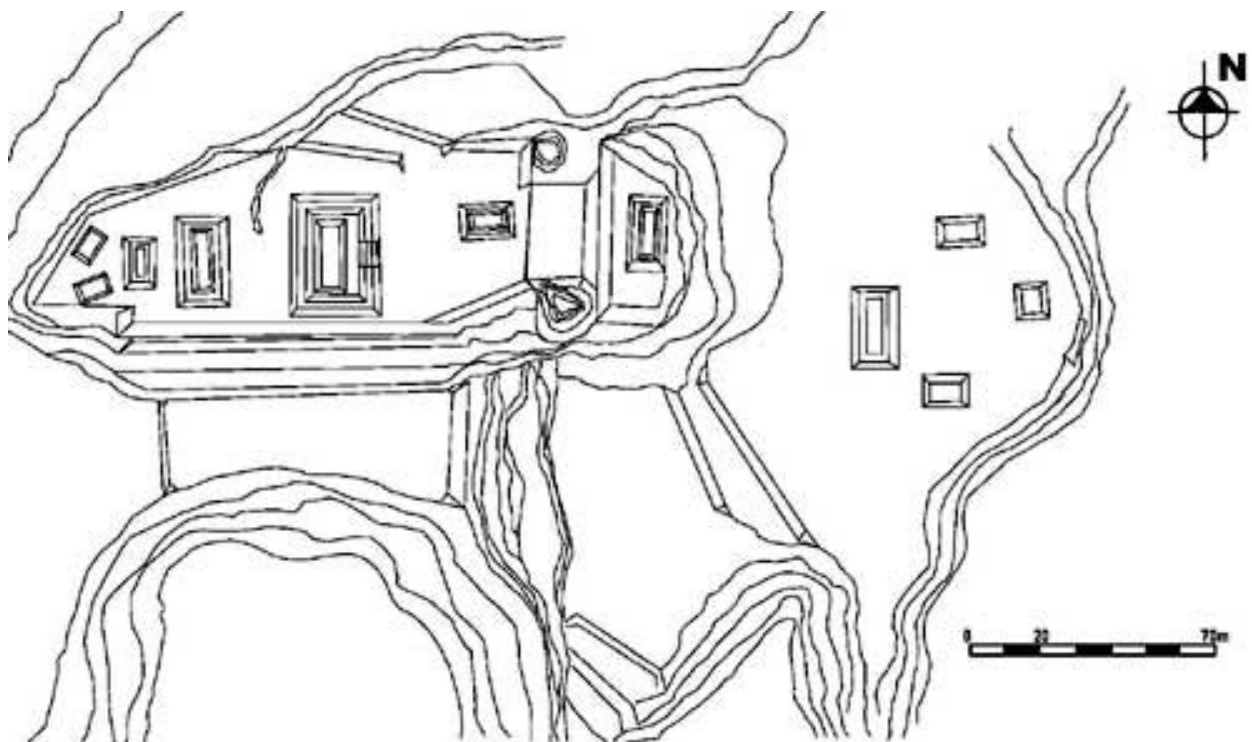


Figure 4. Map showing the center of Macabilero.

Prior to this field season, it was assumed that during the Classic period Macabilero was a satellite site to El Cayo, located downstream. However, the ceramic found in looting trenches corresponds to the Late Preclassic period, and ceramic fragments found in the caves included types that were typical of the Protoclassic period. Thus, even though Macabilero may have been occupied during the Early or Late Classic periods, it would seem to predominantly correspond to the Preclassic period. Without excavations, it is

not possible to establish a chronology for the other sites discovered in 2004, neither is it possible to define whether they were contemporary to one another.

It is also important to note that even though the main goal of the investigation in 2004 was to identify the ancient settlements, the historic settlements and the Popular Communities in Resistance at Petén (*Comunidades Populares en Resistencia de Petén, CPR-P*) were located as well. During the reconnaissance, the archaeologists guided by former members of the CPR-P usually built their temporary camps in the old CPR-P settlements, like those of Rábano, Argueta and El Túnel, which later gave their names to the nearby prehispanic settlements. The name of Vladimir comes as well from a CPR-P camp, though archaeologists could not identify it in the field. Finally, and despite no Lacandon settlement was in fact identified, cacao trees were seen, growing in the vicinities of the site of Esmeralda, which may have been planted and cultivated by the Lacandon people, prior to the crossing of the Usumacinta River by the last communities on their way to Chiapas, during the 1960's.

MAPPING OF ESMERALDA

A second component of the field work in 2004 was to continue with the documentation of the archaeological sites identified during the reconnaissance of 2003, and mainly, to produce reliable maps of the sites. Mathew Liebmann and Greg Borgstede were in charge of producing the maps of Tecolote and Esmeralda, respectively, together with the maps of Fajardo and Texcoco, while the other sites were left for future field seasons.

The mapping of Esmeralda was conducted by Greg Borgstede, with the assistance of Karla Dardón. The mapping team established that the distribution of the small groups in the field suggested that the site identified as Esmeralda during the season of 2003, was, in fact, a series of four contiguous archaeological sites: Esmeralda, Fideo, Anita and Chichicúa (Figure 5).

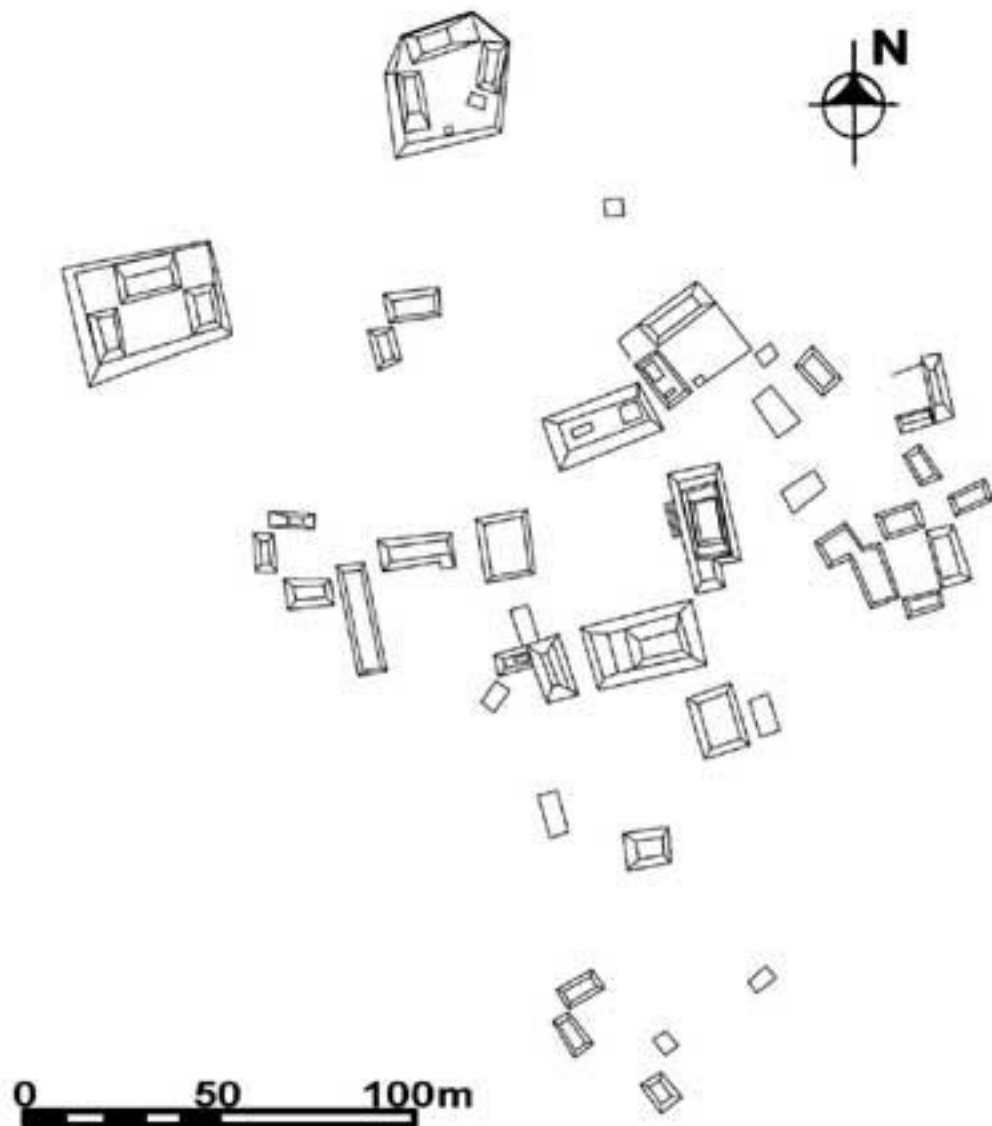


Figure 5a. Map showing the center of Esmeralda.

The two largest sites of this grouping are Esmeralda and Fideo, and they clearly convey the notion of important local centers, while Anita and Chichicúa have much more dispersed settlement patterns. Nevertheless, the architectural patterns of Esmeralda and Fideo differ greatly. Fideo has two small pyramids which apparently dominate the center of the site, with a dispersed arrangement of structures surrounding the settlement. Esmeralda has no pyramids, but it has a Ballgame instead, and a much more centralized architectural pattern.

The excavations conducted by Dámaris Menéndez suggest that these sites are not strictly contemporary. The excavations at Fideo produced materials predominantly of the Late Preclassic period, and a thin Late Classic period ceramic layer. Thus, Esmeralda seems to have replaced Fideo as the local center. Interestingly, the Early

Classic period materials are scarce, a fact probably suggesting that local populations were absorbed by the growing center of Piedras Negras, and that the rural area developed once more during the Classic period.

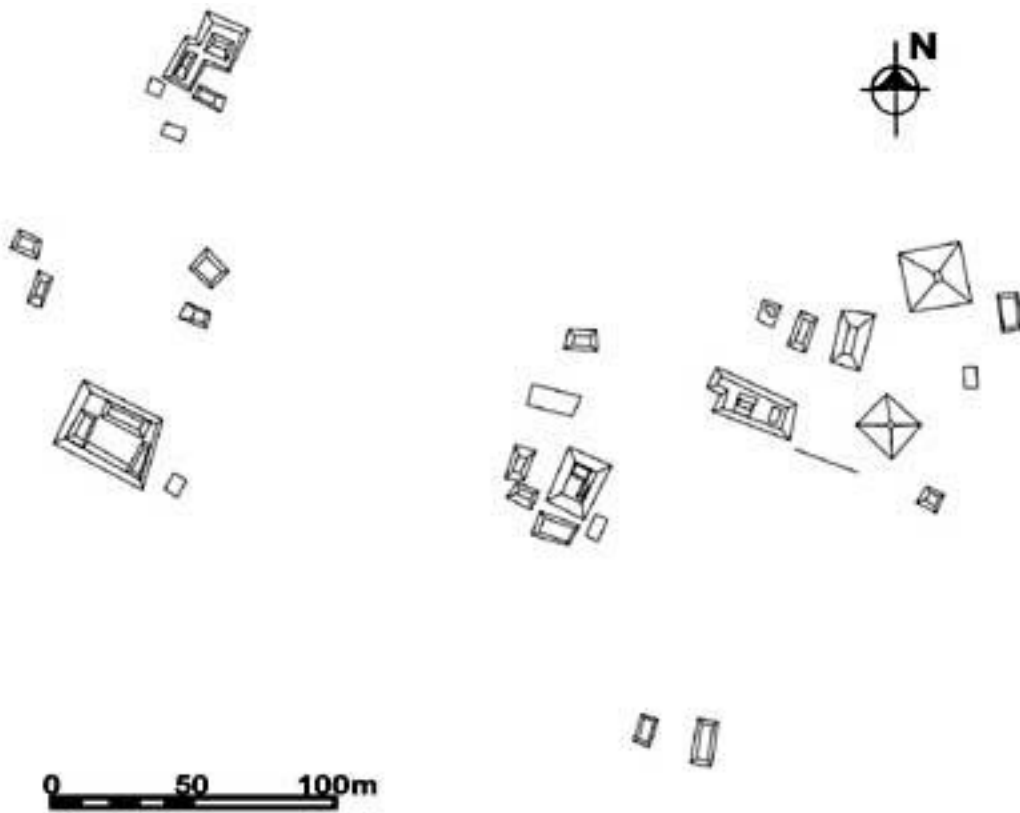


Figure 5b. Map showing the center of Fideo.

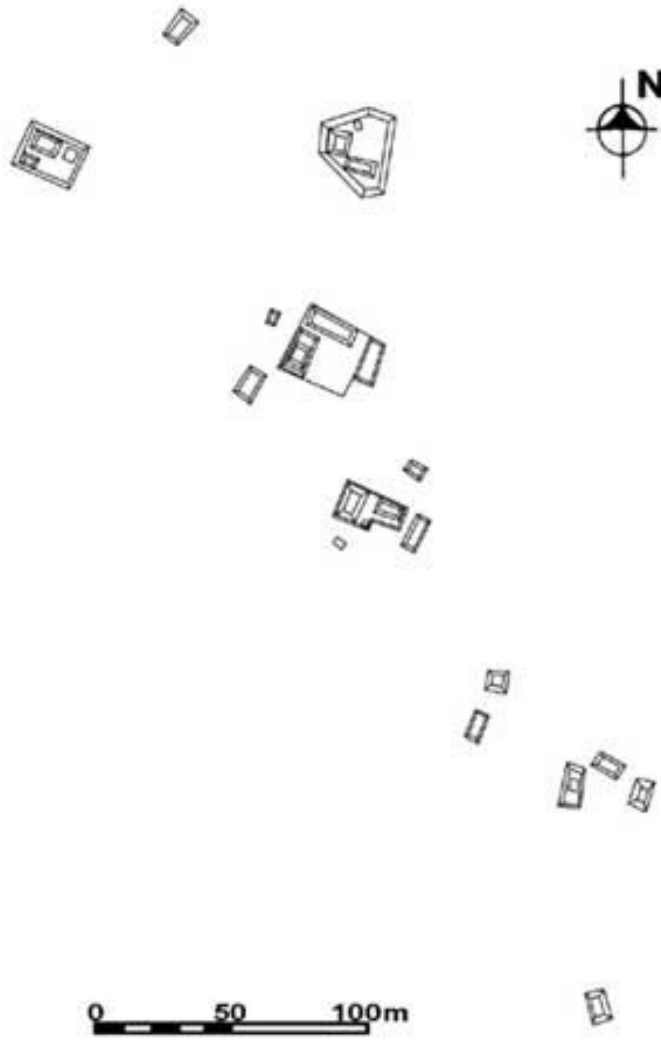


Figure 5c. Map showing the center of Anita.

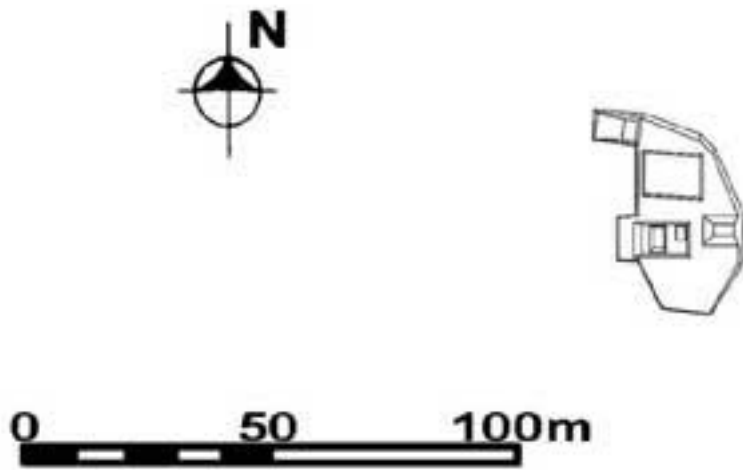


Figure 5d. Map showing the center of Chichicúa.

MAPPING OF TECOLOTE

The mapping of Tecolote was conducted by Mathew Liebmann, with the assistance of Fabiola Quiroa, Martín Rangel and others (Figure 6). The map covers approximately three quarters of the core of the site and shows additional groups of monumental architecture, including collapsed vaulted structures, which will be mapped in subsequent field seasons. While the central plaza lies on an extended and flat area, the majority of the architectural features –assumed to be residential structures- are groups located on the hills that surround the plaza, not having used the flat extension for hundreds of meters beyond the core of the site. Actually, the area to the southeast of the central plaza, between this plaza and the great “palace” complex, is almost devoid of architecture.

The architecture in Tecolote resembles other Late Classic period buildings located in the region of Yaxchilan –an interpretation supported by the fragmented mural inside Structure D3-1 with a painted text, whose calligraphy, according to Stephen Houston, resembles that of Bonampak (Stephen Houston, personal communication). However, Tecolote’s short occupational history differs greatly from those of Esmeralda and Fideo. The excavations conducted at the core of the site and in the isolated groups –directed by Ana Lucía Arroyave- have not produced ceramic prior to the Late Classic period, and no identifiable Postclassic period material. The caves, 2 km away from the core of the site, however, have produced Preclassic period ceramic, and it is expected that additional excavations will show a more extended occupational history, perhaps outside the core of the site.

CONCLUSIONS AND FUTURE INVESTIGATIONS

To conclude, the end of the field season of 2004 has marked the beginning of an effort aimed at creating a more comprehensive and complex history of the settlements and polities along the Usumacinta River in the region between Piedras Negras and Yaxchilan.

To the north, in the area dominated by Piedras Negras during the Classic period, research has produced a much more profound history, and a surprisingly bi-modal one. Even though there is some evidence of Middle Preclassic period occupation, it was during the Late Preclassic period when occupation was significantly expanded around centers such as Fideo, Macabilero and Piedras Negras. There is no evidence suggesting that any particular center dominated the region during the Late Preclassic period; therefore, Piedras Negras might have simply been just another site at that time.

But something changed during the Classic period, and the occupation around Fideo seems to have significantly declined. Virtually, no ceramic from the Protoclassic or Early Classic periods was found in reliable stratigraphic contexts –although these materials were found in caves, and could still be found in subsequent excavations of architecture.

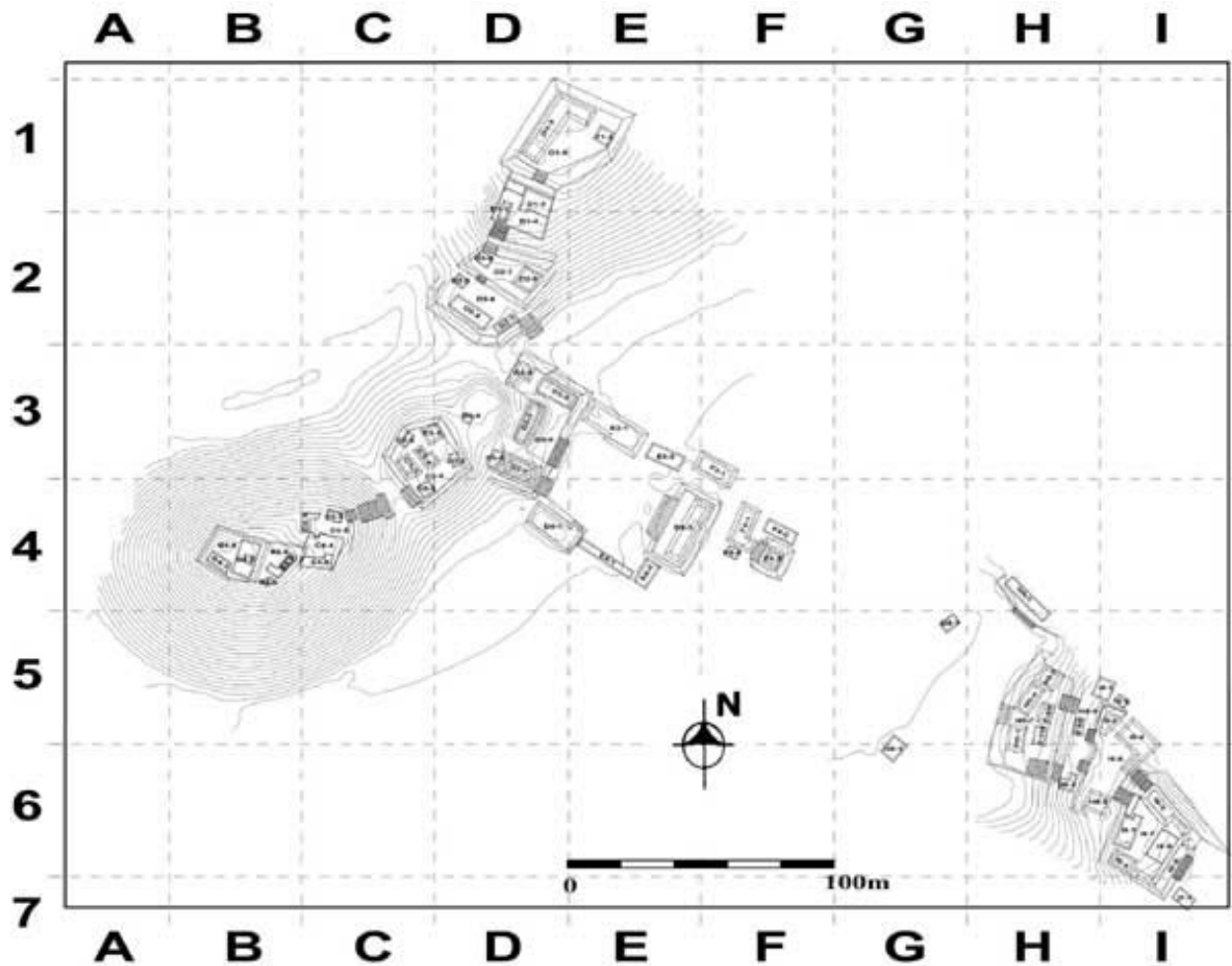


Figure 6. Map showing the center of Tecolote.

Nevertheless, given the abundance of ceramic from the Late and Terminal Classic periods found immediately on top of Preclassic period materials recovered in test pits, it is suggested, for now, that the rural populations in this area were declining during the Early Classic period, while Piedras Negras was rapidly growing as a center of regional power. A very likely hypothesis is that something –perhaps the emergence of a royal dynasty in Piedras Negras- drew the inhabitants of the rural area into the developing urban center. Such pattern has, of course, been previously observed in regard to the growth of many urban centers around the world (Houston *et al.* 2003). While the population flourished throughout the Classic period, the rural area was once again occupied, and Esmeralda reached its peak. The collapse of Piedras Negras in the IX century may, in fact, have encouraged the growth of rural populations when people abandoned the decaying urban center.

The excavations and epigraphy favor a short and rather late occupational history at Tecolote. The standing architecture and the mural paintings are reminiscent of other sites ruled by Yaxchilan during the Late Classic period; likewise, the test pits have yielded no ceramic previous to the Late Classic period. The project’s hypothesis of work

is that Tecolote, La Pasadita, and other secondary political centers along the north border of the kingdom of Yaxchilan, were established by the dynastic rulers of the city as outposts under the ruling of subordinated noble lords, to protect themselves of attacks and to launch them against Piedras Negras. All the information recovered so far, and above all the discovery of the wall system, favors this hypothesis.

For now, there is not much to say about the small sites between Esmeralda and Tecolote, or about those located east of the latter one. Additional excavations and mappings need to be conducted at the sites identified during the season of 2004, to connect them with the regional chronology. It is expected that soon, new details will be revealed about the settlement, site distribution and extension of the wall system, thanks to the information supplied by NASA's AIRSAR system of airborne radars, with the support of the National Science Foundation of the United States and the National Geographic Society. This information, produced through a series of flights over Central America and southern Mexico in March of 2004, is currently being processed. The AIRSAR radar system has the capacity to penetrate the green canopy and produce high resolution images of cultural and natural features, making of it a precious tool for archaeologists.

However, nothing can replace work in the field; therefore, the plan is to return to the park in 2005 to continue mapping, excavating and surveying. There are reliable reports about many other sites in the area of study that need to be documented. Unfortunately, access to some of them is not safe due to the danger represented by trespassers, who are known to actively loot sites like these. However, with the support of Nature's Defenders (*Defensores de la Naturaleza*), CONAP and IDAEH, work will continue, to make progress with the documentation of the region and to offer information on the development of the political borders of the Classic period centers of Piedras Negras and Yaxchilan.

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Figure 1 Map showing the region of study

Figure 2 Map showing the sites located in the region

Figure 3 Map of the sites in the region, showing the location of the walls found in 2004

Figure 4 Map showing the center of Macabilero

Figure 5a Map showing the center of Esmeralda

Figure 5b Map showing the center of Fideo

Figure 5c Map showing the center of Anita

Figure 5d Map showing the center of Chichicúa

Figure 6 Map showing the center of Tecolote