

INTRODUCTION

The Past Informs the Future

The core of the El Pilar Program is based in the archaeological research on the evolution of the ancient Maya landscape. The essence of this program acknowledges that clues to sustaining the complex habitats of today's Maya forest environment are embedded in Maya prehistory. Ancient Maya settlement and local community patterns provide material evidence for the evolution of sustainable economies in one of the planet's last frontiers: the tropics.

Appreciating the ancient Maya of El Pilar —their settlement, their chronology of occupation, their investment in public architecture, the development of the city are fundamental to our understanding of the potential of the Maya forest region. The El Pilar Program research is designed to develop an interdisciplinary database that addresses these important questions. Combining detailed excavations and broad ranging surveys, we are now beginning to build a basis to answer some basic questions about El Pilar and its importance in the Maya area. The archaeological research has focused on the civic-ceremonial, the private residential, and the structure of the Maya forest in an effort to find clues to the human-environment relationship in the past that can help to envision a future.

The ecological structure of the Maya forest is a relic of the dynamic relationship in which humans have played an integral part. This relationship extends back more than four millennia to the initial agricultural pioneers of the Maya forest region and the ancestors of the ancient Maya civilization — the heritage of contemporary farmers.

Combining research designs of professional with those of traditional farmers from the local area, this forest garden is becoming a model of ancient Maya land use that will provide an ongoing source of innovation for the community. The design uses ancient Maya settlement patterns and agricultural knowledge to foster resource conservation that aligns with, rather than opposes, the natural regenerative processes of the tropical forest.

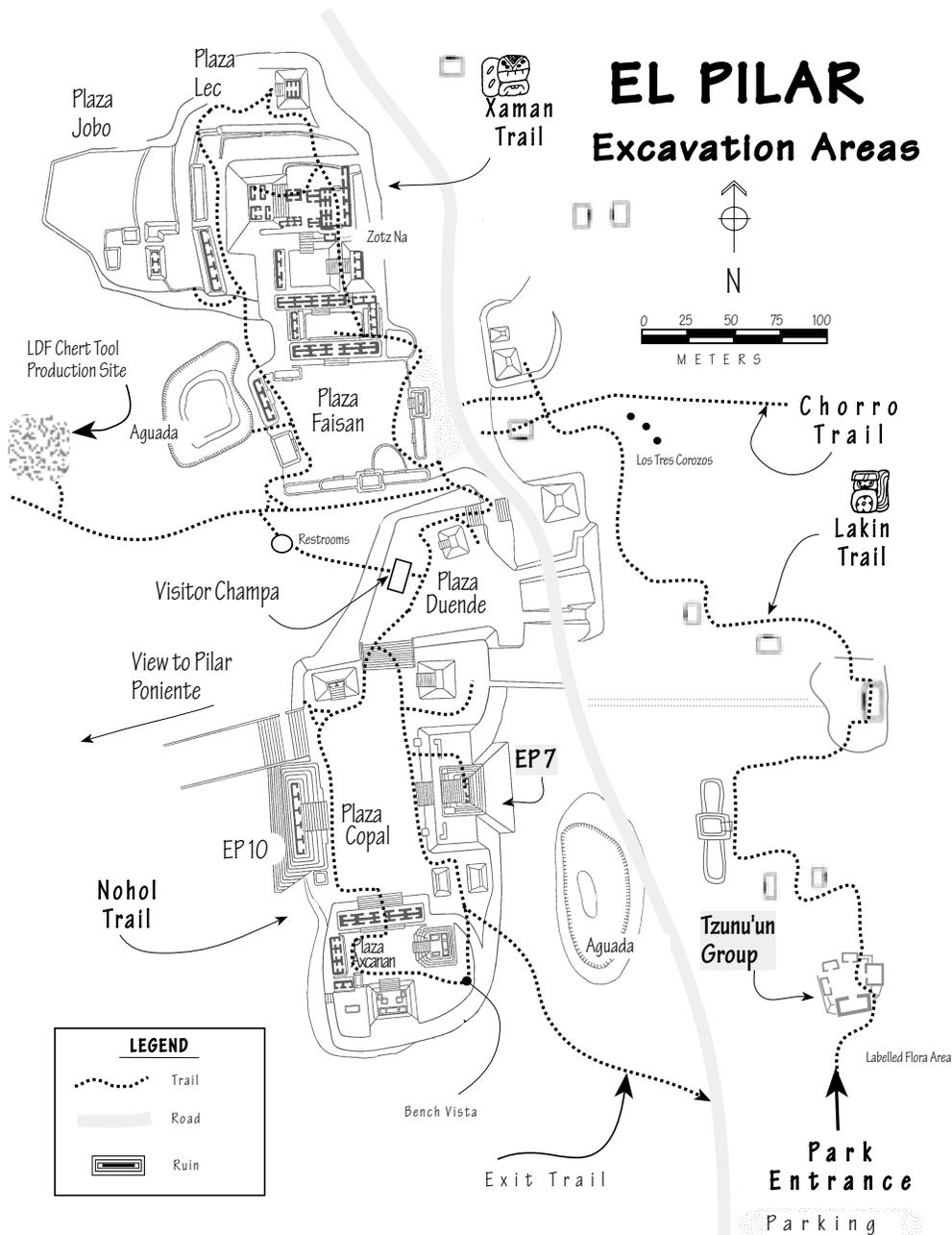
Community Links

No reserve exists within a vacuum and to thrive, the local population must assume a stewardship role or the ultimate conservation aims may not be achieved. A cooperative association has been established with Amigos de El Pilar. Their goal is to develop community enterprises in tourism and agriculture that increase villagers' economic stake in the reserve. Through education and participation, the links between the community and the reserve will strengthen local investments in conservation and develop stewardship responsibility. The leadership role villagers are assuming and the self-determination they are gaining in the process is the foundation upon which the future success of the El Pilar model depends.

Discovering El Pilar

The El Pilar Program has set the stage for ecotourism where the visitor can explore and discover the beautiful Maya architecture beneath the luxuriant forest canopy. The Program's work on trails, rest stops, and picnic areas enhances the accessibility of the site to visitors for education and recreation.

The El Pilar Program continues to evolve around the research concerns of scientific inquiry as well as resource conservation and economic development. Educational and interpretive designs for the park and surrounding landscape are founded on this basic research. These facets of the program are all dependent upon the results of integrated, collaborative, and interdisciplinary research program and are crucial to establishing the reserve on a lasting base. The 1998 season at El Pilar brings us one step closer to our goals.



EXCAVATION RESULTS FOR 1998

The field excavation of the 1998 season focused predominantly at the residential unit of Tzunu'un (272-025), but also included a re-examination of the Xik Na (EP 7) tunnel. Both these efforts provide basic data on the Maya chronology and development of El Pilar. The fieldwork was initiated in March and continued through June. Excavation goals, methodology, and results are consistent with our preceding years and, incrementally, increase our knowledge of the ancient Maya and their occupation in the region.

Excavation Methodology

The procedures of the BRASS/El Pilar Program have been consistently developed and standardized for comparability from year to year. Excavations were conducted by stratigraphic levels, using a modified version of the Harris matrix adapted for the program. Collections were all screened through mesh to maintain volumetric standards for both contexts of fill and middens. Half-inch screen was routinely employed for collapse and general fill deposits. Activity areas and suspected midden areas were treated specifically with smaller mesh screens or completely collected for laboratory sorting and flotation. The same strategies were used for the special features, which were either collected in total or screened using a quarter-inch mesh. All collections were processed in the field laboratory and cataloged by major artifact classes. These data were input and stored in computer files for analyses.

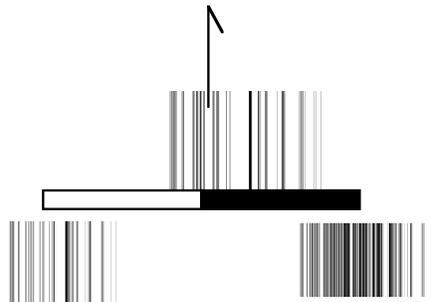
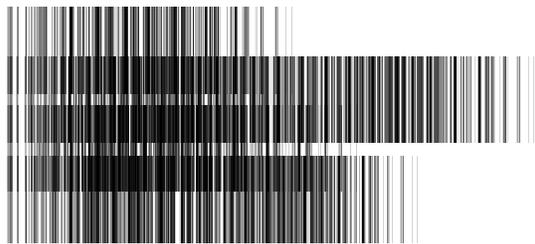
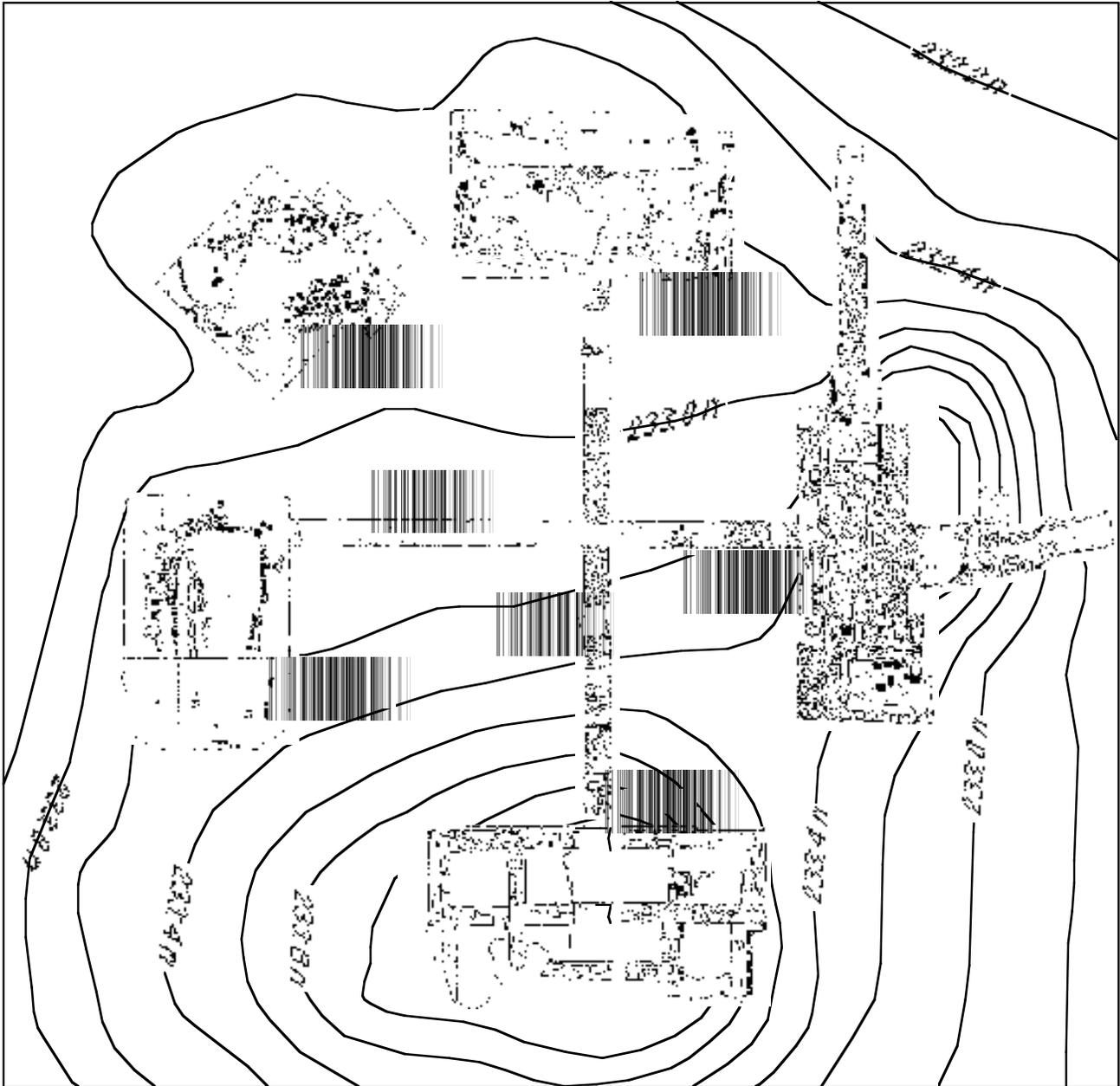
Field excavations followed natural levels and records were maintained by cultural strata. Excavations proceeded with hand tools (shovel, pick, pick-a-hoe, trowel, and scoops), except where special deposits demanded a finer touch. All ceramics and lithics larger than 2 cm were collected in the field from screens for later analysis. All bone, obsidian, and miscellaneous artifacts were kept as well as any organic samples in quantities sufficient for C14 dating. Strata were identified visually and described using Munsell colors and an inclusion guide from the Portland Cement Association (PCA) handbook. Strata were defined in terms of soil type (i.e., sandy loam, etc. from the PCA Soil Primer), dry soil color (with a Munsell Soil Color Chart), and size, type, and percentage of inclusions (sizes range from boulders, cobbles, gravel and pebbles; type generally ranged from limestone to chert).

In preparation for consolidation, excavation of collapse and/or earth disturbed by looters was sometimes necessary and was handled in a different fashion from the formal excavations. Natural stratigraphic levels were followed as much as possible and the excavations proceeded with the traditional hand tools. The collapse was visually screened for artifacts from these disturbed contexts rather than mesh screened.

Excavations at Tzunu'un

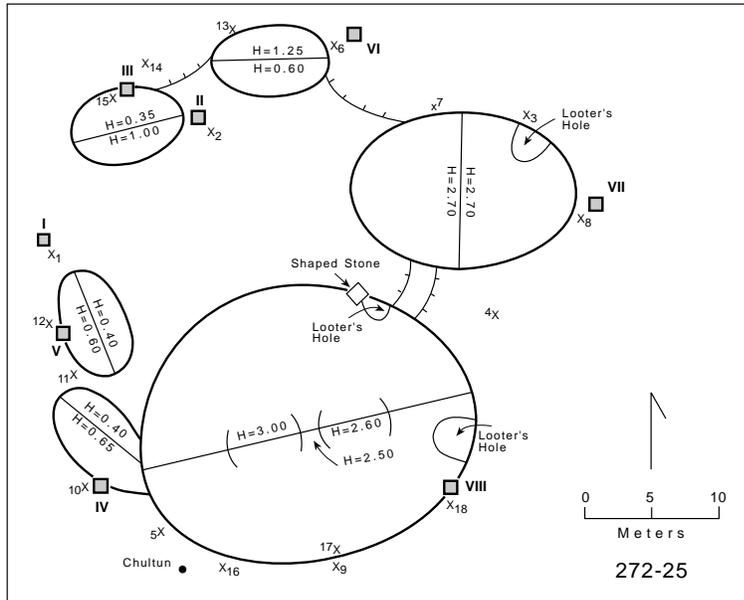
Tzunu'un (Yucatec Mayan for hummingbird) is a plaza group (272-025) consisting of five main structures embraced by a 30 by 40 meter plaza area. Tzunu'un is situated south-east of Plaza Copal across from an aguada and near the drop off of the Petén escarpment. The domestic plaza group is raised approximately one meter from the surrounding topography to incorporate the structures. Str. 1, located to the south is the largest structure and

built on a raised foundation, is an imposing house constructed with limestone walls. Str. 2, on the east, is a pyramidal structure of the "eastern shrine" plan, first recognized by Marshall Becker at Tikal. Structures 3, 4, and 5 appear as foundation for perishable domestic structures: Str. 3 has a plaster floor, Str. 4 has rough foundation and a marl floor and Str. 5 has a rough tramped floor.



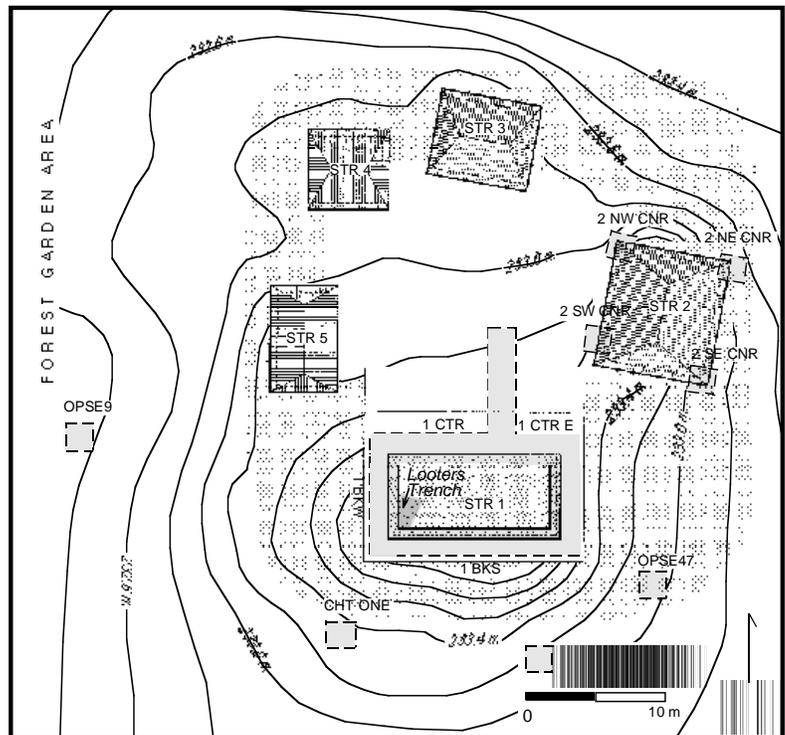
Previous Work: Attention to the residential component of El Pilar represents an important facet of the El Pilar Program as this component represents the foundation of the Maya civilization. Tzunu'un has been the focus of archaeological work of the BRASS Program since 1984 when it was first located on the El Pilar settlement survey transect. At

that time it was mapped within the survey area and tested as part of the 12% sample of residential units along the transect. In our subsequent full scale excavation phase, focused on a representative sample of large, medium and small residential units in all the transects, the large residential unit of 272-025 was selected for detailed examination. The Tzunu'un group is one of two designated residential units at El Pilar selected for full-scale excavation that will complete an excavation sample of 10 residential units to characterize households in the Belize River Area.



Sketch map of 272-025 Brass Survey ~ 1984

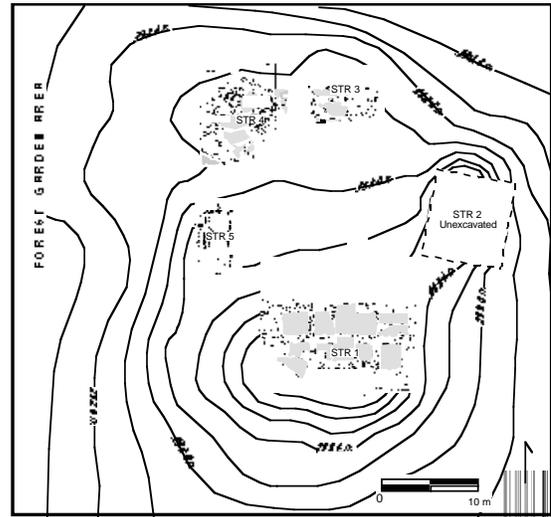
Since 1996, we have methodically proceeded to uncover Tzunu'un (272-025) one of El Pilar's largest residential compounds. The 1996 excavations focused on identifying activity areas around the group and defining the dimensions of the two larger mounds of the Tzunu'un group, Str. 1 and Str. 2. To accomplish these tasks, we prepared the initial map and conducted posthole tests 20 meters around the plaza to evaluate the type and context of activity areas. In addition, we tested the two principal and largest structures, Str. 1 and Str. 2, to determine the condition of the buildings. This included corner probes and a small plaza trench in front (north) of Str. 1. Finally, we cleaned and profiled the



Example Maya House Group Tzunu'un ~1996

looter's trench of Str. 1 and drew the construction profile.

The excavation research at Tzunu'un in 1997 was a continuation of the research plan initiated in 1996. The objectives of the 1997 season integrated the arduous task to expose the structures of the courtyard plaza and interpret the construction history, function, and the overall plan. Excavations began with the largest and most complex structure, Str. 1, originally delimited in 1996. In addition, three other structures were exposed. These include Str. 3, Str. 4 and Str. 5. Excavation of Str. 2 was reserved for a subsequent season.



Tzunu'un Excavations of 1997

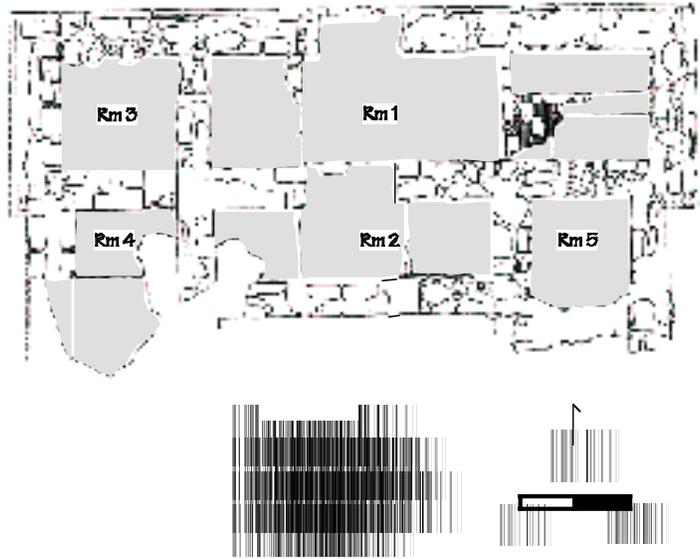
Details of Tzunu'un Excavations ~1998: The purpose of the 1998 work at Tzunu'un was threefold. First, we wished to determine as much as possible regarding the chronology of Str. 1 and prepare this important structure for consolidation. Secondly, we wished to fully expose the last unexcavated structure on the plaza, Str. 2, and determine its use, chronology and condition. This would provide a basis for considering the consolidation process. Lastly, we wished to cross trench the plaza to gather more data on the construction and building history of this common plaza.

The Residential Palace ~ Structure 1: A total of nine separate investigations were undertaken at Str. 1 to support the consolidation and advance architectural studies of Str. 1. Extensive excavations were made in the front and rear of the structure to better understand the foundation and access of the building. This also was important in developing the consolidation plans. Str. 1 at Tzunu'un has a complex floor plan consisting of 5 rooms, most accessed from the front doorway on the north-face of the building. Given the plan of the rear side, it is likely that an access existed to the south, but the nature of the collapse makes it difficult to clearly identify. The relationship of the two rear rooms to the front (rooms 1, 2 and 3) is not clear, as one doorway was sealed in an episode of remodeling. Consequently, the probability of a rear access was advanced.

Since both Rm. 4 and Rm. 5, the southwest and southeastern rooms respectively, appear to open to the south, excavations were undertaken to examine the foundations of the southernmost walls of these rooms as well as the structure as a whole. Three trenches were established stretching from the edge of the rear platform floor to approximately one meter south of the base of the collapse slope. All three of these trench excavations show modification to the underlying bedrock as well as evidence of at least one basal platform step up the south side of Str. 1 to the rear rooms (4 and 5).

A single two-by-two meter unit, placed at the southwest corner of the structure, did turn up evidence that suggests that the rear walls of Rm. 4 and Rm. 5 were destroyed, as facing stones were scarce. This suggests that the structure was either incomplete or stone robbed in the past.

Excavations on both the east and west ends of Str. 1 exposed inset corners at the locations of the rear rooms (4 and 5). A basal molding was uncovered on the ends that matched the one identified on the north side, yet the foundations were found in poor condition. A large excavation exposure on the western end of Str. 1 clarified a chaotic stone pile as collapse from the western wall of Str. 1 rather than a poor addition to the structure. This helped to define the west side more clearly for consolidation.



In an effort to understand the relationship between Str. 1 and Str. 2, a two-by-two meter excavation was undertaken in the northeast corner of Str. 1. This revealed an earlier plaster floor in front of the Str. 1 and provided clues to the nature of a platform connecting Str. 1 and Str. 2.

The Eastern Shrine ~ Structure 2: Str. 2 at Tzunu'un, the easternmost structure, of the group, was the subject of corner probes in 1996. One of the highest priorities of the 1998 field season was to expose the west front face of this structure and determine the structures' condition in terms of the consolidation process. In addition, there was an exposed and deteriorating looters' trench on the eastern backside of the mound that required attention. This old trench was cleared, mapped, and tested before it was backfilled.



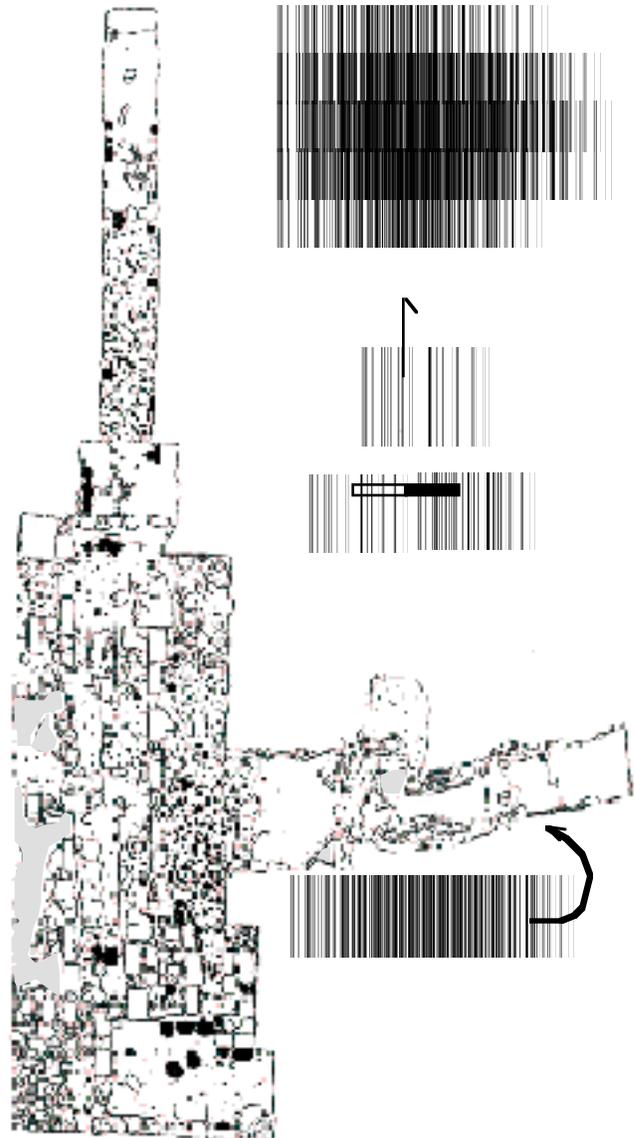
An Overall View of
Tzunu'un Str 2

The excavation exposure of the front of Str. 2 was completed in several stages. The result is a view of the western front half of the structure while the rear of the mound remained covered. The excavation revealed an "eastern shrine" residential temple. The "oratory" had, in its principal form, an outset staircase on the west side leading up to a u-shaped open-sided structure on top. Str. 2 underwent a number of remodelings but was originally constructed of large (60 cm) well-shaped limestone blocks. The last remodelings consisted primarily of rubble fill covered with plaster over expansions west into the plaza and north toward Str. 1.

Through the course of excavation we discovered two caches along the east-west axis in the center of the western face, part of the final construction phases of the building. Both caches, one included as part of the early temple and

one part of a later remodeling, consisted of small undecorated lip-to-lip bowls with related artifacts, chert and obsidian blades, and portions of secondary burials. In the looters' trench, a crypt was cleared in the northern edge of the trench. The looters appeared to have dug through the head (southern) portion leaving only the lower body fragments in situ. The evidence seems to point to there being two individuals in this burial. No vessels or other artifacts were recovered with this burial.

The Plaza Commons: In order to gain a better understanding of the chronology and construction of the plaza group the Program decided to excavate two trenches across the plaza intersecting in the center. Both trenches were one meter wide, divided into two-meter units and excavated down to bedrock. The north-south trench (NST) began at Str. 1, where the step out the front doorway was visible [(FL) 1-26]. This trench continued north from Str. 1 across the plaza, through Str. 3, ending off the plaza to the north. The NST was 24.5 meters in length overall. The east-west trench (EWT) extended from the last step of the axial stairway of Str. 2 and continued to the west to stop just short of the foundation of Str. 5 and was 19.33 meters in length.



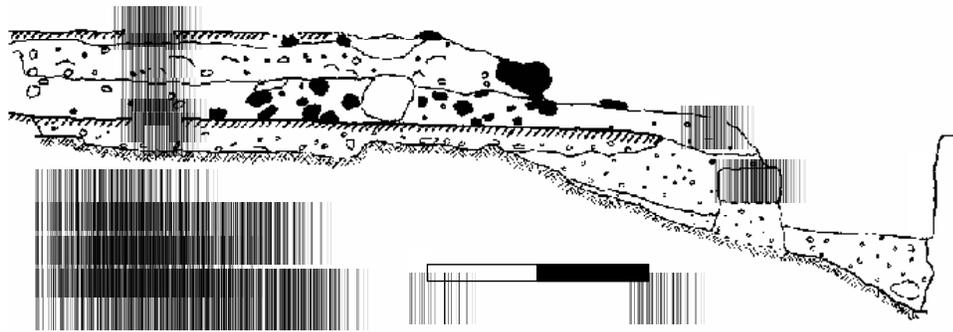
The trench of EWT exposed two plaza floors that consisted primarily of cobble and pebble floor ballast with no evident plaster. This lack of preservation is not surprising given that the plaza area of Tzunu'un has been abandoned for 1,000 years and recently had been used as part of a milpa. The later of the two floors may have been part of a later remodeling in front of Str. 2. EWT3, the third one-by-two unit west of Str. 2, contained an unusually-shaped hole in the bedrock, which may have been a posthole, this suggests the presence of more ephemeral activities in the plaza. Bedrock throughout the EWT series was fairly shallow, less than 50 cm below the present surface. Interestingly, the bedrock showed a sharp rise in elevation in front of Str. 5, which may indicate that the Maya created the structure foundation by lowering the level of the bedrock around it. This point raises questions on the multiple uses the Tzunu'un area may have had in the past.

The NST series was somewhat more complex than the EWT series. First, at the south end of the trench, the excavation revealed four steps leading from Str. 1. Each step had an approximately 30-40 cm rise and 60 cm run. Although the surfaces were, for the

most part, in bad condition, the steps themselves had been faced with large cut stones that made identification clear. The lower of the two plaza levels identified in EWT was also found throughout the NST trench, though in the same rough condition. In the northern part of the trench, units NST10 and NST11, a well-preserved plaster floor was found that matches the lower floor surface of EWT. It appears that the plaster plaza floor was finished prior to the construction of Str. 3. Once again, bedrock was found at a shallow depth of c. 40 cm.



One interesting possibility arose from the bedrock surface map for the combined trench profiles. In three units, one behind Str. 1 (CTRS), one north of Str. 1 (2NWE) and, in NST12, bedrock was found to have been excavated (quarried?) off the plaza area. In other words, there were stepped drops off the plaza that were constructed out of bedrock. This suggests that the Tzunu'un plaza is a 'negative' structure - rather than being constructed as

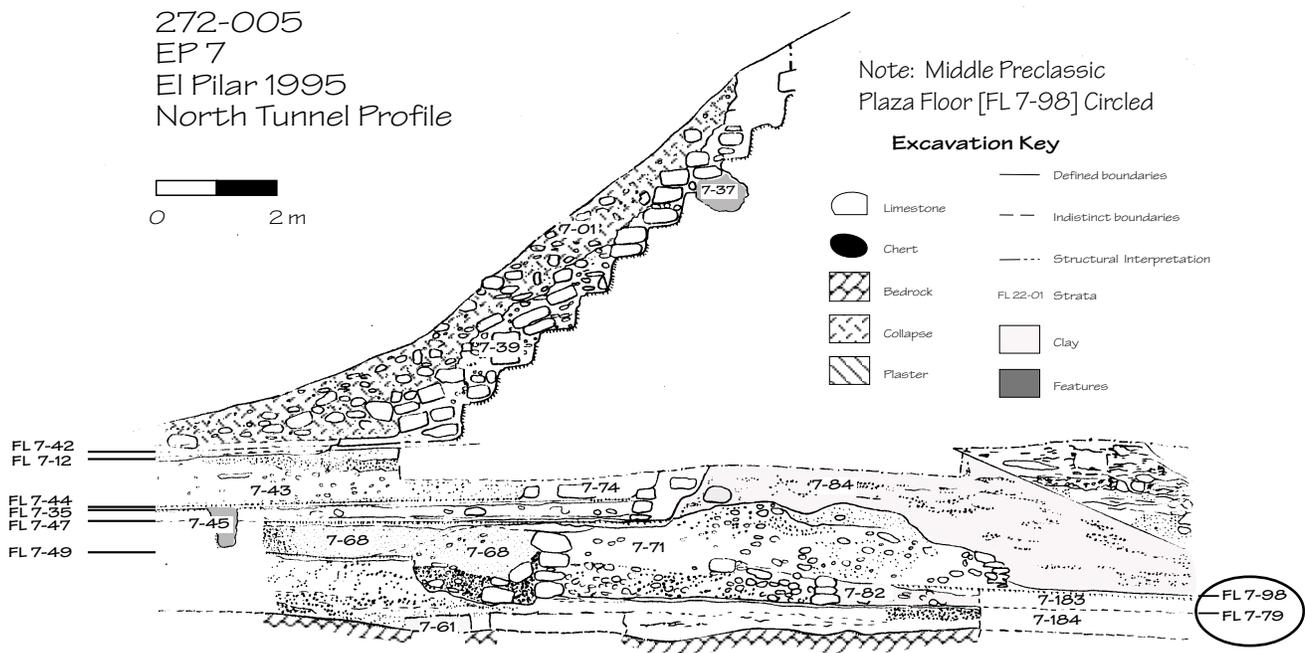


an additive process, the bedrock surface may have been lowered all around the plaza. It is important to note that the bedrock surfaces encountered were very rough and did not appear to have ever formed a usable plaza surface.

Excavations at Xik Na~EP7

The El Pilar Program has had a long-standing interest in the prehistory of the public center as well as the residential components. The tunnel below the Xik Na (EP7) in Plaza Copal is most important in the El Pilar chronology. Xik Na is a 17-meter high pyramid with platforms to either side. This major structure faces west from the eastern side of the largest public plaza in El Pilar. Our archaeological attentions to Xik Na are long standing, and the tunnel completion is high on our priorities.

Previous Work: In 1995 archaeologist Miguel Orrego began axial excavations in the Xik Na. The excavation was designed to examine the building chronology by exposing a profile of the interior episodes and compiling the first major sequence for El Pilar. Due to the extremely good preservation evidenced by the Classic Period axial stairway the initial



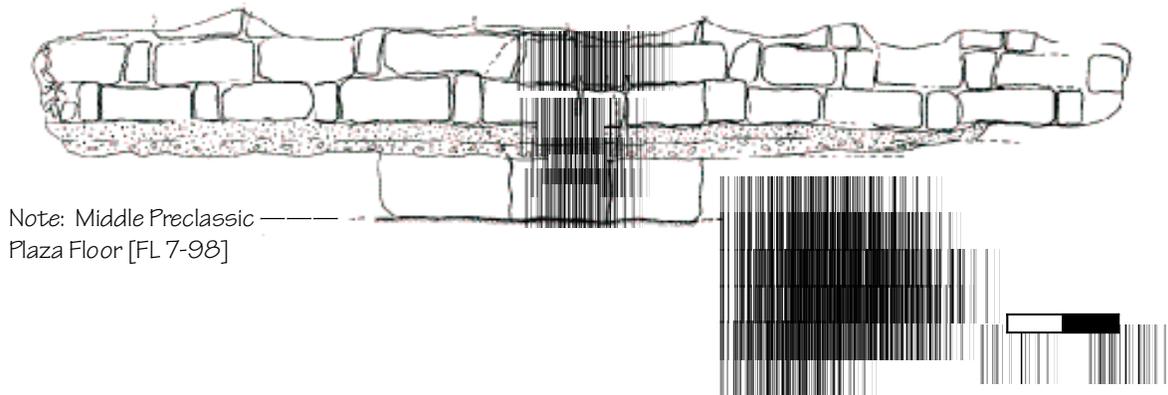
trench strategy was modified. The first phase was to excavate down to bedrock. The second phase tunneled east underneath the pyramid to the center of the building mass. By pursuing this strategy, it was recognized that the data gathered on the chronology would pertain to the earliest construction phases - the tunnel runs at the base of all the later remodelings. The excavation followed along bedrock until, nine meters east of the tunnel mouth, a major plaster floor/plaza [(FL) 7-98] was encountered. It was decided to step up 0.5 m and excavate along the top of this Middle Preclassic plaster floor that formed one of the original public plaza floors at El Pilar. The tunneling continued for 28 meters before excavations were closed down at the end of the field season.

Several important finds resulted from this excavation. The Program identified at least eight major construction phases under the western end of the Xik Na. The earliest phase of construction dates to the Middle Preclassic before 600 BC. More importantly, several of these early phases, in contrast to the latest Xik Na, faced east across the plaza formed by [(FL) 7-98] and this Middle Preclassic floor continued to the east beyond the 28 meters.

Excavations of 1998: It has been assumed that the early structures identified in the western end of the tunnel face across an ancient plaza toward other structures on the east. As the plaza surface [(FL) 7-98] continued east in the Xik Na tunnel, it was determined that the tunnel should be continued, and if possible completed.

Rather soon after commencing excavation in the tunnel, several significant strata were noted. First, there was a 50-cm high platform constructed out of a pure, sticky black clay constructed [7-191] on top of the Middle Preclassic floor [(FL) 7-98]. The second strata, [7-196], consisted of layers of various materials - cobbles, boulders, dirt, gravel - liberally fused in lime cement [7-196]. A third strata showed signs of settling cracks between it and surrounding strata signaling that it had been excavated into older layers.

Four meters from where we left off in 1995, the tunnel crew literally ran into a major obstacle. This obstacle was a large wall [(WL) 7-197] that began 80 cm above the plaster floor [(FL) 7-98]. Three of the courses were exposed in the excavation. This wall was made up of very large well-shaped limestone blocks in header and stretcher construction - blocks approx. every 80 cm protrude to the west. A fill strata [7-196] appears to have formed the foundation behind the wall encountered in the excavations. Probes were extended five meters to the north and south of the wall [(WL) 7-197] to determine if this was a major wall and if there were any apertures. Eleven meters of exposed wall reveal a very consistent enormous header-and-stretcher style retaining wall. Some stones exceeded one meter in length and 50 cm in height. This obstacle was the inside of a major terrace construction wall and was inclining to the west suggesting a battered wall on the other side. There was no other way to continue except through the wall.



Ultimately, we removed two of the stones directly in the path of the tunnel to look beyond the wall [(WL) 7-197] to the east. The wall stones were soft and crumbled readily. East of the wall we encountered strata [7-198], a fill component over the wall [(WL) 7-197]. This fill was composed of loose earth rubble and presented a hazard to the excavation. An excavated 1 meter-long probe into this fill revealed stacked chert and limestone boulders, some reused building blocks, chert cobbles and with a soft clay loam. A survey of the tunnel determined this point was 13 meters from the outside edge and 14 meters below the rear mound structure. With the difficulties presented by the fill, it was determined that we would be unable to complete the tunnel this season.

INTEGRATED SURVEY DESIGN

Building on the settlement surveys of the Belize River Archaeological Settlement Survey, we now have an unique opportunity to undertake an intensive study of a specific area in the immediate vicinity of a large center, El Pilar. The integration of global positioning systems with traditional transit and compass surveys is an important aspect of the strategy and its effectiveness within the Maya forest.

Within a conservation area such as El Pilar, survey strategies should be the least destructive possible. Techniques to accomplish this aim may vary yet current technology allows for prioritizing survey areas and evaluating impacts as the situation dictates. The aim here is to promote minimal impact on cultural and natural resources while identifying and inventorying the cultural heritage.

Survey Objectives

The BRASS/El Pilar Program has integrated a series of mapping techniques that are motivated by the archaeological objectives. The techniques include precise cadastral surveys tied to official bench marks with horizontal controls, Global Positioning System (GPS) control points for target map areas, detailed transit surveys for precise dimensional maps, as well as compass surveys for general identification of cultural remains. The ultimate aim of the program is to have a well-defined topographic map of the El Pilar archaeological area indicating relevant cultural and features. This is obviously a long-term goal, and the strategy presented here will help to define this future.

The survey design incorporates the UTM (Universal Transverse Mercator) grid system within the reserve to provide a locational standard for the El Pilar Program. The UTM locational standard can link everything from archaeological maps to zoological transects and is adapted for Geographical Information Systems (GIS).

There are two main objectives involved in the archaeological survey strategy at El Pilar:

- Locating of cultural remains using an UTM coordinate system
- Mapping individual structures, plaza groups and activity areas.

The techniques used to achieve these objectives utilize different strategies and depend on the immediate goals. General exploration and sketch maps provide an overview of the cultural features of the reserve. Such general maps are located by control points established with the GPS. These control points, in turn, establish the basis for precise mapping using the transit. Used together, these strategies provide a basic foundation for developing an inventory of the cultural resources of El Pilar and a basis for the settlement pattern analysis.

Table 1 : El Pilar Archaeological Survey Strategy

LOCATIONAL STRATEGY	MAIN OBJECTIVES	SURVEY TECHNIQUE	PREFERRED INSTRUMENT
Locate Features	Bench Mark Control Point	Cadastral Survey GPS Survey	Transit GPS Unit
Map Features	Identification Mapping	Exploration & Sketch Detailed topography	Compass Transit

Location of Cultural Remains

The UTM grid system was established by a cadastral survey on the boundaries of the El Pilar reserve. The physical location of cultural features across the landscape requires the establishment of subsidiary control points. Thus, the bench marks and control points of the reserve boundary play an essential role in the El Pilar archaeological settlement survey.

Control points in target areas are key to the detailed mapping. The establishment of the control points can be accomplished in different ways, the basic transit method or with the GPS. The locational controls are the essential basis for fixing cultural features in two-dimensional space.

Cadastral Survey: The cadastral survey of the reserve boundary is the basis for all El Pilar archaeological survey work. The El Pilar Archaeological Reserve boundary is based on permanent bench marks, the key one is identified as SBM1. The position of SBM1 was established on the UTM grid system.¹ There is also an Inter American Geodetic Survey bench mark, E10, placed during a 1962 Cayo-Yaloch road survey.² The El Pilar archaeological survey has used SBM1 as the basis of the horizontal control and E10 as the basis for the vertical control. From these two bench marks the three dimensional horizontal and vertical controls are fixed for all survey and mapping exercises within the reserve.

GPS Survey : A GPS unit is a small, relatively light weight radio transceiver that communicates with known orbiting space satellites. Through radio transmissions, a GPS can fix horizontal locations with a high degree of accuracy. Vertical controls are still problematic for civilian use.

GPS units vary from simple hand held units that provide general locational data, within 100 meters, to more sophisticated and precise units that give horizontal accuracy within centimeters. The El Pilar archaeological survey is fortunate to be collaborating with Sonoma State University where Trimble has recently donated its top equipment for experimentation at El Pilar.

The major benefit of using a GPS unit for archaeological field work is that it can have minimal impact on the forest. GPS units collect locational data transmitted by satellites so there is no need for a transit survey line to be carried from one known control point to the next one.

The use of bench marks SBM1 and E10 within the study area presents a great advantage for the El Pilar archaeological survey. This provides the horizontal and vertical control basis for the GPS. The GPS method employed to ascertain UTM grid locations at El Pilar was a complex one that utilized two GPS units operating in synchrony with each other. A staged strategy was required to establish the given grid basis. The first unit is a stationary base (Trimble 400SE), and the second is a rover (12 channel GPS Pathfinder Pro XL with a TDC1 data logger). These two GPS units together provide a fine scale horizontal control. With the base station set to a known horizontal and vertical position, the precision of the data collected on the horizontal scale is within 5 cm. Using the determined elevation for E10, the vertical data has a precision of within 50cm.



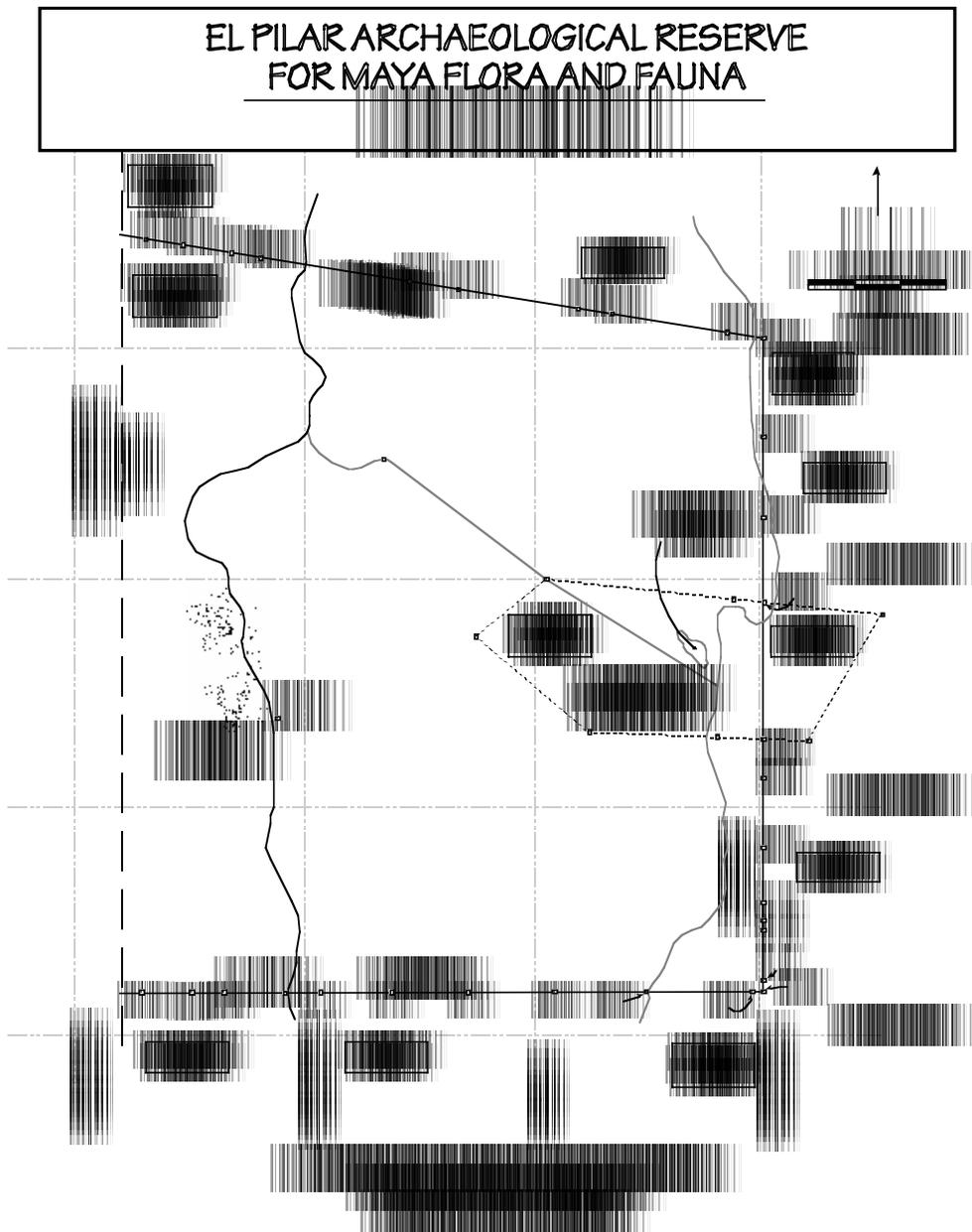
William Poe with mobile

¹ UTM 1907 180 N / 271 933 E (Statutory Instrument 54, Government of Belize 1998).

² E10 has a designated elevation of 231.76 meters, Filed notes, Ministry of Natural resources Belize.

To determine the UTM grid for the El Pilar archaeological survey, a permanent central base station for the GPS had to be established. In order to accomplish this, a multistage strategy based on SBM1 had to be undertaken. This strategy serves for the establishment of all base station controls for survey. First, the GPS base is positioned over the known point while the rover is situated at the potential base station. Then, the satellite data are collected simultaneously. Next, the units are reversed and data are collected again. Each collection period can last up to one hour. This continues until the data sets agree between the new base station location and the known point.

The determination of the agreement is based on laboratory computer processing of the satellite data field. These satellite data were correlated and corrected by computer using a mathematical algorithm to meet the 3 dimensional data of the bench mark. Once the results of this process are found to be satisfactory, the survey proceeds. At this point, a local GPS base station can be permanently set.



The next step was to start GPS survey around El Pilar. Originally it was hoped that topographic survey work could be managed with the GPS rover. Experimentation, however, demonstrated that it was only possible to use the rover while moving in very open areas, such as the roads and fields. Thus, the use of the GPS unit for fine scale definition of the broad topography, monumental and residential areas, not to mention ancient structures, is not possible under the conditions of the Maya forest. Even with a six meter antenna, it was difficult to maintain satellite contact while moving in most areas of El Pilar. Roads were problematic where tree overhang caused interruptions in satellite data flow to the GPS unit.

As a result of these experiments, we concluded that the most effective use of the GPS in the Maya forest is to focus on control points. For the precision we require from the GPS to establish control points, it was essential to maintain contact with a minimum of 5 satellites. To accomplish this, the rover had to remain stationary for approximately 15 minutes. The control points would be fixed in space and provide the base for the integration of other survey methods.

To facilitate the traditional surveys at El Pilar, control points are set in locations where the best data can be captured. A minimum of two control points in line-of-sight need to be established. This provides the basis to maintain a standard grid bearing, essential to all mapping procedures.

By linking the cadastral and GPS strategies, the El Pilar archaeological survey can design the placement of control points throughout the reserve with precise UTM coordinate. From established control points, the sketch and detailed topographic mapping can be integrated. The result is a comprehensive platform for research not only on the archaeological resources in the reserve, but to all research tied to locations within the area.

Identification and Mapping

One of the primary goals for El Pilar is to establish the inventory and understanding of the cultural resources around the major center of El Pilar. This requires archaeological survey to identify and map the area. The survey is divided into two levels of investigation; 1) rapid inventory and sketch mapping, and 2) detailed topographic definition.

Exploration and Sketch: The strategy for the exploration of El Pilar involves both systematic survey and the use of local informants to identify structures or groups of structures. This is an initial level of identification and is important to establish targets for control points. Once areas with archaeological remains are located, sketch maps are prepared. The sketches give the researchers as well as managers and idea of what kinds of sites are found around El Pilar. These locations are, then, the targets for establishing GPS control points.

Detailed Topographic Definition: The most detailed level of survey data is attained with the transit. The need to maintain a standardized grid across the reserve requires an azimuth or grid position to be carried from a known point to the new survey area. The traditional method of maintaining a base line with a transit has been to cut a linking line across the landscape, a time consuming and disruptive practice for flora and fauna. By using the GPS to establish UTM control points, the El Pilar strategy minimizes the need to cut survey lines.

The primary transit used at El Pilar is a Topcon GTS 203 which utilizes a laser to establish distance and coordinates. The information gathered with the transit gives precise data on the location of structural features and general topography. These data are compiled into a growing digital data base from which maps are generated.

Summary

Several long term goals are prominent within the survey design and are aided by the advanced technology currently available to the project. We aim to intensively survey the whole reserve recording the cultural remains based on the UTM grid system. This is facilitated by the GPS control points that are strategically positioned throughout the site.

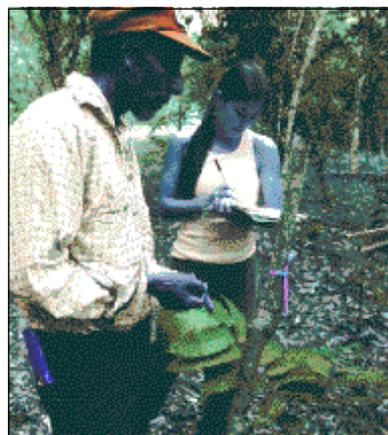
THE MAYA FOREST AS A GARDEN

Ecological studies of the forest structure and assessment of the overall ecological context is at the core of the El Pilar Program efforts and this is prominently featured in the forest garden. The Maya Forest Garden project is designed to utilize both archaeological and ethnographic evidence to design a model of the subsistence mosaic. In combining both past patterns with present knowledge, the garden surrounding the Tzunu'un residential group provides a method for explaining how the ancient Maya may have utilized the land while demonstrating how current inhabitants of the Maya forest are involved in sustainable gardening practices. Overall goals of the project include education of both tourists and the local community, involvement of the local community, and support of scientific inquiry.

Past Enterprise

Begun in 1996 under the direction of Constanza Ocampo-Raeder, the original project was the design and support of three gardens. The first garden at Tzunu'un, around the example Maya house group at El Pilar, was planned as a garden for indigenous plants thought to be utilized by the ancient Maya. The second garden at the caretaker's house was designed to contain both indigenous plants and other introduced species (such as bananas and sugar cane) which are utilized by the local community today. The third garden, at the Be Pukte Cultural Center in Bullet Tree Falls, would contain indigenous and introduced plants most useful to the visiting public, making the forest garden model accessible to the community at large.

Work in the 1996 field season focused mainly on preparing the Tzunu'un forest garden by clearing out unwanted trees and shrubs from a plot of land surrounding the ancient plaza group of Tzunu'un. Species not previously present in the garden area were planted. In the following wet season, caretakers at El Pilar conducted more intensive planting of several species (including such species as cacao and xate). In 1997 the garden was maintained and cleaned but no additional planting was conducted.



Work on the Forest Garden

The garden at the caretaker's house has been intensively managed since 1996. New plants are frequently added by the caretakers during the wet seasons to both provide a welcoming and beautiful entrance to the El Pilar Archaeological Reserve and to provide supplemental foodstuffs. The Be Pukte Cultural Center is much more sparsely planted with small trees, shrubs and bushes. The area is maintained largely as a public gathering place as with grass and various fruit trees. Each Independence Day a new mahogany tree is planted to commemorate the community's investment at the cultural center.



Crew assess the Forest Garden

Garden Development in 1998

This year, the Forest Garden Project focused on the mapping of the established garden and collection of information on the plants that can be utilized for education and tourism. Carmen Cruz, a caretaker at El Pilar, and Narciso Torres of Santa Familia, began the rejuvenation of the garden by selectively clearing within the garden. Based on their extensive knowledge of the plants' needs as well as the soil and water limitations, they removed specific trees and pruned others to allow more light to reach the smaller trees and shrubs. In doing so, they gained an increased knowledge of the location and distribution of the plants within the garden and began to make informal observations on the needs of the garden for the upcoming wet season and the more distant future.

After the removal and clearing was completed, the crew surveyed over five hundred plants and bushes in the garden. During this phase, each surveyed plant was given a permanent number to aid in long-term monitoring of the forest garden. This survey information will be utilized as a map to locate plants in the garden for local residents, tourists, and the El Pilar crewmembers.

Subsequently, work with Leopoldo Romero, a Cayo Bushmaster, helped to identify the trees and plants within the garden. Based on this information, combined with the further research and information compiled in the 1996 field season, the scientific names (Family, Genus, and species when available) and common names (mainly in English and Spanish) of the plants were recorded. The diameter breast height (DBH) of each tree greater than 5 cm was also recorded, and permanent numbered tags were placed on these trees to monitor growth. In order to make this information accessible to the public, a permanent metal nametag has been placed on or near each individual plant. A



The Forest Garden of Heriberto Cocom

new trail winds through the forest garden for the educational enjoyment of the visitor and the use of the forest gardener.

Information on the uses and historical significance of many of the tree species was also recorded from interviews with Mr. Romero and staff members. The compiled information forms a preliminary trail guide for the Forest Garden trail.

Future Work

The Maya forest garden has unlimited potential as a tool for education as a means to attract ecotourists to the El Pilar Archaeological Reserve. Success lies in both maintenance and the continued growth of the garden as well as in the creation of an accessible information base concerning the plants of the forest – garden and the potential use of forest gardening in the local community.

CONSOLIDATION AT TZUNU'UN

Consolidation efforts at El Pilar have proceeded with a clear view towards long-term conservation and maintenance of the area exposures at El Pilar. In view of the considerable experience that exists on Maya architecture, the consolidation work at El Pilar has been designed to incorporate the lessons learned. The goal is to develop a wholly new way of revealing ancient Maya temples that allies with the Maya forest, in a search for a balance between nature and culture.

The balance we are seeking of culture and nature at El Pilar must account for the structural stability of the ancient Maya ruins, the maintenance regime for the site, and the visual needs of the visitor. This complex balancing act requires experimentation and refinement. The El Pilar Program consolidation project is in its second year. We are learning from the experience. Working under the guidance and tutelage of Rudy Larios, whose work on Maya architecture spans more than 3 decades, the vision for the conservation of the ruins goes beyond the immediate and well into the future.



Tzunu'un Str. 5 exposure ~ 1997 / and after experimental consolidation ~ 1998

The El Pilar Approach

The Program's approach to conservation follows the ICOMOS Venice Charter of 1964. The position in the Charter is that the ancient cultural remains are not the sole point

of attention, but part of a greater context that includes the relationship to other cultural resources, the natural environment, as well as the general surrounding landscape. As a ruin, El Pilar can never be reconstructed to resemble anything that it meant in the past. Cultural resources, such as those of El Pilar, are only a vestiges of that original character. We now interpret these remains as we encounter them and at El Pilar we have the opportunity to create an entirely new way of perceiving Maya ruins.

Given our unique position to create a new encounter with El Pilar, we are approaching the conservation of the resources with extreme caution and care. We have spent the past five years investigating and evaluating the site's great potential for conservation. Our initial forays into the realms of consolidation have been rewarded with fine results, as seen at the area of Jobo in the northern H'Mena Acropolis. These results have been hard won and include experimentation with quarrying, development of distinct mortars and surface treatments, and the evaluation of finishing styles. The development of the consolidation process depends on the collaboration with our local staff from Cayo. Their involvement in the decision-making of the work at El Pilar was integral to our successes. These efforts are still in process and will continue to undergo refinement.



Tzunu'un Str. 1 main wall after consolidation

Materials

All the basic materials used in the consolidation work at El Pilar are essentially of the original character of the construction from the Classic Period. Local materials are the source for the ancient Maya and are the basis of effective consolidation for our contemporary goals. Starting with limestone, this local stone forms the fundamental building block of every Maya construction. Rough limestone and its inclusions of chert were used as fill for buildings, the core of walls, and the essence of foundations. Facing stones were fashioned from select quarries for their uniform qualities. At El Pilar we have been reviving old quarries for such stone. Where original stone materials on building exposures have deteriorated, newly quarried stone of the same dimensions is used to replace the original.

Mortars used by the Maya to point the limestone blocks, consolidate fill, and prepare floors were made from lime slaked local limestone, selected marl or sascab, and water. We used a variation of this basic recipe as developed by Rudy Larios.

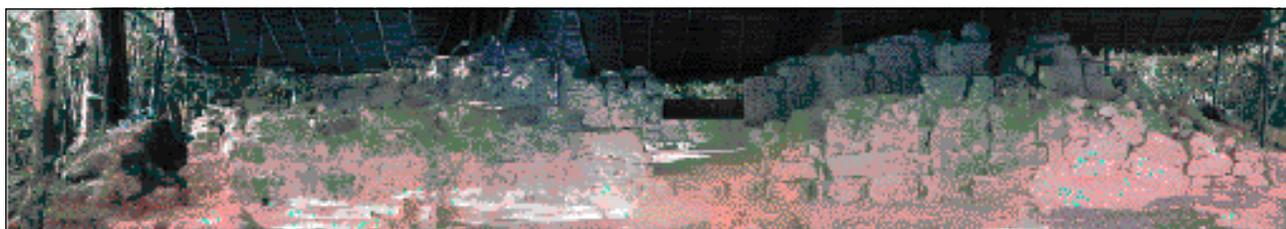
- **3 x 1:** Three parts sifted marl (1/4") to one part hydrated lime for the following uses:
 - For massive wall fill.
 - For repointing walls and resetting chinking in walls
 - For sealing stucco to walls
 - Diluted for stabilizing structural cracks

- **3 x 1 + 5%:** The mix is the same as (I) above with the addition of 1 part Portland cement for 20 parts prepared mix. This is used as follows:
 - For the surfaces of fills, walls and exposures to impede water filtration For leveling of floors for water flow
 - For structural areas where weight bearing is involved.
- **3 x 1 F:** A mix of 3 parts well screened (widow screen) marl to 1 part screened hydrated lime for the following special cases:
 - For sealing of plaster on walls, stucco facades, or in their reconstruction.
 - For sealing of cracks in plaster and stuccos that separated from walls.
- **1 x 2 x 1 F:** This fine mix, screened with window mesh, is made with 1 part marl, 2 parts screened sand, and 1 part hydrated lime. This mix should be very liquid and serves well for the following examples:
 - For filling in holes where stucco has separated from walls.
 - For rescuing stuccos in danger of deterioration.
 - For fine cracks in stuccos and plasters.

Walls and Floors of Tzunu'un

The consolidation at Tzunu'un involved consolidation of the main walls of the southern structure of the house group, Str. 1. This building, composed of five rooms with interconnecting doors, was excavated in 1997 and left protected by a thatch roof for the visitors to view. This year the aim was to develop the consolidation program by working on the stabilization of the building foundation, the consolidation of the room walls of Str. 1, and sealing of the bench surfaces. In addition, we experimented with the consolidation of the floors of the three perishable structures surrounding the plaza (Str. 3, 4, and 5). The results are variable and we will be able to evaluate the long-term conservation issues after the rainy season.

Before any consolidation took place at Tzunu'un, all walls, interior and exterior, were photographed, measured, and drawn. Included in our documentation process was the use of a digital camera that recorded magnetically a picture of the wall surface. The digital photos could be compiled into a mosaic for use on-site. From these photos, we created composite mosaics of the walls for managing the field process. This turned out to be an excellent innovation, better than Polaroid and amenable to many distinct uses that assisted the consolidation process. The working field documents of the drawings, photos and digital mosaics allowed for the accurate enumeration of the wall stones for the consolidation. The results of the work at Tzunu'un provide a basis for quantifying the amount of



Tzunu'un Str. 1 Entrance on the North Wall prior to consolidation

work, evaluating the labor requirements, estimating the materials needed, and the optimum size of a work group.

Following the evidence from the walls, the fill, and the composition of the foundation, the project proceeded to dismantle the loose facing stones, consolidate the rubble core, reconstitute the walls up to their original height (c. 1.20 m), and stabilize the foundations of Str. 1. In addition, we spent considerable time rejuvenating a local quarry in an effort to replace deteriorating facing stones and complete the consolidation process.

The consolidation work focused on the walls and foundation of Str. 1 as follows:

N wall face	E Face and covered
NE wall of Rm. 1	E bench Rm. 1
NW wall of Rm. 1	Seal on S walls Rm. 1
NE Side, E and W face	Seal on E & S walls Rm. 3
W Inset corner	Seal on N, E, & W walls Rm. 4
Bench Rm. 4	Seal on walls and bench Rm. 2
W foundation	Seal on walls and bench Rm. 5
Walls of central door	Seal on central wall S
N Face	Seal on wall cores
Floors covered w/ marl & moist lime	Develop seal style

PARK DEVELOPMENT ACTIVITIES

Construction

The 1998 field season saw the completion of three major construction projects. Raleigh International volunteers worked on the modern Maya house along the Water Trail and thatch-roofed rest stops along the Xaman and Nohol trails. In addition, the old champa in Plaza Duende was replaced by a new structure that should last for many years.

Raleigh International, a British ecological and youth development organization, supplied two volunteer groups to El Pilar this season, each for three weeks. The first group to arrive set up camp along the Water Trail and spent the next three weeks rehabilitating the example Maya house. The old guano, or bay leaf, roof as well as the rotting roof members were removed and entirely new roof assembled, this time out of corozo or cohune leaf. They also replastered the exterior of the building and rebuilt the steps down to the first spring on the trail.

The second Raleigh group built two thatch-roof rest stops, small buildings with L-shaped benches, along the Nohol and



Plaza Copal ~ Causeway Rest Stop



Plaza Duende Picnic “Champa”

Xaman trails. One structure was built at the head of the Bryan & Murphy causeway in Plaza Copal and the other is on the west end of Plaza Lec. Both are constructed out of “redwood” and are destined for many years of use. The Raleigh groups are to be commended for the great job they did.

The Program also replaced the old champa in Plaza Duende. Our master carpenter, Carlos Medina, managed the construction process for the new Duende Champa. They began by constructing six beautiful chert cobble-concrete posts that replace the old wood ones that has succumbed to

termites. The new roof is supported by a pressure treated lumber structure with a painted sheet metal roof to capture water for visitors. Utilizing the left over wood from the construction project, the crew also built two new picnic tables and several stools.

Trails

Three large trail projects were completed during the field season. The first involved removing the stairs from the Chorro Trail, the longest El Pilar trail at 2.3 km. The steep stair areas were replaced with switchbacks wherever possible. This project will make maintenance of the trail easier for the Reserve caretakers.

The Water Trail was completely renovated and partially rerouted by the second group of Raleigh volunteers. This project also replaced many stairs with switchbacks and made the trail somewhat easier going for the visitor. The south end of the trail, near the mouth of the El Pilar springs, is particularly beautiful.

Lastly, an entirely new trail was cut this year at the suggestion of the caretakers in direct response to visitor requests to be able to walk the ancient causeway. With a total length of approximately 1.5 km the Causeway trail exits Plaza Copal and traces the Bryan & Murphy causeway west to an old logging road. The trail then circles back on the old road to end at the LDF chert site. At the chert site, the trail joins the El Pilar trail system to exit at Plaza Faisan.

The result of these new amenities – the rest stops, the Plaza Duende picnic champa, and the trails – will give the El Pilar Archaeological Reserve more character for the visitor.

COMMUNITY PARTICIPATION

In order to bring more focus to community development and community participation related to the El Pilar Archaeological Reserve a community participation component was coordinated with the International Program of University of Florida (UF). The two

goals of the UF/El Pilar Community Project were to facilitate local participation in planning and activities for community development and creating a management plan for the El Pilar Archaeological Reserve. The project encountered a number of challenges. These ranged from local experience with paternalistic projects, to skepticism about potential benefits to the community, to limited organizational experience on the part of the local group— Amigos de El Pilar (AdEP), the local leader in promoting interest in the reserve.

With all the challenges, the UF/El Pilar Community Project succeeded in its goals by facilitating a participatory planning process that analyzed and implemented development alternatives, strengthened AdEP as an organization and strengthened local people's voices in the process of creating a reserve management plan. A team of Belizean facilitators assures continuity of work with AdEP, they will be providing expertise in governmental relations, training, group organization and small enterprise financing. One major success was the evolution of this group from ad hoc team into a group with a shared vision of their roles and approach and a defined set of goals for the upcoming year.



AdEP Be Pukte Community Center ~ BTF

Through five working visits by UF staff (spearheaded by Kevin Veach), the UF/El Pilar Community Project implemented an explicit philosophy of participation as a process of self-initiative promoting individual and group empowerment. The work relied on local definition of needs and interests, beginning with a needs assessment with local groups that led to an understanding of the benefits people desired from the UF/El Pilar Community Project and reserve and what they felt they would need to achieve those desires. Based on these findings, a two-day workshop was held that analyzed the potential benefits and challenges of

ecotourism and initiated a process of planning tourism-related alternatives that could be viable locally. The workshop brought together over 30 individuals from communities near the reserve as well as from the NGO sector and groups involved in ecotourism enterprises.

A subsequent focus by the facilitator team on planning, prioritizing and building organizational capacity with AdEP led to several tangible outcomes. First, the group used its own resources to finish the construction of their cultural and crafts center—Be Pukte—and opened it with a public celebration. Second, a woman's group formed within AdEP and planned, financed and carried out production and sales of a variety of crafts from the new Be Pukte Cultural Center. Third, AdEP made significant progress in its planning and organizational abilities as a result of the work of the UF/El Pilar Community Project and the facilitator team. This has allowed it to conduct more regular and organized meetings,

to plan activities of a larger scale than in the past, to assume responsibility for its own bookkeeping and to request training to improve their entrepreneurial and managerial abilities. Finally, while participation in AdEP has remained fairly constant in numbers, it has improved in quality. Women participate more actively and have new leadership roles. The women's groups have given the women a collective voice that was lacking in the past.

The project was successful in facilitating local participation in the creation of a management plan for the reserve. A public meeting opened dialogue about the process with the community. Preparation with AdEP and the village chair permitted them to play an effective role representing local interests in a multidisciplinary meeting that produced a draft management plan for the reserve. Follow up meetings with the community afterwards assured that the results were shared and strengthened AdEP's credibility in the community. AdEP is committed to playing a role in the development and management of the reserve and is better prepared than previously. It will require significantly more human capacity development, however, before AdEP would be able to assume formal co-management of the reserve.



Serving up local tamales an event hosted by AdEP

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APPENDIX A: From The Mesa Redonda II May 1998

El Pilar Maya Landscape: Gateway Between Two Nations

El Pilar Archaeological Reserve represents an innovative example of cultural resource conservation in relationship to the natural environment and to contemporary peoples.

As the largest Maya archaeological site in the Belize River area, El Pilar is unique in its presentation of ancient daily life through household structures and forest gardens, located in the shadows of monumental Maya architecture.

This shared resource serves as a symbol of cooperation between Belize and Guatemala, and as a model of collaboration between the reserve and local communities and between the cultural and natural resource researchers and conservators.

Involvement in reserve planning and management links the communities to their cultural heritage and encourages their social and economic development.

Documentation and evaluation of this holistic approach to resource conservation will allow El Pilar to serve as a model for other important sites of world heritage.

Draft Goals of the Research and Monitoring Program for the El Pilar Archaeological Reserve for Maya Flora and Fauna

1. General Objectives: Research, Education, Protection
 - (a) to focus on nexus of culture and nature
 - (i) promote sustainable extraction strategies for plants/ animals (e.g. Corozo)
 - (ii) education of community to participation in long term management of El Pilar
 - (iii) encourage dissemination and publication of preliminary results
 - (b) To promote solicited science and independent science
 - (i) standardized data collection methods to facilitate comparisons
 - (ii) UTM grid location of data sites
 - (iii) comparable recording techniques
 - (c) To develop a comprehensive Geographic Information System (GIS) (include all scientific data within the reserve boundaries)
 - (d) To organize a research committee made up of research scientists working in the area
 - (i) to establish peer review process to evaluate research
 - (ii) to develop "handbook" for systematic and vicarious information gathered within the reserve and to encourage dissemination to the community
 - (iii) to promote centralized database of information (all information available, preliminary field reports of research/ observations)
 - (iv) to track and coordinate access to preliminary reports and other grey literature
 - (v) to promote and facilitate research and permit process at El Pilar
 - (vi) to facilitate scientific enterprise and communications between scientists and between the committee and governments

- (vii) to promote periodic scientific roundtables
 - (viii) to attract more research projects
2. General Activities:
- (a) Short Term
 - (i) develop teachers packages (audio/visual kits) for schools
 - (ii) contribute illustrative information to the Be Pukte and other community repositories
 - (iii) incorporate new data into the trail guide for the EP reserve
 - (iv) document the the EP reserve research and development process
 - (v) issues to address
 - permit-processing
 - areas of investigation
 - (i) promote model for interdisciplinary research
3. Cultural Resources Objectives
- (a) To understand the prehistory, history, and contemporary development of El Pilar (archaeological, survey, excavation, archives, library)
 - (b) To promote a coherent archaeological conservation program for all of El Pilar
 - (c) To develop a conservation monitoring program to maintain El Pilar
 - (d) To adopt the theme of Travel Through Time and View Everyday Life
4. Cultural Resources Activities
- (a) Short Term
 - (i) inventory of cultural remains to establish a research and monitoring baseline
 - (ii) investigate the construction sequence of Nohol and Xaman Pilar using the tunneling method focused at Copal (EP7) and the Hemena (EP20)
 - (iii) continue development of the Forest Garden to show aspects of everyday life
 - (iv) complete the excavation, exposition, and consolidation at 1) Tzunu'un, 2) EP7 stairs of Copal, 3) EP25 of Plaza Lec
 - (v) initiate monitoring system for consolidation program an institute improvements
 - (vi) develop cultural conservation program that evaluates nature management of cultural resources
 - (b) Medium Term
 - (i) incorporate Monumento Cultural El Pilar into trail system
 - (ii) complete the excavation, exposition, and consolidation at key locations of
 - Copal
 - Gumbolimbo
 - Ixim
 - Subin
 - (iii) expand the Forest Garden developments at El Pilar to include the mosaic of land use areas, particularly in the western Guatemala section of the reserve where a swamp zones is reported
 - (iv) continue to monitor conservation strategies for revisions and improvements

- (c) Long Term
 - (i) analyze, publish results of research and conservation programs
 - (ii) promote conservation program
 - (iii) establish the varied aspects of the model mosaic of ancient Maya life ways in the different identified natural life zone systems within the reserve
- 5. Natural Resources Objectives
 - (a) To understand the natural history of El Pilar
 - (b) To promote an appreciation of the human interface with the natural environment at El Pilar, past and present
 - (c) To focus on the dynamics of the forest through research on succession, edge effects, and examination of equilibrium
 - (d) To determine indicator species for monitoring program
 - (e) To demonstrate the necessity of wildlife corridors in the viability of small reserves like El Pilar and document the contribution of small reserves like El Pilar to the maintenance of biodiversity and refuges for plants and animals
- 6. Natural Resources Activities
 - (a) Short Term
 - (i) inventory of species and communities of plants and animals for baseline
 - (ii) establish permanent monitoring plots and transects for research and monitoring programs
 - (iii) determine baseline soils, species, light for milpas and other stages of forest within the reserve
 - (iv) determine protocol for monitoring within the reserve boundaries
 - (v) establish air photography base and groundproofing
 - (b) Medium Term
 - (i) periodic monitoring of permanent plots and transects (as needed, at least every 5 yrs)
 - (ii) measure dynamics of forest
 - (c) Long Term
 - (i) analyze, publish results of research and conservation programs
 - (ii) promote conservation program
 - (iii) continue periodic monitoring of permanent plots and transects (as needed, at least every 5 yrs)
 - (iv) continue to measure dynamics of forest

APPENDIX B: Background History on El Pilar

Basic History of Archaeology at El Pilar

- 1972 Site of El Pilar reported to the Belize Dept. of Archaeology
- 1983 Belize Department of Archaeology visits El Pilar with Dr. Anabel Ford, The Belize River Archaeological Survey (BRASS) begins
- 1984 A preliminary map was made of the major architecture at El Pilar by BRASS
- 1986 Excavation and rescue work at El Pilar, Alta Vista, Yaxox, Bacab Na conducted by BRASS
- 1987 BRASS conducts site testing in the area
- 1993 Detailed mapping begins at El Pilar
- 1994 Pilar Poniente mapped with IDEAH and CONAP
First trail system constructed
First Fiesta de El Pilar
- 1995 Construction of a permanent caretaker's house at El Pilar
Boundaries of El Pilar Archaeological Reserve established by Belize Dept. of Lands and Survey
Publication of *Teo's Way*
- 1996 Forest Garden Project at Tzunu'un begins
- 1997 Belize Reserve declared
First El Pilar Mesa Redonda
Consolidation work in Plazas Jobo and Lec
- 1998 Guatemalan Reserve declared under CONAP
Statutory Instrument signed, Ministry of Tourism and Environment
Second El Pilar Mesa Redonda
Rapid Ecological Assessment of Belizean and Guatemalan Reserves
Consolidation work at Tzunu'un

Chronology of Amigos de El Pilar

- 1992 May/June Daniel Silva, Area Representative, supports community work at the plazas of El Pilar
- 1993 Anabel Ford holds two meetings with the community members presenting idea for community based organization related to plans at El Pilar.
June 30, 1993 the name AdEP was decided, members joined, and first officers were elected (President Angel Teck, Vice president Abel Manzanero, Secretary Sandra Manzanero, Treasurer Fred Prost).
- 1994 Nine general meetings of membership, one executive meeting and one event were held.
Participated in the Fiesta El Pilar (5 May 94)
Received registration certificate as a non-profit organization on 7 Sept 94.
Registration number 2566

- 1995 Fifteen general meetings of membership and six events were held.
The group elected a new President, Marcos Garcia (26 Feb)
Events included:
Presentation of *Teo's Way* (19 Mar)
Participation of President Marcos in Mobile TNC workshops (May/June)
BTF Agricultural Fair (27 May)
Fiesta El Pilar (10 June)
Global Roots project (July)
University of West Indies Workshops (Aug/Sept)
Bicycle Race (17 Sept)
- 1996 Sixteen general meetings of membership and four events were held.
The group elected Prisilla Canchan as Secretary (17 Mar)
Events included:
Presentation of funds to Leukemia victim
President Marcos Garcia Reviews El Pilar Archaeological Reserve from Helicopter, courtesy of 25 Flight, APC
Landscape workshop at Duplooy's
Fiesta El Pilar (8 June)
Global Roots project (July)
- 1997 Twenty two general meetings of membership and seven events were held.
June elections of secretary Janet Manzanero
AdEP site maintenance eighteen times per year
Events included:
1st Mesa Redonda (20-24 Jan)
Meeting w/Inpulsores Suchitoecos, Melchor, G.U. (Mar)
Landscape workshop (Apr-May)
Ford Fnd.-Mexico Site visit (Apr)
Fiesta El Pilar (31 May)
Four capacity building workshops with Casteñeda of Envic (Aug-Sept)
Independence Day celebration (21 Sept)
Ford Fnd.-New York Site visit (Oct)
Two community participatory workshops with Veach of U. Florida(Oct/Dec)
- 1998 Thirty general meetings of membership and many events were held.
Elections of new President, Vice Pres., Treasurer
AdEP site maintenance eighteen times per year
Events included:
Mesa Redonda II
Encuentro w/Inpulsores Suchitoecos, Melchor, G.U.
Organizational workshops
Opening of Be Pukte
Presentation of El Pilar Model
Capacity building workshops
AdEP Community Survey
Lamanai Comparison Workshop