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## BRASS/EL PILAR Field Reports

### Title

Assessing the Situation at El Pilar: Chronology, Survey, Conservation, and Management Planning for the 21st Century

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# **ASSESSING THE SITUATION AT EL PILAR: CHRONOLOGY, SURVEY, CONSERVATION, AND MANAGEMENT PLANNING FOR THE 21<sup>ST</sup> CENTURY**

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## **CULTURE AND NATURE IN THE MAYA FOREST: A WORKING PHILOSOPHY**

Contemporary communities of the Maya forest have pioneered lands and adapted to environmental conditions that have a long and dynamic tradition stretching back millennia to the ancient Maya civilization. While recent community land use patterns have emerged under different conditions, the same natural and physical resources shaped links that depend on a complex interwoven alliance between culture and nature. Regardless of contemporary political boundaries, the region shares a common past, is united by the related present, and stands threatened by an ominous future. Current strategies for survival are unsustainable, and the accelerated deterioration of cultural and natural resources could be creating a situation of irreversible damage at every scale. Without clear appreciation of the alternatives, this situation will persist. The El Pilar Program unites an unique interdisciplinary research and development team that relies on an integrated science approach to understanding one of the world's most biodiverse regions: the Maya forest. The program dovetails with regional and local development activities of the regional resources Maya forest. Focused effort at El Pilar are promoting a model for investigation and conservation built on a strong research base, local and international community education awareness, and a participatory management design.

As globalization homogenizes society and infringes on time-honored traditions, community continuity and valuable accumulative knowledge native to the region are vanishing. The irreplaceable cultural resource of Maya archaeology and the natural and physical resources of the Maya forest as a principal local asset that accrue value with investment, stewardship, and management. The field research has moved forward with local partners, quantitative studies with an integrated interdisciplinary science team, and focused eco-archaeological research program for the community. Our research seeks to demonstrate the critical need to understand ancient patterns of land use change over time and across space to model sustainability, resilience, collapse, and succession to influence our understanding and ability to forecast future patterns in the region.

The legacy of human settlement development and evolution of social complexity in the Maya forest can be traced across 4 millennia, and El Pilar is a significant part of that past. Over the course of time, the development of human adaptation to the Maya forest depended on the accommodation to internal population growth and external environmental fluctuations known from the historic past and present in the region. The foundation we have established at El Pilar forms a basis for showcasing past land use patterns, providing for understanding of changing natural and cultural spaces, and developing a combined knowledge base from science and local traditions. This foundation will form the basis of a replicable conservation model for Maya forest that underscore the responsibilities and benefits of conservation strategies for the local community and the region as a whole.

## BRASS/EL PILAR FIELD SEASON

### Introduction

The BRASS/El Pilar Program concentrated its 2000 season efforts on the integration and assessment of the database for El Pilar and the Belize River area. At the site itself, target areas of attention were chronological issues, archaeological survey inventory, resource conservation, and management challenges. Recognizing the need for an assessment and stock-taking at the site, work at El Pilar incorporated several aspects. We devised a method for the completion of the main tunnel of EP 7, we were able to make clarifications of the maps of Tzunu'un and Jobo, and we developed a protocol for the initiation of the settlement survey inventory of cultural resources. In addition, we developed an overall monument conservation assessment that outlines the urgent actions for monumental core of El Pilar. We also were involved with the El Pilar Program team in the investment in management planning for one El Pilar with the III Mesa Redonda El Pilar in Remate, Guatemala. Results of these combined endeavors are compiled in this report as a first step in the development planning of El Pilar for the 21<sup>st</sup> century.

Priorities for El Pilar were examined with an eye toward preparing the El Pilar Program for the future. Data accumulated over the course of the last seven years provide a benchmark for establishing a research and development strategy that provide solid archaeological interpretive foundation for the ancient city center of El Pilar. These data yield an understanding of the cultural resource inventory within the reserve, outline the conservation priorities of the civic ceremonial monuments, and establish the management priorities for the community participation in the protection of El Pilar. The database we have developed and the collaboration that we have secured for El Pilar make the results of our work a strategic basis for a promising model cultural heritage development. Excavations to complete the chronological tunnel proceeded along with the assessment of the monuments at the site and the park infrastructure. These results provide a means for developing the funding requirements for any of the large-scale works proposed for the reserve.

The primary goals for the season were:

1. the completion of the EP7 tunnel examining the chronological sequence in the Plaza Copal area,
2. the field testing of a survey protocol for developing the archaeological site inventory within the reserve,

3. the initiation of the survey for the north road section of the reserve,
4. the preparation of data, budgets and priority lists for future excavation/consolidation, and
5. the preparation of the El Pilar Trial Guide.

Whenever possible, park improvement projects were undertaken. These activities included the maintenance of the trails, refurbishing of facilities, protecting exposures in the architecture, and trimming trees in threat of damaging visitor areas. We also convened the III Mesa Redonda aimed at the development of the strategic management plan for one El Pilar. These endeavors are at the very foundation for long term programs of collaboration and management of the Maya forest resources of El Pilar.

## **Field Methodology**

The procedures of the BRASS/El Pilar Program have been consistently developed and standardized for comparability from year to year. All unit levels were excavated following natural stratigraphic levels wherever possible using hand tools (wrecking bar, shovel, pick, pick-a-hoe and trowel) and screened through a 1/2" wire mesh screen. All lithic and ceramic artifacts larger than a Belizean quarter were kept for analysis. Any special artifacts, such as obsidian prismatic blades, bone and shell pieces were retained no matter what size when recovered. Charcoal samples were taken when the quantities would be enough for accurate radiocarbon analysis.

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; and type generally ranged from limestone to chert).

## **Archaeological Excavations**

Excavations were focused on the completion of the eastern temple of Plaza Copal, EP7 tunnel excavations that were initiated in 1995. This archaeological effort was designed to traverse the base construction phases of one of the major temple constructions of El Pilar. The temple, referred to as XikNa for the wings on the north and south sides of the pyramid, provides use with El Pilar's long construction sequence, beginning from at least 700 BC. The design of the tunnel excavation strategy, known from all the major archaeological projects of the Maya lowlands, is intended to reveal chronological dimensions without destroying the building itself. The tunnel of EP7 has proved an excellent effort, and we now have a basic sequence of construction dating back 2,700 years into prehistory.

EP7TUNE (for "tunnel east") was designed to enter the east, and back side of structure EP7 and join up with EP7Tun, the tunnel begun in 1995 from the west, and front side. The tunnel project was designed to provide a window of the chronological sequence of construction of structure EP7 and add to the already considerable data the El Pilar Program has on the chronology of the Plaza Copal area.

The EP7TUNE tunneling project was supervised by the field director, Clark Wernecke, and included a number of the Program personnel; Elizabeth Tabas, Laura Maag, Melissa Krueger, Erin

Chase, Jesse Cook. Tom Greene, Cleotilde Castellanos, Cesar Cruz and Arnolde Pinelo undertook the underground portion of the work. The successful union of the east excavations with the earlier west tunnel provide an excellent time sequence and ceramic samples for the site.

## Previous Investigations

Surface excavations were conducted on EP7 in the 1993 and 1994 seasons to delimit structural facets of the building. In 1993, the southwest and northwest corners and central stair were uncovered. These units were excavated in order to examine the last evident structure and were part of a larger plan for understanding Plaza Copal. In 1994 a unit was excavated to examine stela fragments in front of EP7's central stair. From these data, we gathered a basic understanding of the latest building phase of structure EP7.

In 1995, Lic. Miguel Orrego Corzo and Melissa Grzybowski initiated a series of excavations that would lead to the tunneling project. Two large excavations were established on the south platform of EP7 and the axial stairway was exposed up to the first platform level. As the exposure of the penultimate stair façade was in excellent condition, with preserved plaster, it was decided that a tunnel to examine at chronology must begin at bedrock in front of the stair and proceed underneath the well-preserved Classic architecture. The tunnel reached 28 meters (approx. 1 meter wide and 1.3m high) by the end of the season and exposed eight construction episodes that revealed a lengthy Preclassic history.

In 1998, under the direction of D. Clark Wernecke, work in the tunnel was resumed. Four additional meters were excavated to the east before the crew ran into a enormous wall (7-197). Two five-meter side tunnels were excavated along this wall to the north and south exhibiting a solid stretch of wall of large proportions. Finally, a section of the wall was removed to allow the tunneling excavations to continue. A further meter was excavated to the east before encountering strata that were not as stable as the previous 34 meters of fill. The final strata exposed after the massive wall were deemed an excavation risk and the decision were made to trench in from the east to meet the tunnel. The end of the field season precluded the initiation of the alternative strategy for the completion of the EP7 tunnel.

## 2000 Excavations

Before initiating the tunnel excavation from the back on the east side of EP7 several preparatory steps were required. Rudy Larios undertook extensive mapping of the structure and the western axial tunnel. Permanent benchmarks were set on the eastern side and an area roughly 2m by 9.5 meters was laid out for excavation with the midline of the pyramid clearly marked out. These efforts were undertaken carefully as the plan was to join the tunnels inside the pyramid and develop a continuous interpretation of the base chronological sequence of EP7.

Rudy Larios, along with Clark Wernecke and Johan Normark, assisted in setting up the excavation area for the EP7 East Tunnel project. GPS work done since the original western tunnel was set up in 1995 had established a better position, both vertically and horizontally, for the starting monument in Plaza Copal, point MB. A polygon around EP7 was shot with the theodolite (3 times

to insure accuracy) and a point established on the eastern side of EP7 that corresponded to MB on the western side. Utilizing this new point behind and east of EP 7, a line was established which would guide the tunnel excavations to their successful conclusion.

Three excavation units were involved in the initial trenching, designated EP7-TUNE1, 2 and 3. EP7-TUNE1 was the highest unit and was an excavation set to remove collapse debris above the target excavation level. This unit abutted a suspected higher platform surface and a barrier was constructed above it to protect the excavators from any possible rock/dirt slides. The dimensions of TUNE1 was 2m wide by 1.5m, the shorter dimension running in an east-west direction. Work began in this unit with the removal of the humus and a portion of the collapse underneath. The humus and initial strata on the east side of EP7 were very loose, with a tendency to slide, so the first goal of the project was to expose a stable surface for the tunnel excavation. The TUNE1 excavations exposed a broken rock surface.

TUNE2 and TUNE3 were both 2 by 2m and were excavated in the same manner as TUNE1. Work began by removing the humus and some of the collapse in a stepped manner to give the excavators a secure place to work. Following this removal of the surface humus, it was decided to concentrate on the middle unit, TUNE2, and cut into the rubble bringing the excavation down to the level of the base of TUNE3 and creating a trench from which we could begin to tunnel inward to the west.

The TUNE2 excavations quickly revealed a platform wall, 7-201, which continued downward to a small platform and the next lower wall, 7-203. By exposing this face a stable surface was created that was ideal for tunneling. Both walls bear a resemblance to the construction found on the final construction phase on the western side.

Tunneling commenced with the removal of several stones from walls 7-201 and 7-203, which created a faux corbel doorway. The construction of these walls made this technique ideal. Both walls were constructed with alternating header-stretcher masonry and the 1m plus stones in one of the stretcher course made an ideal lintel.

The tunnel is a product of brute strength and determination. In pushing the tunnel westward, strata were analyzed and every attempt was made to remove them discretely so as to give the project solid chronological data via the artifacts recovered. This was not always possible due to the difficulties of excavating through solid construction walls. Excavated strata that may be obvious when approached horizontally do not always manifest themselves as obviously vertically. After completion of the tunnel excavation the final evaluations and definition of strata was made with a comprehensive profile. The profile was drawn of the north wall of the tunnel and, where necessary, new strata were identified and defined. Each new strata encountered was also evaluated carefully for tunneling safety, and proceeded only under a safety inspection.

Tunneling westward proceeded through walls, fill, and foundation. Three walls (in addition to 7-201/7-203 exposed on the outside) were encountered before joining up with the enormous wall 7-197 found in the tunnel excavations of 1998. On May 26, Tom Greene and Clark Wernecke shook hands through a small hole uniting the eastern and western tunnels.

Walls encountered in the rear of EP7 maintained stylistic and construction similarities. Alternating header and stretcher courses stabilizing the battered terrace walls were the common construction

theme, as was the use of extremely large stone construction. Large 40-50cm square stones more than one-meter in length were not unusual. The completed eastern tunnel reached 14 meters in length. The entire tunnel profile is over 44 meters in length.

After completion of the tunnel two test pits were excavated inside it to determine the locations of the Preclassic floor, 7-97, that had been followed throughout most of the western tunnel. This was necessary due to the fact that the eastern tunnel was, in places, 1 meter higher than the western tunnel. The first pit within the tunnel excavation was a 1X1m unit excavated between walls 7-206 and 7-208. This excavation produced no evidence of the floor or bedrock with an excavation down to 1.1m below the tunnel base. The second pit, also 1X1m, was excavated between walls 7-208 and 7-197. This unit produced evidence of a broken floor and strata similar to those underlying the wall 7-197 at the eastern end of the western tunnel. It was decided to connect this excavation exposure to the western tunnel. This connection excavation revealed that floor 7-97 exposed the floor that was breaking up gradually east of wall 7-97.

Thus, we have successfully revealed the earliest prehistory at El Pilar. Middle Preclassic constructions found the earliest constructions at El Pilar. At least three major plaza floor levels were established before 500 BC. Over time, and with many modifications into the Late Preclassic, the uses of the area of EP 7 were all major public works of the time. The construction period related to the massive stone walls all date to the Late Classic Period and are all enlargements of the temple that made up the eastern building of Plaza Copal.

## Survey

The monumental core of El Pilar was first mapped in 1984, whereas the surrounding areas of the 9 square kilometer El Pilar Archaeological Reserve for Maya Flora and Fauna have been only partially surveyed and mapped. Mandated in the management plan, critical to resource management, and imperative to archaeological study of the urban qualities of ancient El Pilar, the complete survey of the El Pilar Archaeological Reserve is a major initiative. The 10km survey transect of the BRASS surveys of 1984 provide a basic understanding of the area. Later coverage of the western section of settlement around the Bryan and Murphy Causeway indicated that settlement was relatively dense. This season we determined that a survey protocol and field test would be important to the development of management planning in the reserve and to our appreciation of the nature of occupation around El Pilar. To these multiple ends, we began the field settlement surveys.

The 2000 field season launched the long-term settlement survey project for El Pilar. Initially, a survey design protocol was developed based on the transect surveys. The design protocol was field tested and "debugged" with the field crew of the BRASS/El Pilar crew. This survey was initiated in the northern part of the reserve and extended along the dirt road that cuts through the reserve. The test area began at north of the monuments of El Pilar and ran to the northern limits of the reserve approximately 1.3 km long. The design and strategy was developed and modified over the course of the season and the system we developed will be used in the succeeding season as we map the whole reserve area. In future seasons, the survey will cover all of the reserve and establish GPS

control points in distant areas for future references. This will provide an archaeological inventory for the management of the resources in the reserve.

The objectives of the El Pilar settlement survey are to detect the location of cultural remains, ecological zones, and topographic relief within the El Pilar Archaeological Reserve for Maya Flora and Fauna. The cultural remains include architectural mounds, chultuns, aguadas, quarries, terraces, and sacbes. Ecologically, the survey records vegetation patterns and disturbances such as logging roads and milpa clearings. Survey crews also make notes regarding the topography of the area. All of these features are designed to be fixed to the UTM (Universal Transverse Mercator) grid for comparative spatial utilized by the program and incorporated into a GIS database for distribution.

## Methodology

Initial setup for the survey phase and additional precision surveying was carried out with a Topcon GTS-203 Total station utilizing a datalogger. Total station data was post-processed using SurveyLink and ForeSight software by Tripod Data Systems. Control points were established with Trimble TDC-1 GPS units and post-processing with Pathfinder by Trimble by Spectra Precision. For further details we refer you to Appendix #: Global Positioning System Survey by Wm. Clay Poe. In addition tape, compass and protractor were used to map individual mound groups.

The basic methodology of the survey was to establish a base line from which small side paths (picadas) were cut at set intervals of 20 or 40 meters depending on the vegetation. Picadas were preplanned by the survey chief using ArcView . Each picada was surveyed by a team covering the interval on either side to a distance of 125 meters from the baseline. An initial sketch map of the picada was made noting cultural, ecological and terrain features.

Following the initial pedestrian survey, the targeted with cultural remains were returned to for detailed mapping. A mapping crew who ground-truthed the initial sketch maps then established datum points amongst cultural features for the detailed mapping to proceed. The cultural features were then mapped using tape and compass. Mapping crews also picked likely sites for GPS control points and established sets of permanent concrete survey monuments.

The last field procedure was that of GPS mapping. The GPS crew would gather data on all possible datum points, survey monuments, and selected picadas along the baseline so that the field data could be properly entered into the GIS database. A naming protocol was developed for the cultural features (see Appendix 1 & 2) which allows the program to number each group discretely utilizing the GPS information which will also locate them via a number within 100m.

Following the field portion of the survey, data was post-processed in the lab and the cultural features mapped were inked and scanned for inclusion in the final maps. This integration is made possible by the GPS control point system.

## Results from the 2000 Survey



Since the primary goal of the 2000 survey was to field test a number of different procedures, we began the work using the Pilar road as the baseline and survey an area approximately 250 wide from the northern section of El Pilar to the northern boundary of the reserve. A polygon including four known control points within the El Pilar system (N14, 7, L1, L2) and including the large plazuela group north of Plaza Lec (provisionally numbered NPS21) was shot with the total station. One point on this polygon was selected as the starting point for the 2000 survey. This point was located on the El Pilar road at Northing 1909258.7782, Easting 271828.5876, and Elevation 205.996.

The total length of the northern El Pilar road segment that was surveyed in 2000 field season was 1800 meters. The distance between the starting point to the end point in north-south direction was 1336 meters and the width of the transect, including the road and the bulldozed areas surrounding it, was approximately 260 meters. This gives the survey a total area of 347,000 m<sup>2</sup> or 34.7 hectares, 4% of the El Pilar archaeological reserve.

Picadas were cut at intervals along the road in a non-declinated compass bearing of east 90 ° and west 270 °. Using the road as a starting point required the recognition of the curves as part of the survey strategy. Since the El Pilar road does not run in a north-south direction, planning the intervals along the road was required. The intervals were adjusted as necessary to avoid crossing the road and other picadas. Effort was made to keep the intervals between picadas constant while the road would weave around. Due to the onset of the rainy season and the inability of the mapping crews to draw in the rain only the picadas with cultural remains listed in the initial reconnaissance in 2000 were completely mapped. Those picadas that the crew was unable to finish were pinpointed on the GIS maps and clearly marked in the field so that the 2001 survey can complete the mapping process.

The first general observation regarding the survey is that the hills and higher ground north of the site have the highest settlement density. The lower lands have sparse settlement and the slopes are usually devoted to quarrying. While the patterns are consistent with expectations, some surprises were noted.

Survey crews found a number of small aguadas, both ancient and historical, as well as chultuns, quarries, major architectural compounds as well as many small house mounds. A number of plazuela groups were surveyed and one larger group which appears to be a minor center. These are the critical cultural resources that need to be fully inventoried within the reserve.

The settlement density encountered was higher relative to expectations. Previous work on the BRASS survey transects had established a average density of 292 structures per km<sup>2</sup>. A total of 34.7 hectares were surveyed and 213 structures were mapped. The average in the north survey is 6.14 structures per Ha, or a density of 614 structures/km<sup>2</sup>.

This 2000 season survey covers an area made up of the best farmland around El Pilar, this according to our local Amigos de El Pilar field crew. The survey focused on the undulating hills that are traditionally the location of the high settlement densities. The survey of 2000 does not take in much of the area to the east along the steep edge and below the Peten escarpment. Some of these zones beyond the surveys of 2000 are flat and are seasonally inundated, ill suited for habitation

today as in the past. It is likely that the average density for the reserve as a whole will be significantly lower once the varied ecological zones are included in the survey.

## GIS Fieldwork in 2000

The UCSB Maya Forest GIS project was created in fall of 1998 under a UCSB Research Across Disciplines grant connecting Maya Archaeology with Geographic Information Systems (GIS). This research project established a growing Maya Forest GIS Database consisting of the following data: topography, vegetation, soils, demographics, satellite imagery, air photo mosaics and past collected data from the BRASS/El Pilar Program.

Based on the previously established Maya Settlement Distribution Model created by A. Ford and S. Fedick for the Belize River Area, the UCSB Maya Forest GIS database is one of the primary foundations for further scientific research in the El Pilar Archaeological Reserve. Future research, be it archaeological survey or excavation, ecological data or historical data, will be integrated into the UCSB Maya Forest GIS database to give researchers an unprecedented holistic view of the research area. This data base has a regional component that incorporates all the Maya forest areas in Belize Guatemala and Mexico, a local component focused on the Peten of Guatemala and the north west section of Belize, and the site specific focus on the El Pilar area. It is envisioned that the Maya Forest GIS data base would serve to integrate a wide selection of data form archaeology to zoology and would be a significant resource for the management of archaeological sites in t the region.

The 2000 field season was used to test a complex computerized Maya site prediction model developed with the UCSB Maya Forest GIS. The model utilized a new capability incorporated into the ARC/INFO 8 software called the Weights of Evidence Probability Model. The development of the model relies on the identification of independent geographic weights to predict the probability of discovery or predicting the occurrence of a dependent variable, such as Maya sites. The Weights of evidence modeling procedure was developed to predict mining sites, but was adapted to the Maya archaeological case. The model we developed was designed to predict Maya settlement density. Significant independent weights used in the model were soil fertile, good water sources and drainage, and the slope of geographic terrain. The model tested this season was set up in Santa Barbara by Aric Monts-Homkey and Nick Heartman under Keith Clarke, UCSB Department of Geography and tested by Erica Gardner and Keith Clarke for the Belize River area and the El Pilar Archaeological Reserve.

Weights of evidence modeling (WofE) is a quantitative method for combining evidence in support of a hypothesis. Similar to the methods of multiple regression in statistics, the weights of evidence model for combining evidence involves the estimation of response variable (favorability for ancient Maya sites) and a set of predictor variables (exploration datasets in map form).

In general the model field-tested performed well. Areas in which the model predicted Maya settlement held ample evidence of settlements while those areas deemed unlikely tended to be steeply sloped uninhabitable terrain. The model was field-tested utilizing a Garmin Emap GPS unit and additional field data was also gathered utilizing the Trimble GPS. A need for more refined data within the model was realized and the present survey will add significantly to the value of the model.

## Conservation

Once again, the program was fortunate enough to have C. Rudy Larios Villarta as director of our conservation efforts. This season, with a small number of personnel, we were able complete a large number of important tasks and assessments (See Appendix 3 & 4).

The largest conservation effort of the season was the completion of new comprehensive architectural drawings for both the Tzunu'un plaza group and the building complex in Plaza Jobo. This involved not only new and precise measurements but also incorporated new interpretations of the data. One of the more important revelations stemming from this work involves the confirmation of the apparent deliberate destruction of parts of stone constructions at Tzunu'un. The main structure on the south, Str 1, and the eastern shrine, Str. 2, were both subjected to major alternations in the backs of both structures for remodeling and/or new building. The revelation confirms suspicions that the residential construction was arrested before completion. Most of the ceramics of the latest strata date to the Terminal Classic, suggesting that the evidence we have at Tzunu'un chronicles the collapse.

Another major accomplishment towards the conservation goals for El Pilar is Rudy Larios' document addressing the immediate conservation priorities for El Pilar. This detailed assessment spells out the priority projects in the order they should be pursued. In addition, data are provided on the breakdown of staffing requirement as well as the resources basis necessary for each project. This provides a critical road map for the consolidation of current visitor destinations. The results are detailed in Appenix #.

## Management and Development

The Mesa Redonda III was convened during the 2000 field season. This meeting was developed on the basis of the cross-border management planning process critical to the conservation efforts at El Pilar. This meeting aimed to promote consensus on the criteria for the strategic plan for El Pilar, one that would gather in resource of research and inventory, could incorporate community development, and one that should become a model of regional resource management for the Maya forest.

El Pilar Program staff participated in the meetings that ran from 29 May to the 2 June and incorporated researchers, managers, and community participants from Belize and Guatemala. The parallel representation of forestry and archaeology from Belize and Guatemala, along with community members of Amigos de El Pilar made the consensus of plans formidable. The outline agreement of the MR III was the development of a strategic plan for the management of one El Pilar. (list of participants)

## Park Development

Over the course of the field season, it is customary that the program team undertakes several projects involving the reserve infrastructure. Foremost among these was the replacement of two

badly deteriorating corozo-style champa roofs protecting areas left open to the public. Protective roofs were repaired or replaced, trees were trimmed or removed, excavations areas shored, and trails improved and sustained. These are activities that may often go unnoticed, but are part of a real interest and contribution of the El Pilar Program to the management of the public visiting areas as well as support area of the caretakers. Working with the El Pilar caretaking staff, new issues are discussed and solutions explored. Concerns raised by Amigos de El Pilar and the caretakers are important aspects of the community participation in the responsibilities and benefits of a El Pilar.

These roof, covering Structures EP3 in the south at Plaza Axcanan and EP25 in the north at Plaza Lec, were in urgent need of attention. Two immense trees that endangered structures were also removed. A large tree, four feet in diameter, which had been damaged in a storm in the Fall of 1999 was leaning over the passageway through Structure EP3. This was threatening to remove a significant portion of wall if it fell completely. Another large tree, three feet in diameter, which grew at a forty five degree angle over the Plaza Jobo structures.

At excavation areas, security of access is a concern. A door was fashioned for the new eastern entrance to the EP Tunnel and a set of lasting steps put in to facilitate research access. Due to the precarious safety of archaeological tunneling, this excavation will not be open to the public and it is planned to utilize the back dirt from the excavations to ultimately fill in the western entrance. This will give the public the opportunity to get a better look at the well-preserved façade of EP7. Future plans call for further exposure in this area under the forest canopy of Plaza Copal to add to the inviting quality of the public plaza.

A new equipment storage facility was erected to the east of the caretaker's house. This will allow the program to maintain all of active field equipment at the reserve for use during the field season and safe keeping in the intervening time. This also frees up needed lab space as well as facilitating access to the tools.

The Fiesta El Pilar 2000, sponsored by the Amigos de El Pilar in Belize and Guatemala with the support of Help for Progress and the El Pilar Program, was a grand event. The success brought us new experience in the area of crowd control some practical data regarding the carrying capacity of the reserve. More than 1500 people came to the reserve in one day. There were food stalls and crafts sales organized with Amigos de El Pilar in Plaza Faisan. There were education exhibits sponsored by Monkey Bay in Plaza Copal. There were Corozo exhibits at the Maya house of Tzunu'un. And, there were lively presentations in Plaza Duende.

Parking was managed for the Caretaker house area and provided sufficient areas for the vehicles, included some buses. The comfort stations, build with the support of the British High Commission, were accessible near the parking area of the south and near Plaza Duende in the center of the site. Covered tents, provided by Belikin were set up in Duende and was the focus of the presentations.

Overall, the park bore the visitor traffic well. As a result of the experience, however, several new railings, stairways and crowd flow walls were constructed in areas that did not bear up as well. Critical areas were confined to the site core, in particular the transition areas from Plaza Copal to Duende and Duende to Faisan.