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## **Mayflower Archaeology Project (MAP)**

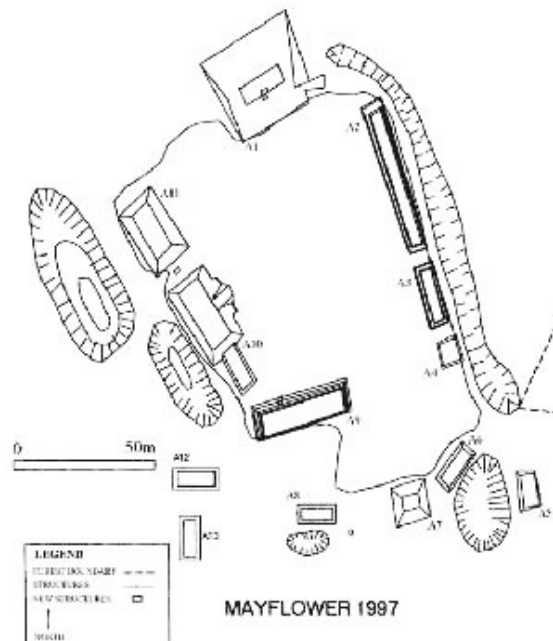
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Jeff Stomper



**Research Year:** 1997

**Culture:** Maya

**Chronology:** Classic

**Location:** Stann Creek District of Belize

**Site:** Mayflower

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## **Introduction**

Inter- and intraregional trade of commodities and exotic items are important in the formation and development of complex societies. This long-distance exchange was institutionalized and regulated, leading to the development of settlements whose purpose was to act as gateways through which large amounts of trade wares would pass. These settlements, referred to as "gateway communities" (Burghardt, 1971; Hirth, 1978; 1984), were often located at key locales along natural trade routes which were essential to control the movement of goods. The purpose and function of gateway communities was first identified by economic anthropologists and geographers who attempted to better understand long-distance trade (Burghardt, 1971). Kenneth Hirth (1978), working at the site of Chalcatzingo, was the first to develop a model of how gateway communities functioned in ancient Mesoamerica. Hirth demonstrated that the gateway community model was advantageous for examining and explaining exchange networks. The gateway model stressed that environmental discontinuities (i.e. natural corridors of trade and communication), landforms, and other environmental factors affected the location and growth of settlement. Others (Clark and Lee, 1984) have used this model for examining Maya trade, including Lawrence Jackson and Heather McKillop (1989) who researched coastal-inland trade in Belize. The Maya site of Mayflower presents an opportunity to study the development through time of a small settlement and the ways in which it was integrated into larger Maya coastal-inland trade networks.

Located in the Stann Creek District of Belize are a group of three small Maya sites—Mayflower, Maintzunun and T'au Witz, collectively referred to as Mayflower. This group of sites is situated along Silk Grass Creek near the foothills of the Maya Mountains. Twenty years ago, Elizabeth Graham (1976; 1977; 1983; 1985; 1994) conducted a survey and mapping project of the entire Stann Creek District. In addition, Graham supervised limited excavations at the Mayflower sites which revealed their long history of occupation and strategic location along trade routes (Graham, 1994). Apart from Graham's district survey, the only other extensive work done in the Stann Creek District

was by J. MacKinnon (1985; 1986; 1989a; 1989b; 1990; 1991a; 1991b). MacKinnon's research was carried out at the coastal site of Point Placencia located in the extreme southern region of the district. Although Graham stressed the necessity for further intensive research in the region, the Mayflower sites received little archaeological attention until the inception of the Mayflower Archaeology Project (MAP) in 1996 (Williamson and Stomper, 1996).

In the spring of 1995 Harriot Topsey requested that Richard Williamson and Jeff Stomper begin an archaeological field project in the Stann Creek District, focusing upon the three Mayflower sites (Mayflower, Maintzunun, and T'au Witz). Topsey's interest in the archaeology of this area was threefold. First, Mayflower is located a few kilometers off the Southern Highway in an area that is easily accessible to tourists, and Topsey wanted the sites to become an archaeological tourist attraction. In 1996 MAP began, in conjunction with the Stann Creek Tourist Board, Minister Melvin Hules, and Brian Woodye of the Department of Archaeology, to address the feasibility of establishing an archaeological park and forest reserve. Second, these sites were not protected from the danger of looting and destruction. In accordance with this, last season MAP documented evidence of previous looting with photos, drawings, and notes. With this information the situation can now be monitored. The project also took aerial photos documenting the destruction of the rainforest in the area. Third, unlike other areas of Belize, Topsey realized that the Mayflower region had received little archaeological attention. In May 1996 Brian Woodye granted Stomper a permit to initiate an archaeological project in the region bounded by North Stann Creek to the north, Cabbage Haul Creek on the south, Guana Church Bank on the west, and the Caribbean Sea on the east.

In the summer of 1996, MAP began a long-term, multidisciplinary study of the Mayflower sites and their surrounding area. Much of the first season concentrated on logistical concerns, but also included pedestrian surveys, mapping, and test excavations. The limited surveys both in the core and periphery of the site uncovered numerous structures, plaza groups, and hilltop settlements which had not been documented previously. Mapping and test excavations demonstrated conclusively that Mayflower, Maintzunun, and T'au Witz were not separate sites, but were three components of a single site that is centered around the Mayflower plaza group (Williamson and Stomper, 1996). During the construction of an access road to these lands in June of 1996 numerous small mounds, platforms, and previously hidden structures were discovered. Further pedestrian survey revealed additional mound groups and isolated mounds. The presence of these mounds, located from 500 m to 2 km from the site core, indicate that Mayflower was much larger than previously thought and suggests a need for further investigation in this peripheral area.

While many recent Maya studies have focused upon the larger sites such as Copán and Caracol, Mayflower presents an opportunity to examine the way in which a smaller community functioned within its local environment and how it was integrated into the social and economic fabric of the larger Maya world. A considerable amount of work has been done on coastal Maya trade in Belize at sites on the Cays or on the coast (Graham, 1989; Jackson & McKillop, 1989; MacKinnon, 1989; McKillop, 1989), and

even more data have been collected on non-local goods and trade items from the major sites inland such as Caracol (Chase, 1991; 1992; Chase & Chase, 1989), Lamanai (Loten, 1985; Pendergast, 1984; 1985; 1992), Cahal Pech, (Awe, Conlon, & Campbell, 1991; Awe & Healy, 1994) and sites in the Petén. What is less known is the exact nature of the trade route system from the coast to inland sites, and specifically what items traveled which routes.

Preliminary analysis of chert, obsidian, and ceramics has indicated that Mayflower was involved in a trade network that stretched from the Guatemalan Highlands to Northern Belize and possibly farther (Williamson and Stomper, 1996). More importantly, Mayflower's location confirms that it was a vital link between the interior and coastal trade routes. The site is situated at the mouth of a box canyon in the foothills of the Maya Mountains (possibly controlling the flow of goods into and out of the canyon) a few kilometers south of the Hummingbird Gap (part of the coastal-inland trade route). The site core and surrounding settlement are located on a river terrace, a few hundred meters from a creek with year round flow. Also, the site is the only locale between the foothills and the coast that is not prone to substantial flooding during the rainy season. This may explain why, in spite of the limited amount of cultivable land in the area, Mayflower was the locus of extensive settlement from Middle Preclassic to Postclassic times (Graham, 1994).

The preliminary analysis of the information from Graham's research and MAP's first season of work indicates that Mayflower may fit Hirth's model of a gateway community. In order to comprehend Mayflower's role in coastal-inland trade, the settlement patterning of the ancient population, the size and complexity of the site, and its long history of occupation must first be understood. This can be accomplished through a program of survey and excavation in the site core and surrounding area.

Outside of Graham's limited survey and excavation, little else was known about Mayflower until the inception of MAP. In 1996 the Mayflower Archaeology Project Survey (MAPS) corrected inaccuracies on Graham's initial maps ([Figure 1](#) and [Figure 2](#)); created the first detailed map showing the relationships between the sites ([Figure 3](#)); and uncovered numerous new structures and features within 1 km of the site core ([Figure 4](#)). During the 1997 field season the pedestrian survey continued, with the focus on enlarging the map of the core area through a strategy of systematic mapping of visible features in the area within 1 km of the site core.

Using Graham's excavations as a guide, several areas of the site core, primarily the structures at Mayflower and Maintzunun, were investigated through a series of shovel test pits and controlled 2 m x 2 m test excavations. These limited excavations revealed new information pertaining to the extent, orientation, and occupation of core area (Williamson and Stomper, 1996). The project will continue to explore the core area with additional shovel test pits, new 2 m x 2 m test excavations, and by expanding upon last years test excavations. There are several reasons for continuing this activity. First, the spatial orientation, building size and archaeological information from Graham's and the 1996 MAP excavations indicated that parts of the Mayflower site were used as residences while others were more ceremonial in nature. Second, little is known about

the function of the structures comprising of Maintzunun. Third, the area between Maintzunun and Mayflower is unexplored, and evidence of features or occupation in this area will enable a better understanding of the relationship between Maintzunun and Mayflower.

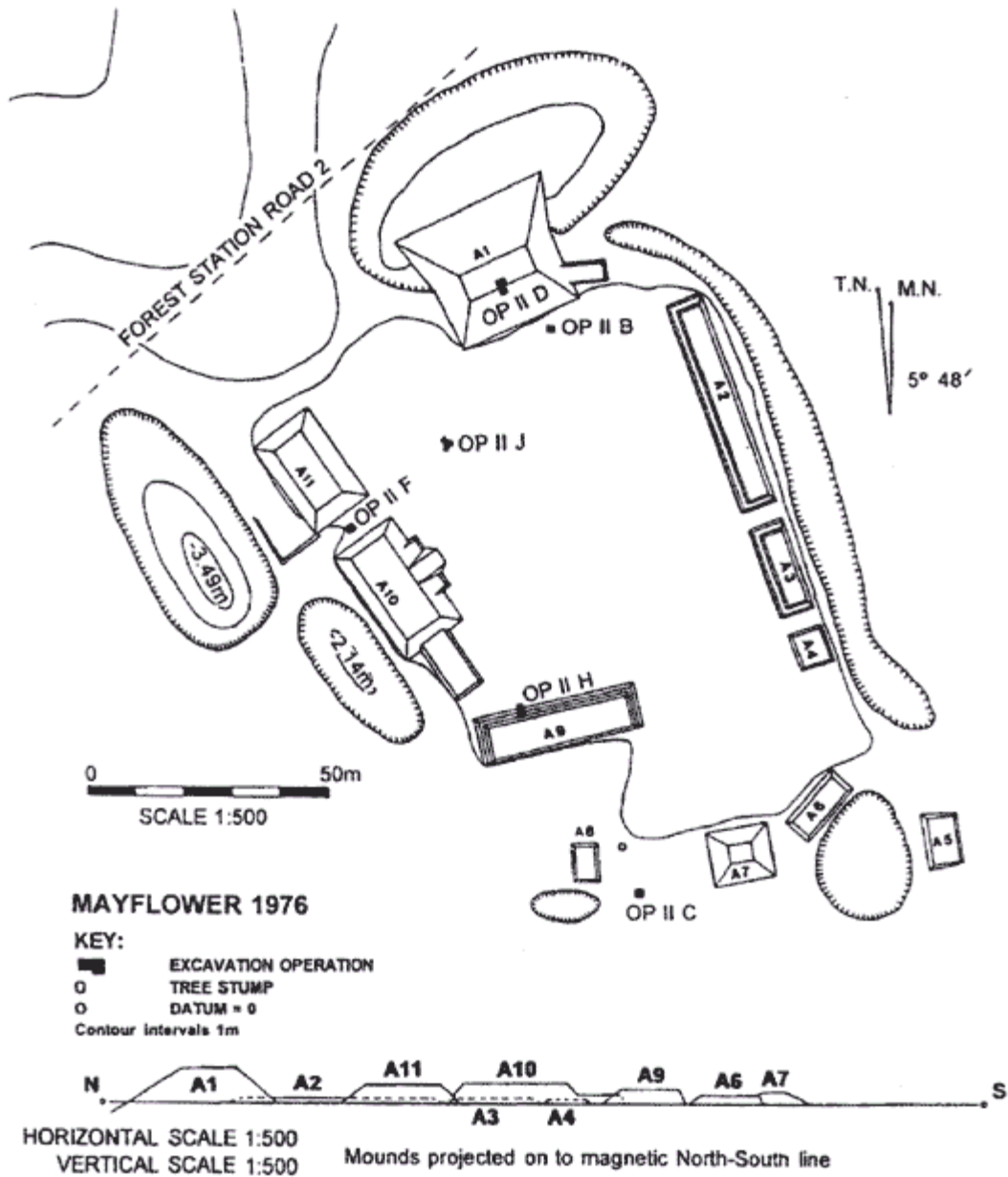


Figure 1: Elizabeth Graham's Map of Mayflower, 1976.

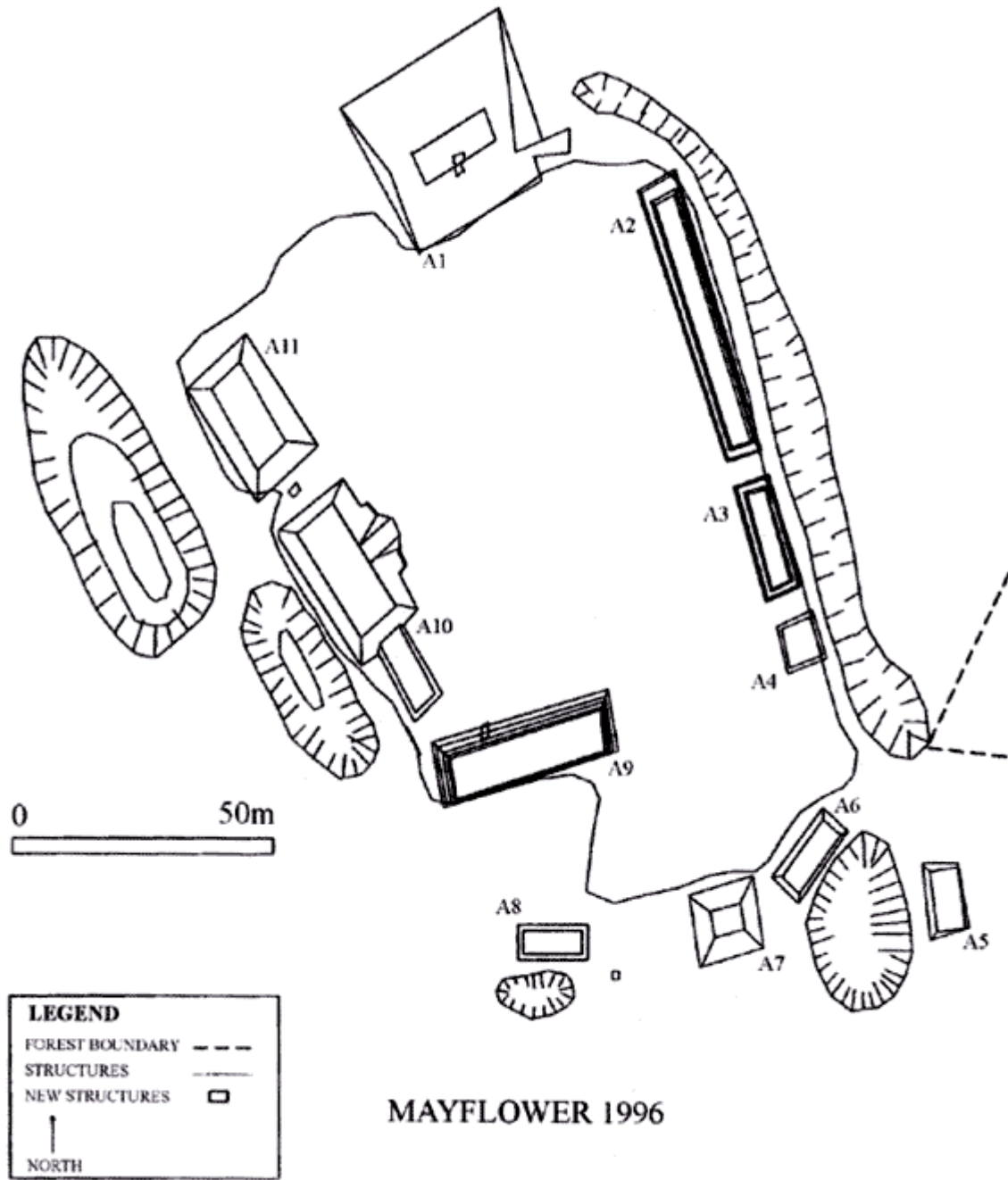


Figure 2: Mayflower Archaeology Project Map of Mayflower, 1996.

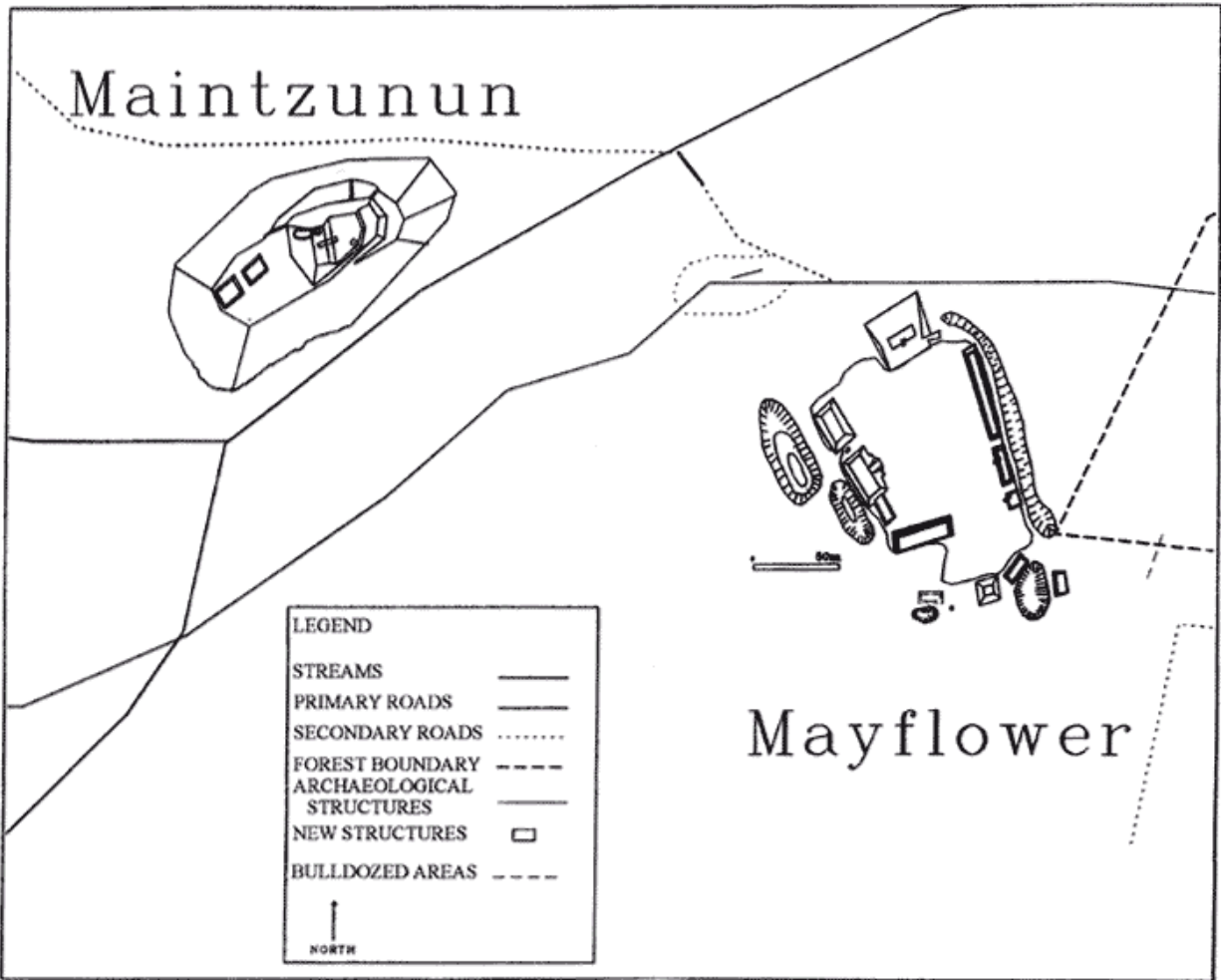


Figure 3: Map of Mayflower and Maintzunun, 1996.



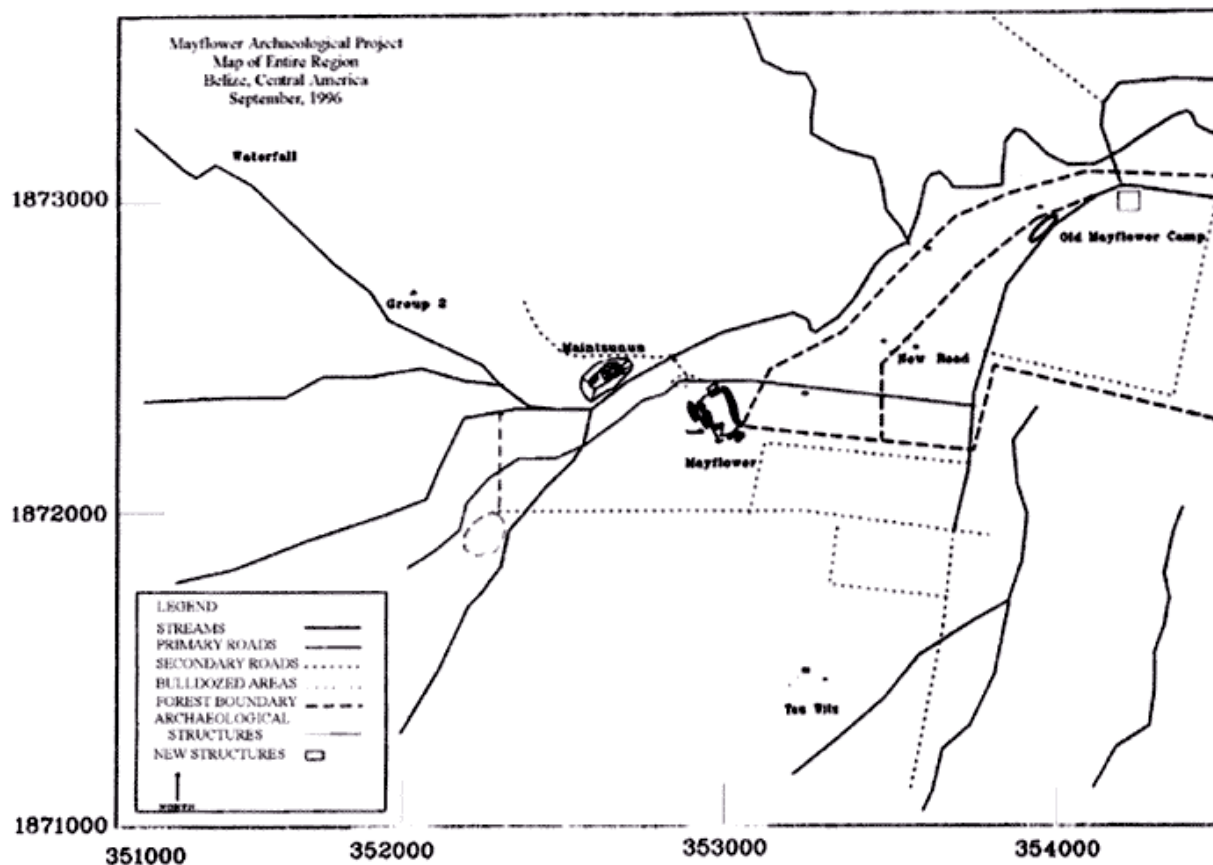


Figure 4: Map of Entire Region, 1996.

In July of 1996, improvements to the site's access road revealed a number of mounds and features located 200 m - 1 km from the site core. These were mapped and surface collections were made wherever possible. Several features were subsurface, artifact scatter suggests that the occupation and activity areas of this region might be much higher than expected. Expanded shovel test pits and controlled test excavations of these features and mounds will be undertaken in order to discern the extent of Mayflower settlement and the relationship of the periphery to the site core.

It is necessary to survey, map, and conduct limited test excavations in order to determine the size and extent of the settlement and to construct an accurate culture history of the area before answering the larger questions of how the site and its people were integrated into the larger social and economic framework of the Maya coastal-inland trade network. Creating this solid foundation of archaeological evidence pertaining to settlement and culture history will enhance future investigations of trade, exchange, economy, subsistence, and social and political organization at Mayflower.

The Mayflower Archaeology Project (MAP) began the 1997 field season on June 4, 1997 with a planned six weeks of field and lab work. This report details the progress of



the 1997 season and provides some initial conclusions based on our research. This is the second field season report issued by the Mayflower Archaeology Project.

The project focused on three areas. First, mapping Mayflower with the aid of a laser Total Station in order to produce a highly accurate representation of the site's topography and to aid, with the help of computer software, the hypothetical reconstruction of the Main Group. Over 5,000 data points were obtained to create the topographic map of the site. Several different types of maps will be produced for the final report, and a sampling of those produced in the field are provided here.

The second focus area was surveying the region around Mayflower, specifically the areas immediately north and south of the Mayflower Main Group, the river terrace between Mayflower and Maintzunun, and possible quarry sites near T'au Witz. New mounds were located in all areas surveyed around Mayflower, with the highest concentration of new structures located in the areas to the south and southeast of the Mayflower Main Group. Several possible quarry sites were located before the start of the field season with another located during transect and pedestrian survey. Time did not permit extensive investigation of any of the quarry sites, but they have been mapped and will be studied in greater detail during the 1998 field season.

Third, excavations were conducted within the Mayflower Main Group with an emphasis on Structure A-8 and the Main Plaza area. The 1996 excavations of Structure A-8 revealed a high concentration of ceramic and lithic artifacts and investigations of the structure were continued this year in order to obtain more information on the occupation history, construction phases and material, and function of the structure. The ceramic information will be used to begin setting up a site (regional) type collection. Test units were also placed in the Main Plaza of Mayflower to obtain information concerning plaza floor construction phases, flooring material, and the overall state of floor preservation, as well as to gain a better understanding of occupational history at the site.

In addition to explorations in the field, a lab was set up in Hopkins to process, catalog, and analyze the artifacts from the 1996 and 1997 field seasons. The artifacts were processed in accordance to the 1997 guidelines/regulations established by the Department of Archaeology (DOA).

The following sections (Mapping & Survey, Excavations, Looters Pits & Laboratory) reveal additional details as to the work performed this season by MAP and some conclusions based on our initial analysis of the data obtained this year.

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## **Mapping & Survey**

### ***Introduction***

In 1996 the Mayflower Archaeological Project Survey (MAPS) initiated a comprehensive survey and mapping program designed to document all mounds and features associated with the Mayflower site. MAPS will attempt to continue this work in the coming years, concentrating its efforts and resources in several key areas. We will continue mapping the structures located in the site core and expand our efforts to include all mounds and features within .5 km of Mayflower.

Extensive pedestrian transect surveys will be conducted to further define the extent and nature of ancient settlement around the site core. Finally, a series of Shovel Test Pit (STP) programs will be implemented to uncover evidence of activity, define the occupation areas and test the accuracy of surface survey. The sections below describe the research undertaken in 1996, our research goals for the 1997 season (and beyond) and the methods and techniques we are employing.

### ***Reconnaissance Survey Methodology***

The US Secretary of the Interior's Standards and Guidelines define "reconnaissance survey" as pedestrian or windshield survey with little or no subsurface testing. As such, they provide little information about specific cultural resources. They are, however, occasionally required, especially if little is known initially about the research area. A preliminary reconnaissance survey was performed at the beginning of the 1996 field season to assess field conditions and obvious disturbances within the area to delineate regions that were appropriate for intensive pedestrian survey.

### ***Mapping Methodology***

The first objective of the 1996 Mayflower Archaeological Project Survey (MAPS) was to create a comprehensive baseline grid based on the UTM system. The MAPS grid was tied into the UTM grid using existing landmarks as determined by 1:50,000 scale maps and by use of a GPS system. This baseline grid is represented by several permanent datums located on and near Mayflower and Maintzunun. Practical experience dictated that several permanent datums would ensure the grid's longevity should an accident compromise the integrity of any given datum. Permanent datum points were created using poured cement and rebar, as well as permanent geological entities.

Upon completion of the baseline grid for each site, a new map of existing structures identified by Graham was created and tied to our permanent grid. The re-mapping of these sites allowed for a detailed inspection of any significant changes that have occurred to these structures including looting, biological or faunal turbation. In addition

to redocumenting Graham's maps and correcting several errors, the preliminary survey uncovered several new mounds and features which were added to the core map for each site.

In 1997 we attempted to complete the mapping of the site core and continue the systematic mapping of the area within .5 km of the center of Mayflower. The resulting data (presented below) begin to indicate the extent and density of ancient settlement. These maps provide the foundation for future research on settlement patterning, economic, social and political organization and will be refined and enlarged as the MAP progresses in future years. If time permits or high concentrations of settlements are found, we will enlarge the areas of the mapping to acquire additional data in future years.

### ***Intensive Pedestrian Transect Survey Methodology***

Intensive pedestrian survey is the only reliable method for achieving thorough coverage of a study area. It is designed to locate previously unreported cultural resources and to relocate previously reported cultural resources. Due to limitations of time and resources only a few pedestrian transects were completed in 1996. Though limited in scope, these transects located a small new site as well as new features at Maintzunun and Mayflower. Transects between the three main sites will be completed in the future and additional pedestrian survey will be conducted in the area surrounding Mayflower. A transect survey was established in 1997 to discover and record new outlying structures, which will be linked into the baseline grid. The initial focus of the transects are to explore the spatial inter-relationship of these three sites in order to identify outlying structures associated with these sites and to record the landscape that these sites occupy. This relationship will be explored by performing transects on the shortest (or most efficient) path between the three sites. This transect survey will also sample the area of land enclosed in the arbitrary triangle formed by the distribution of the three sites. The project has secured a Robotic Geometer Theodolite which will allow for site maps and transects to be completed.

### ***Shovel Test Pit Survey and Site Definition Methodology***

Shovel test pits (STPs) will be excavated in and around the site core to identify middens associated with known structures, to provide quick chronologies, and to locate "hidden" structures and activity areas. The use of STPs at Dos Pilas, Guatemala, and the preliminary results of the MAP STP program indicate that the tropical lowlands are ideally suited for this type of research program.

In 1996, three groups of STPs were placed in the core area. One group each surrounded the bases of Mayflower Structures A-8 and A-11 while the third covered the area between the Mayflower mounds and Silk Grass Creek. In all three groups the STPs were placed systematically every two meters. The extremely low density of

artifacts retrieved in the STPs surrounding Structure A-11 indicated that this area was regularly cleaned—a characteristic of public or ceremonial architecture. Conversely, the STPs surrounding Structure A-8, located away from the main plaza area, revealed a midden (later excavated as a controlled 2 m x 2 m test pit) which contained a high density of coarse ceramic ware, lithics, and lithic debitage—a characteristic of domestic units. In the initial surface survey of the third area between the Mayflower mounds and Silk Grass Creek no cultural materials were retrieved. However, after excavating over thirty STPs in this area nearly all contained cultural material including the remains of a low terrace wall.

These results reveal the potential for using STPs to expose unobtrusive occupation and activity areas, as well as promptly identifying what types of activities might have occurred in or around structures. STPs will enable the MAP to expeditiously acquire large amounts of valuable data concerning the size and function of mounds and activity areas without the destruction associated with full scale excavations. The data obtained from STPs will further enable better placement of controlled 2 m x 2 m test pits—optimizing both time and resources. The STP program continued in 1997 in the site core, testing structures at the Mayflower site core. In addition to the site core, STPs will be excavated along some transect lines and, if possible, near smaller mounds outside the core area in order to identify activities unrecorded by the surface survey and determine the nature and extent of the settlement in these areas. The methodology and techniques of employing STPs are discussed below:

1. The primary implementation of this technique will be used in the previously defined site core. STPs will be placed at 1 m intervals around the base of existing structures. These STPs will be approximately 30 cm in diameter and their depths will be dependent upon bedrock and Holocene deposits. Soil removed from the STPs will be screened using 1/4 inch mesh screens. Cultural materials will be collected and labeled with the appropriate STP #, date, excavator, contents and number of bags. Results of the test will be recorded, providing an expedient density and distribution map of artifacts. Strata within selected shovel tests will be characterized according to soil type (e.g., sandy clay) and Munsell colors. The data will be used to construct an initial overview of strata across the site which will subsequently be used to guide the placement and depth of later excavation units.
2. STPs will also be used to test the hypotheses that structures constructed of perishable building materials and activity areas located near the site core are not readily identifiable. Previously such structures and activity areas were only identified by chance encounter or with large scale extramural stripping projects. By placing several 100 m x 100 m grids in and around the site core it is hypothesized that by distributing STPs at 3 m intervals across this grid these ephemeral structures and activity areas will be quickly and accurately identified.
3. Finally, STPs will be used to test the precision of the conventional transect surveys in site definitions. A sample of documented transect lines will be chosen to have STPs placed along the same axis of travel that the original surveyor

used. These STPs will follow the conventional application of STPs in long-distance surveys: STPs will be placed every 10 m along the line of travel of the original surveyor and if no artifacts are encountered the STP is recorded as negative and the surveyor moves on. If the surveyor encounters artifacts the unit is positive. When a positive unit is identified the surveyor will open up four additional STP units 3 m away from the positive STP. The new STPs will form a cross, with the original STP as the center point. If any more artifacts are encountered in these exploratory STPs then the same positive response technique will be implemented. These lineal shovel tests, in conjunction with surface scatter, provide data regarding the horizontal extent and boundaries of the activity. If no artifacts are encountered in any of the units the original artifact(s) is ruled an isolated find, it is documented and the surveyor moves on.

After horizontal site definition is completed, larger units will be excavated as necessary to obtain data concerning subsurface artifact density and depth of deposit, and to assess subsurface disturbance. At minimum, one 50 cm x 50 cm unit will be excavated in 10 cm levels to a depth of two sterile levels. Additional units may be excavated to obtain data for various portions of the sites. These units become impractical when artifacts occur at depths greater than 70 cm, and in these cases, the unit will be expanded into a 1 m x 1 m unit. Strata in these units will be examined to characterize soil types, Munsell colors, and subsurface disturbance.

Where there is a possibility of recovering small-sized floral and faunal remains, soil samples will be collected from the excavation units. These will be either wet screened through 1/16 inch mesh or a water flotation device will be used.

Controlled surface collections may also be used for site definition. At minimum, a 2 m x 2 m surface provenience will be established within an area where artifacts are concentrated. A thorough collection of that provenience will be made, with artifacts being placed in bags labeled with the provenience grid coordinates. Use of controlled provenience of standard size will allow a comparison of surface densities of the three known sites within the area.

General surface collections may be collected to supplement controlled surface collections. Crew members will flag the extent of surface scatter and all concentrations so that these can be plotted on the site map.

### ***Geographic Information Systems (GIS) Resource Base Map***

GIS data layers for much of Belize are either nonexistent, or cover limited areas. One of the goals for the MAP will be to produce GIS data layers for the Stann Creek district based on currently available 1:50,000 scale data. In addition to currently available data, other new data layers will be created to approximate the resource landscape inhabited

by the Maya. A more fine-scale GIS data layer may be constructed for each site and its immediate landscape in the future.

The resource landscape of the Stann Creek District will include, where applicable:

1. Ocean – saltwater resource locations; fish, crustaceans, avian
2. Streams – navigable waterways, resource rich non-navigable waterways (fish, fresh water)
3. Lakes – fresh water, food resources
4. Ponds – potable water or not, potential food resources
5. Springs – seasonal
6. Locations of general flora and fauna resources, coastal, intermontane, and mountain.
7. Areas of potentially cultivable lands (based on Digital Elevation Models and field observations)
8. Lithic resource areas
9. Clay resource areas
10. Commercially exploitable exotic resource locations (jade, obsidian, stingray spines, etc.)
11. Caves (and their relation to known sites)

After the 1997 field season was complete our team created several small scale maps of the Mayflower region. These were to be expanded as work continued at the site and provide further information on spatial relationships of the site components. Several maps were completed before our relationship with the 1997 survey team expired. [Figure 5](#) is a wire-frame model of the Mayflower area, the white box represents the Mayflower core area. [Figure 6](#) is a false-color rendering of the same area.

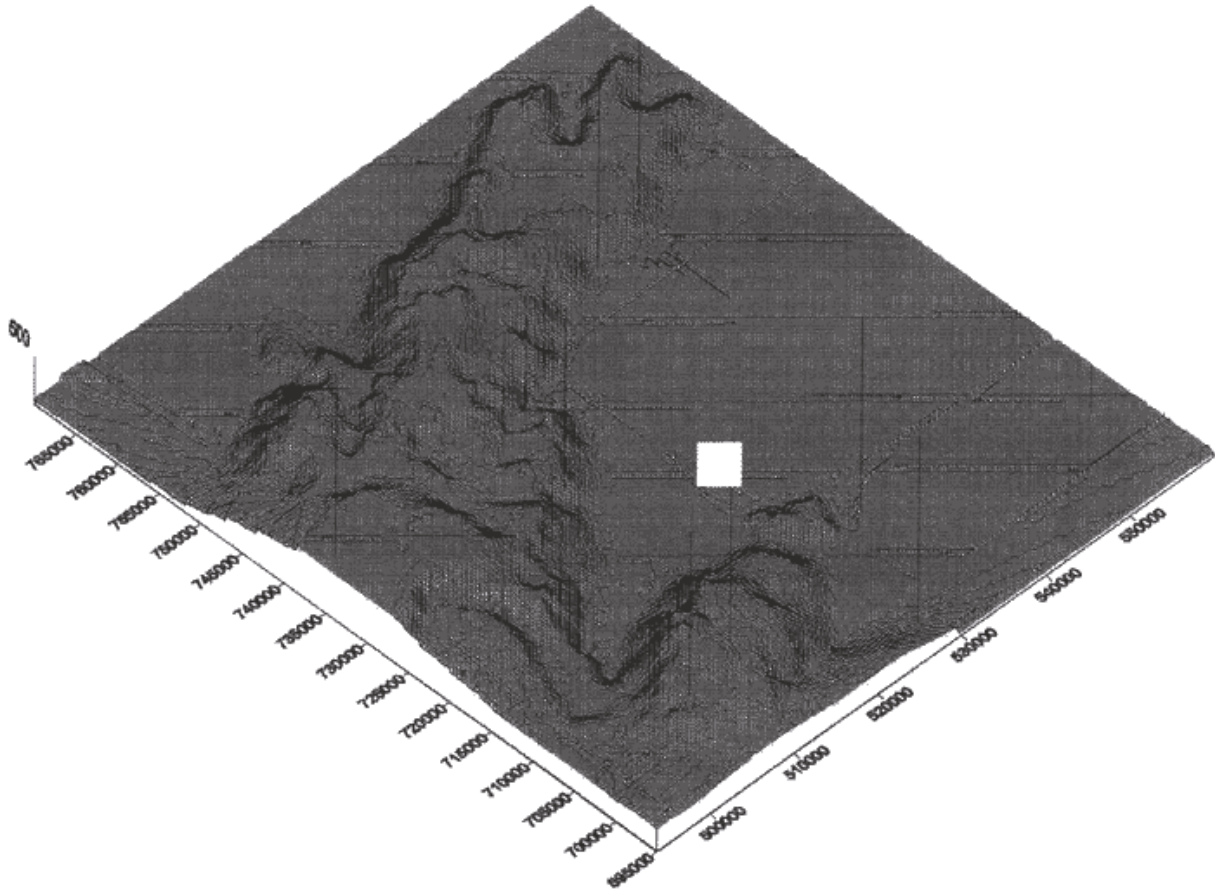


Figure 5: Wire-frame model of Mayflower area.



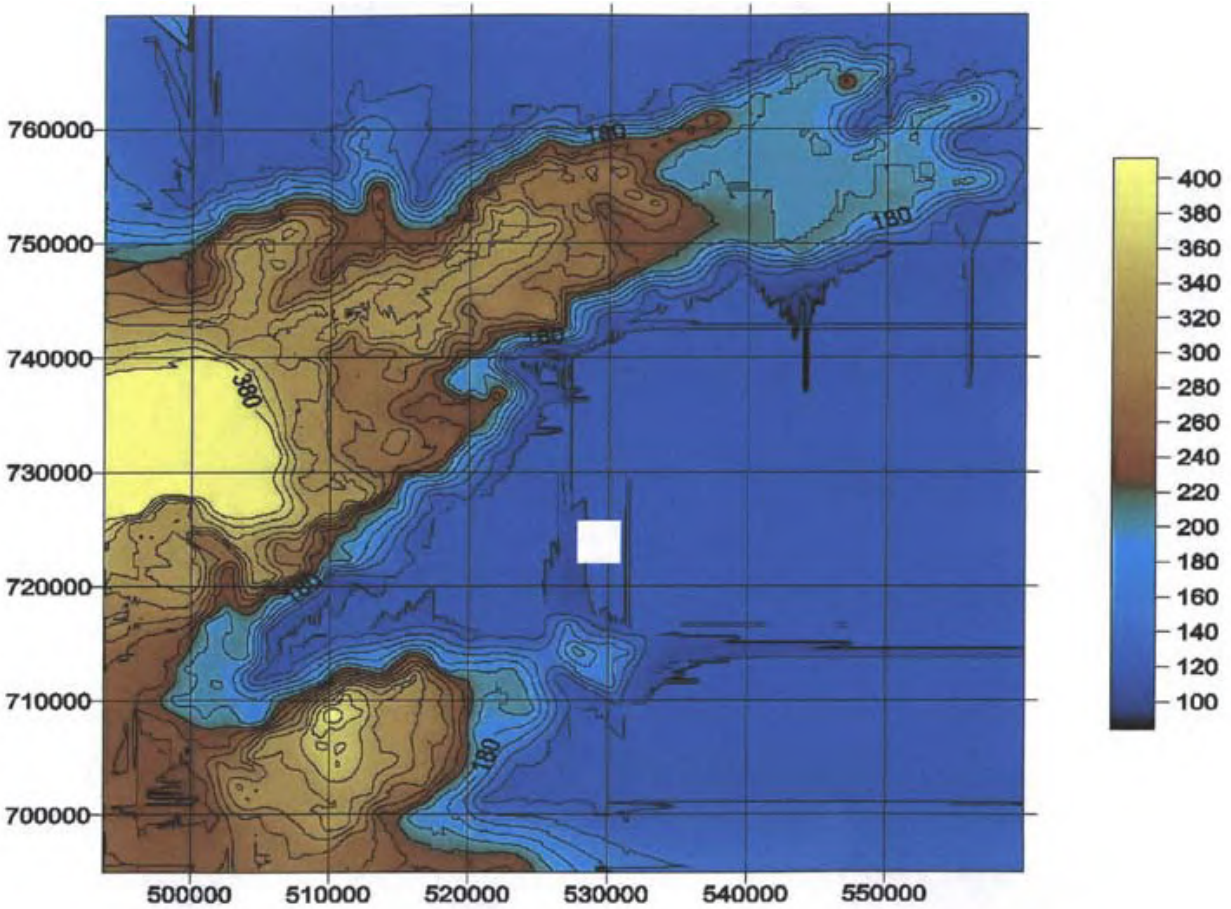


Figure 6: False color model of Mayflower area.

### ***1997 Survey & Mapping***

The College of Lake County provided MAP with a Topcon Model 302 Total Station with data collector and prism/pole set-up to use during a 4 week period this summer. Over 5,000 data points were recorded with the Total Station during this time letting us produce the first high quality topographic map of the Mayflower Main Group. [Figure 7](#) is a 10 cm topographic contour map of the Mayflower Main Group clearly showing the mounds comprising this group. Several things are visible when examining this map. First, the central, outset stairways for Structures A-9, A-10, and A-11 are all easily located (see [Figure 2](#) to compare and for structure numbers). Second, in the lower right corner of [Figure 7](#) two new mounds were located and mapped near Structure A-8.

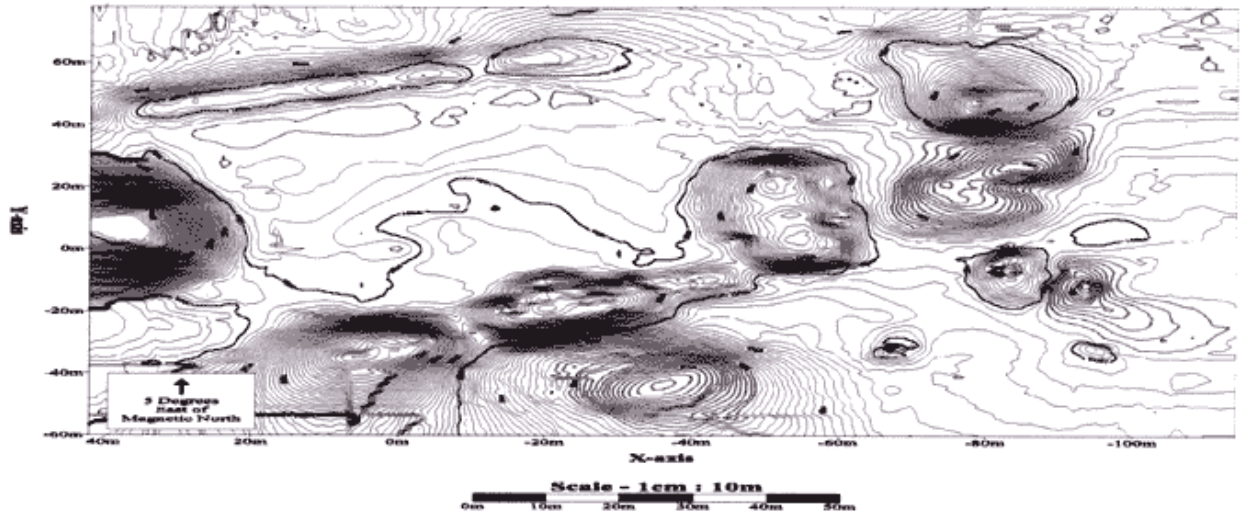


Figure 7: Contour of Mayflower Site Core.

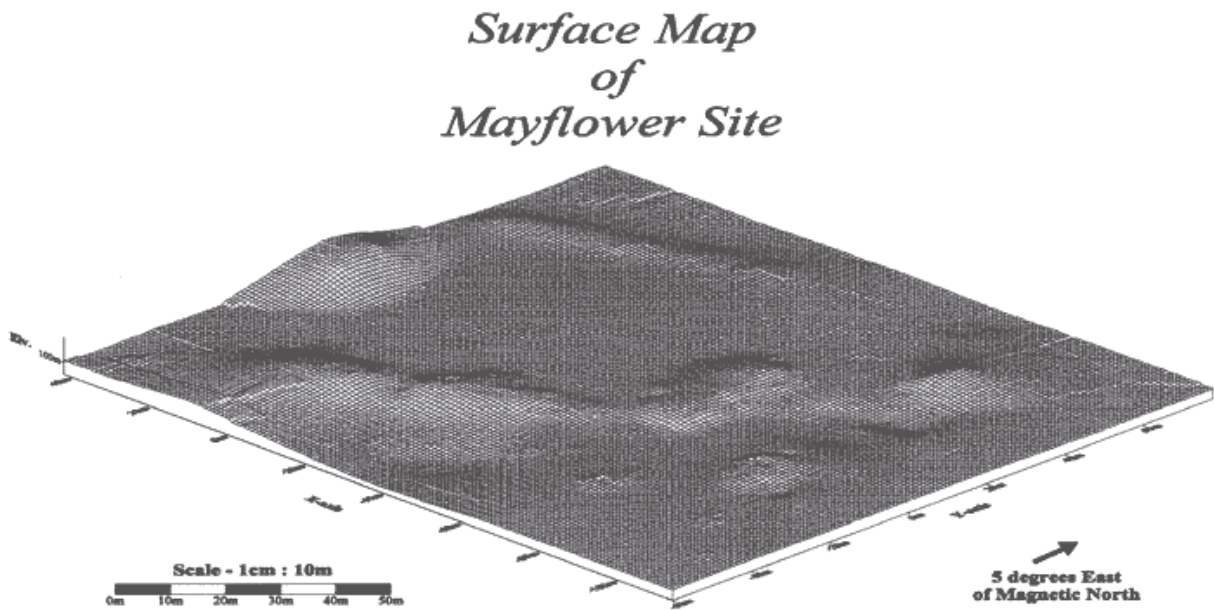


Figure 8: Isometric view of Mayflower core area.

In addition to contour maps we have been able to perform some basic 3D renderings of the Main Group. [Figure 8](#) and [Figure 9](#) represent an isometric view of Mayflower from the southwest. As the database increases with the mapping of additional areas of the site this 3D rendering will enable us to better view the spatial relationships between structures, sites, and the environment. Also, as the large scale rendering of Structure A-

8 ([Figure 10](#) and [Figure 11](#)) demonstrates, the looter's pits and previous excavation pits can be recorded with a high degree of accuracy.

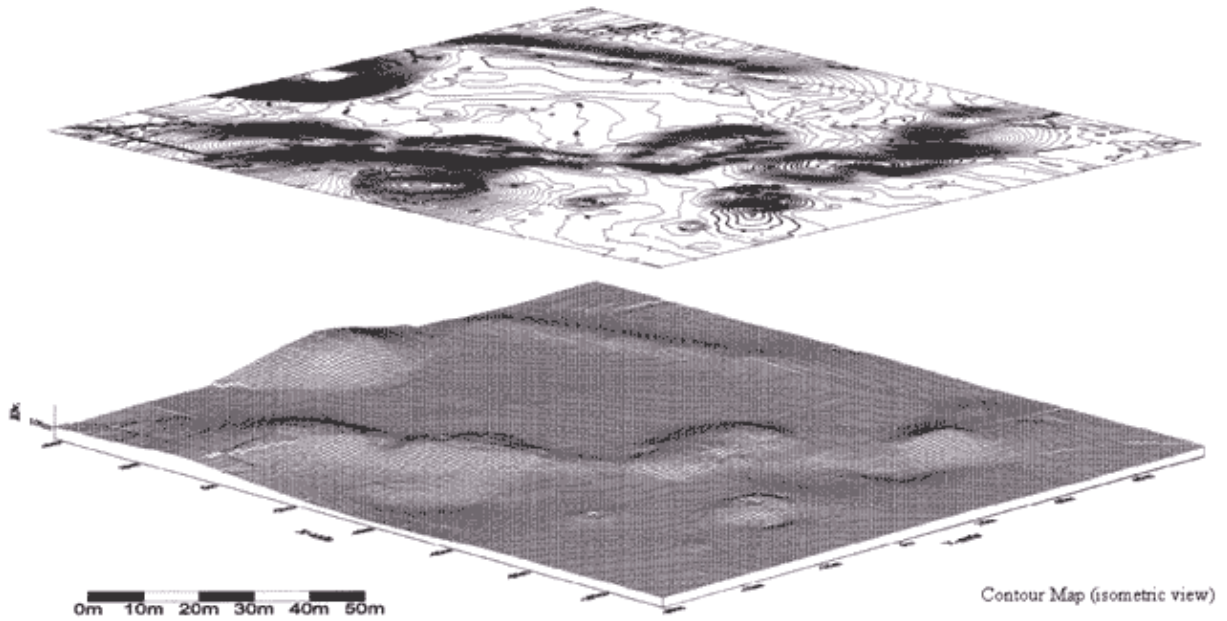
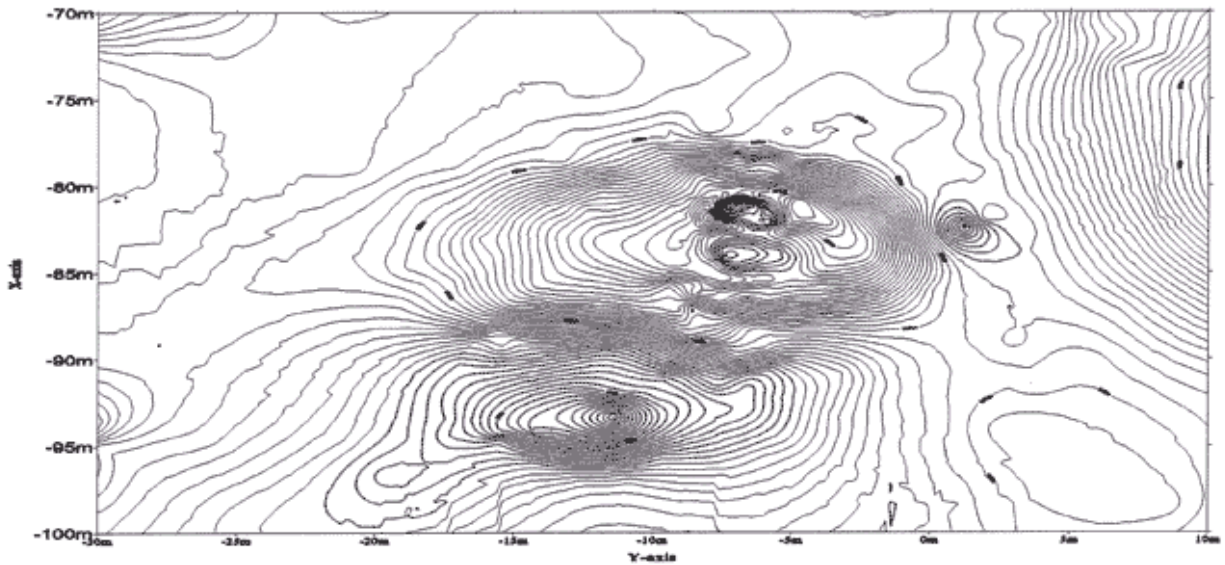


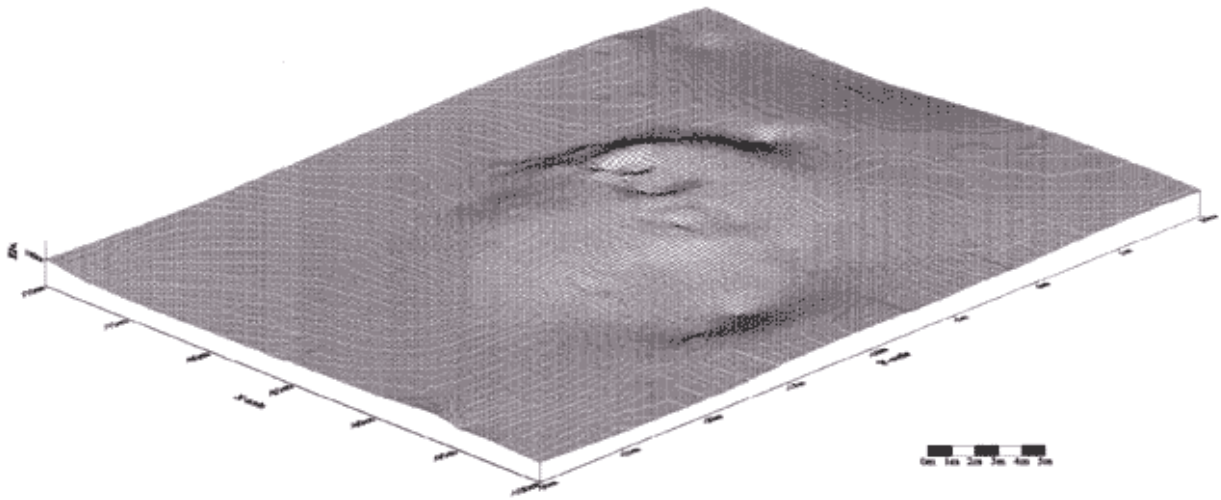
Figure 9: Isometric view of Mayflower core area with topographic overlay.



*Mound A8 - Contour Map*

Figure 10: Topographic detail of Structure A-8.





**Figure 11: Isometric detail of Structure A-8.**

With the aid of the Total Station, the project was able to establish additional survey benchmarks within the Mayflower group. Using the initial project benchmark (established in 1996) just north of Maintzunun off of the F.S.R. #2 spur, MAP established a sub-benchmark in the Mayflower Main Plaza near the stela cache excavated by Graham in 1976. This benchmark was set with rebar in cement with a backsight (also rebar in cement) located near the base of Structure A-1.

Last year's excavation units were established using a transit and a slightly different grid system. In 1997 we were able to use the Total Station to establish new, more accurate grid and synchronize the coordinates for the previous excavation units of the Structure A-8 excavations as well as lay out the newer excavation units around A-8, A-11, and in the plaza area.

Using the Total Station to map Mayflower enables us to easily expand the mapping program and integrate the new data with those from previous seasons. In future years, the site core map will be expanded to include Maintzunun and the other areas around Mayflower. Also, through the use of computer topography programs and imaging systems we will be able to plot archaeological data more easily and accurately as well as include information obtained during multiple field seasons.

During the 1996 field season, pedestrian survey of the chained banana field east/northeast of Mayflower revealed the existence of several previously unknown mounds. A road cut made in July of 1996 uncovered subsurface features that have been determined to be living or activity areas. The 1997 survey was to focus on this area again, but due to the amount of vegetation re-growth it was determined that the

survey focus be shifted to the areas immediately north, south, and west of the Mayflower Main Group.

Three distinct areas were investigated and thus assigned separate operations for purposes of data collection. Operation 5 included the area immediately north of the Main Group, Operation 6 comprised of the areas west and south of Mayflower, and Operation 7 encompassed the survey of possible quarry sites and caves near T'au Witz. The survey methodology varied from operation to operation depending on terrain, time, and manpower availability (discussed in more detail below). The different methods were also employed to determine a feasible way in which to survey in the rain forest growth of the region.

Operation 5 comprised an area between the Main Group and the present day river terrace to the north. Based upon experiences in regions with similar forest cover survey lines were located 15 m apart, the maximum distance allowable between surveyors and for visibility of any cultural features on the forest floor. Due to an unfortunate accident that left the project surveyor with a broken arm, not all transects in this area were finished. Approximately 45% of Operation 5 was surveyed.

A total of 4 lines of stone were located in the areas surveyed. All were small, low (30-70 cm high) mounds with between 2 and 8 worked stones on the surface. In most cases several other stones were located below the surface by probing the mound area with a 30 cm chaining pin. It turns out that these lines of stone comprise two mounds (A12 & A13) that will be investigated at a later date. The location of each these mounds were recorded and appear on the revised site map ([Figure 12](#) and [Figure 13](#)).

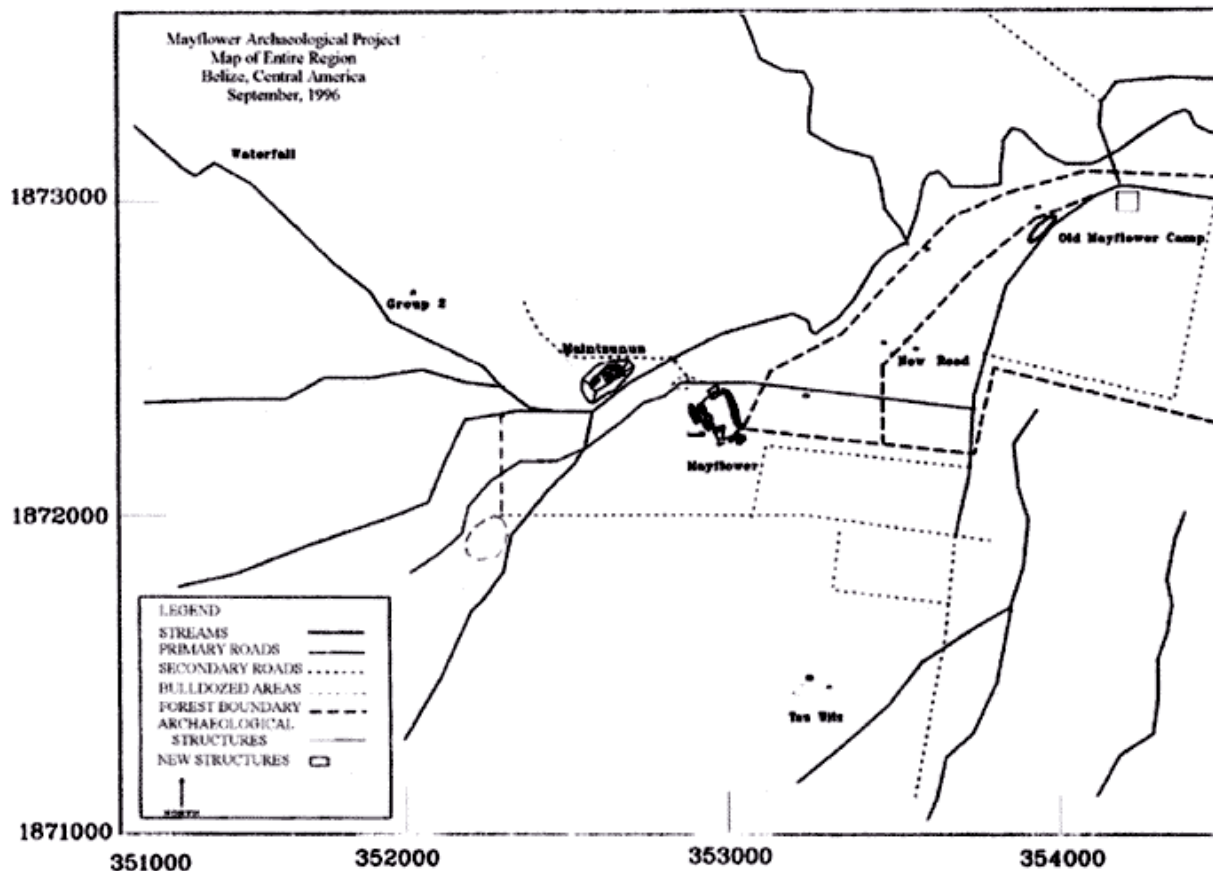
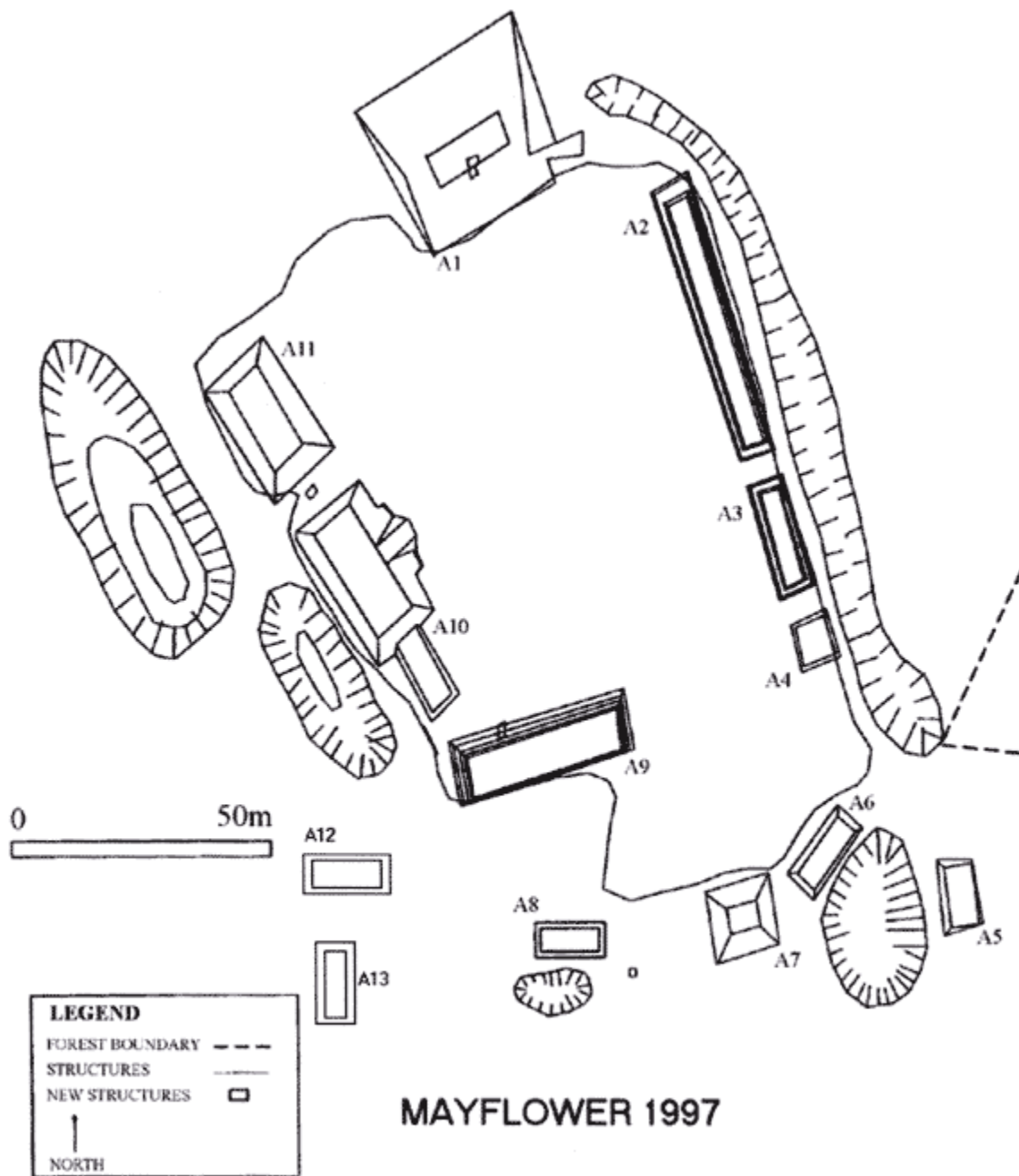


Figure 12: Map of Mayflower area with locations of new finds noted.

The presence of subsurface stones at several of these mounds, along with the evidence of entire living/activity areas found beneath the present surface last year in Operation 4 (the chained banana field east of Mayflower), leads us to believe that the occupational density might be much higher than evidenced by visible mounds in this area. Future research will focus on completing the transect survey of this area as well as obtaining additional data on subsurface occupation areas.

Operation 6 employed a different method for locating mounds in the area west and southwest of the Main Group. One small transect was cut to facilitate entry to the area west of the Main Group. A crew of three local workmen was then assigned areas of approximately 500 m<sup>2</sup> to walk through, slowly and methodically, but not using any formal survey lines, searching for any evidence of cultural activity. A total of 13 previously unrecorded mounds were identified in the area west of the Main Group. As in the previous operation, most of these were small, low mounds (30-60 cm high) with only a few stones visible on the surface, though additional probing often revealed other subsurface stones. Transects cut to the south and west of Structure A-8 for the purpose of obtaining data for the topographic map revealed two additional mounds in close proximity to Structure A-8.



**Figure 13: Updated Map of Mayflower with new Structures (A12 & A13) noted.**

All new structures with substantial architecture were recorded and appear on the revised site map ([Figure 12](#) and [Figure 13](#)). The two mounds close to Structure A-8 were completely recorded with the Total Station. As in Operation 5, the low height of the mounds and the presence of subsurface stone also indicate that additional subsurface features may be located in this area.



Operation 7 is located south of Mayflower and comprises the area around the site of T'au Witz, which is above Mayflower on a ridge that forms the south side of a box canyon. While this area was not slated for survey this season, several potential quarry sites were discovered between the 1996 and 1997 season by Florentino Bol and Ramon Guzman, two of MAP's workmen from the 1996 field season who are now employees of the DOA. Upon the advice of Archaeological Commissioner John Morris, who had seen the potential quarry sites before we arrived for the 1997 season, we set up a survey of the area.

Four areas were investigated as potential quarries looking for evidence of stone cutting, working, and other cultural evidence. Three of the sites were located by Bol and Guzman and the fourth possible site was located while cutting a transect between Mayflower and T'au Witz.

Quarry One is located on the north face of the ridge while Quarries Two and Three are located on the south face of the same ridge. All three sites appear to be natural outcroppings of conglomerate stone (similar to granite). A simple viewing of all three sites indicates that cutting of the outcrops was in progress. Numerous straight (and obviously not natural) cuts in the outcrops can be seen at all three sites. Potentially large stones (large enough to be stelae) are halfway cut, indicating that the stone was in the process of being quarried. This activity was abandoned halfway through the process and presently we have no way of telling how much, if any, of the stone was actually mined.

While it is obvious that human activity was occurring in the area, rock samples from all three quarries produced very poor quality stone. The grains in the samples are much larger than those of the T'au Witz Stela and the pieces from the Mayflower stela cache, and it is not the same stone that appears to be used as terrace facings for the mounds in the Mayflower Main Group. In addition, the stone was very brittle and would easily crumble under pressure from one's hand. From this very preliminary analysis, it appears that this stone could not be used for anything as delicate as stelae or even for terrace walls. Continued survey and excavations will be required to clear up these questions.

The fourth potential quarry site is located approximately 3/4 of the way down the transect from Mayflower to T'au Witz. It is a natural outcropping of granite very similar to stela and facing stones of Mayflower. Approximately 50 m north of this outcrop is a small mound upon which sits a large pile of stone chips—many with beveled edges and right angles. This site's location between the rock outcrop and Mayflower may indicate that it functioned as a stone-working site.

Although there is no evidence of cultural material at the rock outcrop, the presence of the small mound with the stone chips just a short distance away suggests that this area might be the best candidate for the Mayflower site's quarry. It is a short and gentle downhill slope from this outcrop to Mayflower as well as being located fairly close to T'au Witz.

Additional work is still needed in all three of these operations. Research is needed concerning the exact composition of stone from the both the Mayflower constructions and from the potential quarry sites thus far identified as well as continued survey for other potential quarry sites. Not all areas north and west of the site have been covered by pedestrian survey and future work will certainly uncover additional mounds and subsurface features.

## **Excavations**

Excavations for the 1997 season concentrated on the Mayflower Main Group area. Excavations occurred in three areas, Structure A-8 (Op 1 Subop 3), Structure A-11 (Op 1 Subop 2), and the plaza of Mayflower (Op 1 Subop 4). A preliminary account of all three excavations follows a list of units excavated in 1996 and 1997.

### ***List of excavated units of the 1996 and 1997 seasons***

The following is a list of excavated units from the 1996 and 1997 field seasons at Mayflower (site 428) and Maintzunun (site 427), accession number 10017.

The Mayflower project uses the operation, suboperation, lot system meaning that each general area (such as the main compound at Mayflower) is assigned an operation number, a more specific area (such as a particular building) is assigned a suboperation number, and each excavation unit (either an STP or each level of a 1 x 1 m or 2 x 2 m) is assigned one or more lots. Therefore lots will be unique to each suboperation of an operation (there will be several lot 4's within an operation, but only one within a specific suboperation). Lots are not necessarily sequential to a unit's levels (i.e. level 1 of one unit may be lot 1, but level 2 may be lot 4). This list is provenience oriented (e.g. N16 E18) and so the lots will not be sequential with the levels. Units are provenienced using the grid point located at the southwest corner of the excavation square and are operational specific, meaning that Op 1 uses one set of coordinates and Op 2 another.

**Operation 1** (Mayflower main compound) **Suboperation 1** (west of the Main Group, also referred to as "Parking Area") had 31 STPs excavated in the 1996 field season and no excavation units.

**Operation 1** (Mayflower main compound) **Suboperation 2** (Structure A-11) had 37 STPs excavated in 1996 and two excavation units opened in 1997.

N8 W25 was a 2 x 2 m unit that was excavated 30 cm in 10 cm artificial levels (1-3) and assigned lots 38, 39, and 40.

N9 W23 was a 1 x 1 m unit that was excavated 60 cm in 10 cm artificial levels (1-6) and assigned lots 41-46.

**Operation 1** (Mayflower main compound) **Suboperation 3** (Structure A-8) had 16 STPs excavated in 1996, three excavation units opened in 1996, and six excavation units opened in 1997. One unit, N198 E206, was begun in 1996 and was continued in 1997. The mapping scheme for Mayflower changed in 1997 and the new coordinates for this unit are S84.5 W0.5. In order to keep continuity, the N198 E206 provenience information continued in the 1997 field season. Thus, S84.5 W0.5 was referred to as N198 E206 throughout the field season. This is also the case with the 1 x 1.5 m extension of S84.5 W0.5 which was referred to as N198.5 E208. The new datum for this unit is S84 E1.5. The other two units opened in 1996 were N205 E198 and N206 E198, these units are now S77.5 W8.5 and S76.5 W8.5, respectively.

N198.5 E208 (S84 E1.5) was a 1.5 x 1 m unit that was excavated 90 cm in 3 natural levels (level 1 from 0-45 cm, level 2 from 45-66 cm, and level 3 from 66-90 cm). These levels were assigned lots 34, 46, and 47. In addition a 30 cm x 30 cm feature was excavated out in 2 levels from 45-66 cm (level 2) and 66-90 cm (level 3). These levels were assigned lots 44 and 45.

N198 E206 (S84.5 W0.5) was a 2 x 2 m unit that was excavated 90 cm in 10 cm artificial levels (1-8), with the exception of level 3 which was excavated 20 cm (20-40 cm). These levels were assigned lots 17, 19, 20, 23, 26, 28, 32, and 42. In addition at 53 cm an occupational floor was uncovered and excavated out as a 1 x 1 m unit in 3 natural layers from 53 to 80 cm (level 1 from 53-66 cm, level 2 from 66-70 cm, and level 3 from 70-80 cm, and assigned lots 37, 38, and 39). At 90 cm (20 cm below sterile) a 1 x 1 m unit (N198 E206) was excavated one meter (90-190 cm) in one level (level 9) and assigned lot 43.

N205 E198 (S77.5 W8.5) was a 1 x 2 m unit excavated 10 cm in one level and assigned lot 18.

N206 E198 (S76.5 W8.5) was a 1 x 2 m unit excavated 30 cm in 10 cm artificial levels (1-3) and assigned lots 21, 22, and 24.

S85 W12 was a 2 x 2 m unit (with the exception of the last 20 cm dug as a 1 x 1 m) excavated 110 cm in 10 cm artificial levels (1-11) and assigned lots 48, 51, 52, 54, 55, 56, 57, 58, 59, 60, and 61.

S85 W18 was a 2 x 2 m unit excavated 40 cm in 10 cm artificial levels (1-4) and assigned lots 30, 33, 36, and 40.

S91 W16 was a 2 x 2 m unit excavated 90 cm in 10 cm artificial levels (1-8), with the exception of the last 20 cm dug as a 1 x 1 m unit and excavated 20 cm, and assigned lots 25, 29, 31, 35, 41, 49, 50, and 53.

**Operation 1** (Mayflower main compound) **Suboperation 4** (Plaza area) had two excavation units opened in 1997.

S11 E14 was a 1 x 1 m unit excavated 10 cm in one artificial level and assigned lot 1.

S9 E13 was a 1 x 1 m unit excavated 60 cm in 10 cm artificial levels (1-6) and assigned lots 2-7.

**Operation 2** (Maintzunun main compound) **Suboperation 1** (Structure 1) had two excavations units opened in 1996.

N196 E204 was a 2 x 2 m unit excavated 10 cm in one artificial level and assigned lot 1.

N207 E216 was a 2 x 2 m unit excavated 20 cm in 10 cm artificial levels (1-2) and assigned lots 2 and 3.

**Operation 2** (Maintzunun main compound) **Suboperation 2** (plaza area) had one excavation unit opened in 1996.

N176 E186 was a 2 x 2 m unit excavated 44 cm in three natural layers (levels 1-3). Level 1 was 0-10 cm, level 2 was 10-36 cm, and level 3 was 36-44 cm. These levels were assigned lots 1, 2, and 3 respectively.

A map of all the excavated units should be forthcoming.

### ***Structure A-8 (Op 1 Subop 3)***

Excavations at Structure A-8 began in 1996 and continued in 1997. Given its location south and outside the Main Group of Mayflower, last season's hypothesis was that A-8 was a residential structure, possibly domestic in use (e.g. kitchen area) that was associated with the Main Group. As it was outside the Main Plaza the alternative hypothesis was that it formed part of an entirely different plaza group. Excavations and mapping in 1996 confirmed its association with the Main Group based upon the lack of other mounds in the immediate vicinity, its orientation and access towards the Main Group, a borrow pit to the south (opposite the Main Group) and midden on its east side, and that there were no obstructions between it and the other mounds of the Main Group. The abundance of artifacts also indicated that it was residential and probably domestic. This season's survey south of A-8 revealed no mounds that would have been associated with a separate plaza group for A-8. As one of the primary goals of MAP is to establish a ceramic typology for the area, excavations continued here this season.

Five units were excavated at A-8 in 1997, one of which was reopened from 1996 (see previous section on excavated units). Of these units, two were east of the structure, one west, one south, and one on top of the structure. The two eastern units and southern unit produced large amounts of cultural material while the units on top and to the west produced much less. Since additional mounds were found west and south of A-8, the western unit must have been in a traffic corridor and thus kept clean of large amounts of garbage. The southern and eastern units were located in areas that did not lead to other structures—good places to dump refuse (resulting in middens). The greatest difference in artifact distribution between the midden units (eastern and southern) and the other

two units (western and on top of the structure) was in ceramic quantity. All units had an abundance of slate, daub, and carbon. As the slate is only found near structures (the plaza excavations revealed very little), the slate was probably used as a leveling device or flooring for a superstructure. This superstructure was probably made of waddle and daub given the high frequency of both daub and carbon. In addition most of the units encountered small burnt tree roots (5-10 cm in diameter) indicating that shortly after abandonment a fire swept through the area.

Of the five units, the eastern two and the one atop the structure encountered sterile soil about one meter below the surface. The unit on top of the structure showed no signs of an earlier construction, and the fill had very little in the way of cultural material. This would indicate that the earth used to construct the building was not taken from a midden or an area that had been previously occupied. In the eastern units only two stratigraphic levels were noted. The first level went from the surface down to the occupational floor and contained heavy amounts of artifacts. At the floor level was a pile of daub, a partially complete vessel, as well as a 30 cm in diameter hole dug 60 cm deep into the floor. The floor was only identified by the amount of debris sitting upon it rather than a layer of sand and/or compacted clay. The soil below this floor was sterile. While the amount of ceramics was numerous above the floor level, only about 5-10 different ceramic types were encountered.

Given that the fill of the structure is relatively devoid of cultural material, that only one occupational floor was encountered, and that not many different types of ceramics were encountered, it is a possible conclusion that the occupational history of A-8 (and perhaps all of Mayflower) was relatively short. Additional excavations of structures, in the Mayflower Main Group as well as in outlying areas, and formal ceramic analysis is still required to substantiate this claim.

(While this entire report is preliminary, this section on A-8 is extremely preliminary and has glossed over much information that will be forthcoming.)

### ***Plaza Excavations (Op 1 Subops 2 & 4)***

Excavations were undertaken in and around the Main Plaza area of Mayflower to obtain information concerning plaza floor construction phases, flooring material, and the overall state of floor preservation, as well as gaining a better understanding of occupational history at the site. Two areas were selected for investigation. A 1 x 1 m unit was placed in the center of the Main Plaza (Op 1 Subop 4) and two units were located at the base of Structure A-11 on its central axis (Op 1 Subop 2).

The test unit in the middle of the plaza (S9 E13) did not encounter any evidence of an intact floor. Graham, in her excavations at the base of Structure A-9 located the original plaza floor—a thin layer of sand mottled with pure red clay. No similar layer was found in the plaza unit. However, a layer of small pebbles was uncovered in level 3, approximately 20-30 cm below the present day surface. This may very well represent

what is left of the ancient plaza surface. Between 40-60 cm below the surface sterile soil was encountered. Aside from the artifacts uncovered in this unit and the layer of small pebbles, no evidence of earlier occupation was uncovered.

A 2 x 2 m test unit (N8 W25) was excavated near the base of A-11 along the central axis of the structure to find the juncture of the plaza floor with the structure. After three levels the amount of wall fall became extremely dense and a 1 x 1 m extension unit (N9 W23) on the east side of the previous unit was opened to more easily find the plaza floor.

There was almost no evidence of wall fall in this new unit and approximately 60 cm below the surface, a layer of sand mixed with clay was uncovered. It is similar to the floor found by Graham near A-9 and we believe it was the original surface upon which Structure A-11 was constructed. Cultural material was found in all six levels of this 1 x 1 m unit. Time did not permit excavations below this floor level, but both the units will be reopened in 1998 to find the base of A-11 and the juncture with the plaza floor.

Evidence of floors near the structures and the lack of clear evidence of a floor in the center of the plaza may indicate that solid flooring was only needed in the high traffic areas near the buildings or as a leveling mechanism for the construction of the structures. Also, since the Mayflower area has been logged for hardwoods, served as a gmelina plantation, and now is subject to the encroachment of the banana fields to the east, it is possible that the 1000 years of bioturbation and other disturbances in the plaza has destroyed almost all evidence of any ancient floors. Additional test units near other structures in the Main Group as well as in the plaza are necessary to fully prove these ideas.

### ***Looters Pit Recording Program***

During the 1996 field season MAP initiated a survey and recording of looter's pits (as well as previously excavated units) throughout the Mayflower area. In 1996 1:20 scale maps and photographs (B&W and color slides) of the looter's pits were made of the mounds in the Main Plaza of Mayflower. This season with the aid of the laser transit these pits are now mapped. While a start, this program has only covered Mayflower's Main Group and work still needs to be done at Maintzunun, T'au Witz, and the mounds outside the core group of the site. As new mounds are discovered, however, recording, photographing, and mapping of looters pits will occur.

### **Laboratory**

Laboratory work for the 1997 season consisted mostly of washing, sorting, counting, labeling, cataloging, and recording of 1997 artifacts. In addition, the artifacts of the 1996 season were labeled, cataloged, and recorded in accordance with the new DOA guidelines. Some preliminary analysis of the artifacts occurred during this process, but a

ceramicist and lithic expert will be brought on to the project next season to begin formal analysis. At present, over 22,000 artifacts have been recorded. As the present goal of the project is to acquire utilitarian wares to begin a typology for the site very few "special artifacts" have been recovered.

## **Conclusions and Future Research**

As stated in the 1996 final report, the extent of Mayflower is larger than initially thought and therefore the project envisions future research will continue for at least a decade. Some of the short and long term goals of the project were included with the 1997 research design and will be more fully expressed with the final report of 1997 and the 1998 research design. However, given the current work regarding the creation of the Mayflower National Park and Archaeological Preserve, project goals will be modified accordingly.

While much work still needs to be done in survey, mapping, and small scale excavations within and outside the Mayflower Main Group, the project intends on excavating and restoring several of the mounds in the Main Group of Mayflower. One of the first structures slated for excavation and restoration would be Structure A-9. This structure is in the best preserved condition and would be a good model for restoration of other structures.

This season the project hired a total of five workmen for 6 weeks, and depending on funding would like to increase this number to ten or twenty. While most of their work included manual labor such as clearing, they were trained for survey and we began training them for excavations. It is our intention to train a substantial amount of individuals from Silk Grass in the expertise of archaeological survey and excavation, a project which would work well in conjunction with the ongoing development of the Silk Grass Eco-Tourism Association.

The Mayflower Archaeology Project will continue to be affiliated with the College of Lake County, the institution that sponsors the summer archaeological field school. Both Jeffrey Stomper and Wendy Brown are associated with CLC as faculty and staff.

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## Sources Cited

Awe, J., J. Conlon, & M. Campbell

1991 "Preliminary Analysis of the Spatial Configuration of the Site Core at Cahal Pech, Belize and its Implications for Lowland Maya Social Organization." *Mexicon*, 13(2):25-30.

Awe, J. & P. Healy

1994 "Flakes to Blades? Middle Formative Development of Obsidian Artifacts in the Upper Belize River Valley." *Latin American Antiquity*, 5(3):193-205.

Burghardt, A. F.

1971 "A Hypothesis About Gateway Cities." *Annals, Association of American Geographers*, 61:269-285.

Chase, A. F.

1991 "Cycles of Time: Caracol in the Maya realm." In *Sixth Palenque Round Table, 1986*. pp. 32-38. Norman: University of Oklahoma Press.

1992 "Elites and the Changing Organization of Classic Maya Society." In *Mesoamerican Elites: An Archaeological Assessment*. pp. 30-49. Norman: University of Oklahoma Press.

Chase, A. F. & D. Chase

1989 "Investigation of Classic Period Maya Warfare at Caracol, Belize." *Mayab*, 5:5-18.

Clark, J. & T. Lee

1984 "Formative Obsidian Exchange and the Emergence of Public Economies in Chiapas, México." In *Trade and Exchange in Early Mesoamerica*, pp. 235-274. Albuquerque; University of New Mexico Press.

Graham, E.

1976 "Archaeology of the Stann Creek District, Belize, Stann Creek Project 1975 Interim Report." Centre of Latin American Studies, University of Cambridge.

1977 "Intra-regional Trade in the Eastern Lowlands." Paper presented at the 42nd Annual Meeting of the Society for American Archaeology, New Orleans.

1983 *The Highlands of the Lowlands: Environment and Archaeology in the Stann Creek District, Belize, Central America*. Ph.D. Dissertation, University of Cambridge. University Microfilms: Ann Arbor.

1985 "Facets of Terminal to Post-Classic Activity in the Stann Creek District, Belize." In *The Lowland Maya Postclassic*, A. F. Chase and P. M. Rice, eds., pp 215-229. University of Texas Press: Austin.

1994 *The Highlands of the Lowlands: Environment and Archaeology in the Stann Creek District, Belize, Central America*. Monographs in World Archaeology No. 19. Prehistory Press: Madison.

Hirth, K. G.

1978 "Interregional Trade and the Formation of Prehistoric Gateway Communities." *American Antiquity*, 43(1):35-45.

1984 "Trade and Society in Late formative Morelos." In *Trade and Exchange in Early Mesoamerica*, pp. 125-146. Albuquerque; University of New Mexico Press.

Jackson, L. & H. McKillop

1989 "Defining Coastal Maya Trading Ports and Transportation Routes." In *Coastal Maya Trade*, Trent University Occasional Papers in Anthropology, pp. 91-110. Peterborough: Trent University.

Loten, S.

- 1985 "Lamanai Postclassic." In *Lowland Maya Postclassic*, A. F. Chase & P. Rice, eds. pp. 85-90. Austin: University of Texas Press.

MacKinnon, J. J.

- 1985 "The Point Placencia Archaeological Project, 1984-1985 Fieldwork." *Mexicon*, 7:80-83.

- 1989 *Spatial and Temporal Patterns of Prehistoric Settlement, Procurement and Exchange on the Coast and Cays of Southern Belize*. Ph.D. Dissertation, University of Wisconsin, Madison. University Microfilms: Ann Arbor.

- 1990 "Tobacco Range, South Water Cay, Placencia Cay and Maya Sea Trade Routes in Belize." *Mexicon*, 12(4):75-78.

- 1991 "Point Placencia Archaeological Project, 1991 Fieldwork." *Precolumbian Art Research Institute Newsletter* 14.

McKillop, H.

- 1989 "Development of Maya Coastal Trade: Data Models, and Issues." In *Coastal Maya Trade*, Trent University Occasional Papers in Anthropology, pp. 1-18. Peterborough: Trent University.

Pendergast, D. M.

- 1984 "Excavations at Lamanai, Belize, 1983." *Mexicon*, 6(1):5-10.

- 1992 "Noblesse Oblige: The Elites of Altun Ha and Lamanai, Belize." In *Mesoamerican Elites: An Archaeological Assessment*. pp. 61-79. Norman: University of Oklahoma Press.

Williamson, R. & J. Stomper

- 1996 Preliminary Analysis of the 1996 Summer Field Season: Mayflower Archaeology Project. Report on file at the Department of Archaeology, Belmopan, Belize.