

Excavations at Tell Timai 2009
University of Hawaii
Season 1
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Directors

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An archaeological team sponsored by the University of Hawaii lead by Professor Robert Littman and Dr. Jay Silverstein conducted excavations and survey mapping from 24 July to 20 August 2009. The geographic organization of the research followed the 2007 preliminary survey of Tell Timai conducted in 2007 in conjunction with the Mendes Research project directed by Professor Donald Redford. Tell Timai was subdivided into 50-x-50 meter grids labeled with an alpha-numeric designation (Figure 1). These grid units are the primary area designation used to reference excavation units, features, and artifacts. During the 2009 season excavations were conducted in Grids L-16, L-5, M-6, and O-6, and limited mapping and cleaning was conducted in Grids O-5, O-6, O-7, P-5, P-6, P-7, Q-5, Q-6, Q-7, and limited mapping in Grids K-11, L-11, L-10, and M-10. In addition, an exploratory dredge was made of a canal in Grid U-22 on the south border of the tell with a mechanical excavator following the recommendation of SCA Inspector Salem Gabr El-Baghdadi who had recovered numerous architectural elements there. The following results represent a preliminary summary of the investigation.

Survey Report

The Survey team's mission this season was to map the areas of interest for the excavation this year, record the essential data for these activities and establish permanent stations/datum's for use in future seasons. After discussion with the SCA team working in the O6 area, which is soon to become the site of a stadium, it was decided that this area would also be recorded to further expand our knowledge of this region of the tell before it is destroyed. This was especially important as the area appears to be an industrial component of the city (see below), and the information gained on the survey will allow the region to be put into the wider context of the city as future excavations reveal more about the site. For a number of days the survey team was also supported by a visiting SCA inspector who was interested in our methodology, technical skills and machinery. The equipment used for the survey were a Garmin GPSmap 60 handheld GPS and a Leica TCRpower laser total station with a TDS Ranger data collector running Survey Pro software. Over 2000 data points were collected and post-survey analysis of the data is being done with ARCmap software and correlated with 13 February 2004 4-Band Pan Sharpened, orthorectified satellite imagery with 0.60 m resolution.

Excavation L5 Unit 1

Unit 1 was exploratory trench (4 x 4m) situated directly to the west of the visible black granite sarcophagus lid (Feature 56). The reason for this was to investigate whether the area which is to the west of the Tell is the possible location for a cemetery. Following the removal of two extensive features of re-deposited cultural material the Unit revealed the remains of a mudbrick floor abutting a mudbrick constructed wall (northwest/southeast orientated and 1.30m in width). The floor surface was situated to the south of the wall with the area immediately to the wall's northeast facing elevation occupied by what appeared to be collapse associated with the wall. The floor surface appears to be the last associated with the wall before its collapse and the area falling out of use. Below the floor was a mixed deposit dominated by mudbrick and red brick fragments which acted as foundation for the floor. This foundation deposit was the last to be removed before the Unit was closed to concentrate resources on recording features exposed in grid squares O6, O7, and P6. The mudbrick wall in Unit one continues past the east and west limits of the Unit and its width indicates that it was a substantial construction. This wall either functioned as a bounding wall for this segment of the Tell, or as a bounding wall for a large structure. The most notable finds in this unit were a Graeco-Roman coin, a Ptolemaic coin in fair-good condition that may be attributable with research, and a small plemochoe vessel, usually associated with the Eleusian Mystery rituals (Appendix, SCA Record Numbers 6, 8, and 24).

Excavations/Cleaning O6 Units 1, 3, 4, 5, 9, O7 Units 1, 6, 7, and P6 Unit 3

Operations in this area were conducted with the consultation and advice of SCA inspectors in an effort to build on previous work. Extensive cleaning of the above Units revealed a number of features that collectively indicate that this segment of the Tell functioned as an industrial area. Features included red brick built circular kilns, a brick built aqueduct connected to a well (Figure 2), large ceramic vessels sunk into the ground, one of which containing a ceramic pipe to regulate air flow, semi-square mud and red brick storage units and a large limestone cone-shaped grinding vessel. The area also included a number of substantial mudbrick walls which appear to have segmented off function specific areas. One of the walls uncovered to the extreme west of the area may have acted as a bounding wall separating the work areas from the river.

L16 Unit 1

L16 Unit 1 was excavated because of the exposed stratigraphy and surface finds such as an earring dating back to the Roman era. The unit contained several extensive mudbrick walls, four plaster floors and associated redbrick walls (Figure 3). The plaster floors indicated there was several series of construction periods and that this area was very important due to its continued

occupation. The finds include a large volume of ceramics, bone, and shell. Several coins and other interesting small finds were found such as a possible Thoth figurine (see appendix, SCA 1).

L16 Unit 2

The location of the unit L16-2 was investigated because of its location in a built up residential area adjacent to what appears to be a forum. The location appeared to be a single room or house and the excavation consisted of a single 4x4 meter unit within the standing walls of the room. The unit was bordered by mudbrick walls on two sides (NE and SE). Objectives for this excavation unit were to establish the use and dating of the mudbrick structure surrounding it and to gain information about the relationship between this house and the adjacent house which had visible brick and plaster-cement architectural elements. The excavation revealed a series of mudbrick layers which consisted of two different types of mudbrick. The top layer covered the whole unit except the mudbrick walls and it was interpreted to be a floor. Further layers did not cover the entire unit area and their function and phasing was indeterminate. All mudbrick layers below the initial floor layer appear to be earlier structures not associated with the standing walls. At approximately 60 cm below the surface a probable midden was found. This layer yielded important samples including fishbone and shells. Soil samples were taken for flotation and the flotation samples are currently under analysis (Figure 4). The main finds from the midden were pottery, bone and shell. A preliminary analysis of the pottery of the top layer (Feature 91) of the possible midden dated this feature to a time period between the Ptolemaic period and 500 AD.

M6 and Harbor Area

M6 was selected on the basis of NYU's preliminary examination of the area and its proximity to the hypothesized harbor. Excavations revealed a monumental architectural structure with large limestone blocks and dovetail joinery. Three inner 'rooms' were discovered, each filled with successive layers of limestone chips at approximately the same intervals. The regularity and spacing of the limestone floors in each room suggests that these layers were intentionally laid at approximately the same time. (Figure 5). Due to the lack of visible rooms in the structure and the lack of archaeological remains in these rooms, it is possible that they were not accessible and perhaps were filled intentionally. Unit 3 revealed a substantial mudbrick platform that appears to have been constructed at a later date. The finds from M6 included various pottery dating from the Ptolemaic through Roman periods, an echinus cup (see appendix), two Ptolemaic bronze coins, and one partial faience bottle.

A coring auger was used to test the hypothesis of the location of the harbor. Initial findings revealed the presence of lamination lines in all of the areas of the suggested harbor. Two cores were taken in M6 Unit 3 and suggest that at one period the water level reached the south-eastern

face of the limestone structure. Further conclusions regarding the harbor cannot be drawn until analysis of the samples has been completed and additional coring is done in the area.

Dredge of Canal, Grid U22

A hydraulic bucket loader was used to dredge at the north bank of the irrigation canal in Grid U22 to explore the possibility that more architectural elements were located there. Approximately 15 pieces of architecture including limestone blocks with inscriptions and fluted column segments were recovered (Figure 6). Based on the presence of contiguous column pieces it was estimated that the elements were likely coming from a primary context and that some form of temple or other monumental architecture was located approximately 2 meters below the surface in this location. Several blocks of architecture were recovered from adjacent to the canal, one of which has a faint inscription with a tentative reading of a cartouche of Ptolemy.

FIGURES

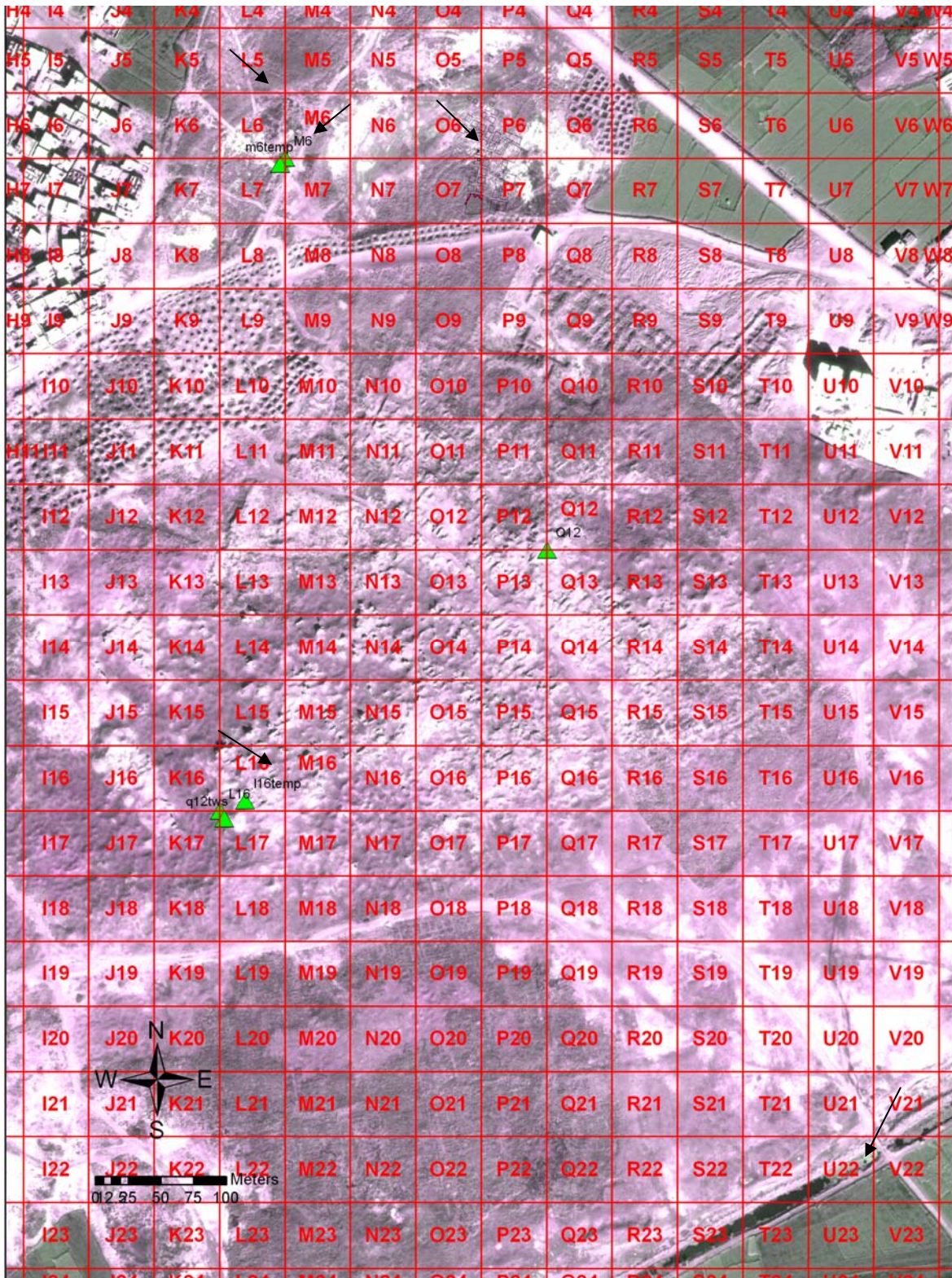


Figure 1. Map of Tell Timai with arrows showing areas of investigation.



Figure 2. Units P6-3, 4, and 5, showing a well, kiln, aqueduct complex.



Figure 3. Excavation of floors at Grid M6, Unit 1.



Figure 4. Excavation at Grid L16, Unit 2.



Figure 5. The Temple complex at M6.



Figure 6. Architectural elements recovered during dredging in Grid U22.

APPENDIX

Artifact	Grid	Feature	Material	Width	Height	Mass	Max. Thick	Description	Quantity	Bag#
Bronze Thoth figurine	L16-1	Surface	Bronze	10.1 mm	27.7 mm	7.5g		Small bronze Thoth figurine, seated with moon disk overhead. Recovered from layer above Roman floors	1	2009-090
Schwabti figurine fragment	P5	Surface	Faience	28.3 mm	28.0 mm	7.4g	14.7 mm	Head and shoulders of an eroded Schwabti figurine. Faience residue visible.	2	2009-026
Ptolemaic coin	M6-2	118	Brass or bronze	18.1 mm		3.1g	2.4 mm	Ptolemaic coin, bust on obverse and eagle on reverse. Restored to fair condition.	3	2009-409
Ptolemaic bronze coin	L16-2	95	Bronze	19.4 mm		2.7g	2.1 mm	Coin with Zeus-Amon on the obverse and eagle on the reverse. Restored to fair-good condition.	4	2009-0192
Roman sestertius	L16-IF	Surface	Bronze	32.7 mm		17.0 g	3.1 mm	Roman sestertius with bust of emperor on obverse and standing deity on reverse. Restored to fair-poor condition. Roman, 2nd-3rd Century A.D.	5	2009-0022
Bronze Roman or Ptolemaic coin	L5-1	50	Bronze	18.9 mm		8.0g	4.8 mm	Bronze coin with possible bust of emperor on obverse and deity and mint mark on reverse. Restored to poor condition.	6	2009-104
Bronze Ptolemaic coin	M6-1	140	Bronze	21.7 mm		8.6g	4.8 mm	Ptolemaic coin with Zeus-Amon on the obverse and unreadable reverse. Divot on both sides. Restored to poor condition.	7	2009-388
Bronze Ptolemaic coin	L5-1	51	Bronze	20.7 mm		6.9g	3.5 mm	Ptolemaic coin with Zeus-Amon on the obverse and unreadable reverse. Divot on both sides. Restored to fair-good condition.	8	2009-124
Echinus Cup	M6-1	142	Ceramic	114.7 mm	61.1 mm		9.7 mm	Near complete Echinus cup, Ptolemaic.	9	2009-387
Conical jar	P6-6	Surface	Ceramic	82.2 mm	95.1 mm		5.8 mm	Complete conical jar, small, probably Ptolemaic	10	2009-469

Miniature pitcher	07-1	59	Ceramic	47.6 mm	111.7 mm	5.3 mm	Small pitcher, almost complete. Ptolemaic.	11	2009-360
Small globular vase	07-1	59	Ceramic	74.0 mm	75.2 mm	3.8 mm	Body of a globular pitcher.	12	2009-360
Small plate	07-1	59	Ceramic	48.7 mm	16.8 mm	7.5 mm	Complete plate. Ptolemaic.	13	2009-360
Unguentarium	P6-6	Surface	Ceramic	43.7 mm	104.3 mm	4.1 mm	Almost complete unguentarium. Late Ptolemaic.	14	2009-469
Globular vase	07-1	59	Ceramic	96.4 mm	103.3 mm	5.1 mm	Globular marl vase body, partial with no neck, reconstructed. Smoothed string-cut base. Ptolemaic.	15	2009-360
Bowl	07-3	Surface	Ceramic	92.3 mm	34.5 mm	8.1 mm	Small complete bowl with string-cut base. Ptolemaic.	16	2009-443F
Miniature jar-conical base	L16-1	67	Ceramic	44.8 mm	75.9 mm	3.4 mm	Miniature conical base jar with neck missing. Amphorae-shaped base.	17	2009-0081
Bowl	L16-1	67	Ceramic	133.3 mm	54.3 mm	7.5 mm	String cut base bowl, Ptolemaic. Complete.	18	2009-0081
Bowl	L5-1	49	Ceramic	114.5 mm	60.1 mm	9.1 mm	String cut base bowl, Ptolemaic. Complete. Trilobe rim form.	19	2009-29
Unguentarium	07-7	Surface	Ceramic	25.9 mm	65.8 mm	2.6 mm	Complete unguentarium/perfume jar.	20	2009-0367 C
Bowl/Cup	07-7	Surface	Ceramic	93.7 mm	45.7 mm	8.1 mm	Complete string-cut bowl. Small, Ptolemaic drinking cup.	21	2009-0367 B
Lamp	07-7	Surface	Ceramic	84.6 mm	26.9 mm	7.6 mm	Byzantine lamp, complete with soot marks at mouth. Mould stamped	22	2009-0367 A
Miniature pitcher	P7-IF	Surface	Ceramic	48.7 mm	78.7 mm	5.4 mm	miniature pitcher missing handle, conical base.	23	IF27
Plemchoe vessel	L5-1	50	Ceramic	55.1 mm	58.0 mm	31.9 mm	Plemchoe form vessel, complete. Ptolemaic	24	2009-209B

