Preliminary Report on the Results of the 2017 Excavation Season at Tel Kabri

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The 2017 excavations at Tel Kabri, the capital of a Middle Bronze Age Canaanite kingdom located in the western Galilee region of modern Israel, lasted from 18 June to 27 July 2017. Highlights of the season included uncovering a courtyard of the palace with rich material culture deposits; massive architecture belonging to phase 4 of the palace ("the painted palace"); and additional data on the "northern complex" belonging to both phase 4 and phase 3 ("the wine palace"). In addition, a solidly built Iron Age structure was unexpectedly found, located above the MB palace courtyard.

Fig. 1. Aerial view of excavated area at Tel Kabri after the 2017 season (photo by Griffin Aerial Imaging/Skyview Photography Ltd)

Introduction

The 2017 excavation season at Tel Kabri in Israel was co-directed by Assaf Yasur-Landau of the University of Haifa and Eric H. Cline of The George Washington University, with Andrew Koh of Brandeis University as Associate Director and Alexandra Ratzlaff of the University of Haifa and Brandeis University as Field Director. It was undertaken with a grant from the Israel Science Foundation, with additional funding provided by the Columbian College of Arts and Sciences at The George Washington University.

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Washington University and private donors, including the Bunting Foundation, the Biblical Archaeology Forum (BAF), the Biblical Archaeology Society of Northern Virginia (BASONOVA), Joshua Eisen, Jeff Leach, and Deborah Lehr. The Leon Recanati Institute for Maritime Studies, directed by Professor Gil Gambash, provided assistance in conservation and storage. We are most grateful to all of these institutions and people, as well as to those who provided contributions and assistance in previous seasons.

Senior staff members included Area Supervisors Matthew Susnow (University of Haifa), Nurith Goshen (Israel Museum, Jerusalem) and Inbal Samet (University of Haifa); Assistant Area Supervisors Roey Nickelsberg (University of Haifa) and Erin Brantmayer and Jim Martin (Brandeis University); Square Supervisors Brigid Clark (University of Haifa), Sam Pfister (George Washington University), and Henry Pelgrift (University of Liverpool); Registrar Ariel Polokoff (University of Haifa); and Administrator Peri Buch (University of Haifa). Roee Shafir (University of Haifa) is managing the conservation work and pottery restoration.

Personnel conducting scientific analyses included organic residue analysis by Andrew Koh (Brandeis University) and Alison Crandall (UCLA); radiocarbon dating by Felix Höflmayer (Austrian Academy of Sciences); dendroarchaeology by Brita Lorentzen (Cornell University); geoarchaeology by Ruth Shahack-Gross and Gilad Steinberg (University of Haifa); and zooarchaeology by Nimrod Marom (University of Haifa). Results from these analyses will be forthcoming in the near future.

The international team included volunteers and staff primarily from the United States and Israel (Fig. 2); participating students came mostly from the consortium schools -- George Washington University, University of Haifa, Brandeis University, and St. Olaf College – but others are currently enrolled at Purchase College, University of Pennsylvania, Bryn Mawr, and elsewhere. During the excavation season, the team was housed and fed at the Western Galilee Field School in Achziv; we are most grateful to the staff of the field school for their hospitality and many kindnesses.

Fig. 2. Team members from the first and second sessions of the 2017 season at Tel Kabri
Aims of the Season
The goals and aims of the 2017 season were:

1. To understand the function of the area west of the wine storage complex excavated in 2013 and 2015, in order to see whether the palace continues further to the west;
2. To gain additional insights into the causes for the end of the final palace in phase 3 (the "wine palace") as well as at the end of the penultimate palace of phase 4 (the "painted palace").

Fig. 3. Plan of the excavated area (to the west and north of the storage complex, also shown)

Excavation Results
Our goals and aims were met, along with some additional and unexpected finds from the Iron Age. For instance, to our surprise we found a large Iron Age IIB-C structure located above a courtyard of the MB palace, immediately west of the storage complex. It is possibly of a non-domestic nature -- the only such structure from this period found so far on the lower tell. In addition, the phase 4 construction located below the storage complex of phase 3 was also of monumental nature, and with a massive western wall, yet with a different inner division, and possibly a different function than the later “wine cellars” in this area.

Furthermore, the area west of the phase 3 storage complex and the preceding phase 4 structure was taken up by a courtyard, possibly an inner courtyard of the palace, in which cooking activities seem to have taken place. This courtyard had a long period of existence
beginning perhaps as early as phase 5 of the palace, which is reflected in the layers of pottery and other finds found discarded within it. Finally, north of this courtyard and below the northern complex of phase 3, which previously yielded storage jars in the 2015 season, was found part of a massive phase 4 structure which continues north.

Fig. 4. The Iron Age structure (looking northeast)

The Iron Age structure and other Iron Age remains (DW 2)

Our excavations in 2017 revealed that the western wall of the phase 3 storage complex, as well as that belonging to the structure dating to the preceding phase 4, was robbed out by a series of at least seven massive Iron Age pits. These we date to phases 2c and 2b. Some have a diameter of 4 meters and a depth of 2 meters, scattered along a northwest-southeast axis. Pottery found within these pits belonged to the Iron IIb and IIc periods, and included mostly sherds of coastal storage jars, but also sherds of coastal cooking pots, Aegean amphorae, Cypriot Black on Red bowls, and Aegean cooking pots.

The Iron Age pit diggers subsequently used the stones that they had robbed for the construction of a sturdy Iron IIc structure, of which only the northeastern corner has been excavated. Its walls have a north-south orientation, different from that of the northwestern-southeastern orientation of the Middle Bronze Age palace.

This Iron Age structure has two phases. The earlier phase, DW 2b, consists of a one-room structure, perhaps only 2.5 by 2m in size. Its northern wall (W3059) is actually the reused western part of wall 2733, while its eastern wall is W2877. These both have two courses, yet without organized rows of stones within the walls. The crude construction may be compared to that of a field tower. A wall (W2947) found within this structure may have served as part of an installation, perhaps an animal pen.

In the later and last phase, 2a, this structure was incorporated into a much larger building with considerably better masonry. Its eastern wall, W2737, is made of two courses with two rows of stones. Its top was covered with a layer of small stones, with the intention of
supporting a mudbrick superstructure. It was excavated over a length of 7 meters, without a cross wall, indicating the existence of a very large inner space in the northeastern part of the building. A well-built drain topped by two large capstones (L2987) was incorporated into this wall. The northern wall, W2733, was built against the wall of the earlier structure, continuing it to the east. The floor of this building has been damaged by recent agricultural activities, although a patch of cobble floor (L2953) has been preserved near the northeastern corner.

_The Wine Palace (Phase DW 3)_
During our attempt to find the western closing wall of the storeroom complex dating to phase 3, as well as the boundary of the Iron Age pits cutting it, several additional storage jars were excavated, similar to those found in 2013 and 2015. This is not surprising, since they were uncovered in the western parts of Rooms 2440 and 2520, neither of which had been completely excavated in those previous seasons.

Unfortunately, it turned out that the Iron Age pits had removed most of the western closing wall of the storage room complex, as just mentioned. Only a few stones remained from the unlooted part, all belonging to the western closing wall (W3057) of the corridor between the storage room complex and the northern complex.

A small section of a plaster floor (L 2979) found to the southwest of this wall may also belong to phase 3. It is assigned to this phase based on elevation, which is above that of the phase 4 deposits in this area. In turn, an Iron Age wall (W2737) is built on top of it.

_The Painted Palace (Phase DW 4)_
Our excavations this year have shown that the storage room complex in Phase 3 was preceded by a monumental construction dating to Phase 4. We opened two probes, one in Room 2520 and the other in Room 2533, in order to reach this earlier phase.

Underneath Floor 2533 of phase 3, a large northeast-southwest wall (W2549) was found. A similar and parallel wall (W2925) was found in a probe underneath Floor 2477 of phase 3. Both walls indicate that the inner division of the area, i.e. underneath the storage
rooms, was different than it would be in the following phase 3; the rooms of phase 4 are divided in a different arrangement, so that the walls of phase 3 are not directly above those of phase 4. It is likely that the function of this area was also different, as indicated by a stone installation (2935) which is south of Wall 2925 as well as a very narrow stone wall or installation (2785) north of Wall 2549.

![Fig. 6. a) Overhead view of wine storage rooms with earlier walls below (left); b) Wall 2549 of Phase 4 (right side of picture), underneath Floor 2533, looking east](image)

Initial analysis of the ceramic finds from this phase 4 indicates that small vessels such as jugs and juglets were much more common than pithoi, which were prevalent in the previous seasons in phase 3.

Deposits on floors by the phase 4 walls and installations show large concentrations of burnt material, both charcoal and ash. This may prove important in establishing the reason for the demise of the phase 4 palace.

*An internal courtyard of the palace (Phases DW 4 and 5)*

A courtyard occupied the area to the west of the storage complex of phase 3 as well as its phase 4 predecessor. The latest phase of this courtyard, in phase 3, had been severely interrupted by the Iron Age structure as well as the series of Iron Age pits. Therefore, most occupation levels in this courtyard belong to phase 4 and possibly phase 5.

In the southern part of the courtyard, west of Room 2520, a series of *tanurs* (L2941 and L3107) was found, one superimposed upon the other. The most preserved one had a diameter of 70 centimeters and a bottom level of 54.04, which is very close to the floor levels of phase 4, found near Wall 2549.

To the northwest of this *tanur*, a series of lower layers composed of ash, burnt organic material, and much pottery, indicates that it was preceded by a series of previous *tanurs* in the same courtyard.
Fig. 7. Tanurs in the southern part of the palace courtyard

To the east of this tanur and the adjoining ash levels, large concentrations of ashy material and pottery also extended to the boundary of the Iron Age pit which robbed the closing wall of the phase 3 storerooms and of the phase 4 structure, indicating that this courtyard borders the edge of these structures in both phases.

Another section of the same courtyard was excavated to the north, immediately west of Wall 3011, used in both phase 3 and 4. This deposit, L3117, included layers of pottery as well as bones. It covered a northwest-southeast, narrow, one-row wall that possibly belonged to phase 5.

Fig. 8. Portion of a bronze figurine (left); scarab (middle); and lead figurine (right)

Further to the west, this courtyard deposit approached Wall 2889, a very narrow wall or installation that formed a corner with Wall 2991. The courtyard deposit (L3117) by Wall 2889 contained large amounts of pottery as well as large amounts of bone, including at least three horns. Additional notable finds from this same context included a scarab; a lead figurine of possible Anatolian type; and a small arm made of bronze from another figure, which holds an object in its hand and possibly belongs to the “smiting god” genre.
The only remnant of the western closing wall from the phase 3 building was found constructed directly on top of this phase 4 deposit (L3117). It is likely that these deposits accumulated during an extended period of time on the surface of the courtyard, which was never paved with either stones or plaster.

The phase 4 accumulations also contained a large number of Cypriot pottery, including at least 54 identifiable sherds. However, the lowest accumulations in this area display pottery that has traits, such as molded rims on storage jars, which are more characteristic of phase 5. It is therefore possible that the use of this courtyard began in phase 5. It is also likely that the courtyard served a domestic function rather than a ceremonial function, thus reflecting non-ceremonial daily life within the palace.

The deposits that likely date to phase 5 were found on both sides of Wall 3043 – L3109 and L3021 on the eastern side and L3041 on the western side. An additional deposit of flat-lying pottery belonging to phase 5 was found below Walls 2991/2889 and to the west. This may be an indication that the phase 5 courtyard was at least as large as the phase 4 courtyard.

The Northern Complex
In 2013 and 2015, we noticed the existence of a northern complex, lying immediately to the north of Room 2440. The walls on either side of the entrance (Threshold 2552) to this complex (W2500 to the west and W2466 to the east) were used in phase 3, adjacent to a plaster floor (L2551). On this floor a variety of pottery was found, ranging from storage jars to cooking vessels, as well as cups and bowls.

This year, in order to understand the history of the northern complex, we removed plaster floor 2551, which dates to phase 3 and was uncovered in 2015. Underneath, and immediately to the north of Wall 2500, a paving made of large stones (W3049) was

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Fig. 9. The northern complex (looking northeast)
uncovered. This paving continued also to the east of Wall 2989, where it was labeled W2939.

![Fig. 10. a) Closing western wall (W2989/3011) of phase 4 palace; b) semi-circular installation (W3047)](image)

We also aimed to find the closing western wall of this complex. It was located and found to be a massive wall (W2989/3011), approximately two meters thick. Its top was covered with a layer of small stones, which served as the foundation for a mudbrick superstructure. The occupational surface (L3029/2927/3033) associated with this wall, marked by tabun material, was found lying underneath a shallow, single-course semicircular installation (W3047). This installation was composed of large fieldstones, with an interior diameter of 1.74m; the interior part may have been covered in cobbles. It is not clear what the function of the installation was, though it possibly served as a planter for a tree (sacred or otherwise). This tabun material and the associated surface was also found directly below the west face of W2989. It is possible that this means the courtyard existed in this area by early phase 4, if not previously, and probably continued north. In turn, this means that the northern complex probably dates to late in phase 4.

Adjacent to the western face of W2989, a small stone feature was uncovered which may have served as a buttress for the western wall of the courtyard complex in phase 3. Below it are a series of plaster floors with flat-lying pottery on them, which probably date to various levels of phase 4.

**Area H**

We also opened up an 8x8m area just to the south of the British Mandate road in order to try to find the southern continuation of the eastern closing wall (W2441) of the phase 3 storage complex. The aim was to link the area south of this road with the area to the north that contains the area of the palace in which we have been excavating during recent seasons.
Unfortunately, the excavation area was taken up almost entirely by a modern northeast-southwest trench. The only evidence for MB occupation was a small segment of a wall (W2714) along with some mudbrick collapse and a section of a surface.

**Organic Residue Analysis**

Approximately 170 samples were taken for organic residue analysis (ORA) during the season. In addition to a comprehensive sampling policy for objects uncovered during the present season, a variety of additional samples were taken for methodological advancement and modern reference. For instance, several samples were taken from adjacent sherds of the same object in order to compare traditional destructive extraction techniques with our non-destructive approach. In addition, multiple samples were extracted from several different locations of the newly uncovered wine jars from Room 2440 in order to test results from different parts of a vessel. Third, samples were also extracted from wine jar sherds that had been uncovered in 2013 and isolated in aluminum foil at that time, i.e., kept untouched and unwashed in anaerobic conditions, with the aim of learning what effect storage of several years – four years in this case – has on organics. In each case, the sample in question was adjacent to sherds from the same jar that had already been tested immediately after excavation in 2013, with positive results. Finally, modern reference samples were taken from *Pistacia palaestina* (terebinth resin) and *Styrax officinalis* (styrax balsam) found in the nearby Nahal Kziv nature reserve. We are now processing and analyzing all of the samples at Brandeis University, using gas chromatography with mass spectrometry (GC-MS), so interpretation of the data can commence.
Conclusions
The new Iron Age structure is the only such structure found to date on the lower tell. The previous excavation by Kempinski, as well as our renewed excavations, uncovered only pits and few installations dating to the Iron Age IIB and IIC (Oren 2002: 70-71). The pits and lack of other structures indicate that the lower tell did not have dense habitation during this period, yet it was the locus of intensive human activity.

The plan of the new building, with a long space and a cobbled surface, may be compared to that of the contemporary structure excavated by Prausnitz at nearby Tel Achziv (Yasur-Landau, Press, and Arie 2016). The date of the construction of this structure is similar to that of the fortress on top of the upper tell of Kabri (Lehmann 2002). They may have been connected to a similar set of activities, perhaps in connection with the presence of the springs at the site, which were a strategic asset that could provide water to a large number of people even in the summer, whether permanent inhabitants or caravans and armies in a close proximity to the important land passage of the ladder of Tyre on the land route between Egypt and Lebanon. It was built during a time in which Phoenician domination in the western Galilee was strengthened, perhaps as a result of the treaty between Esarhaddon and Ba’lu of Sidon (Yasur-Landau, Press, and Arie 2016: 193).

The results of this season also provided, for the first time, data on the size and nature of the phase 4 “Painted Palace,” located before only around Ceremonial Hall 611 and Room 740. This palace may have been as extensive and as solidly built as the final, phase 3, “Wine Palace,” as indicated by the massive western wall of the northern complex. However, there is a distinct change of function in some areas of the palace between the phases: the storerooms of phase 3 stood on top of a series of rooms with small installations of phase 4; the cobbled floor of the northern complex in phase 4 was replaced by a plaster floor in phase 3, thereby increasing the storage capacity of this building, as evident by the rich assemblage found in the 2015 season; and finally the considerable changes made in the plans of Rooms 740 and 607 adjacent to Ceremonial Hall 611, which significantly reduced the size of the former and cut the latter (607) into two rooms.

The large amount of burnt organic material associated with the phase 4 deposits under the storerooms, much larger than found in the later storerooms of phase 3, opens the question of the end of this phase and why such significant changes have taken place. One of the hypotheses that we shall look into is that phase 4 apparently met a fiery end, which necessitated a considerable rebuilding at the beginning of phase 3.

We can now also note that the floors of phase 4 in the area under the storerooms of the courtyard and to the west of this area are considerably lower – up to 40 cm – than Floor 2029 of phase 4 identified in Room 740 north of Ceremonial Hall 611. This may indicate the existence of a small step or terrace between the ceremonial part of the palace and the storage areas to the west.

The courtyard to the west of the storage rooms was likely a feature of considerable longevity, maintaining its position from phase 5 to the end of the palace’s existence as a locus for the conduction of outside, daily activities, from cooking to garbage disposal. It
is likely that the palace expanded west on the expanse of this courtyard, as indicated by the construction of the northern complex on top of courtyard deposits during phase 4.

The courtyard also provides us with massive ceramic, zooarchaeological, archaeobotanical, and other datasets about activities in the palace during phases 5, 4, and 3, that will require years to analyze. They will be used to further examine our ideas about the palatial economy, and mainly our notions relating to the palace as not directly involved in a redistributive system, but rather exercising a form of an oikos economy (Yasur Landau et al. 2016).

The large amount of Cypriot pottery found within the phase 4 deposits, as well as associated archaeobotanical remains, will no doubt provide considerable chronological data, enabling us to further assess the chronology of the phase 4 "Painted Palace" and its Aegean-inspired wall paintings (Cline, Yasur-Landau, and Koh 2017). In addition, the two metal figurines fragments found this season are the first pieces of cultic iconography to emerge from the palace of Tel Kabri. They may indicate the presence of a palatial cult place somewhere in the vicinity of Area DW. The concentration of horns found nearby may also be connected with such cultic activities. However, the rest of the refuse deposit in which they were found, containing common MB pottery types as well as loom weights, may indicate that the refuse of the sacred and the profane may have been mixed in the courtyard.

References Cited


