Preliminary Report on the Results of the 2019 Excavation Season at Tel Kabri

Assaf Yasur-Landau,⁎ Eric H. Cline,† Philipp Stockhammer,‡ and Alexandra Ratzlaff§

The 2019 excavations at Tel Kabri, the capital of a Middle Bronze Age Canaanite kingdom located in the western Galilee region of modern Israel, lasted from 16 June to 25 July 2019. Highlights of the season included uncovering massive architecture belonging to the “northern storage complex” dating to phase III (the “wine palace”); evidence for a painted plaster floor in the Orthostat Building dating to phase IV (the “painted palace”); and evidence for EBII habitation east of the ’En Shefa spring.

Fig. 1. Aerial view of excavated area at Tel Kabri after the 2019 season (photo by Griffin Aerial Imaging)

Introduction
The 2019 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 Associate Directors Philipp Stockhammer of Ludwig Maximilians University Munich and the Max Planck Institute for the Science of Human History and Alexandra Ratzlaff of Brandeis University; Ratzlaff was also Field Director. The project was undertaken with grants from the Israel Science Foundation and the National Geographic Society, with additional funding provided by the Columbian College of Arts and Sciences at George Washington University and private donors, including the Biblical Archaeology Forum (BAF), the Biblical Archaeology Society of Northern Virginia (BASONOA), and Joshua Eisen. The Leon Recanati Institute for Maritime Studies, directed by Dr. Gil Gambash,

⁎ The Leon Recanati Institute for Maritime Studies and the Department of Maritime Civilizations, The Leon H. Charney School of Maritime Sciences, University of Haifa
† Department of Classical and Near Eastern Languages and Civilizations, The George Washington University
‡ Ludwig Maximilians University Munich and the Max Planck Institute for the Science of Human History
§ Department of Classical Studies, Brandeis University
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.

Area Supervisors were Roey Nickelsberg (University of Haifa), Brigid Clark (University of Haifa), and Stefanie Eisenmann (Ludwig Maximilians University Munich and the Max Planck Institute for the Science of Human History). Assistant Area Supervisors were Sam Pfister (George Washington University), Kathryn Joseph (SUNY Buffalo), and Cory Palmer (Brandeis University). Ariel Polokoff (University of Haifa) served as the Registrar, while Kelsie Ehalt (George Washington University) was the Assistant Registrar. Erin Brantmayer (Brandeis University) served as the Technology Specialist, while Evan McDuff (Brandeis University) served as Assistant Archaeobotanist. Lilach Meyer (University of Haifa) served as the Administrator. Ravit Linn (University of Haifa) is managing the conservation work.

Personnel conducting scientific analyses included physical anthropology by Wiesław Więckowski (University of Warsaw); organic residue analysis and protein analysis by Philipp Stockhammer (Ludwig Maximilians University Munich and the Max Planck Institute for the Science of Human History); radiocarbon dating by Felix Höflmayer (Austrian Academy of Sciences); archaeobotanical remains by Marco Nicoli (University of Tübingen); dendroarchaeology by Brita Lorentzen (Cornell University); geoarchaeology by Ruth Shahack-Gross (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, Purchase College SUNY, and West Virginia University, as well as the Hotchkiss School (Connecticut) -- but others are currently enrolled elsewhere, including UC Berkeley and UC Riverside, Bryn Mawr College, Dartmouth College, Reed College, the University of Rhode Island, the College of Wooster, USC, and elsewhere. We are most grateful to Kibbutz Kabri for their
kind hospitality while we were digging in their avocado grove. During the excavation season, the team was housed and fed at the Travel Hotel at Kibbutz Gesher Haziv; we are most grateful to the staff for their hospitality and many kindnesses.

**Aims of the Season**
The goals and aims of the 2019 season were:

1. To understand the function of the “northern complex,” the area north of the wine storage complex excavated in 2017, in order to see whether the palace continues further to the north;
2. To gain additional insights on the nature of settlement outside of the area of the palace, by excavating an area east of the 'En Shefa spring

**Excavation Results**
Our goals and aims were met, along with some additional and unexpected finds from underneath the phase III floor of the Orthostat Building.

Fig. 3. Plan of the Northern Storage Complex
Area D, Northern Complex

Phase III
In 2013, 2015, and 2017, we noticed the existence of a northern complex, lying immediately to the north of Room 2440, with an entrance (Threshold 2552) leading to the north. The southern walls of this complex were identified, located at either side of the entrance to this complex (W2500 to the west and W2466 to the east). We also identified the western wall of this complex (W2989/3011) as well as a thick plaster floor (L2551). We had previously concluded (see 2017 preliminary report) that this complex was used during phase III of the palace but that it was possible it may have been originally constructed in an earlier phase.

Fig. 4. Outline of the Northern Storage Complex

During the current season, we found that the northern complex consists, in phase III, of a single room (2524/3306) which has an inner dimension of 9m by 4.7m. It is thus wider than the wine storage rooms to its south. The room is bordered by walls on all four sides; all walls have two faces and a rubble core with a width of ca. 1.3m. On the southern side is W2550/2466, with an entrance (W2552) in the middle of the wall; on the eastern side is W3232, with another entrance visible (L3314); on the west is W2989/3011, which is also the continuation of the western wall of the southern storage rooms (found to be mostly robbed in seasons 2015 and 2017); and on the north is W3268/3234, with W3233 serving as a one row stone reinforcement on the northern edge.

The mudbrick superstructure was preserved on top of northern wall W3268/3234, as well as on top of both eastern wall W3232 and western wall W2989. In each case, the outer face was made of white mudbricks with a higher concentration of chalk/limestone, which are denser, while the inner face was made from dark brown mudbricks which are more porous.
On the northern wall, the stones of W3268 run continuously E-W, as part of the stone socle of the wall, but neither the reinforcing stones of W3233 nor the outer face of the white mudbrick superstructure nor the inner face of dark brown mudbricks are continuous. Instead, they are found on either side of a ca. 1m-wide gap in which they are not present. It is therefore probable that there was also a fairly-substantial entrance or egress here, at the rear (?) of the building, in addition to the more usual entrances that can be seen in the southern and eastern walls.

![Fig. 5. View of northern wall of complex, with different colored mudbricks seen in balk](image)

Heavy mudbrick collapse covered this entire room, including L3248, L3221, L3226, L3264, and L3266. Below it was found the plaster floor of phase III, which was excavated as FL3312, FL3310 and FL3308 (from the west to the east). In turn, the floor was laid on top of packing which consisted of a single layer of rounded fieldstone up to 40 cm in diameter (excavated as L3049 to the south and L3043 and L3051 in the north). As a result of this packing, the floor level of this room in the northern complex is considerably higher than of the rooms in the southern storage complex (aka the “wine cellar”).

![Fig. 6a-b. Plaster floor 3310 of Room 2524/3306](image)
There is a total of 21 storage jars found on the floor of the room in this northern complex, most of them crushed in place (i.e. complete, but broken into dozens of sherds each). They consist primarily of large, handle-less storage jars, with fewer two-handled Canaanite amphorae, although a crushed thin walled basalt bowl was found under the collapse in L3308. The vessels were found consistently distributed throughout the locus in L3308, but in L3310 they were concentrated in the southern part, as if they had rolled down the floor to this end; in fact, the floor is sloping strongly to the south in this part of the room.

North of wall W3268/3234 and reinforcement W3233 (the northern wall of the complex), no other walls were observed. A beaten earth surface was found in several probes across the north face of the wall (FL3292; excavated as L3258 in square 6, L3270 in square 7, and L3220 in square 8). This surface was covered by heavy mudbrick collapse (L3222, L3224, L3254, L3256, L3318) which included also fragments of the same type of light color mudbrick observed on the superstructure of W3234. The beaten earth surface was laid on top of a porous brown sediment (L3225, L3227, L3274, L3282, L3286) that contained a large amount of pottery sherds and many animal bones, some of them of large size. This sediment may have been a deliberate fill taken from a midden deposit, placed either in phase IV or in phase III of the palace.

Note: Pit 3214, previously misidentified as a Bronze Age installation (see 2017 preliminary report), was this year identified as an Iron Age pit with a dimension of ca. 2.5m by 1.75m. It cuts floor 3310 as well as the fieldstone packing beneath it.

**Area D, Finds West of the Northern Complex**

**Phase V/VI**
Prepalatial remains in Area DW were found west of W3011. The earlier remains were identified in the northeastern corner of room 3331 made by walls W3271 and W3043. A patchy plaster surface, L3299, was found in this room, although several (possibly 2-4) distinct floor levels were found in the western section of the room below wall 2889.
Below plaster floor 3299, there was a layer of flat lying pottery (L3307) mixed with sediment that may belong to an earlier occupational phase of room 3331. The pottery assemblage of the floor of this room is consistent with other Phase V pottery found at Kabri. The assemblage was characterized by wheel-made cooking pots as well as red-slipped burnished platters and juglets – all types that were not previously found in the palace but rather in domestic structures within Area C.

In a later construction, the floor deposits of room 3331 were covered by walls W2991 and W2889. Another deposit contemporary to the later construction was identified directly east of wall 3043. The deposit consists of a thick layer of pottery without much sediment throughout; the assemblage is primarily storage jars with large molded rims typical of Kabri Phase V.

**Phase III**
Remains from phase III were found west of wall 2898 of the northern complex. A wall going E-W was set perpendicular to W2898. Because of the later Iron Age pits, this wall was cut into two parts: the western part is W3329 and the eastern part W3323. It may be that the lower courses of 2989 are bonded with those of W3329, but this situation is not yet clear due to later disturbances.

Two drains were used during phase III. Drain L3291 is ca. 105 cm wide, including its external walls that are made of two rows of small fieldstones. Its general orientation is SSW to NNE and it may go under wall W3329. The NW end of the drain was disturbed by an Iron Age pit of by other post-deposition collapse.

The second drain, L3293, located west of drain L3291, is ca. 110 cm wide. Its walls are made of a single row of medium sized field stones on each side of the drain, while the capstones are up to 100 cm in length. Its general orientation is SW-NE, though it then makes a slight turn to have the same orientation as L3291.

L3321 is mudbrick collapse west of wall 2989, representing material undisturbed by the Iron Age pit. Additional collapse related to the end of phase III is a stone collapse, L3315, which covered wall 3329.
Phase II

Two Iron Age pits were identified along the western extent of the area. Both pits were initially excavated in 2017 and further noted in 2019. The western pit (L3069) was excavated as loci L3205, L3210, L3215, L3249, L3261 (FG), L3277, L3279, L3295, and L3305. The northern pit (L3335) was excavated as L3205, L3210, L3215, L3247, L3280, L3281, L3305, and L3315; L 3257 represents the removal of stones from the bottom of the pit. The presence of these pits greatly disturbed the architecture and associated fills within the area directly above the drain complex.

In room 2520, a probe was cut through floor 2477 in order to better understand the pre-storage room space in this area and to enlarge the botanical assemblage of the pre-phase III levels. The probe measured 2m x 1.5m and was opened along the western face of wall 2441. Excavation in the probe exposed a semi-circular installation of large fieldstones, a possible podium, measuring 2m x 1.3m. This installation may be connected to wall 2925, which was exposed in a probe located directly to the south dug in 2017. All of the walls beneath room 2520 belong to either phase IV or V.
**Area D: Orthostat Building**

An unexpected surprise awaited us while sampling the various plaster floors in Room 2372 of the Orthostat Building (see Yasur-Landau *et al.* 2012).

The floor currently visible as the final phase of the Orthostat Building was extremely thick, with packing stones underneath and a very thin layer of unpainted plaster into which the stones were set. This, in turn, was laid directly on top of an earlier plaster floor (FL333), of which we uncovered a very small portion.

We found this earlier floor to be painted with at least three colors: black, orange and red. Of these, the red is a long narrow line; the orange is perhaps an undulating zone (mountains?); and the black represents an as-yet unidentified form (floral?).

The limited area of exposure, just ca. 10 cm NS x 15 cm EW, makes the understanding of the nature of this painted floor difficult at the moment, yet there is every reason to believe that it is well preserved below the thick later floor of the Orthostat Building. If so, we could expect that the earlier floor was painted in an area as large as 6.8m by 3.6m (inner size).

The tentative phasing of this floor is phase IV, which is contemporary with the original painting of the floor of Ceremonial Hall 611 and the miniature fresco discovered as packing material under the threshold leading into room 740, both discovered by Kempinski and Niemeier, as well as the painted plaster fragments found in Area DS during our current excavations (Yasur-Landau *et al.* 2017; Cline *et al.* 2018).

Future excavation and uncovering of this newly-discovered painted floor may provide additional evidence for connections with the Aegean, but we cannot know for certain until we conduct such an undertaking.

**Area L**

West of the MB palace and north of the En Shefa spring, four half (2m x 4m) squares were opened in a row along a N-S axis. This area was opened in order to find non-palatial, residential architecture of the Middle Bronze Age. However, excavation revealed that in every square below the 30-50 cm agricultural plowed fill, there were EB II deposits.

In the northern most half-square (Square 1), there were two installations: L8013, a small fieldstone (10-15 cm) circular installation, likely a bin (measuring 54 cm x 40 cm) in the northwest corner; and another installation, L8027, to the south, measuring 35 cm x 60 cm, which is likely the remains of a disturbed cist consisting of two large flat stones and a third flat stone resting on top of it.

In the second half-square directly to the south (Square 2), two wall stubs were uncovered in the east and west corners. Wall stubs to the east, L8033, and to the west, L8034, were composed of small field stones 8 – 22 cm over an area of 54 cm in the east and 61 cm in the west.
In the third half-square (Square 3), Wall 8030 (measuring 75 cm E-W by 63 cm N-S) was identified running E-W. It consists of two rows of stones measuring 16-30 cm. Only the top of the first course was exposed. The wall does not continue further to the east, where a probe was opened directly adjacent to the wall.

In the southern most half-square (Square 4), a pottery deposit was uncovered but not associated directly with any contemporary architectural features.

The area was disturbed by Iron Age pits that also contained MB material, located in the two southern squares. The northern pit in square 3 was excavated as loci L8007, L8011, and L8019. The southern pit in square 4 was excavated as loci L8008, L8012, L8022, and L8025.

Fig. 11a-b. Squares 1-4 in Area L (numbered from N to S) and plan of Area L

Fig. 12. Taking samples for ancient protein analysis from plaster floor in the Orthostat Building
Organic Residue Analysis and Ancient Protein Analysis
A number of samples were taken during the season, both for organic residue analysis from vessels and ancient protein analysis from plaster floors. They will be processed at the Max Planck institute at Jena. We are now awaiting the results.

Samples of pottery sherds were primarily taken from storage vessels from room 3306 in the northern storage area, in order to determine what content(s) these held. Additional samples from different contexts and vessel types (especially Kabri cups) were collected to the north and west of this room. They date variously to phases III, IV, and V.

In addition, samples from plaster floors for protein extraction were taken from the different floors of the Orthostat Building, as well as from the floor of room 3306 in the northern storage area, and floor 2477 in room 2520 of the southern (wine) storage complex.

Conclusions
The northern complex
The complete excavation of room 2524/3306 brings to an end our investigation of the northern storage area. While this room is separated from the other (southern) rooms of the storage complex by a corridor, it is clearly an integral part of the storage wing of the palace, as it also contained storage jars and connects to the other storage rooms. We hope that the results of the residue analysis from this room will provide more insights on its role.

A quandary that remains for the next seasons is the nature of the open area to the north of the northern complex: is this an inside courtyard of the palace or an external one? Since the northern wall of room 2524 is relatively narrow compared to other walls of the palace, it is unlikely to be an external wall. Thus, at least for the time being, we favor the idea that the Kabri palace sported a vast internal courtyard to its north.

The painted floor in the Orthostat Building
While exposed in only a very limited area, this floor is of great importance to the understanding of the decorative plan of the phase IV palace, aka the “painted palace.” Not including a single possible floor fragment found previously in Area DS, this is the second painted floor to be found in the palace, after Ceremonial Hall 611, and is an indication that the palace may have been even more lavishly decorated than previously thought. Furthermore, this unexpected find may hint that even more painted floors of phase IV were paved over during the phase III renovations and that additional ones remain to be found. Since phase IV belongs, in terms of relative chronology, to the (early?) MBII, and its end is dated by radiocarbon to around 1700 BCE (Höflmayer et al. 2016), this painted floor likely belong to the second half of the 18th century BCE. Further excavation to expose more of the floor will be of great interest and should indicate whether it represents additional connections to the Aegean.
Area L
This area, located east of the En Shefa spring, was apparently not a built area during the Middle Bronze Age. This situation is similar to that in Area B of the tell, in which no architecture of the Middle Bronze Age was found. Kempinski argued that Area D at the east of the Tel was dedicated to palatial architecture, and Area C by the northern rampart was dedicated to residential architecture, while the area between them was empty and reserved for burials (Kempinski 2002: 451). Indeed, the absence of architecture in Area L, located between Areas D and C, supports this hypothesis. One may also assume that the vast open area close to the spring was used not only for burials but also for concentrating the flocks that were brought into the city to use this important source of water.

References:


