# Results of the 2007 Season Kabri Archaeological Project (KAP)

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## Introduction

During the summer of 2007, we were able to complete work initiated during the previous 2006 season which had been interrupted by the military situation in northern Israel and Lebanon and which had forced us to leave the field early. We were also able to continue with our ongoing regional studies.

Two major projects (each with subprojects) were conducted during this field season:

- 1. Pottery study from the regional work: completion of the work on the MB survey pottery; a chronological and typological examination of the imported LB pottery in the IAA store rooms; and the completion of the regional GPS/GIS survey.
- 2. *Mapping of the site in anticipation of the 2008 field season*: re-planning of the palace and compiling a topographic map of Tel Kabri.

# 1. Regional Studies: Survey and Pottery Study

The Kabri Archaeological Project (KAP) concentrated this year on finalizing the work on the MB survey pottery from sites in the Western Galilee that was cut short by the 2006 war. We also began the processing of LB imported pottery from sites which had been found during previous surveys by Frankel *et al.* (2001) as well as an examination of material from those sites which contained previously-unidentified LB pottery within the boxes of pottery collected by the IAA.

As for the Late Bronze Age material, members of KAP studied the massive and well-organized pottery collection from the IAA storehouses at Kibbutz Beth Ha'emek, reflecting more than 50 years of systematic surveys and surface collections in the Galilee, which was made available to us by the director, Dr. Rafi Frankel. The LB pottery from the sites surveyed by the IAA was located and separated from the other periods in the storerooms. Then, the entire corpus was typologically analyzed by A. Yasur-Landau, E.H. Cline, and Celia Bergoffen, assisted by N. Goshen, and then digitally photographed and catalogued (Figs. 1-2). The imported pottery was selected for drawing and shipped to Tel Aviv, where it will be drawn by N. Mesika.

In addition to the IAA survey material, we were fortunate to locate and analyse in the IAA storage house at Beth Ha'emek an unpublished group of fragmentary vessels which originated in a looted tomb in Ashrat. Preliminary results from our imported pottery study indicate it consists only of Cypriot imports, while Mycenaean sherds were conspicuously absent from the survey collections. These span most if not all of the Late Bronze Age; earlier forms include Cypriot Bichrome and BRI, later WSII, BRII, and Monochrome. These show that the decline and fall of the Kabri polity had little effect on the importation of Cypriot pottery into the western Galilee.

Furthermore, the finds of LB I pottery types such as BRI and Cypriot Bichrome at the sites of Mi'ilya and Asherat, while being absent from Kabri, now provide further support for a pre-LB I destruction date for the palace and town of Kabri (Cline and Yasur-Landau *forthcoming*).



Figs. 1-2. Left: E.H.Cline and H. Tomas photographing LB pottery; Right: LB I Cypriote Bilbil from the Asherat unpublished tomb

Completing our GPS/GIS database of the LB sites, we also visited and tracked the perimeter of two sites newly founded during the LB: the imposing Tel Emeq, which may have replaced nearby Tel Kabri as a center for habitation (Fig. 3), as well as a burial site at Asherat, which has been severely damaged by recent building activities.



Fig. 3. Late Bronze Age site of Tel Emek

As for the Middle Bronze Age material, we re-examined the material drawn during the summer of 2006, finalized its typology, described the wares, and prepared the plates for publication.

One more crucial aspect of our work on the Middle Bronze Age development of complexity and rise of the Kabri polity was also achieved during this season, the ware and thin section analysis of the survey pottery. In order to follow diachronic changes in the number and location of production centers as well as trade in commodities packed in storage jars, we have examined cooking pots and storage jars from both MBI and MBII sites.

Fifty eight sherds were then sampled by David Ben Shlomo for thin section petrographic analysis (TSPA), which was carried in the Institute of Archaeology, The Hebrew University, Jerusalem. While work on this project still continues, and we intend to sample more vessels, including ones from our excavations at Kabri, the preliminary results of the petrographic analysis indicate that most of the samples, both of MBI and MBII date may be classified into three or four major soil or petro-fabric groups:

Soil 1: A relatively compact clay with a foraminiferous matrix, rich with chalk and calcareous inclusions, and about 10% silty quartz; this fabric is probably related to *rendzina* soils.

*Soil 2*. A more porous clay with foraminifers and dolomitic sand (TSPA Group 2). A subgroup of this soil contains well sorted quartz sand and may be of coastal origin (TSPA Group 3).

*Soil 3.* A fabric probably of a similar soil to No. 1 but with added crushed calcite temper (TSPA Group 4); this is a 'cooking ware' fabric.

Soils 1-3 can be derived from geological formations existing in the western Galilee, both in areas closer to the coast and in more inland areas. However, TSPA Group 3 from Soil 2 is likely to be of a coastal origin. As the sites of Hur and Umm Tuma are closer to *rendzina* outcrops, in principle, vessels made of Soil1/TSPA Group1 are more likely to be produced in this region. However, *rendzina* outcrops also exist in the region of the sites of Dabsha and Sirim. Only Buqbaq is a clear coastal site, and according to the results there were no vessels from inland sources found here. Several vessels from Umm Tuma are likely to be of coastal origin.

These results indicate that variability in the pottery production centers existed throughout the MB. However, the multiple ware groups from both Hur and Umm Tuma, both village sites of the MBI period, indicate that trade networks in the Galilee existed before the rise of the urban center of Kabri. The find of White Painted Cypriot ware in Umm Tuma indicates that these trade networks, operated by pre-Urban settlement systems were not limited to the Galilee. The demise of these village sites at the end of MBI, coinciding with the rise of Kabri, may have changed the trading networks.

Another intriguing result is the lack of wares from the eastern Galilee and from the area of the flourishing MB kingdom of Hazor. Further examination of the material will confirm whether Kabri and the Western Galilee were heavily dependent on maritime trade routes, and on contacts with Cyprus, as evident by the continuation of Cypriot imports throughout the Middle and Late Bronze, while the east-west MB land routes bypassed the area.

## 2. Re-Planning of the Palace

As part of our renewed investigations at Tel Kabri, Israel, we initiated a re-planning of the palace and a re-mapping of the entire site, as preparatory work for the resumption of excavation work planned for 2008. We were scheduled to conduct this work during the summer of 2006, but were unable to do so because our season was cut short as a result of the war (please see our report for the summer of 2006). As result, we completed this project during the 2007 season.

Our first priority was to compose a revised, high-accuracy stone plan of the center of the palace as dug by Kempinski and Niemeier from 1988 to 1993. Some of the walls of the palace were never drawn stone-by-stone by the original excavators (as is the case of walls W710 and W709, both shown with only schematic representations of stones in the plan published in the final report). Other walls (such as W708, W625, and W618), which were originally covered with mudbrick material at the time of their initial excavation, have now been partially exposed to the elements since 1993, with the result that their stone structure can now be seen and must now be drawn. This redrawing was done by our architect, Dov Porotsky, and his assistant (Fig. 4).



Fig. 4. Re-planning of the Palace at Tel Kabri

Numerous changes to the original plan were noted, including the first drawing of parts of pre-Stratum 3 walls, which belong to the "proto-palace" and which were excavated by Kempinski, yet do not appear in his final publication. A major correction to the plan of the famous Stratum 3 palace is the new plan of the staircase leading to the second floor (Fig. 5a-b).

In the original publication this staircase was shown to have a central antae (Wall 686 or 679; Kempinski 2002: fig. 4.69) but this, however, turned out instead to be a full wall. The stairwell now appears to be in the form of a long and straight narrow shaft, which closely resembles a long, narrow room 153950 in the LB I palace of stratum VIII at Megiddo (Loud 1948: fig. 282), which is also identified as a stairwell leading to the second story of the palace.

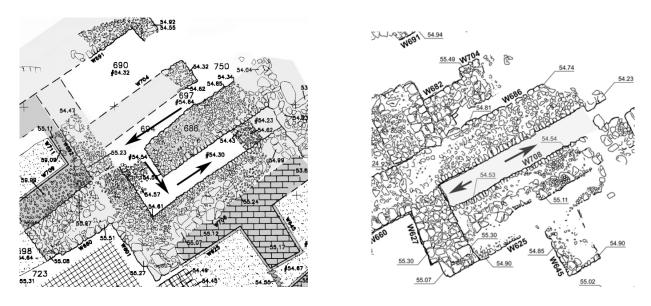


Fig. 5a-b. Old plan (left) and new plan (right) of the staircase leading to the second floor.

The new stone plan contributes not only to our studies of the architectural phases of the palace, but will also serve as an accurate basis for our future excavations at the site. The final, complete stone plan of the core part of the palace will be an exquisite tool for the understanding of the phases within the palace, the process of its building and use, and the exact architectural horizon for the Aegean-style painted floor. Thus for example, the new NE-SW section of the core of the palace (Fig. 6) clearly shows the difference in elevation between the floor of Hall 611 to rooms 607 and 667. This difference was caused by the repaving of the hall with plaster floors, the latest was the famous frescoed floor excavated by Kempinski and Niemeier.

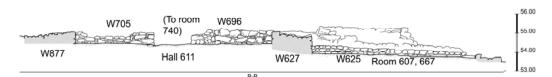


Fig. 6 a NE-SW section of the core of the palace

# 3. Monitoring Program and Topographic Map of the Tell

One of the most urgent needs for future conservation and excavation plans for the site is the creation of high resolution, digitized map of the tell. Such a topographic map was missing from previous works, as was exact documentation of the location and dimension of important Ottoman remains — such as the two masonry-built pools by Ein Sefa and Ein Giah. Thus we arranged for such a map to be prepared during the 2007 season, in cooperation with Ofek Aerial Photography, a company that specializes in photogrammetric mapping. The map (Fig. 7) was created by a combination of low-attitude stereoscopic aerial photography and ground measurements.

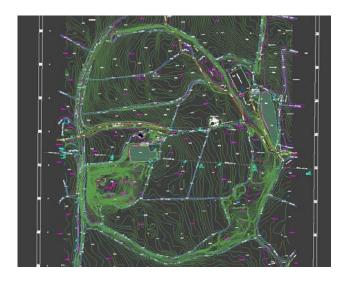


Fig. 7. New topographic map of Tel Kabi and environs.

The map and the aerial photograph of the site (Fig. 8) will also be of use in a planned long term monitoring program for the site. Since 2005, a constant and ongoing dialogue with the IAA and Kibbutz Kabri, which owns the land and the avocado grove on the tell, has been conducted in order to continue and protect the archaeological remains at the site, while understanding the need of the members of the Kibbutz community to sustain their major source of income.



Fig. 8. Aerial photograph of Tel Kabri; July 2007.

In addition, we have began to collect aerial and satellite images of the tell, to understand the rapid changes made by intensive agricultural cultivation since the 1960s (Figs. 9-10). A CORONA image of the site taken in the late 1960s shows the site covered with banana plantations, with the entire area east and south of it divided into smaller plots of land, belonging

to individual households in the village of Ben Ami and more consistent with traditional agricultural patterns in the Galilee. In contrast, a picture taken in the late 1980s shows the large avocado plantation dominating the landscape both on the tell itself and around it.





Figs. 9-10. A CORONA image of the tel from the 1960s (left) and a late 1980s aerial photograph of the same area (right).

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