

In Centro

Collected Papers
Volume I

Motion, Movement and Mobility

Editors:
Guy D. Stiebel
Doron Ben-Ami
Amir Gorzalczany
Yotam Tepper
Ido Koch





Central Region



TEL AVIV UNIVERSITY

The Sonia and Marco Nadler Institute of Archaeology

The Jacob M. Alkow Department of Archaeology and Ancient Near Eastern Cultures

The Chaim Rosenberg School of Jewish Studies and Archaeology

The Lester and Sally Entin Faculty of Humanities

Proceedings of the first annual “In Centro” conference
held by the Central Region of Israel Antiquities Authority,
the Department of Archaeology and Near Eastern Cultures
and the Sonia and Marco Nadler Institute of Archaeology of Tel Aviv University
on April 26, 2018 at Tel Aviv University

Cover photograph: Illusions of Arabia © George Steinmetz

Graphic design: Ayelet Gazit

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ISBN 978-965-266-066-4

Printed in Israel 2022

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On the Way to the City: The Central Role of 'En Esur ('En Asawir) in the EB IB Settlement Pattern in the Coastal Plain of Israel

Itai Elad and Yitzhak Paz | Israel Antiquities Authority

Introduction

'En Esur ('En Asawir) is located in the northeastern Sharon Plain, near the western opening of Naḥal 'Iron (Wadi 'Ara; Fig. 1). The site comprises three main elements: 1) the main mound, known as Tel Esur, and the small mound to its southeast; 2) the protohistoric site of 'En Esur, covering the area around the mound, with its core in a small hillock approximately 220 m to the south; and 3) the cemeteries, consisting of dozens of rock-hewn burial caves, to the east and south of the settlement.

The site was first surveyed by the Palestine Exploration Fund and W.F. Albright, who mistakenly identified the tell as Yaham (Albright 1923: 9). A. Alt identified the site as Aruboth, following his survey (Alt 1929: 34; 1932: 31), but this proposal too was mistaken. The first comprehensive survey of the site and its environs was carried out by R. Gophna, who was the first to estimate the dimensions of the protohistoric site.

The main mound and the small mound are being excavated by the Haifa University. Several excavation seasons in 2001–2003 (Zertal 2003) and since 2010 (Bar 2016) have revealed occupation layers from the Early Bronze Age I, the Middle Bronze Age II, the Late Bronze Age and the Iron Age II, as well as from the Persian, Hellenistic and Roman periods.

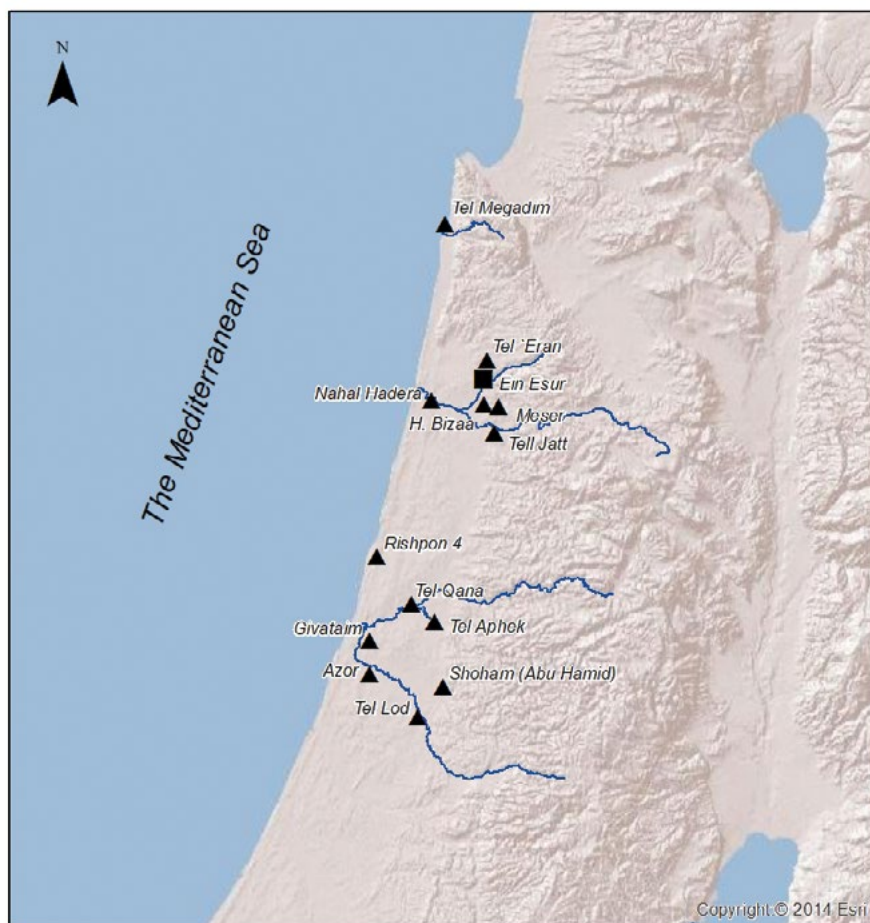


Fig. 1: 'En Esur in the Sharon Plain

The protohistoric site was first excavated during the 1990s by E. Yannai. This quite large-scale salvage excavation, conducted along Road 65, has revealed a continuous settlement that existed at the site between the fifth–late fourth millennia (Chalcolithic to Early Bronze IB; see Yannai 2006). The eastern and

southern cemeteries were investigated during salvage excavations and partially published (Yannai 2016).

A mega-scale salvage excavation conducted at 'En Esur in 2017–2019 on behalf of the IAA have revealed a huge settlement (no less than 65 hectares), dated to the late fourth millennium BCE. This settlement seems to display several aspects of planning, testifying to an early urban site.

A Word on Methodology

The current paper will not discuss the intra-site characteristics of planning and urban traits, but will focus on the spatial aspects of these traits, i.e., the settlement pattern that characterizes the site within the Coastal Plain of Israel. It is suggested that different patterns typified rural and urban settlement systems (see, e.g., Joffe 1993: 70); thus, these two systems will be compared with the pattern of 'En Esur. The settlement pattern of the environs of EB IB 'En Esur will thus be compared with the thoroughly studied EB IB settlement clusters located at the western and northern flanks of the Yarkon-Ayalon basin (Gophna and Paz 2014).

'En Esur during the Early Bronze IB

The protohistoric site of 'En Esur is situated in a large alluvial plain adjacent to two season-long abundant springs and Naḥal 'Iron. During the EB IB 'En Esur was already a long established settlement. It was first settled during the Pottery Neolithic and the site grew significantly during the Early Chalcolithic. After a short interval the site was occupied continuously from the Late Chalcolithic until the end of the EB IB (Elad, Paz and Shalem 2018). Starting as a relatively small village, concentrated in the area between the two springs of the site, the settlement reached its zenith during the late EB IB, when it became a massive settlement that spanned over 65 hectares, the largest known EB IB site in the southern Levant.

The 2017–2019 excavations conducted at the site have exposed not only the sheer size of the EB IB settlement at 'En Esur but also what we believe to be a clear example of an EB IB “proto-urban” settlement (see, e.g., Paz 2002). This phenomenon is exemplified by a large, densely built, settlement with several main streets that define the public domain, allowing free passage and access to different areas at the site and dividing it into several quarters consisting of complexes (Fig. 2). Several side streets or alleys are connected to these main streets, leading to clusters of built complexes. The streets were probably the main “channels” through which human beings, animals and goods moved within the settlement and therefore had been carefully planned and maintained.



Fig. 2: Street system and built complexes at 'En Esur

The streets' walls were retained, drainage systems were installed in them, and running water was manipulated in order to prevent damage to the streets.

We believe that the site-scale planning of 'En Esur, demonstrated by the complex network of streets and alleys, should be viewed in light of the accumulation of knowledge regarding the early emergence of urbanization in the southern Levant. Recent studies and excavations appear to support the notion that early urbanization started as already as the EB IB. The renewed excavations at Tel Erani have clearly demonstrated that the early EB IB settlement was fortified with a massive (8 m wide) brick wall (Yegorov and Milevski 2017). Excavations at 'En Zippori (Milevski and Getzov 2014), Hittin (Hartal 2011) and other sites (Getzov, Paz and Gophna 2001: 22–24; Paz 2002) all appear to attest to an early emergence of urban entities in the EB IB.

There can be little doubt that the site of 'En Esur reached its peak during the EB IB. The settlement grew significantly, reaching a size of ca. 65 hectares, indicating for the first time a site-scale planning and urban layout. The EB IB settlement of 'En Esur was probably the central focal point of the period in the Coastal Plain north of the Yarkon River, or the Sharon region. As a matter of fact, the only other large EB I site north of the Yarkon River is Tell Jatt (7 hectares) and possibly Tel Megadim (of unknown size).

A GIS study was initiated as part of our study of the landscape around 'En Esur and was conducted by M. Birkenfeld. All known EB I sites were plotted on a multi-layered map. It is easily discernable that 'En Esur is practically the only settlement in a radius of ca. 10 km (Fig. 3), suggesting that its huge dimensions are the result of a concentration of population from the entire region of the Sharon Plain. Moreover, the sites visible in Fig. 3 may be dated to the EB I, although a more accurate date is not available, except for the site of Meser, which was attributed to the EB IA (Dothan 1959).¹

1 The sites of Nahal Hadera, H. Bizaa (Na'aman 1990) and Tel Eran (Dagan and Eisenberg 2007) do not provide further information regarding the exact date within the EB I.

Two Settlement Patterns in the Central Coastal Plain: The Yarkon-Ayalon Basin as a Control Group

The settlement pattern of 'En Esur and its vicinity may now be compared with other areas of the Coastal Plain of Israel in order to achieve a better understanding of the effect of a large site on its surrounding. In the Yarkon-Ayalon basin (Fig. 4), 27 EB IB settlements and three artifact scatters, as well as nine burial sites, are known. They can be generally divided into three sub-regions or clusters that were all connected to the Yarkon-Ayalon river system (Gophna and Paz 2014). We will address two of the three clusters, being geographically and culturally closer to the 'En Esur system (Fig. 3). Most settlements in all three clusters were open-air sites, but a few dwellings and storage facilities in caves sites (such as Giv'at Qesem) were also encountered. Cave sites are found in the Upper

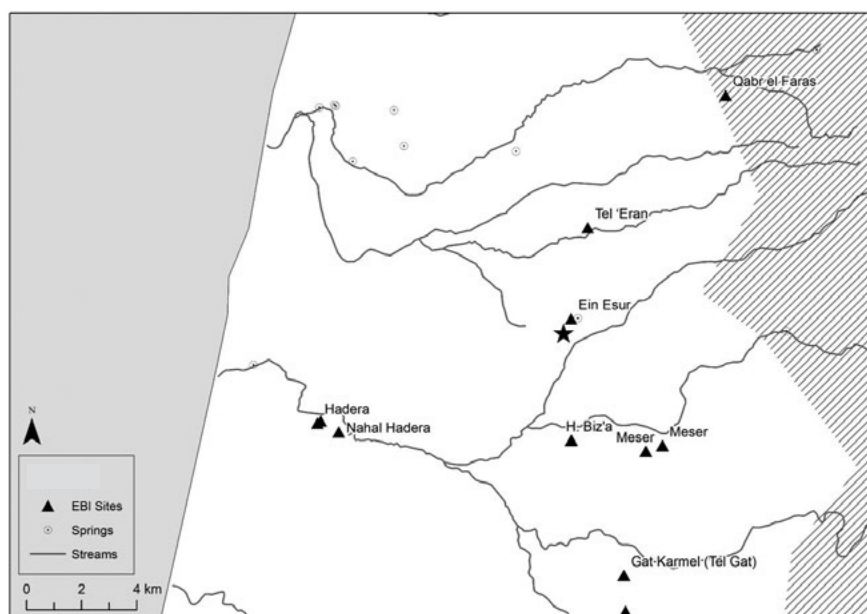


Fig. 3: 'En Esur within its settlement system during the EB IB

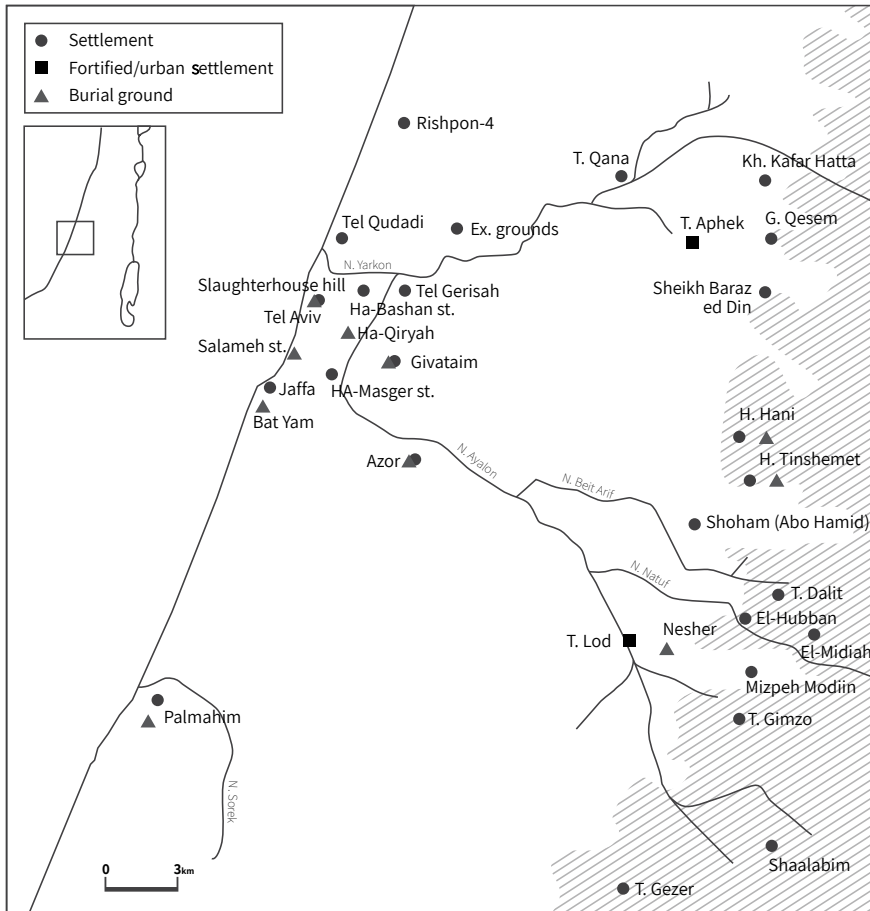


Fig. 4: The Yarkon-Ayalon northern and western settlement clusters during the EB IB (after Gophna and Paz 2014: Fig. 1)

Shephelah, noted for its limestone bedrock outcrops, and are likely indicative of open air settlements whose remains have no longer preserved.

The northern cluster (Fig. 4) is located along the extension of the Yarkon River in the vicinity of Tel Aphek. It includes the settlements of Tel Aphek, Stratum B VIIIa-c, Tel Qana, Giv'at Qesem and Sheikh Baraz ed-Din. The major settlement

in this cluster was Tel Aphek, in which a fortified urban center that occupied no less than 12 hectares, flourished and dominated the Yarkon fords (see, e.g., Kochavi, Beck and Yadin 2000: 67; Paz 2002: 242).

The western cluster (Fig. 4) is located along the northern extension of Nahal Ayalon, between its meeting point with the western end of the Yarkon River to the Mediterranean—an area of ca. 15 km × 7 km. This region seems to have been rather extensively occupied during the EB IB, with no less than nine settlement sites and six burial sites. The settlement sites are located both north and south of the Yarkon River. North of the Yarkon we note four sites: Rishpon 4 (Gopher *et al.* 2017: Chapter 16), Sede Dov (a recent excavation directed by Y. Marmelstein on behalf of the IAA), the Exhibition Grounds and Tel Qudadi (Gophna and Paz 2011). While the latter three sites were only represented by a score of sherds that may offer a EB IB date, the excavation at Rishpon 4 yielded large amounts of pottery that reflect the northern late EBI traditions, as well as a rich assemblage of “Proto-Metallic Ware,” which should be dated to the late EB IB (see Gophna 1978; Paz 2010; Paz, Shoval and Zlatkin 2009). South of the Yarkon River, the following appear to have been settlement sites: Ha-Bashan Street, Tel Gerisah, Ha-Masger Street, Jaffa and Azor (see Gophna and Paz 2011; Gopher *et al.* 2017: Chapter 20). An important settlement in this group of sites must have been Azor, whose related cemeteries yielded vast amounts of finds, among which we may note Egyptian artifacts that hint at the presence of an Egyptian community within the Canaanite site, much like Lod (see Ben-Tor 1975).

Conclusions

The 2017–2019 excavations at the site of ‘En Esur revealed that during the later phase of the EB IB the settlement developed into an enormous site (65 hectares), heavily populated and arranged in a site-scale planned street network. These finds reflect an early urbanization process and lead us to define ‘En Esur as an urban settlement. It is of course important to note that ‘En Esur was not a sole

component in the early urbanization of the southern Levant during the late fourth millennium BCE. As was already stressed by Paz and others, there was a “proto-urban” settlement process during which EB IB settlements exhibited urban characteristics (Paz 2002; Getzov, Paz and Gophna 2001).

All in all, the settlement at ‘En Esur was far larger than any other site during the EB IB. Accordingly, and in light of both the architecture and material culture, it may be suggested that ‘En Esur played a major role in inter-regional trade and that it was probably a focal point for the entire settlement system of the Sharon region. The domination of the site in the northern Sharon Plain was so apparent that very few contemporaneous sites are found in the immediate vicinity.

This phenomenon was examined in comparison to two additional areas, both located in the central Coastal Plain. In the western Yarkon-Ayalon basin a cluster of sites, centered in the Tel Aviv region, with no large urban settlement, are found. This cluster is characterized by many small rural settlements and several connected burial grounds that co-existed during the EB IB (Gophna and Paz 2014). On the other hand, north of the Yarkon basin (the northern cluster), Tel Aphek, which was fortified and probably urban in nature, stood almost alone in its associated surroundings. The differences between the settlement pattern that characterizes ‘En Esur and that of the western Yarkon-Ayalon basin, on the one hand, and the resemblance between the ‘En Esur pattern and the Tel Aphek settlement cluster, on the other are striking. In light of these two distinct settlement patterns, we would suggest that the lack of small settlements in the areas surrounding ‘En Esur and Tel Aphek should be attributed to the emergence of urban settlements during the EB IB.

References

- Albright, W.F. 1923. Some Archaeological and Topographical Results of a Trip through Palestine. *Bulletin of the American Schools of Oriental Research* 11: 3–14.
- Alt, A. 1929. Arubboth. *Palästinajahrbuch* 25: 33–36.
- Alt, A. 1932. Die reise: Aphek, Ophra, Hopher, Aroboth, Natbatam, Helenipolis. *Palästinajahrbuch* 28: 19–36.
- Bar, S. 2016. Tel Esur 2010–2012. *Ḥadashot Arkheologiyot* 128. https://www.hadashot-esi.org.il/report_detail_eng.aspx?id=25034&mag_id=124 (accessed December 20, 2021).
- Ben-Tor, A. 1975. Two Burial Caves of the Proto-Urban Period at Azor, 1971. *Qedem* 1: 1–53.
- Dagan, Y. and Eisenberg, E. 2007. Tel Eran. *Ḥadashot Arkheologiyot* 119. http://www.hadashot-esi.org.il/report_detail.aspx?id=557&mag_id=112 (accessed December 20, 2021).
- Dothan, M. 1959. Excavations at Meser 1957: Preliminary Report on the Second Season. *Israel Exploration Journal* 9: 13–29.
- Elad, I., Paz, I. and Shalem, D. 2018. Ein Esur (Area M). *Ḥadashot Arkheologiyot* 130.
- Getzov, N., Paz, Y. and Gophna, R. 2001. *Shifting Urban Landscapes during the Early Bronze Age in Canaan*. Tel Aviv.
- Gopher, A., Gophna, R., Eyal, R. and Paz, Y. 2017. *Jacob Kaplan's Excavations of Protohistoric Sites 1950s–1980s* (Monograph Series of the Institute of Archaeology of Tel Aviv University). Winona Lake and Tel Aviv.
- Gophna, R. 1978. Archaeological Survey of the Central Coastal Plain, 1977 Preliminary Report. *Tel Aviv* 5: 136–147.
- Gophna, R. and Paz, Y. 2011. Tell Qudadi and Tel Gerisah: Two Early Bronze Age Sites on the Yarkon River. *Tel Aviv* 38: 42–51.
- Gophna, R. and Paz, Y. 2014. From Village to Town to Village Again: Settlement Dynamics in the Central Coastal Plain and Adjacent Shephelah from the Late Early Bronze Age I to Early Bronze Age III. *Strata* 32: 13–35.
- Hartal, M. 2011. Hittin. *Ḥadashot Arkheologiot* 123. http://www.hadashot-esi.org.il/Report_Detail_Eng.aspx?id=1707 (accessed December 20, 2021).
- Joffe, A. 1993. *Settlement and Society in the Early Bronze Age I & II Southern Levant: Complementarity and Contradiction in a Small-Scale Complex Society*. Sheffield.

Kochavi, M., Beck, P. and Yadin, E. 2000. *Aphek-Antipatris I: Excavations of Areas A and B. The 1972–1976 Seasons* (Monograph Series of the Institute of Archaeology of Tel Aviv University 19). Tel Aviv.

Milevski, I. and Getzov, N. 2014. Ein Zippori. *Ḥadashot Arkheologiyot* 126. http://www.hadashot-esi.org.il/Report_Detail_Eng.aspx?id=13675 (accessed December 20, 2021).

Na'aman, Y. 1990. *Map of Ma'anit*. Jerusalem.

Paz, Y. 2002. Fortified Settlements of the EBIB and the Emergence of the First Urban System. *Tel Aviv* 29: 238–261.

Paz, Y. 2010. “Last but not Lost”: New Vistas on Ceramics of the Proto-Urban Horizon (Latest EBIB). Evidence from a Small Site at the Central Coast of the Land of Israel. In: Mattiae, P., Pinnock, F., Nigro, L. and Marchetti, N., eds. *Proceedings of ICAANE 6, 1*. Rome: 899–912.

Paz, Y., Shoval, S. and Zlatkin, O. 2009. Canaanite EBIB “Proto Metallic Ware”: The Earliest Production of Ceramic “Metallic Ware” in the Land of Israel. *Leiden Journal of Pottery Studies* 25: 163–188.

Yannai, E. 2006. *‘En Esur (‘Ein Asawir) I. Excavations at a Protohistoric Site in the Coastal Plain of Israel* (Israel Antiquities Authority Reports 31). Jerusalem.

Yannai, E. 2016. *‘En Esur (‘Ein Asawir) II: Excavations at the Cemeteries*. Jerusalem.

Yegorov, D. and Milevski, I. 2017. Tel Erani. *Ḥadashot Arkheologiyot* 129. http://www.hadashot-esi.org.il/Report_Detail_Eng.aspx?id=25179 (accessed December 20, 2021).

Zertal, A. 2003. *The Excavations at Tel Asawir, Preliminary Report of the First Two Seasons 2001–2002*. Haifa.

