

Introduction and History of Research

The site

The site of 'En Esur ('Ein Asawir) is located in the northeastern Sharon plain, near the western opening of the 'Iron Stream (Wadi 'Ara), extending on both sides of Road 65 (Hadera–'Afula Road) southwest of Mishmar ha-Gevul Junction (Fig. 1.1). Situated on a large alluvial plain adjacent to perennial springs, the location offered favourable conditions for human habitation. Two springs are the site's primary water sources: an eastern spring named 'En Esur (also named 'En Arubot) and an unnamed spring in the west. Both springs discharge small, southward-flowing streams that cross the site.¹ Although the western stream had been diverted in modern times and now flows southwest, parallel to Road 65, old aerial photos indicate that both streams had once discharged into the 'Iron Stream (also known as Nahal 'Iron; see Fig. 1.2).

The site includes two main elements: a settlement and a cemetery (or cemeteries). The settlement has three components (Fig. 1.1; Gophna 1974: 25–26): A protohistoric site ('En Esur; Fig. 1.1), a tell (Tel Esur) and a small mound.

'En Esur

'En Esur, the protohistoric site, is located on the floodplain north of Nahal 'Iron, incorporating two springs and the protohistoric tell. The latter is located between the springs, approximately 220 m south of Tel Esur (Fig. 1.1). Excavations revealed unstratified finds from the Pottery Neolithic period and stratified finds from the Early Chalcolithic period, Late Chalcolithic period, EB I and Intermediate Bronze Age (IBA). Yannai (2006: 2–3) described the site's topography and distinguished four parts: (1) the area east of the eastern stream, (2) a low-lying area west of the eastern stream, (3) a region between the two streams, where the protohistoric tell is located, and (4) the area west of the western stream, including the eastern slope of a limestone hill. The limestone hill is the site's highest topographic feature, reaching 61.3 m above sea level (asl), from where it moderately slopes east and south. The gentle topography continues east and southeast into the extensive area south of Road 65 (Yannai 2006: Fig. 1.2).

Tel Esur

Tel Esur is located between the two springs, covering an area of approximately three hectares. Its roughly

rectangular shape, which rises above the plain, probably formed during the Middle Bronze Age (MB) IIA; the tell also includes strata associated with the MB IIB, Late Bronze Age (LB), Iron Age IIB, and Hellenistic and Early Roman periods (Bar 2016, 2021).

The small mound

The small mound is located about 50 m southeast of Tel Esur. At this location, excavations uncovered a large 8th-century BCE administrative building. Beneath it, curved architectural remains, pottery and flint from the Early Bronze Age were found (Bar 2016, 2021).

The cemetery

The cemetery is located in the rocky hills east and southeast of the settlement. It comprises dozens of rock-cut burial caves, which Yannai (2016a) assigned to an eastern cemetery (sometimes referred to by the name Horbat Gilan) and a southern cemetery. The tombs were dated to the EB IB, EB II (pottery related to this period was identified only in one tomb and was absent from the settlement of 'En Esur), Intermediate Bronze Age, MB II and Late Bronze Age (see Dagan and Sadeh 2008, 2021; Gorzalczyk and Sharvit 2010; Yannai 2016a: Table 1.1).

The environment

The site of 'En Esur is located in the Mediterranean climate zone at the geomorphological junction of the Menashe Heights and Amir Hills (c. 180 m asl) in the east with the foothill plain in the west (c. 60 m asl.; Fig. 1.3). The area's geology is diverse: The Menashe Heights are composed of Eocene chalk of the Maresha and Adulam Formations (Avdat Group), while the Amir Hills consist of Senonian chalk of the Menuha Formation (Mount Scopus Group) and Turonian and Cenomanian limestone and dolomite of the Bina and Sakhnin Formations (Judea Group). A few basalt and tuff exposures are also present (Sneh et al. 1996).

The pedological composition is characterised by brown rendzina soil on the chalk of the Menashe Heights, brown and pale rendzina soils on the Senonian chalk of the Amir Hills, and *terra rossa* on the Turonian and Cenomanian limestones and dolomites of the Amir Hills. Alluvial-colluvial grumusols (vertisols) and red sandy soil (known as *hamra*) are located at the foothill plains and the floodplain of Nahal 'Iron (Govmap n.d.; Dan et al. 1972, 1976; Dan, Fine and Lavee 2007; Singer 2007). The site's general pedo-sedimentary sequence consists of sand and red sandy soil, overlain by anthropogenic soil (mostly

¹ Each spring has several outlets, as described by Yannai (2006: 1; see also Fig. 6); however, not all are regularly active. When active, all a spring's outlets immediately converge into a single stream.

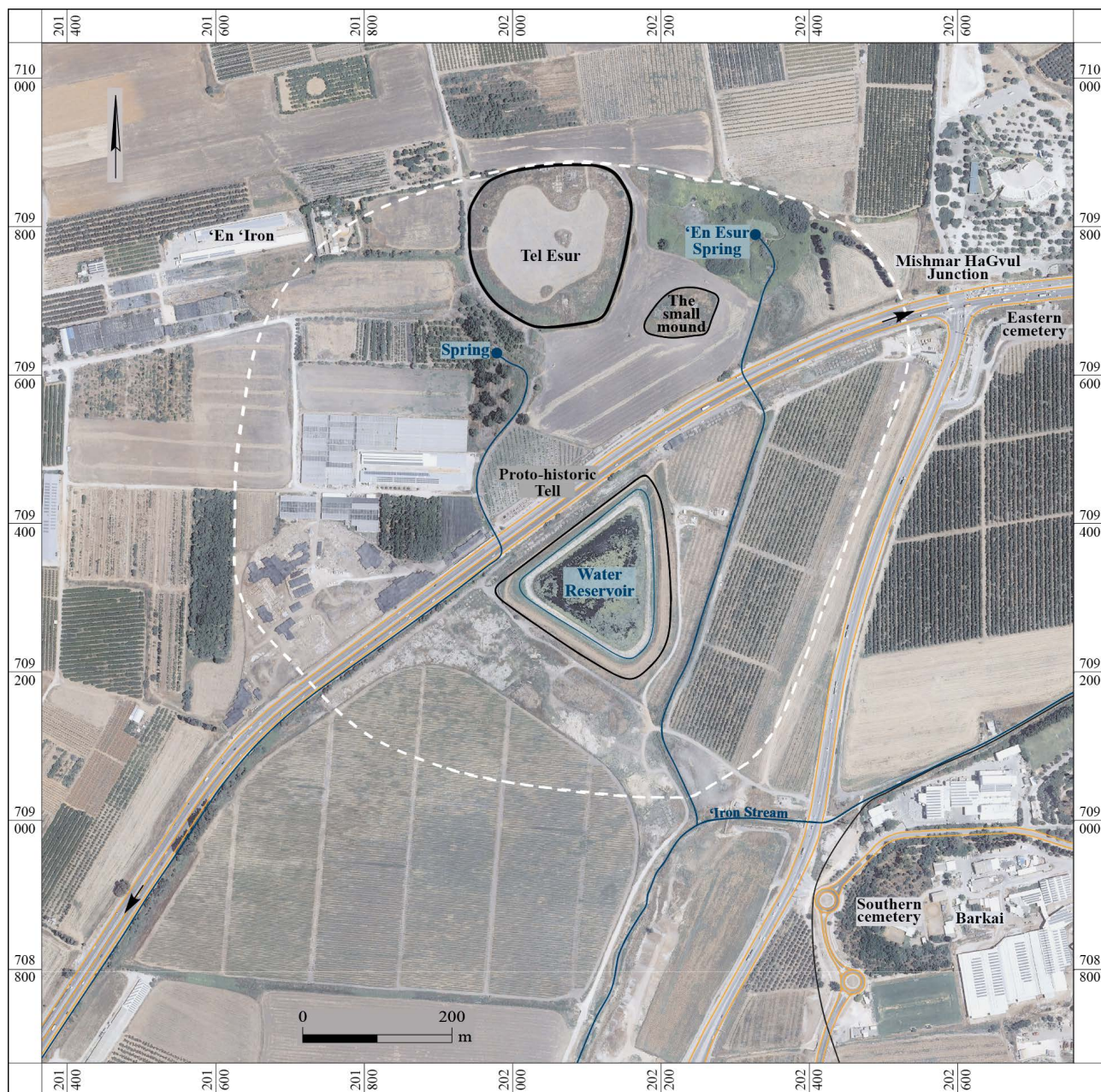


Fig. 1.1. The location of the site (the dashed line marks the proto-historic site's boundaries).

dated to the Early Bronze Age) and topped by a grumusol (clayey soil, vertisol; Fig. 1.4).

The area's geological diversity (Fig. 1.3) offers a wide range of potential building materials (Yannai 2006: 3–5): dolomites, limestone and chalk are located about 3 km east of the site and might have provided building stones; basalt can be found about 8 km east of the site and might have provided the raw material for grinding tools; the site's sands, sandy soil and alluvial clay might have been the source for mudbricks.

History of research

'En Esur, Tel Esur and the cemetery were extensively but discontinuously investigated. The area was surveyed several times, and four main expeditions excavated the site: An expedition of Haifa University is currently excavating

at Tel Esur, two IAA expeditions have excavated 'En Esur (see below), and another IAA expedition excavated the eastern cemetery.

The exploration of the site

Tel Esur was first surveyed by the Palestine Exploration Fund and again, shortly after, by Albright, who mistakenly identified it as Yaḥam (Albright 1923: 9). Alt identified the site as Arubot after conducting his own survey (Alt 1929: 34, 1932: 31), but this suggestion was unfounded. Tel Esur and the small mound are currently being excavated by Haifa University. Several excavation seasons during 2001–2003 (Zertal 2003) and since 2010 (Bar 2016) have revealed occupation layers from the EB I, MB II, Late Bronze Age, the Iron Age II, as well as the Persian, Hellenistic and Roman periods.

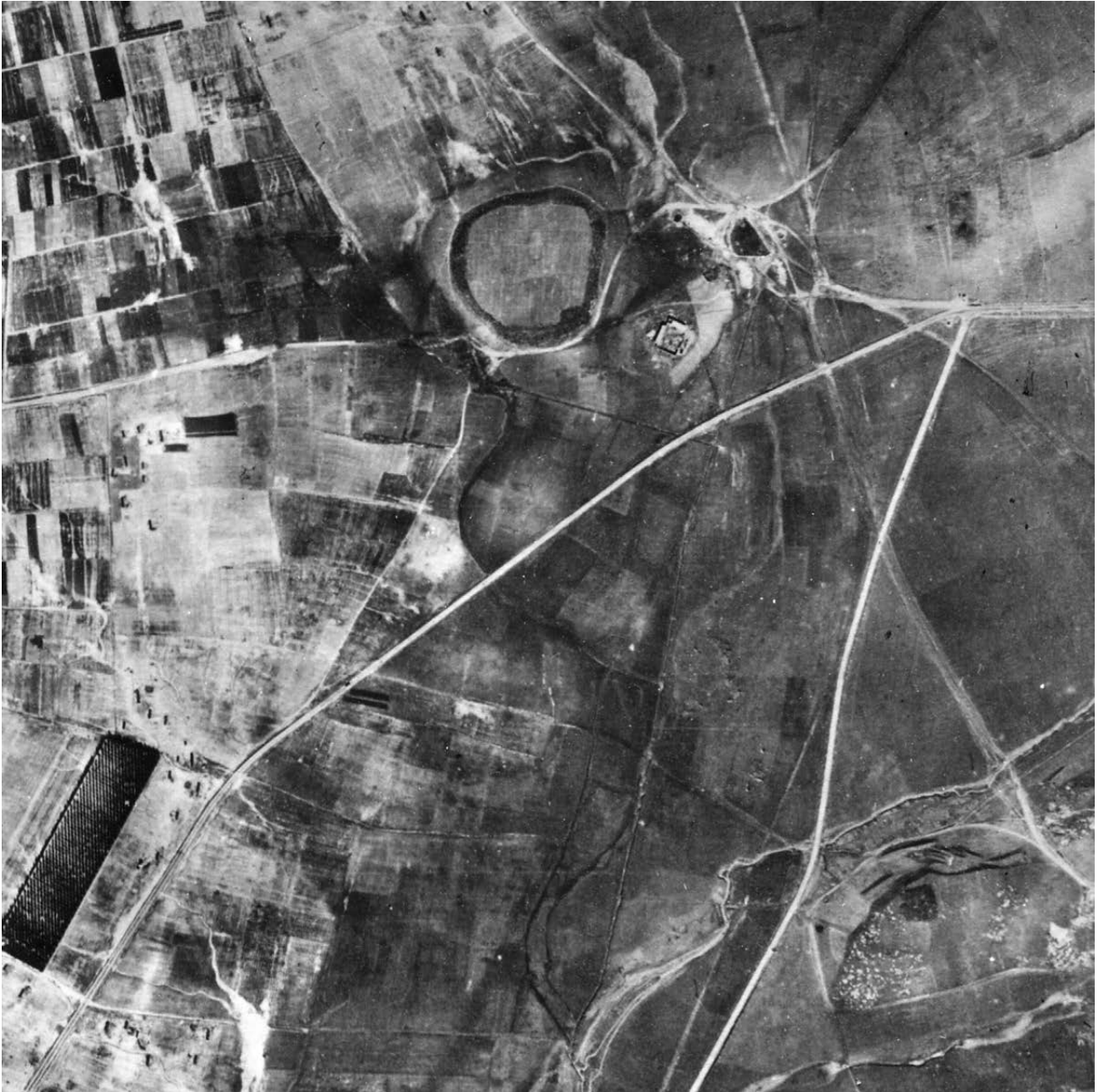


Fig. 1.2. Aerial photograph of 'En Esur from January 1945 (modified after the Royal Airforce, 1945; Courtesy of the Hebrew University of Jerusalem, Bloomfield Library for the Humanities and Social Sciences, The Aerial Photograph Archive).

The first comprehensive survey of 'En Esur and its surroundings was carried out by Gophna, who estimated its size to be 12 ha (Gophna 1974: 25–26; Fig. 1.5). His pottery collection included mainly EB IB forms (Gophna 1974: Fig. 5). In 1977, after archaeological deposits were damaged by a water reservoir constructed next to Road 65 (Fig. 1.1), he conducted a small-scale excavation at the site in collaboration with Ziegelman and on behalf of Tel Aviv University. In this excavation, two strata were detected: one from the Chalcolithic period and another from the EB I (Ziegelman and Gophna 1978).

Yannai's Excavations

The first large-scale excavations at 'En Esur were conducted by Yannai in 1993 and 2000–2008. These were

salvage excavations that concentrated along Road 65, cutting a long and narrow section through the middle of the site (Fig. 1.6). Although the excavation areas were small, they produced significant information. Altogether, ten areas (A–J) were excavated. Six (A–F, excavated in 1993) were located along Road 65; three (Areas G–I, excavated between 2000 and 2008) were located on the western side of the site, and one (Area J, excavated in 2008) was located near its southern edge (Yannai 2016c: Fig. 1).

Area B was Yannai's largest area, where remains spanning the mid-6th and late 4th millennia BCE were uncovered. These remains included occupations assigned to the Pottery Neolithic period (Stratum VII), the Wadi Rabah culture (Stratum VI), the Early Chalcolithic period

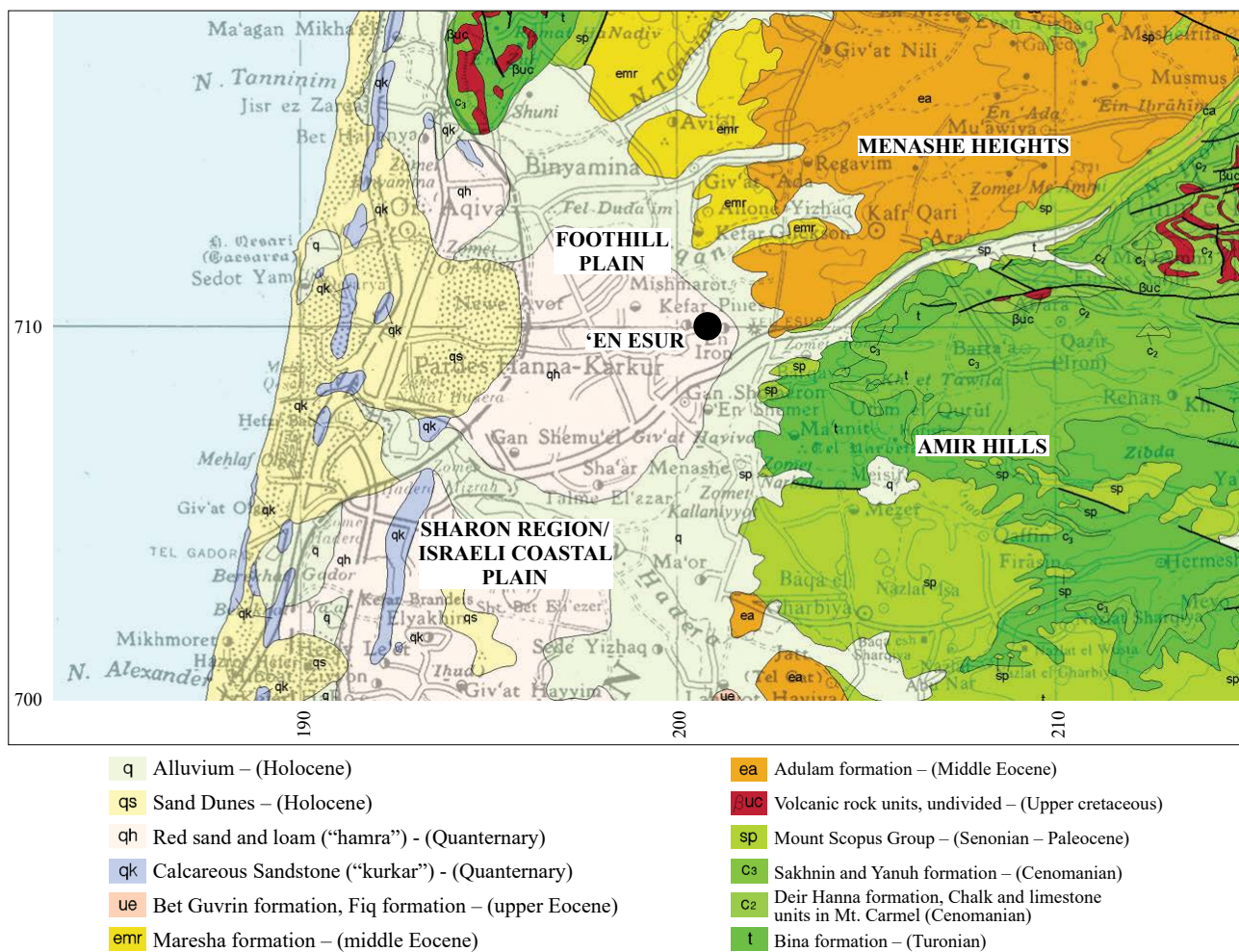


Fig. 1.3. The geological environment (modified after Sneh et al. 1998; Courtesy of the Geological Survey of Israel Library).



Fig. 1.4. The site's general paedo-sedimentary sequence as seen in Sq. FL195, Segment N (photo: O. Ackermann).

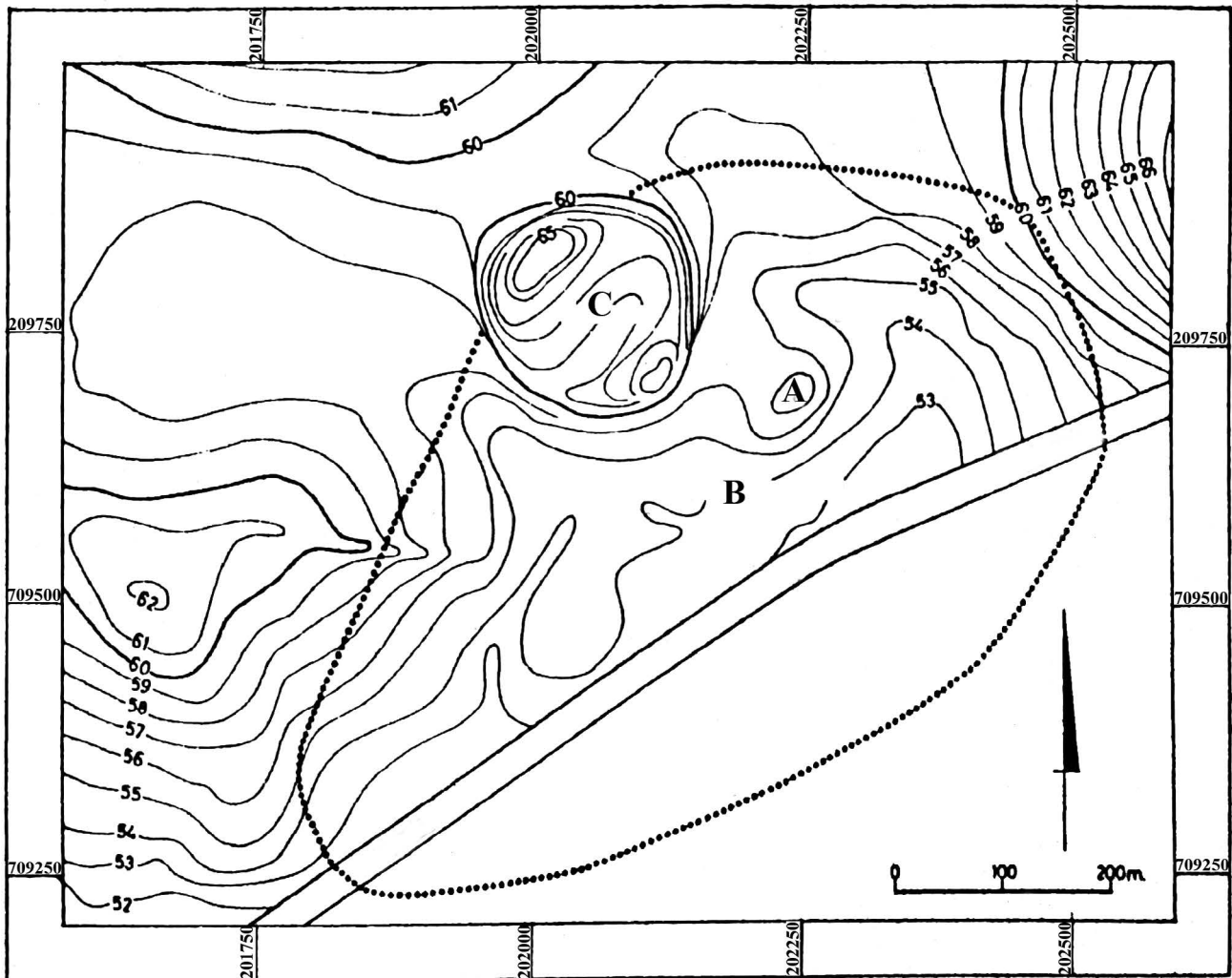


Fig. 1.5. Gopna's estimation concerning the area of the protohistoric site (B; modified after Gopna 1974: 25–26). Also marked on the map: Tel Esur (C) and the small mound (A).

(Stratum V), the Late Chalcolithic period (Strata VA, IV), the EB IA (early EB I, Stratum III) and the EB IB (Strata IIA–B) (Yannai 2006: 9, Table 1.3). His findings suggest that the occupation at 'En Esur originated adjacent to the springs in the Pottery Neolithic period, peaked once during the Wadi Rabah culture and again in the EB IB (Yannai 2006, 2016b, 2016c; for a correlation of Yannai's periods and strata with ours see Table 2.1).

As Yannai's excavations are fully published, there is no need to repeat their results here. However, several observations should be recalled, underscoring 'En Esur's stratigraphy, the spatial distribution of the various settlements and the southwestern edge of the site. Firstly, Area F produced no architectural remains, allowing for the detection of the settlement's southwestern border, at least during the EB IB. Large Chalcolithic and EB I sherds were found in Area F, and Yannai suggested they originated from within the settlement (Yannai 2006: 55).

Secondly, several excavation areas not along Road 65 offered additional data regarding the site's dimensions. Area J, located c. 500 m southeast of Tel Esur, was excavated in 2008 by Yannai (Yannai 2016c) and

demonstrated that the Wadi Raba culture (our EC II, see Table 2.1) and EB IB settlements had reached this point, reinforcing his estimate concerning the settlement's size during this period. Additionally, Intermediate Bronze Age remains (a wall and pottery sherds; Yannai 2016c: 33) offered evidence of squatters in the southern part of the site, complementing remains previously found in Area C (see Yannai 2006: 51–52).

Another area distant from Road 65 is Area I in the west, adjacent to the site's highest point (see Yannai 2016b: Fig. 1), 2–6 m higher than the other excavated areas. The earliest remains in the stratigraphic sequence, as presented by Yannai, were assigned to the Wadi Rabah Culture and superimposed by EB IA and EB IB remains. As mentioned above, Yannai considered these two periods to mark the settlement's peaks. He also suggested that Late Chalcolithic-period 'En Esur was not just an agricultural village. Judging from its precinct wall and painted vessels, he suggested that the settlement had 'urban social characteristics' (Yannai 2006: 281), a view he also expressed concerning the EB IB settlement. Moreover, Yannai described 'En Esur's settlement system as similar to that of Tel Afeq and Tel Megiddo, both of which were

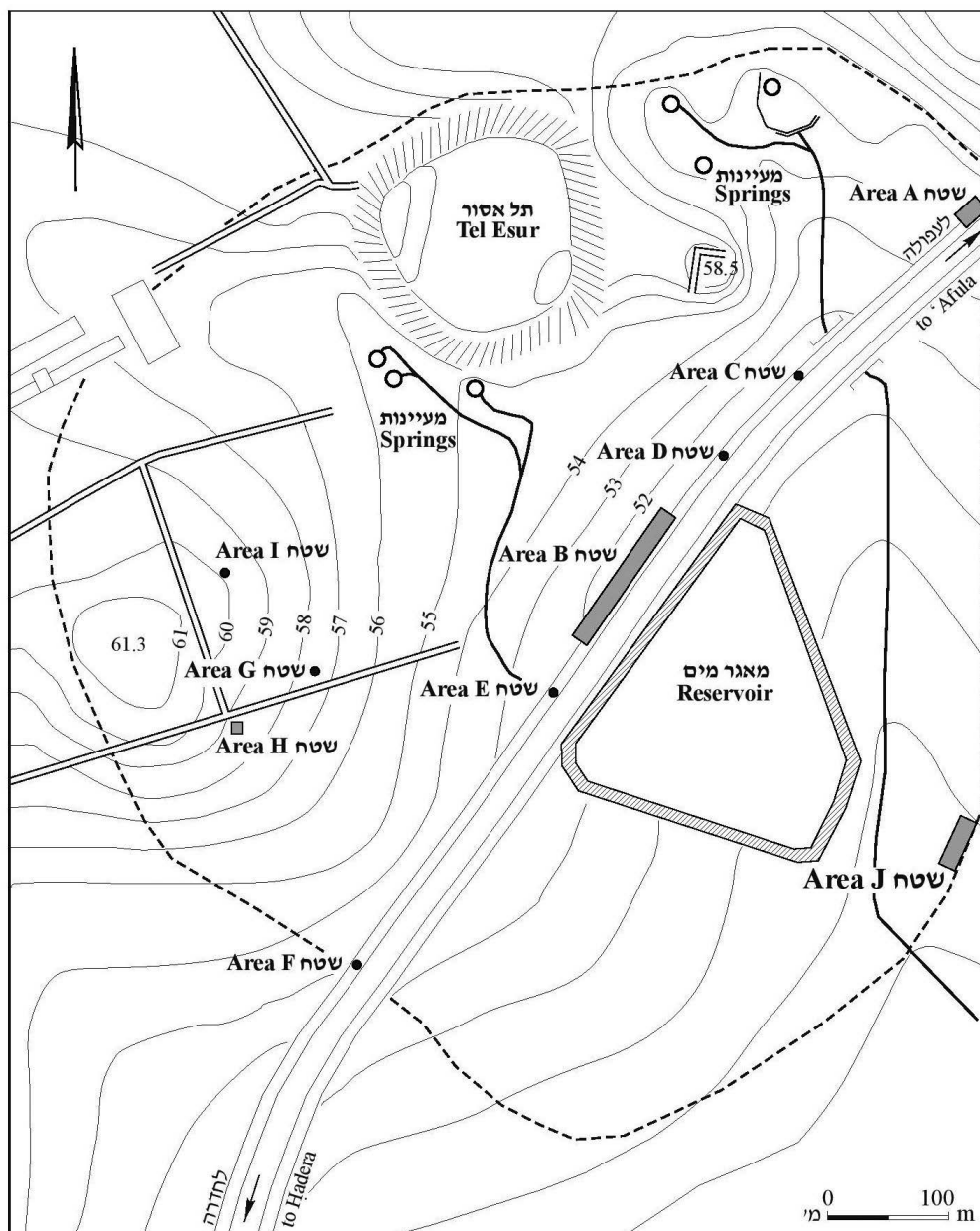


Fig. 1.6. Yannai’s excavated areas and estimation of the protohistoric site’s area (after Yannai 2016c: Fig. 1; Courtesy of the Israel Antiquities Authority).

already urban during the EB IB (e.g. Getzov, Paz and Gophna 2001: 22–24; Paz 2002). Therefore, he rightfully recognised 'En Esur’s part in the urbanisation process that unfolded during this period (Yannai 2006:281).

Looking back on c. 50 years of research since the initial survey at 'En Esur, it can be stated that Yannai’s excavations have provided us with precious data concerning the protohistoric settlement’s stratigraphic sequence, spatial distribution in various periods and material culture. His observations proved immensely valuable in planning and strategising for the initial part of our 2017–2019 excavations. The many excavation areas he sampled provided useful estimates of the expected remains in different parts of the site, and his understanding of the site’s stratigraphy allowed us to fine-tune and greatly expand our knowledge.

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