AN EARLY BRONZE AGE IB-EARLY BRONZE AGE III OCCUPATION SEQUENCE AT TAMRA, WESTERN GALILEE

HOWARD SMITHLINE

INTRODUCTION

In May 2004, a single 5×5 m probe was excavated on a soccer pitch in Tamra, a city approximately 15 km southeast of Akko (map ref. 218400/750250; Figs. 1, 2). Tamra sprawls down a steep hill on the border between the Akko coastal plain and the rising foothills of Lower Galilee.

The excavation was situated on the southern slope of the city, c. 120 m above sea level. The flat topography of the playing field, a rare occurrence in the midst of Ṭamra, drops steeply on three sides: south, east and west. A large accumulation of recent waste material covers the southern slope of the site, making it difficult to determine the original contour of the hillside beneath all the rubble. There is a sharp rise to

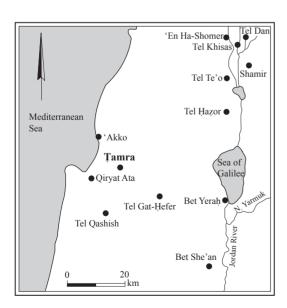


Fig. 1. Location map.

the north that is characteristically occupied by crowded houses and alleys with few existing open areas. The excavation lot is surrounded by schools in the southeast, north and west and a community center in the northeast.

Previous Research

Tamra was visited by Guérin (1880:284), who noted ancient remains, particularly the incorporation of ancient building stones in later structures. The site, surveyed in the 1990s by Lehmann and Peilstöcker (2012), is divided it into two close, but non-contiguous sites (Fig. 2). Tamra 1 (Site 127, the subject of this

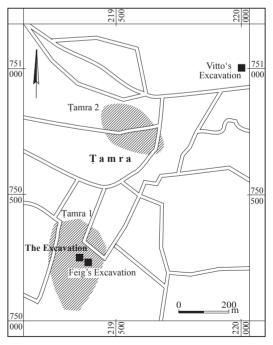


Fig. 2 Map showing the location of excavations within Tamra.

report) yielded finds from the Early Bronze Age IA (EB IA), EB IB, EB II, EB III, Middle Bronze Age II (MB II), Late Bronze Age, Iron Age II, Persian and Hellenistic periods; Tamra 2 (Site 128) is identified with later periods, specifically the Roman, Byzantine, Umayyad, Crusader, Mamluk, and the Early and Late Ottoman periods (Peilstöcker 2003:83). A Late Roman-period hewn burial cave, containing loculi and ceramic sarcophagi was investigated in Tamra 2 by Vitto (1980:39).

In June 2008, Nurit Feig (pers. comm.) conducted an excavation adjacent to the one under discussion. In addition to pottery dating to EB IB and EB II, her excavation yielded both EB IIIA sherds and a significant amount of EB IIIB Khirbet Kerak Ware, greatly enhancing the importance of the EB III presence at Tamra.

The area of the present excavation revealed elements dating nearly exclusively to EB IB–III, with a few sherds originating from a small MB II intrusion (L109). Worn sherds dating to the Roman and Byzantine periods were found in small numbers, sporadically spread across the site. The dearth of later finds in Tamra 1 and the lack of early finds in Tamra 2 indicate that the former was abandoned shortly after the Early Bronze Age, and that the latter was settled a short distance to the north, probably in the Roman period. Tamra, thus, is essentially two separate sites with neither chronological nor physical overlapping between them.

THE EXCAVATION

A 5×5 m square was measured in the northeastern quadrant of the pitch. Four levels of occupation were defined: Level I consists of an intrusive pit dated to MB II; Level II contains remains of an EB III settlement; Level III, the main occupation stage, dates to EB II; and Level IV presents evidence of an EB IB occupation.

The upper surface of the excavation, a playing field created by depositing *hamra* soil over a stabilizing layer of sand, lay directly upon the Early Bronze Age remains.

Level IV (Plan 1)

Level IV consists of a wall segment (W111; 0.7–0.8 m wide), which runs in a southeastern–northwestern direction. The top of W111 was attained only in an extremely confined area, below and perpendicular to W101 and W102 of Levels II and III (Fig. 3).

Although it is impossible to validate, W111 seems to be less imposing than W101 and W102. Its southern face comprises a row of small/medium-sized stones (mean size: 20–25 cm); the northern face is built of large stones with a mean size of c. 45 cm. Wall 111 is dated to EB IB on the basis of the significant EB IB pottery repertoire associated with it, as well as its stratigraphic position.

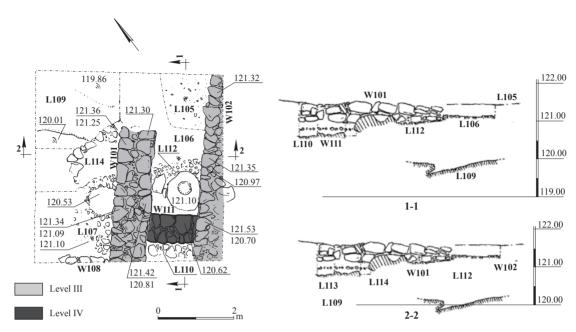
Level III (Plan 1)

Directly below the *hamra* and sand fill of the soccer pitch, two parallel walls (W101, W102) running in a northeast–southwest direction were uncovered (Fig. 4). Between the foundation of W101 and the top of the underlying W111 is a 20–30 cm layer of earth and small stones, while the bottom course of W102 is separated from W111 by approximately 10 cm of earth.

Wall 101 is built of two rows of large hammer-dressed stones with a soil and small-stone fill. It measures 0.85–1.00 m in width, and was exposed over a length of 3.4 m. It is founded on a fill of small to medium-sized stones. Its two courses are preserved to a height of 0.50–0.55 m. Wall 101 abruptly ends 1.25 m from the northern balk of the square, having been cut by an intrusive stone fill.

Floor 107 was exposed to the west of W101. The floor was paved with tightly fitted small stones, and was penetrated by a circular installation that was vandalized soon after its discovery. A small segment of a wall (W108), perpendicular to and seemingly bonding with W101, was discernible, although barely, in the southern balk.

Wall 102, parallel to and east of W101, extends the entire length of the eastern balk of the probe. It is similar to W101 in construction, but with somewhat smaller stones. The complete



Plan 1. Levels IV and III, plan and sections.

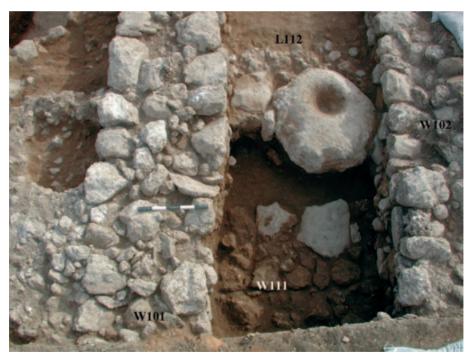


Fig. 3. Level IV: W111 underlying and perpendicular to W101 on the left and W102 on the right, looking northeast.

width of W102 (c. 1 m) was exposed only in a small section in the north of the eastern balk. It is preserved to a maximum of four courses, nearly 0.8 m in height.

A large, round hollowed-out stone was found in situ against the western face of W102 in the narrow corridor (L106) separating W101 from W102. The section of W102 adjacent to the stone is constructed of unbound stone courses with the stones having been haphazardly placed directly one upon the other. This careless construction is possibly connected to the rebuilding of a damaged wall section, perhaps caused by the hollowed stone's emplacement. The hollowed-out part of the stone may have functioned either as a posthole or as a household mortar. The first option seems more likely, as the stone exhibited only questionable evidence of grinding activity on its inner surface. In addition, the L106 corridor appears to be too confined an area to efficiently accommodate even a household grinding installation.

To the north and south of the presumed posthole was a tightly packed small-stone floor (L112), while to its west, a large flat stone was wedged between the round stone and W101, probably for stabilizing purposes (Fig. 4).

Level II (Plan 2)

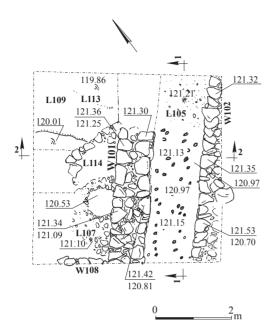
A packed-earth floor (L105) with patches of small stones covered the narrow corridor between W101 and W102, both of which apparently remained in use by the occupants of Level II (Fig. 5). This floor served the two parallel walls, but completely covered the Level III posthole/mortar. It represents the latest occupation and final utilization of W101 and W102.

Level I (Plan 2)

The northwestern corner of the square was occupied by an intrusive stone-filled pit (L113), containing MB IIB potsherds. The pit was excavated down to hewn bedrock (L109).



Fig. 4. Level III: Hollowed stone (posthole?) and floor of small stones (L112) in corridor (L106) between W101 and W102, looking southwest.



Plan 2: Levels II and I.



Fig. 5. Level II: packed-earth floor (L105) with patches of small stones between W101and W102, completely covering the hollowed stone of Level III, looking northeast.

THE FINDS

POTTERY

Due to the limited area exposed, along with incidents of vandalism and damaging flooding, many finds had moved from their primary deposition. This was especially true in regard to the ubiquitous EB II pottery that quantifiably dominated the ceramic finds. It also reflects the greater size and intensity of the EB II settlement as compared to the EB IB and EB III presences.

Level IV

Although the EB IB pottery repertoire is extremely limited because of the small scale of the excavation, the occurrence of grain wash on jars and pithoi is its dominant feature (Fig. 6). Jars and pithoi (Fig. 7:1, 2) are characterized by a coarse fabric and an everted rim, often with a circumventing ridge on the shoulder. The EB IB Tamra jars and pithoi are comparable to storage vessels from Qiryat Ata (Golani 2003: Figs. 4.12:11; 4.13:14), Kabri (Scheftelowitz 2002: Fig. 5.6:3, 4), Abu edh-Dhahab (Getzov 2004: Fig. 8:9, 11, 13) and Horbat Roshim adjacent to Me'ona (Braun 1996: Fig. 11:3, 4, 5). These vessels, with a circumventing ridge, are considered to be "unique to Western Galilee" (Getzov 2004:43). A plain, roundrim holemouth jar (Fig. 7:3), one of only four holemouth jars in the entire excavation, is paralleled by a holemouth jar from EB IB Qiryat Ata (Golani 2003: Fig. 4.5:1). An

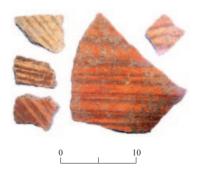


Fig. 6. Early Bronze Age IB sherds decorated with grain wash and band slip.

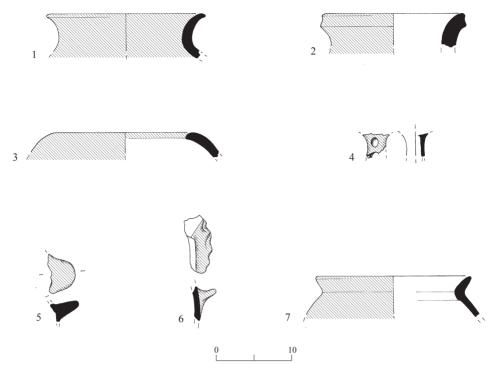


Fig. 7. EB IB pottery.

No.	Vessel	Locus	Basket	Description	
1	Pithos	105	1024	Red slip on red surface, int. and ext.; black core; white, gray and brown inclusions; wheel striations on rim	
2	Pithos	104	1005/1	Dark red slip on pink surface; gray core; numerous small/medium white, brown and gray inclusions	
3	Holemouth jar	110	1035/1	Reddish brown slip on pink surface on ext. and int. rim; dark gray core; small white and medium gray inclusions	
4	Fenestrated base	109	1033/1	Red slip on red surface; black core; white and gray small/ medium inclusions; coarsely cut fenestration	
5	Ledge handle	105	1010/2	Red slip on light buff surface; light gray core with gray and few brown inclusions	
6	Ledge handle	103	1027/1	Red slip on light red surface; reddish brown core; black, gray and brown small/medium inclusions	
7	Cooking jar	110	1035/2	Brown surface; brownish red core; white, gray and brown small/ medium inclusions	

eight-centimeter-long fragment of a coarsely produced, high fenestrated base (Fig. 7:4) is also attributed to this period. Several fenestrated-base fragments dated to EB IB were unearthed at Qiryat Ata (Golani 2003: Fig. 4.14:1, 3) and Tel Bet Yerah (Getzov 2006: Fig. 2.17:17).

Few EB IB plain ledge handles, or redslipped, finger-impressed ledge handles, were found at Tamra (Fig. 7:5, 6). Common to the entire Tamra assemblage are coarse, plain, everted-rim cooking pots (Fig. 7:7). These may be considered the dominant type of cooking vessels of the Early Bronze Age in the north of the country, where holemouth jars were less frequently utilized for cooking (Covello-Paran 2003:108). Preference for the everted-rim pot as a cooking vessel is demonstrated at Tamra by its quantity in

contrast to merely four burnt holemouth jars that were unearthed.

It is extremely difficult, however, to clearly differentiate between the earlier and later cooking jars within the Early Bronze Age. Everted-rim cooking jars appear during EB IB at Abu edh-Dhahab (Getzov 2004:42, Fig. 8:1, 2), while no other cooking-pot types, e.g., holemouth jars, were in evidence there. In contrast, at Qiryat Ata, holemouth cooking jars were the predominant cooking vessel in Strata II–III dated to EB IB, but were replaced by necked cooking jars in EB II Stratum I (Golani 2003:155). At Tel Bet Yeraḥ, as well, everted-rim cooking jars first appear during

EB II (Getzov 2006: Fig. 3.43:10–12). They are also the main EB II cooking-pot type at Tel Dan (Greenberg 1996:102). At Tel Gat-Ḥefer, where everted-rim cooking jars appear to be more prominent than holemouth cooking jars earlier in EB II–III, holemouth cooking jars seem to attain dominance during EB III. Any distinct typological characteristics that could differentiate between the earlier and later jars are absent (Covello-Paran 2003:133, Figs. 7:7; 12:4; 14:7; 16:12). The use of everted-rim jars for cooking, as opposed to holemouth jars, continued into the Intermediate Bronze Age in the north (Smithline 2002:30*, Fig. 12:2–13).

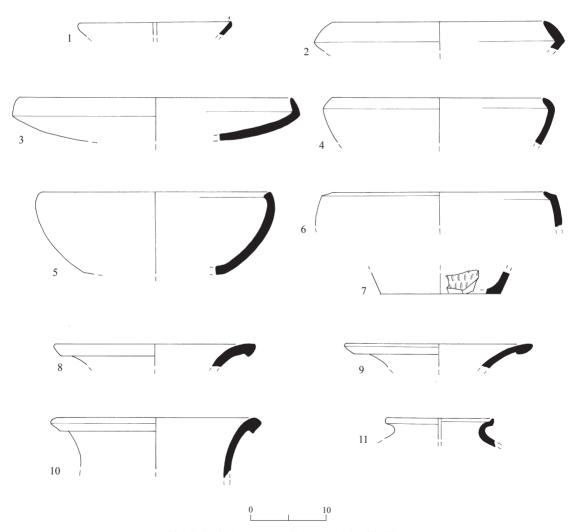


Fig. 8. Early Bronze Age II pottery: Metallic Ware.

4	Fig.	8

No.	Vessel	Locus	Basket	Description	
1	Bowl	105	1010/5	Red burnished surface; red core; white and brown inclusions	
2	Platter	105	1031	Pink burnished surface; red core; white and brown inclusions; wheel striations on rim	
3	Platter	105	1010	Brownish red burnished surface; dark gray core; white and brown inclusions; wheel striations on rim	
4	Bowl	109	1019	Pink surface; red core; small white, gray and brown inclusions	
5	Bowl	105	1031/1	Burnished red surface; red core; white and brown inclusions	
6	Krater	104	1005	Pink combed surface; gray core; white, gray and brown inclusions	
7	Incised bowl	104	1069	Pink surface; gray core; white, gray and brown inclusions	
9	Pithos	105	1010/1	Red surface; dark gray core; white, gray and brown inclusions; fine wheel striations on rim	
10	Pithos	105	1027/2	Light red surface; brick red core; white and brown inclusions; wheel striations around rim	
11	Pithos	100	1001	Red surface; dark gray core; white, gray, black and brown inclusions	

Level III

Level III is characterized by its typical EB II assemblage of Metallic Ware vessels. Bowls and platters are the most numerous types. They exhibit variations in size and form, but present no unique characteristics. Among the bowls are small flat plates, inverted-rim bowls, deep bowls with a flat rim and platters (Fig. 8:1–5).

An unusual metallic bowl-type possessing an incised and gouged inner surface (Fig. 8:7) stands out among the pottery finds. The purpose of the rough inner surface has not, as yet, been satisfactorily explained. Examples of similar vessels have been found at sites across the north of the country, ranging from Tel Dan (Greenberg 2002: Fig. 3.14:13), Shamir (Greenberg 1988: Fig. 44:12) and 'En Ha-Shomer (Marder, Yegorov and Smithline, forthcoming), all in the Hula Valley and its periphery, to Qiryat Ata (Golani 2003: Fig. 4.24:30, 31) and Tel Qashish (Zuckerman 2003: Fig. 24:4–6) in the Jezreel Valley. Unusually, the two samples of this bowl that were identified at Tel Qashish were not fired to a metallic consistency.

An additional, less common Metallic Ware vessel is a variant of metallic kraters with a characteristic EB II Metallic Ware surface combing (Fig. 8:6). Similar vessels have been unearthed at Qiryat Ata (Golani 2003: Krater Type K IIb, Fig. 4.4:1–10), as well as at EB II sites in the Ḥula Valley, e.g., Ḥazor, Tel Te'o, Shamir and Ḥasas (Greenberg 1988: Figs. 33:10; 42:21; 44:13; 45:9).

The Metallic Ware flaring-rim and gutter-rim storage jars and pithoi (Figs. 8:8–11; 9:1–3), many adorned with pattern or parallel combing, are conventional EB II types. Such vessels were found at numerous EB II sites, e.g., Qiryat Ata (Golani 2003: Figs. 4.31:10, 12; 4.32:1, 6) and Tel Bet Yeraḥ (Getzov 2006: Fig. 3.43:13–15). Handles and combed bases, identical to those found at Ṭamra, were also recovered from Tel Bet Yeraḥ (Getzov 2006: Fig. 3.44:7, 8, 16)

The Level III cooking pots (Fig. 9:4–6) are indistinguishable from both earlier and later Early Bronze Age cooking pots.

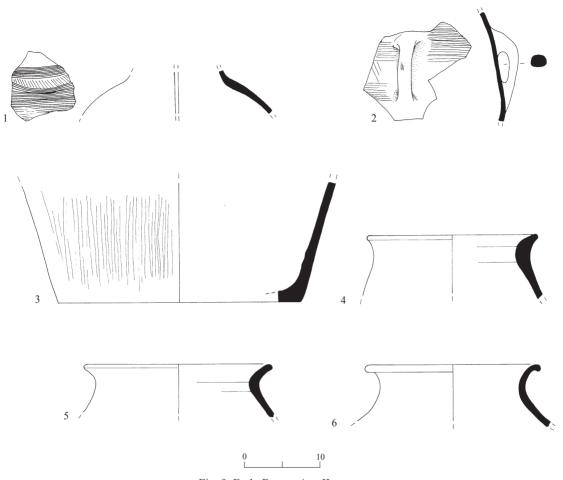


Fig. 9. Early Bronze Age II pottery.

No.	Vessel	Locus	Basket	Description		
1	Combed jar	104	1005/3	Brownish red surface; gray core; white, gray and black inclusions; Metallic Ware		
2	Jar handle	107	1026/1	Red combed surface; red core; small white and brown inclusions; Metallic Ware		
3	Pithos base	109	1009/3	Red combed surface; gray core; white, gray and brown inclusions; Metallic Ware		
4	Cooking jar	114	1049	Brown surface; gray core; white and gray inclusions; quartz		
5	Cooking jar	105	1010/3	Brown surface; dark gray core; very numerous small white inclusions		
6	Cooking jar	100	1045	Brown surface; dark reddish brown core; white, gray and brown inclusions		

Level II

A concentration of EB III pottery fragments was unearthed in the corridor between W101 and W102. The ceramic finds reflect occupation of the site during both EB IIIA and EB IIIB,

the latter phase identifiable by the presence of Khirbet Kerak Ware (KKW). The very limited scale of the excavation does not allow for assignment of a separate stratum for each of the EB III phases.

The identifiable EB IIIA vessels are characterized by a coarse, light-colored fabric and non-metallic firing. A common type is the heavy, coarse bowl with a variety of inverted rims (Fig. 10:1–5) reminiscent in form of EB II Metallic Ware vessels. They are frequently covered with a poorly applied red slip and a streaky uneven burnish. Such finishing resulted in poor surface preservation. Similar bowls are components of the EB III pottery assemblage as may be seen at Tel Bet Yeraḥ (Getzov 2006: Figs. 3.45:12–25; 3.46:1–8) and at Tel Gat-Hefer (Covello-Paran 2003: Figs. 9:4–7, 21;

15:1–5; 16:5–10). Of note is a shallow open bowl with a streaky pattern-burnish on its inner surface (Fig. 10:1), which also is comparable to bowls from Bet Yeraḥ (Getzov 2006: Fig. 3.45:11) and Tel Gat-Ḥefer (Covello-Paran 2003: Fig. 14:6).

Storage jars, of similar ware and surface treatment, are also dated to EB IIIA (Fig. 10:6).

Khirbet Kerak Ware.— Among several KKW sherds retrieved from Level II is a flaring-rim bowl fragment possessing a highly unusual pinched handle (Fig. 10:7).² A remarkably

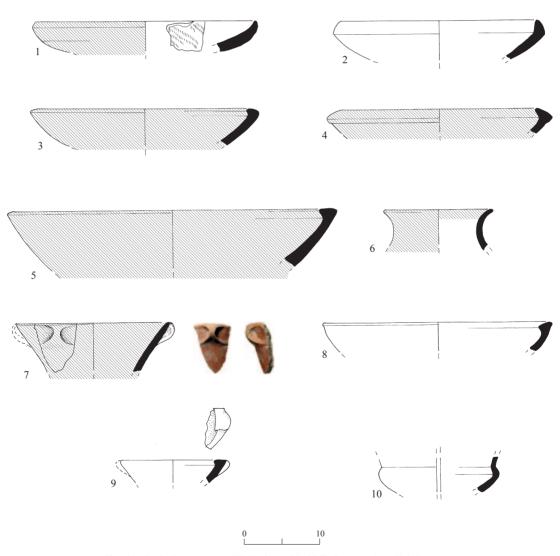


Fig. 10. Early Bronze Age III (1–9) and Middle Bronze Age II (10) pottery.

No.	Vessel	Locus	Basket	Description	
1	Bowl	104	1005/4	Unevenly burnished red slip on int. and ext.; pink and gray core; white, gray and brown small/medium inclusions	
2	Bowl	104	1009/2	Light red surface; gray core; white, gray and brown inclusions	
3	Bowl	110	1034	Red slip on int. and ext.; pink and gray core; white, gray and brown inclusions	
4	Bowl	105	1030/1	Red slip on int. and ext.; pink and gray core; white and gray inclusions; wheel striations on rim	
5	Bowl	105	1030/2	Red slip on light red int. and ext.; gray core; gray inclusions	
6	Storage jar	104	1004	Red slip on light red ext. and int. of rim; dark gray core; gray and brown small/medium inclusions; wheel striations around rim	
7	KKW bowl	104	1009/1	Burnished red int. and ext. surfaces	
8	KKW bowl	103	1013	Red burnished surface; red and reddish brown core; white and brown inclusions	
9	KKW bowl	107	1026/2	Black burnished external surface; remnants of red burnish on rim; small/medium white and black inclusions; dark buff core	
10	Bowl	109	1033/2	Light red surface; buff core; white, gray and brown inclusions; quartz	

← Fig. 10

similar handle was found on a unique cylindrical jar at Bet Yeraḥ (Paz 2006: Fig. 3.28). *En face*, the two handles appear identical, although the handle from the Ṭamra vessel is not pierced as is the handle from Bet Yeraḥ.

The KKW burnished bowl with the internally sloping rim (Fig. 10:8) has close parallels at Tel Bet Yeraḥ (Getzov 2006: Fig. 3.50:27, 33). An additional worn, small bowl with a rim projection possibly belongs to this family (Fig. 10:9).

Level I

Several MB IIB potsherds were found in an intrusive pit (Fig. 10:10). Sherds dating to this period were found only in the pit context (L109).

FLINTS Ofer Marder

The Tamra flint assemblage is small and chronologically homogeneous. It consists of 117 items, most of which are flakes with few blades or bladelets (Table 1). Only four cores were found: one is on a flake and the remaining

Table 1. Breakdown of the Flint Assemblage

Туре	No.	%
Primary Elements	6	9.5
Flakes	41	65.1
Blades\lets	9	14.3
Canaanean blades	3	4.8
Burin spall	1	1.6
CTES	3	4.8
Total Debitage	63	100.1
Chunks	10	27.0
Chips	27	73.0
Total Debris	37	100.0
Debitage	63	53.8
Debris	37	31.6
Cores	4	3.4
Tools	13	11.1
Total Assemblage	117	99.9

three are amorphous. Of the small number of recovered tools, most are on Canaanean blank blades (Table 2).

It seems that the choice of coarse-grained, beige flint of Eocene origin for the production of Canaanean blades (six tools and three blanks)

Table 2. Tool Frequencies from Tamra

Туре	No.
Sidescraper	1
Denticulate	1
Awl	1
Borer	1
Canaanean sickle blade	2
Truncated Canaanean blade	1
Retouched flake	1
Canaanean retouched blade	3
Chalcolithic sickle blade	1
Truncation	1
Total	13

was deliberate. The small number of such flints retrieved from the excavation, however, does not allow for an in-depth analysis that would attain any pertinent conclusions. This type of raw material is well-known from sites located in the center of Israel and along its central coastal plain (Bankirer 2003:172; Milevski 2005:122–123; Milevski et al. 2006).

As mentioned previously, the tool repertoire (Table 2) is characterized by the predominance of tools on Canaanean blades. All of the Canaanean blades are broken on both ends (Fig. 11:2, 3), except for a single truncated blade (Fig. 11:4). One Canaanean sickle blade shows a gloss on both edges of its ventral and dorsal surfaces (Fig. 11:2). The other has a gloss only on one edge of the ventral and dorsal surfaces (not illustrated). Non-continuous nibbling is present on three Canaanean blades (Fig. 11:2).

In addition, ad hoc tools, such as a retouched flake, a sidescraper, a denticulate, an awl and a small borer, were retrieved (not illustrated). The borer was modified by abrupt retouch and truncation on one end.

A single Chalcolithic period sickle blade with a triangular section (Fig. 11:1) was recovered. It is made of high quality flint and is backed by a semi-abrupt retouch and truncation on both ends. It was uncommonly modified by semi-abrupt retouch on the ventral surface prior to its acquiring the existing visible gloss.

In summary, the flint assemblage, most notably the tools on Canaanean blades, is characteristic for all three phases of the Early Bronze Age documented at the site. The only exception is the single Chalcolithic sickle blade, suggesting an occasional visit to the site during the Chalcolithic period.

ASPHALT

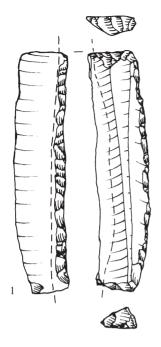
An uncommon find associated with Level IV is a small lump of asphalt.3 The asphalt deposits nearest to Tamra are in the area of the Dead Sea, while further afield, Mesopotamia is also a source. Asphalt is found in EB IB sites in southern Canaan and Egypt either as a lump in its raw form or applied to flint for hafting purposes or to pottery for insulation, waterproofing and sealing (Milevski, Marder and Goring-Morris 2002:220-226). It served as an important trading commodity in southern Canaan and its probable trade routes have been traced. Asphalt has not been previously reported from sites north of Bet She'an. Indeed, its appearance seems to be confined to sites south of the Lod Valley (Milevski, Marder and Goring-Morris 2002:226-230).

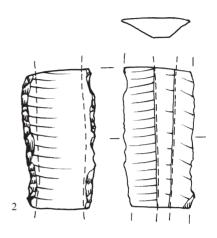
DISCUSSION AND CONCLUSIONS

The excavation at the previously unexcavated site of Tamra, although small in scale, has yielded important information concerning the Early Bronze Age on the eastern edge of the 'Akko plain. Surveys had already identified the existence of an Early Bronze Age settlement at the site, but its chronological sequence, with assemblages typical of EB IB, EB II and EB III, extending through nearly the entire span of the Early Bronze Age, had not previously attracted attention. In fact, this site is possibly the only site in the region to present an Early Bronze Age occupation sequence with a significant EB III presence.

The Early Bronze Age at Tamra

It is impossible to characterize the various Tamra habitation layers due to the limited







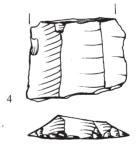


Fig. 11. Flint.

No.	Туре	Locus	Basket
1	Chalcolithic sickle blade	105	1010/4
2	Canaanean sickle blade	105	1010/6
3	Canaanean retouched blade	104	1009/4
4	Truncated Canaanean blade	103	1020

nature of the excavation. However, as a single Chalcolithic sickle blade (Fig. 11:1) is not sufficient evidence upon which to surmise an earlier occupation, it would seem that the first recognizable settlement was established during EB IB.

The near-total absence of holemouth jars, either for storage or cooking, is notable throughout the excavation. The everted-rim cooking pot was the preferred cooking vessel in the north during the Early Bronze Age. It is a coarse vessel of a brownish ware usually with a plain, thick everted rim. As stated previously, it is impossible to differentiate between earlier and later cooking pots. Apparently, their form wellsuited their function and thus the jar changed little during the long extent of the Early Bronze Age in the north. Also missing from the EB IB repertoire are neck-less rail-rim pithoi with a thickened round-rim section and circumscribing impressions. Getzov (2004:44, Fig. 8:15) suggests that on the basis of their fabric, rail-rim pithoi, typical of EB IB, were manufactured in the eastern Jordan Valley. They are, however, found in western and Upper Galilee EB IB contexts; e.g., at Abu edh-Dhahab (Getzov 2004: Fig. 8:15); Nahf (Smithline 2008: Fig. 3:9); and they are also found at 'En Shadud (Braun 1985: Fig. 23:3-7), in the western Jezreel Valley, to which there was a relatively direct route from the Jordan Valley. Perhaps such an accessible route did not exist to Tamra in lower Galilee, which may account for their absence there. It must not be forgotten, however, that the excavation was very limited in size and not every vessel type was necessarily unearthed.

The Tamra EB II assemblage is typical of that period and is dominated by the large number of Metallic Ware vessels, viz. platters, storage jars and pithoi. Pattern combing is also a common feature. No plain holemouth jars are associated with the Level III occupation. One particular cooking jar (Fig. 9:6), probably dating from EB II, is notable: although it has a familiar everted rim similar to those found on storage jars (Braun 1996: Fig. 10:6), this vessel is nonetheless made of cooking ware fabric.

The major contribution of the excavation is the documentation and corroboration of an EB III presence in the 'Akko coastal plain. The EB III occupation of Level 2 utilized the already existing Walls 101 and 102, and added a stone floor in the corridor between the two walls. The quantity of EB III pottery indicates the existence of an established settlement at the site rather than a temporary exploitation of exposed ruins by a group of transitory squatters. The appearance of EB IIIB Khirbet Kerak Ware is a rare and significant occurrence in this region. It strengthens the assertion that the site experienced a sedentary occupation, probably of a new ethnic entity, which introduced this pottery into the area.

Overview of the Early Bronze Age in the 'Akko Coastal Plain

The 'Akko coastal plain extends from the Carmel Ridge in the south to the present-day Israel-Lebanon border, where it descends to the sea in the north. To the west, the plain is bounded by the Mediterranean Sea along its entire length. To the east are the ascending foothills of the Hills of Galilee, eventually reaching an elevation of more than 1000 m above sea level, 35 km from the coast (Fig. 12; Table 3).

This region was surveyed in-depth by Peilstöcker and Lehmann in the mid-1990s.4 They enumerated 24 sites where pottery fragments dating to either EB IA, EB IB or EB II/III were found (Peilstöcker 2003:92-166). Eleven of these sites were probed by excavation, while the remainder were only surveyed. According to the surveyors, it was impossible to differentiate between EB II and EB III potsherds and, therefore, as frequently occurs in studies of the EB II and EB III periods, no specifically EB III sites were identified. A similar situation occurs, for instance, in the Upper Galilee survey undertaken by Frankel et al. (2001), where the term EB II/III was again utilized to designate this seemingly archaeologically indistinct period. The resulting impression is that the area had been either abandoned during EB III or had

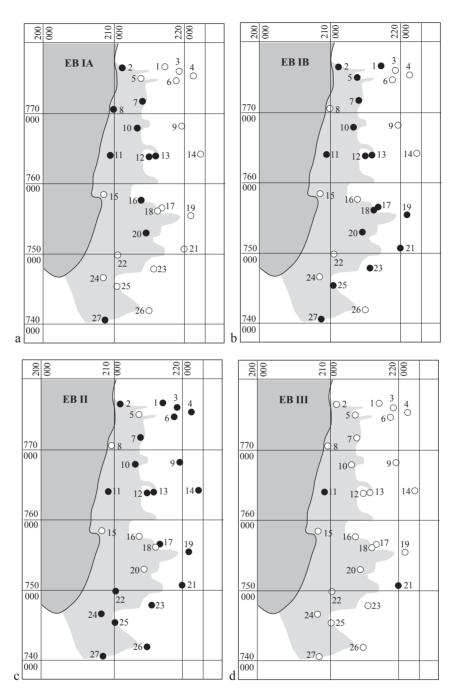


Fig. 12. Distribution of sites in the 'Akko plain and its periphery during EB IA (a), EB IB (b), EB II (c) and EB III (d); see Table 3 for key to site names. On each map, black dots indicate sites with finds from that particular period.

No.	Site	EB IA	EB IB	EB II	EB III	Source
1	Ḥorbat Ḥur		×	×		Frankel et al. 2001:20
2	Rosh Ha-Niqra	×	×	×	?	Tadmor and Prausnitz 1959
3	Khirbat Idmit			×		Frankel et al. 2001:22
4	Ḥorbat Karkara			×		Frankel et al. 2001:27
5	Shelomi South		×			Frankel et al. 2001:17
6	Ḥorbat Seraf			×		Frankel et al. 2001:21
7	Abu edh-Dhahab	×	×	×		Getzov 2004
8	Nahariyya North	×				Frankel et al. 2001:10
9	'En Ga'aton			×		Frankel et al. 2001:16
10	Tel Kabri	×	×	×		Frankel et al. 2001:13
11	Giv'at Yasaf	×	×	×	×	Rochman-Halperin 1999
12	Asherat	×	×	×		Smithline 2001
13	Bet Ha-'Emeq	×	×	×		Frankel et al. 2001:14
14	Jatt			×		Frankel et al. 2001:24
15	'Akko	×?	×?			Dothan 1993:19
16	Ḥorbat 'Uza	×				Getzov et al. 2009:5
17	Yavor		×	×		Peilstöcker 2003:88
18	'Ard es-Samra		×			Getzov et al. 2009
19	Ḥorbat Yaʻanin		×	×		Peilstöcker 2003:86
20	Tel Kison (Tell Keisan)	×		×		Peilstöcker 2003:71
21	Ţamra .		×	×	×	
22	Afeq			×		Peilstöcker 2003:53
23	Ḥorbat Zefat 'Adi		×	×		Stern and Smithline 2004
24	Tel Zavat			×		Peilstöcker 2003:89
25	Qiryat Ata		×	×		Golani 2003:11 Abu-Hamid (pers. comm.)
26	'Alil			×		Peilstöcker 2003:52
27	Tel Regev	×	×	×		Peilstöcker 2003:

Table 3. Early Bronze Age Sites in the 'Akko Plain and Periphery (see Fig. 12)

retained its EB II characteristics, albeit with as yet undefinable EB III features.

The following picture of the settlement dynamics of the 'Akko plain may be extrapolated from the surveys:

Early Bronze Age IA. With the onset of EB IA, settlements were established along the coast, in the midst of the plain or on its low lying perimeter (Fig. 12:a). The major site of Tel 'Akko itself has yielded some EB I material; however, nowhere in the 'Akko archaeological literature is it clearly stated whether the Early

Bronze Age 'Akko finds are to be dated to EB IA or EB IB or even to a transitional Chalcolithic–EB IA period (Dothan 1993:19).

The low foothills that rise up to the Hills of Galilee remained practically unsettled. The only sites that lay outside this scheme are Bet Ha-'Emeq and Ḥorbat 'Uza that are both located on the periphery of the coastal plain, yet not on the plain itself.

Early Bronze Age IB. The EB IB period (Fig. 12:b) witnessed only a slight increase in settlements, but the EB IA settlement pattern

with its concentration of sites in the center of the plain and on the coast began to shift. The EB IA sites of Nahariyya, and possibly 'Akko and Tel Kison were abandoned, as was more peripheral Horbat 'Uza. The continuation of occupation in the remainder of the peripheral settlements stands in contrast to those abandoned sites.

In addition, four new sites were established, none of which is situated in the midst of the plain. Horbat Ya'anin was founded on the very fringe of the plain, at the point where the foothills of the Lower Galilee begin their ascent. The protohistoric site at Qiryat Ata was established on a low peripheral rise, while Horbat Hur is the first of several settlements that were later to be established in the northern hills. The newly established settlement at Tamra appropriately fits into this new settlement pattern as it is situated above the plain floor. All of these sites are peripheral to the plain.

Early Bronze Age II. Although in EB II the picture remains similar (Fig. 12:c), with most sites exhibiting settlement continuity, this period is also witness to an increase in new settlements, including the resettlement of Tel Kison. Once again, the newly established villages are peripheral to the plain or follow the example of Horbat Hur and spread into the hills.

Early Bronze Age III. The most obvious change in settlement dynamics and patterns occurred between EB II and EB III. No significant evidence indicating sedentary occupation of the 'Akko plain during EB III (most easily identified by the presence of Khirbet Kerak Ware) was found by any of the surveys in any part of the plain or in peripheral sites.5 Thus far, only two of the excavated 'Akko plain sites seem to have yielded KKW fragments: at Rosh Ha-Nigra several sherds were reported but not illustrated (Tadmor and Prausnitz 1959:88), and at Giv'at Yasaf a single vessel is mentioned (Rochman-Halperin 1999: Fig. 13:10). At Qiryat 'Ata, which, like Tamra, is situated on the periphery of the plain, recent excavations have also exposed

an EB III presence, but without KKW (Amani Abu-Ḥamid, pers. comm.).

Several reasons have been offered to explain this paucity of pertinent EB III material finds. The picture tentatively presented is one of either insufficient excavations, resulting in a *terra incognita* concerning the identification of this period, or else one of abandonment of the 'Akko coastal plain during EB III.

Peilstöcker is of the opinion that the EB III assemblages of the 'Akko plain are, as yet, insufficiently understood due to a lack of excavations. Additional data, mostly from stratified excavations, must first be accumulated and interpreted in order to enable differentiation between the EB II and EB III periods (Peilstöcker 2003:368, 372).

The discovery of an EB III occupation (Fig. 12:d) that includes Khirbet Kerak Ware in the Tamra excavations finally introduces this period and its pottery repertoire into the plain. Its presence assists in solving the perplexing problem of the settlement sequence in the 'Akko plain during the Early Bronze Age. Strangely, its presence at Tamra strengthens the assumption that the region was virtually abandoned during EB III.

The assemblage, a typical EB III repertoire similar to those familiar from Tel Bet Yeraḥ and Tel Gat-Ḥefer, demonstrates that there is no necessity to search for a unique and as yet unknown repertoire specific to the 'Akko plain, as suggested by Peilstöcker. Rather, the fact that the EB III period as such has not been recognized in the region is most probably to be understood in terms of a near-total absence of contemporary settlement sites. The scale and extent of the surveys and excavations undertaken in the area should have been sufficient to expose significant remains of the period, yet this has not occurred. Therefore, it appears that the region was largely unoccupied during EB III.

A comparable, albeit earlier situation in which a region was virtually uninhabited, existed in the Hula Valley, where there is no evidence of occupation during EB IB (Greenberg 2002:84–89).

NOTES

- ¹ The excavation (Permit No. A-4169) was directed and photographed by the author, with the participation of Vadim Essman and Viacheslav Pirsky (surveying), Elizabeth Belashov and Natalia Zak (drafting and final plans), Leea Porat (pottery restoration), Hagit Tahan-Rosen (pottery drawing), Ofer Marder (flint typology and study), Leonid Zeiger (flint drawing) and Anastasia Shapiro (GPS and location maps). The excavation, carried out in an area intended for the installation of public sports facilities, was financed by the Municipality of Tamra. Valuable assistance was rendered by Nimrod Getzov, both through our many fruitful discussions and in his preparation of the settlement-dynamics maps. My thanks also to Nurit Feig for allowing me to refer to her Tamra excavation prior to its publication,
- ² This sherd underwent a petrographic analysis as part of a major study of KKW vessels conducted

- by Zuckerman, Ziv-Esudri and Cohen-Weinberger (2009). It was found to comprise raw material that was "not attested in any KKW vessels of the 'core area' sites." The Upper Galilee was offered as a possible source for this vessel (Sharon Zuckerman, pers. comm.).
- ³ The asphalt lump did not undergo laboratory testing or analysis.
- ⁴ For an inclusive account of surveys and excavations carried out in the 'Akko coastal plain, see Peilstöcker 2003:14–20.
- ⁵ Peilstöcker (2003:162) states: "A fourth assemblage containing late Metallic Ware and Khirbet Kerak Ware (KKW) as it was defined by Greenberg for the Hula Valley (Greenberg 2002:48–51) seems to be missing in the 'Akko Plain."

REFERENCES

- Bankirer R.Y. 2003. The Flint Assemblage. In A. Golani. *Salvage Excavations at the Early Bronze Age Site of Qiryat Ata* (IAA Reports 18). Jerusalem. Pp. 171–182.
- Braun E. 1985. 'En Shadud: Salvage Excavations at a Farming Community in the Jezreel Valley, Israel (BAR Int. S. 249). Oxford.
- Braun E. 1996. Salvage Excavations at the Early Bronze Age Site of Me'ona: Final Report. 'Atiqot 28:1–31.
- Covello-Paran K. 2003. The Early Bronze Age Occupation at Tel Gat-Hefer in the Lower Galilee, Areas C and D. 'Atiqot 44:97–138.
- Dothan M. 1993. Tell Acco. In *NEAEHL* 1. Pp. 17–24.
- Frankel R., Getzov N., Aviam M. and Degani A. 2001. Settlement Dynamics and Regional Diversity in Ancient Upper Galilee: Archaeological Survey of Upper Galilee (IAA Reports 14). Jerusalem.
- Getzov N. 2004. Notes on the Material Culture of Western Galilee in the Early Bronze Age IB in Light of the Abu edh-Dhahab Excavations. 'Atiqot 48:35–50.
- Getzov N. 2006. The Tel Bet Yerah Excavations, 1994–1995 (IAA Reports 28). Jerusalem.
- Getzov N., Barzilai O., Le Dosseur G., Eirikh-Rose A., Ktalav I., Marder O., Marom N. and Milevski I. 2009. Nahal Betzet II and Ard el Samra: Two

- Late Prehistoric Sites and Settlement Patterns in the Akko Plain. *JIPS* 39:81–158.
- Getzov N., Lieberman-Wander R., Smithline H. and Syon D. 2009. *Horbat 'Uza. The 1991 Excavations* I: *The Early Periods* (IAA Reports 41). Jerusalem.
- Golani A. 2003. Salvage Excavations at the Early Bronze Age Site of Qiryat Ata (IAA Reports 18). Ierusalem
- Greenberg R. 1988. *The Settlement of the Hula Valley in the EB II–III*. M.A. thesis. The Hebrew University. Jerusalem (Hebrew; English summary, pp. i–vii).
- Greenberg R. 1996. The Early Bronze Age Levels. In A. Biran, D. Ilan and R. Greenberg. *Dan I: A Chronicle of the Excavations, the Pottery Neolithic, the Early Bronze Age and the Middle Bronze Age Tombs*. Jerusalem. Pp. 83–160.
- Greenberg R. 2002. Early Urbanizations in the Levant: A Regional Narrative. London.
- Guérin V. 1880. Description géographique, historique et archéologique de la Palestine III: Galilée I–II. Paris.
- Lehmann G. and Peilstöcker M. 2012. *Map of Aḥihud (20)* (Archaeological Survey of Israel). http://www.antiquities.org.il/survey/new/default_en.aspx (accessed August 1, 2014).
- Marder O., Yegorov D. and Smithline H. Forthcoming. Renewed Excavations at 'En Ruweihina ('En

- Hashomer): a New Look at Kaplan's Excavation (The Jacob Kaplan Protohistoric Excavations in Israel). *Tel Aviv University Monograph Series*.
- Milevski I. 2005. *Local Exchange in Early Bronze Age Canaan* (2 vols.). Ph.D. diss. Tel Aviv University. Tel Aviv.
- Milevski I., Marder O. and Goring-Morris A.N. 2002. The Circulation of Asphalt in Southern Canaan and Egypt during the Early Bronze Age I. In E.C.M. van den Brink and E. Yannai eds. *In Quest of Ancient Settlements and Landscapes: Archaeological Studies in Honour of Ram Gophna*. Tel Aviv. Pp. 219–236.
- Milevski I., Marder O., Khalaily H. and Sonntag F. 2006. The Flint Assemblages. In E. Yannai. 'En Esur ('Ein Asawir) I: Excavations at a Protohistoric Site in the Coastal Plain of Israel (IAA Reports 31). Jerusalem. Pp. 179–210.
- Paz S. 2006. Area SA: The Stekelis—Avi-Yonah Excavations (Circles Building), 1945–1946. In R. Greenberg, E. Eisenberg, S. Paz and Y. Paz. *Bet Yeraḥ. The Early Bronze Age Mound I: Excavation Reports*, 1933–1938 (IAA Reports 30). Jerusalem. Pp. 53–103.
- Peilstöcker M. 2003. The Plain of 'Akko from the Early Bronze Age to the Beginning of the Late Bronze Age: A Historical Geography of the Plain of Akko from 3500–1400 BC; A Spatial Analysis. Ph.D. diss. Tel Aviv University. Tel Aviv.
- Rochman-Halperin A. 1999. Excavations at Giv'at Yasaf (Tell er-Ras)—1984—1985. 'Atiqot 37:83—123 (Hebrew; English summary, pp. 172*–173*).

- Scheftelowitz N. 2002. Pottery: Early Bronze Age. In A. Kempinski. *Tel Kabri: The 1986–1993 Excavation Seasons* (Tel Aviv University Institute of Archaeology Monograph Series 20). Tel Aviv. Pp. 96–108.
- Smithline H. 2001. Chalcolithic and Early Bronze Age Caves in Asherat, Western Galilee. 'Atiqot 42:35–78.
- Smithline H. 2002. An Intermediate Bronze Age Site at Horbat Qishron. In Z. Gal ed. Eretz Zafon: Studies in Galilean Archaeology. Jerusalem. Pp. 21*–46*.
- Smithline H. 2008. Results of Three Small Excavations in Nahf, Upper Galilee. 'Atiqot 59:87–101.
- Stern E.J. and Smithline H. 2004. Horbat Zefat 'Adi. HA–ESI 116:6*–8*
- Tadmor M. and Prausnitz M. 1959. Excavations at Rosh Hanniqra. 'Atiqot (ES) 2:72–88.
- Vitto F. 1980. Tamra. HA 73:39 (Hebrew).
- Zuckerman S. 2003. The Early Bronze Age II—III Pottery. In A. Ben-Tor., R. Bonfil and S. Zuckerman. *Tel Qashish: A Village in the Jezreel Valley; Final Report of the Archaeological Excavations* (1978–1987) (Qedem Reports 5). Jerusalem. Pp. 130–160.
- Zuckerman S., Ziv-Esudri A. and Cohen-Weinberger
 A. 2009. Production Centers and Distribution
 Patterns of Khirbet Kerak Ware in the Southern
 Levant: A Typological and Petrographic
 Perspective. Tel Aviv 36:135–180.