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Çilingiroğlu, Çiler; Schwall, Christoph; Sezgin, Ece; Çakırlar, Canan

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Kababurun: investigations of an eastern Aegean village in the Late Chalcolithic to Early Bronze Age transition

Çiler Çilingiroğlu,[1] Christoph Schwall,[2] Ece Sezgin[3] and Canan Çakırlar[4]

[1]Ege University, Türkiye, [2]Austrian Academy of Sciences,
[3]Muğla Sıtkı Koçman University, Türkiye, and [4]Groningen University, The Netherlands
ciler.cilingiroglu@ege.edu.tr

Abstract

The Late Chalcolithic and Early Bronze Age (EBA) 1 are dynamic prehistoric eras, encapsulating crucial political, social and economic developments in western Anatolia and the adjacent regions. Although recent fieldwork and synthesis on this transition in western Turkey provide a general framework for this important transitional period, we still lack a holistic understanding of settlement types, subsistence patterns and socio-economic interaction zones. Discovery of the coastal site of Kababurun during surveys on the Karaburun Peninsula enhances understanding of the Late Chalcolithic–EBA 1 transition by providing data on settlement characteristics, material technologies and subsistence strategies. Kababurun is currently the only absolutely dated prehistoric site in the Karaburun Peninsula, offering a reliable chronological basis for comparisons in the region and beyond. In this article, we first introduce and then contextualise the Kababurun data within the eastern Aegean and western Anatolian research problems, then discuss how that data might contribute to a more refined understanding of Late Chalcolithic to EBA 1 communities. In particular, we argue that the site of Kababurun represents a form of community that is vitally important but poorly understood for this period: a small-scale rural settlement, connected to local networks but without a specialised function.

Özet

Geç Kalkolitik ve Erken Tunç Çağı (ETÇ) 1, Batı Anadolu ve yakın bölgelerdeki önemli politik, sosyal ve ekonomik gelişmeleri kapsayan tarih öncesinin hareketli dönemleridir. Türkiye'nin batısındaki bu geçiş dönemine ait son alan çalışmaları ve araştırmaları, bu önemli geçiş dönemi için genel bir çerçeve sunsa da, yerleşim türleri, geçim modelleri ve sosyo-ekonomik etkileşim bölgelerine ilişkin bütüncül bir anlayışa hâlâ sahip değiliz. Karaburun Yarımadası'nda yapılan yüzey araştırmaları sırasında Kababurun kıyı yerleşiminin keşfedilmesi ve yerleşim özellikleri, malzeme teknolojileri ve geçim stratejileri hakkında sağladığı veriler Geç Kalkolitik'ten ETÇ 1 dönemine geçişin anlaşılmasını kolaylaştırmaktadır. Kababurun, Karaburun Yarımadası'nda günümüze kadar mutlak olarak tarihlendirilmiş tek tarihöncesi yerleşim yeri olup bu bölge ve yakın bölgeler arasındaki ilişkiyi karşılaştırmak için güvenilir bir kronolojik temel sunmaktadır. Bu makalede, Kababurun verileri Doğu Ege ve Batı Anadolu araştırma problemleri içinde öncelikle tanıtılıp bağlamsallaştırılacak, ardından bu verilerin Geç Kalkolitik - ETÇ 1 topluluklarının daha ayrıntılı bir şekilde anlaşılmasına nasıl katkıda bulunabileceği tartışılacaktır. Özellikle, Kababurun yerleşiminin, yerel ağlarla ilişkili fakat özel bir işlevi olmayan, küçük ölçekli kırsal bir yerleşim olarak, bu dönem için son derece önemli olan ancak yeterince anlaşılmayan bir topluluk biçimini temsil ettiği iddia edilmektedir.

The turn of the fourth to the third millennium BCE encapsulates one of the most critical transitions in Anatolian prehistory since the Neolithic period. During the Late Chalcolithic, socio-cultural developments took place that led to the intensification of connectivity between communities, the consolidation of innovations (that is, metallurgy and textile production) and a differentiated settlement structure, traceable also in the western Anatolian coastal region. These processes were crucial for the subsequent EBA 1 period, encompassing the emergence of communities with regional power and fortified settlements along the western Anatolian coast and

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beyond. Recent fieldwork and synthesis on this transition make it possible to establish a general framework for the nature of sites and communities (Ivanova 2013; Ünlüsoy 2018a; Gündoğan et al. 2019; Massa, Tuna 2019; Derin 2020; Schwall, Horejs 2020).

Despite early studies suggesting a centralisation process within a two-tier settlement hierarchy in western Anatolia (Çevik 2007), we lack an up-to-date, holistic understanding of the settlement types and patterns in the region. The discovery of Kababurun, a coastal site on the Karaburun Peninsula, contributes in multiple aspects to the discussion of the Late Chalcolithic–EBA 1 temporal range in western Anatolia and the eastern Aegean. The site provides radiocarbon samples and offers insights on settlement patterns, material technologies and subsistence strategies. Evidence from Kababurun offers rare insights into smaller-scale rural settlements that, while linked into local networks of mobility and exchange, were not central nodes in these networks. Such settlements are often difficult to identify in the archaeological record and have attracted less scholarly attention than either larger fortified sites or sites with evidence for specialised activities such as metalworking. However, they are of vital importance, as it is in these kinds of smaller rural communities that much of the population would have lived.

This article offers a detailed presentation and discussion of the survey results from Kababurun, a prehistoric site in Karaburun Peninsula, in the context of western Anatolian/eastern Aegean contemporary sites. The material culture and faunal assemblage from the site allow a first-ever description and contextualisation of Karaburun communities in the late fourth and early third millennium BCE. They also accentuate the notion of the connectedness of Karaburun communities to a network that spanned the eastern Aegean islands and western Anatolia. We thus aim to embed this new data within the greater eastern Aegean context of the late fourth and the early third millennium BCE.

The Late Chalcolithic period in western Turkey

The Late Chalcolithic period (ca 4250–3000 BCE, after Schoop 2005) was arguably a dynamic era which has been well recognised in western Turkey and the eastern Aegean through fieldwork investigations at key sites (fig. 1; Schwall 2018). Relying heavily on the cultivation of cereals and animal husbandry, along with hunting, fishing and shell-fishing, communities established well-organised settlements with substantial architecture, sustained a flow of raw materials and/or finished products and were specialised in essential new technologies such as metallurgy and textile production, to which the increasing impact of woven textiles attests (Schwall, Horejs 2020). Stable communication and exchange systems seem to have been important during the Late Chalcolithic period, throughout which, especially during the fourth millennium BCE, an intensification and consolidation of these developments is observable. This is also reflected by the increasing number of settlements of the second half of the fourth millennium BCE that stayed occupied until the EBA.

For a long time, sites like Kumtepe (Koşay, Sperling 1936; Sperling 1976; Korfmann et al. 1995) in the Troad and Beycesultan (Lloyd, Mellaart 1962), Aphrodisias-Pekmez (Sharp Joukowsky 1986), Bağbaşı (Eslick 1992) and Kuruçay Höyük (Duru 1996) in the southwestern Anatolian hinterland provided our basic knowledge about the western Anatolian Late Chalcolithic period. Besides these excavations, Poliochni (Lemnos; Bernabò-Brea 1964), Emporio (Chios; Hood 1981–82), and Tigani (Samos; Felsch 1988) on the eastern Aegean islands are essential for understanding and assessing developments during this time frame in a broader perspective. In recent decades, knowledge about the western Anatolian Chalcolithic has expanded due to new excavations and field surveys (summarised in Schwall 2018: 29–40). The data available for this important period have been recently reviewed, slowly filling the gaps in our knowledge (Schoop 2005; Düring 2011; Schwall 2018).

In the context of the present study, in particular the excavations at Bakla Tepe (Erkanal, Özkan 1999; Şahoğlu 2008: 484–85; Erkanal, Şahoğlu 2012a; Şahoğlu, Tuncel 2014), Çukuriçi Höyük (Horejs 2014; Schwall 2018; Schwall, Horejs 2018), Liman Tepe (Erkanal 2008; Erkanal, Şahoğlu 2012b; Tuncel, Şahoğlu 2018) and Yassıtepe Höyüğü (Caymaz 2013; Derin 2020; Caymaz 2021) in the central western Anatolian coastal region provide much sought-after fresh data on the late fourth millennium BCE. Especially, the radiocarbon dates support more precisely the relative chronological position of the material assemblage (Şahoğlu, Tuncel 2014: 76, table 1; Schwall 2018: 167–70; Tuncel, Şahoğlu 2018: 527, table 53.1), which previously depended on the absolute dating of the Troad sites or the southwestern Anatolian hinterland.

Despite the increasing evidence on the Late Chalcolithic period, however, the results are far from offering a thorough and complete picture of this period in western Anatolia. Recent detailed material studies from settlements in the central western Anatolian coastal region (Bakla Tepe, Çukuriçi Höyük, Liman Tepe, Yassıtepe Höyüğü; for references see above) revealed that apart from more general and widespread traditions, an unprecedented degree of regionalism is to be expected, as indicated by the distribution of pottery styles (Schwall 2018: 262–68). Moreover, apart from a few Late Chalcolithic sites (summarised in Schwall 2018: 278–79), basic analyses of botanical and zoological remains are still lacking, although

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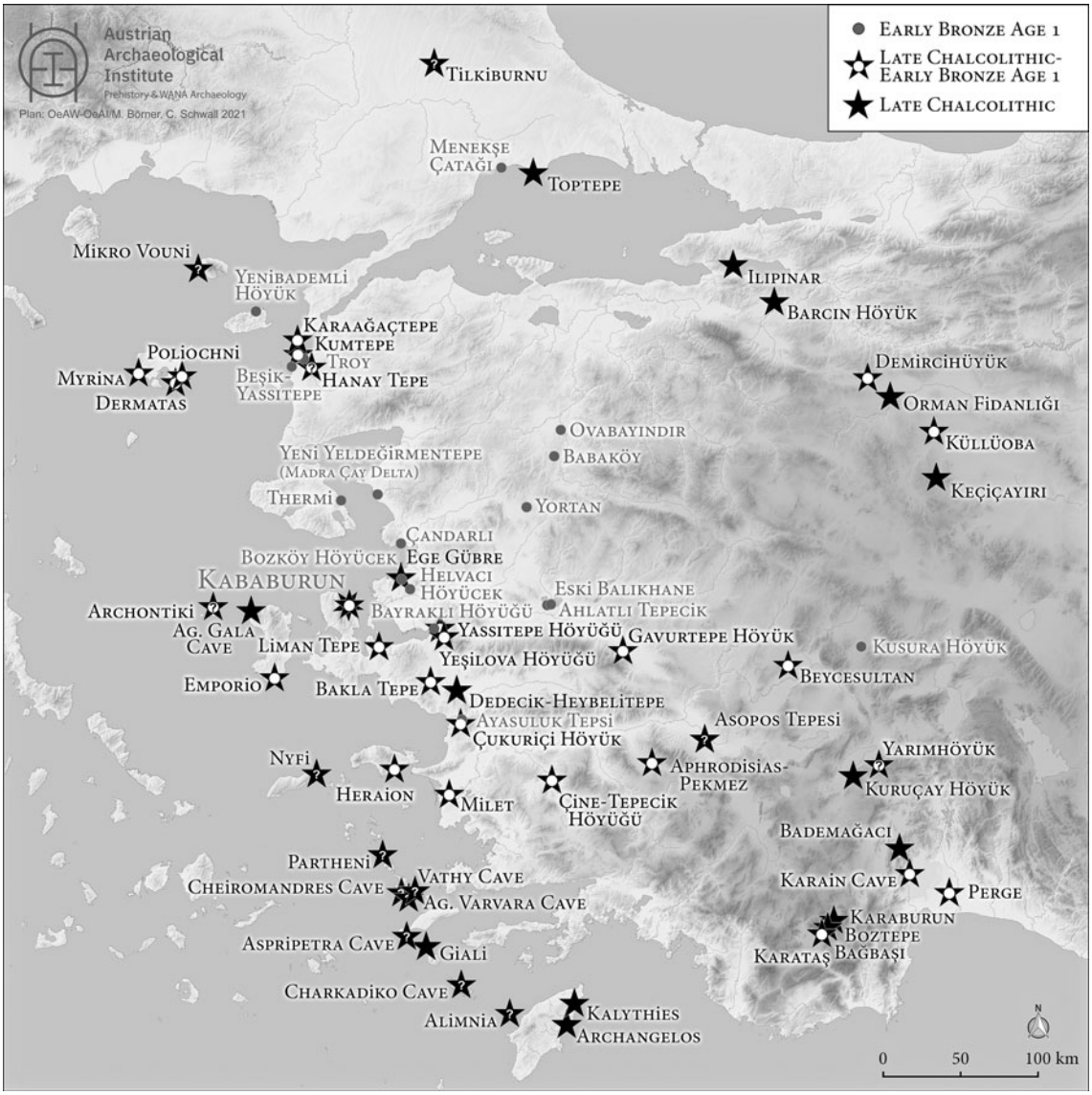

Fig. 1. Map of Kababurun and other western Anatolian and eastern Aegean Late Chalcolithic–Early Bronze Age 1 sites mentioned in the text.

they would be vitally important for discussing in detail the subsistence strategies of settlements in different regions of western Anatolia. The site of Kababurun therefore offers much sought-after fresh archaeological data concerning the Late Chalcolithic period and the Early Bronze Age 1.

The site: Kababurun

Kababurun (designated site number POI.16.47) was discovered by the Karaburun Archaeological Survey Project (KASP) during the 2016 field season, near the village of Ambarseki (fig. 2). The material on the surface allowed for a relative chronological identification of the site as Late Chalcolithic and Early Bronze Age. Because of its significance, further visits to the site were organised in 2017 and 2018. The local name of the promontory 'Kababurun' provided the name for the site.

Archaeological remains are located on a natural limestone promontory oriented towards the northeast, above the coastline at an altitude of 16m. The site covers 0.11ha, but the original size of the settlement was probably greater. The cultural layers have been heavily damaged by the sea and by wind due to the site's location on the coastline, where it is exposed to northerly winds (fig. 3). Today, most archaeological finds are found scattered over the bedrock, without any archaeological context. In one area where the cultural deposits were exposed in a ca 1m-thick section, we could observe in situ archaeological features such as wall foundations and midden deposits containing animal bones and clusters of limpets (*Patella* sp.) (fig. 4). The faunal bones, which served as the basis for the radiocarbon samples presented here, were all collected from different locations in the exposed section in this area.

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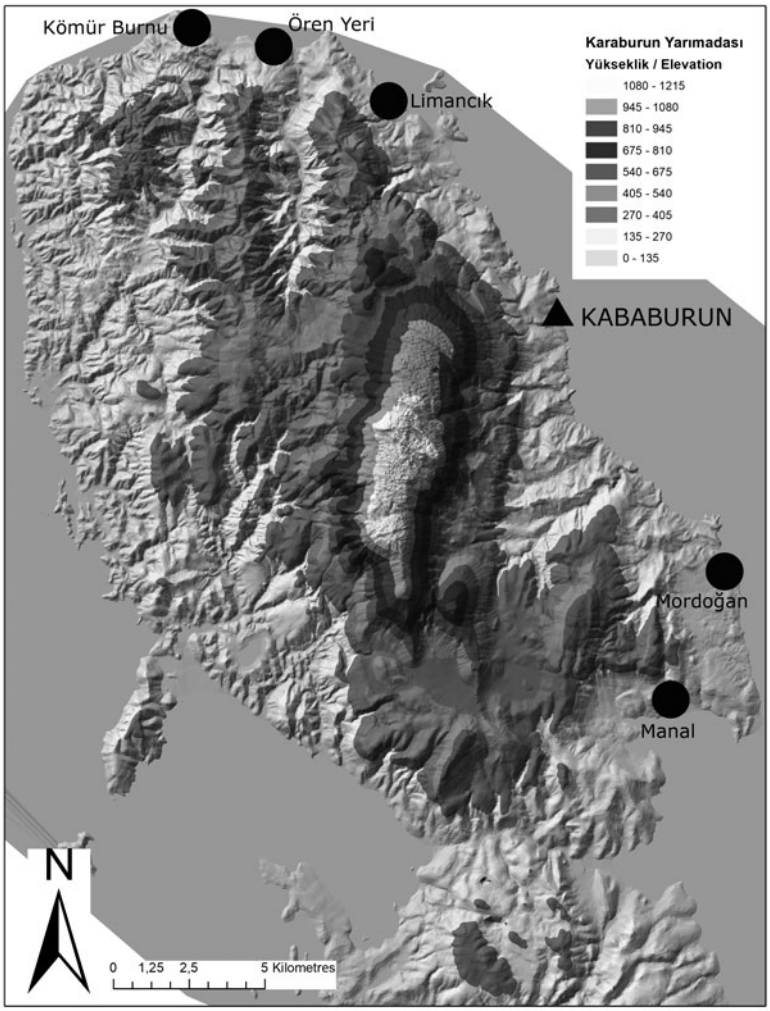

Fig. 2. Map of the Karaburun Peninsula showing the location of Kababurun and all EBA sites identified by KASP.

The material collected from the site originates from the surface of the limestone bedrock and the exposed section containing cultural deposits. Pottery was sampled randomly, targeting mainly specimens that provided diagnostic features that could be dated. Grinding stones, pierced objects and chipped stones were collected for further documentation. Molluscs appeared both on the limestone surface and in the exposed profile. Those collected for the faunal study came from the surface. So as not to damage the exposed profile where a clustered context of *Patella* sp. specimens was visible, faunal bone samples were hand-picked from the profile for radiocarbon dating.

Only 70m to the north of the site of Kababurun, there is another area where prehistoric pottery and chipped stones were identified in 2016 and 2017; the project called this POI.16.48. This area contains no visible architectural features. All finds were discovered scattered over the limestone bedrock. There is currently no physical connection between Kababurun and this scatter of prehistoric finds. However, we suspect that exposure to wind and sea may have disturbed the original formation of the coastline here. In that case, it seems possible that the two sites were previously connected. Nevertheless, although it is discussed briefly in this article in relation to Kababurun, the preservation and quality of archaeological finds from POI.16.48 do not provide a firm comparison or dating.

Archaeological finds from Kababurun

The site is heavily exposed to sun, wind and waves; therefore, the archaeological materials collected during the survey have worn surfaces, partially covered with carbonates. In total, 143 finds were collected during the survey, consisting of 80 diagnostic and 39 ceramic body sherds, 14 chipped stones, six perforated stone objects, two ground-stone objects and two grinding stones made from basalt or andesite. In addition, we collected 29 faunal specimens for zooarchaeological study and five bone samples for radiocarbon dating (table 1).

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Fig. 3. View of Kababurun from the south.

Fig. 4. Exposed section with an in situ context of Patella *sp. in Kababurun.*

Kababurun pottery assemblage

All diagnostic sherds from the site have been investigated typologically and technologically using a standard data sheet in an MS Access-based relational database used initially by Çilingiroğlu (2012) and subsequently adapted for KASP. Diagnostic sherds include 44 rim sherds, 29 handles/lugs, three decorated body sherds, two bases, one foot and a specimen defined as 'indeterminable' which may be a rim fragment.

Ware groups. The entire pottery assemblage is hand-made. The surfaces are heavily worn, making the identification of the surface and surface treatment difficult in some cases. Ware determinations are based on the texture of the clay, the size of non-plastic inclusions, the intensity of non-plastic inclusions, firing, wall thickness, surface treatments and outer surface colour (table 2).

We identified three distinct ware groups based on these qualities: 1) Grey-brown ware: n=39; 2) Red-brown ware: n=40; 3) Cream-colored and burnished ware: n=1. The assemblage rarely contains hard-fired sherds. Only 10 sherds among the medium–coarse grey-brown wares are well fired, whereas the rest are either moderately (n=18) or poorly (n=11) fired. In the fine–medium reddish-brown ware group, 7 are hard fired, 27 moderately fired and 6 poorly fired. Among the three identified ware groups, the reddish-brown ware is the best quality, with thin walls, hard firing and traces of a surface treatment like slip or burnish (figs 5, 6).

The majority of the pottery sherds have single-layered cores. Only 17 sherds display double- or triple-layered cores. Single-layered cores are mainly dark grey and dark brown. Other core colours, such as brown, light brown, reddish brown, orange-brown and grey, are also recorded.

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Pottery	*Rim sherd*	*Handle/lug*	*Base*	*Foot*	*Decorated body sherd*	*Bodysherd*	*Other*
	44	29	2	1	3	1	39
Ground-stone objects	*Grinding stones*		*Ground-stone objects*		*Pierced stone pebbles*		
	2		2		6		
Chipped stone	*Flake*		*Blade*		*Scraper*		
	11		1		1		
Total	n=142						

Table 1. Kababurun surface finds by category.

Ware groups	*Red-brown ware*	*Grey-brown ware*	*Cream-coloured burnished ware*
Fine/Medium	15	10	1
Medium/Coarse	22	20	-
Coarse	3	9	-

Table 2. Relationship between ware groups and vessel quality at Kababurun.

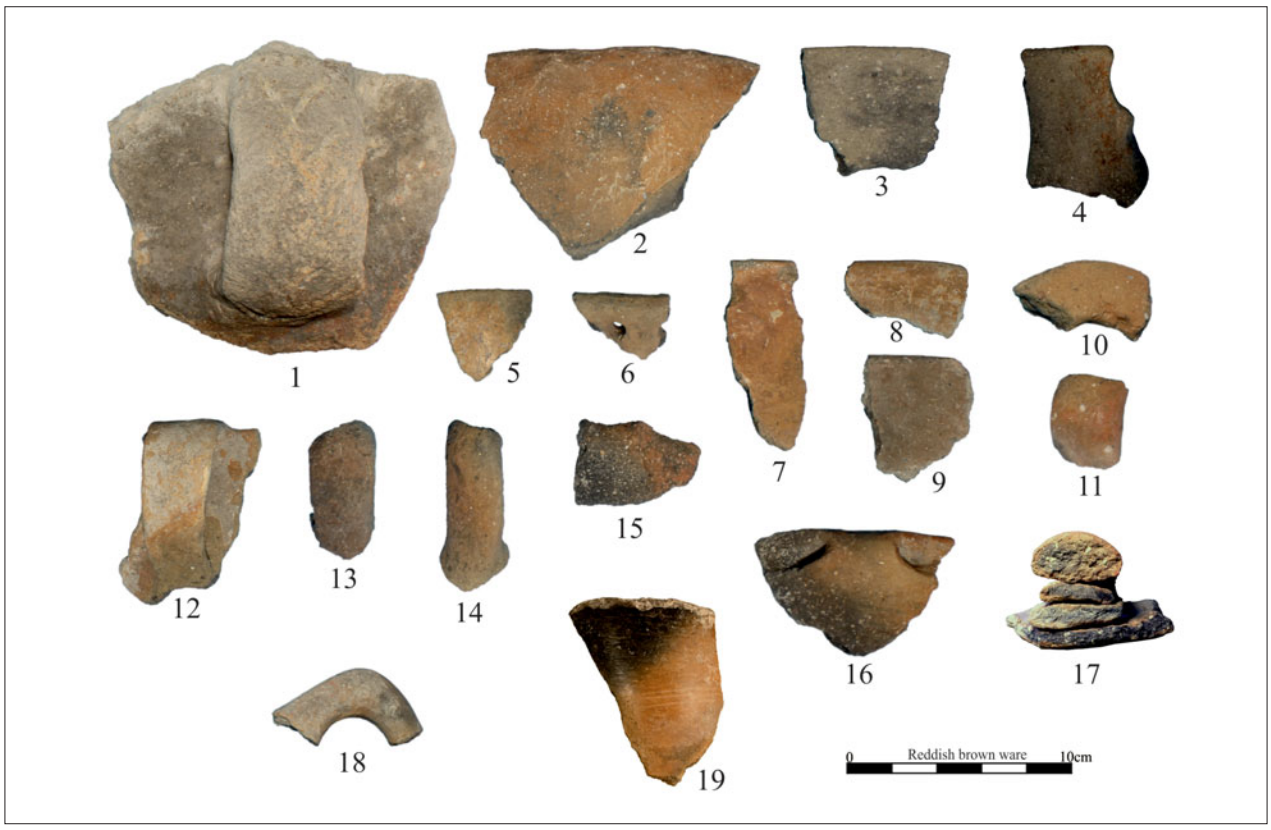

Fig. 5. Reddish-brown wares from Kababurun.

The pottery has at least two different kinds of non-plastic inclusions in its paste. Since the surfaces of most of the pottery are worn, non-plastic inclusions are easy to identify. Mineral non-plastic inclusions such as sand and grit dominate the assemblage. Besides these, mica, lime, chaff, quartz and shell inclusions are also macroscopically observed. Mica and chaff inclusions are mainly associated with fine and fine–medium reddish-brown wares. At least one reddish-brown medium ware contains quartz temper in its paste. Shell temper is observed in a grey-brown sherd.

The pottery is porous. Pores are generally formed due to the thin, long gaps left by the disappearance of chaff temper during the firing process. In some sherds, the pores extend up to 5mm.

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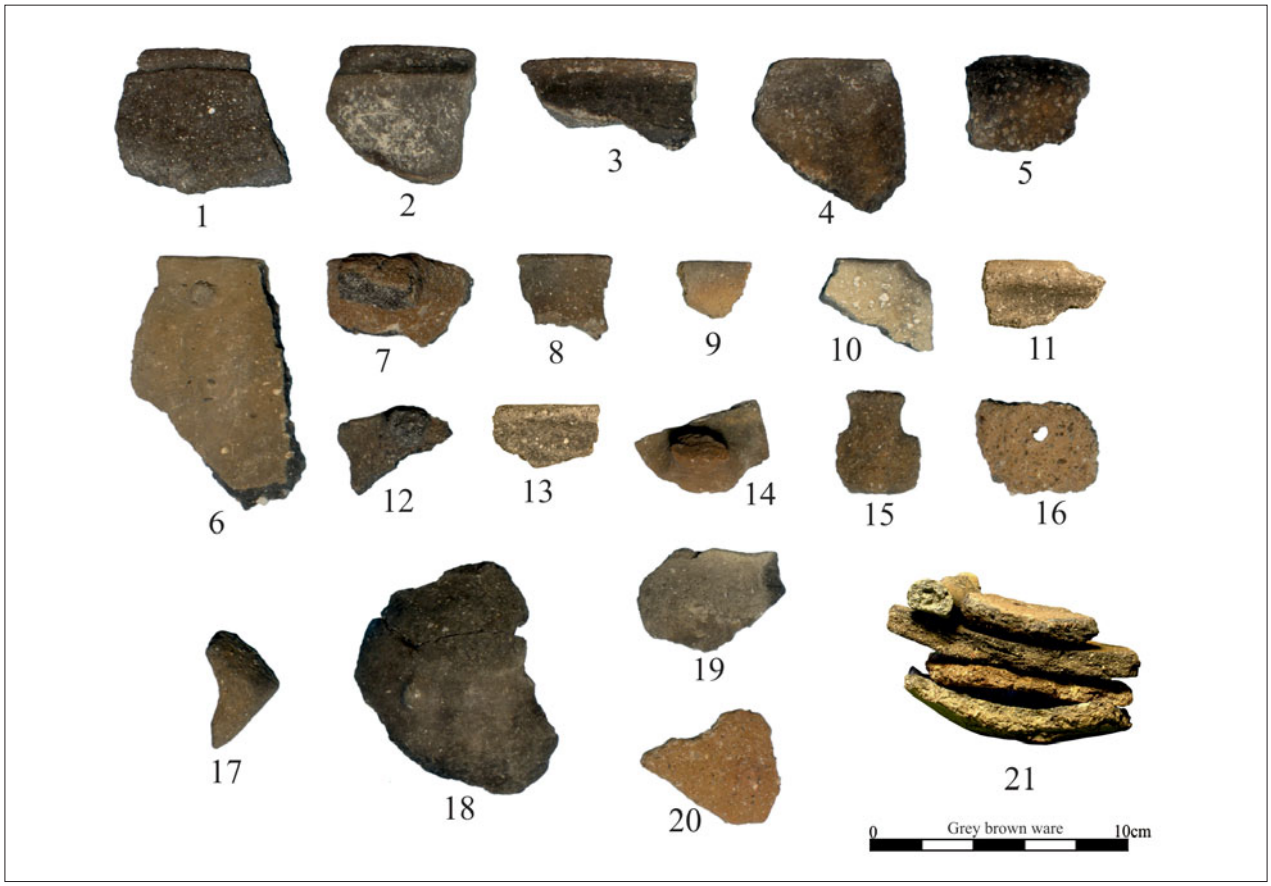

Fig. 6. Grey-brown wares from Kababurun.

The distribution of surface colour provides clues about ceramic technology. These are classified as even (n=39) and uneven (n=33) surface-colour distributions. Outer surface colour is generally brown, red–reddish brown, light brown and dark brown. Brown is the most common colour in interior surfaces, with light brown, red–reddish brown, dark brown and grey–dark grey making up the colour spectrum for inner surfaces.

Only 22 of the pottery sherds show traces of slip as a thin layer separate from the paste (fig. 7). Of these, 12 had traces detected on both the inner and the outer surfaces. Three slipped sherds belong to the grey-brown group and one to the cream-coloured burnished ware group. All other pieces are from the reddish-brown ware group.

In total, 27 pottery sherds carry traces of burnishing. Sixteen of these show burnishing marks only on the outer surface; ten have burnishing on both surfaces. Fifteen of the reddish-brown examples and 11 of the grey-brown pieces are burnished.

Shapes. The majority of the analysed sherds belong to open vessels (fig. 8). Sixteen sherds are identified as jars or jugs, 17 sherds belong to deep bowls, 12 sherds are conventional bowls and one sherd belongs to a shallow bowl.

Most sherds are everted rims. Since the majority are very fragmented, their shapes remain undefinable. Among the shapes, carinated bowls, bowls with trumpet or tubular lugs, holemouth jars, necked jars and knobbed vessels stand out.

Four of the vessels belong to the so-called cheese pot category, with small perforations aligned under the rim (figs 6.16; 9.7, 9, 12, 13). There are three perforations visible on one of the specimens (figs 5.6; 9.13), and four perforations are preserved on the sherd in fig. 9.9, just below the rim.

There are only three bases in the assemblage: two are flat (fig. 9.27), and one is a foot of a tripod (fig. 9.25).

In total, there are 43 handles or lugs. Thirty of these are recorded as handles, which generally exhibit an asymmetrical form. Due to the poor preservation conditions and small size, the typological characteristics of some handles could not be determined. Twenty-eight are vertically placed and two are of the horizontal type. Almost all of them belong to the loop handle type. Oval handle profiles (n=26) are more common than rounded profiles (n=4). Two handles can be described as elbow-handles (figs 5.18; 6.17; 9.28, 29).

The inventory includes 13 lugs. The most common type is the pierced, horizontal lug on the rim (n=7). This type of lug is mostly attached to carinated vessels. The

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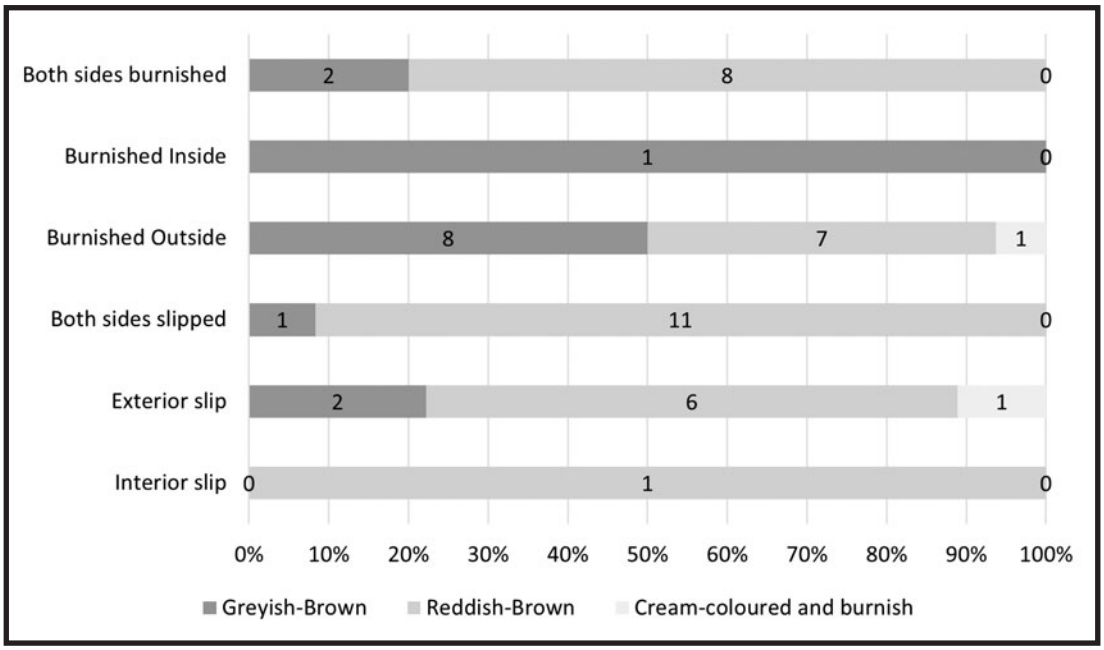

Fig. 7. Surface treatment of different wares from Kababurun.

width of the string holes varies between 5 and 8mm. Six are horizontally perforated (figs 5.15, 16; 9.1–6) and one is vertically perforated (figs 6.15; 9.8). One lug has a rectangular shape and rises vertically above the rim. Moreover, the lug has a vertical perforation positioned closer to the outer part of the rim. The diameter of the perforation is about 4–5mm. The attachment itself is broken, its form is uncertain, but the preserved dimensions are 22×22mm.

Decoration. Three body sherds are decorated. The decorations are incised (n=2) and painted (n=1). The incised decoration is observed on two handles (figs 5.1; 9.16, 19). These contain chevron motifs on the outer side of two vertical handles. The painted decoration is seen on the neck of a jug or jar with an everted rim (fig. 8.6). It consists of three parallel lines in white paint (fig. 5.19).

Another noteworthy group of decorated pottery is the knobbed vessels. Single knobs are seen on both open and closed vessels (figs 6.6, 18–20; 9.10, 11, 14, 15). They are located either on the belly or on the carination, with diameters ranging from 11 to 14mm. Different techniques were used to manufacture knobs. One type was made simply by sticking a small piece of clay onto the body (figs 6.6; 9.10); another was formed by exerting force with a finger or round object on the inner surface before the pot was fired (figs 6.20; 9.15).

Pottery comparisons. The pottery assemblage contains fabrics and morphological features which are indicators for a relative chronological dating of the site. The variety of shapes include (shallow) bowls, narrow-mouthed vessels, necked vessels, beak-spouted jugs, jars, 'cheese pots', a foot and variations of handles (knobs, horizontal handles, lugs). In addition, a few specimens carry decorations of different types (knob applications, and incised and white painted decoration).

Especially significant for dating is the presence of carinated bowls (figs 6.1–2; 8.2, 3, 5, 25; 9.6, 14), which are widespread in western Anatolia and on the eastern Aegean islands during the Late Chalcolithic period (Schwall 2018: 267–68, fig. 112). One rim fragment (fig. 8.25) has a softer carination, which is comparable with pottery found at Beycesultan LC3–4 (Lloyd, Mellaart 1962: 88–101) or Demircihüyük Ware F/G (Seeher 1987: pl. 25). Other rims (figs 8.2, 3, 5; 9.6, 14) display sharper carination, also known from contemporary sites like Poliochni nero on Lemnos (Bernabò-Brea 1964: pls 5–6; Tiné 1997: 38, pl. 1) and Çukuriçi Höyük VII (Schwall 2018: pl. 9.210). Additionally, horizontal tubular lugs on bowl rims (fig. 9.1–6) are well-known from the Kumtepe IB and Troy I assemblages (Sperling 1976: pl. 74.402, 408, 410, 421; Blegen et al. 1950: pls 243.27–33; 244.1–10). Striking is the complete lack of '*Knickrandschalen*' at Kababurun, which could possibly be explained by the relatively small sample size.

Three rim fragments of so-called cheese pots (figs 5.6; 9.9, 12, 13) do not contradict a chronological position dating to the fourth millennium BCE but allow a wider temporal range, from the Middle Chalcolithic to the EBA, as there is evidence of this type at multiple sites in the Aegean and adjacent regions (Schwall 2018: 262–63, fig. 108).

That the date is probably later, pointing to the EBA, is supported by a fragment of a beak-spouted jug (figs 5.4; 8.17). Although this type of vessel is known from coastal western Anatolian Late Chalcolithic contexts like

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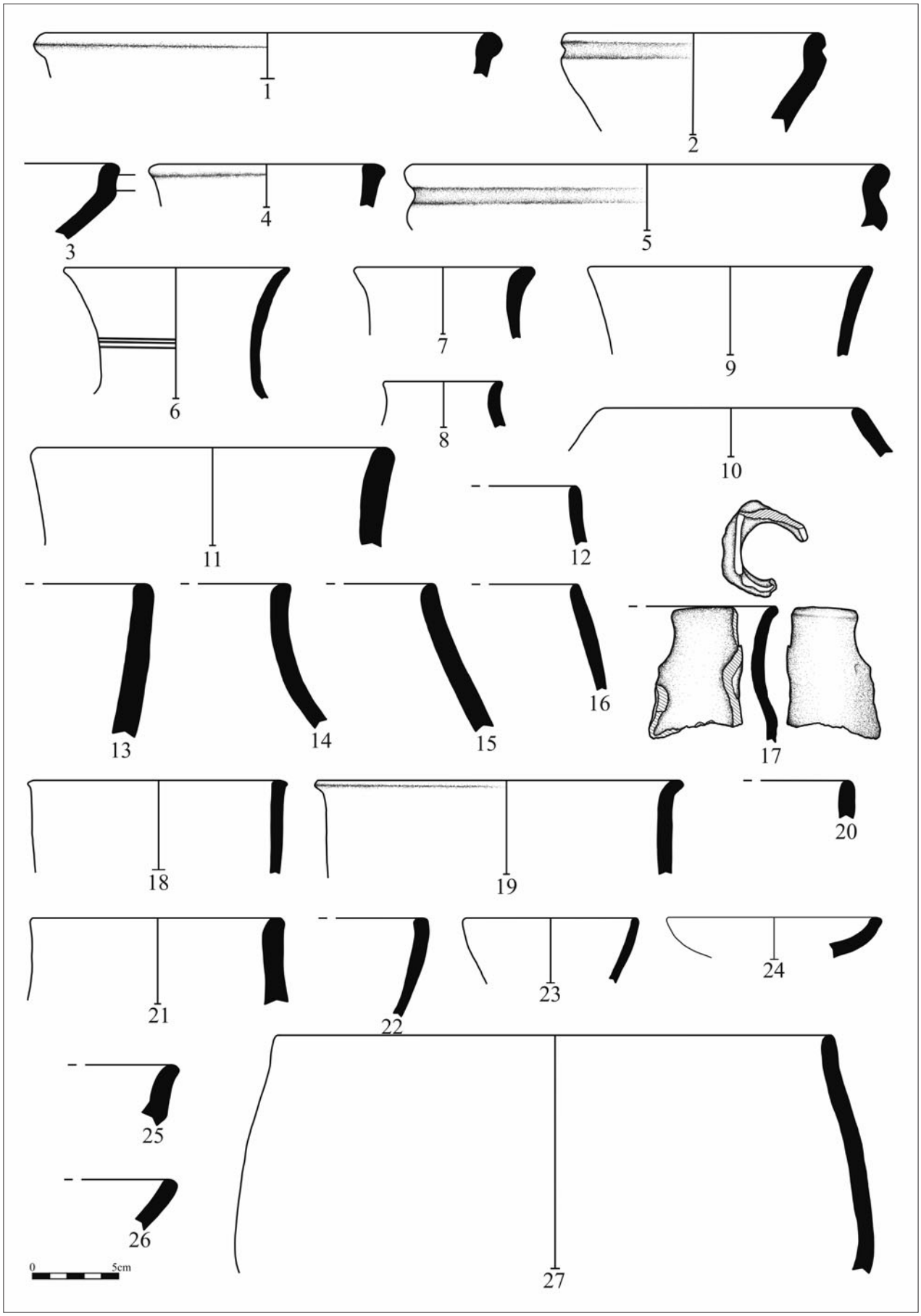

Fig. 8. Late Chalcolithic–Early Bronze Age 1 pottery from Kababurun. For details, see catalogue.

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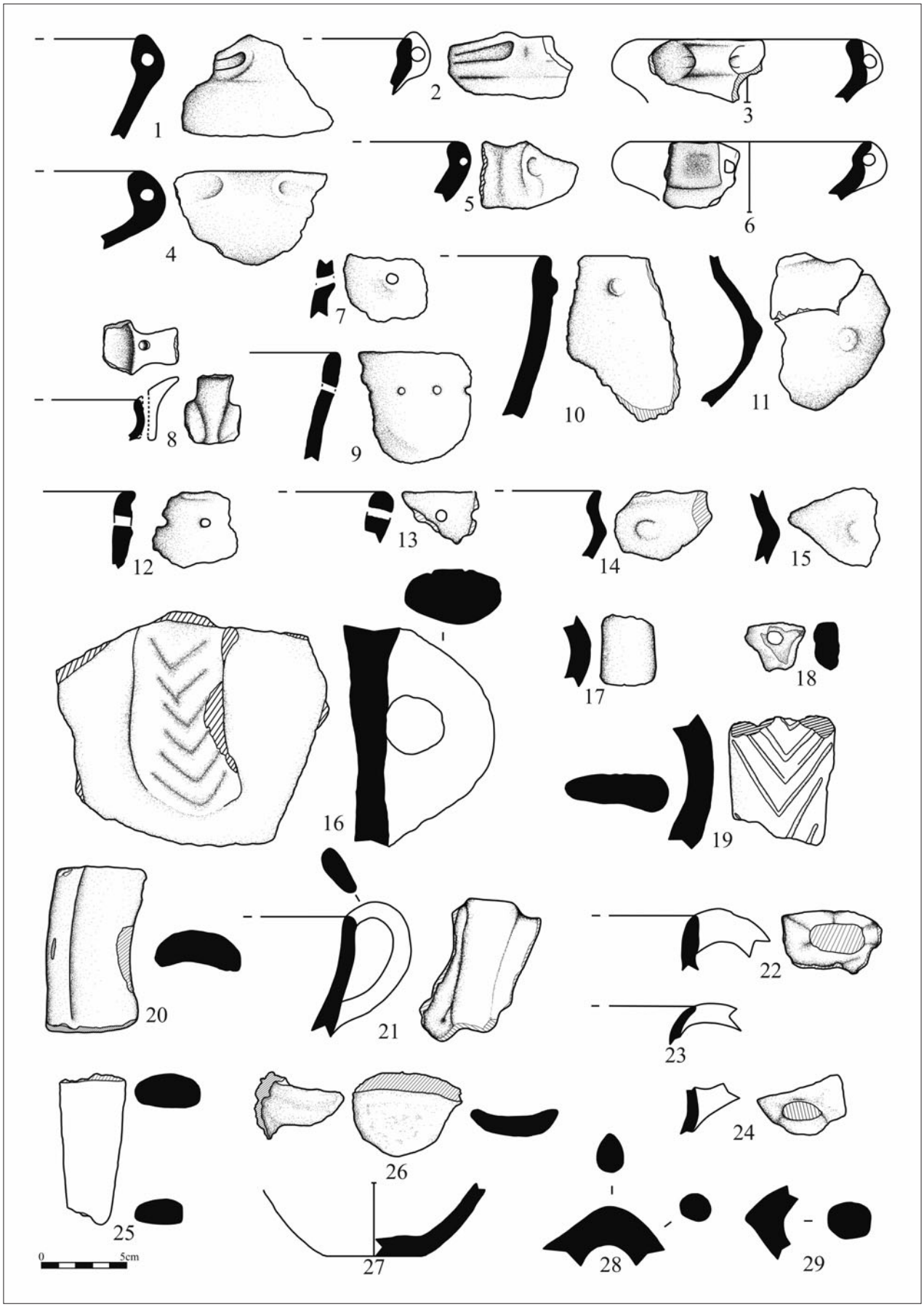

Fig. 9. Late Chalcolithic–Early Bronze Age 1 pottery from Kababurun. For details, see catalogue.

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Balka Tepe, Liman Tepe and Çukuriçi Höyük (Şahoğlu, Tuncel 2014: 75; Tuncel, Şahoğlu 2018: 524, fig. 53.12b; Schwall 2018: 194, fig. 73.Ka1–2), there are differences. The preserved part of the sherd shows a cut-off spout with an uneven transition from spout to neck. Proper comparisons are known from Çukuriçi Höyük, indicating an EBA 1 date (Röcklinger 2015: pls 8.Au2; 29; Röcklinger, Horejs 2018: 90, fig. 7). Nevertheless, the slightly narrowing spout could also indicate a date that is later than EBA 1, as indicated by the vessels from the EBA 1–2 Yortan cemetery (Kâmil 1982: pls 9–12).

A fragment of a foot with an oval cross section (fig. 9.25), belonging to a tripod cooking pot, also supports a chronological position in the late fourth to early third millennium BCE (Schwall 2018: 267, 269, fig. 113). This is indicated by examples from Aphrodisias-Pekmez LC 2 (Sharp Joukowsky 1986: 539, fig. 389.23–24) and Troy I (Blegen et al. 1950: pl. 245.34–37).

A comparable classification is also acceptable for handles and lugs found during the surveys. The fragment of an elbow-handle (figs 6.17; 9.29) finds good comparisons in the material from Troy I (Blegen et al. 1950: pl. 245.17–20). The same is evident for a horizontal handle (figs 5.18; 9.28) which can be found, for example, at Aphrodisias-Pekmez LC 4 (Sharp Joukowsky 1986: 559, fig. 402.9, 34) as well as at Troy I (Blegen et al. 1950: pl. 245.9). One lug with an approximately semi-circular shape and a slightly curved section (fig. 8.26) resembles a lug which was found at Late Chalcolithic Bağbaşı in southwestern Anatolia (Eslick 1992: pl. 50.171). Also notable among the handles is a badly preserved, presumably small, trapezoidal and perforated lug of a bowl (figs 6.15; 9.8). However, without perforation, the lug is more reminiscent of fishtail-shaped handles, which are attested at Çukuriçi Höyük VIb and Vb (Schwall 2018: 218, pls 19.528, 36.1003) and Liman Tepe VIIa (Erkanal et al. 2016: 331, 339, fig. 7), all dating to the Late Chalcolithic period.

Regarding decoration, knob applications were attached to four fragments below the rim (figs 6.6; 9.10, 14) or to body sherds (figs 6.18; 9.11, 15). Knob applications are less useful than other features for relative dating because decoration of this kind has been common since the Middle Chalcolithic period. During the Late Chalcolithic, knob applications are known, for example, from Heraion 6a of Samos (Kouka 2015: 240, fig. 6c; Menelaou, Kouka 2021: fig. 3). At Çukuriçi Höyük, plastic-knob decoration is common during the Late Chalcolithic (Schwall 2018: pl. 14.366) and EBA 1 periods (Röcklinger 2015: pl. 20.WS5B).

Remarkable is a rim fragment, presumably belonging to a jug, with white painted decoration consisting of three parallel, horizontal lines (fig. 8.6). In general, white painted decoration is known from the Middle Chalcolithic period onwards, and it is widespread in western Anatolia and the eastern Aegean (Schwall 2018: 264–65, fig. 110). However, close comparisons for the arrangement of parallel horizontal lines on the neck are well known from Late Chalcolithic sites such as Liman Tepe VIIa (Tuncel, Şahoğlu 2018: 524, fig. 53.12b), Çukuriçi Höyük VIa and Vb (Schwall 2018: pls 26.641, 645; 36.998–99) and Poliochni nero (Bernabò-Brea 1964: pl. 1f).

Incised decoration was detected on two handles (figs 5.1; 9.16, 19) with multiple chevrons pointing to the bottom of the vessel. Even though the motif of incised chevrons on handles is known from Middle Chalcolithic rod handles (for example, Çine-Tepecik Höyüğü IV: Günel 2014: 94, pl. 1B; 2018: 541, fig. 55.3), closer parallels were found in Late Chalcolithic and especially EBA contexts. Similar handles found at the Heraion of Samos (Late Chalcolithic and EBA; Kouka 2015: 240–41, figs 6f, 7g), Thermi on Lesbos (Lamb 1936: pl. 14), Emporio V on Chios (Hood 1981–82: 236, fig. 116.8, pl. 79d) and Çukuriçi Höyük III (Röcklinger 2015: pl. 11.H2C) provide closer comparisons.

On the basis of the comparisons presented here, an earlier, preliminary assessment that assigned the Kababurun pottery assemblage to the Chalcolithic and EBA (Çilingiroğlu, Dinçer et al. 2018: 322–23; Çilingiroğlu, Dinçer et al. 2019: 411; Çilingiroğlu, Gürbıyık et al. 2019: 378) can now be made more precise. The pottery contains diagnostic forms and decorations which are indicative of the Late Chalcolithic and EBA 1 periods. Even though some shapes and decorations are attested through the millennia (that is, the 'cheese pots', white painted pottery), typological comparisons from sites in western Anatolia and the eastern Aegean suggest a reliable chronological span from the second half of the fourth millennium BCE to the first quarter of the third millennium BCE. This dating is supported by parallels from sites with contemporary occupations in the mid/late Late Chalcolithic (Aphrodisias-Pekmez LC2–4, Bağbaşı, Bakla Tepe V, Beycesultan LC3–4, Çukuriçi Höyük VII–Vb, Demircihüyük ware F/G, Heraion 6a, Liman Tepe VIIa and Poliochni nero) and the EBA 1 (Çukuriçi Höyük III, Emporio V, Thermi I–IIIA, Troy I). The fragment of a beak-spouted jug could probably extend the timeframe to the EBA 2 period, as indicated by the vessels from Yortan cemetery.

Regarding the spatial distribution of pottery comparisons, the best-fitting parallels were identified at different sites in the central and northwestern coastal regions and on the offshore islands in the eastern Aegean. Despite the limited pottery assemblage from the Kababurun survey, however, comparisons were also found at inland western Anatolian sites: Demircihüyük in the north, Aphrodisias-Pekmez and Beycesultan, situated in the Büyük Menderes valley, and Bağbaşı in southwestern Anatolia. This fact fits

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well with other Late Chalcolithic and EBA 1 coastal sites, which seem to have been connected with sites over the sea and by inland routes, as indicated by pottery distributions (Schwall 2018: 262–71; Fidan et al. 2015: 68–69).

Chipped and ground stone

Survey at Kababurun produced 13 chipped-stone items (fig. 10.6–13). These are produced from different raw materials such as chert and sandstone. Most blanks are flakes (n=10) with one additional cortical flake. Two blades have been identified in the assemblage. The number of tools, that is, retouched blanks, is very low (n=3). There is one retouched blade, one retouched flake and one scraper with scalar retouch on its left dorsal side.

No cores were identified, and all material seems to have arrived at the site as finished products. The assemblage does not show any period-specific tool types, and no sickle blades were found. Just to the north of the site, however, there is another site, as mentioned, which we designated POI.16.48. Survey there produced two sickle blades (fig. 10.14) and other flakes and chips. The dating of these chipped-stone items is not certain, but we are inclined to suggest that Kababurun and POI.16.48 are contemporary and were presumably physically connected to each other in the past.

Studies show that Late Chalcolithic and EBA 1 period chipped stone is very much dominated by a blade and bladelet industry (Kolankaya-Bostancı 2008). The small sample size at Kababurun does not allow for a meaningful techno-typological comparison with nearby contemporary sites.

The lack of obsidian at Kababurun, although it may be a function of our sampling, is noteworthy for two reasons. First, our work on the Karaburun Peninsula revealed obsidian, both Melian and Cappadocian, at Neolithic and Early Bronze Age sites, implying that Karaburun communities were an integral part of Aegean and Anatolian exchange networks (Çilingiroğlu, Dinçer 2018; Ünlüsoy 2018b). Second, obsidian is a frequent component of Late Chalcolithic and EBA 1 sites in coastal western Turkey (Yeğingil et al. 2020; Derin et al. 2020). For instance, the percentage of obsidian at Çine-Tepecik hits 76% of the entire production during the Middle Chalcolithic, whereas at EBA 1 Bakla Tepe, it constitutes up to 46% (Kolankaya-Bostancı 2008; Kolankaya-Bostancı et al. 2020). The discovery of an obsidian-tool workshop at the EBA 1 site of Bakla Tepe is an indication that coastal Anatolian communities engaged in the circulation and acquisition of non-local raw materials in chunks via maritime networks (Kolankaya-Bostancı 2006). Although we know that Karaburun Peninsula had been part of Aegean exchange networks at least since the late seventh millennium BCE, the Kababurun Late Chalcolithic–EBA 1 community seems to have restricted itself to locally available raw materials such as chert and limestone, both readily accessible as chunks at little distance from the site (Çilingiroğlu et al. 2020).

Our surveys at Kababurun yielded ten ground-stone objects. These comprise two grinding stones (fig. 10.15, 17), two ground-stone objects (fig. 10.16) and six pierced stone pebbles.

One group of objects that is peculiar to the site is especially worth highlighting. These are small, amorphous limestone pebbles which carry human-made, circular holes in their top-centres (fig. 10.1–5). Their weights range from 3.6 to 55.4g. The ubiquity of this object type at the site indicates its relevance for the daily life of the community. We suggest they may have been used as fishing-net weights. Almost identical objects have been discovered at the Neolithic sites of Atlit Yam in Israel (Galili et al. 2013) and Pendik in Turkey (Pasinli et al. 1994: 151; Gölbaş 2010). In the eastern Mediterranean, lead and stone fishing-net sinkers are known from the Epipaleolithic period onwards (Nadel, Zaidner 2002; Galili, Rosen 2007: tab. 1; Britsch, Horejs 2014: 234–38). A stone object (6.53g) that is similar in form and was identified at Çukuriçi Höyük VII as a 'pendant' (Schwall 2018: 565) and similar but unpierced, notched pebbles from Troy, which were initially identified as 'idols', could also be fishnet sinkers (Zimmermann 2004).

Another stone object, with an elliptical form and a central hole, may be an instrument like a fish gorge (2.77g). A similar pierced and polished stone object is known from Çukuriçi Höyük Va (Schwall 2018: pl. 89), but its exact function remains unclear.

Faunal remains

Twenty-nine mammal-bone, tooth and mollusc-shell specimens, including samples for radiocarbon analysis, were collected (fig. 11). Faunal analysis was conducted at the site utilising expert anatomical knowledge and digital images of skeletal parts. Bones and shells were chalky, and the teeth were fragile and fragmented. Despite the small sample size and poor preservation, identification to lower taxa was possible for seven molluscs and ten mammal specimens. The remaining 12 specimens are also mammals, but they are too fragmentary to identify genera or species. Site location and the abundance of molluscs and possible net sinkers suggest that the faunal spectrum includes fish, but fish bones are rarely recovered without proper excavation and especially sieving.

Six mollusc shells were limpets (*Patella* sp.), and one 'murex' snail (*Hexaplex trunculus*) was identified as well. As noted above, limpets are visible in several exposed deposits. The molluscs collected were almost complete specimens. Limpets live on rocky coasts with wave action in fully marine waters. Murex snails move across various surfaces on the sea bottom.

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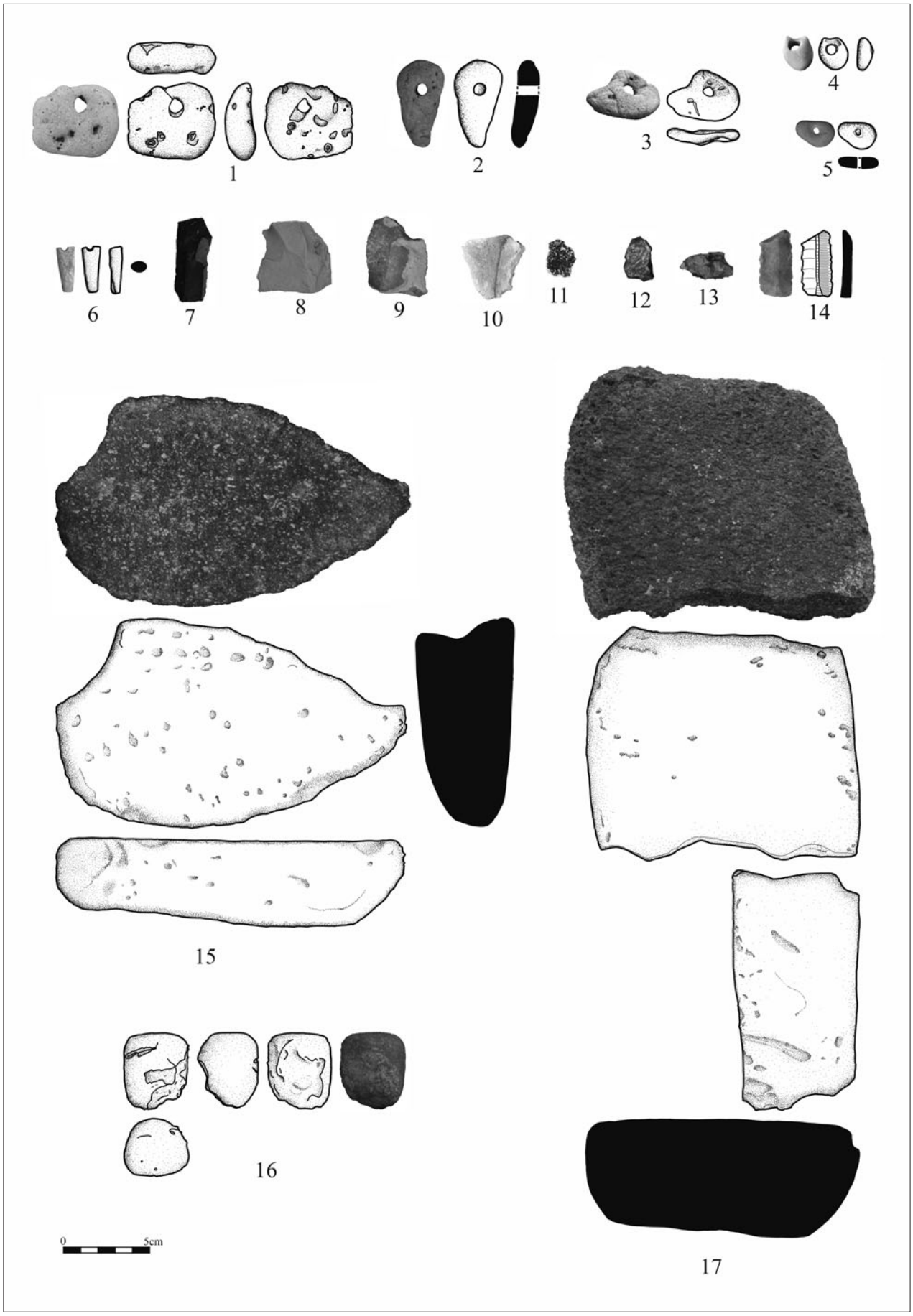

Fig. 10. Late Chalcolithic–Early Bronze Age 1 small finds: 1–5. net sinkers; 6. fish gorge (?); 7–14. chipped stones; 15–17. grinding instruments. For details, see catalogue.

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The identified mammal remains include five cattle (*Bos taurus*) specimens (two molar fragments, one metapodial fragment and one mandibular fragment), one fallow deer (*Dama dama*) proximal radius, one almost complete sheep first phalanx, and three caprine (*Ovis aries* or *Capra hircus)* remains (one molar, one scapula and one humerus fragment). Although no conclusions can be drawn about species composition from such a small sample, the presence of fallow deer is notable. The relatively high frequency of cattle remains can be attributed to hand picking visible bones at the surface.

Radiocarbon dates

Radiocarbon analyses were conducted on five faunal specimens discovered at Kababurun (table 3). Molluscs were not sampled for the radiocarbon analysis. The results support the relative chronological dating of pottery to the Late Chalcolithic and EBA periods. However, the dates seem to split into an older (704, 706) and younger (703, 705, 707) timeframe (fig. 12). The older dates cover roughly the second half of the fourth millennium BCE, from 3520–3100 calBCE. The later dates range approximately from 3000–2690 calBCE, representing the EBA 1 as well as the beginning of the EBA 2 period. The timespans are not overlapping and, thus, a gap of approximately 100 years could be possible between occupations. On the other hand, the gap could also simply reflect the small number of radiocarbon dates available from the site, which may not display its entire occupation. Therefore, the question of whether Kababurun was continuously occupied from the Late Chalcolithic to the EBA, like several other sites in the region (Schwall 2018: 282–84), has to remain open.

Discussion

Karaburun Peninsula has produced substantial data related to the prehistoric periods from the Lower Paleolithic into the Late Neolithic (Çilingiroğlu, Dinçer et al. 2018; Çilingiroğlu et al. 2020). The occupation of the area continued during the Chalcolithic period. It is known that the local cinnabar sources were exploited by Middle Chalcolithic groups, who possibly occupied caves near to sources (Koşay, Gültekin 1949; Uhri et al. 2010). A few diagnostic pieces of Late Chalcolithic pottery, including a 'cheese pot' fragment and trumpet lug, were previously identified at the site of Kömür Burnu (Çilingiroğlu, Uhri et al. 2018).

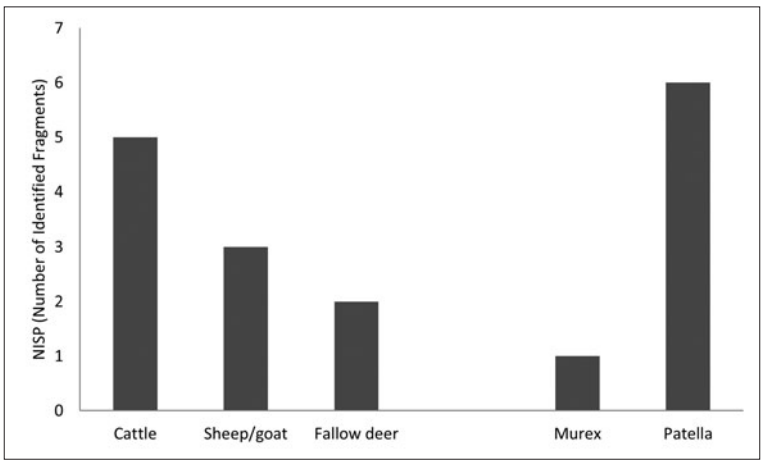

Fig. 11. Faunal remains identified in Kababurun. Total Number of Identified Specimens (=NISP) is 17.

Lab. no. [TÜBITAK]	*Sample no.*	*$\delta^{13}C$ [‰]*	*^{14}C Age [BP]*	*cal 1σ [BC]*	*cal 2σ [BC]*	*Material*
707	16.47 ÖRN.6	−21.3	4223 ± 31	2896–2762	2906–2696	Bone
703	16.47.ÖRN.1	−21.3	4257 ± 31	2905–2879	2920–2760	Bone
705	16.47.ÖRN.4	−22.5	4271 ± 34	2911–2881	3008–2759	Bone
704	16.47.ÖRN.2	−22.8	4557 ± 34	3367–3125	3486–3104	Bone
706	16.47.ÖRN.5	−20.0	4642 ± 35	3499–3366	3519–3357	Bone

Table 3. Radiocarbon dates from Kababurun, measured in the TÜBITAK MAM lab (n=5; calibrated with OxCal v4.3.2).

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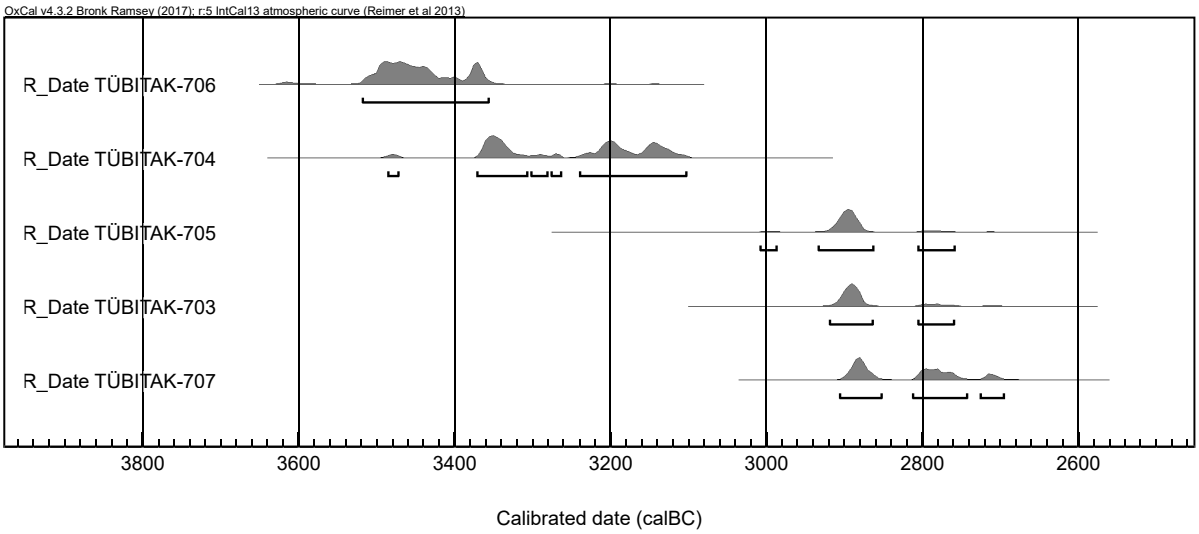

Fig. 12. Compilation of five calibrated radiocarbon dates deriving from the survey at Kababurun.

Mordoğan Höyük, was a sizable (at least 3ha) coastal site during the Early Bronze Age. Earlier, non-systematic work there revealed a Yortan-type vessel, typical of the EBA 1 (Bittel 1939–41; Akurgal 1945). Our visits to the site in 2015 and 2021 produced many hand-made, plain polished pottery sherds of the EBA type, confirming earlier observations. Its coastal location and the fertile, agricultural hinterland arguably housed the biggest concentration of EBA populations in the Karaburun Peninsula. Unfortunately, today the site is completely covered with modern buildings and further archaeological research is hampered.

Additional EBA sites were discovered by the KASP team along the eastern shores of the peninsula. These sites, which are all coastal and located on natural promontories, produced a variety of materials including hand-made pottery, chipped stone and ground-stone objects such as grinding and pounding instruments. Some of the chipped-stone objects from these sites were produced from Melian obsidian, as indicated by P-XRF analyses kindly conducted by R. Özbal of Koç University.

One of these sites, known locally as Manal, even yielded an arsenical copper dagger, dating possibly to the EBA 3 on typological grounds (Ünlüsoy 2018b; Zararsız, Zimmermann 2020). All these data clearly indicate that the local raw material sources, such as the cinnabar, chert, or andesite, were well known to communities in the fifth, fourth and third millennia BCE. In addition, non-local obsidian and arsenical copper made its way to the peninsula, demonstrating communities' transregional interactions.

The radiocarbon dates from Kababurun provide a more refined chronological basis, rendering it the only absolutely dated prehistoric site in the Karaburun Peninsula, which offers a reliable chronological basis for comparisons in the region and beyond. The dates show two clusters, one covering a range from 3520 to 3100 calBCE and other from 3000 to 2690 calBCE, suggesting that Kababurun was occupied during both the Late Chalcolithic and the EBA 1.

The typological analysis of the pottery provided a wide range of comparisons with western Anatolian and eastern Aegean sites. The assemblage contains pottery shapes and decorations which are characteristic for the Late Chalcolithic and EBA 1. This is attested in particular by distinct types such as carinated bowls, beak-spouted jugs, 'cheese pots' and feet of tripod cooking pots. In addition to morphological features, incised and white painted specimens do not contradict this chronological position. The assemblage is very well embedded in the contemporary western Anatolian and eastern Aegean sites. As discussed above, diagnostic morphological features identified at Kababurun are also attested at the contemporary sites of Bakla Tepe, Çukuriçi Höyük, Heraion on Samos, Liman Tepe, Poliochni on Lemnos, Thermi on Lesbos and Troy.

Together, this implies that the Kababurun community was an active participant in regional cultural practices and trends. The morphological similarities indicate common culinary practices across the region, whereas the similar types of decoration may indicate shared aesthetic preferences. The picture offered by the pottery in this respect is of Karaburun communities connected with regional networks of interaction. The degree of connectivity seems to be related to an increasing settlement density, recognisable in the coastal region during the Late Chalcolithic and especially in the EBA (see fig. 1; Schwall 2018: 277–84). A similar picture can be observed in other regions, through surveys conducted in the Troad (Bieg et al. 2009; Blum et al. 2011), as well as in the Lake District (De Cupere et al. 2017; Vandam et al. 2019).

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Therefore, the newly discovered site of Kababurun supports the evolving picture of a dynamic period with well-connected communities.

One interesting category of finds which frequently occurred at the site is amorphous pierced limestone pebbles. These are presumably fishing-net weights, as suggested by comparisons from many other eastern Mediterranean sites. Kababurun is the only site on the Karaburun Peninsula where this specific type of object was discovered by our team. Here, however, they appeared frequently relative to the area of sampling. We are inclined to suggest that the Kababurun community captured marine fish using vertical gillnets. Historical documents from the 19th–20th centuries CE show that gillnets, among other methods, were used in the Aegean to capture both local and migratory fish, such as the grey mullet, red mullet, pilchard sardines, sea bass, mackerel, sea bream and bluefin tuna (Deveciyan 2006; Çilingiroğlu, Çakırlar 2018).

Along with the above-mentioned stone net-weights, grinding stones, small pounders and somewhat crude lithics speak to a community of rural character. Two sickle blades from the nearby location of POI.16.48 indicate that the group engaged in farming practices.

A small faunal assemblage has been analysed from the site. First, it seems no coincidence that such a small assemblage displays a high species diversity. Coastal and epi-coastal faunal assemblages in the eastern Aegean contain a large number of animal taxa from the beginning of the Neolithic, but the mammalian spectrum is dominated by domesticated animals in the Early Neolithic (Çakırlar 2012; Atici et al. 2017; Galik 2019). Starting as early as the early sixth millennium BCE (Late Neolithic/Early Chalcolithic), faunal assemblages, from both coastal and inland sites, contain increasing proportions of pig or boar, and fallow deer remains (Çakırlar 2012; Çakırlar, Atici 2017). At some sites, wild boar remains also become more abundant than they were in the Early Neolithic (Norbert Benecke, pers. comm. for Malkayası in the Bafa region). Deer, especially fallow deer, became particularly abundant during the EBA (Çakırlar, Atici 2017). For Çine-Tepecik in the upper Meander Valley, Sevinç Günel (2015) notes the presence of deer, presumably fallow deer, specifically in the Middle Chalcolithic layer IV, suggesting the relative abundance of cervids at the site. The diversification of the taxonomic spectrum is mirrored on the eastern Aegean islands close to Anatolia (Clutton-Brock 1982; Sorrentino 1997). In the Late Chalcolithic and EBA, mollusc remains are abundant at coastal sites (Galik 2019), and they become still more abundant in epi-coastal and inland sites located up river valleys (Çakırlar 2009; Çakırlar 2015; Günel 2015). At some sites, for example, at Yenibademli on Gökçeada island in the northern Aegean, limpets are the most abundant mollusc shells, as they are at Kababurun (Çakırlar 2009).

The faunal remains also suggest mixed subsistence strategies, which are rather extensive, broad-spectrum and opportunistic, rather than complete reliance on specialist pastoralism and agriculture. The relative abundance of fallow deer and mollusc shells are common features of the Chalcolithic and Early Bronze Age throughout western Anatolia, including the eastern Aegean islands. This suggests shared foodways across the region. The reasons for the high presence of fallow deer have been debated: ranching, increased open areas and hunting for status have been suggested as plausible explanations (Çakırlar, Atici 2017).

When compared with contemporary sites from coastal western Anatolia, Kababurun also displays notable differences in several aspects. While acknowledging the limitations of survey data, we nevertheless find it appropriate to discuss regional settlement types in light of the new insights gained by this research.

The archaeological record makes it possible to identify three different settlement types in the region from ca. 3300–2700 cal. BCE. The first is the fortified sites which acted as centres of specialised economic and social activities (Gündoğan et al. 2019). For instance, Late Chalcolithic Çukuriçi Höyük is surrounded by a ditch, possibly constructed for defensive purposes (Schwall 2018: 166–67). Notably, Troy and Liman Tepe emerged as fortified nodal sites in coastal western Turkey. It is worth highlighting that even in its basal layers, Troy had an enclosure wall. It was reinforced with bastions during the middle Troy I period, thus becoming monumental in size (Ünlüsoy 2006), covering ca 6 to 9ha. Substantial and continuous investment in labour to build defensive structures is one of the characteristic features of these communities (Frangipane 2010).

A second type of site that seems to have appeared in the early third millennium BCE is the settlement capable of specialised or mass production. A good example is EBA 1 Çukuriçi Höyük, where well-preserved remains of an arsenical copper production workshop have been excavated. The presence of rod-ingot moulds and weighing stones here and elsewhere in the region manifests clearly the use of a standardised measurement system to ensure secure transactions in a regional and supra-regional trade network (Horejs 2009: fig. 7; Horejs 2016). Similar features, related to some form of industrial production during the early third millennium BCE, have been recovered from sites like Bakla Tepe and Yassıtepe Höyüğü (Gündoğan et al. 2019; Derin 2020).

The third site type is the unfortified, rural settlement. These cover a small area (less than 1ha). Their economic relations are seemingly more locally bound. The inhabitants are in contact with contemporary groups, as indicated by common cultural practices and attitudes, but they play

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barely any decisive role in the regional and supra-regional economic networks. As such, these communities rely predominantly on the availability, accessibility and perhaps circulation of local raw materials and natural resources. Their social organization is presumably egalitarian in essence; that is, social status within the community relies on achievement rather than heredity.

We suggest that Kababurun belongs to this category of small, unfortified settlements with close ties to local networks but without the economic and political functions of a nodal or specialised site. The faunal, lithic and ground-stone assemblage indicates a self-sustaining community with mixed subsistence strategies, involving the exploitation of marine resources and wild game alongside farming and herding. The material culture, especially the pottery, is a strong indication of the community's involvement with and integration into the cultural networks and trends of the eastern Aegean. The faunal record from the site also suggests multiple common aspects with contemporary subsistence patterns in the eastern Aegean and western Turkey. As a coastal community well adapted to the use of coast- and seascapes, this group perhaps mostly maintained contact with neighbouring communities via marine engagements.

Conclusions

This article has introduced one of the best-documented prehistoric sites on the Karaburun Peninsula. Located on the eastern coast of the peninsula, Kababurun today covers only 0.1ha. Its cultural deposits have been heavily damaged, and many of the material remains were found scattered on the natural bedrock. The exposure of in situ deposits in a section, however, provided evidence of stone foundations, a cluster of *Patella* sp. and the majority of the faunal assemblage used to discuss subsistence, as well as the short-lived faunal samples required for reliable absolute dating.

The calibrated ranges indicate that the site was possibly occupied from ca 3500 to 2700 calBCE. It remains uncertain whether this occupation was continuous, but the current clustering of dates indicates that there may be two non-overlapping temporal horizons at the site.

The majority of the material culture from the site is pottery. All of the finds are fragments of hand-made, medium–coarse vessels, mostly with extremely worn surfaces. Despite these disadvantages, it was possible to conduct a technological and typological analysis of the assemblage. We have discussed the fabrics and morphology of Kababurun pottery in detail. Heavily dominated by plain grey-brown and reddish-brown surfaces, the paste contains an abundance of non-plastic inclusions, both mineral and organic. The presence of a few finely produced, red-slipped and burnished sherds may suggest that the site was occupied beyond the EBA 1 and into the EBA 2.

Grinding stones, chipped stones and pierced stone objects which were possibly used as net weights offer a general idea about the economic basis of the group. The faunal assemblage provides a better idea about subsistence and environment at Kababurun during the Late Chalcolithic Period and EBA. The importance of coastal foraging is clear, animal husbandry was present, and hunting and managing deer populations also took place probably fairly often. These results, while very preliminary and far from complete, are quite similar to zooarchaeological results from the Late Chalcolithic to EBA in the eastern Aegean (Çakırlar 2015; Çakırlar 2016; Çakırlar, Atici 2017).

Because excavations focus on large sites, there has been no opportunity to investigate different types of sites in the region. Surveys can help in this respect, but they have their own methodological limitations. Our investigation shows that Kababurun was a small, rural, yet regionally connected community with an economy that involved farming, herding, fishing and hunting.

Until very recently, our knowledge of the Anatolian Chalcolithic and EBA has mostly been dependent on a small number of excavated sites. As a result, we have tended to focus our research on two main types of sites: the large, fortified site, characterised by the centralisation of certain economic and social activities and acting as a regional node and communication hub; and the industrial site, associated with particular forms of specialised or mass production. Yet a sizeable proportion of the population would not have lived in either of these two types of sites, probably residing instead in smaller and unfortified settlements. While this type of site might initially seem unglamorous and quotidian, it was a vital element within the social fabric and settlement structure of the Chalcolithic and EBA periods. After all, it was in these kinds of communities that non-elite and non-specialised segments of the society would have lived. Unfortunately, such sites often leave only a faint footprint within the archaeological record and as a result are poorly understood. The intensive survey work conducted at Kababurun is a rare opportunity to shed light on them and on the lives of the people who lived in them.

Acknowledgements

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Catalogue

These abbreviations are used in the catalogue that follows: th. = thickness; dia. = diameter; unk = unknown; L = length; W = width; H = height.

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Fig. 8 catalogue. Late Chalcolithic–Early Bronze Age 1 pottery from Kababurun

No.	*Ware*	*Non-plastic inclusions*	*Quality*	*Outer surface colour*	*Inner surface colour*	*Surface treatment*	*Decoration*	*Wall th. (cm)*	*Rim dia. (cm)*	*Type*
8.1	GBW	Sand, grit, chaff, lime	Medium	Brown–grey	Reddish brown–grey	Burnished		0.8	2.6	Bowl with outer thickened rim
8.2	GBW	Sand, grit, lime	Medium–coarse	Dark grey	Dark grey			1.1	2.2	Carinated bowl
8.3	GBW	Sand, grit, mica, chaff	Fine–medium	Dark brown	Complete abrasion	Burnished		0.7	2.7	Carinated bowl
8.4	GBW	Sand, grit, chaff, lime, mica	Medium	Dark grey	Dark grey			0.9	1.2	Bowl with flattened rim
8.5	GBW	Sand, grit, chaff	Medium	Brown–dark brown	Dark brown			1.1	2.7	Bowl with out-curving rim
8.6	RBW	Sand, grit, chaff, mica	Fine	Reddish brown–brown–black	Reddish brown–brown–black	Slipped, burnished	Painted	0.6	1.3	Necked jar with out-curving rim
8.7	CCBW	Sand, grit		Beige–cream	Light brown	Slipped, burnished		0.8	1.3	Jar with out-curving rim
8.8	GBW	Sand, grit, mica	Medium	Dark brown–dark grey	Greyish brown			0.7	0.8	Jar with out-curving rim
8.9	GBW	Sand, grit, lime	Medium	Light brown	Light brown			0.7	1.6	Necked jar with out-curving rim
8.10	GBW	Sand, grit, chaff, lime	Medium	Grey-brown	Brown–dark grey			0.7	2.0	Holemouth jar
8.11	GBW	Sand, grit, chaff	Medium	Dark brown–brown–grey	Light brown	Burnished		1.3	3.0	Bowl with simple rim
8.12	GBW	Sand, grit, chaff, shell	Coarse	Brown	Brown			0.7	Unk.	Bowl with simple rim
8.13	RBW	Sand, grit, mica, chaff, lime	Fine–medium	Brown–reddish brown	Brown–grey	Slipped, burnished		1.3	3.0	Bowl with simple rim
8.14	RBW	Sand, grit, chaff	Fine–medium	Reddish brown	Reddish brown–light brown	Slipped, burnished		1.0	Unk.	Short-necked jar
8.15	RBW	Sand, grit, chaff	Medium	Reddish brown–brown	Brown–black			1.1		Holemouth jar
8.16	GBW	Sand, grit, chaff	Medium	Light brown	Light brown	Burnished		0.8		Jar with narrowing rim
8.17	RBW	Sand, grit, lime	Fine–medium	Grey–red-brown	Grey–red-brown	Slipped, burnished		0.5		Spouted jug
8.18	RBW	Sand, grit, chaff, lime	Medium	Red	Light brown	Slipped, burnished		0.7	1.4	Bowl with out-curving rim
8.19	GBW	Sand, grit, chaff, quartz	Coarse	Brown–grey	Grey	Burnished		0.8	2.1	Bowl with out-curving rim
8.20	GBW	Sand, grit	Fine–medium	Light brown–brown	Light brown			0.8	Unk.	
8.21	RBW	Sand, grit, mica, chaff	Fine–medium	Red brown	Brown	Burnished		1.1	3.0	Bowl with out-curving rim
8.22	RBW	Sand, grit, mica	Medium	Grey	Greyish brown–red	Slipped		0.7	2.8	Bowl with flattened rim
8.23	RBW	Sand, grit, mica	Fine	Brown–orange	Light brown	Slipped, burnished		0.4	1.1	Bowl with simple rim
8.24	GBW	Sand, grit, lime, mica	Coarse	Black–brown (abrasion)	Dark grey (abrasion)			0.8	1.4	Carinated dish, out-curving rim
8.25	GBW	Sand, grit, mica	Fine–medium	Dark brown–grey	Dark brown–grey	Burnished		1.1	2.9	Carinated bowl
8.26	RBW	Sand, mica	Fine–medium	Brown	Brown	Slipped, burnished		0.8	2.8	Simple convex profile bowl
8.27	GBW	Sand, grit, chaff	Coarse	Brown–dark brown	Dark brown–brown			1.0	3.0	Holemouth jar

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Fig. 9 catalogue. Late Chalcolithic–Early Bronze Age 1 pottery from Kababurun

No.	*Ware*	*Non-plastic inclusions*	*Quality*	*Outer surface colour*	*Inner surface colour*	*Surface treatment*	*Decoration*	*Wall th. (cm)*	*Rim dia. (cm)*	*Type*
9.1	GBW	Sand, grit, lime	Fine–medium	Brown-grey	Light brown–grey	Slipped, burnished		0.9	Unk.	
9.2	GBW	Sand, grit, chaff	Fine–medium	Dark grey	Dark grey	Slipped, burnished		0.7	Unk.	Bowl, out-curving rim, horiz. pierced lug
9.3	GBW	Sand, grit, chaff	Coarse	Worn out	Brown–light brown			0.7	1.6	Carinated bowl, trumpet lug
9.4	RBW	Sand, grit, lime, mica	Fine–medium	Brown–reddish brown–grey	Reddish brown–grey	Slipped, burnished		0.8	2.0	Carinated bowl out-curving rim, horiz. pierced lug
9.5	RBW	Sand, grit, lime, mica	Fine–medium	Dark grey–reddish brown–brown	Red brown–brown			0.9	Unk.	Bowl, inner thickened rim, horiz. pierced lug
9.6	RBW	Sand, grit, chaff	Medium	Light brown	Light brown			0.8	1.4	Carinated bowl, trumpet lug
9.7	GBW	Sand, grit, mica, chaff	Coarse	Light brown	Greyish brown			0.7		
9.8	GBW	Sand, grit, mica	Fine–medium	Dark brown	Greyish brown			0.4		Bowl with out-curving rim
9.9	GBW	Sand, grit, chaff	Medium	Grey, light brown	Light brown			0.8		Bowl with simple rim
9.10	GBW	Sand, grit, mica, chaff	Medium	Brown	Brown			1.0		Bowl with simple rim
9.11	GBW	Sand, grit, lime, mica	Medium	Dark grey	Dark grey	Burnished		0.5		Miniature jar
9.12	GBW	Sand, grit, chaff	Coarse	Dark brown	Light brown			1.0		Bowl with sharply out-curving rim
9.13	GBW	Sand, grit, mica, chaff	Medium–coarse	Brown–light brown	Reddish brown			1.3		Bowl with simple rim
9.14	GBW	Sand, grit, chaff	Fine–medium	Dark brown	Dark brown			0.4		Carinated bowl, out-curving rim
9.15	GBW	Sand, grit, mica	Medium	Brown	Brown			0.6		
9.16	RBW	Sand, grit, lime	Coarse	Light brown–red	Light brown	Burnished	Incised	1.7		
9.17	RBW	Sand, grit, mica, quartz	Medium	Light brown–brown–orange brown–pinkish brown	Light brown–brown–orange brown–pinkish brown					
9.18	RBW	Sand, grit, chaff	Medium	Reddish brown	Reddish brown			0.8		
9.19	GBW	Sand, grit, lime	Coarse	Light brown	Light brown		Incised	2.1		
9.20	RBW	Sand, grit, mica	Medium	Reddish brown–light brown–greyish brown	Reddish brown–light brown–greyish brown	Burnished		1.8		
9.21	RBW	Sand, grit, mica	Fine–medium	Reddish brown–brown	Reddish brown–brown	Slipped, burnished		0.7	1.3	Bowl with out-curving rim
9.22	GBW	Sand, grit, chaff	Medium–coarse	Brown	Brown			0.7		Jar with out-curving rim
9.23	GBW	Sand, grit, mica, chaff	Medium	Brown–dark grey	Brown–dark grey	Slipped, burnished		0.5		Jar/jug with out-curving rim
9.24	GBW	Sand, grit, mica	Fine–medium	Brown	Greyish brown			0.6		
9.25	RBW	Sand, grit, lime	Medium	Light brown	Light brown			1.8		Tripod
9.26	RBW	Sand, grit, chaff	Fine–medium	Brown	Brown–dark brown	Slipped, burnished		0.8		
9.27	GBW	Sand, grit, chaff	Medium	Light grey-brown	Dark grey			0.8	5.5 (base)	
9.28	RBW	Sand, grit, lime	Fine–medium	Light brown–orange–red–grey	Light brown–orange–red–grey	Slipped, burnished		1.4		
9.29	GBW	Sand, grit, lime, mica	Fine–medium	Brown	Brown			0.9		

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Fig. 10 catalogue. Late Chalcolithic–Early Bronze Age 1 small finds

No.	*Description*
10.1	Material: limestone. L: 5cm; W: 4cm; H: 2cm.
10.2	Material: limestone. L: 5cm; W: 2.74cm; H: 1.27cm.
10.3	Material: limestone. L: 2.8cm; W: 4cm; H: 8.5cm.
10.4	Material: limestone. L: 1.8cm; W: 1.6cm; H: 0.9cm.
10.5	Material: limestone. L: 2.2cm; W: 1.5cm; H: 0.6cm.
10.6	Material: limestone. L: 2.6cm; W: 0.98cm; H: 0.5cm
10.7	Material: chert. Blank: blade. Condition: proximal. Colour: brown. Platform: facetted. Buttshape: constricted. Orientation of scars: parallel. Origin of scars: proximal. Termination: broken. L: 4.9cm; H: 2.2cm; W: 0.6cm.
10.8	Material: chert. Type-Bordes: retouched flake. Blank: flake. Condition: complete. Colour: orange. Platform: cortical. Buttshape: plain. Orientation of scars: parallel. Origin of scars: proximal. Termination: broken. L: 4.3cm; H: 3.7cm; W: 1.5cm
10.9	Material: chert. Type-Bordes: endscraper. Blank: flake. Condition: complete. Platform: undetermined. Orientation of scars: centripetal. Origin of scars: centripetal. Termination: undetermined. L: 4.6cm; W: 2cm.
10.10	Material: chert. Blank: cortical flake. Condition: complete. Colour: grey. Platform: plain. Buttshape: constricted. Orientation of scars: parallel. Origin of scars: proximal. Termination: plain. L: 3.7cm; H: 3.7cm; W: 1.4cm.
10.11	Material: chert. Blank: flake. Condition: complete. Colour: black. Platform: cortical. Buttshape: plain. Orientation of scars: undetermined. Termination: plain. L: 2.3cm; H: 1.7cm; W: 0.4cm.
10.12	Material: chert. Blank: flake. Condition: complete. Colour: reddish brown. Platform: lip. Buttshape: constricted. Termination: plain. L: 2.7cm; H: 1.7cm; W: 0.5cm.
10.13	Material: chert. Blank: flake. Condition: complete. Colour: pinkish brown. Platform: facetted. Buttshape: expanding. Orientation of scars: parallel. Origin of scars: proximal. Termination: hinged. L: 1.7cm; H: 3.1cm; W: 0.6cm.
10.14	Material: chert. Type-Bordes: sickle blade. Blank: blade. Condition: mesial. Platform: broken. Orientation of scars: parallel. Origin of scars: parallel. Termination: broken. L: 3.8cm; W: 1.6cm; H: 0.4cm.
10.15	Material: basalt. L: 11.3cm; W: 19cm; H: 5.5cm.
10.16	Material: basalt. L: 4.5cm; W: 3.7cm; H: 3.5cm.
10.17	Material: basalt. L: 15.8cm; W: 13.5cm; H: 6.7cm.

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