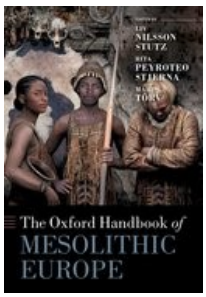

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CHAPTER

13 The Black Sea Area

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Abstract

This chapter regards the Early Holocene archaeology of the Black Sea region and its adjacent areas, from the Bosphorus, in the west, to the Caucasus, in the east. From an archaeological and environmental point of view, the territory is very diverse. Some of the areas are reasonably well known, such as the steppe zone of Ukraine and the Crimean mountains, while the data currently available from others, among which are Anatolia and the westernmost Black Sea region, are very poor. This is due to different reasons, including the quality and intensity of the research, the characteristics of the landscape, and the political events that took place during the last decades. From a chrono-cultural point of view, the most interesting region is the Crimean Peninsula, where important caves and rock shelters which were settled during the whole Early Holocene have been discovered and radiocarbon dated. These sites yielded long sequences with knapped stone artefacts of microlithic dimension among which are different types of geometric tools which are represented by variable percentages of lunates, triangles, and trapezoidal arrowheads.

Keywords: southeastern Europe, Black Sea, Caucasus, steppe zone, Early Holocene, lithic tools, microliths, radiocarbon chronology

Subject: Anglo-Saxon and Medieval Archaeology, Archaeology

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Introduction

The scope of this chapter is to discuss some aspects of the Mesolithic archaeology of the coasts of the Black Sea and their close interior. The Black Sea is a wide basin opened towards the Aegean and the Mediterranean Seas through the Bosphorus and the Dardanelles. Its complex history falls into the wider perspective of the dynamic evolution and changes of the Caspian, Marmara, and Aegean Seas (Krijgsma et al. 2019). It is delimited to the north by the Danube, Dniester, and Dnieper alluvial plains, to the east by the Russian Caucasus and Colchis, and to the south by the Pontic Mountains of Anatolia (Williams et al. 2018). The great differences that characterize the landscapes around it were first described by ancient Greek and Roman historians and geographers (Rood 2011).

During the last three decades, much attention has been dedicated to the Pontic region focusing mainly on the problem of the sea level rise and the effects of climatic/environmental changes on human settling (Anthony 2007; Dolukhanov 2009a) between the Last Glacial Maximum (LGM) and the beginning of the Holocene (Yanko-Hombach et al. 2007). It is well known that the idea of a catastrophic event caused by the rapid overfilling of the Black Sea was suggested in the 1990s (Ryan and Pitman 1998). In contrast, the results obtained by decades of research conducted mostly by Soviet and Russian colleagues never showed any trace of catastrophic events, called 'flood' by some western authors (see Glebov and Shel'ting 2007). This impression has been reconfirmed recently by the study of the north Aegean Sea core SL152 (Herrle et al. 2018), and the sediments extracted from the southwestern Black Sea (Ankindinova et al. 2020).

Keeping in mind the above premises, this chapter presents and updates some aspects of the early Holocene prehistory of the region, among which are landscape/environmental characteristics (Dolukhanov 2009b), settlement location and density (Anthony 2007: 355; Dergachev and Dolukhanov 2017: 494), and material culture remains. The latter consist almost exclusively of knapped stone assemblages, following the typology of which Mesolithic cultural groups have been defined (Telegin 1998; Kitagawa et al. 2018). It is important to point out that the term Mesolithic employed in this chapter refers to the Holocene Preboreal (9,800–8,500
p. 237 cal BC[1]), Boreal (8,500–7,000 cal BC), and Early Atlantic (7,000–6,000 cal BC) ↳ periods (Arslanov et al. 1999: Table 7). In contrast, Epipalaeolithic is used to indicate sites or assemblages attributed to the final stages of the Upper Palaeolithic, during which important climatic events took place just after the end of the Last Glaciation, between the Older and Younger Dryas that mark the end of the Pleistocene (Heiri et al. 2014).

The knowledge on the Mesolithic in the Pontic region is affected by several factors: 1) the great differences that characterize the climatic/environmental zones that border the Black Sea (Kozłowski 2009: 400; Larchenkov et al. 2009); 2) the complex geomorphology (Bailey 2007; Özdoğan 2007: Figure 1); and 3) the quality of surveys and excavations conducted in different countries. The latter is affected by local political systems, the number and reliability of the radiocarbon dates, and materials used for dating.

While our knowledge about the Mesolithic in some northern Black Sea territories is reasonably good, almost no evidence of the presence about the last hunter-gatherers in the steppe zone of south Ukraine and the Crimea mountains (Telegin 1982, 1989; Stanko 2007: 380), along the northern coast of Anatolia (Kartal 2003) and the Colchis in Georgia (Gabuniya 1976; Gabuniya and Cereteli 1977: Figure 1) exists. Very few finds from Turkish Thrace, and the entire western sector in general, including the coastal landscapes of Romania and Bulgaria (Özdoğan 2007: 661; Gatsov and Nedelcheva 2009: 45, 2016) are known. The distribution of the Mesolithic sites in the northwestern Black Sea steppe zone seems to be delimited by the lower course of the Danube that marks the boundary between Ukraine and Romania, west of which the finds become very rare (Figure 13.1). The problem related to the regional presence/absence of sites is intriguing, and the reasons why our knowledge of the Mesolithic settlement pattern in some important areas is very limited need to be
p. 238 explained (see Grøn 2018). ↳

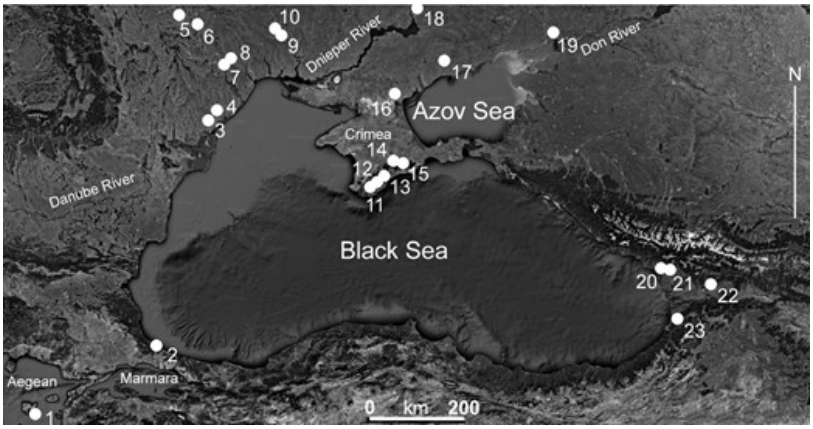

Figure 13.1 Approximate location of the most important sites mentioned in the chapter. 1: Ouriakos; 2: Aşağı Pinar; 3: Mirnoe; 4: Beloles'e; 5: Soroki II; 6: Pashkov VII; 7: Grebeniki; 8: Girzhevo; 9: Abuzova Balka; 10: Anetovka; 11: Shan-Koba; 12: Murzak-Koba; 13: Fat'ma-Koba; 14: Kukrek; 15: Shpan-Koba; 16: Solone ozero; 17: Kam'yana Mogila; 18: Marievka and Vasilyevka; 19: Kamennaya Balka; 20: Mezmaiskaya Cave; 21: Dvoynaya Cave; 22: Kotias klde; 23: Kobuleti (Drawing: P. Biagi).

Figure 13.2 Loess deposits along the left (eastern) bank of the Dnestrovskiy Liman, c. 25 km west of Odessa (Ukraine), where Palaeolithic horizons have been discovered (Photograph: P. Biagi, 2016).

Sites and Assemblages

The Northwestern Black Sea Steppe Region (*Prichernomor'ya*)

The cultural sequence of the Mesolithic of the northwestern Black Sea steppe zone of Ukraine was established in the 1970s by V. N. Stanko (1972, 1977) following the discovery of Mesolithic sites with microlithic trapezoidal geometric armatures in 1960s (Stanko 1966). During the same period, Telegin wrote his first synthesis on the Mesolithic Ukraine (Telegin 1973). The territory is characterized by alluvial plains and thick Pleistocene loess deposits, dissected by rivers that flow down to the sea forming unique morphological figures (i.e. *limans*; Figure 13.2). This region extends between the Danube delta in the west, the Bug and Dnieper Rivers and the western Azov Sea in the east. The Mesolithic sites are found along terraces that border small valleys located rather far from estuaries and the seashore from which, we do not have any evidence of finds (Larchenkov et al. 2009: 37).

The Mesolithic chrono-cultural seriation proposed by Stanko was based on the results of the research conducted in the northwestern Black Sea steppe zone. It led to the discovery of several sites, and the excavation of a few important settlements including Beloles'e (Stanko 1971; Korobkova 1993) (Figure 13.3, top) and Mirnoe (Stanko 1982) (Figure 13.3, bottom). The subdivision into Grebeniki and Kukrek cultures took place in those days and is still accepted by most authors (see Dolukhanov 2008: 291; Kiosak 2016: 132),
p. 239 though with some variants. ↳ They concern mainly the Kukrek culture that is characterized by the occurrence of Abuzova Balka points and Kukrek inserts (Yanevich 1987; Man'ko 2005) (Figure 13.4). Kukrek has been subdivided into local groups based on the geographical location, and differences in the typological
p. 240 characteristics of knapped stone artefacts (Smyntyna 2007). ↳

Figure 13.3 The Mesolithic sites of Beloles'e in the steppe zone of southwestern Ukraine (top) and Mirnoe in the steppe zone of southwestern Ukraine (bottom) (Photographs: P. Biagi, 2007).

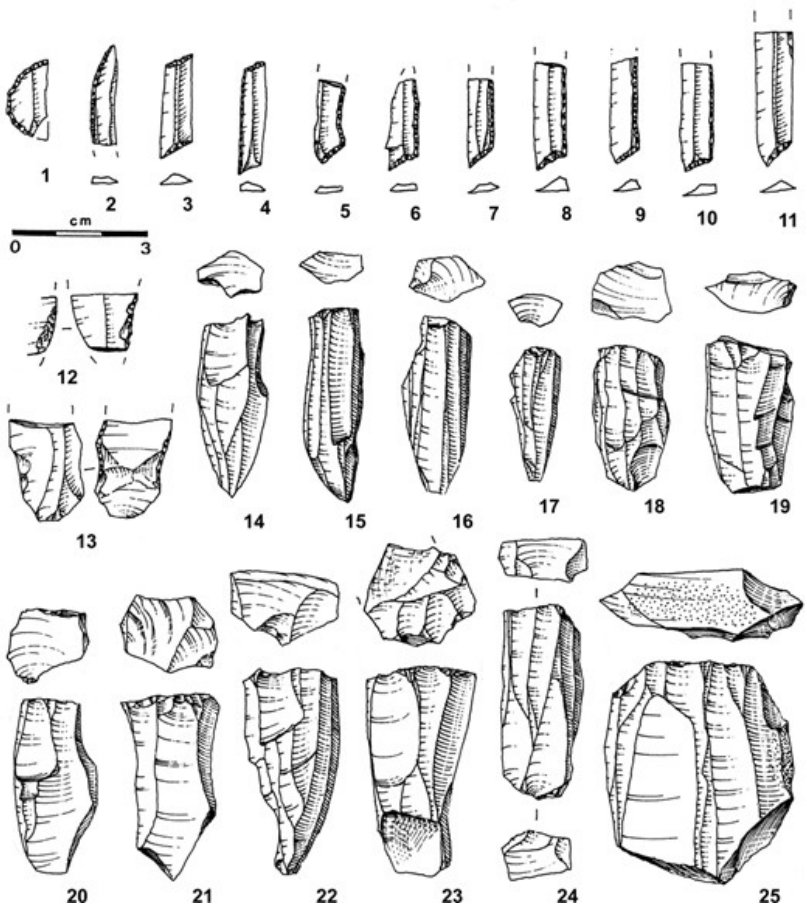

Figure 13.4 Knapped stone artefacts from Abuzova Balka (Ukraine). 1: lunate; 2: backed point; 3: elongated rhomboid; 4–11: backed bladelets and truncation; 12, 13: Kukrek inserts; 14–25: cores (from Biagi and Kiosak 2010: Fig. 4).

The absolute chronology of the northwestern Pontic Mesolithic is not well-grounded. Though the stratigraphy and chronology of Beloles'e (Nužnyi 1992: Fig. 14, no. 37–57) has been disputed till recently (Sapožnikov 2004), a mammal bone was radiocarbon dated to the mid-ninth to mid-eighth millennia cal BC (Ki-10886: 8900 ± 190 BP), while four AMS results have been obtained from aurochs and wild horse bone of two well-defined areas of Mirnoe where typical Grebeniki or Rogalik-Grebeniki isosceles trapezes (Telegin 1989: 111, 1998: Fig. 4; Zaliznyak 1998: 128) were collected (Stanko 1982: Fig. 9; Nužnyi 1992: Fig. 23, no. 1–
p. 241 26). All the radiocarbon dates from Mirnoe fall into the eighth ↳ millennium BC (8475 ± 45 BP (GrA-37312), 8280 ± 45 BP (GrA-37336) (Biagi et al. 2008; Biagi and Kiosak 2010: Table 3). They can be compared with three AMS results obtained from the lowermost horizon of Melnychna Krucha, in central Ukraine, which has been attributed to the Kukrek technocomplex (from 8368 ± 23 BP (BE-7636) to 8311 ± 24 BP (BE-7635)). They both have been obtained from one single fragment of unidentified large ungulate bone (Kiosak et al. 2021: Table 3). In contrast, Girževo, another site with Grebeniki-type trapezoidal armatures (Nužnyi 1992: Fig. 23, no. 58–103), is c. 1,000 years younger (6,400–5,800 cal BC; 7390 ± 100 BP (Ki-11240), 7050 ± 60 BP (Le-1703)) (Zaliznyak 2005: 163).

Two radiocarbon dates from the Mesolithic layer at Kam'yana Mogila site 1 and the horizon just below it (c. 8,200–7,600 cal BC; 8810 ± 50 BP (Poz-61519, unidentified charcoal), 8730 ± 50 BP (Poz-51419, unidentified mammal bone); Kotova et al. 2018: 32) are comparable with Beloles'e. Both layers yielded a bladelet knapped stone industry that is attributed to the Kukrek aspect on typological grounds; also, mobile art objects were found (Kotova et al. 2018).

All the dates from Beloles'e, Kam'yana Mogila, Mirnoe, and Melnychna Krucha fall into the Boreal period, with the first two sites dating to the very beginning of this stage. In contrast, Mirnoe yielded slightly later Boreal dates. Mirnoe was excavated over an area of c. 1,600 m^2, suggesting that the site was resettled several times by aurochs and wild horse hunters (Kitagawa et al. 2018: Table 3). There were concentrations of lithic artefacts that are interpreted as presenting eighteen dwelling structures (Smyntyna 2007).

The stone assemblage from Mirnoe consists of bladelets detached from elongated subconical and pencil-like cores with one prepared platform, and isosceles trapezoidal geometrics with oblique, straight truncations characteristic of the Grebeniki culture (Nužnyi 1992: Fig. 23; Biagi and Kiosak 2010: Fig. 6) (Figure 13.5). Kukrek inserts have been recovered from some areas of the site (Stanko 1982: Table 14). Late Mesolithic sites with isosceles trapezes are also known farther north, along the Dniester, close to the mountains of the Transcarpathian Ukraine, although all these sites are still undated (Mackev'iy 2001). In Moldova, the aceramic layers 3 and 2 of Soroki II with bladelets and trapezes were radiocarbon dated to the seventh millennium cal BC (7515 ± 120 BP (Bln-588), 7424 ± 80 BP (Bln-587)). The site is located on the banks of the homonymous river (Markevich 1974: 147).

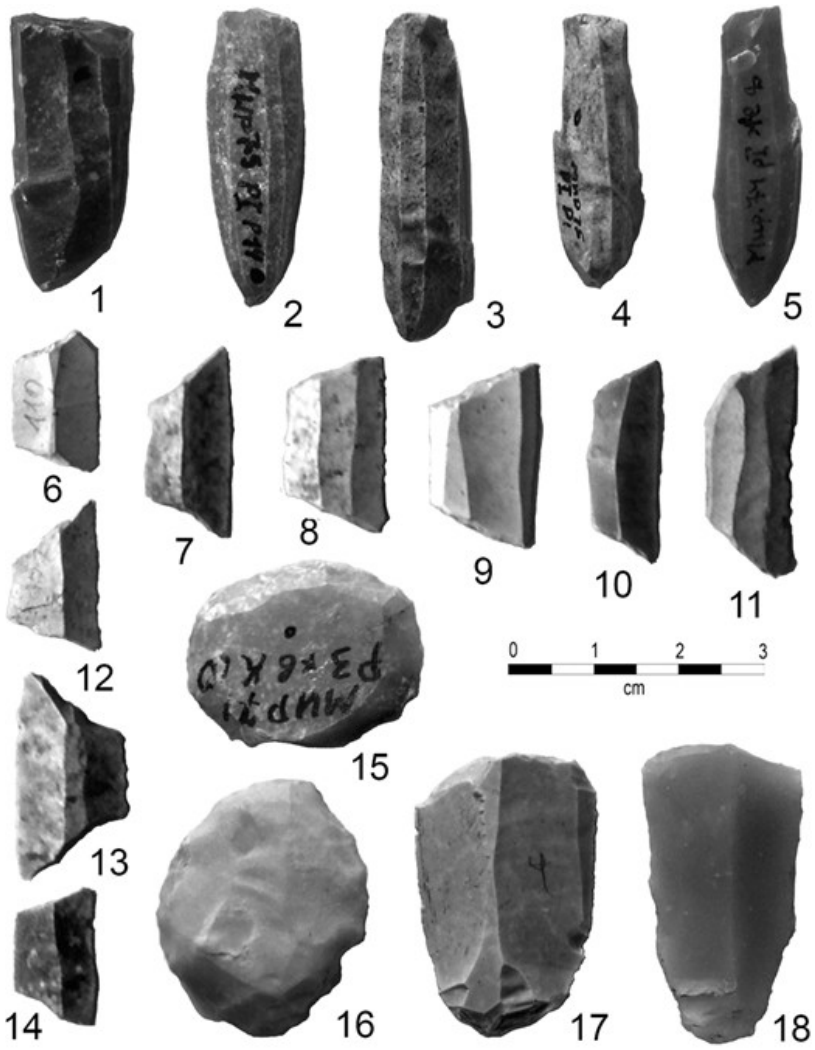

Figure 13.5 Knapped stone tools from Mirnoe (Ukraine). 1: subconical core; 2–5: pencil-like cores; 6–14: isosceles trapezes; 15–18: short and long end scrapers (Photographs: P. Biagi).

The number and quality of radiocarbon dates available from south Ukraine is insufficient to build a reliable chronology of the Mesolithic of the northwestern Black Sea steppe zone. Currently, most results fall into the

Boreal period, and cover just c. 600 years, while Early Mesolithic Preboreal sites are unknown (Smyntyna 2004: Fig. 5), and the only early Atlantic dates come from the Grebeniki site of Girzhevo (see Stanko and Kiosak 2008–2009: 32).

These data contrast with those available for the Late Epigravettian. During this period, the stations discovered in the central-eastern part (Stanko et al. 1989; Olenkovskyi 2008: 188–241) were settled by bison hunters (Krasnokutsky 1996; Stanko 1999), while 'the Mesolithic faunal record shows a spectrum of diet with a relatively unchanged preference for game prey … and the diversified diet based on terrestrial and aquatic resources' (Kitagawa et al. 2018: 204). A few sites were dated to the Bølling interstadial (Sapožnikov 2006: 220–2). The available radiocarbon result indicating on the fourteenth millennium cal BC habitation comes from Solone ozero Ia, a site close to the present northwestern Azov Sea shore (Olenkovskiy 2008–2009: 16, 12,700 ± 60 BP (Ki-6357)). A similar situation is reported from the lower course of the Don in
p. 242 Russia Kamennaya Balka (12,530 ± 160 BP (ISGS-3285); ↳ Leonova et al. 2006: 122), and even more in the interior, along the Dniester, from Pashkov VII (12,220 ± 500 BP (Le-1061); Ketraru et al. 2007: 127).

Despite the general impression that the local Mesolithic assemblages are rooted in the Late Epigravettian complexes of the northwestern Black Sea region (Telegin 1998: 86; Stanko 2009: 9), we do not have any strong evidence to support this view. Moreover, it is important to find an answer to the question of whether
p. 243 the entire steppe zone was uninhabited during ↳ the Younger Dryas and the Preboreal period (Smyntyna 1999), or is this caused by research bias. Additionally, the present Mesolithic cultural sequence (Telegin 1982: Table 6) is based on the techno-typological characteristics of the stone assemblages defined sixty years ago (Stanko and Kiosak 2006–2007, 2008–2009).

The Crimea

Crimea is a large, peninsula extending over an area of c. 26,000 m^2. It protrudes into the Black Sea from the steppe zone of Ukraine from which it is separated by the Perekos Isthmus. Crimea is surrounded by Black Sea waters, in the south and west, and the Azov Sea, in the east. The latter is a region rich in salty swamps (*Sivash*), where many Late Epigravettian sites have been discovered and excavated (Olenkovskyi 2008). The southeastern part of the peninsula is a mountain chain that drops abruptly into the sea from an altitude of c. 750 m (Figure 13.6, top). Another, parallel ridge of the Tauric Mountains is located slightly in the interior, where it reaches c. 2,000 m.

Many caves and rock-shelters with Late Palaeolithic and Mesolithic occupations have been excavated (Telegin 1982, 1989; Bibikov et al. 1994; Nuzhnyi 1998). During the last two decades, some of the most important sequences have been radiocarbon-dated (Benecke 2006; Biagi and Kiosak 2010; Biagi et al. 2014; Biagi 2016), helping to redefine the chronology of some sites (e.g. Shan-Koba: Biagi et al. 2014), and interpret the long-term (15,000 to 9500 cal BC, e.g. Stanko 1976; Zaliznyak 1995, 2005; Telegin 1998) changes of the stone assemblages with geometric microlithic hunting weapons of southeastern Europe.

Crimea is also one of the few territories where we have Mesolithic burials. There the rock shelters that open in the southeastern part of the peninsula (e.g. Murzak-Koba, Fat'ma-Koba) were also employed as burial grounds (Bibikov et al. 1994: Figs. 31–46). Although the skeletons have not been directly dated, their stratigraphic position and the presence of characteristic stone artefacts suggest their Late Mesolithic date.

The presence of Late Mesolithic trapezoidal microliths of Murzak-Koba type (Yanevich 1998: Fig. 2) was reported at the end of the 1800s from Kizil'-Koba in southeastern Crimea (Merezžovskiy 1880: Fig. IV, Fig. 3). In the peninsula, the progressive microlithization of the artefacts reached its apex during the Preboreal Mesolithic Shpan culture (Yanevich 1993; Nužnyi 1998), dated to the eleventh and tenth millennia cal BC 10,210 ± 80 BP (Ki-5823), 9760 ± 60 BP (KIA-3686; Man'ko 2010: 250), and continued up to the appearance

of typical isosceles trapezoidal microliths retouched from bladelet blanks (Biagi and Starnini 2016). According to the dates from the south Ukrainian steppe sites and the Crimean cave sequences, we know that the first regular blades and trapezoidal geometrics started to be produced during the second half of the Boreal, around the last three centuries of the ninth millennium cal BC or slightly later (Biagi 2016; Gronenborn 2017), when the Grebeniki (Stanko 1982) and Murzak-Koba hunter-gatherers began to establish their settlements in these regions (Yanevich 1998: Fig. 2; Zaliznyak 1998). Their provenance is debated between a Near Eastern origin (Dománska 1990), as proposed by Formozov (1962), and a central-eastern Asia provenance (Gronenborn 2017: Fig. 5).

Shan-Koba is one of the most important Late Palaeolithic-Mesolithic sequences of the Crimean Mountains
p. 244 (Bibikov 1946; Bibikov et al. 1994: 144), giving a name to the ↳ homonymous culture expanding from the end of the Palaeolithic to the end of the Mesolithic (Koen 1994). A few bone samples retrieved in the late 1920s and 1930s, allowed to re-assess the chrono-cultural sequence of the rock shelter to a period between the end of the Bølling and the end of the Allerød interstadials and the Early Atlantic. The radiocarbon dates group into three blocks (Biagi 2016: Fig. 5) showing that the rock shelter was settled for a short time during
p. 245 the Mesolithic, and that the sequence was not 'continuous' as previously suggested. ↳ The stone assemblages are represented by well-defined cultural markers with characteristic stone tool types throughout c. 6,000 years.

The geometric implements from the sequence of Fat'ma-Koba consist of isosceles triangular and trapezoidal microliths (Bibikov et al. 1994: Tables LXIV–LXV). Their presence suggests that the shelter was inhabited at different times during the late Boreal and early Atlantic periods, being further confirmed by a set of radiocarbon dates from bones from different Mesolithic layers (Biagi and Kiosak 2010: 29).

The dates from Shan-Koba help refine the chronology of the Mesolithic of the Crimea (Nužnyi 1998; Biagi and Kiosak 2010: 22). Moreover, these suggest that some shelters were settled during the Preboreal (Sphan-Koba), in the Boreal (Shan-Koba and others), and others during the early Atlantic (Murzak-Koba and others). Although the Mesolithic of the Crimean Mountains has been characterized as the Crimean Mountain Culture (Bibikov et al. 1994: 182), the lithic assemblages of the three periods are well differentiated. During the Preboreal is characterized by scalene triangles, Early Boreal by lunates and isosceles triangles, and Late Boreal and Early Atlantic by trapezoidal geometrics.

Another important point concerns the origin and chronology of the appearance of isosceles trapezoidal armatures that mark the adoption of new hunting techniques, 'their use in different composite arrowheads … and the … highly reduced role of retouch in their morphology' (Nužnyi 2000: 100). The reason why these weapons occurred in the mountains of the Crimea and the steppe zones of south Ukraine may be explained with the Heraklean Peninsula pollen cores (Biagi 2016: 122). They show that a steppe-like environment comparable with present conditions (Cordova and Lehman 2005: 270) was established during the second half of the Boreal period (i.e. 7,600–7,200 cal BC; 8550 ± 40 BP (Beta-156479), 8342 ± 70 BP (T-16421A)). This suggests that the Late Boreal hunter-gatherers were forced to adapt their subsistence strategy to the new ecosystem.

The Caucasus

The Caucasian Mountains of south Russia border the northern part of the Colchis (Figure 13.6, bottom), which is characterized by, 'plains, marshes, and foothills … intersected by scores of rivers, some readily navigable … while … the west is dominated by the Black Sea' (Braund 1994: 40). The Early Holocene of this Georgian region is insufficiently investigated.

Figure 13.6 The mountains of southeastern Crimea dropping into the Black Sea a few km east of Yalta (top) and the Black Sea coastline at Batumi in Georgia (bottom) (Photographs: P. Biagi, 2009 and 2012).

Until the end of the 1980s, the Mesolithic of Georgia was subdivided into four cultural entities, of which two are oriented towards the Black Sea (Gabuniya 1976; Gabuniya and Tsereteli 1977). The first covers the northeastern coast of the Black Sea, the second part of the Colchis, extending inland along the Pioni River and its affluent (Bader and Cereteli 1989: 94). New excavations have been carried out at Kobuleti, an open-air site located close to Batumi. These led to the reassessing of the chronology of the site to the mid-eighth millennium cal BC (8670 ± 100 BP(SPb-3084); Chkhatarashvili and Man'ko 2020: Fig. 3). Further excavations in a few caves and rock-shelters that open at middle altitude in the Russian Caucasus during the last two decades have improved our knowledge about the region (Leonova 2014).

The problems regarding the so-called Imeretian culture and the distribution and chronology of the Epipalaeolithic in the region have been re-appraised recently (Golovanova et al. 2014; Golovanova and
p. 246 Doronichev 2020: 394–402). The presence of specialized Preboreal ↳ (?) Mesolithic bear hunters is known from layer B of Kotias Klde cave in central-western Georgia (10,542–10,047 cal BC (89.8%) (10,400 ± 60 BP; RTT-4703) and 8,633–8,304 cal BC (95.0%) (9,270 ± 60 BP; RTT-4698); Bar-Oz et al. 2009). The same rock shelter was used to bury a young adult male during the Boreal period (first half of eighth millennium cal BC (8,665 ± 65 BP, RTT-5246 and 8,743 ± 45 BP, OxA-28256)); Golovanova and Doronichev 2020: 416). The stone tools from the Preboreal consist of a bladelet assemblage with long, scalene triangles obtained by bipolar retouch, though a few isosceles specimens are also present (Meshveliani et al. 2007).

In the northwestern Russian Caucasus, the uppermost horizons of the Mermaiskaya Cave consist of a stalagmite flow above which layers 1–2 and 1–2a were dated to the first half of the eighth millennium cal BC (8,690 ± 100 BP (SPb-86) and 8,720 ± 70 BP (SPb-85)). It is known that layers 1–3 contained microlithic

geometric artefacts (e.g. lunates, triangles, and trapezes; Golovanova et al. 2014: 194). A few caves at middle altitudes in the Gubs Gorge were excavated during the last decade. Dvoinaya yielded a sequence covering the entire Mesolithic period. The Early Mesolithic occupation was dated to the eleventh to mid-eighth millennium cal BC (10,020 ± 160 BP (GIN-14706) and 8,908 ± 280 BP (GIN-14704)), while the Late Mesolithic is still undated (Leonova 2014: Table 2). Geometric microliths have been found from Early and Late Mesolithic layers represented by different types and percentages of trapezoidal artefacts, lunates are typical for Early Mesolithic.

The first evidence of the producing cultures in the region is known from Chokh (excavated between 1955 and 1982; Amirchanov 1987) (Figure 13.7). Chokh is a wide rock shelter that opens at 1,725 m in the mountains of Daghestan, and yielded a sequence of Mesolithic and Early Neolithic occupations. The research carried out in the Elbrus region of the Russian Caucasus led to the discovery of the Epipalaeolithic and Mesolithic sequence of Badynoko rock shelter (Seleckyi et al. 2017), which opens at 830 m. The deposits consist of c. 2.50 m thick sequence. The uppermost layer yielded evidence of a Mesolithic occupation dated to 6,824–6,392 cal BC (7,715 ± 95 BP; COAH-5895) with a stone assemblage characterized by geometric (mainly trapezoidal) microliths. A similar picture is known from the Javakheti Plateau in the southern Caucasus of Georgia. The sequence of Bavra-Ablari has been dated to the Preboreal and Boreal periods. It yielded a very poor assemblage without diagnostic tools (Varoutsikos et al. 2017).

The general impression is that while the Late Palaeolithic assemblages with backed micro-bladelets and micro-points are quite common and reasonably radiocarbon dated (Golovanova and Doronichev 2020; Golovanova et al. 2021), our knowledge on the Mesolithic is still very poor not only regarding the Colchis and Georgia in general but also Armenia (Petrosyan et al. 2014).

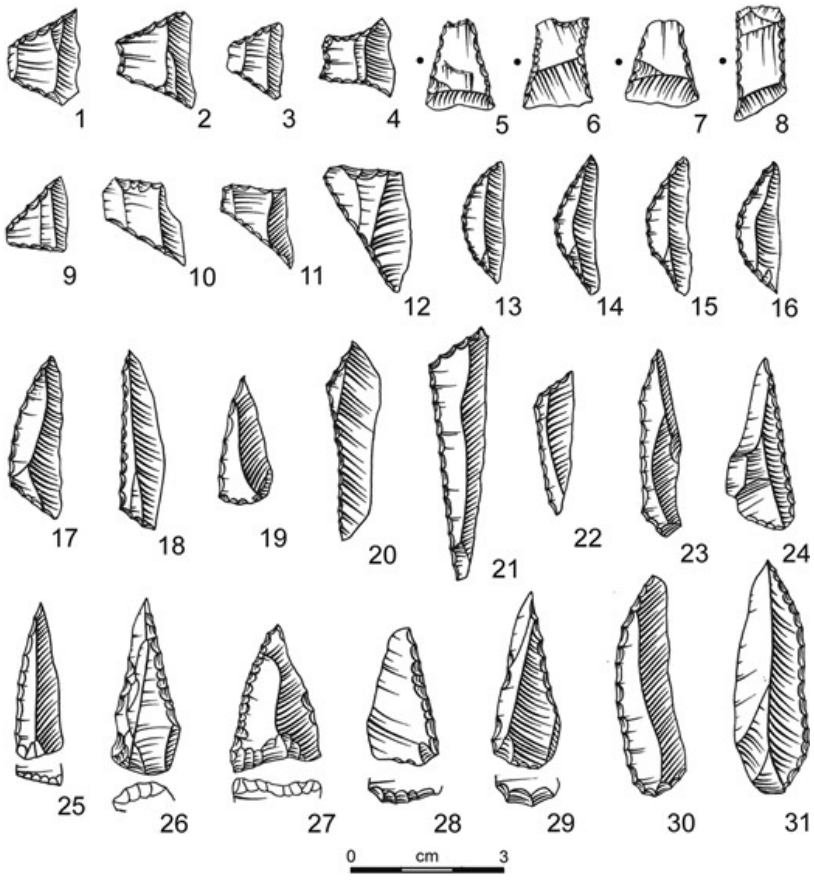

Figure 13.7 Knapped stone tools from the Mesolithic layers of Chokh rock shelter in Daghestan. 1–12: Different types of trapezes; 13–16: lunates; 17–29: backed points and truncation; 30, 31: backed points (after Bader and Cereteli 1989: Table 68).

North Anatolia and Turkish Thrace

The research conducted along the northern coast of the Anatolian Peninsula has never been aimed at the discovery of Pleistocene and Early Holocene sites. The territory shows a complex morphology, subjected to changes until the last century when many villages were deserted, leading to the reforestation of a former
p. 247 agricultural landscape (Düring and Glatz ↳ 2015). A comparable situation is known from the easternmost coast of the Turkish Black Sea, where abrupt slopes are terraced for tea cultivation (e.g. Rize). As a result, we do not have any evidence of Mesolithic sites over a vast area.

Mesolithic evidence is no more consistent in Thrace and along the Marmara Sea, an important passage route between the Black and Aegean Seas connecting Asia to Europe. This region has very few disputable lithic assemblages (Gatsov and Özdoğan 1994). The most interesting is the open-air site Aşaği Pinar (Gatsov 2009), which could be attributed to the end of the Palaeolithic. Our knowledge of the Early Holocene is
p. 248 scarce. Moreover, ↳ the use of the term Epipalaeolithic in this region is somewhat confusing (Kartal 2003; Özdoğan 2019).

The term Antalyan has recently been introduced to define the end of the Palaeolithic along the Mediterranean coastline of Anatolia (Kozłowski 1994: 145). The presence of different types of lunates during the c. 6,000 years is characteristic of the Antalyan assemblages (Bayón et al. 2002: Tab. 1). Their techno-typological characteristics vary according to site location, chronology, and raw material employed for their manufacture.

Conclusions and Future Perspectives

This brief survey of the Mesolithic settlement pattern in the Black Sea area shows that some important problems are still to be solved:

1) The precise chronology of the Ukrainian Mesolithic and the detailed definition of the cultural seriation in the steppe zone of the north Black Sea coast as well as the Crimea. When analysing the sites, many discrepancies appear. Considering that the Crimean sites consist of caves and rock shelters, we need to ask where are the high-altitude camps? Do we have any evidence of the exploitation of coastal resources during the period when the Black Sea freshwaters slowly changed into brackish and then into salty marine waters (Nicholas et al. 2011; Nicholas and Chivas 2014)? Did the environmental changes influence the lithic technology that developed into a blade and trapeze tradition during the second half of the Boreal, or was it due to influx of new technologies from central Asia (Gronenborn 2017)?

2) When and why did the Final Palaeolithic bison hunters become aurochs and horse hunters in the steppe zone of Ukraine?

3) What were the relationships between temporary stations and the large settlements that might have been repeatedly settled (e.g. Mirnoe)? Why is the number of sites so small (Grøn 2012)?

4) Where did the Mesolithic of the Caucasus originate from and what about its chronology, cultural seriation, distribution, and movement of chert and obsidian??

5) Why is our knowledge of the Mesolithic period so scarce all along the western Black Sea region? Why do the Mesolithic sites disappear in Romania and Bulgaria?

6) Is the scarce evidence of Upper Palaeolithic and Mesolithic sites along the northern coast of the Anatolian Peninsula related to the research bias?

7) What do we know on the characteristics of the burial grounds? The best, though limited, evidence comes from the rock shelters of the Crimea and the lower Dnieper River where the Mesolithic cemeteries of Vasilyevka II and III and Marievka have been excavated and some of the human remains dated. The results show that the Crimean rock shelters were utilized as cemeteries during the early Preboreal (Vasilyevka III), Boreal (Marievka), and Early Atlantic periods (Vasilyevka II) (Telegin 1962; Lillie 1998; Zvelebil and Lillie 2000; Lillie et al. 2003).

All these questions, and many more, are still waiting for answers, and will probably wait for years to come.

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Notes

1 The cal BC dates presented in this chapter have been calibrated by OxCal 4.4 online.