The Flint Assemblage from Kerem Maharal

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The excavations at Kerem Maharal (see 'Ad and Sa'id, this volume) yielded a collection of flint artifacts (n = 2238) from various stratigraphic contexts, such as fills inside caves, dark clay soil within U-shaped cupmarks and cavities in limestone exposures, none of which represent primary depositions. For this reason, the assemblage is described as a single unit, without any attempt to differentiate between the layers. Partial seiving was conducted in most of the excavation areas, and only the sediments from Areas F10–12 were fully sieved through a 5 mm mesh. As a result, chips and small flakes (30–40 mm) are well-represented within the assemblage, and the number of tools is small, consisting of only 56 items.

Raw Material and Waste

The most frequent raw material utilized at the site is light to dark gray, fine-grained, high-quality flint. Occasionally, the items are covered with a whitish patina. Flint nodules (mainly cobbles and blocks) are abundant at the site, embedded within the Upper Cenomanian soft-limestone formations (*qirṭon*; Kashai 1966; Druck 2004).

The flint assemblage is characterized by flake production, while blades/bladelets are less common (Table 1). Cores are rare, with 16 for flake production and only 3 for blade/bladelet production (Fig. 1; Table 2). In addition, there are 22 core-trimming elements (Fig. 2:8; see Table 1). Of interest is one proximal microburin, which is a typical spall for the production of microlithics during the Epipaleolithic period (Goring-Morris 1987).

Table 1. Waste Material Frequencies

Type	N
Debitage	
Primary elements	120
Flakes	513
Blades\bladelets	104
CTEs	22
Burin spalls	3
Total Debitage	762
Debris	
Chunks	79
Chips	1322
Total Debris	1401
General	
Debitage	762
Debris	1401
Cores	19
Tools	56
Total	2238

Tools (Table 3)

The tool kit is dominated by microliths (Fig. 2:1–5), notches and denticulates, retouched

Table 2. Core Frequencies

Type	N
Single-platform flake cores	5
Amorphous flake cores	7
Multiple-platform flake cores	2
Core fragment	1
Single-platform blade cores	2
Single-platform bladelet core	1
Discoidal core	1
Total	19

Table 3. Tools Frequencies

Type	N
Endscraper on blades	1
Endscrapers on flakes	6
Trapeze-rectangles	5
Obliquely backed and truncated bladelets	1
Microlith fragments	6
Retouched blades	5
Notches and denticulates	12
Burins	5
Awls	5
Multiple tool	1
Varia	1
Retouched flakes	8
Total	56

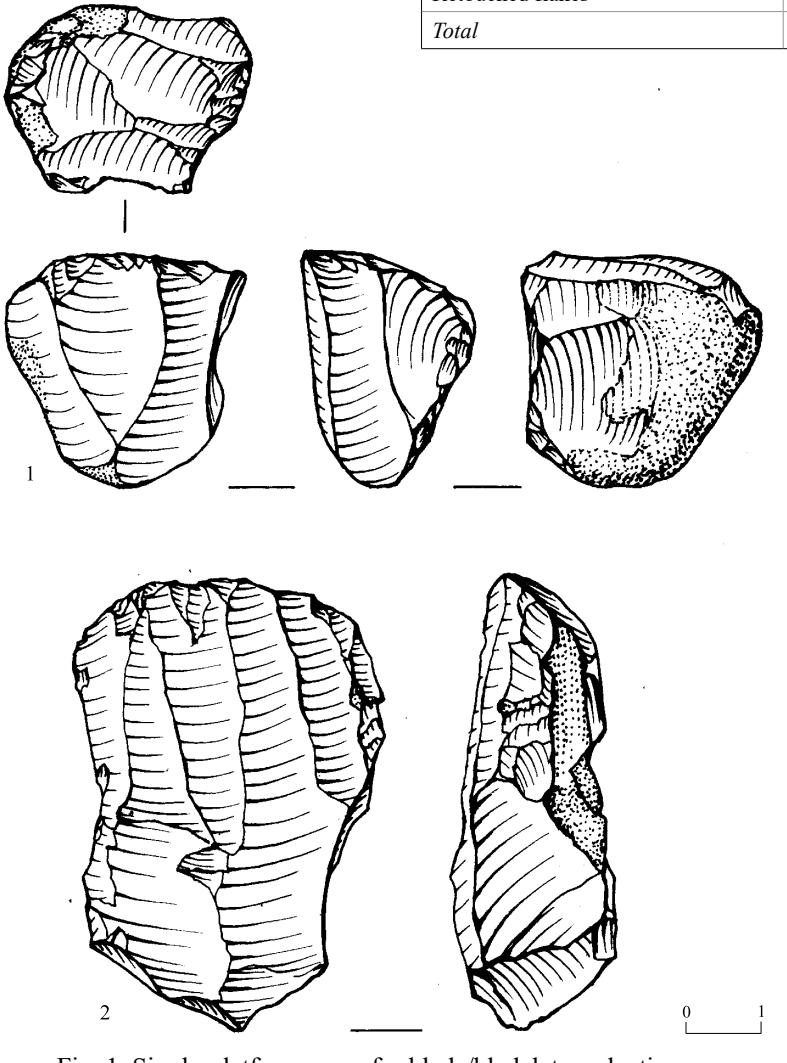

Fig. 1. Single-platform cores for blade/bladelet production.

flakes (Fig. 2:6, 7) and endscrapers (Fig. 3:2), alongside burins (Fig. 3:1), awls (Fig. 3:3) and varia (Fig. 3:4). Microliths are the most distinctive tools in the assemblage, consisting of trapeze-rectangle microliths, obliquely truncated and backed bladelets, and microlith fragments. The trapeze-rectangle microliths are complete, while the other microliths are broken, and therefore some of these may also have been trapeze-rectangles (Fig. 2:5).

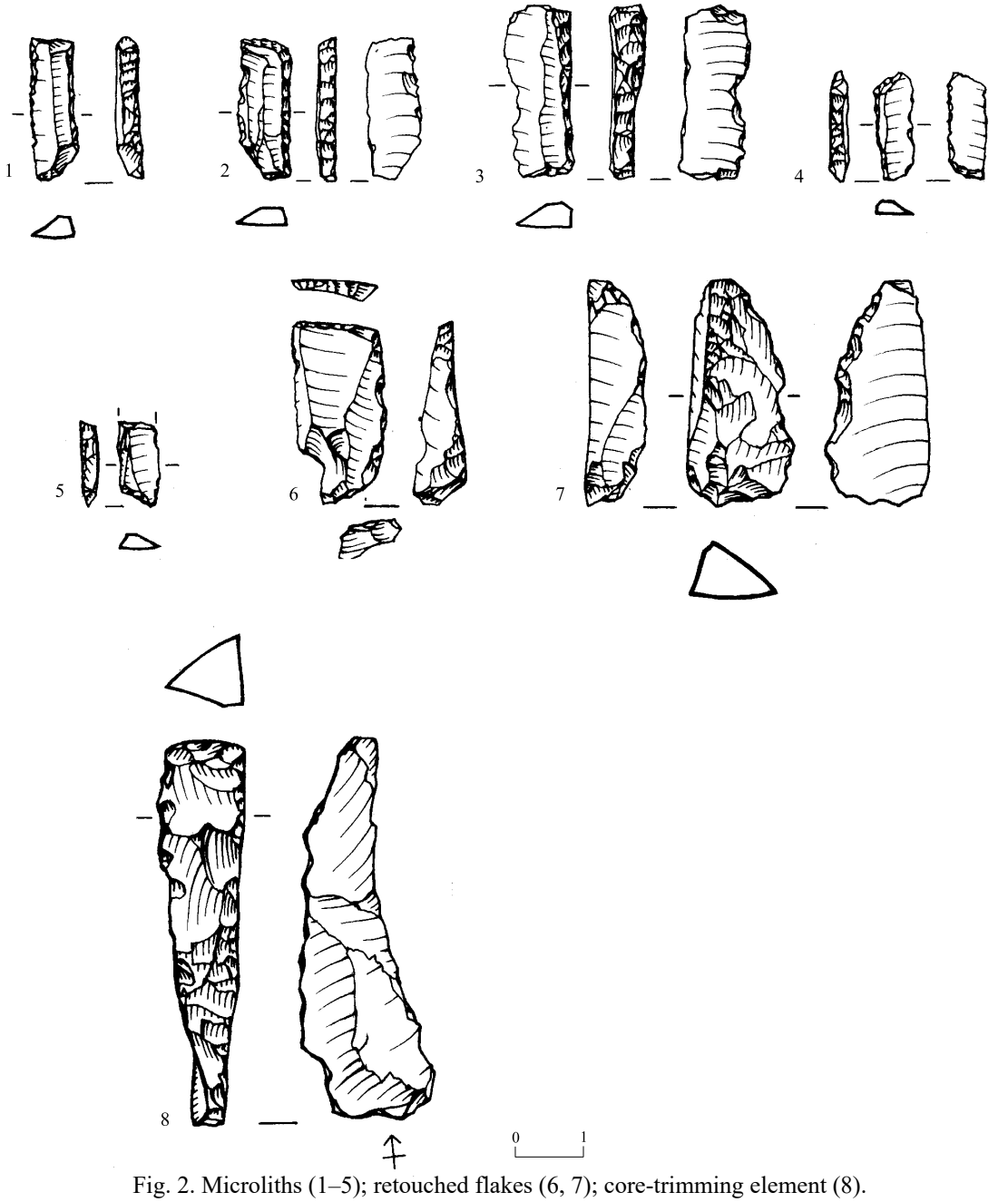

Fig. 2. Microliths (1–5); retouched flakes (6, 7); core-trimming element (8).

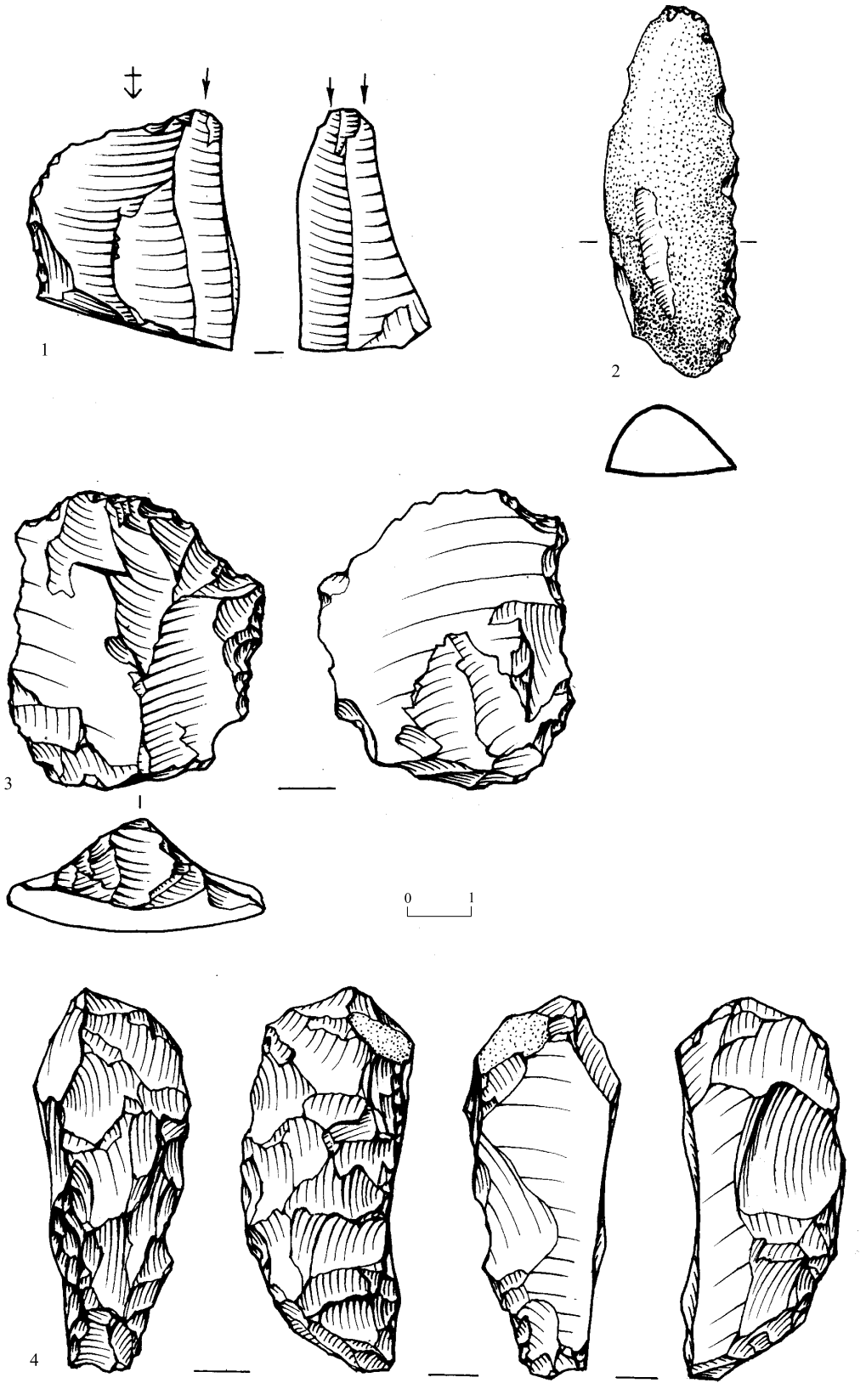

Fig. 3. Burin (1); endscraper on blade (2); awl (3); varia (4).

Discussion

This assemblage is characterized by the appearance of a few trapeze-rectangle microliths, together with single-platform blade/bladelet cores, a proximal microburin and an endscraper on a blade. These tools suggest an Epipaleolithic occupation, probably Geometric Kebaran. However, the small amount of tools and debitage does not enable a more precise identification. Numerous Kebaran and Geometric Kebaran sites are known within a radius of 10 km from Kerem Maharal, on Mount Carmel and along the coastal plain. Some of these sites, such as Ḥefẓiba and Newe David (Kaufman 1989; Yeshurun et al. 2015) are large (500 sq m) with occasional building remains, while others, located within the dunes, are small (50–150 sq m), such as Naḥal Ḥadera I–II (Kaufman 1976; Ronen and Kaufman 1976), or are of uncertain size, such as Haifa I–III (Olami 1984) and the occupation at Raqefet Cave (Lengyel 2007). It is noteworthy that a similar assemblage was recovered from the site of Qasṭra, 8 km to the north of Kerem Maharal, where several eroded, Kebaran and Geometric Kebaran microliths were found within caves and bedrock cavities (Hamoudi Khalaily, pers. comm.).

The survey conducted in this region by Olami (1984:164) produced several flint items dated to the Middle Paleolithic, Neolithic and Chalcolithic periods. During the excavations at Kerem Maharal, a few Chalcolithic sherds were recovered, although no diagnostic Chalcolithic tools were present in the flint assemblage.

In summary, although the flint assemblage and especially the tool kit is small, the prehistoric finds at Kerem Maharal contribute to our knowledge of Epipaleolithic open-air sites in this region.

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