

THE FLINT ASSEMBLAGE FROM ḤORBAT DUVSHAN

HAMOUDI KHALAILY

A total of 184 flint artifacts were collected from three excavation areas (Table 1). Comparison of the lithic artifacts from the three areas revealed great similarity; therefore, all the lithic finds are treated as a single assemblage characteristic of the Chalcolithic period. Debitage, the majority of which is flakes, constitutes two-thirds of the assemblage. The fact that chips and chunks are present in low frequencies suggests that the artifacts were not systematically collected. Tools represent 12.5% of the flint assemblage, similar to tool frequencies in other Chalcolithic sites of this region, such as Tel Turmus (c. 15%; Hermon 2003:192).

The tool inventory from Ḥorbat Duvshan (Table 2) includes most of the types typical of Chalcolithic assemblages, although the relative frequencies here are not characteristic of Chalcolithic habitation sites. Most of the tools are present in almost equal numbers, apart from sickle blades. These unusual proportions are probably a result of the unsystematic retrieval.

Table 1. The Flint Assemblage

Category	Type	N	%
Debitage	Primary elements	18	15.4
	Flakes	78	66.7
	Blades/bladelets	21	17.9
	Total debitage	117	100.0
Debris	Chips	14	37.8
	Chunks	23	62.2
	Total debris	37	100.0
Assemblage	Debitage	117	63.6
	Debris	37	20.1
	Cores	7	3.8
	Tools	23	12.5
	Total	184	100.0

Raw Material

The site is located within a volcanic formation of the Neogene-Quaternary Era that is not rich in flint outcrops. The main flint source is the Eocene formation located in the Naftali Hills to the west. Flint nodules are common in the nearby wadis that crisscross the area from east and west, providing drainage conduits to the Sea of Galilee. Most of the items are made of beige to brown flint, with several items manufactured on gray translucent flint. Both flint types are of high quality suitable for shaping tools.

Cores

Only seven cores were collected (3.8% of the assemblage; Table 1), most with a thin brown patina. The common core is a nodule between 6 and 8 cm in length; all of the cores were intensively utilized. Three of the cores have a single platform and two possess multiple platforms oriented in various directions. Six of the seven cores display flake scars (Fig. 1:1, 2), while the remaining core has flake and blade scars (Fig. 1:3).

Table 2. Tool Frequencies

Type	N	%
Sickle and backed blades	8	34.80
Retouched blades	2	8.70
Bifacial tools	3	13.04
Scraper	1	4.35
Perforators	2	8.70
Burins	2	8.70
Retouched flakes	4	17.40
Varia	1	4.35
Total	23	100.00

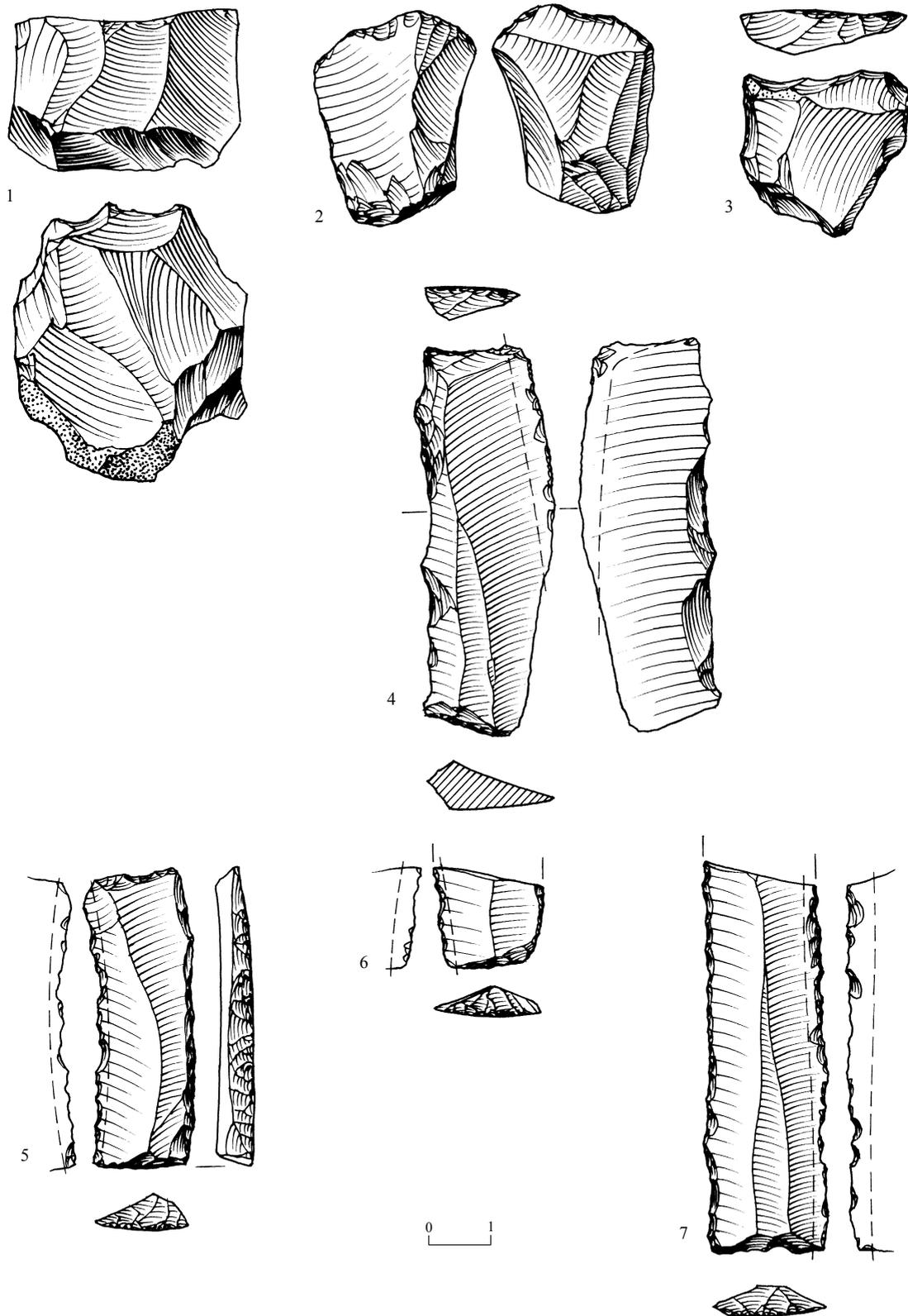


Fig. 1. Flint tools: (1-3) cores; (4-7) sickle blades.

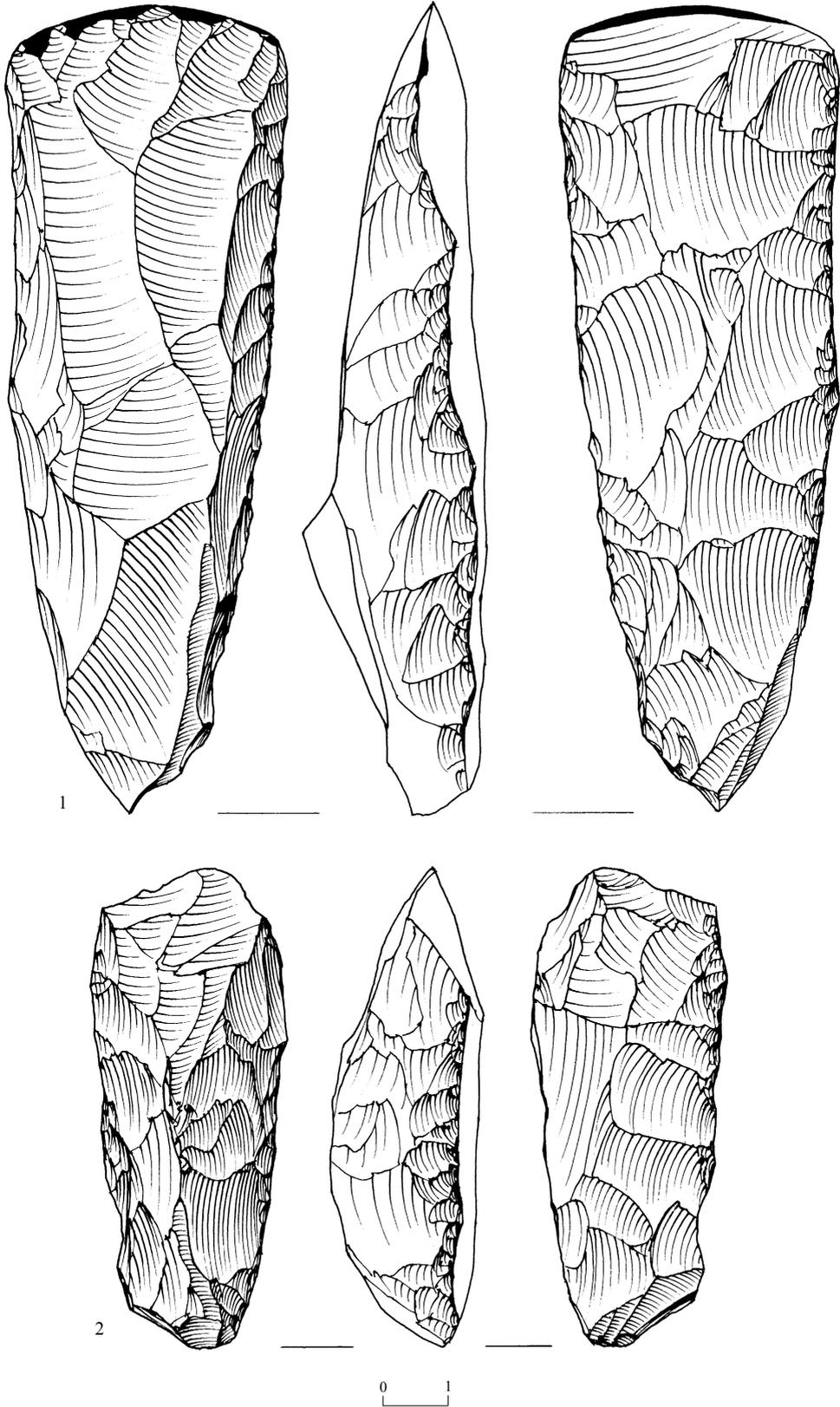


Fig. 2. Flint tools: (1) axe; (2) adze.

The number of scars on the flaking surface of the cores varies from 9 to 13, with most bearing 10 scars, reflecting the high degree of exploitation of each core. The surface of the cores is usually clean of cortex, further support for the assumption of intensive exploitation.

Tools

A total of 23 tools was collected (Table 2). Sickle blades are the most frequent type, comprising c. 35% of the tools (Fig. 1:4–7). Seven of the eight items display gloss on their working edges (Fig. 1:6, 7). The sickle blades usually comprise a bitruncated, backed blade with one working edge modified by fine denticulation (Fig. 1:7). However, they have a trapezoidal cross-section and are wider blanks than the typical Chalcolithic sickle blades known from southern Chalcolithic sites. The mean width of the sickle blades from Ḥorbat Duvshan is 15 mm, which is very similar to that of sickle blades from Yir'on, also dating to the Chalcolithic period (Uziel et al. 2007). This reflects a northern Chalcolithic tradition of utilizing wider blanks than those in the central and southern regions (see Hermon 2003:277–279). A similar phenomenon is also seen at Tel Te'o (Gopher and Rosen 2001), Tel Turmus

(Hermon 2003) and in the Golan Chalcolithic culture (Noy 1998:287).

Three bifacial artifacts, two tools and one unidentified fragment were recovered. The two tools, an axe (Fig. 2:1) and a massive adze (Fig. 2:2), represent 13.04% of all tools. Both were intensively shaped by bifacial flaking leaving minimal cortex on the dorsal side. The ad hoc tools that include scrapers, perforators and retouched flakes and blades are present in similar numbers, a further indication of the selective retrieval.

Summary

Although the flint assemblage from Ḥorbat Duvshan was collected in three different areas, the combined assemblage is homogenous and typical of northern Chalcolithic assemblages. Since the site is located within an environment where raw materials were not readily available, the flint production was mostly task oriented and not an integral part of the site economy. The tools include all common Chalcolithic types. The sickle blades are distinctive in their dimensions, which are wider than normative Chalcolithic sickle blades from the central and southern regions, a characteristic of northern Chalcolithic assemblages.

REFERENCES

- Gopher A. and Rosen S.A. 2001. Lithics of Strata XIII–III: The Pre-Pottery Neolithic–Early Bronze Age. In E. Eisenberg, A. Gopher and R. Greenberg. *Tel Te'o: A Neolithic, Chalcolithic and Bronze Age Village in the Hula Valley* (IAA Reports 13). Jerusalem. Pp. 49–82.
- Hermon S. 2003. *Socio-Economic Aspects of the Chalcolithic (4500–3500 BC) Societies in the Southern Levant—A Lithic Perspective*. Ph.D. diss. Ben-Gurion University, Be'er Sheva'.
- Noy T. 1998. The Flint Artifacts. In C. Epstein ed. *The Chalcolithic Culture of the Golan* (IAA Reports 4). Jerusalem. Pp. 270–332.
- Uziel J., Ben-Efraim Y., Khalaily H., Marder O., Bar-Oz G. and Raban-Gerstel N. 2007. The Salvage Excavations at Yiron East. *Qamma* 1:39–94.