

WĀDĪ ḤAMARASH: A NEW MPPNB SITE IN JORDAN

Adamantios Sampson

Site Setting

Since 2007, a team from the University of the Aegean has been participating in a survey in the aṣ-Ṣāfi area (Politis *et al.* 2007), during which three prehistoric sites along the Wādī al-Ḥasā river have been located. Two of them (Wādī Ḥamarash 1 and 2) belong to the PPNB and third one to the Bronze Age.

The site Wādī Ḥamarash 1 is located on an extended plateau north-west of the confluence of the al-Ḥasā and Ḥamarash - Suwayf wadis (Fig. 1). The Neolithic settlement extends over a flat, circular area 80m in diameter, dominating the arid plateau which is bounded by Wādī Ḥamarash - Suwayf to the east, a smaller wadi to the west and steep mountains to the north (Fig. 2). The site is isolated and inaccessible, about an eight-hour walk from the village of aṭ-Tayyiba on the Karak plateau, and about a three-hour

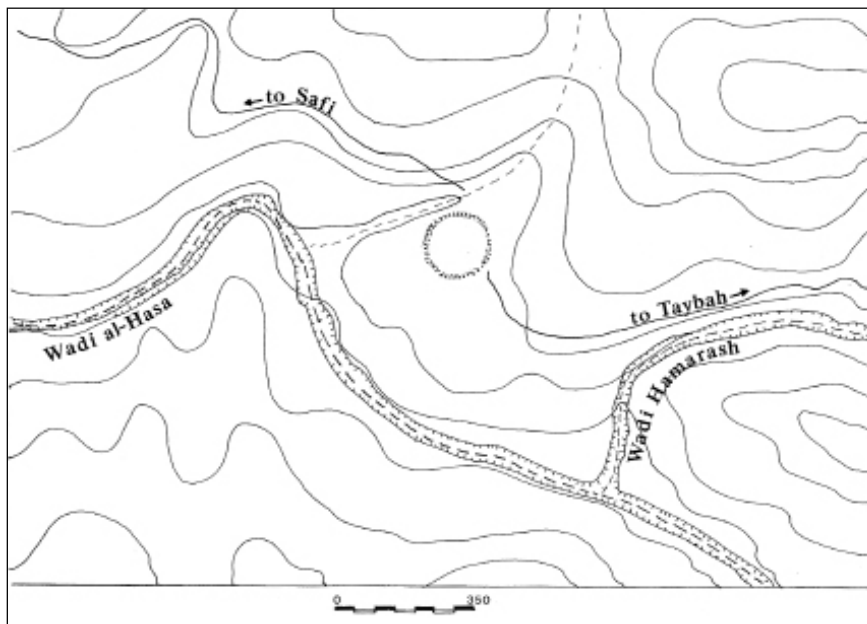
walk from aṣ-Ṣāfi.

Excavation

In January 2008, the University of the Aegean started systematic archaeological digging at Wādī Ḥamarash I. Our research lasted three weeks and was carried in two areas, I and II. In 2009 two more areas, III and IV, were opened, while investigation in Areas I and II continued. In total, an area of 950 sq. meters has been excavated (Fig. 3).

Area I

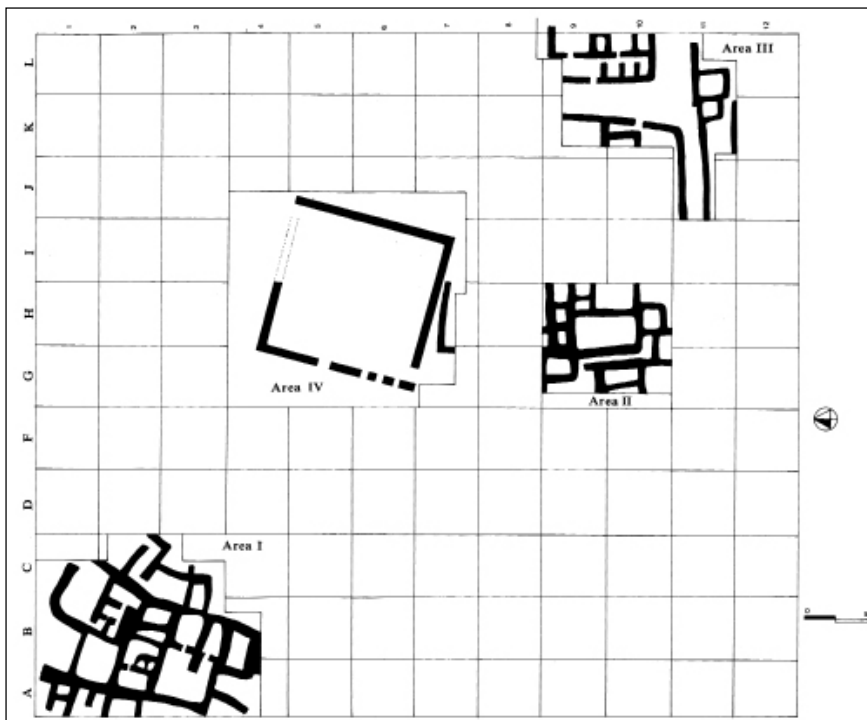
In Area I (Figs. 4 and 5) we excavated various walls, some of which were thick and well built, which is probably indicative of the presence of double-storey buildings. Thinner walls probably served to sub-divide rooms. Locus 1 was a rectangular room, a large portion of which



1. Wādī Ḥamarash: map of the site.



2. The plateau from the north.

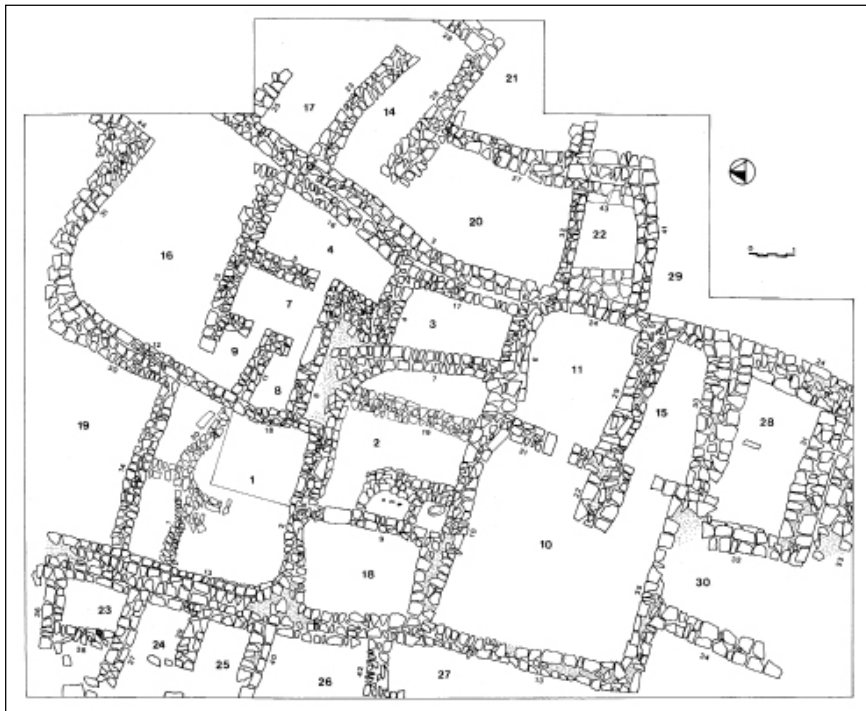


3. Site grid.

was excavated. At a depth of 1.70m there was a buttress wall which may have supported an upper floor, while flint tools and burned deposits continued down to 3.10m (Fig. 6). Locus 2 is a square room with rounded corners. A semi-circular, roughly built structure, which continued down to a depth of 0.75m, was exposed in the eastern part of the room. Within the structure two querns were found, one of which was part of the west wall. Three more querns were found at

the north-west part of the structure. The deposits were soft, sandy and easily removed. After careful planning and photography, the roughly built structure, which consisted of a single row of stones, was removed. Probably it was a much later addition, erected after the settlement was abandoned.

In the west wall of the room, at 0.74m depth, an opening appeared, constituting a doorway 0.76m high and 0.50m wide. In the west side



4. Plan of Area I.



5. Area I from the north.

or the room, at 1.20m depth, two semi-circular storage areas appeared, adjoining to the west wall beside the door (Figs. 7 and 8). There were minimal traces of fire, suggesting that these features were not used for cooking. The excavation of the room reached a depth of 2.10m, where hard soil -- probably a surface -- was exposed.

In Locus 18 (Figs. 4 and 8), which communicates with Locus 2 by means of a narrow door from a depth of 1.00 to 1.40m, flint fragments, eight flat drilled stones, perforated shells, drills,

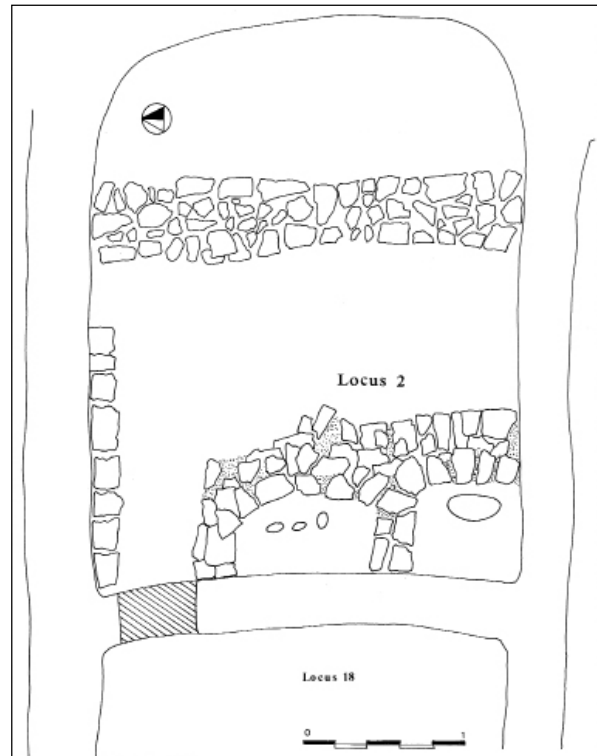
a perforated round sandstone piece, and fragments of querns and grinders were collected. Of interest were two flat limestone stones with round cavities, probably a gaming board (see Fig. 17). In the center of Area I, three small storage areas -- Loci 7, 8 and 9 -- are formed (Fig. 4), which are interconnected by means of narrow passages. At all three entrances, thresholds were found at the depth of 0.40m indicating that the rooms did not continue any deeper.

Locus 22 is a trapezoid room added on top



6. Area I, Locus 1.

of Wall 24 (**Fig. 9**), which was excavated to a depth of 2.10m where chipped stone tools and burned animal bones were found.

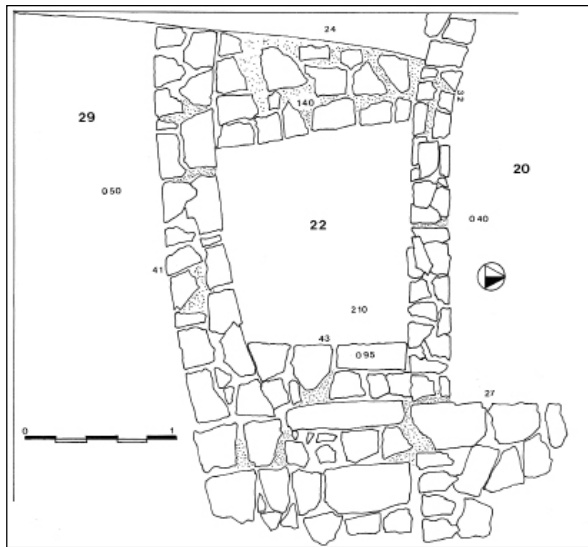


7. Plan of Locus 2.

In 2009 the dig extended into the east part of the area (**Fig. 4**). Wall 23 extended to the east but was interrupted at a length of 2.55m. Wall 26 was also exposed; although it appears to be quite thick, this is in fact the result of another wall having been attached to its side. Wall 26 formed an angle with another wall (Wall 28),



8. Locus 2 from the east.



9. Area I, Locus 22.

which headed north. In this area, excavation stopped at a depth of just 0.45m. numerous querns and grinders were found in all areas.

The new areas discovered in the extension of Area I to the west yielded a large quantity of ground stone objects, such as querns and grinders. This work exposed a number of small rooms, Loci 23-26 (**Fig. 4**), which so far do not seem to communicate with each other. The walls of these rooms were relatively thin, being constructed on top of the main wall, Wall 13, which continues further to the south. The small rooms were dug to 0.50m depth. In the south, Wall 13 forms an angle enclosing a wide area (Locus 10). The west side of this locus was dug down to 0.80m but was not particularly interesting. This locus and two smaller loci, 11 and 15, with which it communicates through narrow doorways, may have constituted a single dwelling. However, further investigation is needed in order to clarify this point.

With further expansion to the south, a small room (Locus 28) with sturdy walls was revealed. It may constitute a separate unit, as there are double walls to the south and north (**Fig. 4**). Excavation in Locus 28 reached a depth of 0.65m; the deposit did not yield any artifacts except for a few blades and some stone vessels. It was characterized by a stone standing upright in the middle of the room.

Area II

In Area II, situated in the south part of the site,

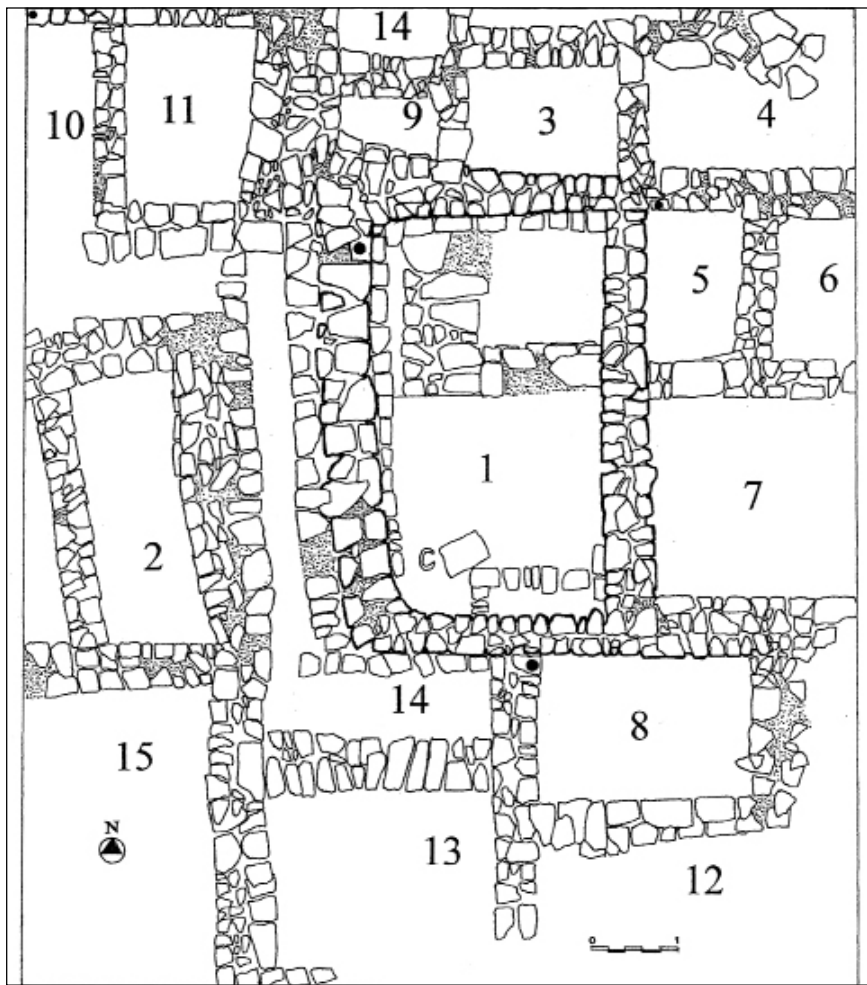
we discovered a building complex dominated by major structure built of large heavy stones (**Fig. 10**). We conducted our research in the north-east side of the building where deposits were intact. The soil was soft and sandy with many stones, presumably fallen from the superstructure of the building. At the depth of 0.60m, a buttress wall appeared at the north side, on which posts supporting the first floor were founded.

At 0.80-1.00m below ground surface, we discovered a stratum of burned soil with chipped stone arrowheads, stone vessels fragments and animal bone. The next stratum consisted of a dark soil, rich in stone artifacts and with traces of burned remains. Fewer artifacts and animal bones were found 1.15m below the ground surface, although an oval bead made of green stone (possibly malachite) was recovered from this deposit. 1.35m below the ground surface, we discovered a 1.30m wide wall made of large, flat stones, possibly belonging to an earlier architectural phase (**Figs. 11 and 12**).

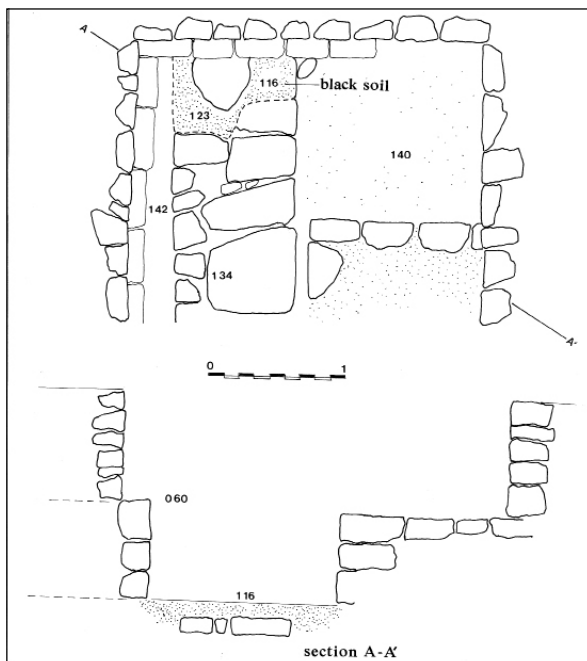
Small rooms have been discovered around this main building. In the north, there are four independent small loci (3, 4, 9, 11 and 14) which we excavated to a depth of 0.30m, recovering many querns, ground stone artifacts and chipped stone blades. Small loci were also found to the east and south. The excavation of Locus 13 just 0.20m below ground surface was very interesting, since we discovered blades, arrowheads and animal bones.

Area III

In Area III, an open area was discovered which may be a courtyard with small storage areas to the east and west, which are interconnected by means of narrow doorways (**Fig. 13**). The layout of these small loci with narrow passageways (Loci 4-10), where many ground stone tools were found, looks different from the 'beehive' -- like building system at al-Baydā. A one metre wide passageway, which may be interpreted as a road, leads to the courtyard (Locus 14). At the north-eastern side of Area III, a building with poorly preserved walls was excavated to a depth of 1.90m, while to the south two rectangular loci have walls preserved to a considerable height. At the western side a narrow passageway leads from the 'courtyard' to another structure (Loci 2, 3, 6 and 13).



10. Plan of Area II.



11. Area II: Plan and section of Locus 1.

Area IV

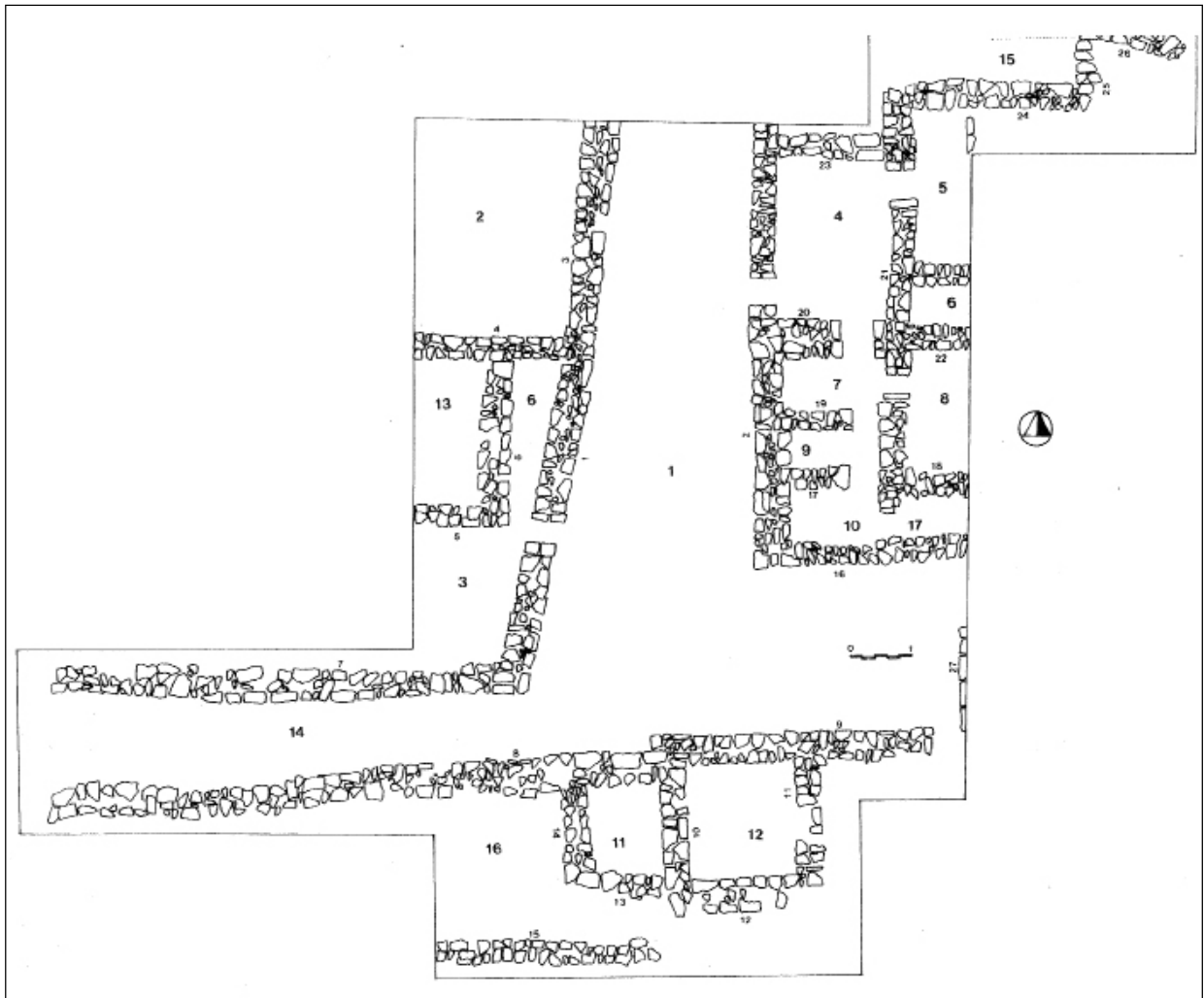
The biggest surprise of the last season's work came during the final days when a 13-metre square building (Area IV) was uncovered in the centre of the settlement. Its construction with carefully chosen flat slab stones differed from that of other buildings on the site. Excavations here continued to a depth of only 30cm, but it is certain that this building is preserved to a great height as was evident from our test-trench on the north side which went down to 1.60m without finding the bottom of the wall. This building has entranceways on three of the corners and three narrow openings on the western side (**Fig. 14**).

Ground Stone Objects and Other Finds

Ground stone implements are widespread in the Pre-ceramic Neolithic in the Near East. In those regions the occurrence of ground stone tools is recorded from the 10th to 8th millennia cal. BC. They are associated with the process-



12. Area II. Locus 1 from the north.



13. Plan of Area III.



14. Openings in the west side of the square building.

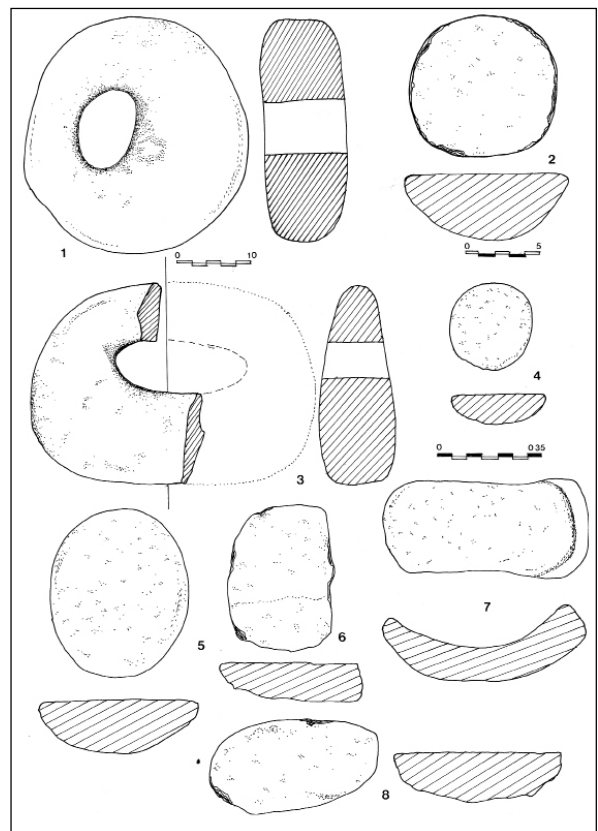
ing of plant foods, especially the seeds of wild grasses and domesticated cereals. As for the typology of passive groundstone, different types have been identified in the Pre-ceramic Neolithic of the Near East.

The usual types are oval or round querns with a flat surface (Fig. 15.5, 15.6, 15.8), as well as the unusual concave and oblong millstone with convex base (Fig. 15.7). As for the grinders, different types occur.

It is very significant that a large number of stone vessels were also found (Fig. 16). There are oval or round bowls, of which the most usual type is a small shallow mortar with thick walls (Fig. 16.7, 16.8, 16.10). Rare are the closed-shaped stone vases with very thick walls.

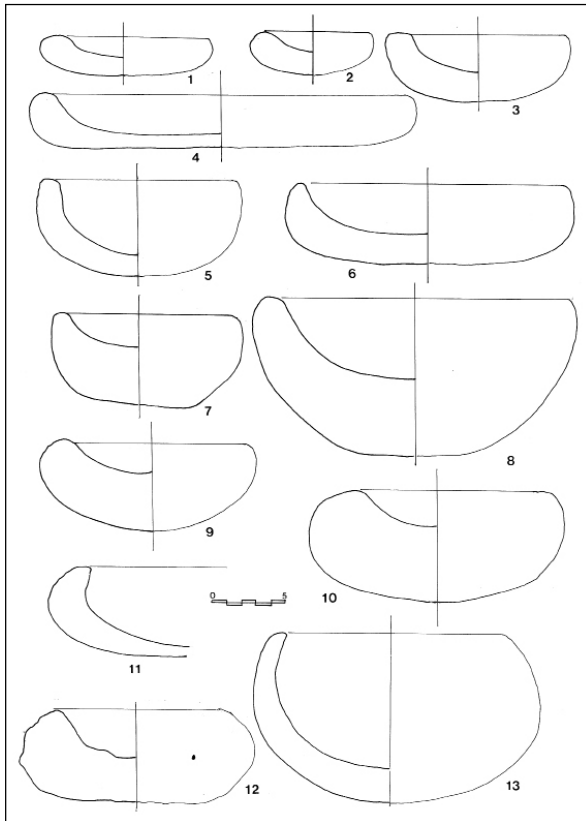
A marble notched stone could be a schematic figurine, or perhaps just a weight. Bilaterally notched stones, interpreted as weights, have been reported from the PPNB settlement at Wādī Abū Ṭulayḥa (Fujii 2007: Fig. 16).

Two slabs of sandstone found in Area I, Locus 18 bear cup marks on their surfaces and may be characterized as gaming boards (Fig. 17). Similar items have been found at the PPNA site of Ein Suhun (Kaliszan *et al.* 2002: 16) and at Wādī Abū Ṭulayḥa (Fujii 2007: Fig. 31, 2008: Fig. 30.11). These are, possibly, associated with several stone bowlets also found in Area I. Of undefined usage are small flint bowlets without retouch, which are found in all areas. These un-

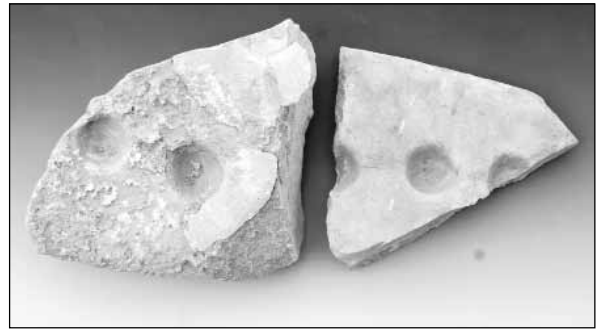


15. Ground stone tools.

usual items have so far only been recorded at Basta (Nissen *et al.* 1991), Ba'ja (Gebel 1999) and Kfar Hoheresh (Gorring-Morris 1994). At Wādī Ḥamarash these items are not retouched,



16. Stone vessels.



17. Stone gaming boards.

whereas at Baṣṭa and Ba‘ja some do feature re-touch. They could have been slingshots, or perhaps counters used with the abovementioned gaming board. Several limestone discs with a small knob were found in Area I and are similar to objects found at Wādī Abū Ṭulayḥa (Fujii 2008: Fig. 31.6).

Twelve drilled flat stones were found in Area I, Locus 18 (**Fig. 18**), these were presumably soft stone necklace beads, which are known from many PPNB settlements.

Chipped Stone Artifacts

Excavations yielded a large quantity of



18. Drilled flat stones.

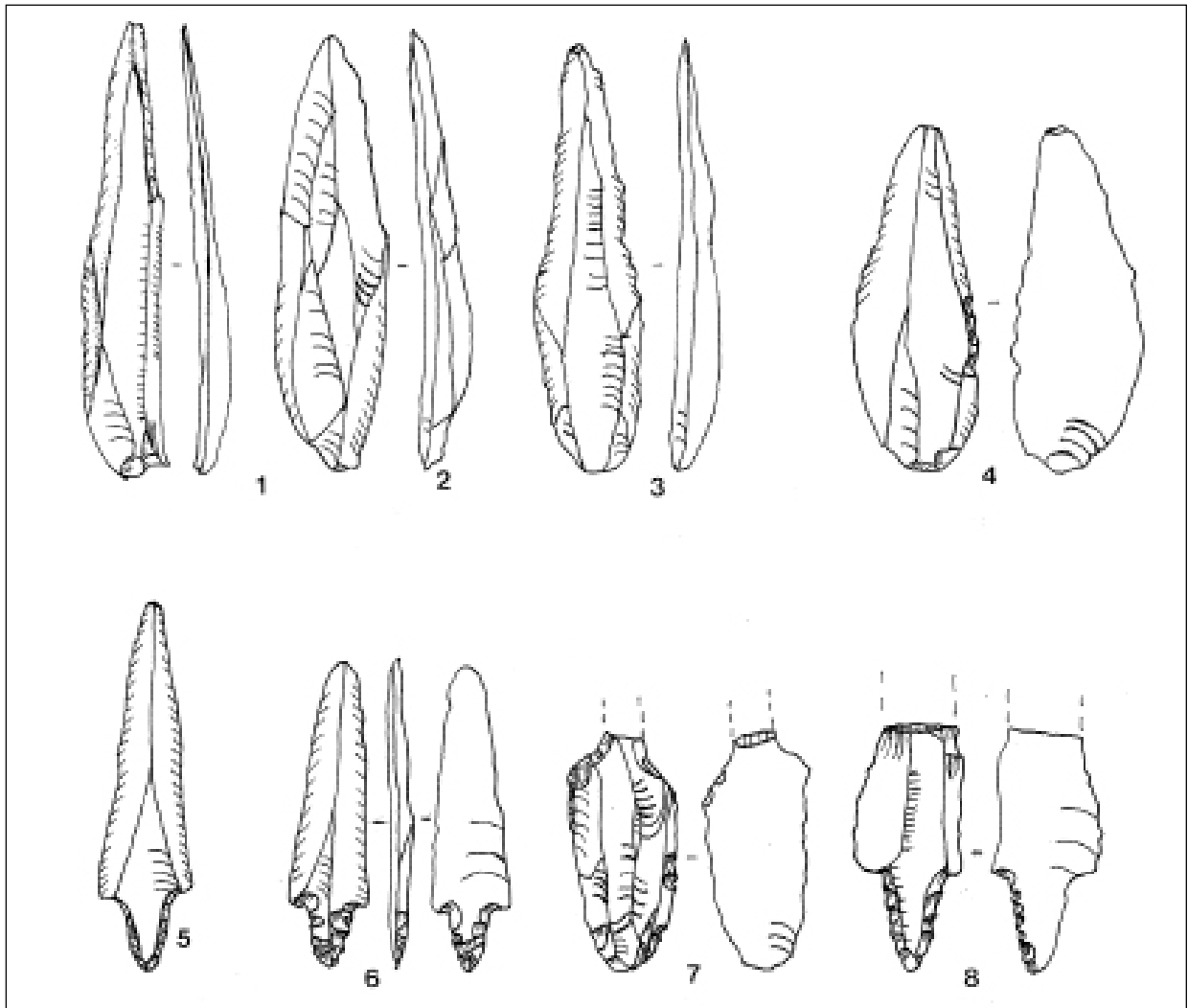
chipped stone artifacts. Although analysis is still in progress, their density on the whole seems rather regular across the site. However, in least in two cases (Area I, Locus 18 and Area II, Locus 13), artifacts were concentrated in specific areas, presumably storerooms or spaces where specialized activities took place. All artifacts recovered so far are made on flint extracted from waveform cores using the pressure blade technique (Fig. 19).

The main tool types in our sample are blades with traces of use-wear, denticulate tools, borers or drills, and projectile points. At Shukarat al-Musay'id arrowheads were the most common category of tool, accounting for 20% of the tools (Kaliszan *et al.* 2002). With the exception of the borers (Fig. 20), many of the tangled artifacts

probably had the same use.

Discussion

The architecture at Wādī Ḥamarash has apparent similarities with the 'peripheral' settlement of Ghweir I in southern Jordan (Simmons and Najjar 2000), where rectangular buildings with large rooms were excavated. Two-storey buildings also occur, 3.60 to 4.00m high, as do the niches and low doorways known from Wādī Ḥamarash. The closest known PPNB settlements to Wādī Ḥamarash are Khirbat al-Ḥammām (Peterson 2007) and Wadi al-Ḥimmah, which are situated in the region of Wādī al-Ḥasā, albeit at a higher altitude. Khirbat al-Ḥammām is a megasite extending over 6 to 7 hectares; limited excavation has been conducted. The second is a



19. Chipped stone artifacts.

smaller site at 450m altitude, with an extent of one hectare, which has sustained heavy destruction from road construction. Although the site has not been excavated, openings in walls exist, as do subterranean channels similar to Basta and as-Sifiyya (Mahasneh and Gebel 1998).

We may assume that there was permanent or semi-permanent occupation at Wādi Ḥamarash, because of the river that flows by the settlement. Since the area is located among deep canyons and steep mountains, we assume that the site's occupants cultivated the plateau around the settlement, taking full advantage of the wadi water.

Wādi Ḥamarash can be characterised as a small PPNB settlement, typical of the early stages of that period. Shukarat al-Musay'id (Kaliszan *et al.* 2002) is also a small site, probably preceding the megasite phenomenon, but the round buildings there are very different to those at Wādi Ḥamarash.

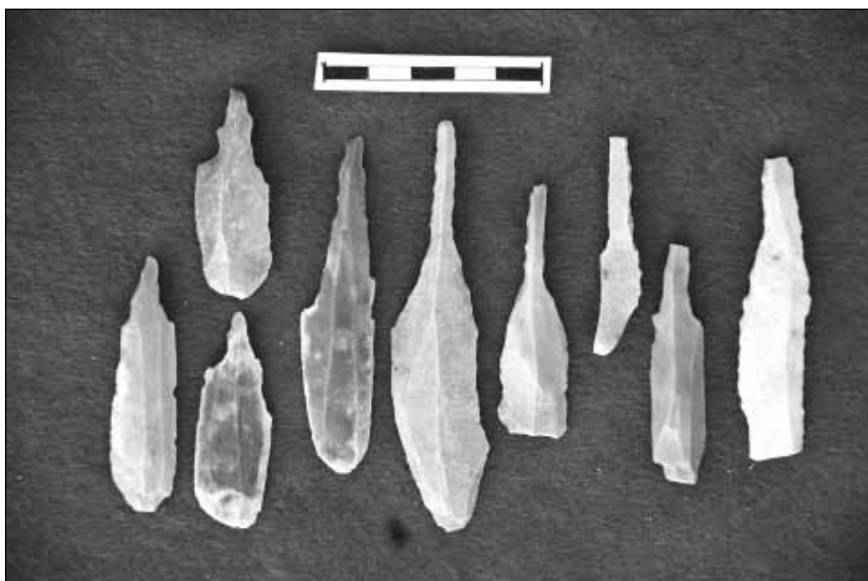
Acknowledgements

The project is grateful to the Director General of Antiquities, Dr Fawwaz al-Khraysheh, and his staff for granting permission to work at the site. Thanks are due to Dr Konstantinos Politis who helped with preparations for the excavation. My thanks also go to the staff members of the project: Photographer Petros Konstantopoulos, architect Photeini Striggari, Georgia Tampakopoulou (chipped stone) and Syrmali Donta (ground stone).

Adamantios Sampson
University of the Aegean

References

- Fujii, S.
2007 PPNB Barrage Systems at Wadi Abu Tulayha and Wadi ar-Ruwayshid ash-Sharqi. *ADAJ* 51: 403-427.
2008 Wadi Abu Talayha, 2008, A preliminary Report of the 2007 Summer Field Season on the Jafr Basin Prehistoric Project. *ADAJ* 52: 445-478.
- Gebel, H.G.K.
1999 Flint "bowlets" from the LPPNB of Southern Jordan. *Neo-lithics* (02): 12.
- Gorring-Morris, R. F.
1994 Aspects of the PPNB lithic Industry at Kfar Hahresh Near Najareth, Israel. Pp. 427-444 in K. Kozłowski and H.G.K. Gebel (eds.), *Neolithic Chipped Stone Industries of the Fertile Crescent and their Contemporaries in Adjacent Regions*. Berlin.
- Kaliszan, L.R., Hermansen, B.D., Hoffmann Jensen, C., Skuldbol, T., Bille, M., Bangsgaard, P., Ihr, A., Sorensen, M. L. and Markussen, B.
2002 Shawarat Mazyad 2002, The Village on the Edge of what. *Neo-lithics* (01): 16.
- Mahasneh, H. M., Gebel, H.G.K.
1998 Geometrics from LPPNB Es-Sifiyya, Wadi Mujib, Jordan. *Paleorient*: 1-5.
- Nissen H.J., Muheizen, M., Gebel, H.G. *et al*
1991 Report on the Excavations in Basta. *ADAJ* 35: 13-40.
- Peterson, J.
2007 Khirbet Hammam 2006. Preliminary Report of



20. Area I, Locus 18: Borers.

ADAJ 54 (2010)

- Continued Test Excavations. *Neo-lithics* (02): 3-6.
- Politis, K.D., O'Hea, M., Papaioannou, G.
2007 Ghawr as-Safi Survey and Excavations 2006-2007. *ADAJ* 51: 199-210.
- Simmons, A.H. and Najjar, M.
2000 Preliminary Field Report of the 1998-1999 Excavation at Ghweir I, a Pre-pottery Neolithic B Community in the Wadi Feinan Region of Southern Jordan. *Neo-lithics* (02,03): 4-6.