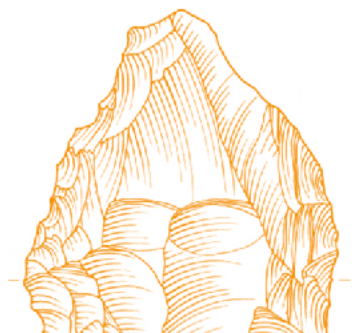


Second season of prehistoric investigations in the Qumayrah Valley, Oman



Abstract: In the second field season of the Omani–Polish Qumayrah Archaeological Project, the prehistoric leg of the team conducted investigations of previously discovered lithic sites in the vicinity of Al-Ayn village. This paper summarizes the results of archaeological testing at three open campsites codenamed Qumayrah-Ayn (QA) 2, QA 6 and QA 12. The investigations provided new evidence of intensive Stone Age settlement of the Qumayrah Valley (also known as Wadi Fajj). The data, comprising lithic tools and some shell and stone beads, indicate that the occupation of these sites should be dated to various stages of the Neolithic period.

Keywords: new prehistoric sites, Neolithic, Qumayrah Archaeological Project, Oman

Prehistoric investigations in the region of Qumayrah, located in the Hajjar Mountains in inland northern Oman (Al-Dhahirah Governorate, Wilayat Dank), figure as part of a broader University of Warsaw Omani–Polish archaeological project initiated in 2015 and headed by Prof. Piotr Bieliński. The project is a joint undertaking of the Polish Centre of Mediterranean Archaeology, University of Warsaw and the Department of Archaeology and Excavations, Ministry of Heritage and Culture, Sultanate of Oman.

A few dozen new archaeological sites located in, and around, the wide, southern entrance to the Qumayrah Valley were discovered in the course of the field surveys carried out in previous seasons. Seven of these sites hail from the Stone Age. Restricted testing at one of them, QA 2, in 2016 confirmed it to be a site that was

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The prehistoric sub-project is part of the Omani–Polish Qumayrah Valley Project directed by Prof. Piotr Bieliński (Institute of Archaeology, University of Warsaw).

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at least partly stratified (Białowarczuk 2017). The 2017 season of fieldwork focused on a more detailed reconnaissance of the Stone Age occupation in the region. In particular, the work involved the extension of the excavation area at

QA 2, which seems to be the largest and the best preserved of the registered Neolithic sites, as well as minor testing at QA 12 [Fig. 1], one of the sites that yielded the most interesting lithics discovered during the survey.

EXCAVATIONS AT QA 2 IN 2017

Site QA 2 is the largest and the best preserved Stone Age site discovered so far in the Qumayrah Valley. The geographical coordinates of its center point are N 23°52'26.72" E 56°11'08.70". Remains of a campsite are situated on a flat terrace on the bank of a seasonal river bed, about 573 m ASL, making it an excellent observation point of the wide valley extending to the south (Białowarczuk 2017: Fig. 2). A reconnaissance in the autumn of 2016 (see Białowarczuk 2017) showed the site to be strongly deflated, yet with

a sizeable cultural deposit still extant in some parts. The current objective was to enlarge the excavated area to investigate whether the well-preserved stone hearth and stone platform discovered in the previous season marked the presence of other structures in this part of the site. Another issue of interest was the actual extent of the site.

The principal area of excavation thus included four neighboring trenches with a total surface area of 70 m². Fitted within a site grid, they were situated in quarter



Fig. 1. Location of the study area (inset) and position of sites discussed in the text in the vicinity of the Ayn Bani Saed village (Based on Google Maps; drawing M. Puszkarski, editing M. Momot)

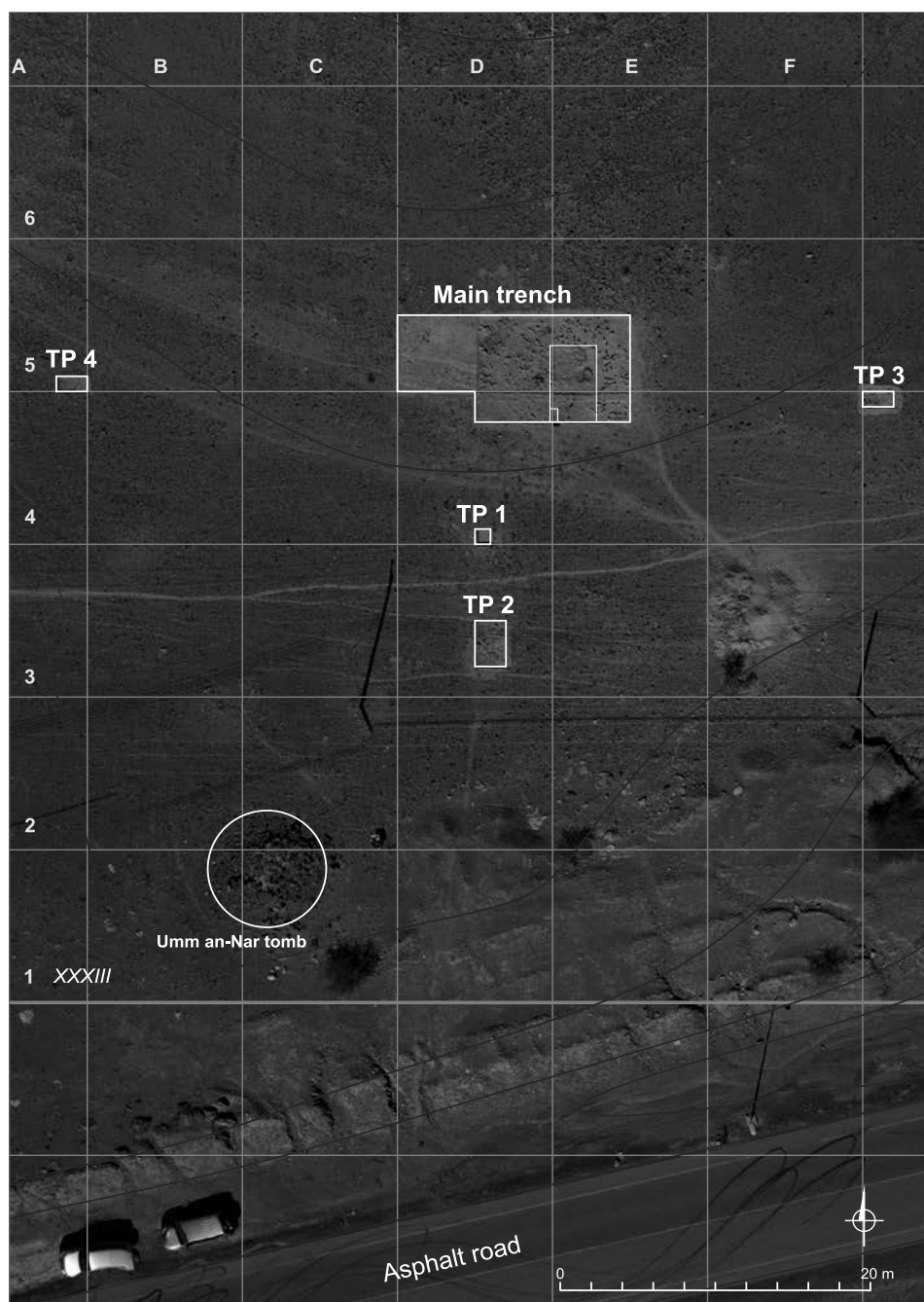


Fig. 2. Top view of site QA 2 with superposed site grid and placement of trenches excavated in 2017 (Based on Bing Maps, processing M. Antos, M. Momot)

'd' of square XXXIII-d-5, quarter 'c' of square XXXIII-e-5, the northern part of quarter 'b' of square XXXIII-d-4 and the northern part of quarter 'a' of square XXXIII-e-4. Additionally, four test pits (TP 1–4), initially 1 m by 1 m in size, were dug on the southern, eastern and western fringes of the site. TP 1 and TP 2 were both dug south of the main trench, in line and aligned north–south with respect to it, while TP 3 and TP 4 were located, respectively, on the eastern and western slopes of the terrace [Fig. 2].

Fieldwork in the central trenches confirmed the idea, formed by the excavators in the wake of the first season's results, of further stone structures existing at the site. Remains of a circular shelter (Locus 1) were discovered immediately southeast of the best preserved hearth (context 005) discovered in 2016. The out-

line of the shelter, measuring approximately 3 m in maximum diameter, consisted of a double row of cobbles [Fig. 3]. The western part of the excavated area yielded also a presumed usage level with a few badly destroyed stone installations (contexts 017 and 019) and ashy deposits (contexts 008, 009, 016, 018, 029 and 030). A fair number of artifacts in the form of, predominantly, lithics, came from this usage level, with rare fragments of marine shells as well as single stone and shell beads being recorded as well.

This cultural deposit accumulated on a slightly sloping terrace. Its maximum thickness was observed in the central part of the site (in the main trenches and in TP 1); it disappears gradually towards the southern and eastern edges of the terrace, yet some traces of stone installations and a hearth were discovered there as well.

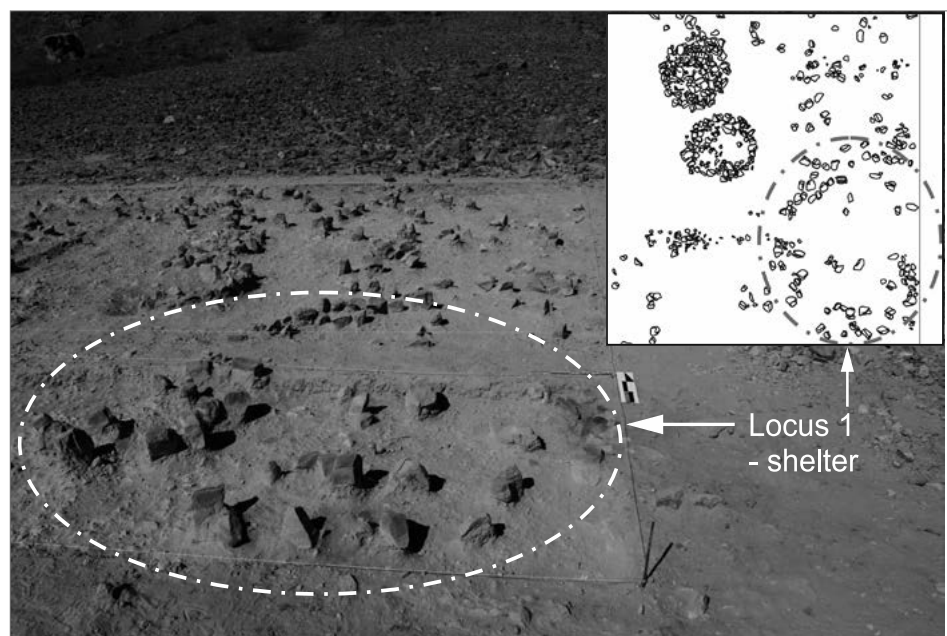


Fig. 3. Remains of a double row of cobbles forming the wall of a circular shelter Locus 1; inset, plan of Locus 1 and neighboring structures (PCMA UW Qumayrah Project/photo and drawing A. Szymczak)

As in the main excavation area, the structures were set on bedrock. In TP 2, they were covered by a thin cultural deposit,

in TP 3 by nothing but surface stone rubble. The westernmost trench, TP 4, was opened in the middle of the terrace slope.

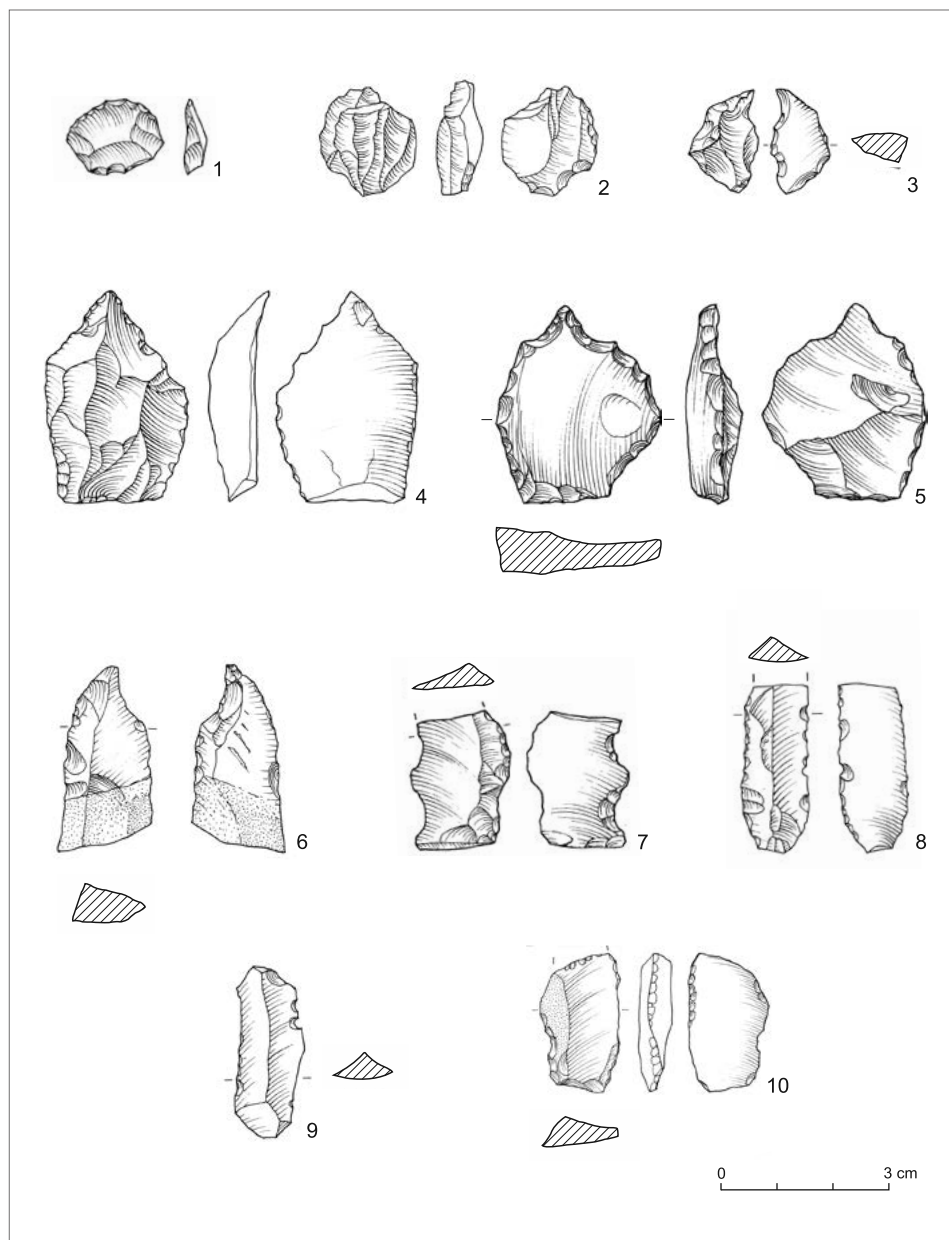


Fig. 4. Lithics from QA 2: 1, 10 – sidescrapers; 2 – splintered piece; 3–5 – perforators; 6 – borer; 7 – notched piece; 8, 9 – retouched blades (PCMA UW Qumayrah Project/drawing M. Puskarski)

It contained only stone rubble washed down towards the bottom of the nearby small “wadi”. As no archaeological material was forthcoming, it clearly indicates that the original range of the QA 2 site was limited to the flat part of the terrace and was less extensive than first supposed. The surface scatter of worked lithics, covering an area of about one hectare, is thus rather a confluence effect, while the actual size of the campsite was about 0.30 ha. Several circular stone alignments visible on the surface in this area may in fact turn out to be the remains of further installations or other archaeological features.

Detailed planigraphy of the finds showed an even saturation throughout

the area under exploration, without any special clustering. This indicates regular, although temporary, human activity in the described area.

LITHIC ASSEMBLAGE

Although the extension of the excavated area resulted in a much larger number of lithic artifacts for analysis, it did not significantly affect the general characteristic of the flint industry. Analysis of 2139 lithics from the current season, including 63 core forms, 159 blanks, 427 retouched tools and 1490 pieces of various waste debitage, confirmed earlier observations made on this assemblage (see Białowarczuk 2017). The most characteristic features are:

- ▷ using local sources of raw materials, mostly flint and radiolarite;

- ▷ coexistence of flake and blade techniques, with domination of simple direct hard hammer percussion and rare indirect percussion;

- ▷ domination of simple retouched tools produced by direct-scaled retouch, with fair occurrence of various sidescrapers [Fig. 4:1,10], end-scrapers [Fig. 5:2,3], retouched flakes including notched pieces [Figs 4:7, 5:4], retouched blades [Fig. 4:8,9], perforators [Fig. 4:3–5] and borers [Fig. 4:6], splintered pieces [Fig. 4:2], accompanied by rare tanged projectile points made on flakes [Fig. 5:5] and combined tools [Fig. 5:1].

The presence of a few projectile points within the context of a temporary stone structure is indicative of early Neolithic occupation (Białowarczuk 2017). The typological list of tools of the site was complemented with some occasional specimens of a different type [Table 1].

Table 1. Typological list of tools identified in 2017 at sites mentioned in the text

Tool types	QA 2	QA 6	QA 12
End-scrapers	22	2	1
Sidescrapers	101	7	10
Retouched flakes	153	5	8
Notches	23	1	3
Burins	2	–	–
Backed blades	1	–	–
Retouched blades	38	5	5
Perforators	52	2	2
Borers	7	–	1
Combined tools	6	–	1
Points	1	1(?)	3
Bifacial foliates	2	–	–
Splintered pieces	19	1	1
Total	427	24	35

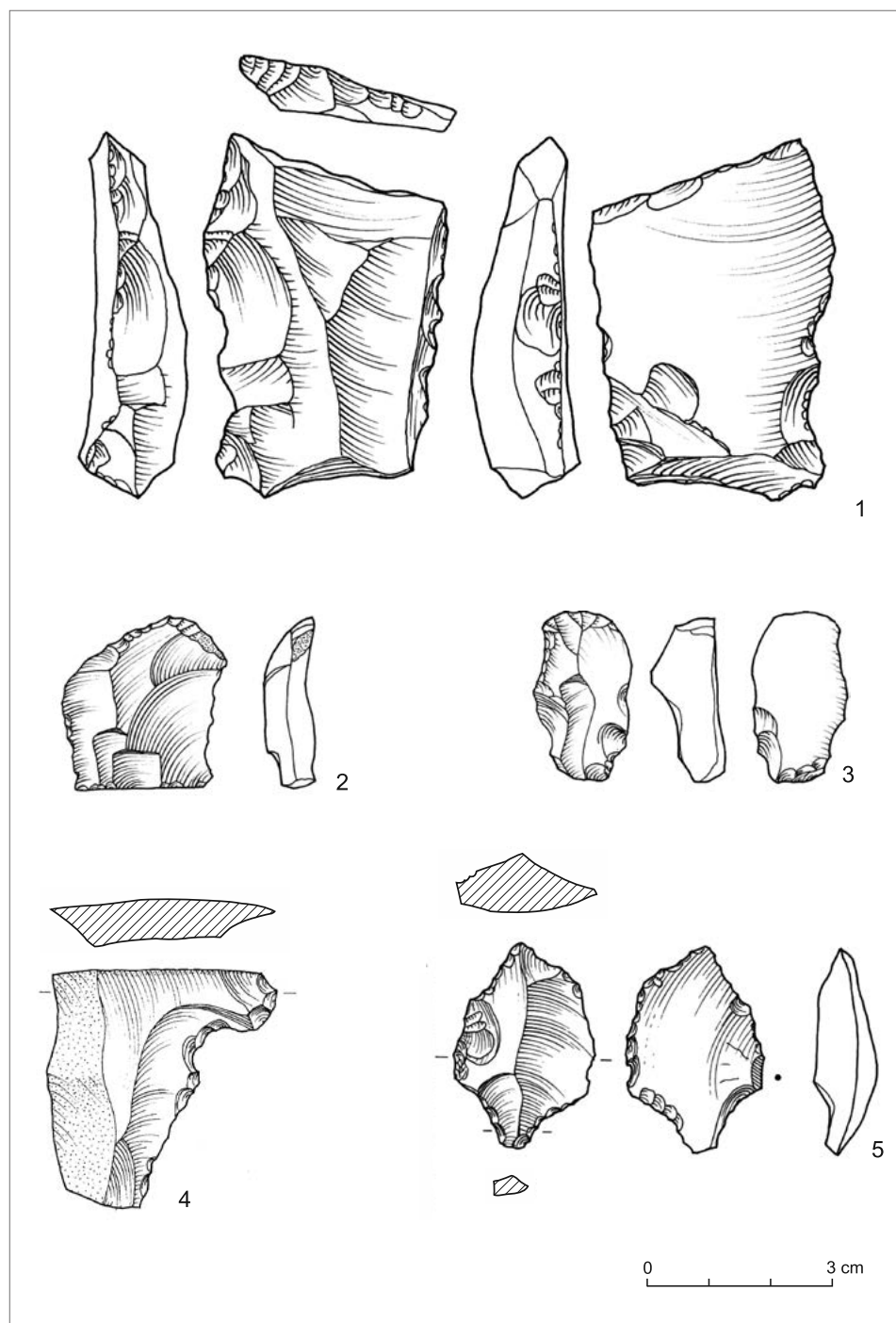


Fig. 5. Lithics from QA 2: 1 – combined tool: sidescraper and perforator; 2, 3 – end-scrapers; 4 – notched piece; 5 – tanged point (PCMA UW Qumayrah Project/drawing M. Puzzkarski)

They came from the deflated surface and subsurface contexts, and indicated a much later stage of occupation of the site as well. Among them are bifacial foliated pieces: one large fragment of unidentified function [Fig. 6:1], and smaller fragments of implied fusiform points [Fig. 6:2]. Linking the latter finds with fusiform points results from the fact that four other forms of this type, including two complete ones [Fig. 6:3], were found at the site of QA 1, which is mostly occupied by an Umm al-Nar period cemetery, located directly beside QA 2 (Rutkowski 2017). These complete forms are short and wide, of almond shape, biconvex section, straight convergent edges and V-shaped base. Similar examples are known from Wadi Dhahr in Yemen (Kallweit 2003; Fig. 4:14). They are also reminiscent of fusiform points from Suwayh SWY-1 (Biagi and Nisbet 2006) and Mundafin (Edens 1982: Pl. 101, B.18).

From a techno-typological point of view they can be ascribed to type 1.B. according to the classification proposed by Vincent Charpentier (2008: 67). The appearance of the same type of foliated pieces and points on these two neighboring sites, currently separated by a modern asphalt road, seems to confirm the hypothesis about their being actually a single Stone Age site inhabited in different periods of prehistory (Białowarczuk 2017: 544). The presence of the above-mentioned bifacial foliates attests to the existence of a late Neolithic phase of occupation there (Charpentier 2008; Uerpmann et al. 2013).

SMALL FINDS

Of chronological significance is the appearance of an Akab-type tubular bead made of dark softstone (Charpentier and Méry 2008). One such bead, with its characteristic double-angled perforation, was

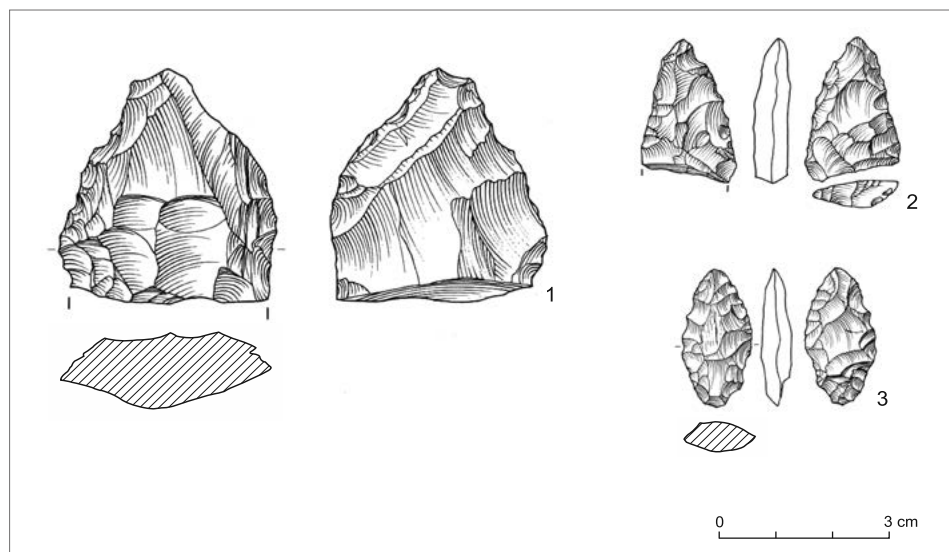


Fig. 6. Lithics: 1 – bifacial foliate from QA 2; 2 – point from QA 2; 3 – fusiform point from QA 1 (PCMA UW Qumayrah Project/drawing M. Puzkarski)

found at QA 2 [Fig. 7:2], whereas another one was picked up from the surface of QA 1 [Fig. 7:1]. Beads of this type have been found primarily in funerary contexts at coastal Neolithic sites in Oman and the United Arab Emirates dated to the 5th and early 4th millennia BC (Méry and Charpentier 2013: 77). The remaining small finds, comprising just a few objects, such as beads and marine shell fragments, are less chronologically indicative (e.g., a bead that was crafted from an *Olividae* sp. shell by removing the apex to obtain a hole [Fig. 7:3] could be dated much more

broadly to a period from at least the 5th millennium BC onward), although they also fit into a Neolithic framework.

DISCUSSION

Both the bifacial foliates and the beads seem to be related to the late Neolithic period (see Charpentier 2008: 66–75; Charpentier and Méry 2008). The presence of marine shell fragments at a campsite in a mountain valley lying almost a 100 km from the shoreline is significant, as it proves some form of contacts between these two regions. Although

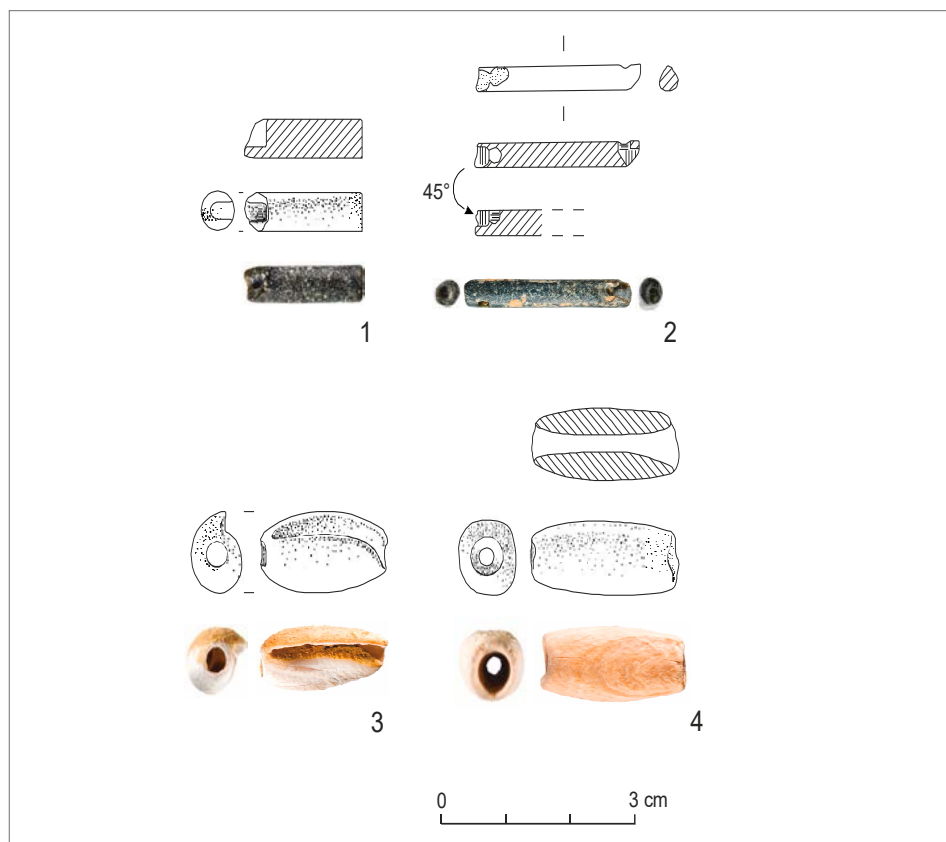


Fig. 7. Selected small finds: 1, 2 – stone tubular Akab-type beads from QA 1 (1) and QA 2 (2); 3 – *Olividae* sp. shell bead from QA 2; 4 – barrel shell bead from QA 6 (PCMA UW Qumayrah Project/ photos A. Oleksiak, drawings M. Momot and M. Puzkarski)

the character of these contacts is far from clear at this point, one possibility is related to a micro-nomadism model,

according to which human groups were moving seasonally from the coast to the mountains (Cavulli and Scaruffi 2013).

SITE QA 6

Another site, QA 6, tested in 2016, is located just about 120 m northwest from QA 2 [see *Fig. 1*], with central geographic coordinates of N 23°52'29.03" E 56°11'05.20". It is also a campsite and covers a flat saddle of about 1000 m² between two hills. A small test pit (1 m by 1 m) was dug in the central part of the site, confirming the existence of an approximately 0.30-m-thick deposit, similar to the one found on QA 2 [*Fig. 8*]. No structural remains have been discovered so far, either on the surface or in the test pit.

The lithic assemblage consists of only 60 pieces, including five cores, 27 blank flakes, three blades, 24 retouched tools [see *Table 1*] and 13 pieces of waste debitage. It is characterized by the same simplicity as the assemblage from QA 2, but it is generally macrolithic. It includes mostly notched pieces [*Fig. 11:1*], sidescrapers [*Fig. 11:2,3*], retouched blades [*Fig. 9:1–4*] and denticulated pieces which could have been pre-cores [*Fig. 10:1,2*].

The character of the lithic assemblage from QA 6, scarce but fairly homogene-

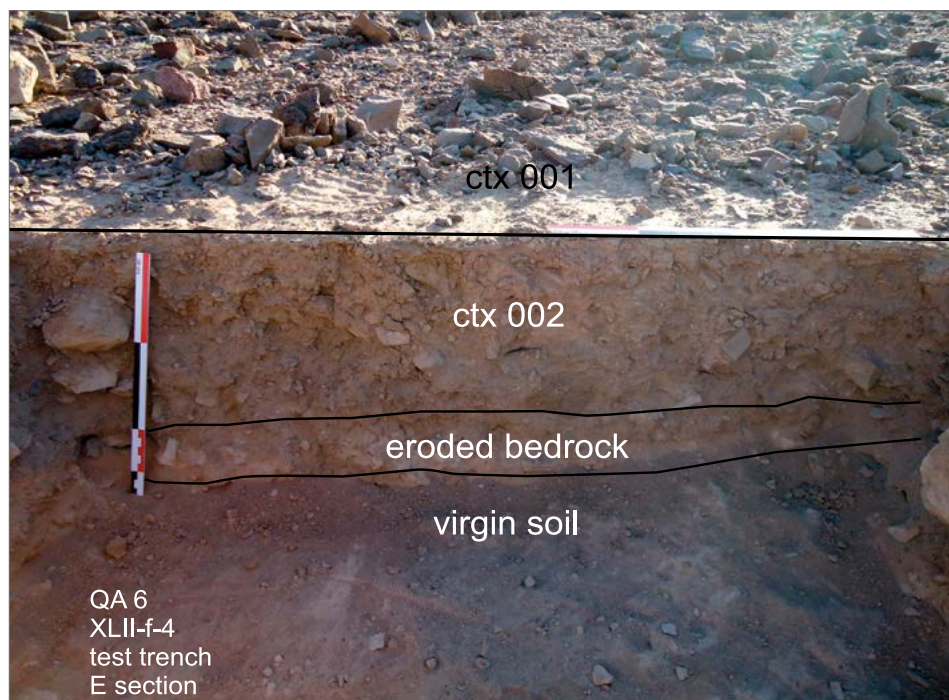


Fig. 8. East section of test trench at site QA 6 (square XLII-f-4) (PCMA UW Qumayrah Project/ photo M. Białowarczuk, processing A. Szymczak)

ous, indicates a more temporary occupation of the site during only one period. From a techno-typological point of view, it seems to refer to the end of Neolithic occupation (Charpentier 2008: 75) with the nearest assemblages being from Suwayh SWY-2 and SWY-5 (see Charpentier 2008: Fig. 11), Wadi Shab (Tosi

and Usai 2003: 12–14) and Ra's al-Hadd (Charpentier 2001).

QA 6 is the second Stone Age site yielding a marine shell artifact so far in the microregion of Qumayrah. An elongated barrel bead with biconical drilling was found on the surface [see Fig. 7:4]. It is also the most elaborate shell arti-

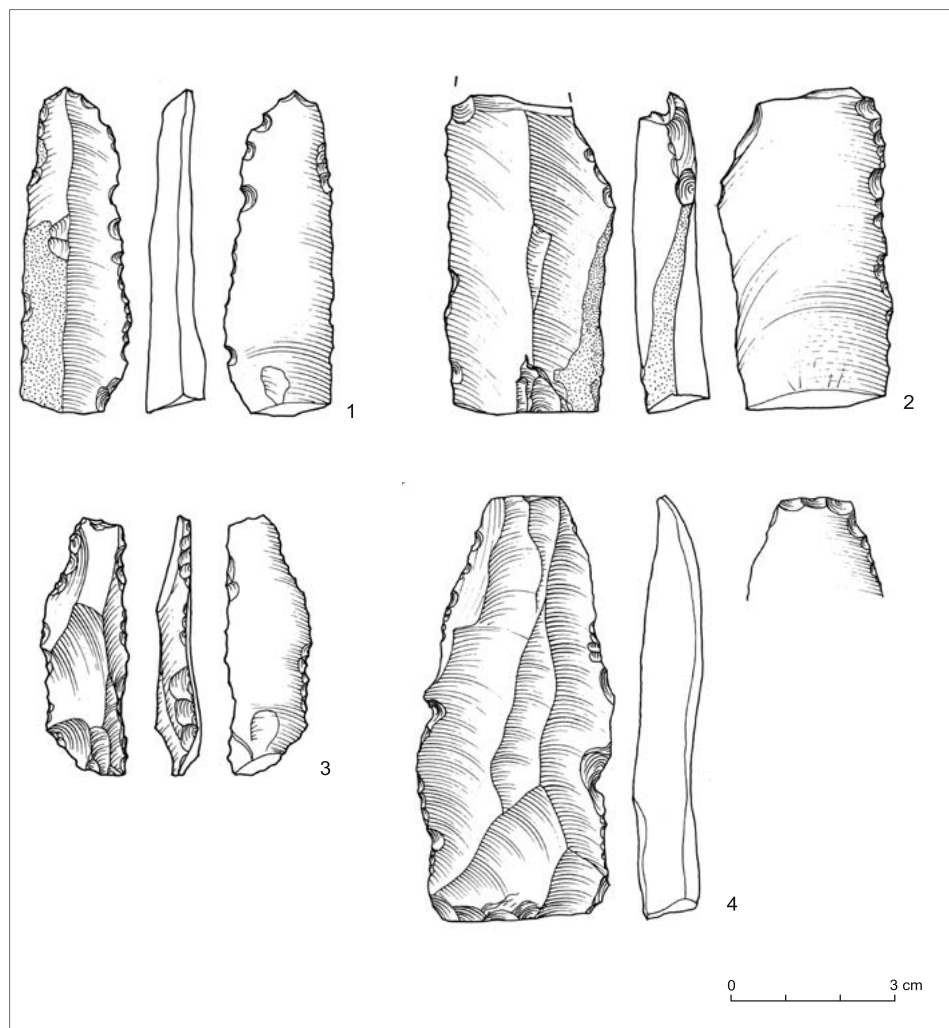


Fig. 9. Lithics from QA 6: 1–4 – massive retouched blades (PCMA UW Qumayrah Project/ drawing M. PuszkarSKI)

fact found so far during the investigations. Parallels come from the Neolithic cemeteries of Buhais 18 and FAY-NE 15

(Beaclair, Jasim, and Uerpmann 2006: 179–180, Fig. 5; Kutterer and Beaclair 2008: 141, Fig. 14).

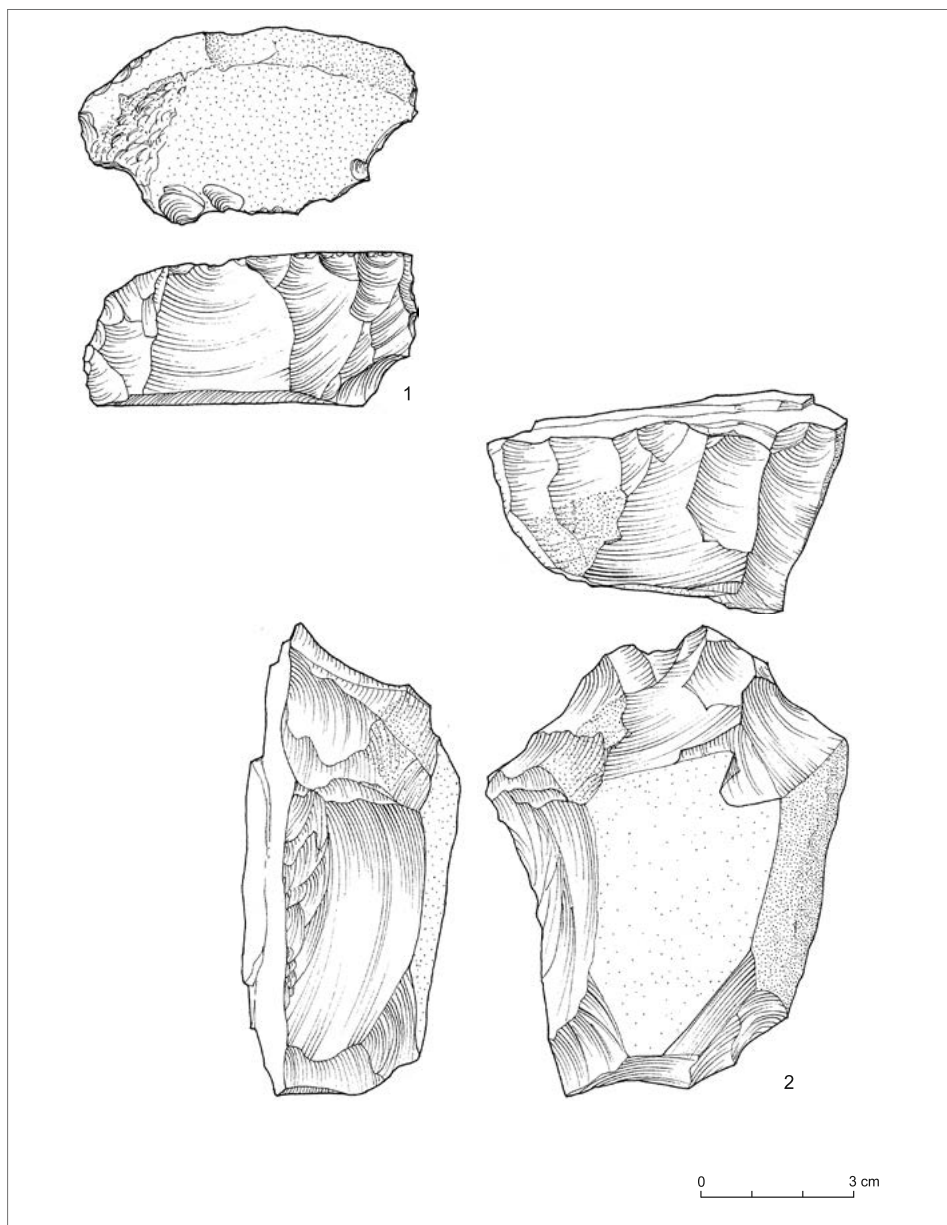


Fig. 10. Lithics from QA 6: 1, 2 – denticulates (PCMA UW Qumayrah Project/drawing M. PuszkarSKI)

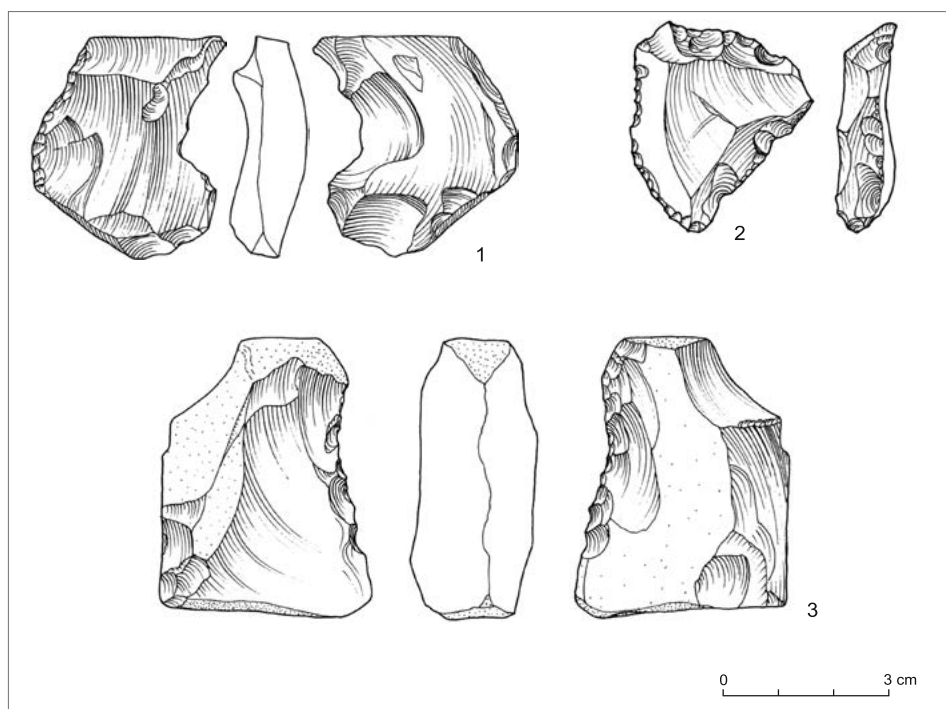


Fig. 11. Lithics from QA 6: 1 – notched piece; 2, 3 – various sidescrapers (PCMA UW Qumayrah Project/drawing M. Puskarski)

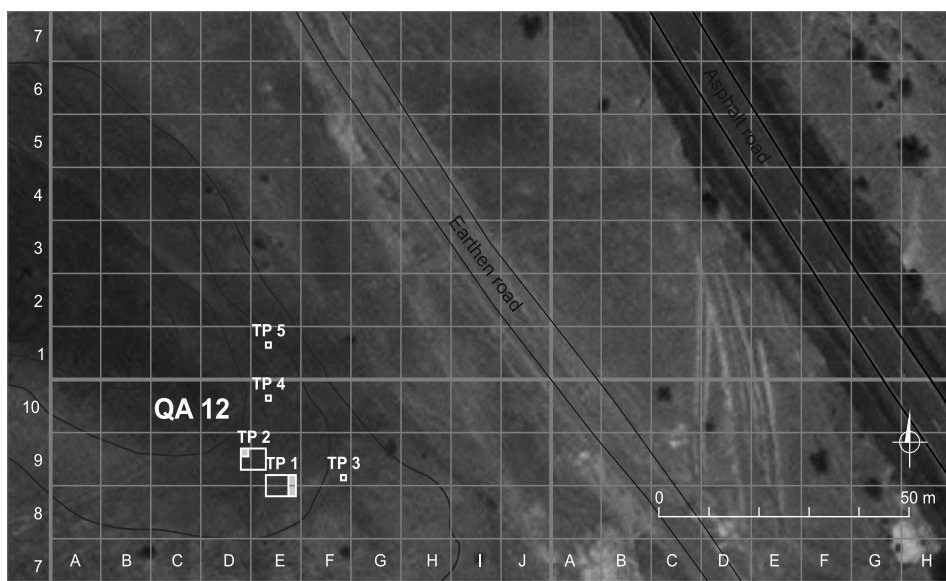


Fig. 12. Top view of site QA 12 with superposed site grid and placement of trenches excavated in 2017 (PCMA UW Qumayrah Project/based on Bing Maps, processing M. Antos, M. Momot)

SITE QA 12

Site QA 12 is located east of the previously described sites, at an elevation of about 575 m ASL. Its geographical coordinates are N 23°52'34.01" E 56°10'50.81" as taken at

the centre of the site [see Fig. 1]. It is a small campsite lying on a flattish top of an alluvial fan and measures approximately 50 m north–south and 40 m east–west [Fig. 12].

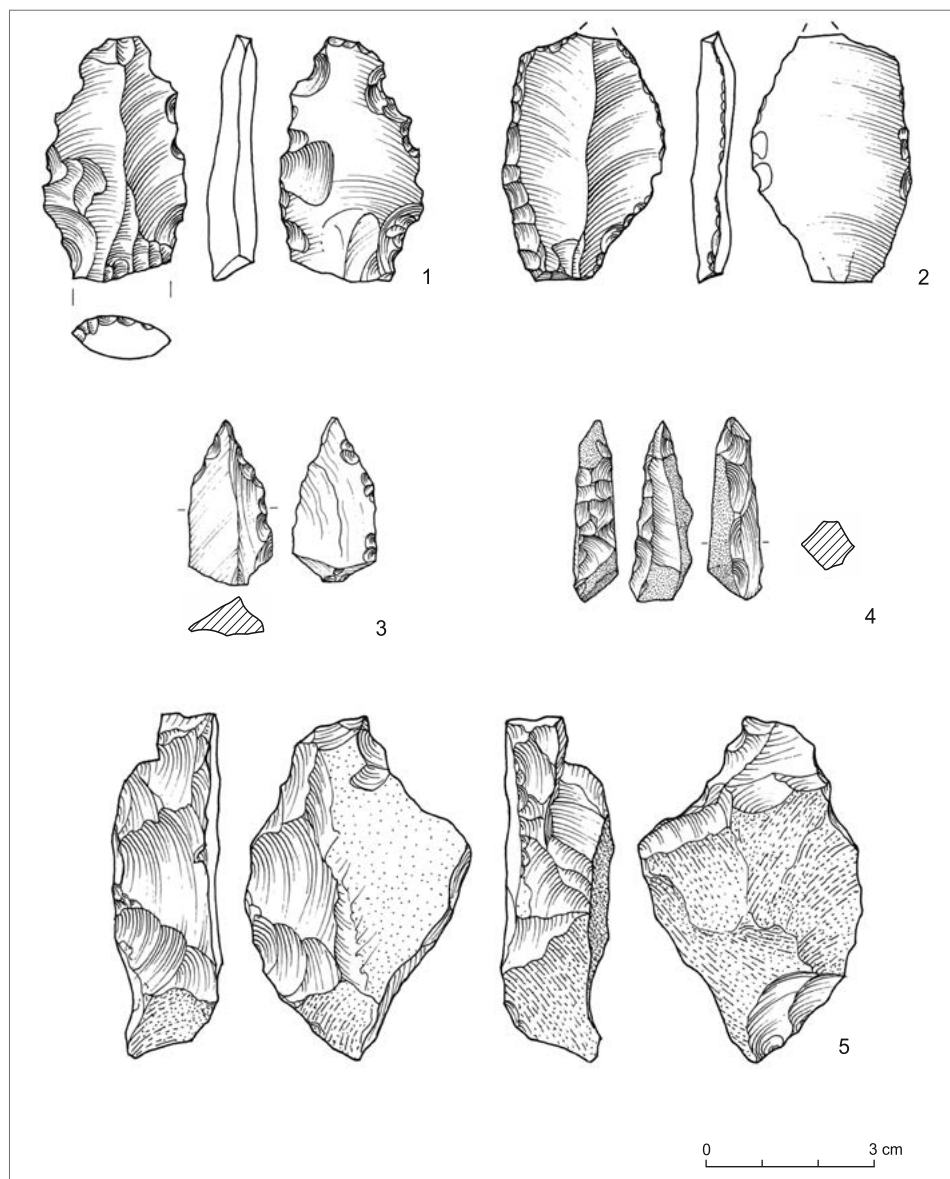


Fig. 13. Lithics from QA 12: 1 – retouched flake; 2 – retouched blade; 3 – perforator; 4 – borer; 5 – semi-product of tanged point (PCMA UW Qumayrah Project/drawing M. PuszkarSKI)

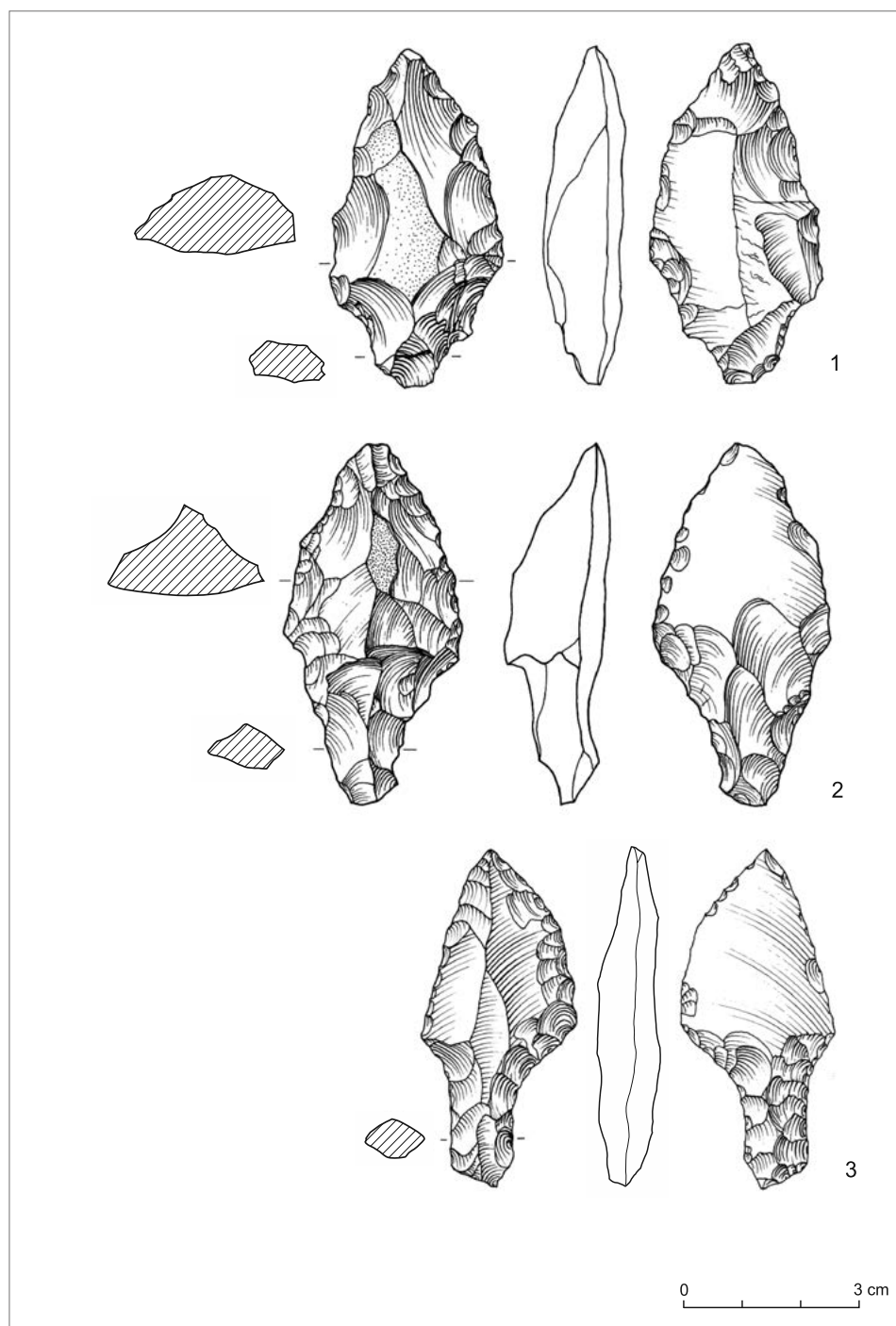


Fig. 14. Lithics from QA 12: 1–3 – tanged points (PCMA UW Qumayrah Project/drawing M. Puzkarski)

Rare lithics were scattered unevenly across the area, occasionally encroaching on the northeastern and eastern slopes. The finds included three tanged spear points, which were interesting enough to occasion more detailed investigation of the site.

Test trenches were laid to investigate a tentative stratigraphy. Two surface areas in the central part of the site were cleaned of the rocky overburden, comprising mostly broken fragments of brown flint nodules and single finds of small retouched tools. Five test pits (TP 1–5) were located along the major axes [see *Fig. 12*]. All of them yielded negative results and contained only alluvial deposits consisting of layers of gravel and eroded rock fragments.

Archaeological material was collected only from the deflated site surface. It consisted of 45 lithics, including five cores, three flake blanks, 35 retouched tools [see *Table 1*] and two pieces of waste debitage. The retouched tools are mostly flakes and

blades [*Fig. 13:1,2*], occasional perforators [*Fig. 13:3*], and one borer [*Fig. 13:4*].

The most interesting finds are the three tanged points made on massive flakes. Two of them [*Fig. 14:1,2*] represent a simple technology of production by direct hard hammering. The same technology of production is also attested by one massive flake found at the site [*Fig. 13:5*]. Additionally, its similar shape and size suggest that it may have been a semi-product of such a point, and indicate local manufacture for the latter. The morphology of the tanged points mentioned above assigns them to type 1B from the Hadramawt Plateau in Yemen, dated to about the mid 6th millennium BC (see Crassard 2008: 141, 144). The third specimen [*Fig. 14:3*] represents an apparently different type. It is more slender and slightly asymmetric, with a well pronounced tang. Invasive retouch with shallow knapping scars indicates an advanced pressure technique.

DISCUSSION

The poor state of preservation of prehistoric open-air sites in the whole of Arabia is a well-known problem. Strong deflation by wind or violent erosion by streaming water will cause destruction of stratified levels on most early and mid-Holocene sites throughout the region. For these reasons, data from the study of surface collections and rare surviving fragments of cultural deposits is mixed and patchy, and cultural and chronological interpretation is difficult at best. The sites investigated in the Qumayrah Valley are no exception to this rule. In their case, the most characteristic feature of

the flint industries from all the discussed sites is their total reliance on local raw materials, easily available in the nearby, strongly eroded hills.

Another distinguishing feature is the blank production technology. The debitage includes both flakes and blades obtained by the hard-hammer technique, less frequently indirect percussion. Both kinds of blanks have a repeatable form and size, which indicates the intended coexistence of flake and blade techniques, rather than the reuse of selected waste in order to temporarily supplement the store of flakes for tool production.

In each case, the retouched tools are characterized by a simplicity of production with consistent use of the natural shape of the raw material, in order to reduce to a minimum necessary treatment. The resultant tools did not change over the ages and cannot be therefore reliable chronological indicators.

However, significant differences that can indicate the chronology of finds are visible in certain techno-typological details, such as the presence of certain types of blades, a bifacial technology or its lack, and macrolithization of the industry. These elements are noticeable in assemblages from the individual sites and seem to indicate some chronological differences between them. Typological and comparative analyses of the flint, stone,

and shell objects found at the sites seem to suggest three occupational phases associated with different stages of the Neolithic period. Early Neolithic occupation is indicated by the seasonal character of the oldest structures from QA 2 and the associated primitive tanged points. Typologically, this phase also seems to correspond to two of the three spear-points found on QA 12. The Late Neolithic is suggested by younger flint materials from QA 2, such as the retouched bifacial point and foliated piece, the stone Akab-type bead and, probably, the third of the QA 12 points. And the final stage of the Neolithic is indicated by the macrolithic flint industry and, perhaps, also the bead from QA 6.

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