

**ABU ŞUWWAN BRIEFLY REVISITED
ADDITIONAL NOTES ON A LARGE
NEOLITHIC SITE NEAR JARASH,
JORDAN**

by
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Background

Abu Şuwwan (*Father of Flint*) is a large and dense scatter of flint artifacts located in a cultivated field near Jarash in northern Jordan (Fig. 1). The site was first reported by Harding¹, and was briefly examined by Diane Kirkbride in 1955. She published a short note in 1958², observing that Lower Paleolithic, Middle Paleolithic, and Neolithic artifacts were present, with the latter being especially abundant. Most of the Neolithic artifacts were tentatively dated to the Pre-Pottery Neolithic (PPNB) phase. Kirkbride also excavated a small sounding at the site to a maximum depth of ca. 1.5 m. She noted the presence of hearths, but no other features or architecture were recorded. To the best of our knowledge, nothing else on Abu Şuwwan has been published since the 1958 note.

Given the recent upsurge of interest in the Levantine aceramic Neolithic with the recognition or rediscovery of several major sites, such as 'Ain Ghazal³, Baṣṭa⁴, Wadi Shu'eib⁵, and Kharaysin⁶, it seemed advisable to prepare a brief description of a limited sample of materials from Abu Şuwwan. During the summer of 1987, a small surface collection of chipped stone artifacts was gathered from the site⁷. Several biases are present in this collection; one is the emphasis given to the retrieval of tools rather than debitage. This was done because of the general proclivity

of archaeologists to compare sites of a given time period on the basis of the tool types present. Accordingly, the sample discussed here should not be considered as representative; it does, however, suggest some tendencies in the chipped stone assemblage from Abu Şuwwan.

A second bias occurs because Abu Şuwwan has been visited repeatedly over the years by various people, both archaeologists and non-archaeologists, who have collected certain types of tools. A brief conversation with a local inhabitant indicated that Abu Şuwwan was noted for the presence of abundant numbers of spear and arrow heads. This was confirmed by one of us (Z.K.), who had visited Abu Şuwwan on a number of previous occasions. Our brief examination of the site area, however, failed to yield a single arrowhead. These are a particularly distinctive artifact type, and it is not surprising that they would tend to be collected more often than other tool types.

A final bias is represented by the fact that the surface of Abu Şuwwan is plowed. The results of this type of modern disturbance are breakage of artifacts, the addition of noncultural retouch to the pieces involved, and the mixture of artifacts from varying contexts (activity defined or chronologically defined).

Brief Description of the Collection

Bearing the above observations in

1. Harding 1948.
2. Kirkbride 1958.
3. Rollefson *et al.* 1984, 1985; Rollefson 1984, 1986; Rollefson and Simmons 1985, 1986; Simmons and Rollefson 1984.
4. Gebel *et al.* 1988.
5. Kirkbride 1958; Mellaart 1975, p. 63; Rollefson

1987. This site also was examined by two of us (A.S. and D.O.) during the summer of 1987.
6. Edwards and Thorpe 1986.
7. This collection is stored at the Institute of Archaeology and Anthropology at Yarmouk University, Irbid, Jordan.

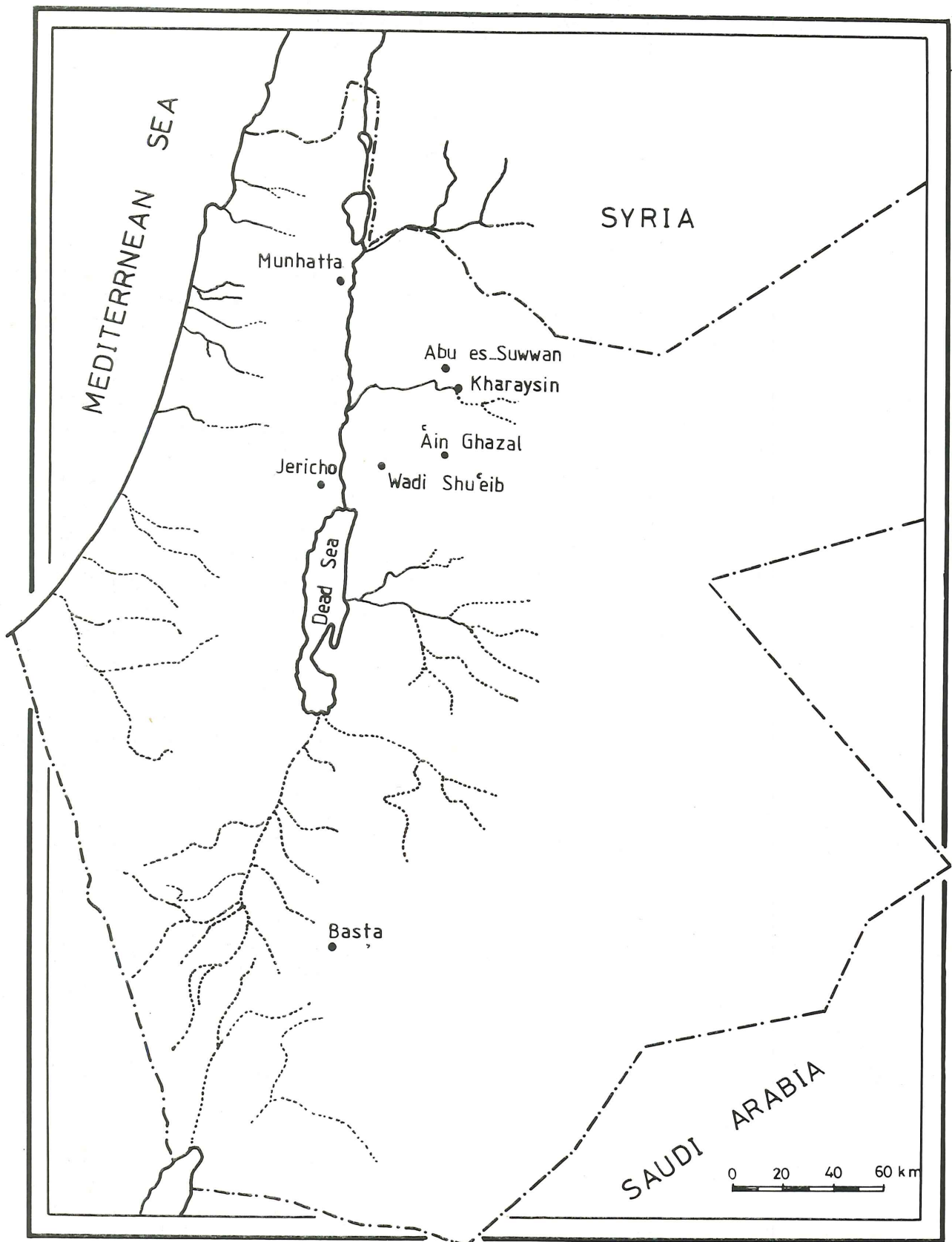


Fig. 1. Map showing the location of Abu Suwwan.

mind, the following comments about the chipped stone artifacts from Abu Şuwwan can be made. Table 1 provides the data on the tool classes and types present in the collection, while Table 2 lists debitage⁸.

The small number of collected tools (N=44) undoubtedly influences the absolute significance of the relative frequencies of each tool class presented in Table 1. Many of these, however, are morphologically very similar to those from PPNB contexts at other sites. Burins from Abu Şuwwan (Figs. 2 and 3), for example, have parallels at Beida⁹, 'Ain Ghazal¹⁰, and Jericho¹¹.

Another important tool class at many PPNB sites in the Levant is the sickle blade. The surface collection at Abu Şuwwan yielded four of these implements (Fig. 4), all of which exhibit sickle gloss that is unilateral and bifacial. Two sickle blades (Figs. 4a and 4d) exhibit retouch that results in a very finely denticulated edge. This also is the edge with the sickle gloss. Finely denticulated edges with gloss are generally accepted as indicative of the 7th millennium B.C. at certain sites in the Levant¹², and would therefore be found in both PPNA and PPNB contexts. Documentation of this type of sickle is found at PPNA Jericho¹³, PPNB Jericho¹⁴, Beida¹⁵, and 'Ain Ghazal¹⁶.

The remaining two sickle blades from the Abu Şuwwan sample (Figs. 4b and 4c)

exhibit an unusual form of retouch, given that it occurs along the edge with the sickle gloss and that it is present on sickle blades rather than sickle elements. This retouch is well-formed, regular, flat, and invasive, occurring on the interior surface of the blade. In both cases, thinning of the ends of the blade (proximal, distal, or both) also is present. Variations on this form occur at other sites. For example, in the PPNA at Jericho¹⁷ this retouch is used along the non-active edge for hafting purposes and is bifacial. The PPNB at Jericho¹⁸, however, has yielded only one example of a sickle blade with this type of retouch along the interior surface of the active edge. This virtually duplicates the Abu Şuwwan samples. A recent analysis of the sickle blades from the PPNB levels at 'Ain Ghazal has not observed any sickles of this type¹⁹. In somewhat later contexts, such as at Tell Ramad²⁰, similar retouch occurs on sickle elements, and at the Yarmoukian from Abu Thawwab²¹ this retouch is both bifacial and occurs on sickle elements.

The debitage from the surface collection at Abu Şuwwan (Table 2) also exhibits characteristics attributable to an aceramic Neolithic context. These include the presence of blade blanks and of cores for the manufacture of such blanks. Emphasis on the blade blank manufacture is attested in late PPNB phases at 'Ain Ghazal²², and in most of the PPNB levels at Jericho²³,

8. Flake debitage was observed at Abu Şuwwan but was not collected.
 9. Mortenson 1970, p. 28, Figure 26.
 10. Rollefson 1984, p. 7, Figure 2.1; Rollefson and Simmons 1985, p. 37, Figure 1.0; Rollefson *et al.* 1984, p. 146, Figure 3. b-g.
 11. Crowfoot-Payne 1983, p. 688, Figure 318.
 12. Cauvin 1983, p. 71.
 13. Crowfoot-Payne 1983, p. 650.
 14. Crowfoot-Payne 1983, p. 683-686, 684, Figure 313.
 15. Mortensen 1970, p. 34-35, 38, Figure 37. a-e.
 16. One of us (D.O.) recently has analyzed the sickle blades from the 1982-85 'Ain Ghazal field seasons, and has found that fine denticulation along the active edge of the sickle blade is very common here.

17. Cauvin 1983, p. 67, Figure 2.1.
 18. Crowfoot-Payne 1983, p. 683, 695, Figure 315.3.
 19. These observations are based on the work of one of us (D.O.) on the sickle blades from the 1982-1985 field seasons at 'Ain Ghazal. The description of this analysis is currently being prepared for publication.
 20. Cauvin 1983, p. 69, Figure 3.8.
 21. This site has been excavated by one of us (Kafafi 1988) and the presence of the flat invasive retouch was noted for sickle elements from the Yarmoukian occupation. Some of these elements also have been examined by another of us (D.O.).
 22. Rollefson and Simmons 1986, p. 155 and 154-155, Tables 1-3.
 23. Crowfoot-Payne 1983, p. 736-743, Tables 9-16.

Table 1: Tool typology for the Abu Şuwwan surface collection.

<i>Type</i>	<i>Flake</i>	<i>Blade</i>	<i>Total N</i>	<i>% of Total</i>
Endscraper	—	1	1	2.3
Burins			9	20.4
angle of break	—	2		
off truncation	—	1		
off end-notched	—	1		
multiple truncation	—	1		
transverse	—	3		
transverse off preparation	—	1		
Perforators	—	1	1	2.3
Truncations			5	11.4
convex	—	3		
straight oblique	—	2		
Notch/Denticulate			6	13.6
notch	2	2		
denticulate	—	2		
Sickles	—	4	4	9.1
Naturally Backed	—	6	6	13.6
Retouched Pieces	—	9	9	20.4
Combinations			2	4.5
truncation/denticulate	1	—		
burin/denticulation	—	1		
Celt	—	1	1	2.3
Total	2	42	44	99.9

Table 2: Debitage from the Abu Şuwwan surface collection.

<i>Type</i>	<i>Flake</i>	<i>Blade</i>	<i>Total N</i>	<i>% of Total</i>
Blades			22	88.0
regular	—	20		
crested	—	2		
Cores			3	12.0
opposing	—	2		
opposing/opposed	1	—		
Total	1	24	25	100.0

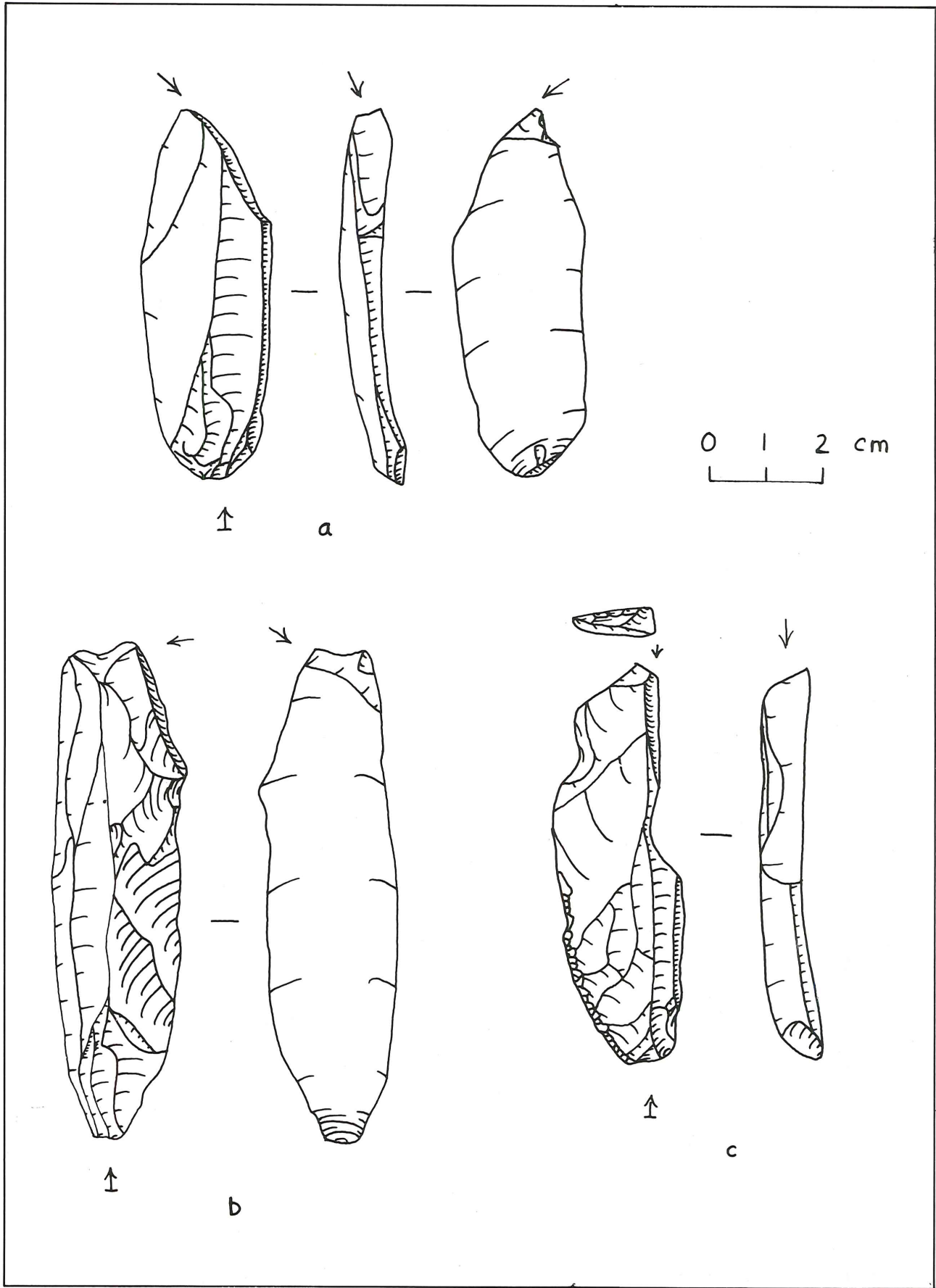


Fig. 2. Burins from Abu Şuwwan. a., b.: transverse burins; c.: burin off truncation.

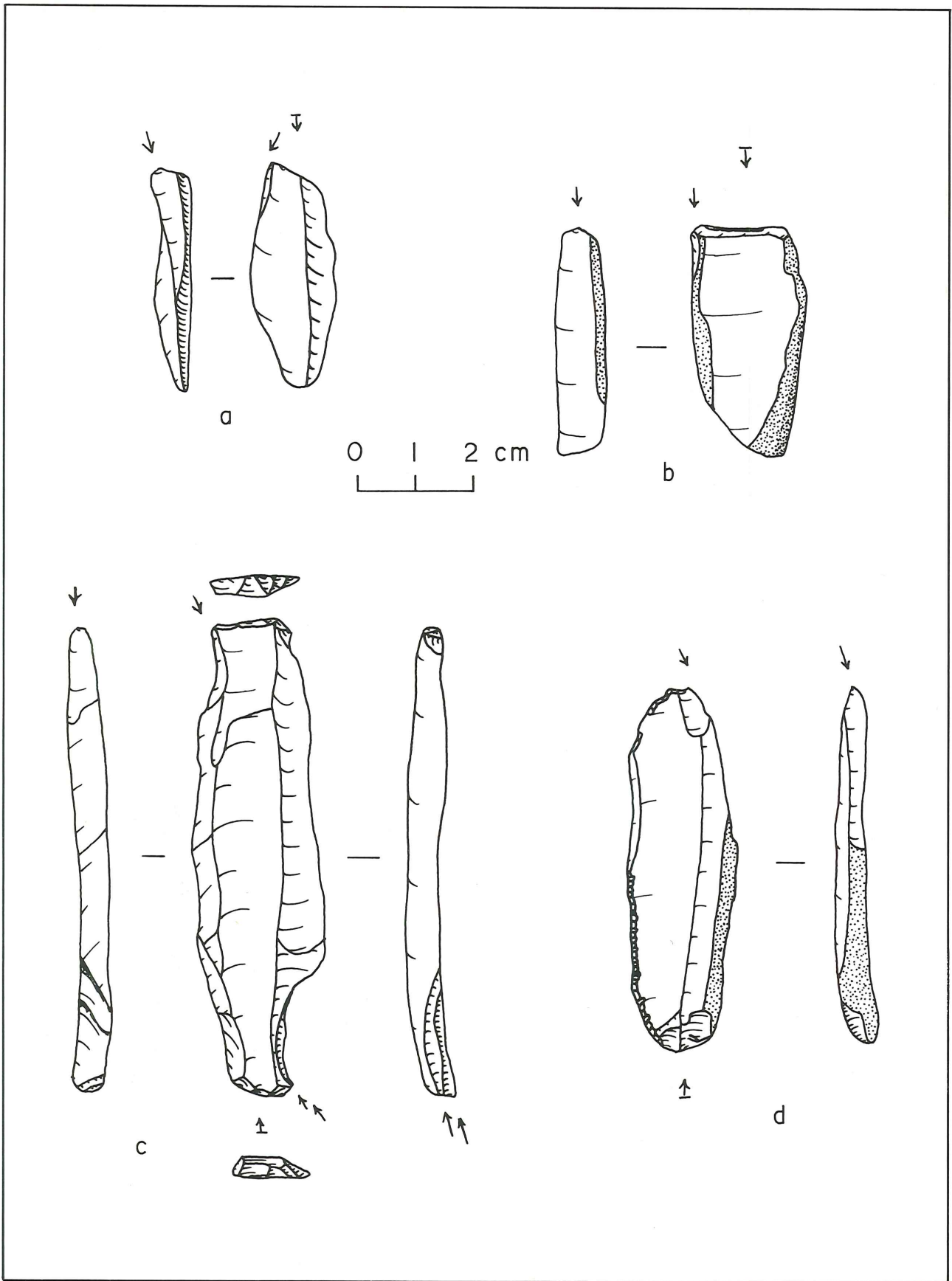


Fig. 3. Burins from Abu Şuwwan. a., b.: angle burins off breaks; c.: combination burin; d.: burin off end-notched blade.

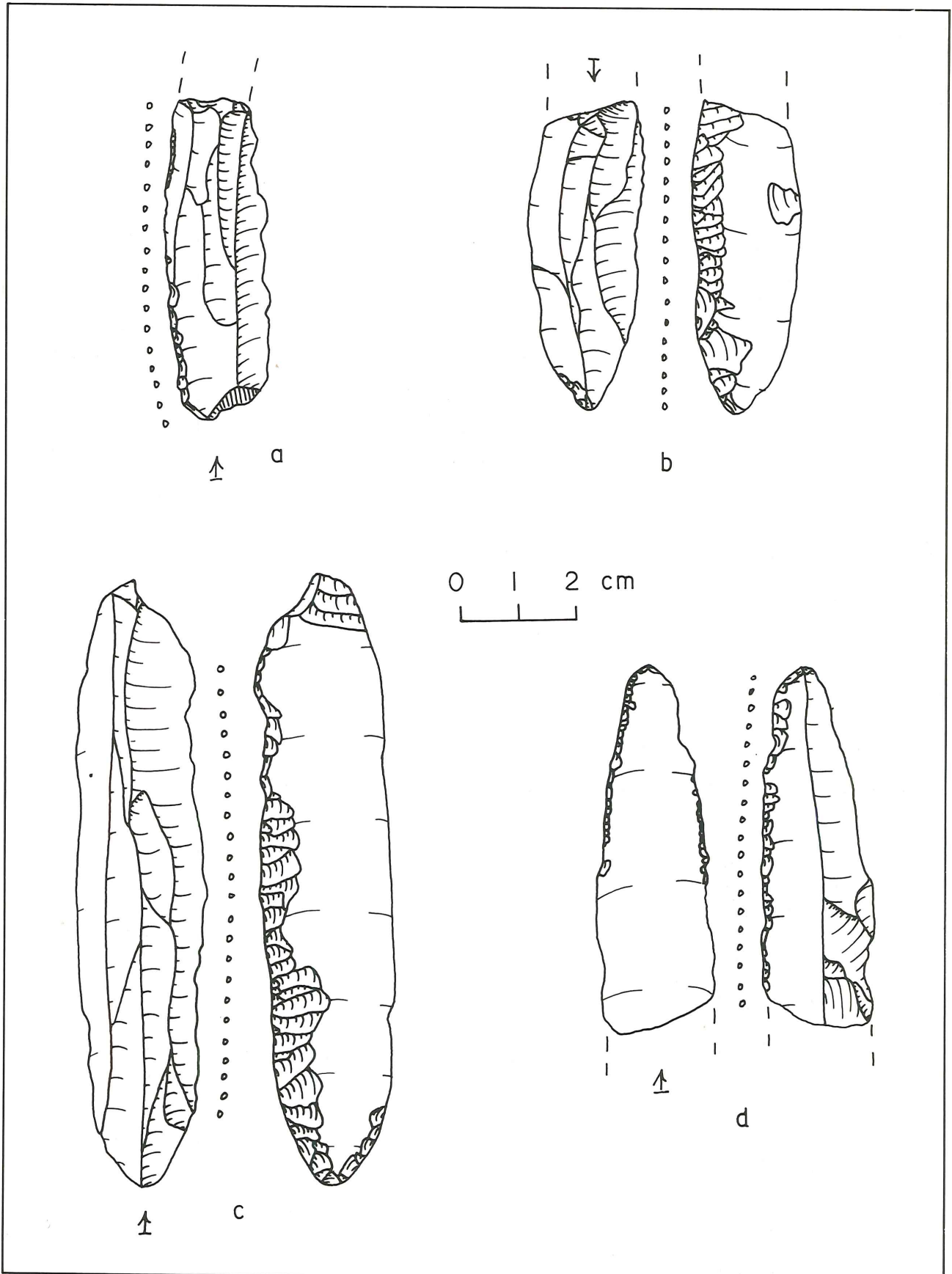


Fig. 4. Sickle blades from Abu Suwwan. a., d.: finely denticulated active edges; b., c.: interior, flat invasive, retouched active edges.

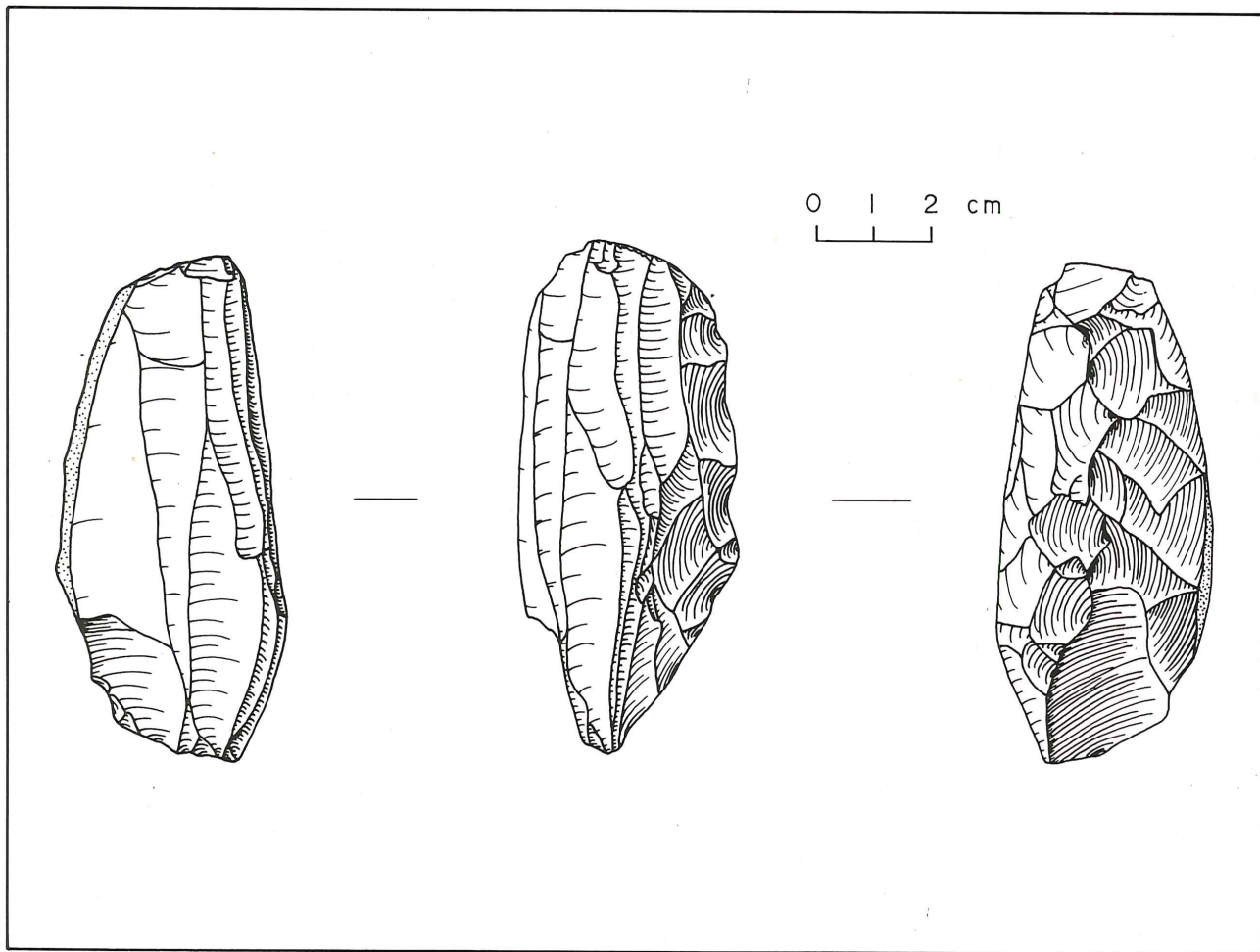


Fig. 5. Naviform core from Abu Şuwwan.

Table 3: Length, width, and thickness for selected debitage and tools.

(a.) *Blades*, N=8

mean length	66.6 mm
mean width	16.1 mm
mean thickness	6.9 mm

(b.) *Burins*, N=6

mean length	68.2 mm
mean width	17.9 mm
mean thickness	6.2 mm

(c.) *Retouched Blades*, N=4

mean length	54.2 mm
mean width	17.3 mm
mean thickness	6.2 mm

(d.) *Naturally Backed Blades*, N=2

mean length	59.7 mm
mean width	20.9 mm
mean thickness	7.3 mm

although not all PPNB contexts show a similar emphasis on blades²⁴. PPNA levels from Mureybat²⁵ and Jericho²⁶ have higher percentages of flakes than blades.

Blade blank metric information is provided in Table 3 for both unmodified blanks and for certain tool classes. Although the samples are too small to be statistically significant, blade blanks range from about 54 mm to 68 mm in length. Formal tools such as burins appear to be made on longer than average blade blanks, while less formal, or perhaps opportunistic tools, such as retouched and naturally backed blades, occur on shorter than average blade blanks.

The two blade cores in the Abu Şuwwan surface collection are both naviform cores, a special type of opposing platform blade core (Fig. 5). These cores are ubiquitous throughout the Levant during both the PPNA and PPNB periods. They are found, for example, in PPNA and PPNB contexts at Mureybat²⁷, PPNB Jericho²⁸, Beida²⁹, 'Ain Ghazal³⁰, and Qdeir³¹.

Summary

The small collection of tool and debitage elements obtained from the surface of Abu Şuwwan during 1987 support Kirkbride's³² initial assessment of this site as a primary PPNB occupation. Although some of the morphological and technological characteristics of the assemblage fall within both PPNA and PPNB parameters, other features tentatively indicate that the occupation here is late in the PPNB se-

quence, and possibly even continuing into the Pottery Neolithic. This is suggested by the apparent emphasis on blade blanks and the presence of flat, invasive retouch on the active edge of sickle blades, which is a retouch form seemingly more common during the later Pottery Neolithic.

Despite years of exposure and collection, it is apparent that a great deal more can be learned from Abu Şuwwan. The site appears to represent yet another large Neolithic occurrence, and systematic investigation of it could aid substantially in interpreting many elements of Neolithic adaptations. For example, the apparent lack of substantial architectural remains is an intriguing aspect that requires more adequate demonstration. Furthermore, the presence of earlier materials on the site is a rare occurrence, and could contribute to a better understanding of prehistoric land use patterns through time in highland Jordan.

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24. Mortensen 1970, p. 4, Table 1.

25. Calley 1986b, p. 350, Figure 126.

26. Crowfoot-Payne 1983, p. 729-735, Tables 2-8.

27. Calley 1986b, p. 93, 359, Figure 136.1.

28. Crowfoot-Payne 1983, p. 666, Figure 292.

29. Mortensen 1970, p. 10, Figure 6.a-b.

30. Although not reported in the published litera-

ture from 'Ain Ghazal as naviform cores, these special opposing platform blade cores have been noted by one of us (D.O.) during analysis of the 1984 season assemblages.

31. Calley 1986a.

32. Kirkbride 1958.

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