TELL FENDI: JISR SHEIKH HUSSEIN PROJECT, 1986

by J. Kareem

Tell Fendi is located in the northern part of the Jordan Valley on the extended low hills, the *qatar*, overlooking the flooded flat part of the Jordan Valley, the *zor* (Fig. 1). It is situated on the southeastern side of Wadi Ziqlab, two kilometres south of Tell el-Arba'in and one-half kilometer south of Tell Qudsiya.

Tell Fendi is one of ten archaeological sites surveyed in the Jisr Sheikh Hussein region, along with excavations at one site, Tell Qudsiya, between March 1 and April 15, 1986 (Kareem 1987: 52-91; 1988: 8-10; Lenzen, et al. 1987: 313-320). The results of the survey, in addition to the excavation at Tell Qudsiya, will be published separately. The project was funded by Yarmouk University. The site is in danger of being lost as the agricultural development of the Jordan Valley continues, a danger that threatens many other archaeological sites in the Jordan Valley.

Tell Fendi was surveyed on March 2, 1986. The tell had been ploughed recently and planted with corn. The tell (Site A) is flat and on the same level as the fields on the northern edge (elevation: -247.80 m) (see Fig. 2). It slopes up at the southern and western edges. The summit of the tell rises four meters above the surrounding fields on the southwestern edge, where site B is located, and five meters on the western edge.

In 1953, de Contenson (1964: 35) visited Tell Fendi and reported "a modern farm is built on the southern end". The eastern, southern and western edges of the tell (Site A) were bulldozed several years ago; however the summit of the tell has not been seriously disturbed. Due to the high vegetation growing on the site, traces of ancient buildings and/or structures were not visible. Unhewn stones were visible on the surface. It is possible that these were used in ancient structures. Mud-brick fragments, which may date to the Chalcolithic

period, were noted by Glueck in the ploughed furrows of Site A (Glueck 1951: 146). In 1955 a mud brick house was built on the southwestern corner of the tell, Site A. No occupation has taken place at the site since the house was destroyed in 1970.

Glueck was the first person to survey Tell Fendi. He described it as an "extensive, low, gently rising, flat topped rise" (Glueck 1951: 241). Glueck dated the pottery retrieved from the site to the middle Chalcolithic, first part of the Early Bronze Age, Hellenistic through Byzantine and Mediaeval Arabic periods (Glueck 1951: 247) and he argued that Tell Fendi was originally settled in the Neolithic period (Glueck 1951: 246). De Contenson agreed with Glueck in dating the bulk of the pottery from Tell Fendi to the Middle/ Late Chalcolithic period (de Contenson 1964: 35, Pl. IX). He described the pottery and the stone artifacts collected from Tell Fendi and related to the Chalcolithic period in detail (de Contenson 1964: 34-35), while he did not date any pottery to the Islamic periods. Among the sherds picked up by de Contenson from Tell Fendi were two wheel-made jugs in dark red clay which he dated to the Roman period (de Contenson 1964: 36, Pl. XI: 11-12).

Tell Fendi was surveyed in 1975 by Ibrahim, Sauer and Yassine. They dated the pottery retrieved from the site to the "Neolithic/Chalcolithic, Byzantine and Ayyubid/Mamluk" periods (Ibrahim et al. 1976: 49; Yassine 1988: 168). Kafafi studied the pottery and the stone artifacts that they collected from Tell Fendi and dated them to the pre-Chalcolithic period. Based on comparative study with stratified sites, Kafafi dated types of bowls, cooking pots and jars from Tell Fendi to the Late Neolithic 2 (PNB, ca. 6th millennium B.C.) (Kafafi 1982: 202-203; Pl. 4:1-4).

Separating Tell Fendi into two sites: A

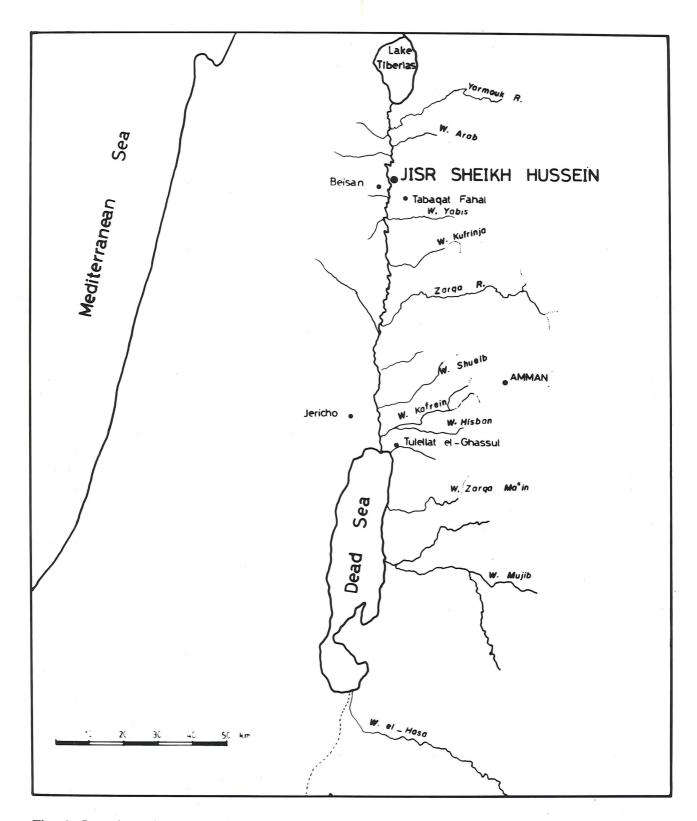


Fig. 1. Location of the Jisr Sheikh Hussein Region.

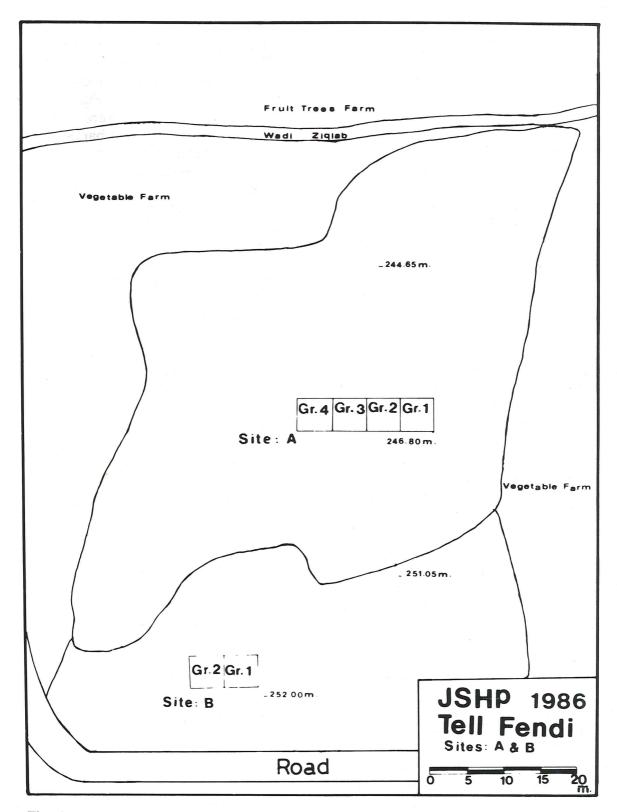


Fig. 2

and B (Fig. 2) was due to: 1) differences in elevation; 2) Site B was levelled and planted with vegetables; and 3) Site B had only one period type sherds on it.

Four grids were laid on the southern slope of the tell, Site A, where the corn plants were the shortest. The pottery reading from the thirty-six squares (see Chart 1) showed that the Chalcolithic/Early Bronze I period was predominant, while the other periods (Byzantine, Ayyubid, Mamluk and modern) were only slightly represented.

Two grids were laid on the middle of Site B. The pottery reading (see Chart 2) from the eighteen squares showed that the site was occupied in one period, i.e. the Ayyubid/Mamluk period. All of the pottery sherds collected from these grids came from vessels which were used for processing sugar. This conclusion is supported by: 1) all sherds from the surface are from Abaleeg (sugar pots) used in the last stage of sugar processing (al-Nuweiri: VIII/272-276); and 2) the artifacts used by villagers, such as bowls, cooking pots and water jars, were absent. Several burnt bricks were found on the surface of Site B, which were probably part of a structure. No pottery wasters were found on the surface of Site B. It is likely that Abaleeg (sugar pots) were made by special craftsmen at the processing locations of the sugar cane, in the light of 1) the similarities between them in the Jordan Valley; 2) the huge amount of sugar pots used at each processing centre; and 3) the difficulties that would result from transporting them.

Pottery and Stone Artifacts from Tell Fendi

Seventy-one pottery sherds dated to the Chalcolithic/Early Bronze I period were studied and analysed. Thirty-six sherds were from jars, thirty-one were from bowls and four sherds were from cooking pots. The fabric of the jars is mostly crude; 94.4% of the jar sherds were in coarse ware, while 5.6% were described as fine ware (see Chart 3). The inclusions in the fabric were straw, stones, grog, flints and shells. The clay is of whitish, pinkish and brownish colours. The outer face of the jar sherds were mostly slipped and smoothed. All of these jars were handmade. A low percentage of these sherds has red or brown wash (see Chart 3). Loop handles were represented by six fragments, while indented ledge handles were represented by one sample (Fig. 3:14). Simple curved ledge handles were represented by two fragments. Raised bands of clay with thumb impressions were found on five thick storage jar sherds (Fig. 3:7). Jars with simple, thickened and everted rims were the most common (Fig.3:8-13).

The fabric of the bowls is mostly well levigated: 83.87% of the analysed sherds were in fine ware, while 16.12% were in coarse ware. The visible inclusions seen in the fabric were stone, grog, flint and shell fragments. These inclusions were mostly tiny, less than one millimeter in size. It was noticed that white sieved clay was only used in manufacturing small bowls and cups. A high percentage of the analysed bowl sherds was painted in red or brown. This paint appears frequently as a band around the rim. The main shapes of the bowls were hemispheroidal (Fig. 3:1-4) and V-shaped.

Four of the analysed sherds were from cooking pots. The fabrics of these sherds were crude. The inclusions found in the clay were straw, stone, grog, flint and shell, and were mostly medium and large sized (see Chart 3). All of these cooking pots were handmade. The main shapes were holemouth and bow neck.

Pottery sherds dated to the Byzantine period were mostly of reddish colour. Water jars were mostly coated in gray and painted in whitish vertical and cross lines. All of these sherds were from jars and cooking pots (Fig. 3:16).

Four hundred and thirty five of the so-called sugar pot sherds (Abaleeg) were retrieved from eighteen squares within the limited time (half an hour for each square). Depending on their colour, they can be classified into two major groups, light brown and pink. All of these pots were handmade with folded rims. Because the coiling method was used in manufacturing

Chart 1. Surface sherd distribution at Site A.

Total sherds number	Total sherds registered	Periods	Total sherds number for each period	Total sherds registered for each period	Percentage from total sherds number	Others	
1056	139	Chalcolithic/ Early Bronze Age	989	128	93.65%	Flints	
		Byzantine	45	9	4.26%		
		Ayyubid/ Mamluk	12	2	1.13%		
		Modern	6	0	0.56%		

Chart 2. Surface sherd distribution at Site B.

Total sherds number	Total sherds Periods registered		Total sherds number for each period	Total sherds registered for each period	Percentage from total sherds number	Others
461	123	Ayyubid/ Mamluk	461	123	100%	Several burnt mud-bricks

these pots, it is easy to see wide grooves on the exterior wall surface and the finger impressions on the interior surface. Due to their function as industrial pots, the decorations found on other pottery vessels from the same period were absolutely absent. All of these pots were bell-shaped (Figs. 4: 2-13; 5: 1-19) and have pierced bottoms (Fig. 5: 20-21).

Al-Nuweiri (ca. 1350 A.D.) gave details of cane-sugar manufacture, which may have been practiced in the Jordan Valley. He reported that "the boiled juice is poured out into pots called Abaleeg, which have pierred bottoms. Cane straws are placed into those holes to act as filters. In this stage, the sugar-syrup starts to crystalize" (al-Nuweiri: VIII/270).

Archaeological evidence shows that the Jisr Sheikh Hussein region was extensively planted with sugar cane in the Ayyubid/Mamluk period. Abaleeg sherds were found at two other sites in the region, Tell Abu 'Arabi esh-Shamali (Site J) and Khirbet Sheikh Hussein (Site O).

In the sixth through seventh centuries A.H./thirteenth through fourteenth cen-

turies A.D., the Jordan Valley flourished according to the archaeological record. Ayyubid/Mamluk remains were found in 107 out of 225 sites recorded by the Eastern Jordan Valley Survey Project, 1975 and 1976 (Ibrahim et al. 1976: 38). The revival of social and economic growth in the Jordan Valley throughout the Ayyubid/Mamluk period is reflected in the efficient use of water both to irrigate the Jordan Valley fields and to power the sugar mills. Large quantities of sherds belonging to Abaleeg have been found at a number of sites (Ibrahim et al. 1976: 38), with at least thirty installations attested as sugar mills between the Yarmouk River in the north and the Dead Sea in the south (Hamarneh 1977/78: 18) Abaleeg sherds were well identified in excavated sites located on the floor of the Jordan Valley, such as Tell Abu Qa'dan (Franken and Kalsbeek 1975). According to the historical sources, the Jordan Valley was agriculturally wealthy in this period. The Jordan Valley was widely planted with sugar cane in this period (Abu al-Fida 1850: 223; Ibn Shaddad 1962: 136; Muqaddasi 1967: 161-62,

Average wall	Thickness		1.675 cm.		1.558 cm.		0.806 ст.	
turing	II/hool	turned					22	%6.07
Manufacturing	Jondmodo	andmade		100%	36	100%	6	100%
ce ent	I bottoom	Smoothed Handmade		%001	36	100%	31	100%
Surface Treatment	Clipped	oupped.	2	%09	34	94.4%	27	87%
e)	Coarse Fine				2	5.5%	26	83.8%
Ware			4	100%	34	94.4%	5	16.1%
	Brown Red				9	%9.91	14	45.1%
Paint			1	25%	5	13.8%	11	35.1%
		L.						
	Shell	M.			3	8.3%	2	6.4%
		S.	4	100%	33	%9'16	15	48.3%
	Flint	Т.	3	75%	27	75%	3	%9.6
	Fli	M.	_	25%	6	25%	6	39%
		S.					19	61.295
	Grog	Т.			2	5.5%		
s		M.	3	75%	22	63.8%	4	12.9%
nclusions	Stone	S.	-	25%	12	33.3%	79	83.8%
I		<i>L</i> .			3	8.3%		
		M.	╗	100%	56	94.4% 19.4% 72.2%	7	12.9%
	ян	S.			7	19.4%	56	
	ish Str		7	%00I	35	94.4%	10	32.2% 83.8%
	Cooking Jars Bowls Whitish Pinkish Brownish Straw Pots				12	33.3%	김	38.7%
Colour	Pinkish	-		. "	51	41.6%	9	19.3%
	Whitish		7	%001	6	25%	10	32.2%
	Bowls	Bowls					31	
Form	Jars				3,6			
	Cooking	rots	7					

Chart 3. Analysed Chalcolithic Pottery sherds from Tell Fendi: Site A, Abbreviations and illustrations:

S: small; less than one millimetre diameter.

M: Medium; between one and two millimetres diameter.

L: Large; more than two millimetres diameter. Coarse ware: depends on the inclusions' density, their size and the clay frailty.

ADAJ XXXIII (1989)

186; al-Qazwini 1969: 142; al-Qalqashandi: 4/87).

Further excavations in Tell Fendi (Site A) may expose the last stage of the Neolithic period, the whole Chalcolithic period and the first stage of the early Bronze Age. In general, Tell Fendi is one of the most significant sites in the Jordan Valley, as a residential site in the fifth/fourth millennium B.C. and as an industrial center for processing sugar in the thirteen through fourteenth centuries A.D.

Description of Artifacts*

Fig. 3:

- 1. Bowl; simple rim, band of red paint on exterior and interior rim; handmade; pinkish colour, small and medium sized stone, flint and shell grits; E/I: pink (7.5 YR 8/3); C: pinkish gray (7.5 YR 7/2); Date: Chalcolithic. Parallels: Loud 1948: Pl. 2: 4; de Contenson 1960: Fig. 3: 6, 9 and 15; McNicoll and Smith 1982: Pl. 105: 5, 7 and 9; Hennessy et al. 1983: Fig. 2: 7; Gaube 1985: Fig. 8: 17.
- and interior rim; slow wheel turned, pinkish colour; small and medium sized stone, grog and flint grits; E: pink (7.5 YR 8/3); I: pinkish gray (7.5 YR 7/2); C: dark gray (7.5 YR 4/0); Dia: 26 cm; Date: Chalcolithic.

 Parallels: de Contenson 1960: Fig. 3: 19-20.

2. Bowl; simple rim, red paint on exterior

3. Bowl; simple rim, band of red paint on exterior and interior rim; slow wheel turned; pinkish colour; small and medium sized stone, grog and flint grits; E/I: pink (7.5 YR 8/3); C: pinkish gray (7.5 YR 7/2); Date: Chalcolithic.

Parallels: de Contenson 1960: Fig. 36:1 and 7, Fig. 32: 17; Mellaart 1962: Fig. 5: 65; McNicoll and Smith 1982: Pl. 105: 5, 7 and 9; Hennessy *et al.* 1983:

Fig. 2: 7.

- 4. Deep bowl; thickened flat top rim, traces of red paint on exterior and interior rim; handmade (coiling); pinkish colour; medium and large sized stone, flint and grog grits; E/I: pink (5 YR 8/3); C: light gray (5 YR 7/1); Dia: ca. 40 cm; Date: Chalcolithic. Parallels: McNicoll and Smith 1942: Pl. 105: 1; Hennessy et al., 1983: Fig. 2: 3.
- 5. Jar; body sherd; handmade; dusky red (5 R 3/2) paint on exterior surface; pinkish colour, small and medium sized stone, grog and flint grits; E/I: pink (5 YR 8/4); C: pinkish gray (5 YR 7/2); Date Chalcolithic.

 Parallels: de Contenson 1960: Fig. 25: 20
- 6. Jar; body sherd, band of dark red (5 R 3/8) paint on exterior surface; handmade; reddish colour; mostly medium sized stone, grog and flint grits; E: reddish yellow (7.5 YR 8/6); I: light brown (7.5 YR 6/4); C: gray (N 6/0); Date: Chalcolithic.

 Parallels: de Contenson 1960: Fig. 3: 3, 4 and 7.
- 7. Jar; body sherd, handmade; rope moulding on a raised band of clay on exterior surface; brownish colour; medium and large sized stone, grog and flint grits; E/I: brown (7.5 YR 5/2); C: dark brown (7.5 YR 3/4); Date: Chalcolithic.
 - Parallels: de Contenson 1960: Fig. 4: 15, Fig. 23: 8 and 9, Fig. 25: 19.
- 8. Jar; simple rim; wheel turned; pinkish colour; small and medium sized stone, grog and flint grits; E/I: pink (7.5 YR 8/3); C: pinkish gray (7.5 YR 7/2); Dia: 14 cm; Date: Chalcolithic. Parallels: Hennessy *et al.* 1983: Fig. 2: 8.
- 9. Jar, everted rim, mostly S-shaped body; burnished in dark brown on exterior and interior surfaces; wheel turned; reddish colour; medium sized stone, grog and flint grits; E/I: bur-

^{*} Abbreviations used in the artifacts description section:

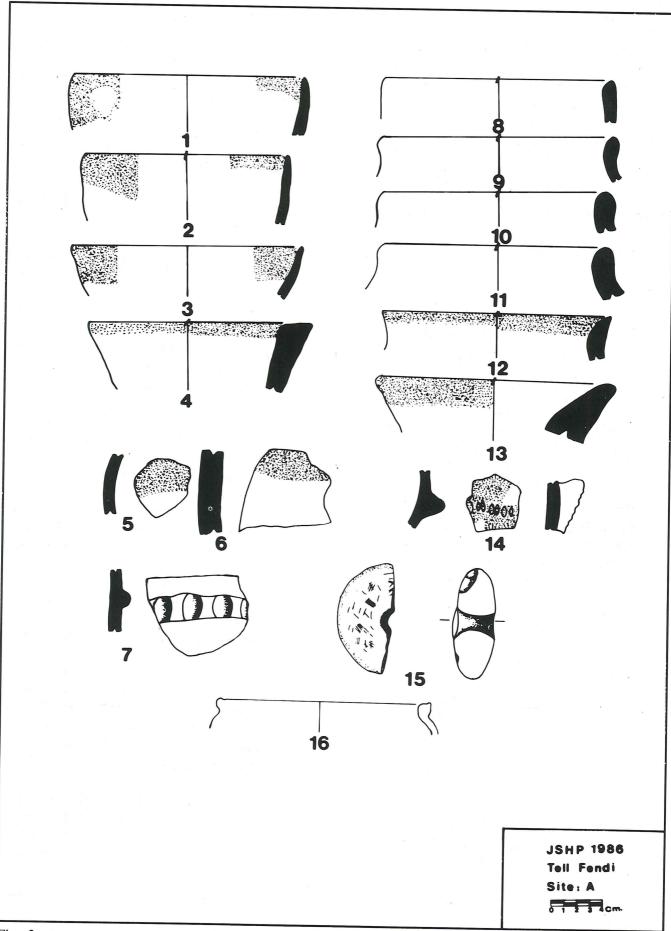


Fig. 3.

nished in dark brown (7.5 YR 4/2); C: reddish yellow (7.5 YR 7/6); Dia: 18 cm; Date: Chalcolithic/Early Bronze Age.

Parallels: No exact parallels.

- 10. Jar or cooking pot; simple rim, globular body; smoothed by hand; handmade; pinkish colour; small and medium sized grog, stone and flint grits; E/I: pink (7.5 YR 8/4); C: gray (N 5/0); Dia: 34 cm; Date: Chalcolithic.
 - Parallels: de Contenson 1960: Fig. 4: 2, Fig. 33: 3.
- 11. Jar; simple rim, globular body; burnished in brown (7.5 R 5/4) on exterior and upper rim surface; wheel turned; small and medium sized stone, grog, and flint grits; C: dark gray (N 4/0); Dia: 26 cm; Date: Chalcolithic. Parallels: no exact parallels.
- 12. Jar; everted rim, red paint on both rim sides; wheel turned; small and medium sized stone, grog, and flint grits; E/I: reddish yellow (5 YR 7/6); C: gray (5 YR 6/1); Dia: 22 cm; Date: Chalcolithic.
 - Parallels: McNicoll and Smith 1982: Pl. 104: 2.
- 13. Jar; everted rim, bow shaped neck; traces of red wash on exterior surface; handmade (coiling); medium and large sized stone, grog and flint grits, brownish colour, E/I: very pale brown (10 YR 8/3); C: very dark gray (10 YR 3/1); Dia: 36 cm; Date: Chalcolithic. Parallels: de Contenson 1960: Fig. 12: 5, Fig. 33: 12, Fig. 24: 1; Smith 1973: Pl. 34: 717; Hennessy *et al.* 1983: Fig. 1: 7.
- 14. Indented ledge handle; reddish brown paint (5 YR 4/4); nail impressions; pinkish colour; medium and large sized grog, stone and flint grits; pink (5 YR 8/3) throughout; Date: Chalcolithic.
 - Parallels: de Contenson 1960: Fig. 12: 10.
- 15. Spindle whorl; broken; made from white limestone; traces of narrow grooves made probably by using flint sickle blade for smoothing the surface.

- Date: Neolithic/Chalcolithic. Parallels: Dellfus and Kafafi 1988: Fig. 21
- 16. Cooking pot; collared with soft wide ribbing on top rim surface, globular body; wheel made; reddish colour; small sized sand grits; dark red (7.5 R 3/6) throughout; Date: Byzantine. Parallels: Smith 1973: Pl. 43: 1296; Hennessy et al. 1981: Pl. XXXIV: 8; McNicoll and Smith 1981: Pl. 138: 8.

Fig. 4

- 1. Basalt bowl; flat top rim; Date: Chalcolithic.
- 2. Oblogah; (sugar pot); handmade; E/I: white (10 YR 3/2); C: very pale brown (10 YR 7/3); Dia: 34 cm; Date: Ayyubid/Mamluk.
- 3. *Oblogah;* handmade; E/I: white (10 YR 8/2); C: light gray (10 YR 7/2); Dia: 42 cm; Date: Ayyubid/Mamluk.
- 4. *Oblogah*; handmade; E/I: reddish yellow (5 YR 7/8); C: reddish gray (5 YR 5/2); Dia: 40 cm; Date: Ayyubid/Mamluk.
- 5. Oblogah; handmade; E/I: pinkish white (7.5 YR 8/2); C: light brown (7.5 YR 6/4); Dia: 32 cm; Date: Ayyubid/ Mamluk.
- 6. *Oblogah;* handmade; E/I: pink (5 YR 8/4); C: pinkish gray (5 YR 7/2); Dia: 34 cm; Date: Ayyubid/Mamluk.
- 7. Oblogah; handmade; E/I: pink (7.5 YR 7/4); C: light brown (7.5 YR 6/4); Dia: 36 cm; Date: Ayyubid/Mamluk.
- 8. Oblogah; handmade; E/I: pink (5 YR 8/4); C: pinkish gray (5 YR 7/2); Dia: 38 cm; Date: Ayyubid/Mamluk.
- 9. *Oblogah*; handmade; E/I: pink (5 YR 8/3); C: gray (N 6/0); Dia: 42 cm; Date: Ayyubid/Mamluk.
- 10. Oblogah; handmade; pink (5 YR 8/3) throughout; Dia: 46 cm; Date: Ayyubid/Mamluk.
- 11. Oblogah; handmade; E: pale yellow (5 YR 8/3); I: white (5 YR 8/2); C: light gray (2.5 Y 7/2); Dia: 44 cm; Date: Ayyubid/Mamluk.
- 12. *Oblogah*; handmade; E/I: reddish yellow (5 YR 7/6); C: pinkish gray (7.5

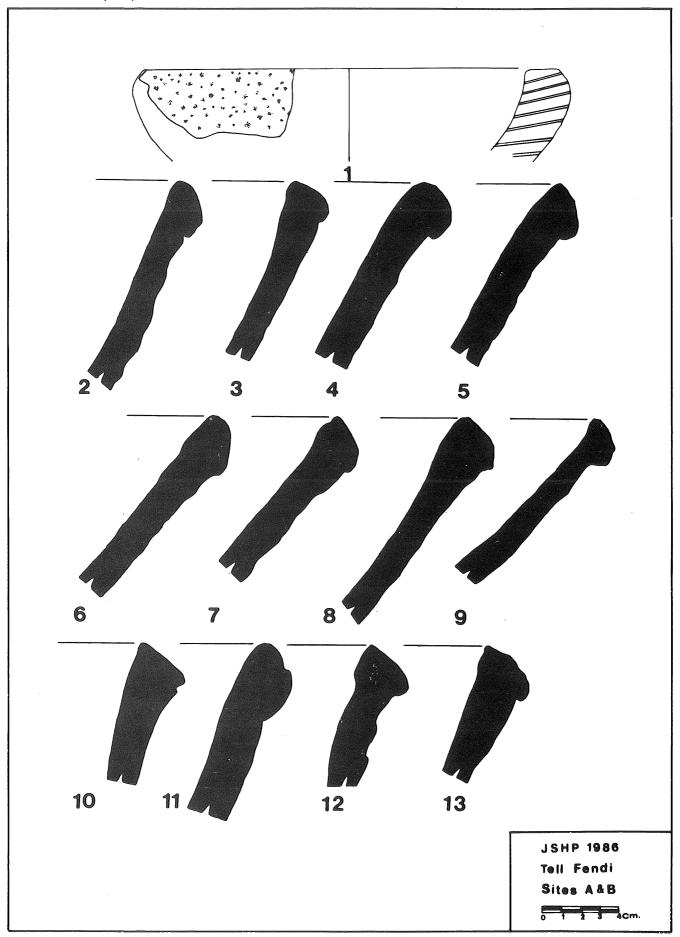


Fig. 4.

ADAJ XXXIII (1989)

- YR 6/4); Dia: 44 cm; Date: Ayyubid/ Mamluk.
- 13. *Oblogah*; handmade; E/I: reddish yellow (5 YR 7/6); C: pinkish gray (7.5 YR 7/2); Dia: 42 cm; Date: Ayyubid/Mamluk.

Fig. 5

- 1. Oblogah; handmade; E/I: very pale brown (10 YR 7/3); C: light gray (10 YR 7/2); Dia: 40 cm; Date: Ayyubid/ Mamluk.
- 2. *Oblogah*; handmade; E/I: pink (7.5 YR 8/4); C: pinkish gray (7.5 YR 7/2); Dia: 42 cm; Date: Ayyubid/Mamluk.
- 3. *Oblogah;* handmade; E/I: pink (5 YR 7/4); C: light gray (5 YR 7/1); Dia: 40 cm; Date: Ayyubid/Mamluk.
- 4. *Oblogah*; handmade; E/I: pink (5 YR 7/4); C: gray (5 YR 6/1); Dia: 42 cm; Date: Ayyubid/Mamluk.
- 5. Oblogah; handmade; E/I: pink (7.5 YR 8/4); C: pinkish gray (7.5 YR 7/2); Dia: 42 cm; Date: Ayyubid/Mamluk.
- 6. Oblogah; handmade; E/I: pinkish gray (7.5 YR 7/2); C: gray (5 YR 6/1); Dia: 42 cm; Date: Ayyubid/Mamluk.
- Oblogah; handmade; E/I: light red (7.5 YR 6/8); C: dark reddish gray (10 R 4/1); Dia: 42 cm; Date: Ayyubid/ Mamluk.
- 8. *Oblogah;* handmade; E/I: light red (10 R 6/6); C: light gray (5YR 7/1); Dia: 40 cm; Date: Ayyubid/Mamluk.
- 9. *Oblogah*; handmade; E/I: reddish yellow (5 YR 7/6); C: gray (5 YR 5/1); Dia: 42 cm; Date: Ayyubid/Mamluk.
- 10. Oblogah; handmade; E/I: very pale brown (10 YR 8/4); C: light yellowish brown (10 YR 6/4); Dia: 34 cm; Date: Ayyubid/Mamluk.
- 11. *Oblogah*; handmade; E/I: very pale brown (10 YR 8/4); C: light gray (2.5 YR 7/2); Dia: 38 cm; Date: Ayyubid/ Mamluk.
- 12. Oblogah; handmade; E/I: pink (7.5

- YR 8/4); C: pinkish gray (7.5 YR 7/2); Dia: 38 cm; Date: Ayyubid/Mamluk.
- 13. *Oblogah;* handmade; E/I: reddish yellow (5 YR 7/6); C: light brownish gray (10 YR 6/2); Dia: 40 cm; Date: Ayyubiḍ/Mamluk.
- 14. Oblogah; handmade; E/I: light red (2.5 YR 6/6); C: gray (N 6/0); Dia: 34 cm; Date: Ayyubid/Mamluk.
- 15. Oblogah: handmade; E/I: pink (7.5 YR 8/4); C: pinkish gray (7.5 YR 7/2); Dia: 42 cm; Date: Ayyubid/Mamluk.
- 16. *Oblogah*; handmade; E/I: white (10 YR 8/2); C: light brownish gray (10 YR 6/2); Dia: 40 cm; Date: Ayyubid/ Mamluk.
- 17. Oblogah; handmade; E/I: pinkish gray (7.5 YR 7/2); C: very dark gray (N 3/0); Dia: 38 cm; Date: Ayyubid/Mamluk.
- 18. *Oblogah*; handmade; E/I: pink (7.5 YR 8/4); C: pinkish gray (7.5 YR 7/2); Dia: 40 cm; Date: Ayyubid/Mamluk.
- 19. *Oblogah*; handmade; E/I: pinkish white (7.5 YR 8/2); C: gray (N 6/0); Dia: 42 cm; Date: Ayyubid/Mamluk.
- 20. Oblogah; handmade; holed base; E/I: light red (10 R 4/4); Dia: 5 cm; Date: Ayyubid/Mamluk.
- 21. *Oblogah*; handmade; holed base; E/I: pink (5 YR 7/3); C: pinkish gray (5 YR 7/2); Dia: 5 cm; Date: Ayyubid/Mamluk.

Acknowledgements

I deeply appreciate the following for their consistant encouragement for the Jisr Sheikh Ḥussein Project:

Dr. C.J. Lenzen; Prof. Dr. Moawiyah Ibrahim; Dr. Zeidan Kafafi; Dr. Axel Knauf; Susan Thorpe; Nabil al-Qadi; Isam al-Deen al-Hadi; M. Delong and Mamdouh al-Ghawi. The writer wishes to thank Dr. Adnan Hadidi, former director general of the Jordanian Department of Antiquities, and the present director, Dr. Ghazi Bisheh, for their support and encouragement.

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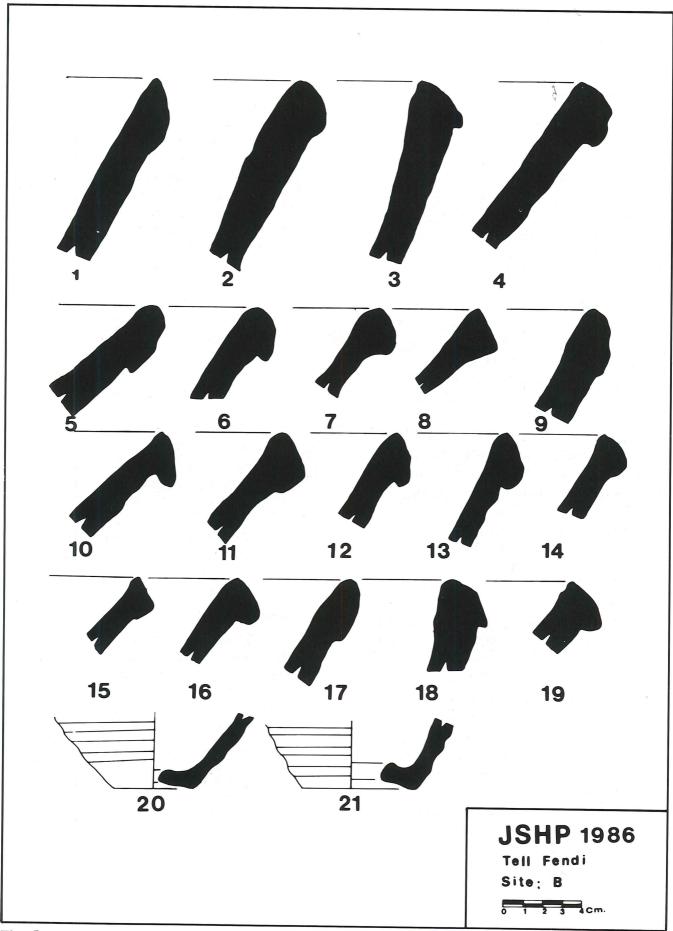


Fig. 5.

ADAJ XXXIII (1989)

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