

# RECENT DISCOVERIES FROM PORTSMOUTH AND LANGSTONE HARBOURS: MESOLITHIC TO IRON AGE

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## INTRODUCTION

THIS paper records the results of fieldwork upon the shoreline of Portsmouth and Langstone Harbours. It falls into four sections. It includes description and discussion of two Mesolithic assemblages as well as other isolated finds, nine late Neolithic flint groups and a further thirteen minor collections, some Bronze Age sherds from Farlington Marshes and a group of middle Iron Age pottery from Paulsgrove.

The area covered by this survey, (Fig. 1), consists of two drowned valleys and the low islands of gravel and brickearth within them. This expanse is uncovered at low tide and is protected from the main force of erosion by the Isle of Wight and by the sand and gravel bars at the harbour mouths. Erosion is mainly limited to shores facing south or west and the resulting silts tend to be redeposited on the sheltered sides of the islands (Perraton 1953). These range in height from 8 to 25 ft, while tides can reach as high as 6.6 ft O.D., although the profile has been changed by the embanking of the tidal margin (Bryant 1967, 5-8) and the shrinking of the reclaimed silts. The shallowness of these harbours, together with their sheltered position, has ensured that the effects of past changes in sea level have not been marked, and the overall thickness of silts rarely exceeds 4.5 ft.

Little of the material discussed here has been found in situ. Most is derived from eroded cliffs or mudflats, where material may tend to remain within nucleations because the tide is too slack to disperse it rapidly. Hearths, for example, remain on the shallow surface of the mud away from the deeper channels, but from the start it must be understood that the discovery of different types in such groups does not prove that they are all of the same age. For this reason no valid samples of flint waste could be collected, and since the area was so treacherous accurate levelling was impossible and planning could only be achieved with the aid of vertical air photographs. Further details of the sites are held by the Archaeology Division of the Ordnance Survey and a fuller analysis of the material is lodged with Portsmouth City Museum.

## MESOLITHIC

Two sites, P 1, P 2 (P=Portsea), have been identified, in addition to scattered finds in later foci. The raw material indicates a flint source within the chalk, perhaps upon the Portsdown ridge to the north of the harbours (Fig. 1).

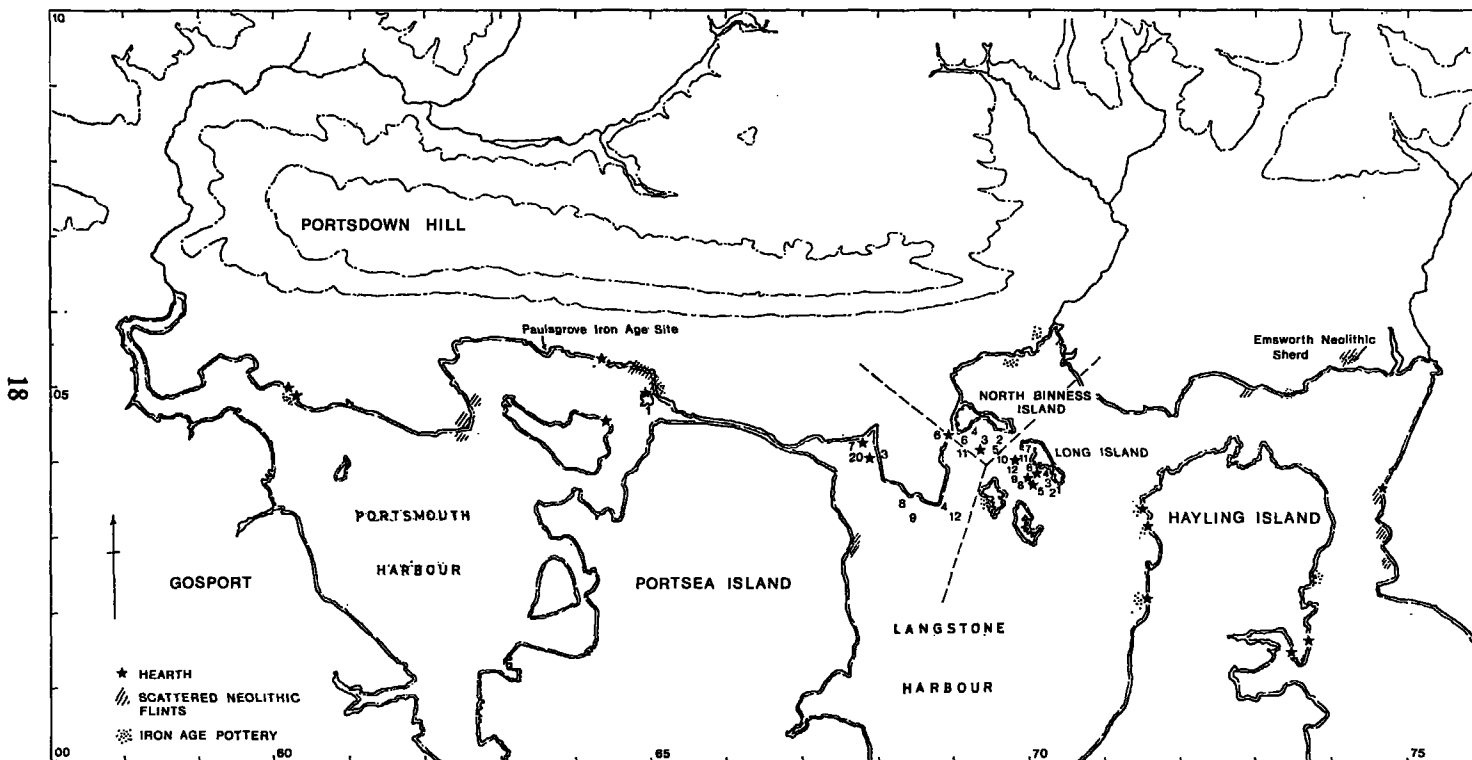


Fig. 1. Map of Portsmouth and Langstone Harbours showing sites and locations of finds from field survey. Frame marked with km divisions of National Grid, contours at 25 ft intervals. Drawn by M. Bouillard.

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The contents of these groups can be summarised as follows (L=Long Island, NB=North Binness Island) (A fuller analysis and a gazetteer will be lodged with the museum material):

	P1	P2	P7	P11	P12	L2	L3	L6	L7	L8	L11	NB1	NB2
Cores	—	1	—	—	—	—	—	—	—	—	—	—	—
Core trimmings	9	1	—	—	—	—	—	—	—	—	—	—	—
Unused flakes	20	26	—	—	—	—	—	Not collected					
Used flakes	—	8	—	—	—	—	—	Not collected					
Retouched flakes	1	—	—	—	—	—	—	Not collected					
Unused blades	174	66	—	—	—	—	—	Not collected					
Used blades	19	26	1	1	1	3	6	8	6 <sup>5</sup>	3	5	4	—
Blade segments	2	1	—	—	—	—	—	—	—	—	—	—	—
Scrapers	—	11 <sup>4</sup>	—	—	—	—	—	—	—	—	—	—	2
Microliths	1 <sup>1</sup>	22 <sup>3</sup>	—	—	—	—	—	—	—	—	—	—	—
Pick	—	1 <sup>6</sup>	—	—	—	—	—	—	—	—	—	—	—
Saws	—	1	1	—	—	—	—	—	—	—	—	—	—
Notched flakes	—	—	—	—	—	—	2	—	—	—	—	—	—
Obliquely truncated blade	—	—	1	—	—	—	—	—	—	—	—	—	—

(Superscript numbers refer to illustrations in Figs. 2 and 3)

Little of this material requires comment. The core is of Clark's 'chopper' type, while the scrapers include nine convex and two blade end tools. One microlith was of type B, or doubtfully D, while another from P2 was certainly of this type. A second example from P2 may be an unfinished example of type A. Fig. 2,1 retains a low bulb, partly removed by secondary flaking. There is little to give a close date, although the use of rod microliths and the absence of microburin technique have been seen as characteristics of the late Mesolithic in the south (Higgs 1959). A rather similar industry from Wakefords Copse, Havant, has been dated to 3730±120 BC (HAR-233). The high proportion of utilised material matches earlier observations for southern England (Coles 1971, 304). The evident contrast in the composition of the two main groups is a reminder of the functional segmentation sometimes found between the camps of hunter gatherers, although there is no evidence that these are of the same date. They are too small, however, to form the basis of a more elaborate interpretation.

NEOLITHIC

The evidence for Neolithic activity is more extensive. Material was collected entirely from eroded cliffs or mudflats and only one sherd now survives. Traces of a burial were also recognised. The exposed sections showed no features other than hearths. The flint industry again used material gathered from the downland, while the scatter of unused waste flakes indicates some knapping on the sites.

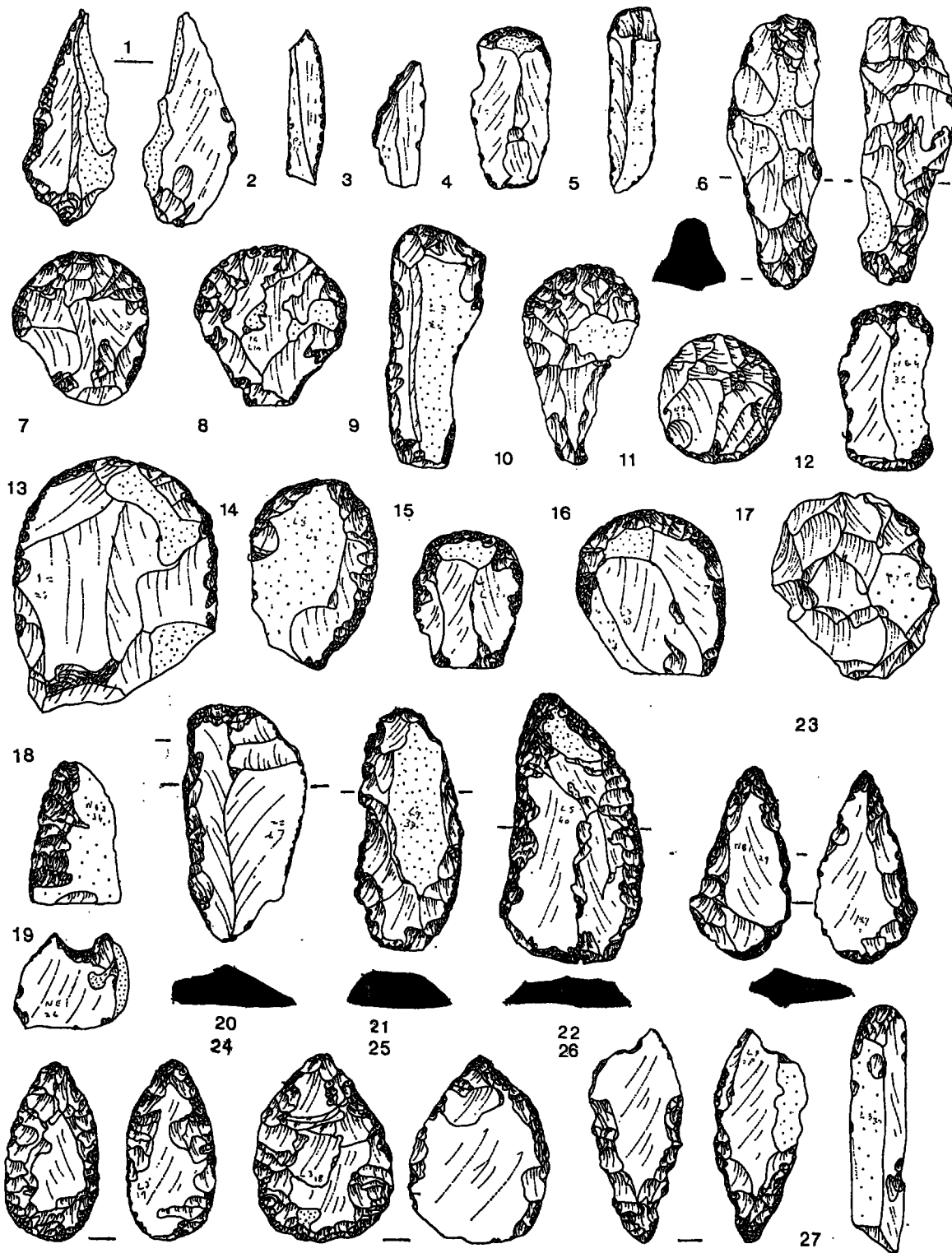


Fig. 2. Mesolithic and Neolithic flint implements from Portsea, Long Island and North Binniss Island.  
 (Scales 1-3  $\frac{1}{4}$  4-27  $\frac{1}{2}$ ).

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*Convex scrapers*: The convex scrapers from the nine largest groups have been classified according to the system set out by Clark (1960, 217):

Type	Percentage of total									Illustrated
	P2	L2	L3	L5	L6	L7	L8	L11	NB1	
A (i)	38	24	28	20	20	28	28	32	45	Fig. 2 No. 1, 9, 7, 8, 13-16
(ii)	48	72	45	57	48	52	54	46	45	
B (i)	4	1	2	—	2	—	3	—	—	12
(ii)	—	—	1	—	—	—	—	—	—	—
C	2	3	10	10	20	—	13	16	3	11
D (i)	1	—	—	—	6	—	—	—	—	14
(ii)	4	—	10	10	—	8	—	—	7	—
broken:	3	—	3	3	4	2	2	6	—	—
Number	85	35	136	29	53	24	31	24	34	

Metrical analysis of the two largest groups gives the following results:

	Length (mm)							Breadth (mm)		
	20-29	30-39	40-49	50-59	60-69	70-79	80-89	0-9	10-19	20-29
	<i>Percentages</i>									
L3	8	16	32	28	10	4	2	50	18	12
P2	7	12	24	37	14	6	—	20	70	10
	<i>Angle of retouch (degrees)</i>									
	20-29	30-39	40-49	50-59	60-69	70-79	80-89			
	<i>Percentages</i>									
L3	—	—	11	29	33	20	7			
P2	2	7	7	36	23	15	10			

Seven sites have produced only convex scrapers: L 10 (4), NB 4 (12), P3 (3), P4 (3), P8 (2), P 11 (6), and P 12 (1).

*Other implements*: The overall composition of the remaining groups is set out below. 'Core tools' follow the definition of Alexander and Ozanne (1960) and 'spurred implements' that of Smith (1965).

(Numbers in parentheses indicate illustrations in Figs. 2 and 3).

Provenances, Fig. 2: P1 1; P2 2-4, 6, 10, 13, 17; P11 7; L3 9, 14-16, 24-5, 27; L5 22; L7 5, 20; L8 26; L9 21; L10 8; NB1 19, 23; NB3 18; NB4 12; NB6 11.

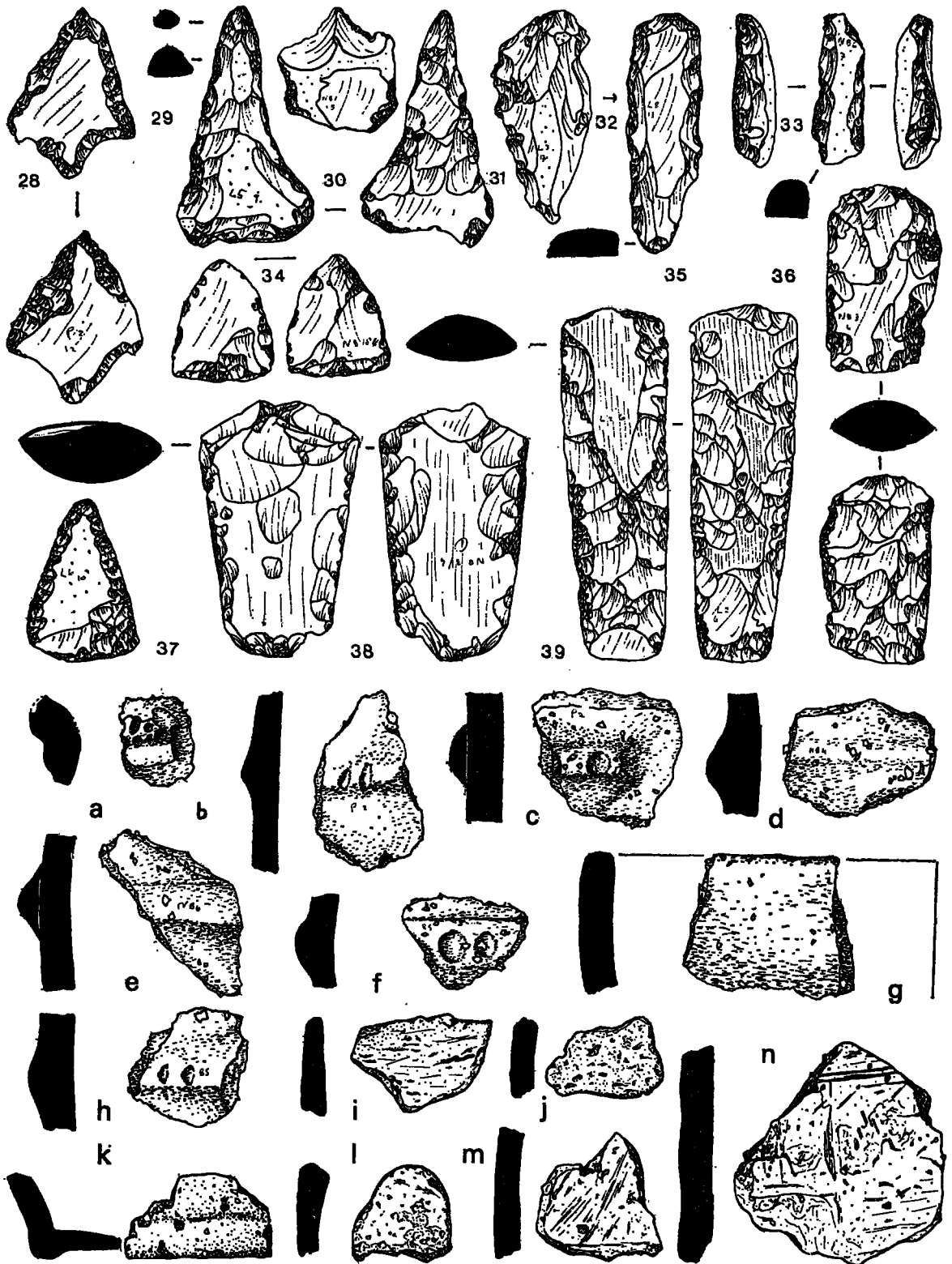


Fig. 3. Flint implements from Portsea, Long Island and North Binness Island (28-39) and pottery from Emsworth (a) Farlington Marshes (b-h) and Paulsgrove (i-n). (Scales 28  $\frac{1}{2}$ , remainder  $\frac{1}{4}$ ).

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	P1	P2	L2	L3	L4	L5	L6	L7	L8	L9	L11	L12	NB1	NB3	NB6
Convex scrapers	10	85	35	136	6	29	53	24	31	5	24	3	34	12	13
Concave scrapers	1	8	—	—	—	—	—	—	—	—	—	—	1 <sup>19</sup>	—	—
Core tools	—	1 <sup>17</sup>	—	—	—	1	1	—	—	—	—	—	—	—	—
Tanged scraper	—	1 <sup>10</sup>	—	—	—	—	—	—	—	—	—	—	—	—	1
Retouched flake knife	1	—	—	9	—	1	3	—	2	—	2	—	3 <sup>23</sup>	1 <sup>18</sup>	—
Blunted back knife	1	—	—	1	—	—	—	3 <sup>20</sup>	—	—	—	—	1	2	—
Plano-convex knife	—	—	—	1	—	1 <sup>22</sup>	—	—	—	1 <sup>21</sup>	—	—	—	—	—
Laurel leaf	—	—	—	2 <sup>24,25</sup>	—	—	—	—	—	—	—	—	—	—	—
Tanged knife	—	—	—	—	—	—	—	—	1 <sup>26</sup>	—	—	—	—	—	—
Fabricator	—	—	—	5	—	1	—	—	1 <sup>32</sup>	1	—	1	—	1	1 <sup>33</sup>
Spurred impt.	—	1	—	—	1	—	—	—	—	—	—	—	1 <sup>30</sup>	—	—
Borers	—	1	—	—	—	2 <sup>31</sup>	—	—	—	—	—	—	—	—	1
Leaf shaped arrow-head	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanged arrowhead	—	1 <sup>28</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
Triangular arrow-head	—	—	—	—	—	—	1 <sup>37</sup>	—	—	—	—	—	1 <sup>34</sup>	—	—
Axes	—	—	—	—	—	—	flake	—	—	—	—	—	flake	2 <sup>36,38</sup>	—
Adzes	—	—	1 <sup>39</sup>	—	—	—	1	—	—	—	—	—	—	—	—
Miscellaneous	1	—	—	2 <sup>27</sup>	—	—	—	—	1	—	—	—	—	—	—
Total	14	99	36	156	7	35	60	27	36	7	26	4	42	18	16

The implements listed as 'miscellaneous' are a serrated flake from P1, a possible 'push plane' from L3 and a piece of tabular flint from L3 with faint inverse and marginal retouch and with a lightly worked tip. Wear on this suggests its use as a burnishing tool.

In the absence of associations, the general chronology may be summarised. The earliest items are the laurel leaves, which were placed in the earlier Neolithic on the evidence of the Windmill Hill — Kennet Avenue sequence (Smith 1965). That the group from L3 was mixed is also suggested by the finding of a plano-convex knife (but see Robertson Mackay 1965). The finding of a tanged arrowhead and a leaf shaped arrowhead at P2 might be explained in the same way, as might the late Neolithic core tool. Similarly triangular arrowheads and polished axe flakes were found together at L6 and NB1.

These difficulties apart, the majority of the flints may belong to the indigenous late Neolithic. Round Beaker scrapers are uncommon and the measured implements are very close in size and shape to those from Arreton Down. These comparisons are confirmed by computer sorting of measured British neolithic industries. The tanged knife, the spurred implements and the thin fabricators may all belong in a similar context and the plano-convex knives are irregular types without the even scale flaking of Beaker examples. The core tools are best matched again at Arreton Down, while the partly polished aze and the adze from L2 could be part of a similar industry. The tanged and concave scrapers may be of the same date.

The contents of these groups are of interest in view of the number of scrapers. No group includes more than eight of the sixteen types of tool listed on p. 23 and it is very

Provenances, Fig. 3: P2 28; L2 35; L5 29, 31; L6 37; L8 32; NB1 30, 34; NB3 38; NB6 33.

unlikely that this results from the difficulties of collection. In each case the proportion of scrapers is far in excess of that found on Neolithic sites with pits and houses and it may be that there was no full domestic occupation here. Hunting may not provide the answer and more arrowheads seem to be known from Portsdown Hill. The scrapers suggest the possibility that grazing, butchery and the treatment of skins were the main activities in this area, though such implements may of course be used on wood and bone as well as hides. This could parallel the medieval use of this area as summer pasture. Fuller discussion of these points must be postponed to another occasion. Meanwhile a brief summary of similar sites has appeared elsewhere (Bradley 1972).

*Pottery.* The one sherd is a damaged rim found with two struck flakes (SU 7425 0550). It is in a hard black to grey-buff ware with scattered medium flint filler. The rolled rim and impressed decoration are compatible with a Middle Neolithic date (cf Smith 1965, 199, fig. 28; this paper Fig. 3, a).

*Human remains.* The skeleton of an elderly female was found in silt at NB5. It had been damaged by the tide but had lain in a crouched position with legs and arms tightly flexed. Stature is estimated at 165 cm. It had no associations but its position and the primitive conditions of platymeria and platycnemia on the long bones might suggest a Neolithic or Bronze Age date.

#### BRONZE AGE

In addition to coarse body sherds from the shoreline, a few sherds show characteristics possibly diagnostic of a later Bronze Age date. Their fabric is coarse and unevenly fired with large flint filler and they show raised and applied cordons and lugs. The provenance of the illustrated material is as follows: P2 - b and c; L1 - g; NB4 - d and e; and NB5 f and h (Fig. 3).

Again these items are without coherent associations and there is no indication of any connection with the burial from NB5. Too little survives for links with Calkin's (1962) type series for west Hampshire to be canvassed. They offer a useful reminder of the remarkable intensity of Middle Bronze Age occupation on the coastal plain but they do nothing to elucidate its nature.

#### IRON AGE

One Iron Age site requires treatment here. This site, at Paulsgrove, was exposed by tidal erosion and has since been removed. It lay just below the tidal margin on the tip of a small tongue of reclaimed saltings 200 m south of the main Portsmouth to Southampton road (SU 6392 0558). The site consisted of a roughly rectangular surface 5 m by 3 m, made up of a thin layer of alluvium mixed with local traces of red burnt clay. Large numbers of calcined flints were found within it, together with a great quantity of Iron Age pottery. Food remains were totally absent and there was no evidence for a structure of any kind. Traces of briquetage among this material suggest salt making. Further discussion of this point may be postponed for a later paper on the salt industry as a whole and here only the pottery will be considered.

Three basic fabrics are represented. A more elaborate analysis of these is lodged with the material. The coarse wares are in heavy, medium to coarse flint gritted fabrics, from grey black to orange buff in surface colour. The exterior is sometimes smoothed and shows rare traces of burnishing, haematite coating or grass marking. The fine wares are

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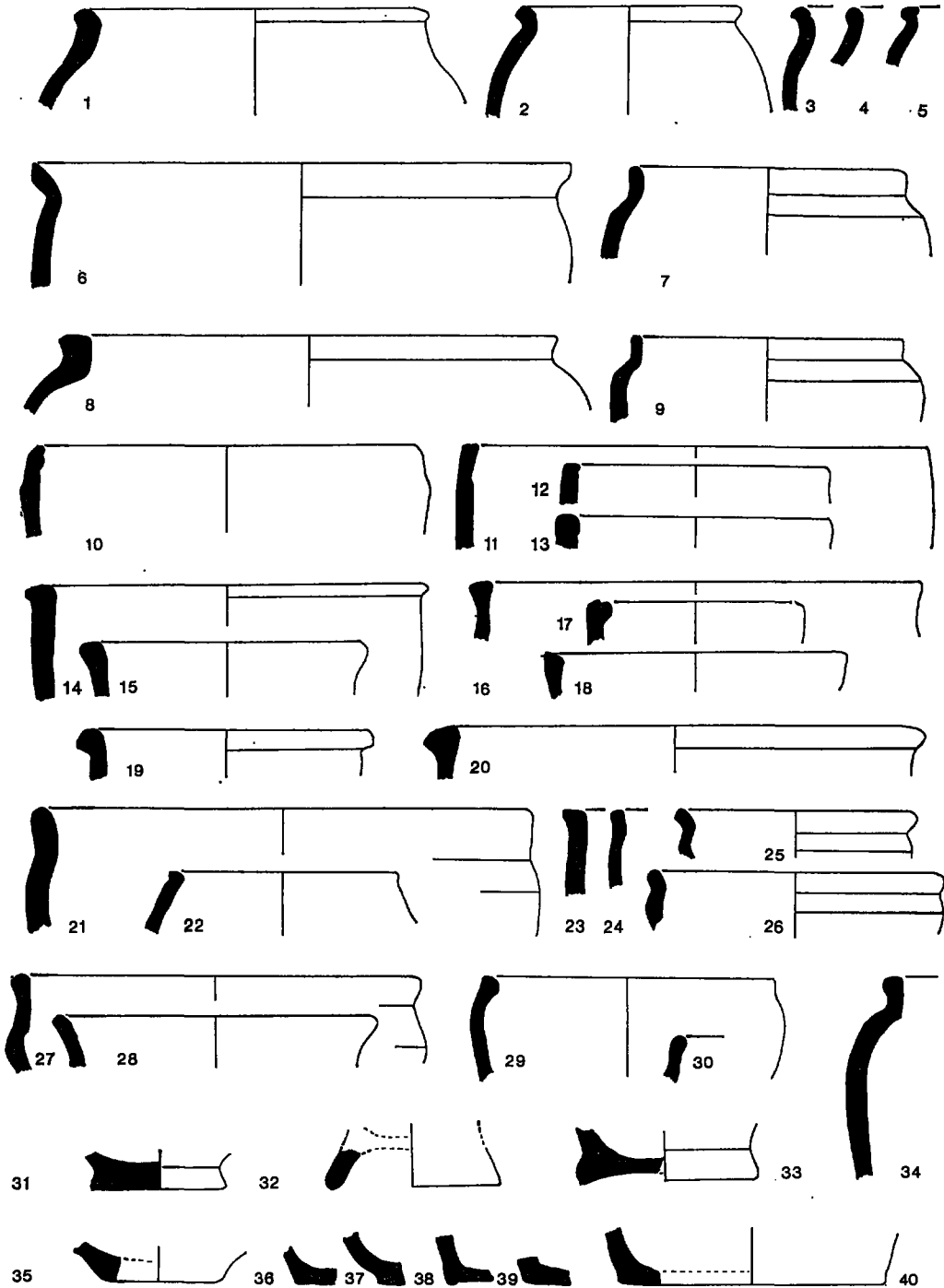


Fig. 4. Iron Age pottery from Paulsgrove. (Scale  $\frac{1}{4}$ ).

equally hard but more carefully smoothed with evenly distributed fine flint grits. Burnishing and haematite are again present and the surfaces are normally black. The third fabric is limited to a few sherds and is that of the briquetage used in salt production (Fig. 3, i-n).

Owing to the poor condition of this pottery no vessels can be restored. Some exterior surfaces have flaked away but even so surface treatment seems to be rare and fingernail impressions are found on only one wall sherd and rarely on the rim. Fingertip impressions are still rarer and are confined to rims. Decorative cordons are absent. Because of its fragmentary and weathered condition, rims and bases are best treated separately.

#### *Rims*

1. Rounded jars: Well made rounded jars lacking marked shoulders in fine and coarse wares with rare traces of haematite or burnishing (Fig. 4, 1-6). Rims are rounded or slightly flattened. No. 6 is a larger and coarser variant. Other variants include a fuller lip (4), internal grooving giving an incipient bead rim, (3 and 5), or slight internal thickening (1). About 60 vessels.
2. Shouldered jars: Slack shouldered jars in the same wares with upright necks and simple flattened or expanded rims, (7-9). No. 34 is a more globular variant, rim diameter 30 cm. About 7 vessels.
3. Simple upright vessels with four variant rim forms:
  - (i) Upright or slightly biconical with sharp or flattened rim tops, (10 and 11). About 23 vessels.
  - (ii) Similar, more rounded, rims with internal grooves, (12 and 13). About 8 vessels.
  - (iii) Expanded, flattened or flanged rims with marked internal and external lip, (14 and 16-18). About 4 vessels.
  - (iv) Heavier out-turned rim, rounded or flattened. Occasional fingernail decoration of the rim top (15, 19 and 20). About 17 vessels.

i, ii and iv are in fine and coarse wares, iii in a heavy, coarse fabric with traces of haematite.
4. Tripartite upright vessels with slightly angular or rounded profiles and slightly everted rounded or flattened rims (21, 23, 24 and 27): About 5 vessels.
5. Miscellaneous: 22. Narrow-mouthed jar in coarse ware. One sherd with fingernail marks. 25 and 26. Rounded tripartite bowls in fine ware. 28. Out-turned flattened rim in smooth sandy ware with large flints. 29. Fine ware bowl with internally thickened rim. 30. Rim in grey sandy ware with medium flints.

#### *Bases*

1. Simple angled bases, a few with an expanded junction, in fine and coarse wares (31, 35-8 and 39-40).
2. Pedestal bases in fine ware. There is no consistent height range (32 and 33).
3. Foot rings. A very few examples in burnished coarse ware and briquetage (Fig. 3, k; Fig. 4, 38).

Most of this pottery is too featureless to suggest a close date and attention must focus on particular details of the fine ware and a few general tendencies extending to the coarser fabrics. The incipient beading of some rims and the internal thickening of some rim angles foreshadow the St. Catherine's Hill group (Cunliffe 1964, 2) which forms part of the saucepan pot tradition and is attributed to a date in the second to first centuries BC.

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At Paulsgrove the many upright vessels fall outside that range and may be older than it. Some at least are closer to Harding's 'barrel jars' (1972, 99). The internal grooving of the rim is sometimes found with material of that type. So too is the long tapering rim form represented here by No. 6. The pedestal bases are also interesting because they suggest a further link with the fine wares of other middle Iron Age sites, especially on the chalk of Hampshire and Sussex. This suggestion is supported by the consistent burnishing of the fine wares on the site.

Several characteristics of the coarse wares are equally helpful. The apparent rarity of any colouring on the sherds may partly reflect recent damage by the sea, but the usual haematite coating is here replaced by a pasty red brown wash best matched in the middle of the Thames Valley sequence (Harding 1972, 97). Few body or rim sherds show any of the applied or incised decoration found on sites of the early Iron Age. The shoulders of these vessels are poorly defined and also contrast with the more angular form of the earlier material. Even the flattened rim forms, which might be matched on sites of the early Iron Age elsewhere, are here found alongside rounded or more beaded variants. Again a context in the middle Iron Age seems appropriate.

#### *Acknowledgement*

Figs. 2 and 3 were drawn by Jane Griffiths, Judith Jones and Philip Kenrick and Fig. 1 by Mike Bouillard.

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