Sussex Archaeological Collections **125** (1987), 51–67

THE EXCAVATION OF A LATE BRONZE AGE SITE AT YAPTON, WEST SUSSEX, 1984

by David Rudling

with major contributions from Sue Hamilton, Chris Place and Caroline Cartwright

The excavation of a concentration of burnt flint, charcoal and prehistoric pottery revealed four pits which are dated by the associated pottery finds to the 9th century B.C. The pottery assemblage is of particular importance due to the lack of adequately stratified pottery of this date in Sussex.

INTRODUCTION

The site (SU 96452447) is situated on the West Sussex coastal plain brickearth (Hodgson 1967, fig. 8) and is about 4 to 5 metres above the present sea level (Figs. 1 and 3). The area in general is susceptible to waterlogging in wet weather, and today drainage is controlled by an extensive series of ditches (Fig. 1).

The site was first discovered by Mr. Peter Day whilst fieldwalking early in 1984. Mr. Day noticed that ploughing had revealed a concentration of 'burnt soil', flint and sherds of handmade pottery. Subsequently, and with the permission of the tenant farmer, Mr. Keith Hocking of Drove Lane Farm, Mr. Day undertook a small exploratory excavation in order to investigate the nature and condition of any subsoil context from which the finds had been dislodged by the recent deep ploughing. Mr. Day's excavations (approximately a metre square) revealed and virtually totally excavated a pit (Fig. 2, Context 6). Finds from the pit included additional worked flints, pottery and charcoal. Details of the discovery were conveyed to Mr. F. Aldsworth, Archaeological Officer for West Sussex County Council.

Later the details about Mr. Day's discovery were reported to the Field Archaeology Unit of the Institute of Archaeology, London University. In view of Mr Day's discoveries, which also include a Middle Bronze Age hoard found in 1982 in the next field (Aldsworth 1983), and knowing that the site was again to be deep-ploughed in the autumn, the writer decided to undertake a further exploratory excavation once the newly sown crop had been harvested. Thus in late August and early September 1984 a small excavation was made in the area of the pit discovered by Mr. Day. This work was made possible by a grant from the Historic Buildings and Monuments Commission. All the finds, together with a copy of the site archive, are deposited at Worthing Museum.

THE EXCAVATIONS

A trench 15 metres long and 3 metres wide was hand-excavated (Fig. 2). Below the plough-soil were: Mr. Day's pit (Context 6); a group of 3 pits (2, 15 and 16); 3 natural spreads of flint nodules and broken pieces of flint (Contexts 5, 8 and 9); and several natural features in the brickearth (Contexts 22–5). For further details

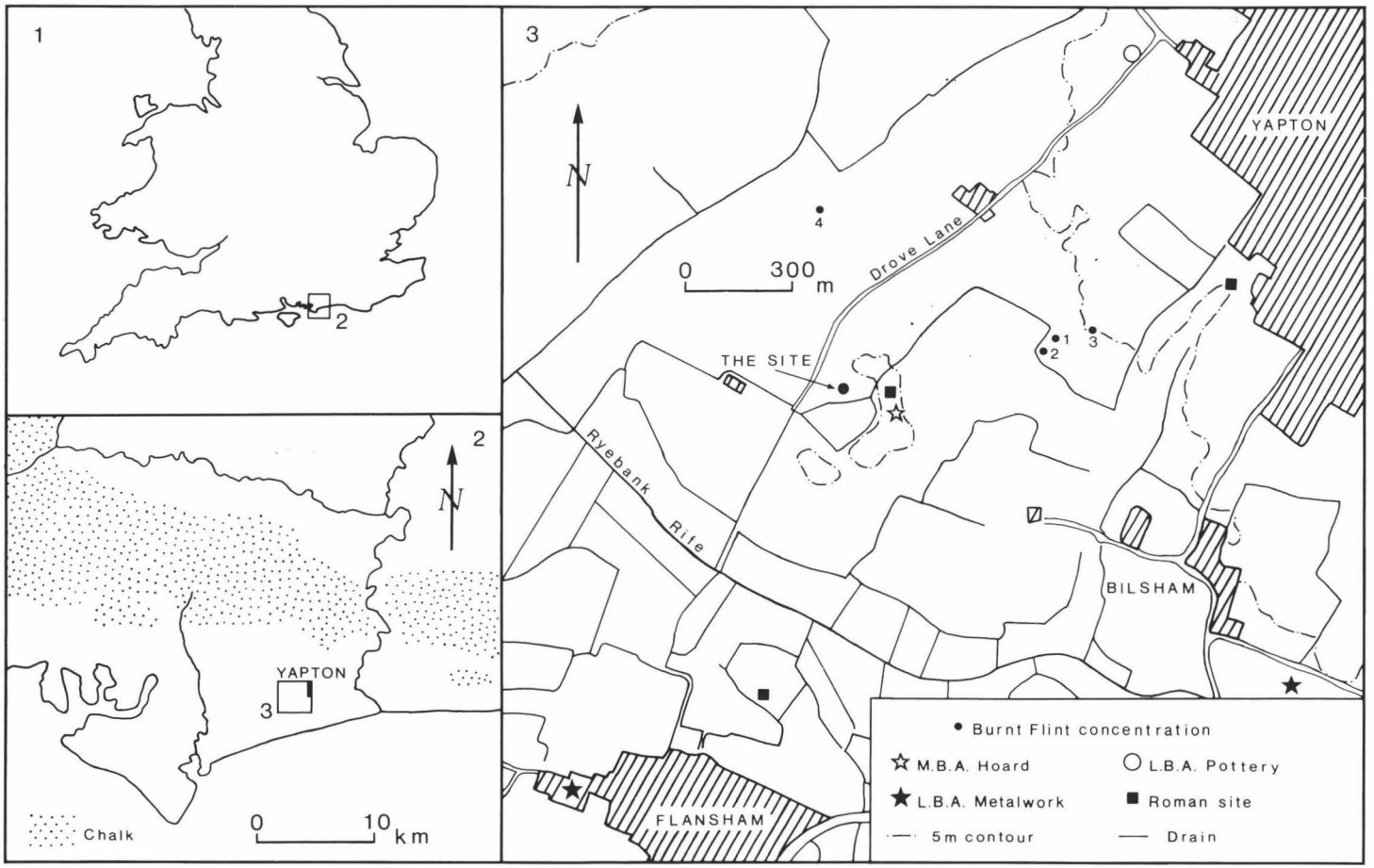


Fig. 1. Site location: general.

about all the excavated contexts (features and layers) see microfiche, p. 36.

Pits 2, 15 and 16 (Fig. 2)

The sequence of this group of pits is: the digging of Pit 16; a recut Pit 2; and finally the cutting of Pit 15, which cuts both Pits 2 and 16. On the basis of the pottery evidence (see below) Sue Hamilton has suggested that the cutting and filling of Pit 16 and its recut Pit 2 took place within a restricted timespan. In addition, the pottery evidence also suggests that the cutting of Pit 15 took place after a longer time gap, but was nevertheless still filled with material from the same dump of rubbish as for Pits 2 and 16.

THE SURFACE ARTEFACT COLLECTION SURVEY

During the excavation the farmer ploughed the rest of the field, and the opportunity was taken to undertake a surface artefact survey of the part of the field surrounding the excavation trench. The grid square method was used, and a total of 71 20-metre squares were walked (Fig. 3).

A considerable quantity of burnt flint was recovered (Fig. 3), and many squares yielded examples of worked flint (Fig. 3). Only two pieces of prehistoric pottery were found; possibly this does not survive very well in the ploughsoil. Two squares produced pieces of daub, and again this may be due to poor survival value in ploughed soils. Various other categories of finds were also made, and all the finds are summarized in Table 9 (microfiche, pp. 41–3). Considering the field's proximity to the Roman settlement which lies just to the north-east (Fig. 1), it is perhaps surprising that there was no Romano-British pottery (but note the discovery in the field of a coin of Marcus Aurelius; see Table 10 (microfiche, p. 44)). In contrast, the quantity of late medieval pottery is relatively large compared with the surface pottery finds in general; this may be the result of medieval manuring.

LATE BRONZE AGE POTTERY (by Sue Hamilton)

The Excavated Pottery

A total of 223 sherds were recovered from the group of interconnecting Pits 2, 15 and 16, and from the nearby Pit 6. For style, fabric and stratigraphic reasons the pottery would seem to be a related group of material. A Late Bronze Age date of the 9th century B.C. is suggested for this material. Sussex lacks adequately stratified pottery of this date (Barrett 1980, 311; Champion 1980, 44) and it was therefore considered important to assess the stratigraphic context and value of the Yapton material.

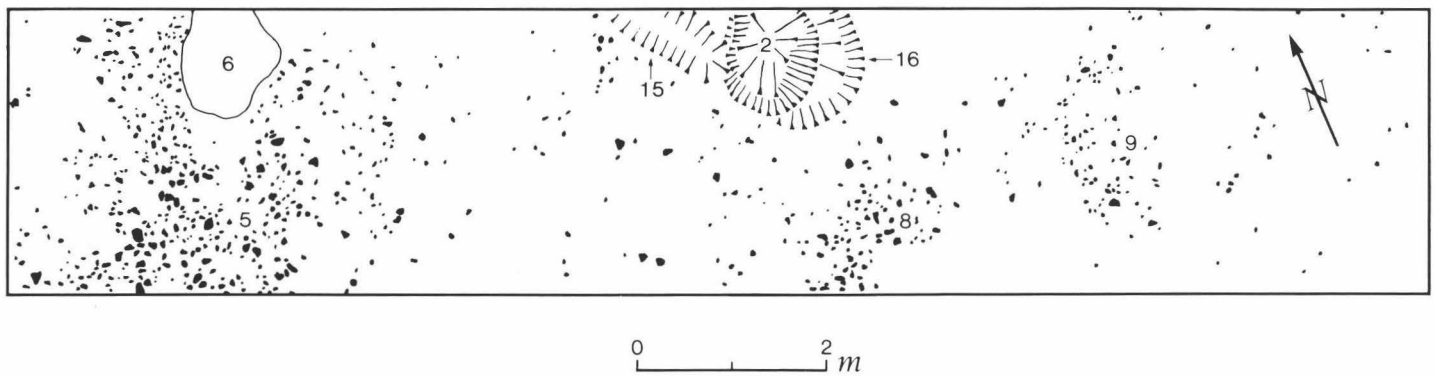
The stratified context of the pottery

The pottery from the various pit features noted above would seem to largely represent an originally related group of material. The evidence for this and for the nature of the pre-depositional context of the pottery is as follows:

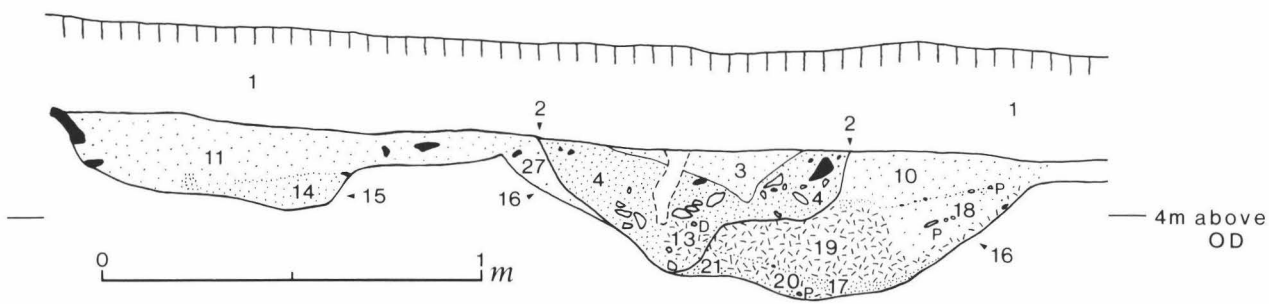
1. Sherds from every context have evidence of surface erosion. This suggests that the sherds did not arrive in their excavated context direct from a primary point of breakage but either (i) came from a rubbish collection open to erosion such as weathering, or (ii) suffered trample and displacement at the point or points of breakage prior to being cleared into the pits.
2. Layers 3 and 4 in Pit 2 have non-joining sherds, in the same state of erosion, from apparently the same shouldered bowl (Figs. 5.11, 5.16). This would indicate that the material deposited in Layers 3 and 4 came from the same rubbish source and that the successive dumping of this rubbish may have taken place within a short timespan.
3. Layer 3, Pit 2 and Layer 10, Pit 16 have non-joining sherds of the same vessel forms and fabric types. The time between the dumping/accumulation of pottery in Pit 16 and the cutting and complete infill of Pit 2 may therefore have been limited and the sherds derived from the same rubbish source.
4. Layer 11, Pit 15 and Layer 21, Pit 16 also have non-joining sherds from the same or

YAPTON 1984

a, Trench Plan



b, Section across Pits 2; 15 and 16



Key ● Flint ○ Burnt flint ⋯ Charcoal P Pottery D Daub

Fig. 2. Yapton, 1984. Plan and section.

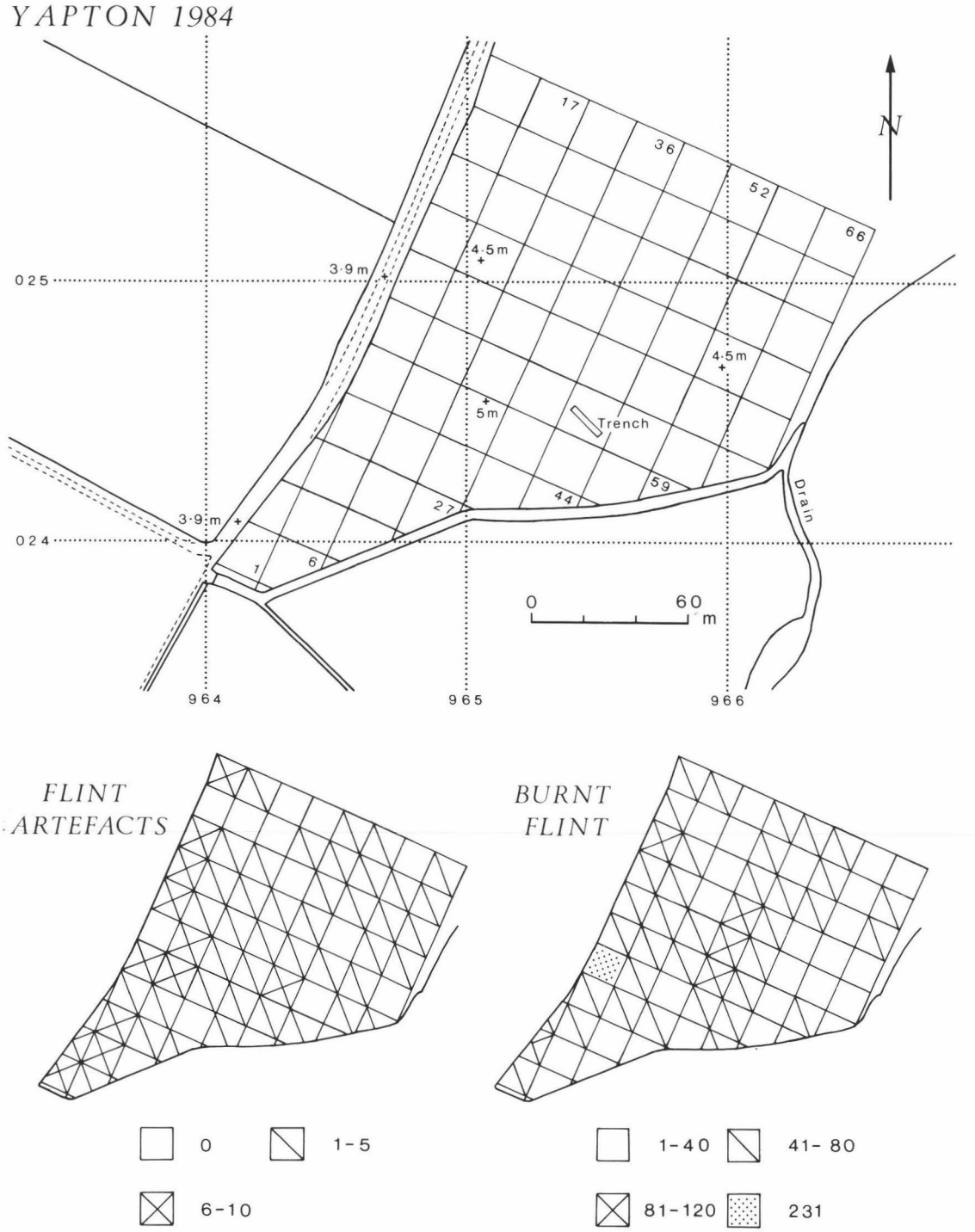


Fig. 3. Yapton, 1984. Tranch and grid square plan.

similar vessels (Figs. 4.1, 4.8) but the sherds of Layer 11 are more eroded than those of Layer 21. The contents of Pits 15 and 16 could accordingly be interpreted as originating from the same pre-deposition rubbish source, but with enough time elapsing between the filling of Pit 16 and its recut Pit 2, and the cutting and filling of Pit 11, for the sherds deposited in Layer 11 to have suffered greater erosion.

5. No actual sherd joins were achieved across individual layers or features, but it was possible to join sherds within individual layers of Pits 16 and 2. These joins include joins of post-depositional breaks but additionally joins were achieved between eroded sherd breaks. This suggests that the pottery is more likely to have come from a concentrated rubbish source rather than a primary rubbish creation point which had suffered more random dispersal of sherds (cf. 1. above), since the latter would have made the juxtaposition of originally joining sherds at a secondary clearance context less likely.

6. The sherds from Pit 6 are comparable in form and fabric with those from the other pit contexts. Pit 6 sherds could therefore be of the same date and primary origin as those discussed above.

The activities relating to the cutting and filling of Pit 16 and its recut Pit 2 are therefore interpreted as having taken place within a restricted timespan. The ceramic contents of these pits would seem to be derived from the same collection of rubbish. The general stylistic and fabric unity of the material throughout the contexts suggests that it could all or mostly relate to a single phase of rubbish creation/collection. The cutting of Pit 15 seems to have taken place after a longer time gap but still being filled with material from the same original rubbish dump. The geometric incised sherds from Layers 3 and 4, Pit 2 (Figs. 5.11, 5.16) are the only sherds which stylistically could relate (although not necessarily) to a slightly later date than the rest of the material (see below). If this were so, this slightly increased timespan would relate to the pre-depositional phase of rubbish collection rather than to the timespan in which, as discussed above, the pits were cut. The pottery can therefore be regarded as a 'closed' group of associated/accumulated material (Collis 1977, 30) which, in this case, pre-dates the features in which it is found by a timespan long enough to allow moderate erosion of sherds to ensue.

Analysis

The sherds were grouped for each context by their fabric characteristics using a × 10 lens. These groups were confirmed for selected sherds by disaggregating the sherds and counting the relative number of inclusions and fragments of temper per 1-g. sample, using an up to × 50 binocular microscope (see Hamilton 1982, 82 for this methodology). In Figs. 4, 5 and 6 the relative number of inclusions and fragments of temper in 1-g. samples of selected sherds are expressed visually as proportions of pie charts (Hamilton 1977, 85). Characteristics of ceramic form, decoration and technology were studied for each fabric group (Table 1).

Fabric and ware categories

All of the sherds were flint-tempered. Some additionally had grog tempering. All sherds had a quartz sand 'backing' and a very occasional presence of powdery haematite. Both of the latter, for reasons concerning their frequency and size characteristics, appear to be natural to the potting clay. Fabric categories were based on specific temper/inclusion combinations and their respective characteristics of size and abundance. Ware categories relate to differing surface finishes within specific fabric categories.

Fabric 1 (flint- and grog-tempered)

'Coarse' calcined flint temper measuring 1 to 4 mm. of frequent abundance together with moderately abundant rounded grog temper measuring 2 to 4 mm. Scattered fine and medium (Wentworth size classification: Krumbein & Pettijohn 1938, 30) quartz sand inclusions of rounded morphology and clear to translucent colouring. Occasional traces of burnt-out vegetation were present on some sherd surfaces.

TABLE 1
Sherd Counts for Rims, Bases, Decorated Sherds and Undecorated Body Sherds According to Context and Ware Categories

	Rim, base and decorative forms													
Wares	*R1*	*R2*	*R3*	*R4*	*R5*	*B1*	*B2*	*D1*	*D2*	*D3*	*D4*	*D5*	*BS*	*Total*
1a	—	—	—	8	1	—	—	—	—	1	—	—	49	59
1b	—	2	—	—	—	—	—	—	—	—	—	—	8	10
2a	2	1	—	4	—	8	1	—	—	—	—	—	106	122
2b	—	1	3	—	—	—	—	3	1	—	—	—	2	10
3	—	—	—	—	—	—	—	—	—	—	—	3	13	16
4	—	—	3	—	—	—	—	—	—	—	2	—	1	6
Total sherds	2	4	6	12	1	8	1	3	1	1	2	3	179	223
Context														
1	—	—	—	—	—	—	—	—	—	—	—	—	23	23
3	1	—	—	3	1	—	—	—	—	—	—	2	23	30
4	—	2	3	1	—	2	—	3	—	—	—	1	51	63
7	—	1	—	3	—	—	—	—	—	1	—	—	25	30
10	1	1	—	5	—	—	—	—	—	—	2	—	39	48
11	—	—	2	—	—	—	—	—	—	—	—	—	4	6
14	—	—	—	—	—	—	—	—	—	—	—	—	5	5
17	—	—	—	—	—	5	1	—	1	—	—	—	3	10
21	—	—	1	—	—	1	—	—	—	—	—	—	6	8
Total	2	4	6	12	1	8	1	3	1	1	2	3	179	223

Key
(examples in brackets)

Rims
R1: short, upright, flattened (Figs. 4.4, 5.10)
R2: short, upright, slightly flattened (Fig. 6.18)
R3: slight bead (Figs. 4.1, 4.8, 5.15, 6.17)
R4: incurving (Figs. 4.2, 4.5, 5.12, 5.14)
R5: hook-over (Fig. 5.9)

Bases
B1: flat
B2: flat, thumb-splayed (Fig. 4.7)

Decoration
D1: applied fillet with cable decoration (Fig. 5.13)
D2: finger-nail impressed (Fig. 4.6)
D3: finger-impressed (Fig. 6.19)
D4: incised linear line (Fig. 4.3)
D5: incised geometric (Fig. 5.11)

Others
BS: undecorated body sherd

Sherd thickness: 5 to 8 mm.
Firing characteristics: sherds were mostly oxidized throughout but some interior surfaces were reduced and some reduction patches occurred on exterior surfaces.
Wares: 1a, minimal surface treatment; 1b, smoothed to achieve surface compaction of raised inclusions and a slight burnish.

Fabric 2 (flint-tempered)

Frequent 'coarse' calcined flint temper and scattered quartz sand 'backing', both the flint and the quartz having comparable size categories and morphology to Fabric 1 above.
Sherd thickness: 5 to 8 mm.

Firing characteristics: cores and surfaces mostly reduced, especially Ware 2b below. Some surface patches of oxidation on Ware 2a.
Wares: 2a, minimal surface treatment; 2b, smoothed as 1a above.
Fabric 3 (fine flint-tempered)

'Fine' calcined flint tempering measuring 1 to 2 mm. of medium abundance with a scattered fine (Wentworth size classification: see above) quartz sand 'backing' comprising transparent and translucent rounded grains.
Sherd thickness: 4 mm.
Firing characteristics: oxidized cores with a thin and even layer of surface reduction.
Ware 3: well smoothed with a slight burnish.
Fabric 4 (fine flint- and grog-tempered)

'Fine' calcined flint measuring 1 to 2 mm. of medium abundance, together with occasional rounded grog temper measuring 2 to 4 mm.
Sherd thickness: 5 mm.
Firing characteristics: oxidized throughout or oxidized cores with reduced surfaces.
Ware 4: well smoothed surfaces with a slight burnish as Ware 3 above.
Source of potting material

None of the inclusions or tempering identified in the pottery fabrics suggest a non-local source of potting materials. The coastal plain brickearths, within which the site is situated (Hodgson 1967, fig. 8), are variable in their constituents and could have collectively provided potting clay, sands and flint gravel for temper. The viability of the Sussex coastal plain brickearth for potting is amply demonstrated by the past small-scale use of such deposits for brickmaking (Edmunds 1935, fig. 56).
Forming technology and decorative techniques

Certain innovations in ceramic forming technology have been isolated for post-Deverel-Rimbury, Late Bronze Age pottery. These include the introduction of slab-building and surface smearing (Barrett 1975, 104; Champion 1980, 45). Evidence of primary forming techniques (Hodges 1964, 25; Rye 1981, 70) could be distinguished for Fabrics 1 and 2 of the Yapton pottery. The use of finger-squeezing (Rye 1981, 70) to form and finish vessel shapes is evident on 12% and 14% of Fabric 1 and 2 sherds respectively. Vessel 15 (Fig. 5) appears to have been formed, at least above its carination, by slab-building.

Vertical finger-smearing and finger-pressing are evident on the vessel interior at the point of carination where a slab or slabs have been joined on to form the shoulder above the carination.

The methods used to form rims are also distinguishable for Fabrics 1 and 2. Hook-over rims have been formed by folding the rim edge over onto the inside vessel wall and 'fixing' it by finger-nail-pressing it. The short upright rims from shouldered jars have slight 'pie-crust' characteristics due to being flattened by pressing the flat of an index finger, or sometimes a finger tip, at regular intervals diagonally across the rim top. (See Table 1 for examples of these rim forms.)

Four per cent of the sherds were decorated. For Fabrics 1 and 2 this comprised plastic decoration of finger and finger-nail impressions and applied clay fillets with 'cable' decoration produced by alternate upright and diagonal finger impressions (Fig. 5.13). Fabrics 3 and 4 are associated with incised linear (Fig. 4.3) and incised geometric (Figs. 5.11, 5.16) decoration.
Forms, affinities and chronology

The assemblage comprised hemispherical bowls and bag-shaped jars with incurving and hook-over rims, together with shouldered jars with short, upright, flattened and slightly flattened rims, and bipartite bowls with slight bead rims. The hemispherical bowls, bag-shaped jars and shouldered jars are characteristic of a post-Deverel-Rimbury repertoire where 'plain wares' still predominate (Barrett 1980, 302–4). Sussex has comparable material at perhaps five or six sites including Plumpton Plain B (Hawkes 1935), Selsey (White 1934), Highdown Hill (Wilson 1940; 1950), Bishopstone (Hamilton 1977) and Kingston Buci (Curwen & Hawkes 1931). Plumpton Plain B provides a discrete pottery assemblage with

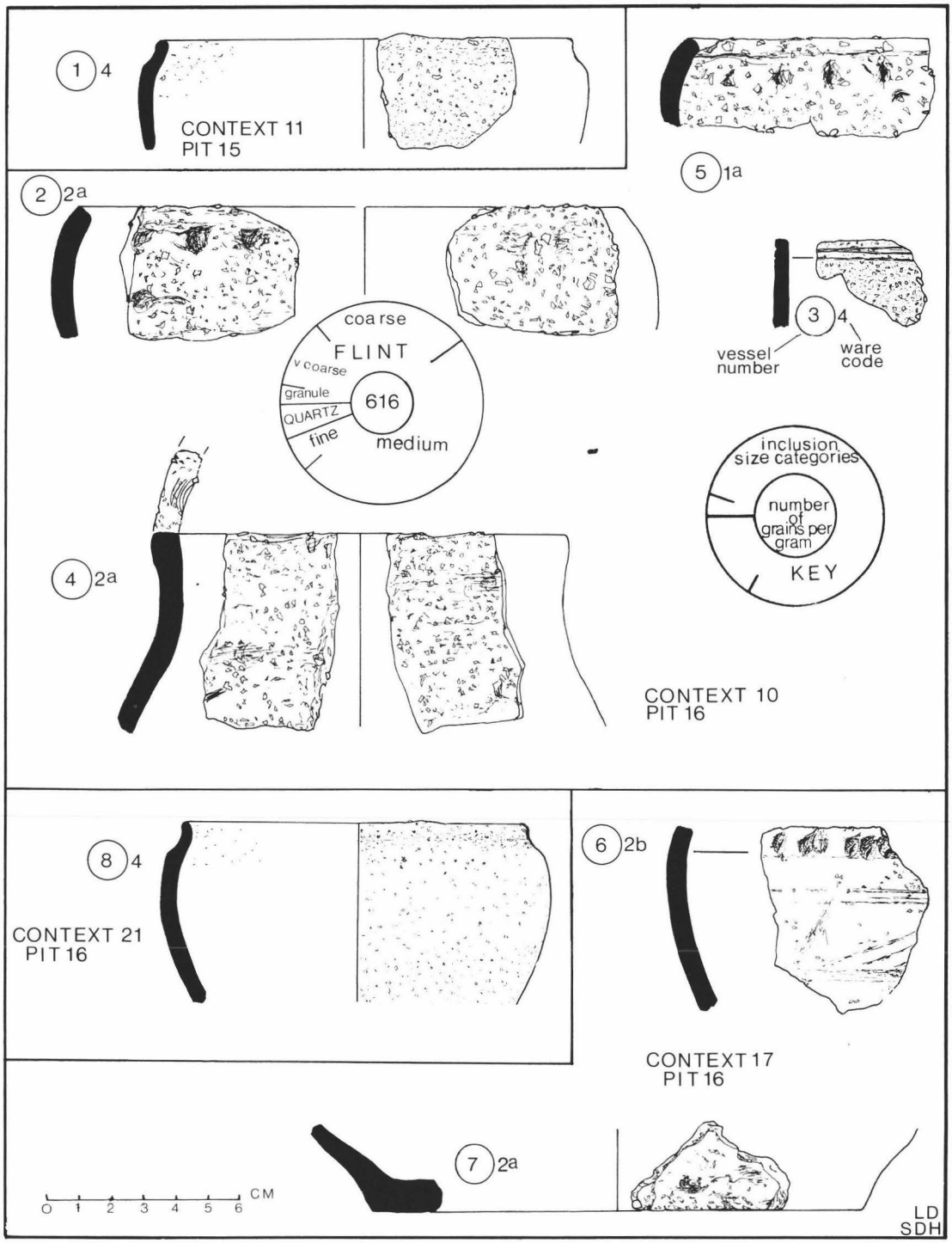


Fig. 4. Yapton, 1984. Prehistoric pottery (× ½).

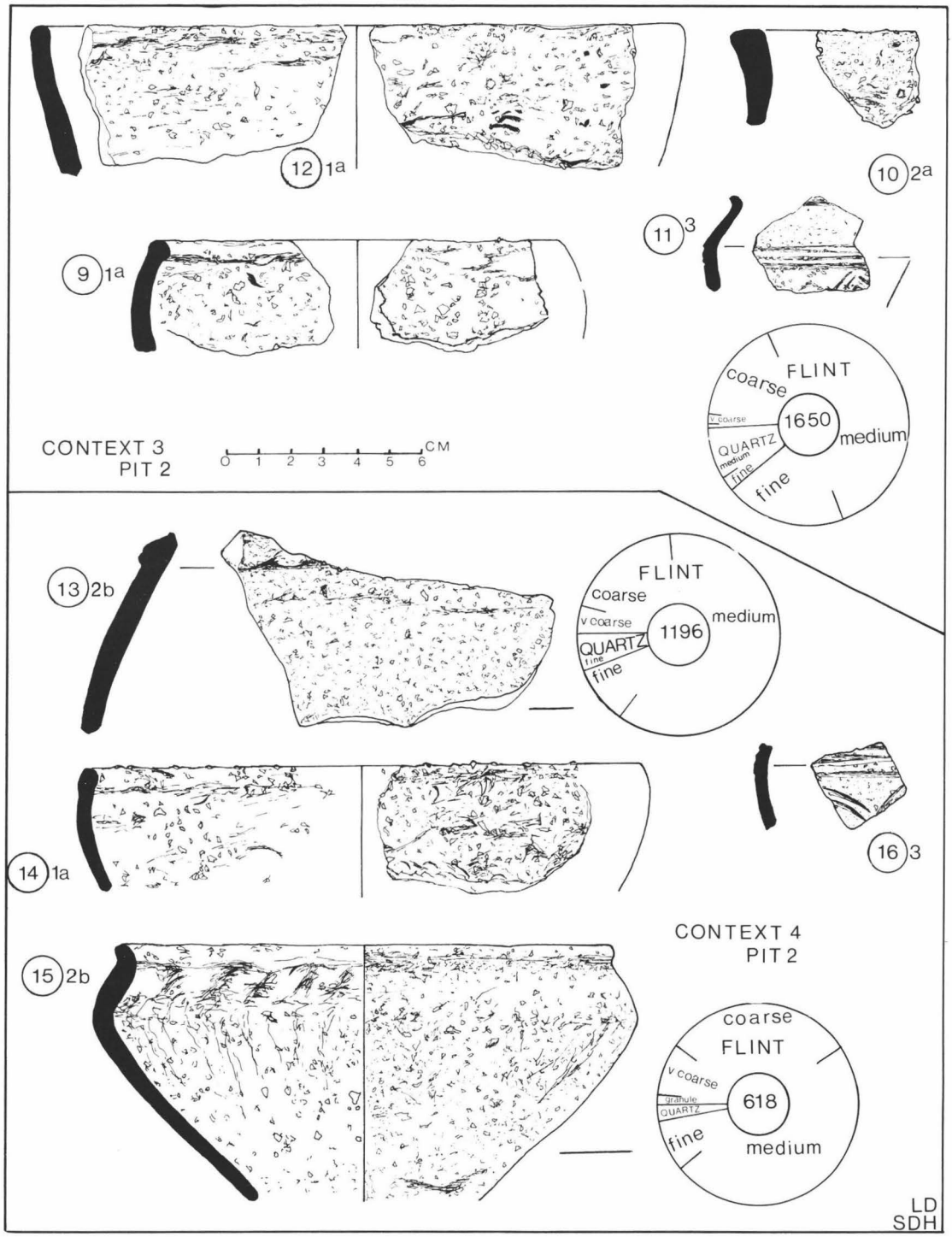


Fig. 5. Yapton, 1984. Prehistoric pottery (× ½).

hook-over rim jars and round-shouldered jars which postdates the Deverel-Rimbury assemblage of Plumpton Plain B (Ellison 1978, 32; Hawkes 1935). A fragment of median winged axe from Plumpton Plain B may put the ceramic material from the site as early as the 11th century B.C. (Barrett 1980, 311). The other post-Deverel-Rimbury pottery which has been isolated for Sussex has suffered from being mixed, stratigraphically and/or post-depositionally, with both 'earlier' and 'later' pottery (Barrett 1980, 311; Champion 1980, 40). Hook-rim jars and jars and bowls with incurving rims from the enclosure ditch at Bishopstone are of what appears to be a stratigraphically early fabric (Hamilton 1977, 99 and table Va) and this fabric has thermoluminescence dates of 1030 B.C. and 850 B.C. with probable limits of error 650–1250 B.C. (Bell 1977, 290). Highdown Hill has produced a range of Late Bronze Age metalwork, including socketed knives and socketed axes but unassociated with the pottery (Curwen 1954, 186–7; Wilson 1940; 1950). At Selsey Bill a series of pits collectively contained pottery relating to most of the 1st millennium B.C. From this material Hawkes isolated shouldered jars with short upright and slightly out-turned rims with flattened tops, comparable with the Yapton shouldered jars, as being part of the earliest of this Selsey material (White 1934, 42 and fig. 2). Barrett has suggested that elsewhere these rim forms, described by him as 'plain squared rims', form part of a post-Deverel-Rimbury repertoire (Barrett 1975, 106). Similar rim forms at Yapton are represented by Figs. 4.4 and 6.18 and are particularly comparable to the Selsey pottery in being associated with predominantly undecorated vessels.

The evidence of 'fingering' on the Yapton pottery is comparable with similar relic-forming impressions on shouldered jars, and jars and bowls with 'hook-over'/incurving rims from Highdown Hill, Kingston Buci and Selsey (material stored at Chichester District Museum and Barbican House Museum, Lewes). Both Hawkes (in White 1934, 44) and Ellison (1978, 32) have noted a distinction between smoothed and unsmoothed wares rather than marked distinctions in fabric type for early 1st-millennium B.C. material. The Yapton pottery also shares this technological distinction (see above) together with the technological features discussed below. Some of the Yapton sherds in Fabrics 1 and 2 have evidence, such as inclusion orientation, designated as ancillary characteristics of slab-building (Rye 1981, 72), and more specifically sherds from one angular bowl (Fig. 5.15) display characteristic slab-join smear marks (cf. above, *Forming technology and decorative techniques*). The latter is paralleled on a plain angular bowl from Kingston Buci (Curwen & Hawkes 1931, fig. 22) not explicit on the drawing but clear on examination of the sherd at Barbican House Museum, Lewes. Barrett has also noted, for Kingston Buci, material displaying attributes associated with slab-building, such as distinct thinning of vessel walls (Curwen & Hawkes 1931, fig. 17), a feature which remained common amongst a number of eastern and south-coast regionally developing groups until perhaps the 8th or 7th century B.C. (Barrett 1975, 104).

Angular bipartite bowls may start later in the post-Deverel-Rimbury repertoire than the incurving jars, hemispherical bowls and round-shouldered jars already discussed. They perhaps appear as early as the 10th or 9th century B.C. in Sussex (Champion 1980, 45), and in the Thames Valley are associated with limited incised decoration by the 9th century B.C. on sites such as Runnymede Bridge (Longley 1980, 74). A plain bipartite bowl from West Blatchington, comparable to Yapton (Fig. 5.15), was found in the general area which also produced a Late Bronze Age hoard of two palstaves and a winged axe (Norris & Burstow 1950, fig. 2). At the Caburn (Hawkes 1939), Hollingbury (Hamilton 1984) and Stoke Clump (Cunliffe 1966) a series of fine-ware angular bipartite bowls have burnished finishes and incised geometric shoulder decoration. There

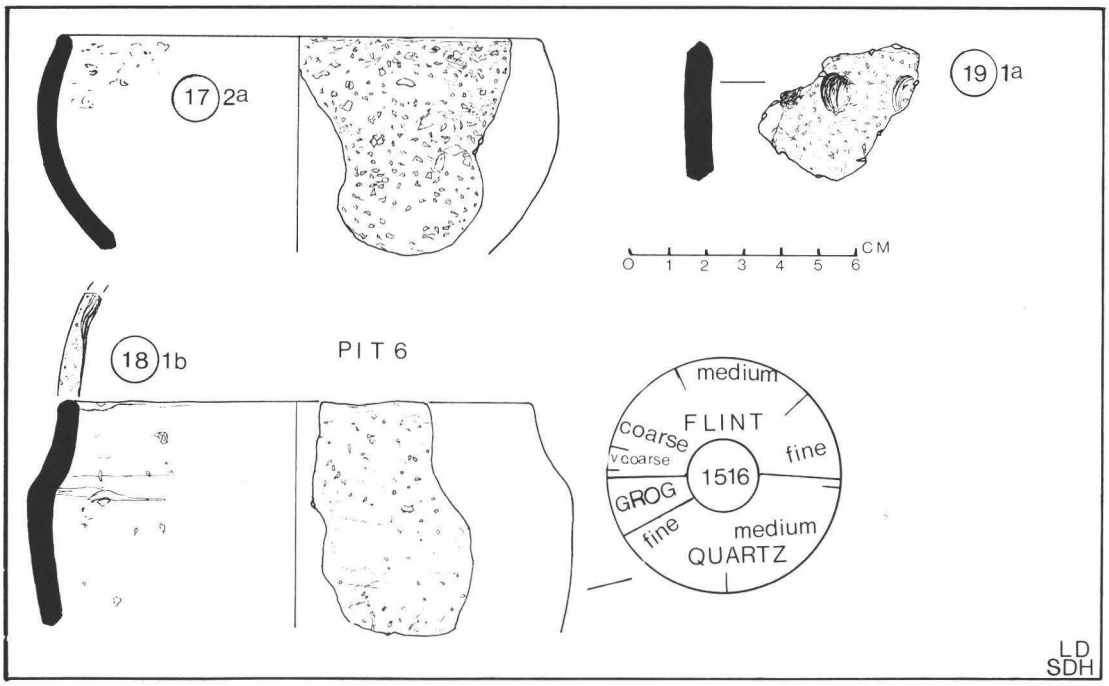


Fig. 6. Yapton, 1984. Prehistoric pottery (× ½).

are no absolute dates or stratigraphically associated metalwork for any of this material, but by comparison with elsewhere such ceramic types may be established by the 8th century B.C. and continuing to develop through to the 6th and 5th centuries B.C. (Barrett 1980, 311). The limited use of finger-impressed and incised decoration at Yapton would concur with 9th-century B.C. dates for south-eastern sites outside Sussex rather than the more regular use of decoration seen in the Thames valley and eastern Britain by the 8th century B.C. (Longley 1980, 71; Needham & Longley 1980, 410). It is therefore possible that the incised geometric decorated fine-ware angular bowl sherds from Yapton (Figs. 5.11, 5.16) extend the collective date limits of the material into the 8th century B.C.

Conclusions

By comparisons with pottery from other regions and extrapolating from the limited stratigraphic and absolute dating evidence available from within Sussex, the Yapton pottery would seem stylistically and technologically to fall within a tradition which was emerging perhaps as early as the 11th century B.C. and lasting in its limited use of decoration until the 8th century B.C. Incised decoration emerges by the end of this timespan. A 9th- or possibly 8th-century B.C. date might therefore be appropriate for the Yapton pottery.

The Yapton pottery evidences an 'activity area' of rubbish generation and collection outside the excavated area. This 'activity area' may relate to other evidence of Later Bronze Age occupation and perhaps metalworking in the Yapton vicinity (Aldsworth 1983, 198; Hearne 1940, 206) which is summarized in Fig. 1.

The Pottery from the Surface Artefact Survey

Five prehistoric sherds were recovered from surface collection. All of the sherds were

undiagnostic body sherds. The sherds were, however, comparable in fabric and ware to types isolated from the excavated pit groups. It is therefore quite likely that these sherds are within the same ceramic tradition as the excavated material and of a similar Late Bronze Age date. The sherds are listed below according to the wares isolated for the excavation material:

(a) Fieldwalking Square 3: 1 sherd Ware 3.
(b) Fieldwalking Square 37: 1 sherd Ware 1a.
(c) Burnt Flint Concentration Site 1: 3 sherds Ware 1a.

FLINTWORK (by Chris Place)

The Excavated Flint

The flints from the Yapton excavations represent a collection from the topsoil and several cut features. The sample is small (see Table 2), and as such is not conducive to statistical analysis. With this in mind it seems wise not to go beyond a descriptive approach to this report.

The raw material

Within a general range of flint colours two broad types can be distinguished. They are as follows:

Type A. A grey-brown flint with whitish patches. The overall light appearance may be the result of patination. The light cortex often shows signs of attrition.

Type B. This second variety of flint is dark grey to black, though it too contains white patches. The cortex is buff to yellow and appears not to be abraded.

The topsoil and immediate subsoil contain much presumably natural flint, almost exclusively of Type B. It seems likely that this was the source for some of the artefacts. However, the presence of Type A suggests the utilization of more than one source, though they need not have been far apart.

The artefacts

Table 2 shows the type and number of artefacts present. Table 3 is concerned with flint technology. It is hoped that this may distinguish residual flint from pieces in a primary context.

Analysis

Table 2 shows a distinction between topsoil artefacts and those found in subsoil contexts. Within the topsoil, artefacts will have accumulated gradually and from several sources. It would therefore be false to regard the whole collection as a true assemblage. This has the result of reducing the size of the collection open to analysis.

Of the flint left, only five of the 19 flakes or blades display worked platforms. This occurs in the form of 'dorsal trimming' as opposed to definite butt-facetting. Also only four artefacts show clear soft-hammer striking. A combination of both occurs in only three pieces, of which one is a blade and another a backed bladelet. These possibly anomalous artefacts could be residual, in terms of both flint technology and date. Also not in character with the generally poor quality of flaking are the blade segments, one of which appears microlithic. The suggestion is of an intrusive element within an otherwise contemporary 'assemblage'. Indeed, the surface artefact collection (see below) identified a small blade and blade segment element in the surface finds.

TABLE 2
Excavated Flintwork

Artefact type	*Artefact numbers* *All contexts*	*Excluding topsoil*
Flakes	24	11
Retouched Flakes	10	6
Cores	2	0
Scrapers	3	0
Blade Segments	3	2
Notched Flakes	7	0
Blades	1	1
Bladelets	1	1
Other Retouched Flints	13	4
Totals	64	25

TABLE 3
Flint Technology: All Flakes and Blades (Excluding Topsoil Artefacts)

Artefact number	*Context*	*Cortex*	*Retouch*	*Butt*	*Hammer*
1	3	<5%	Yes	A	H
2	3	0%	Yes	A	H
3	3	<5%	Yes	A	H
4	3	0%	Yes	A	H
5	3	<5%	No	A	H
6	3	<5%	No	A	H
7	3	50%	No	A	H
8	3	<5%	No	A	H
9	3	25%	No	B	H
10	3	5%	Yes	A	H
11	4	0%	No	A	H
12	4	20%	No	B	S
13	4	<5%	No	B	H
14	4	0%	No	A	S
15	4	*c.*20%	No	A	H
16	7	<5%	Yes	B	S
17	7	0%	No	B	S
18	12	25%	No	A	H
19	17	<5%	Yes	A	H

Key
Butt: A – unworked; B – worked.
Hammer (style): H – hard; S – soft.

TABLE 5
Artefacts per Grid Square

	0	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Frequency of occurrence	14	16	16	8	2	3	4	0	3	4	1

Little can be said about the remaining debitage, except possibly that the range of cortex covering the flakes could indicate on-site manufacture. Table 3 also shows the crude nature of the flakes, and the use of flint which is unworked except for small areas of retouch. The lack of definite tools is also interesting, but this is possibly due to sample size. However, the function of scrapers could have been taken by the poorly 'retouched' flakes and otherwise unworked flints. The retouch is variable, ranging from single lines of fine retouch along one edge of the piece to confined areas with several lines of retouch.

Conclusions from a sample this small are difficult to make and should be treated with caution. As sample size precludes a sound comprehension of the percentages of types present, it follows that comparisons with other assemblages are not tenable. The problems of residuality combine with this to make dating almost impossible by the flints alone. However, in general it does seem valid to comment that the debitage found does not represent a high level of flaking technique except for the probably residual blade element. Ideally, though, a much larger sample would be needed to isolate residual elements and confirm technological and stylistic traits.

Flintwork from the Surface Artefact Collection

In conjunction with the excavation, a limited surface artefact collection was undertaken (see above). The results of this survey included a small collection of worked flints numbering 188 in total. The distribution of artefact types to grid squares is displayed in Table 4 (microfiche, p. 37). It is immediately apparent how low are the flint densities per 20-metre grid square. Table 5 shows artefact occurrence to be inversely proportional to the frequency of that occurrence.

For the most part the collection consists of flakes (32.1%), retouched flakes (26.6%), and other utilized flints (15.4%). Also well represented are flakes with notches made by abrupt retouch (12.2%). Although no artefacts could unequivocally be assigned to any given period on typological criteria, the presence of blades and blade segments of a regular form (Movius 1967) may indicate a possible earlier Neolithic element (Pitts 1978; Saville 1981). The blades for the most part displaying parallel sides and parallel dorsal crests are reminiscent of the two excavated examples from Context 7. This may therefore strengthen the case for considering these two artefacts as being residual.

In conclusion, there is little that can be definitely stated, though the similarity of form and technology between the surface artefacts and the excavated flint is apparent. On the point of distribution, wider surface artefact collections may help to elucidate whether these flint types are consistent or if they display spatial variation. Recent fieldwork has resulted in the discovery of further charcoal and fire-cracked flint patches (see above). Two pieces of worked flint have been found; one from Site 2 and the other from Site 3. Both are crude hard-hammer flakes with no sign of platform preparation. The flake from Site 2 has a notch formed by abrupt retouch as well as crude semi-abrupt retouch at its distal end.

Acknowledgements

The author would like to thank C. Cartwright, P. Drewett and M. Newcomer for their assistance during the preparation of this report.

OTHER FINDS

Charcoal (by Caroline Cartwright)

A total of 153 g. of charcoal were identified; details of context are summarized in Table 6 (microfiche, p. 38).

With the exception of Context 4 (one of the fills of Pit 2), overall quantities of charcoal recovered from the excavations are fairly low. Many of the contexts contained very fine, comminuted flecks of charcoal embedded in a clayey matrix which proved difficult to disaggregate in the laboratory. Many of the flecks were too comminuted to be identified, but those fragments which could be identified appeared to derive largely from twig and small branch material. Context 4 contained 125 g. of oak, hawthorn, leguminous species, willow/poplar and hazel charcoal – probably most representative of the vegetational resources exploited as a whole on the site. Other contexts contained small amounts of oak, with hazel and hawthorn sparsely represented. The combination of timber illustrated comprises building, artefactual, fencing and hedging, fuel and hearth uses.

Marine Molluscs (by Caroline Cartwright)

Only three oysters (minimum number) were recovered from the excavations, a surprisingly small number considering the relatively easy access to the coastal fringes for exploitation of marine resources. Of these shells only one was recovered from a pit fill (Pit 16, Context 10). Eight oysters were also recovered from the fieldwalking. Details of contexts/grid squares are summarized in Table 7 (microfiche, p. 39).

Seed Impression (by Pat Hinton)

Unfortunately no carbonized seeds were recovered from the soil samples floated from the excavated pits. Samples of daub/burnt clay from the pits, however, were submitted for examination since these exhibited voids which might be the impressions of seeds. Only one void seems to be definitely a seed impression (1.2 x 0.8 mm.) and is probably a grass seed, very probably *Poa* sp. The piece of burnt clay is from Pit 6, Context 7.

Geological Material (by Caroline Cartwright)

Only a very small amount of geological material was recovered from the excavations at Yapton. Apart from beach pebbles, which hint at coastal contact, there are a few fragments of sandstone, only one of which can clearly be seen as a fragment of quernstone with a portion of the burnt grinding surface remaining (Pit 16, Context 10).

The fieldwalking yielded some (modern) roof-slate fragments (total 11), four flint beach pebbles, two quartzite beach pebbles and one small fragment of fine-grained, friable Eocene sandstone.

Details of the geological material by context/grid square are summarized in Table 8 (microfiche, p. 40).

Burnt (Fire-Cracked) Flint

The excavations yielded a total of 1,406 pieces of burnt flint. Of these, 283 pieces come from the ploughsoil; 948 from Pit 2; 12 from Pit 6; 12 from Pit 15; and 151 from Pit 16.

The surface artefact survey also produced large quantities of burnt flint: 3,494 pieces in total (see Fig. 3; Table 9: microfiche, pp. 41–3).

Daub

The excavations recovered pieces of daub/burnt clay from Pit 2 (Context 4); Pit 6 (Context 7); and Pit 16 (Context 10). These fragments were examined for traces of plant impressions (see above).

The surface artefact survey only produced examples of daub from two squares: 1 (six pieces) and 10 (four pieces). To the north-west of the excavation and fieldwalking survey area, a recently discovered concentration of burnt flint (Fig. 1, Site 4) has also yielded examples of daub/burnt clay (P. Day pers. comm.).

Medieval and Post-Medieval Finds

In addition to the finds described above, the excavations and fieldwalking survey produced quantities of late medieval and post-medieval pottery (13 and two sherds respectively from the ploughsoil in the excavations); medieval or post-medieval tile/brick/drainpipe fragments (five pieces from the excavations); clay-pipe stems (two from the excavations); and modern glass. The fieldwalking finds are summarized in Table 9 (microfiche, pp. 41–3). The medieval pottery covers a variety of basically sandy fabrics (sometimes with a little added flint), and includes examples of green lead-glazed wares, and also one example which is decorated with bands of white paint below the rim.

Coins and Metalwork

Both before and after the excavation and fieldwalking survey undertaken in August 1984, Mr. Day has surveyed the field using a metal detector. His surveys have revealed 13 coins and 10 metal objects (late medieval or post-medieval). Details of all these finds are summarized on Table 10 (microfiche, p. 44). With the exception of a Roman As of Marcus Aurelius, the coins are post-medieval (Charles II to Elizabeth II).

DISCUSSION

Following Mr. Day's original discovery of material being ploughed out of a Late Bronze Age pit, excavation and further survey have revealed a number of traces of possible Late Bronze Age settlement in the vicinity of Drove Lane. First, there are four excavated pits which are dated by the pottery to the 9th or possibly 8th century B.C. The pits were ultimately used to bury rubbish, surviving types including: pottery; charcoal; burnt flint; worked flints (some could be residual); daub; shell; and stone, including a fragment from a quern. Possibly the soil conditions were not suitable for the preservation of other materials, such as bone and seeds. Unfortunately only a small area was exposed by excavation and the size and function of the whole site is unknown.

The fieldwalking project also revealed other high densities of burnt flint (Fig. 3), and some of these locations may also have subsoil features. Square 10 looks particularly promising since it contained 231 pieces of burnt flint, almost twice the second highest number of pieces from one square (117 pieces from Square 14). Squares 10 and 14 both had relatively high numbers of worked flints, and Square 10 had four pieces of daub. Of the other concentrations, the line of three squares numbered 39–41 also had very high densities of burnt flint. In terms of dating there is little to go on, with the survey yielding only two pieces of pottery (though both are of similar fabrics to the excavated material) and the general lack of diagnostic flint artefacts and the possibility of a

residual Neolithic element amongst the flintwork. During the winter of 1984–5 three further concentrations of burnt flint were found by Mr. Day to the north-east of the excavation (Fig. 1, Sites 1–3). Surface finds from these sites include three sherds of prehistoric pottery (again similar to that from the excavations) and two flint flakes. In the winter of 1985–6 Mr. Day found another concentration of burnt flint and daub/burnt clay to the west of Drove Lane (Fig. 1, Site 4). No finds have yet been made from Site 4.

Thus it is beginning to look as if there might be a fairly large area containing traces of possible Late Bronze Age activity. As yet we can only speculate as to what form that activity took: perhaps permanent settlement (in which case there would almost certainly have been a need for drainage ditches), or perhaps temporary, seasonal settlement or specific activity sites.

It is interesting to note the other Bronze Age finds from the Yapton area. These include the Middle Bronze Age hoard found to the east of the excavation (Fig. 1). Since the publication of the hoard (Aldsworth 1983), Mr. Day has found, *c.* 50 metres from the site of the hoard, two parts of another palstave with mid-rib, thus making a total of four palstaves with mid-rib and two plain palstaves. All six palstaves have recently been acquired by Littlehampton Museum. A small excavation (Aldsworth 1983) of the site of the hoard revealed that it had originally been placed in a small pit. Other finds from the field include two bronze lumps (possible pieces of 'cake') and at least four lumps of cuprous slag, possibly evidence relating to the activities of a Middle Bronze Age bronzesmith. The site also produced a scatter of flintwork, burnt flint and one sherd of coarse-gritted pottery. It has been suggested that these finds may indicate a Bronze Age settlement site.

A Late Bronze Age hoard was found to the south-west of the excavations at Flansham (Fig. 1). This consisted of two socketed celts, two socketed gouges, a ferrule, a copper cake, 25 lumps of metal, and fragments of five socketed celts, three swords, a spearhead, a socketed knife, a socketed gouge and a ferrule (Hearne 1940).

A Late Bronze Age pot was found in 1951 just to the north of Drove Lane (Lewis 1960), and recently Mr. Day has found part of a Late Bronze Age socketed axe near Bilsham (Fig. 1).

To conclude, the evidence for Late Bronze Age activity/settlement in the Yapton area is growing and it may be necessary to question the recent theory put forward by Bedwin (1983, 43) that on the lower coastal plain during the Late Bronze Age and Early Iron Age there was 'some setback to the spread of settlement because of climatic deterioration'.

Radiocarbon Dating

A sample of 125 g. of charcoal from Pit 2 (Context 4) was submitted to Harwell for C14 dating. The results of Harwell's tests became available after the excavation report had been submitted for publication. The uncalibrated result of the C14 dating is 2600 b.p. ± 70, or 650 b.c. (Har-7038).

Contents of Microfiche

List of contexts (p. 36)
Worked flint from the surface artefact survey: Table 4 (by C. Place) (p. 37)
Charcoal finds: Table 6 (by C. Cartwright) (p. 38)
Marine molluscs: Table 7 (by C. Cartwright) (p. 39)
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Acknowledgements

I wish to thank Mr. Day for all his help and information, Mr. Hocking for his help and for allowing the excavation to take place, the

Historic Buildings and Monuments Commission who funded the project, and Mr. F. Aldsworth, Archaeological Officer for West Sussex County Council. I would also like to thank all the volunteers, especially Mr. C. Place, the Supervisor, and Ms. J. Wood, the Finds Assistant. Finally, I would like to thank the various specialists who have contributed towards this report and Mrs. L. Drewett who drew the pottery finds.

Author: David Rudling, Institute of Archaeology, University College London, London WC1.

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The Society is grateful to the Historic Buildings and Monuments Commission for a generous grant towards the cost of publishing this article.