SPTA FIBUA Site, Copehill Down Chitterne, Wiltshire

Archaeological Evaluation and Excavation Report

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WA Report Ref.: 31762
Date: 1988

Excavations at the SPTA FIBUA Site, Copehill Down 1987-8

by Julian Richards
with contributions by Mike Allen and Philip Harding
(Wessex Archaeology)

Abstract

This report describes the results of evaluation and subsequent excavation on Copehill Down. Evaluation by means of extensive machine trenching located a series of subsoil features of prehistoric date, including one dating to the earlier Neolithic period and tentatively interpreted as part of an enclosure. A second, discrete area contained apparent postholes which, although undated, were interpreted as representing settlement traces of a similar date.

More extensive excavation failed to confirm the existence of an enclosure and suggested that many of the settlement features were of natural origin. A later prehistoric linear earthwork was, however, more extensively sampled. The comparison of environmental and lithic data from this feature with those from the earlier Neolithic provide valuable indications of both vegetational change and the decline of lithic technology.

Acknowledgements

The project was funded by the Property Services Agency. The fieldwork was carried out by Graham Keevil (evaluation) and Christine Farwell (subsequent excavation). Thanks are due to the Royal Commission on the Historical Monuments of England for their assistance with surveying and to Roy Canham of the Wiltshire Library and Museums Service for his support and interest.

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1. The site: topography, geology and previously recorded archaeology.

The site lies on the southern half of Salisbury Plain, approximately 3 miles (5 kilometres) to the west of Shrewton. It occupies a flat-topped spur, mostly above the 450m contour line, with fairly steep-sided dry valleys to the north and south. Although the underlying bedrock is chalk, there are, in places, substantial deposits of clay-with-flints.

The area of development was not known to contain any archaeological remains (Fig 1). This paucity of archaeological data may be related to recent landuse; unmanaged grassland being relatively unresponsive to aerial photographic interpretation. However, evidence for nearby prehistoric activity is provided by two Neolithic long barrows to the north-east, and by the later integration of these barrows into an extensive linear earthwork complex. This complex, assumed to date to the first millennium BC, is also associated with field systems, some of which lie close to the development area on a south facing slope.

2. Evaluation: W216, August 1987

(This section summarises the results presented in the evaluation report, Keevil and Richards 1987).

2.1 Test pits

The first stage of evaluation consisted of the manual excavation of 12 test pits (Fig 2), placed at approximately 20m intervals parallel to, and to the west of the main north/south evaluation trench (trench a). The purpose of the test pits was to examine the soil profile, and to assess the distribution of artefacts within the topsoil prior to machine excavation. It was appreciated that such a small sample would be unlikely to reveal subsoil features. In all cases the topsoil, between 0.13 and 1.34m deep, was found to overly a clay-with-flints capping, the boundary between soil horizons marked by a distinct layer of natural flint. The clay-with flints capping was also excavated to the surface of the underlying chalk, although in four cases chalk was not reached. In these cases the test pits appear to have corresponded with natural subsoil hollows. Artefacts from the excavation of the test pits, although few, were concentrated in the southern part of the area examined in this way (details in archive).

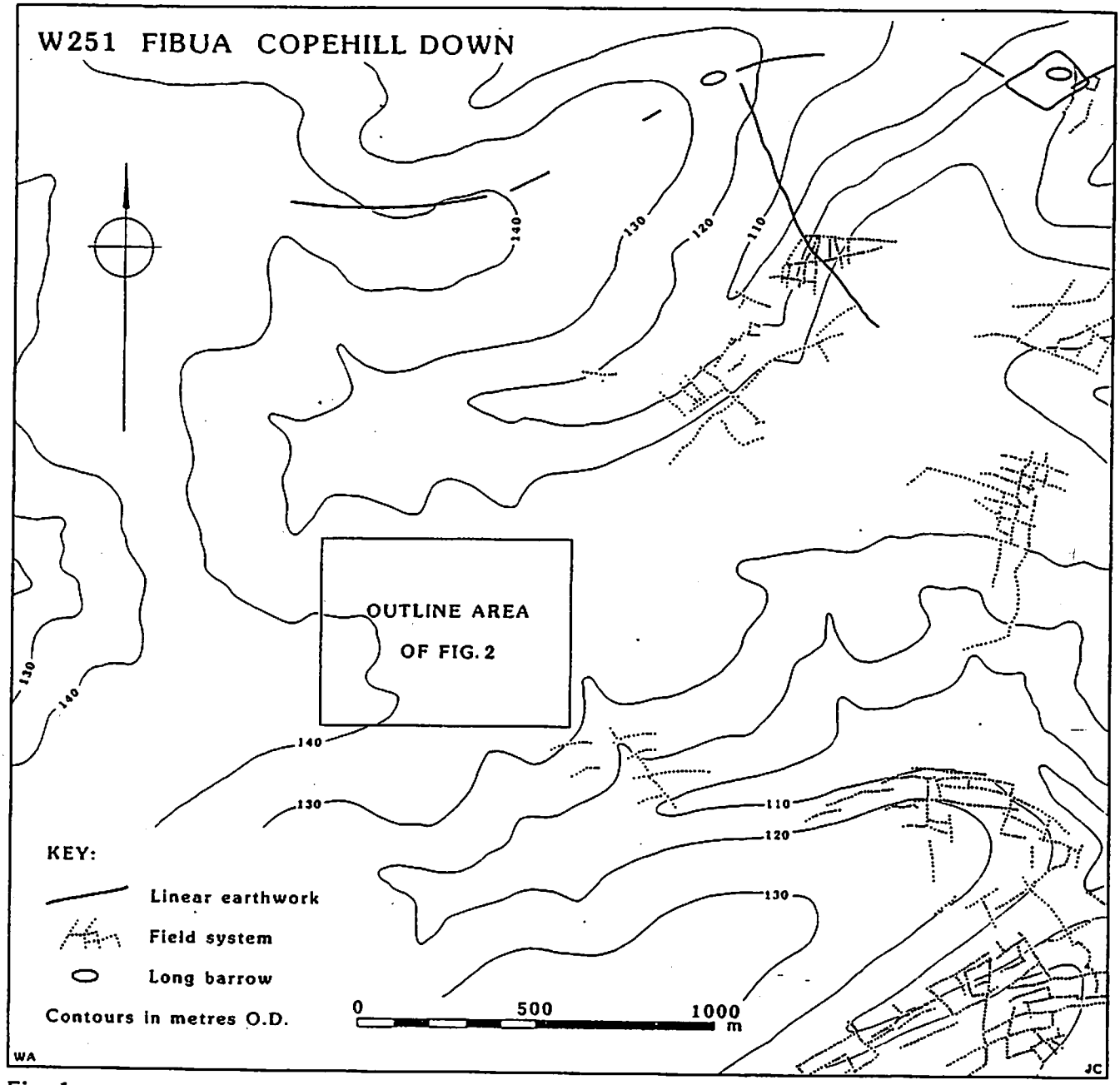

W251 FIBUA COPEHILL DOWN
OUTLINE AREA
OF FIG. 2
KEY:
Linear earthwork
Field system
Long barrow
Contours in metres O.D.
0
500
1000
m
WA
JC

Fig. 1

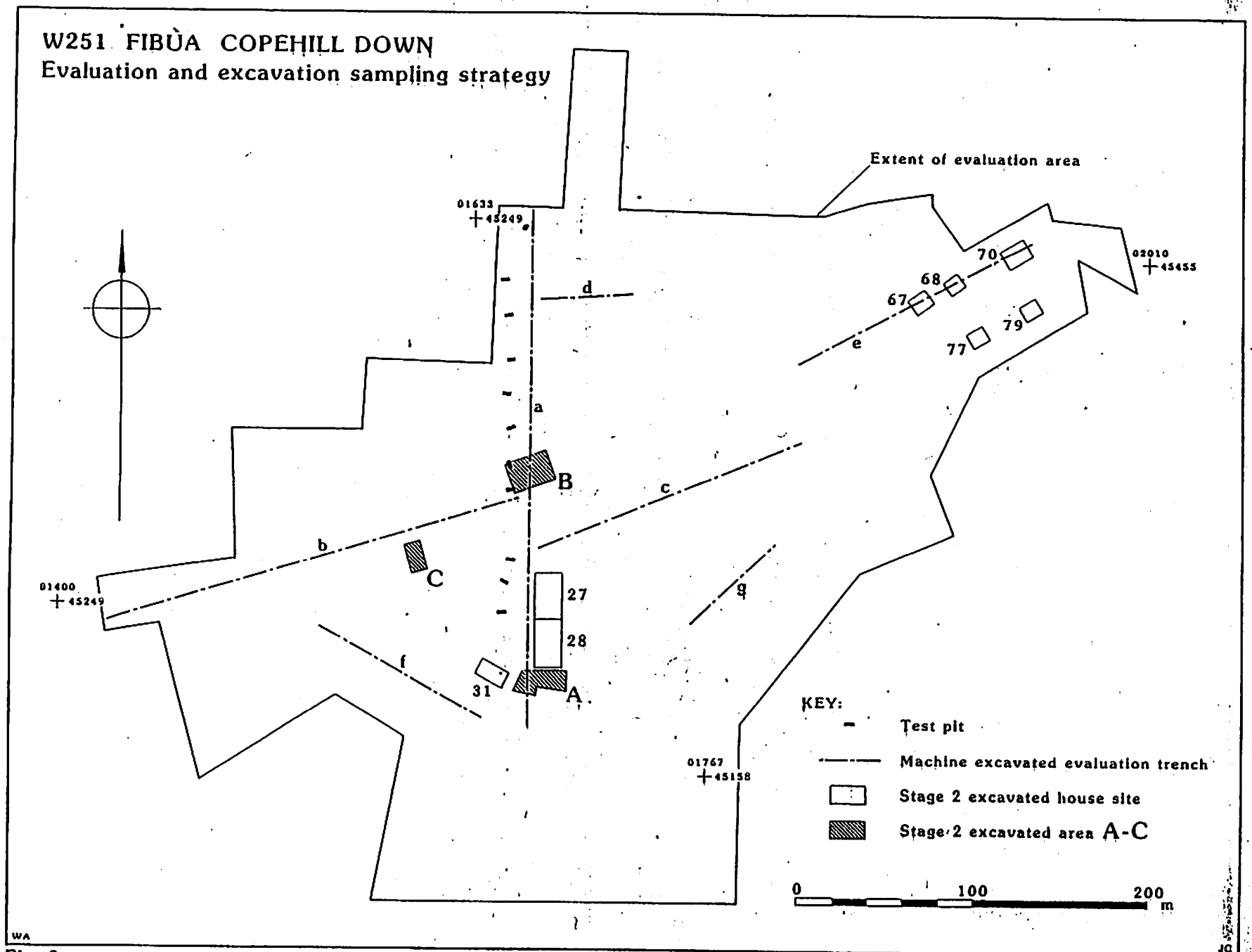

W251 FIBÙA COPEHILL DOWN
Evaluation and excavation sampling strategy
Extent of evaluation area
01633
+45249
02010
+45455
01400
+45249
01767
+45158
a
b
c
d
e
f
g
A
B
C
27
28
31
67
68
70
77
79
KEY:
Test pit
Machine excavated evaluation trench
Stage 2 excavated house site
Stage 2 excavated area A-C
0
100
200
m
WA
JQ

Fig. 2

2.2 Machine trenching

The second stage of evaluation involved the machine excavation of seven trenches, approximately 1.75m wide and totalling 1.1km in length. The layout of the trenches broadly followed the courses of the internal 'village' roads and were intended to provide an extensive sample of the development area. The variable nature of the clay-with-flints subsoil and the necessity of recognising archaeological features with the minimum of manual cleaning meant that machine excavation was deeper than would normally have been carried out. Despite these problems within the trenches several, mainly linear features, were located, recorded and excavated. The results can be summarised as follows:

Trench a. 292m long.

Ditch 004. This feature, initially machine sectioned, was recorded over a length of 6.75m and contained a small assemblage of worked flint. A 20m length of this ditch was subsequently examined (see W251 cut 114, 3.3 iii below and Fig 3).

Ditch 002. This feature, initially machine sectioned, appeared in plan to be the terminal of a steep-sided ditch with a flat base. The recorded section also suggested the existence of a possible recut or basal slot. Manual excavation of the small ammount of the filling of the 'terminal' that remained after machine trenching produced an assemblage of 268 worked flints which on technological grounds appeared to date to the earlier Neolithic period (c.3500 - 3000BC). This feature was subsequently re-examined (see W251, cut 112, 3.3 ii below and Fig 3).

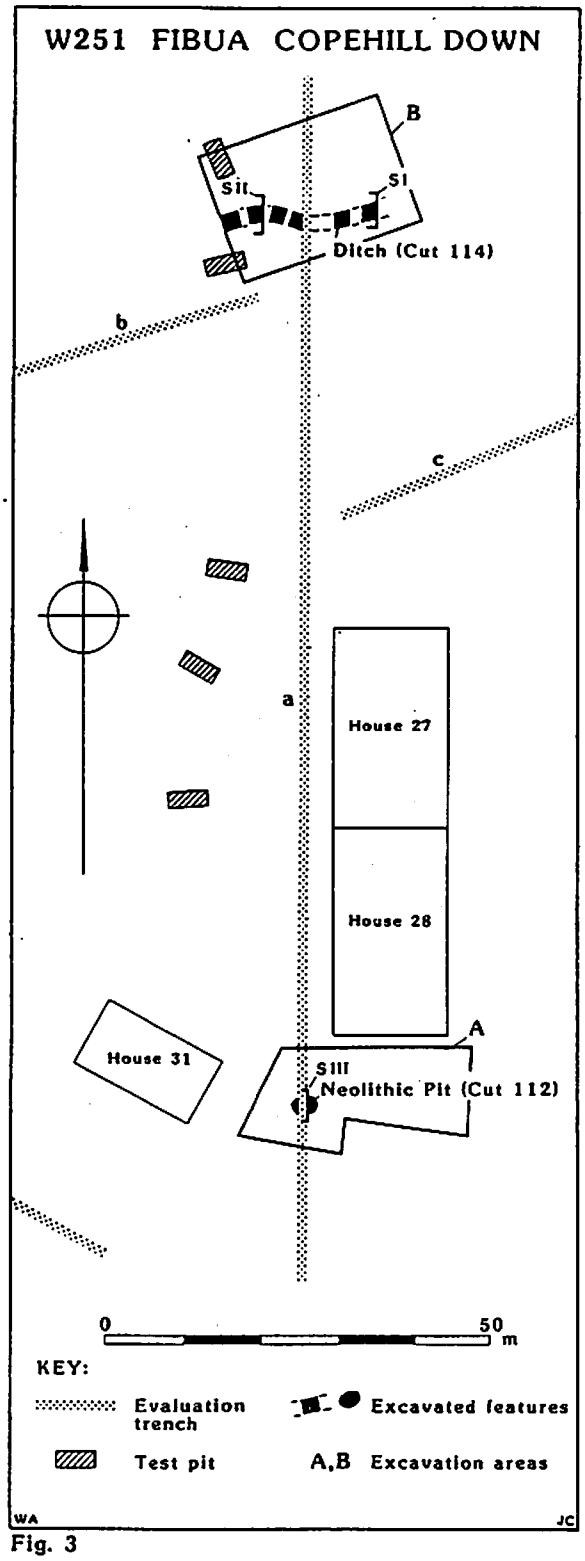
Ditch 009. This feature, which appeared to have been recut, lay only 4m south of ditch 002 and was suggested as being of recent origin.

Trench b. 244m long.

(This trench cut through extensive and deep deposits of clay-with-flint capping. In consequence only one archaeological feature was defined).

Ditch 020. This feature appeared to be either an oval pit or a ditch terminal with steep sides and a flat bottom. A small assemblage of worked flint was recovered from this feature.

Four sherds of early post-medieval pottery were recovered from this trench.


W251 FIBUA COPEHILL DOWN
B
SII
SI
Ditch (Cut 114)
b
c
a
House 27
House 28
House 31
A
SIII
Neolithic Pit (Cut 112)
0
50
m
KEY:
Evaluation trench
Excavated features
Test pit
A,B Excavation areas
WA
JC
Fig. 3

Trench c. 150m long.
Within this trench deposits of clay-with-flints were up to 1.25m deep. No archaeological features were recorded but four sherds of Romano-British pottery were recovered from the topsoil.

Trench d. 53m long. No archaeological features were recorded.

Trench e. 150m long.
Several deep areas of clay-with-flints were recorded, primarily within the western half of this trench.
Towards the eastern end of the trench a number of small features were recorded which, although undated, were interpreted as postholes. They varied in plan between sub-rectangular and sub-circular; most had steep sides, and the bases were frequently flat. This area was subsequently examined more extensively (see 3.3 i below and Fig 5).

Trench f. Overall length 160m (30m long section could not be excavated owing to the presence of a wire mat).
A feature interpreted as a possible ditch was located 3.5m from the eastern end of the trench.

Trench g. 67m long.
No archaeological features were recorded.

2.3 Interpretation of evaluation results
The distribution of finds recovered from the hand-excavated test pits suggests that, in the north-south axis of the sampled area, prehistoric activity was concentrated around the top of the plateau. This suggestion is supported by evidence from the more casual collection of finds during the subsequent machine trenching.

The evidence, primarily from the machine trenching, was taken at this stage to suggest two areas of archaeological potential;

i. a possible enclosure of earlier Neolithic date (based on the sectioned ditches and the feature [ditch 020] in trench b)

ii. an area of potential settlement activity within trench e, defined by

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ii.an area of potential settlement activity within trench e, defined by

features interpreted as postholes which, within the limited sample trenches, appeared to form a structured pattern.

3. Subsequent excavation: W251, May-June 1988

3.1 Introduction

At the stage at which the internal site roads and drainage system were being installed, no decisions had been made regarding further funding, and in consequence no archaeological observation was carried out. The opportunity to have carried out such observation would have enabled the interpretation and spatial distribution of the linear features recorded during the evaluation exercise to be checked. As, however, this opportunity was lost, the location of more extensive excavation trenches was based solely on the results of the evaluation. These excavations were carried out immediately in advance of construction, and were concentrated on the sites of specific houses, primarily those to be constructed with cellars, and lying within areas of suggested archaeological potential.

3.2 Methodology

By the time excavation commenced the entire site had been stripped of grass and topsoil. The nature of this stripping, and disturbance caused by subsequent vehicle movement meant that archaeological features could not be identified at this level. Consequently, in all areas subsequently excavated, the clay-with-flints subsoil was also removed by machine. Within stripped areas, defined below as 'buildings', and areas A - C, it was then intended to excavate all archaeological features.

3.3 Results.

3.3 i. 'Settlement area' (originally located in evaluation trench e).
Within this area the sites of buildings 67, 68, 70, 77 and 79 were excavated, representing a total area of approximately 275 m^2. Supervised stripping revealed numerous clay-filled features, all of which were cut into natural chalk, were irregular in plan, and, within the areas examined, formed no discernable pattern. This irregularity was also reflected in the profile of sectioned examples, the manual excavation of which failed to produce any artefacts, and suggests that they may be best interpreted as

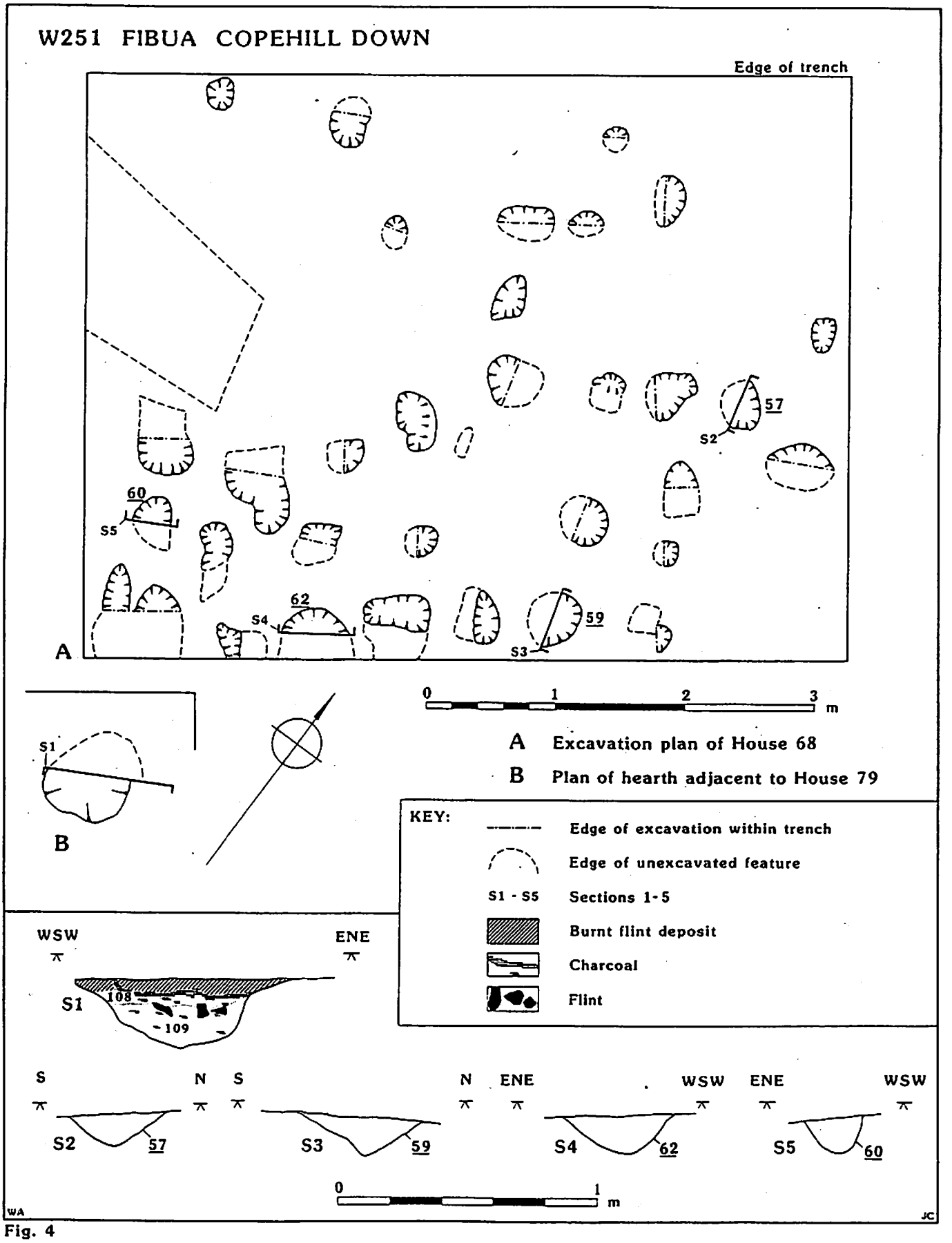
W251 FIBUA COPEHILL DOWN
Edge of trench
A
57
S2
60
S5
62
S4
59
S3
0 1 2 3 m
A Excavation plan of House 68
B Plan of hearth adjacent to House 79
B
S1
KEY:
Edge of excavation within trench
Edge of unexcavated feature
S1 - S5 Sections 1-5
Burnt flint deposit
Charcoal
Flint
WSW
ENE
S1
108
109
S
N
S2
57
S
N
S3
59
N
ENE
S4
62
WSW
ENE
S5
60
WSW
0 1 m
WA
JC

Fig. 4

natural features of periglacial origin. Figure 4 shows the plan recorded within building 68, together with selected profiles of excavated 'post-holes'.

Excavation within this area located only one positive archaeological feature, a shallow hearth (plan and section also shown on Fig 4). The upper fill of the hearth consisted of a deposit of compact burnt flint (context 108) which was sampled and sieved, but produced no identifiable carbonised material. Despite this paucity of archaeological features, however, the level of artefacts, primarily of worked flint, recorded during topsoil stripping, suggests that this area had formed the focus for some activity, probably during the Neolithic period. The worked flint, which demonstrates some concentration in the area of buildings 77 and 79 includes material of both earlier and later Neolithic date (see 5.4 ii below).

3.3 ii. Neolithic 'enclosure' ditch (originally located in evaluation trench a).

Within this area the sites of buildings 27/8 30 and 31 were excavated, all producing similar periglacial features to those described above. The previously sampled feature (W216, evaluation trench a ditch 002) was relocated (in additional area A), and was found not to be a ditch terminal, but a large oval pit. The section (Fig 5 iii) shows the feature to be 'U' shaped, and approximately 1.3m deep from the stripped surface. The upper fill (context 110) was a brown clay loam, below which was a primary fill (context 113) of cemented small chalk rubble. The feature appeared to have been recut from a level at the junction of contexts 110 and 113. This recut, approximately 0.5m wide and 0.5m deep, was filled with a fine chalk rubble (context 111) which showed signs of horizontal lensing. This context was sampled for molluscan analysis as it was considered (M.J.Allen pers.comm) that the chalk rubble primary fills were almost totally devoid of molluscs. Analysis suggests that this feature was constructed within an area of broadleaved deciduous woodland (see 6.3 below). The total assemblage of worked flint from this feature (see 5.2 below) broadly confirms initial impressions formed from a rapid assessment of the evaluation material. A date in the Neolithic period, and potentially within the earlier part of this period, is suggested by the high proportion of blades (22%) within the flaked material. Some ambiguity is, however,

W251 FIBUA COPEHILL DOWN

Sections of excavated prehistoric features

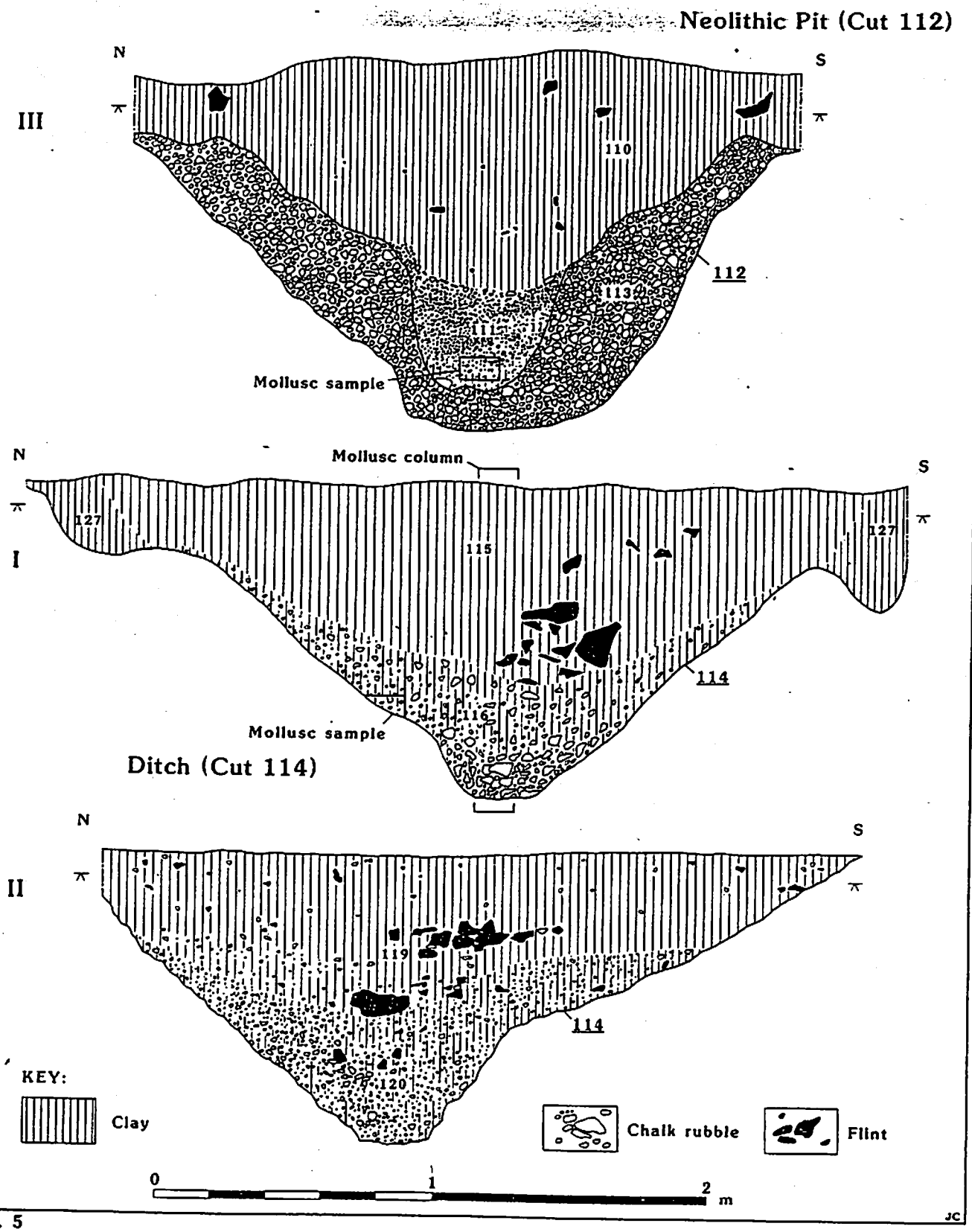

Fig. 5

provided by the occurence in the pit of a broken fabricator, a tool more likely to be of later Neolithic date. This potential later Neolithic element appears to be confirmed by finds of worked flint, which include two transverse arrowheads, from areas immediately adjacent to the pit.

It appears, from the sampling carried out in the immediate vicinity of this feature, that it may be an isolated pit, although the worked flint recovered from surface contexts may suggest some associated activity.

3.3 iii Prehistoric ditch (originally located in evaluation trench a) Additional area B, between buildings 58 and 18, was excavated in order to re-examine a ditch located in the evaluation (W216, trench a ditch 004). This was originally interpreted as part of an enclosure, and was also tentatively suggested as dating to the Neolithic period. A 20m length of this feature was exposed, within which six sample sections were manually excavated. The ditch (cut 114, see Fig 5 i and ii for sample sections), was shown to be 'V' profiled, with a flat bottom, on average 2.70m wide at the surface and 1.15m deep. Where sampled, the ditch exhibited a consistent sequence of filling, with a primary fill, context 116 (equivalent to 120) of yellow-brown clay with a high concentration of small rounded chalk rubble. Above this, context 115 (equivalent to 119), was a compact yellowish-brown clay loam with occasional flint nodules, the majority of which lay towards the centre and base of the layer. The dating for this feature relies on a small sherd of pottery from context 116, of a sandy fabric which would not be out of place in a Bronze Age context, and on observed variation in the flint assemblage (see 5.3 below). Molluscan analysis (see 6.4 below and Fig 5 for location of the sample column) suggests that the ditch was constructed within an area of open downland although the construction was followed almost immediately by abandonment and the recolonisation of the area by more rank vegetation.

3.4 iv Possible ditch (originally located in evaluation trench b) Additional area C was excavated between buildings 25 and 26 close to the position of the feature recorded in evaluation trench b and on the projected line of the ditch described above (cut 114). No features were recorded.

4. Discussion

4.1 Methodological approach

The combined results of the evaluation and the subsequent excavation demonstrate the problems inherent in assessing and interpreting the archaeological potential of areas under landuse of an essentially unresponsive type.

A range of investigative techniques are available for assessment of archaeological potential, but of these, many are inappropriate for the conditions encountered at Copehill Down. It can be expected that substantial earthworks would have been previously identified and recorded on the Wiltshire Sites and Monuments Record, the pattern of such monuments enhanced over the SPTA by the results of extensive aerial photographic study and ground fieldwork. At Copehill Down these sources had not indicated any identifiable earthwork remains suggesting that, unless such remains had been removed by recent ploughing, that the archaeological record was potentially more ephemeral. Geophysical survey (magnetometer or resistivity) was considered inappropriate within this area owing to the potential levels of metallic interference (based on experience of magnetometer survey on SPTA, A D H Bartlett pers comm).

In retrospect, it is difficult to suggest an alternative approach to that adopted, although the difficulties of interpretation caused by the narrowness of the initial evaluation trenches could have been alleviated by adopting a wider sample trench. In addition, the combination of the recovered archaeological remains and the confusing picture presented by the natural geology, combined to produce far from ideal conditions for the rapid and coherent assessment of the overall archaeological record of the FIBUA site.

4.2 Archaeological results

Within the overall area of the site, the location and excavation of one feature of Neolithic date cannot be used to imply more extensive activity of this period. With reference to this feature, initially interpreted as a ditch terminal, the main emphasis of the second stage of excavation was to determine whether or not it formed part of a ditched (possibly causewayed) enclosure, a rare type of site of which only one other example (Robin

Hood's Ball), is known from Salisbury Plain. It appears that this is not the case, and sampling in the vicinity of what was re-interpreted as a pit appears to have demonstrated that it does not form part of a monument comprising a wider arrangement of such features. In isolation, a functional interpretation of this feature is difficult, its major value lying in the indication that it provides of unspecific Neolithic activity of a non-monumental type, and in the environmental data that it produced.

The ditch examined within area B also cannot be suggested as part of an enclosure, and may be interpreted as representing part of a linear boundary earthwork. Extant examples of such earthworks are recorded to the north and north-east of Copehill Down and it is also possible that more continuous elements of associated field systems may represent defined long-distance boundaries (see for example Fig 1, the field system immediately north-east of the outline of Fig 2). The sampled ditch can be suggested as having been constructed in the later part of the Bronze Age (c. 1000 - 600 BC), and within an area cleared of woodland within which open grassland conditions prevailed. Unlike the environmental sequence suggested for the Stonehenge area however (Richards in press), where an intensification of arable cultivation can be seen at this time, the data from Copehill Down suggests a phase of abandonment and a reversion to scrubby grassland. It is possible that this localised environmental succession was largely determined by the nature of the soils on the hilltop, the heavier soils derived from the clay-with-flints capping being less attractive for arable conversion.

In summary, the site of FIBUA on Copehill Down shows evidence of some Neolithic activity, in many ways comparable to that recovered by more intensive fieldwork within the Stonehenge area (Richards in press). Here areas of activity are requently unassociated with the digging of pits and can be located solely on the basis of surviving artefact scatters. The hitherto unrecorded linear ditch is part of a more extensive pattern which occurs over the majority of the SPTA and is the subject of a major research project by Reading University.

The excavations at Copehill Down have produced positive data which, if restricted in their value for immediate interpretation, will be of greater significance when employed in a comparative capacity. The archaeological potential of the area has been demonstrated and provides a clear indication

of the necessity for archaeological monitoring of any subsequent developments either on or adjacent to the FIBUA site.

5. Worked Stone (P.A.Harding and J.C.Richards)

For the purposes of analysis the material from both evaluation and subsequent excavation has been considerd as one assemblage. The material, all of worked flint, with the exception of one piece of worked chert, was recovered from a range of contexts of varying stratigraphic integrity, from subsoil surface to well-stratified features.

5.1 Methodology

All material was initially sorted into a series of categories based on aspects of the flint reduction sequence (core: flake: retouched piece etc). This stage also involved the quantification of complete and broken pieces and, within the flake class, the quantification of blades (length = twice breadth) and bladelets (blades less than 12mm wide). The detailed results of this first stage of analysis are contained within the project archive. The results, particularly from the individual building plots, provides the basis for some broad spatial analysis (discussed above). Beyond this, analysis concentrated on two stratified groups of material, from the pit (cut 112) and from the ditch (cut 114). The group from the former is essentially from a single episode of pit filling and can therefore be expected to exhibit a greater degree of homogeneity than that from the ditch. Material from this latter feature has been grouped together within broad stratigraphic units (primary and secondary fills), and the possibility of residual material must also not be ignored.

5.2 Neolithic pit (3.3 ii above)

A total of 225 pieces of worked flint from this feature were examined. Of the four cores, three were small examples, all with opposed platforms, and all probably for blade/bladelet production. Two show signs of rejuvenation, and all are well worked down.

The bias demonstrated in the cores towards blade production is to a certain extent reflected in the flaked material, of which 22% (44 out of 202 pieces) are blades/bladelets. It is likely that at least 100 pieces

were removed from a single large nodule of flint, the largest being cortical preparation flakes within which class limited refitting potential was identified. Many aspects of the examined flint suggest removal by soft hammer, although the heavy cortex of the raw material, which produces similar characteristics (Ohnuma and Bergman 1982, 166), may account for this.

The only identified tool from this assemblage was a broken fabricator, with a 'D'-shaped section, made on a flake/blade and probably snapped during manufacture.

The assemblage can be interpreted as representing the dumping of essentially waste material, from varying stages in the reduction sequence. Many of the flakes are cortical preparation flakes, are broken, or are the products of rejuvenation. Tool production appears to be suggested by the apparent breakage of the fabricator during manufacture.

There are few aspects of this assemblage which are chronologically diagnostic, although the percentage of blades, including deliberate double-ridged examples suggests a date within the Neolithic period. The occurence of the fabricator, and the recovery nearby of transverse arrowheads, may suggest that the date may be later rather then earlier in this broad period.

5.3 Prehistoric ditch (3.3.iii above)

The sample excavation of the ditch produced a total of 81 pieces of worked flint. Although conclusions relating to such a small assemblage, recovered from a number of sections along the sampled part of the ditch, are few, some aspects appear to offer a notable contrast to the material recovered from the pit discussed above.

Firstly, both the cores are flake cores, and only 4% of the flaked material (3 out of 73 pieces) is of blade/bladelet form. In addition, and despite the occurence of two rejuvenation flakes, there is a notable lack of core preparation, with butts mainly unmodified. The greatest 'concentration' of blades occurs in context 120, and includes two examples with abraded butts, struck by soft hammer. One example is crested for correction at the distal end. These pieces may perhaps be suggested as residual within the context of the overall assemblage, an assemblage which can be suggested as considerably later than that from the pit described

above.

The only 'tool' from the ditch is a flake, retouched on three corners by semi-abrupt, direct retouch to make a scraper type implement.

5.4 Unstratified material

Unstratified material was collected from the surface of individual building areas prior to, and during further machine stripping. For the purposes of superficial examination this material can best be considered in two groups:

5.4 i From area A, and buildings 27/8 and 31, spatially associated with the pit discussed above.

This group of material includes both flake and blade cores, one example of the latter being of 'micro-bladelet core' type. The area immediately adjacent to the pit produced two well-made end scrapers made on flakes, one of which has inverse retouch to thin the butt.

The group of flint from building 31, immediately to the west of the pit, included an opposed platform blade core, a scraper, of less regular form than those from area A, and two transverse arrowheads. These were both of Green's British oblique form (Green 1980, fig 38), one with a pronounced concave base produced by bifacial retouch. In both cases the tips are missing, but whether as a result of ancient or modern breakage cannot be determined.

5.4 ii From buildings 67, 70, 77 and 79, from the area previously suggested as a settlement focus.

This group of material is largely undiagnostic, with the exception of some pieces from building 79. These include blades from cores with abraded butts, an end scraper, and a single flake, also with an abraded butt, of chert. On visual examination this appears to be fine-grained Portland chert which tends only to occur in earlier Neolithic contexts within the Stonehenge area (Richards in press).

6. Landscape History (M. J. Allen)

6.1 Introduction

A single sample from the Neolithic pit (cut 112) and a column of eight samples from the later prehistoric ditch (cut 114) were analysed for Mollusca. Both features were cut into chalk in an area of extensive, but

severely eroded, clay-with-flint deposits. In both features the lower fills were calcareous and contained shells, whereas the upper fills, derived from the clay-with-flints, were devoid of Mollusca.

6.2 Methodology

Methods of molluscan analysis employed were those outlined by Evans (1972, 44-45). One kilogramme samples of air-dried soil were disaggregated in water and hydrogen peroxide (H_2O_2), and the flot decanted onto a 500 micron mesh sieve. The residues were washed through a nest of sieves of 5.6mm, 2mm, 1mm, and 500 micron mesh aperture, dried and then quantified. Apical fragments were extracted and identified using a x10 to x30 stereo-binocular microscope. The mollusc nomenclature follows Walden (1976) and ecological groups are those defined by Evans (1972, 194-203). The results are presented in histograms of absolute shell numbers in Figure 6 and by species in Table 1.

6.3 Neolithic pit

A single bulk sample was taken from the pit fill immediately above the vaccuous chalk rubble primary deposit (see Fig 5.III for location). Initially 1 kilogramme was processed and produced 37 shells. In view of the importance of establishing the ecological context of this feature, and the significance of the assemblage, a further 2 kilogrammes of soil was processed in order to provide sufficient shell numbers for ecological interpretation. The total of 3 kilogrammes of processed soil produced 127 shells of 16 taxa.

The assemblage is predominantly shade-loving, with no open contry species present. It is dominated by Discus rotundatus (55%), which is a common woodland species that enjoys a number of shady habitats, including leaf litter, hedgerows, logs, etc. The other main species of this assemblage are the predatory Zonitids (Aegopinella pura, Aegopinella nitidula, Oxychilus cellarius) and Carychium tridentatum. Carychium and Discus, together with the predatory Zonitids, are commonly associated with decaying plant material beneath leaf litter on a deciduous woodland floor. The occurence of the rare Vertignid, Vertigo pusilla, corroborates this as it is restricted to woodland habitats, especially ground litter. In addition, Acanthinula aculeata, Balea perversa, and Clausilia bidentata are

Fig. 6

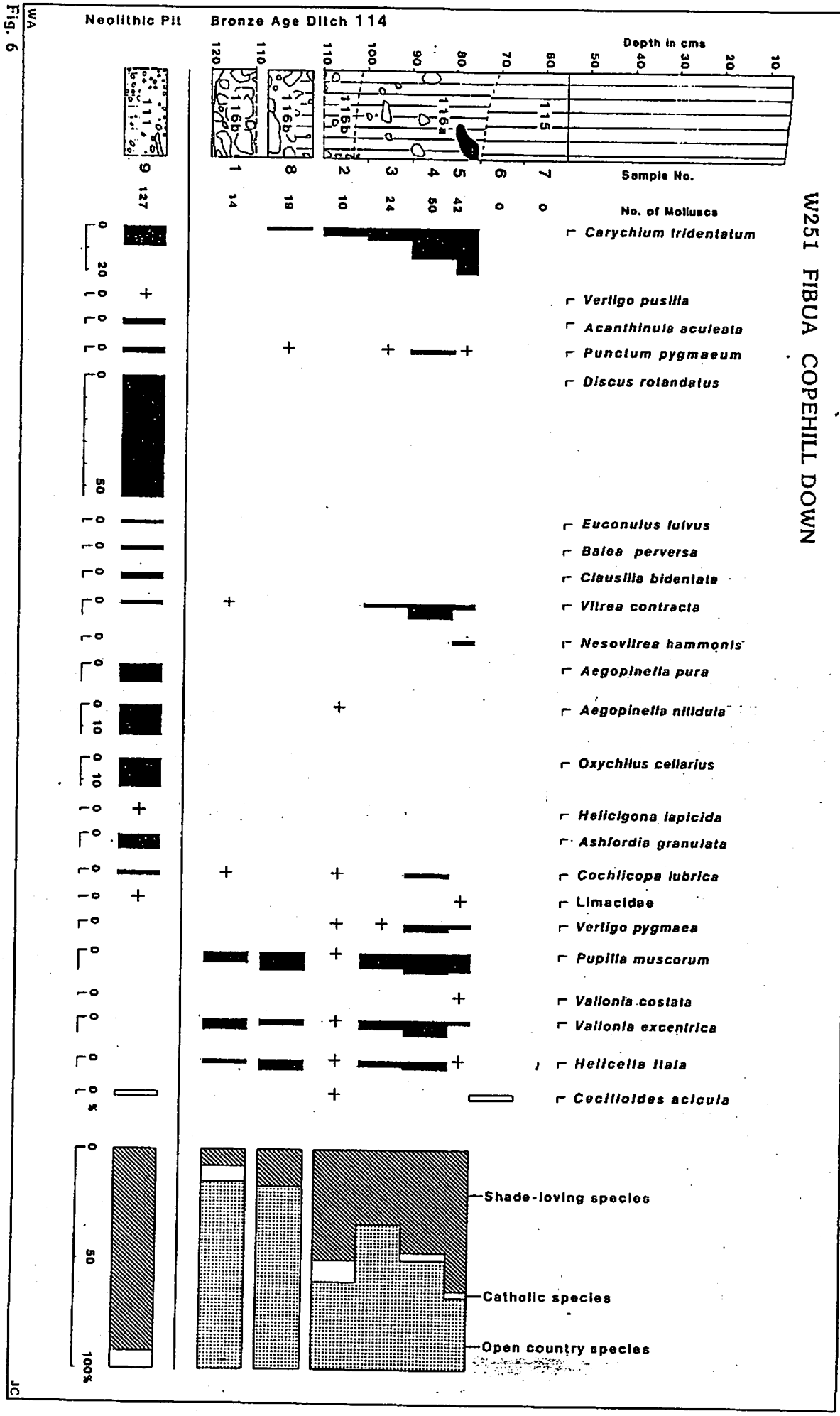
Neolithic Pit
Bronze Age Ditch 114
Depth in cms
Sample No.
No. of Molluscs
W251 FIBUA COPEHILL DOWN
Carychium tridentatum
Vertigo pusilla
Acanthinula aculeata
Punctum pygmaeum
Discus rotundatus
Euconulus fulvus
Balea perversa
Clausilia bidentata
Vitrea contracta
Nesovitrea hammonis
Aegopinella pura
Aegopinella nitidula
Oxychilus cellarius
Helicigona lapicida
Ashfordia granulata
Cochlicopa lubrica
Limacidae
Vertigo pygmaea
Pupilla muscorum
Vallonia costata
Vallonia excentrica
Helicella itala
Cecilioides acicula
Shade-loving species
Catholic species
Open country species

Table 1 Molluscan species

V251

	FEATURE				114				
	SAMPLE	9	1	8	2	3	4	5	6	7
	CONTEXT	111	116	116	116	116	116	115	115	115
	DEPTH		1,10m	spot	1m	0,92m	0,90m	0,75m	0,55m	0,55m
MOLLUSCA			1,20m	sample	1,10m	1m	0,80m	0,80m	0,75m	0,65m
	VTg	3000g	1000g	1000g	1000g	1000g	1000g	1000g	1000g	1000g
Carychium tridentatium (Risso)		9		2	3	6	13	20		
Carychium spp.					1		1	1		
Cochlisopalubrica (Muller)							1			
Cochlicopa spp.		2	1		1		1			
Vertigo pusilla Muller		1								
Vertigo pygmaea Draparnaud					1	1	4	2		
Pupilla Muscorum (Linnaeus)			5	8	1	7	9	8		
Vallonia Costata (Muller)								1		
Vallonia excentrica Sterci			5	3	1	4	8	2		
Acenthinula aculeata (Muller)		3								
Punctum pygmaeum Draparnaud)		3		1		1	2	1		
Discus rotundatus (Muller)		55								
Vitrea Contracta (Westerlund)		2	1			2	7	3		
Nesovitrea Mammonis (Strom)								2		
Pegopinella pura Alder		9								
Aegopinella nitidula (Draparnaud)		14			1					
Oxychilus cellarius (Muller)		13								
Limacidae		1						1		
Evconulus fulvus (Muller)		2								
Ceciliaides acicula (Muller)		2				1			3	
Clausilia bidentata (Strom)		3								
Balea perversa (Linnaeus)		2								
Ashfordia granulata (Alder)		7								
Helicella itala (Linnaeus)			2	5	1	3	4	1		
Helicigona lapicida (Lineaus)		1								
Total		127	14	19	10	24	50	42	0	0
Taxa		16	5	5	7	7	8	10	0	0
% shade loving species		92,1%	7,1%	15,8%	50%	33,3%	46%	64,3	0%	0%
% Catholic species		7,9%	7,1%	0%	10%	0%	4%	2,4%	0%	0%
% Open country species		0%	85,7%	84,2%	40%	66,6%	30%	33,3%	0%	0%

essential rupestral in their habitat preference. Of the two non-shade-loving species, Ashfordia granulata is also common in woodland and has been recorded in palaeo-woodland contexts at Hambledon Hill (Bell and Allen 1985) and Maiden Castle (Evans et al 1989), both in Dorset.

It has long been recognised that, for a number of reasons, pits are not ideal contexts for reconstruction of the palaeo-environment. They may provide refuge for faunas which specifically enjoy the shady micro-environment provided by the pit, and may also contain shells from relict faunas eroding into the pit (Thomas 1977, Shackley 1976). However, in the case of the feature under consideration, the assemblage appears to give a constant picture of a broad leaved deciduous woodland providing humid conditions and with a developed leaf litter zone. Furthermore, the presence of Euconulus fulvus, a mollusc rare on 'dry chalkland sites of Neolithic and later date' (Evans 1972, 186) together with Vertigo pusilla, which Evans records as being severely restricted after the onset of Neolithic clearance (1972, 142), certainly indicate an early woodland that has not been radically altered by human interference.

6.4 The Prehistoric Ditch (Cut 114)

Eight samples from the ditch produced assemblages which contrast markedly with that discussed above. Generally mollusc numbers were low, and the taxonomic range restricted. Although the basal sample, from the primary fill, produced only 14 shells, they were predominantly of open country species, with only two specimens falling outside this category. The predominance of Helicella itala, Pupilla muscorum, and Vallonia excentrica indicate very open conditions, probably short-turfed grazed downland. A further spot sample from the primary fill confirmed this interpretation. In contrast the secondary fill (context 116), despite displaying similar open country attributes, produced increasingly higher percentages of shade-loving species. This component comprised Carychium tridentatum and Vitrea contracta, common in tall unkempt grassland (Cameron and Morgan-Huws 1975), and Punctum pygmaeum and Nesovitrea hammonis, both of which belong to Evans' 'Punctum group', indicative of vegetation colonisation in ditches. A phase of neglect can thus be suggested.

The tertiary fill (context 115) was a silty-loam derived from the clay-with-flints and was consequently non-calcareous. It contained only

specimens of the burrowing, and thus unindicative species Cecilioides acicula.

It appears that the ditch was constructed in an area of established open grazed downland. These conditions appear to be short-lived however, as, soon after construction, probably, by analogy with the Overton Down experimental earthwork, within 20-30 years (Crabtree 1971, Fowler pers comm), the ditch became overgrown. The primary and secondary fills are calcareous, indicating weathering predominantly from the ditch sides. This is consistent with the suggestion of grazed rather than tilled downland. The derived upper fills may indicate erosion of this Tertiary clay-with-flint deposit, possibly by tillage.

6.5 Summary

The pit was either constructed in a broadleafed deciduous woodland, or was excavated shortly after such woodland was cleared. Unfortunately there is no evidence for any subsequent environmental change. By the time that the ditch was constructed clearance had been carried out to such an extent that open downland conditions prevailed and the area had been colonised by new land snail faunas. The construction of the ditch was followed almost immediately by abandonment. Vegetation and long grasses soon became established within the ditch, and, at a later date, it is likely that ploughing took place, mobilising the clay-with-flints subsoil and enabling it to erode into the ditch.

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