

Channel Tunnel Rail Link
CTRL UK Limited
Oxford Wessex Archaeology Joint Venture

**The worked flint from White Horse Stone, Pilgrim’s
Way, East of Boarley Farm and West of Boarley
Farm, Aylesford; Boxley, Kent**

by Kate Cramp

1	INTRODUCTION	3
2	PROVENANCE	3
3	CONDITION AND RAW MATERIAL.....	5
4	TECHNOLOGY AND DATING.....	6
5	WHITE HORSE STONE.....	6
5.1	WHS STRUCTURE.....	8
5.2	FEATURES WITHIN/NEAR WHS STRUCTURE	8
5.3	FEATURES SOUTH OF WHS STRUCTURE	9
5.4	FLINT SCATTER	9
5.5	GROOVED WARE PITS AND TREE-THROW HOLES	9
5.6	LATE NEOLITHIC PIT 7000.....	12
5.7	LATE NEOLITHIC TREE-THROW HOLE 5125	12
5.8	FOOD VESSEL TREE-THROW HOLE 5128.....	13
5.9	MIDDLE AND LATE BRONZE AGE FEATURES	13
5.10	AREA 8088	14
5.11	PALAEOSOL 4144.....	14
5.12	THE REMAINING ASSEMBLAGE.....	15
6	PILGRIM’S WAY	15
6.1	FEATURES WITHIN/NEAR PIL STRUCTURE	18
6.2	PETERBOROUGH WARE PITS 711 AND 714.....	18
6.3	GROOVED WARE PITS	18
6.4	LATE NEOLITHIC TREE-THROW HOLES 861 AND 909.....	21
6.5	LATE NEOLITHIC PIT 952.....	22
6.6	MIDDLE BRONZE AGE FEATURES	22

6.7	THE REMAINING ASSEMBLAGE	22
7	EAST OF BOARLEY FARM.....	23
8	WEST OF BOARLEY FARM.....	23
9	DISCUSSION.....	23
10	BIBLIOGRAPHY.....	24

CTRL Specialist Report Series

October 2005

©CTRL UK Limited 2005

All rights including translation, reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without the prior written permission of CTRL UK limited

1 INTRODUCTION

An assemblage of 4971 struck flints was recovered from White Horse Stone (ARC WHS98), Pilgrim's Way (ARC PIL98) and Boarley Farm (ARC BFE99 and ARC BFW98). This total includes 2672 chips (<10mm²), which provide 53.8% of the assemblage. White Horse Stone produced the largest flint assemblage of all the CTRL sites, a total of 4125 pieces, which is inflated by the quantity of chips (2343 pieces) retrieved during the environmental sampling of large parts of the site. A substantial assemblage was also recovered from Pilgrim's Way (825 pieces), while the Boarley Farm sites yielded much smaller quantities of flint (Table 1). A further 293 pieces of burnt unworked flint weighing 2744 g were also retrieved from the four sites (Table 2), with the greatest quantity again coming from White Horse Stone.

The flint assemblage was recovered from a range of features, including pits, tree-throw holes, postholes, ditches and layers (Tables 3 and 6). The general technological appearance of the flintwork suggests a mainly Neolithic date and, while some is likely to be early Neolithic in date, the majority probably results from activity in the later part of this period; of particular note are several large pit assemblages found in association with late Neolithic Grooved Ware pottery from White Horse Stone and Pilgrim's Way.

Apart from a possible burin from pit 5022 (White Horse Stone), very little flintwork is demonstrably earlier than Neolithic. Similarly, flintwork post-dating the Neolithic is comparatively under-represented. The few exceptions include a large assemblage associated with Food Vessel pottery from White Horse Stone and a limited number of flints from middle Bronze Age features at both White Horse Stone and Pilgrim's Way.

An illustrated selection of flint can be found in Figures 1 and 2, with accompanying catalogues in Tables 7 and 8.

2 PROVENANCE

The assemblage comes from pits, tree-throw holes, postholes (including those from an early Neolithic post-built structure), ditches and layers. Most of the flints occur as residual finds in later features (Tables 3 and 5). A particularly large assemblage of redeposited flintwork (706 pieces, including 448 chips) was recovered from a layer of remnant palaeosol (4144) at White Horse Stone.

With the exclusion of chips, only very small amounts of flint were retrieved from the postholes of the early Neolithic rectangular structure at White Horse Stone (Table 3), and none at all came from the postholes of the early Neolithic structure at Pilgrim's Way. Pits and tree-throw holes seem to have been commonly used for the deposition of flint in the later Neolithic, with sizeable assemblages recovered in association with Grooved Ware ceramics from both White Horse Stone and Pilgrim's Way (Tables 3 and 4). These assemblages have

provided a valuable opportunity to examine differences in assemblage composition between the two sites.

Table 1: Struck flint by type from White Horse Stone, Pilgrim's Way, East of Boarley Farm and West of Boarley Farm.

Category:	ARC WHS98	ARC PIL98	ARC BFE99	ARC BFW98	Total:
Flake	1328	353	4	5	1690
Blade	13	10	1	-	24
Bladelet	8	1	-	-	9
Bladelike flake	39	20	1	-	60
Flake from ground implement	1	1	-	-	2
Flake from hammerstone	7	1	-	-	8
Core face/edge rejuvenation flake	4	6	-	-	10
Rejuvenation flake tablet	-	1	-	-	1
Irregular waste	200	47	-	-	247
Chip	2343	320	-	9	2672
Single platform flake core	13	3	-	-	16
Multi-platform flake core	22	4	-	-	26
Levallois/other discoidal flake core	1	-	-	-	1
Keeled/non-discoidal flake core	1	-	-	-	1
Core on a flake	3	-	-	-	3
Unclassifiable/fragmentary core	8	-	-	-	8
Tested nodule	20	1	-	-	21
Retouched flake	45	20	-	-	65
Retouched blade	1	2	-	-	3
Side scraper	2	1	-	-	3
End scraper	11	9	-	-	20
End-and-side scraper	6	3	-	-	9
Scraper on a non-flake blank	1	1	-	-	2
Other scraper	1	1	-	-	2
Backed knife	2	1	-	-	3
Piercer	3	3	-	-	6
Spurred piece	1	-	-	-	1
Burin	1	-	-	-	1
Notch	7	1	-	-	8
Denticulate	3	1	-	-	4
Serrated flake	13	8	-	-	21
Petit tranchet arrowhead	-	1	-	-	1
Chisel arrowhead	2	1	-	-	3
Leaf arrowhead	-	-	1	-	1
Oblique arrowhead	1	-	-	-	1
Unfinished arrowhead/blank	-	1	-	-	1
Unclassifiable retouch	8	2	-	-	10
Unclassifiable heavy implement	1	1	-	-	2
Hammerstone	5	-	-	-	5
Total:	4125	825	7	14	4971

Table 2: Quantification of burnt unworked flint from White Horse Stone, Pilgrim's Way, East of Boarley Farm and West of Boarley Farm (based on unpublished assessment data in Bradley 2001, tables 2.1.3, 2.1.5 and 2.1.7).

	ARC WHS98	ARC PIL98	ARC BFE99	ARC BFW98	Total:
No. of pieces:	262	24	5	2	293
Weight (g):	1653	1010	54	27	2744

While a small assemblage of flintwork (36 pieces) was recovered from a tree-throw hole containing Food Vessel pottery at Pilgrim's Way, comparatively little later Bronze Age flintwork is present. Ditches, pits and postholes dated to the middle Bronze Age from White Horse Stone and Pilgrim's Way produced only limited amounts of flintwork. Again, the figures are somewhat inflated by the retrieval of numerous sieved chips.

3 CONDITION AND RAW MATERIAL

The condition of the flintwork varies by context but is generally good. Of 928 pieces assessed in detail, around 73 % were considered to be in fresh condition; none was recorded as heavily damaged. However, unstratified and residual flints from later contexts (i.e. groups not selected for further analysis) tend to be in a much poorer condition. These pieces often exhibit surface rolling and edge-damage associated with successive redeposition.

The majority of flints are heavily corticated to an opaque white. Nearly 80% of the assessed component exhibits a heavy cortication, which is probably representative of the assemblage as a whole. It is likely that heat-alteration is chiefly responsible for the few cases where cortication has not occurred.

The raw material used for knapping appears to come mainly from gravel flint sources. These pieces can be distinguished by a thin, abraded and often stained cortex. The heavy cortication of the flints does not usually allow a description of colour, although it can be seen that many pieces contain cherty inclusions and thermal flaws that may have affected knapping quality. Chalk flint was also widely used and can be differentiated from gravel flint by its thick, clean white cortex. The site lies on or very close to potential sources of chalk and gravel flint, so the nodules need not have travelled far.

Bullhead flint, distinguished by its distinctive dark green cortex and underlying orange band, is well represented in the assemblage. Nodules would have been available locally from deposits at the base of the Thanet sands (Shepherd 1972, 114), some 8 to 10km to the east. A particularly large number of bullhead flakes (14 pieces), including a serrated flake (Fig. 1.9) and two refitting flakes (Fig. 2.4), were associated with late Neolithic tree-throw holes 861 and 909 from Pilgrim's Way; small quantities of bullhead flint were also recovered from several of the Grooved Ware pits at Pilgrim's Way (898, 904, 911 and 913) and White Horse

Stone (4994 and 7024). Two flakes of bullhead flint came from a late Neolithic tree-throw hole (5125).

4 TECHNOLOGY AND DATING

What follows is a discussion of the flint assemblage by site, with detailed reference to the flintwork from key groups including:

- the rectangular posthole structures and associated features
- the flint scatter at White Horse Stone
- Peterborough Ware pits
- Grooved Ware pits and tree-throw holes
- Late Neolithic features
- Food Vessel tree-throw hole 5128
- mid/late Bronze Age features
- palaeosol 4144

5 WHITE HORSE STONE

A total of 4125 struck flints and 262 pieces (1653 g) of burnt unworked flint were recovered from White Horse Stone (Tables 1 and 2). A considerable proportion of the assemblage was recovered from features of Iron Age date and later; the remainder came from layers, pits, tree-throw holes, postholes and ditches dating from the early Neolithic to the Bronze Age (Table 3).

Table 3: Struck flint by phase and feature from White Horse Stone.

	Pre-EN	EN				LN									EBA	MBA				LBA	BA	IA		RO	MED	U	
Category:	Pre-early Neolithic features	WHS house	Features within/near WHS house	Features south of WHS house	flint scatter grid	GW pits within house (19400)	GW pit 7024 (NE of house)	GW pits S of house (19399)	GW pits in Group 8088 (19413)	GW tree-throw hole in 8088	LN pit 7000	LN tree-throw hole 5125	Round structure 5257	Stakehole 5242	Food Vessel tree-throw hole 5128	Ditch 4025	Erosion gully 4873	Erosion gully 5473	Area 8088	Pit 5421	Ditch 7197	Palaeosol 4144	Other Iron Age features	Roman features	Medieval and later features	Unphased features	Total:
Flake	3	32	15	10	17	87	25	15	87	49	28	79	5	-	18	1	9	10	6	9	4	200	449	5	3	162	1328
Blade	-	1	-	-	-	-	1	-	4	-	-	1	-	-	-	-	-	-	-	-	-	1	3	-	-	2	13
Bladelet	-	-	-	-	-	1	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	5	-	-	-	8
Bladelike flake	-	-	2	-	1	3	2	-	5	2	3	2	-	-	-	1	1	-	-	-	-	2	10	-	1	4	39
Flake from ground implement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
Flake from hammerstone	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	2	7
Core face/edge rejuvenation flake	-	-	-	-	-	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4
Irregular waste	6	8	6	4	5	11	2	2	6	-	5	5	1	-	3	-	7	4	-	2	1	37	64	-	2	19	200
Chip	20	239	109	36	-	229	22	81	29	3	25	69	27	11	9	-	11	49	4	7	15	448	654	16	40	190	2343
Single platform flake core	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	1	6	-	-	3	13
Multi-platform flake core	-	-	-	-	-	1	-	1	4	1	1	-	-	-	-	-	-	-	-	1	-	1	7	-	-	5	22
Levallois/other discoidal flake core	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Keeled/non-discoidal flake core	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
Core on a flake	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	3
Unclassifiable/fragmentary core	-	-	-	-	-	-	-	-	-	2	-	-	-	-	1	-	-	-	-	-	-	-	3	-	-	2	8
Tested nodule	-	-	1	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	2	6	-	1	8	20
Retouched flake	-	-	1	1	1	4	-	-	3	2	2	2	-	-	2	-	-	-	-	3	-	4	15	-	-	5	45
Retouched blade	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Side scraper	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2
End scraper	-	-	-	-	-	-	-	-	-	-	3	-	-	-	1	-	-	-	-	-	-	3	3	-	1	-	11
End-and-side scraper	-	-	-	-	-	1	-	-	1	-	2	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	6
Scraper on a non-flake blank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Other scraper	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Backed knife	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	2
Piercer	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	3
Spurred piece	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Burin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Notch	-	-	-	-	-	-	-	1	1	1	-	1	-	-	-	-	-	-	-	-	-	1	2	-	-	-	7
Denticulate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	3
Serrated flake	-	-	-	-	-	-	2	2	2	-	-	3	-	-	-	-	-	-	-	-	-	-	3	-	-	1	13
Chisel arrowhead	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Oblique arrowhead	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Unclassifiable retouch	-	-	-	-	-	-	-	1	-	1	3	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	8
Unclassifiable heavy implement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
Hammerstone	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	3	-	-	-	5
Total:	29	280	134	52	25	341	55	104	148	65	73	164	33	11	36	1	28	64	11	22	20	706	1245	21	49	408	4125

5.1 WHS structure

A total of 280 struck flints and 114 pieces (157 g) of burnt unworked flint were recovered from the postholes of the early Neolithic rectangular structure at White Horse Stone (Table 3). The struck total has been greatly inflated by the 239 chips retrieved from sieving; when these are excluded, the assemblage is actually rather small (41 pieces). If the contents of the postholes are taken as representative of what was lying around in the vicinity of the structure, it seems that few pieces of flint over 10mm² were present in the general area prior to the construction of the house and, unless there has been significant soil erosion, it appears that that the area was kept free from flint debris following its completion.

The flints are generally fresh and heavily corticated; where it can be determined, most are of gravel flint manufacture (16 pieces). The assemblage consists entirely of unretouched types including flakes, chips and pieces of irregular waste. Very little evidence of use is present, with use-wear only noted on four edges. No retouched tools or cores were recovered. The quantity of chips might be indicative of knapping activity in the locale, although the absence of cores and of knapping refits again suggests that the larger elements of waste were removed for deposition elsewhere. If flintworking was performed in the immediate area, as the volume of chips implies, all but the smallest knapping elements were removed from the spread.

Technologically, the assemblage appears to be a flake-based one, containing very few pieces approaching bladelike dimensions and none with dorsal blade scars. While this is contrary to normal expectations of early Neolithic assemblages (e.g. Ford 1987), the small size of the sample may have had a misleading effect. Furthermore, given the low numbers of retouched and utilised pieces, it is possible that any useful blades were removed from the collection. The reduction strategy seems to have involved a mixed percussion mode; the use of platform edge abrasion is occasionally represented (four pieces). Preparatory flakes (6 pieces) and trimming flakes (11 pieces) are together as common as non-cortical flakes (17 pieces), indicating that all stages of the reduction sequence are represented.

Dating and interpreting the assemblage is problematic in the absence of diagnostic types and given its small size. It is possible that some of the flintwork relates to the use of the structure, but the relative paucity of anything larger than 10mm² intuitively suggests that efforts were made to keep the dwelling area free from sharp and uncomfortable pieces of flint.

5.2 Features within/near WHS structure

A small assemblage of 25 struck flints and a further 109 chips were recovered from various features (postholes, stakeholes, tree-throw holes and natural features) within and near the

structure (Table 3). The material is again largely undiagnostic and consists mainly of unretouched debitage, including numerous chips, flakes and pieces of irregular waste. A single retouched flake was recovered from tree-throw hole 5393. With the exception of a tested nodule (45 g) from tree-throw hole 5351, no cores were recorded. A further 13 pieces of burnt unworked flint weighing 43 g were also retrieved.

5.3 Features south of WHS structure

A total of 52 struck flints and 14 pieces of burnt unworked flint (116 g) were recovered from posthole 4919, tree-throw hole 5283, natural feature 4948 and other miscellaneous features to the south of the structure (Table 3). The assemblage, which largely consists of chips, is thinly spread across the features; the largest quantity (excluding chips) came from tree-throw hole 5283 (eight pieces). No cores are present, and the only retouched tools are one retouched flake and one backed knife (Fig. 1.2).

5.4 Flint scatter

A total of 25 flints were recovered from the flint scatter to the north of the structure (Table 3). The assemblage is flake-based and includes two retouched pieces: one retouched flake and one scraper fragment. The flintwork is in variable condition, suggesting that some or all of the material has been redeposited.

5.5 Grooved Ware pits and tree-throw holes

An assemblage of 713 struck flints and 87 pieces of burnt unworked flint (466 g) were recovered from eleven pits and one tree-throw hole containing Grooved Ware pottery (Table 4). Pits 7024, 4994, 5094, 4965, 5256 and 5072 produced reasonable quantities of struck flints; a large assemblage of burnt unworked material was recovered from pit 4994, which contained a total 51 pieces weighing 354 g.

Table 4: Struck flint by type from Grooved Ware features at White Horse Stone.

Category:	GW pits within house				GW pit 7024 NE of house	GW pits S of house				GW pits in Group 8087				Total:
	4874	4965	5256	7024		4929	4943	4952	5180	4941	4994	5094	5072	
Flake	7	37	43	25	3	7	5		-	63	24	49	263	
Blade	-	-	-	1	-	-	-	-	-	3	1	-	5	
Bladelet	-	1	-	-	-	-	-	-	-	-	1	-	2	
Bladelike flake	1	2	-	2	-	-	-	-	-	3	2	2	12	
Flake from hammerstone	-	-	-	-	-	-	-	-	-	-	1	-	1	
Core face/edge rejuvenation flake	-	-	1	1	-	-	-	-	-	-	-	1	3	
Irregular waste		2	9	2		1		1		1	5		21	
Chip	29	67	133	22	12	55	8	6	-	19	10	3	364	
Single platform flake core	-	-	-	-	-	-	-	-	-	2	1	-	3	
Multi-platform flake core	-	1	-	-	-	1	-	-	-	3	1	1	7	

Unclassifiable/fragmentary core	-	-	-	-	-	-	-	-	-	-	-	2	2
Tested nodule	-	-	-	-	-	-	-	-	-	1	-	1	2
Retouched flake	-	1	3	-	-	-	-	-	1	2	-	2	9
Retouched blade	-	1	-	-	-	-	-	-	-	-	-	-	1
Side scraper	-	-	-	-	-	-	-	-	-	-	-	1	1
End-and-side scraper	-	-	1	-	-	-	-	-	-	-	1	-	2
Piercer	-	-	-	-	-	-	-	-	-	-	-	1	1
Notch	-	-	-	-	-	1	-	-	-	-	1	1	3
Serrated flake	-	-	-	2	2	-	-	-	-	2	-	-	6
Chisel arrowhead	-	1	-	-	-	1	-	-	-	-	-	-	2
Unclassifiable retouch	-	-	-	-	1	-	-	-	-	-	-	1	2
Hammerstone	-	1	-	-	-	-	-	-	-	-	-	-	1
Total:	37	114	190	55	18	66	13	7	1	99	48	65	713
Total number of burnt struck flints:	6	6	18	2	3	2	4	-	-	8	2	6	57
Total number of broken struck flints:	20	47	83	13	10	19	3	2	-	30	13	14	254

The material is generally in a fresh condition and is marked by an opaque white cortication. Most pieces represent the use of gravel flint sources, although several pieces of chalk flint origin were identified. Two pieces of bullhead flint (one unretouched flake and one serrated flake) are also present.

As a group, the flintwork represents a flake-based industry aimed at the production of broad, fairly squat removals. Only five blades and two bladelets were recorded, and very few of the flakes approach true blade dimensions. The results of the metrical analysis confirm this (Fig. 3.1). The tendency for removals to become less bladelike over time has been well-documented (e.g. Pitts and Jacobi 1979; Ford 1987); the debitage from the Grooved Ware features at White Horse Stone is certainly consistent with this trend.

The results of the technological analysis suggest a mixed hammermode with a distinct preference for the use of hard-hammer percussion (represented by a total of 98 pieces compared to 41 soft-hammer removals). Feather-terminated flakes occur most frequently (152 pieces), although high numbers of hinge (84 pieces) and plunging (33 pieces) terminations were also recorded. Most butt types are plain or cortical and tend to be fairly wide; fewer linear (17 pieces) and punctiform (8 pieces) butts were noted. Around 30 % of assessable pieces exhibit platform edge abrasion, indicating that some investment was made in the preparation of the platform prior to flake removal. The three platform edge rejuvenation flakes from the assemblage reflect attempts to extend the use of the core through the periodic adjustment of the flaking angle.

A total of 12 cores were recovered, all of which were aimed at the production of flakes using one or more platforms. In most cases, the platform edge shows evidence of abrasion. The average weight of all complete specimens is 224.2 g; this figure is inflated by the inclusion of an exceptionally large example (774 g) from pit 5094. Two tested nodules, weighing 155 g and 166 g, were also recovered from pits 5072 and 4994.

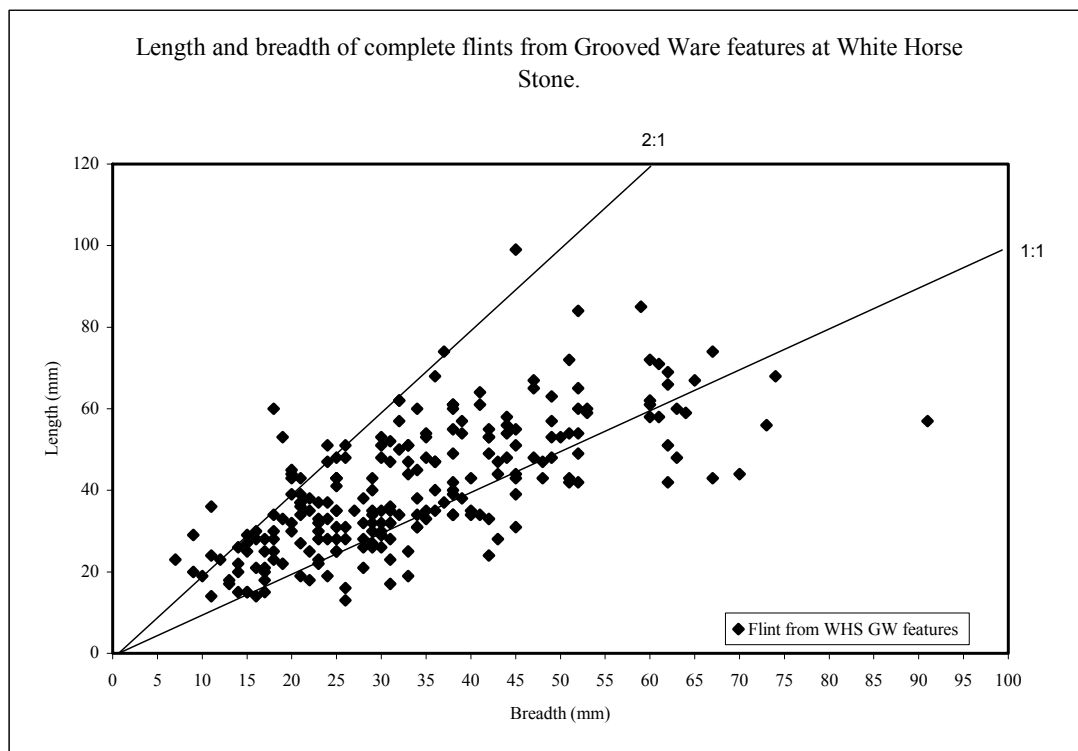
The results of the refitting analysis identified two groups of refitting flakes (Fig. 2.1 and 2.2) and one conjoining flake that had broken along a sired fracture, an accidental break

sustained when the flake was struck from the core (Fig. 2.3). In some cases, the refitting pieces have also been utilised, indicating that elements of the same knapping sequence were later used and then deposited together. The presence of refitting material, cores, rejuvenation flakes, pieces of irregular waste and numerous chips strongly suggests that a certain amount of the flintwork results from knapping activity.

The retouched component is dominated by edge-retouched flakes and blades. Serrated flakes (e.g. Fig. 1.4) feature regularly (six pieces), although scrapers are comparatively under-represented (three pieces). Both side (e.g. Fig 1.5) and end-and-side varieties are present. Two chisel arrowheads, which often occur in Grooved Ware contexts, were recovered from pits 4965 and 4943. One of these (Fig. 1.3) can be compared to Green's type d (Green 1980, 101, fig. 37); the other is similar to type e (Green 1980, 101, fig. 37).

A total of 316 flints were suitable for use-wear analysis following a brief microscopic scan (i.e. had sufficiently intact and undamaged edges). Of these, 167 (52.8%) exhibit use-wear; no evidence of use was detected on the remaining 149 pieces. The range of retouched tools in the assemblage (e.g. retouched flakes, scrapers, piercers and notched pieces) might imply that a variety of different tasks were performed with the flints; future analysis at a more detailed level would elaborate on this and, given the high proportion of utilised pieces, is likely to be rewarding.

Fig. 3.1: Length and breadth of complete flints from Grooved Ware features at White Horse Stone.



5.6 Late Neolithic pit 7000

An assemblage of 73 struck flints, including 25 chips, were recovered from three deposits within pit 7000 (Table 3). Two pieces of burnt unworked flint weighing 72 g were also retrieved from context 7001. The flintwork is in a fresh, heavily corticated condition and can be dated to the late Neolithic on general technological grounds. Small amounts of calcium carbonate concretion were noted on several pieces.

The assemblage is largely composed of unretouched debitage, mostly flakes (28 pieces) and chips (25 pieces), and represents a careful flake-based technology involving the frequent use of platform edge abrasion. Several large trimming flakes are present. The retouched component is dominated by scrapers, including both end and end-and-side varieties (e.g. Fig. 1.6). Two edge-retouched flakes were also recovered. The unclassifiable retouched pieces comprise two thick, inversely retouched flakes (both broken) and a possible scraper, which has been minimally retouched on a thermal blank. Numerous utilised but unretouched edges were also noted. A total of 16 flints are burnt, mostly calcined white, and a further 19 flints are broken.

The collection was fairly evenly distributed between contexts 7001 (30 pieces) and 7002 (34 pieces); only nine chips came from context 7023. The remaining 16 chips all came from context 7002, which might reflect the inclusion of knapping waste in this deposit. No refitting material was identified, however, and the virtual absence of cores suggests that the assemblage does not contain the full range of knapping products. It is clear from the number of retouched and utilised pieces that other activities were performed with the flints before they were deposited; the predominance of scrapers in the assemblage might shed light on the nature of these activities.

5.7 Late Neolithic tree-throw hole 5125

A total of 164 struck flints, including 69 chips, were recovered from the lower fill (5127) of tree-throw hole 5125, which has been C14 dated to the late Neolithic (Table3). A further 13 pieces of burnt unworked flint were recovered from the same deposit. The assemblage is in fresh condition and most flints display a light or moderate cortication. Technologically, the assemblage is probably late Neolithic in date, and is thus consistent with the radiocarbon determination for the feature.

The collection is dominated by flakes (79 pieces), although a small number of blades, bladelets and bladelike flakes were also recovered (four pieces); in most instances, these are likely to represent either accidental removals or residual inclusions. Most pieces possess plain, unabraded platforms. Around 35% (27 pieces) of 77 assessable flints exhibit platform edge abrasion. While hard-hammer flakes are most numerous (24 pieces), soft-hammer percussion is also represented (14 flakes), suggesting a mixed hammermode.

Chips are very numerous (69 pieces) and probably reflect some *in situ* knapping activity. Although no refits were found, similarities in flint type suggest that material from the same parent nodule has been deposited. The cores themselves, however, are entirely absent from the assemblage.

The use-wear assessment detected 48 episodes of use-wear on a sample of 89 assessable pieces (53.9%), which is similar to the amount of use observed in the Grooved Ware pits (52.8%; see above). The interpretation of the assemblage would certainly benefit from more detailed use-wear analysis in the future.

5.8 Food Vessel tree-throw hole 5128

A relatively small assemblage of 36 flints was recovered from tree-throw hole 5128, which was associated with early Bronze Age Food Vessel pottery (Table 3). A further 41 pieces (107 g) of burnt unworked flint were also recovered. The material is in a fresh, heavily corticated condition. Most pieces have been manufactured from gravel flint, although chalk flint is represented in small quantities. Around 52.8% of the flints (19 pieces) are broken and a further 47.2% (17 pieces) exhibit evidence of burning. Microscopic use-wear was noted on ten of an assessable 18 pieces (55.6%).

Excluding chips (nine pieces), the assemblage is dominated by unretouched flakes (18 pieces). The flakes tend to be broad and squat in shape, and generally possess plain platforms. Several pieces of irregular waste were also recovered. Platform edge abrasion is present in approximately one in five cases. The hammermode was apparently mixed, although this is based on a small sample as most pieces (20 pieces) were of indeterminable hammermode.

With the exception of an unclassifiable burnt fragment, the assemblage lacks cores of any sort. Other elements of knapping waste, such as chips and pieces of irregular waste, are present in reasonable number. No refits were identified, although several pieces of a possibly related flint type were noted.

A total of five retouched tools were recovered from the tree-throw hole. These represent a fairly varied range of types, including simple edge-retouched flakes. Of particular note is the backed knife (Fig. 1.7) and the oblique arrowhead. The latter can be compared to Green's type d (Green 1980, 102, Fig. 38). This arrowhead type has been known to occur in Beaker contexts, but its association with Food Vessel pottery is less well documented (Green 1980, 115).

5.9 Middle and late Bronze Age features

A modest-sized assemblage of 115 struck flints (including 67 chips) was recovered from middle Bronze Age ditch 4025, erosion gullies 4873 and 5473, and late Bronze Age pit 5421

(Table 3). A further 23 pieces (127 g) of burnt unworked flint were also recovered from these features.

The material from the ditch and gullies is composed entirely of unretouched debitage (flakes, irregular waste, chips, etc.). Along with a substantial quantity of debitage, the assemblage from the pit also included one multi-platform flake core (398 g) and three edge-retouched flakes. Around 10% of flints (12 pieces) are burnt and nearly 36 % (41 pieces) broken.

5.10 Area 8088

A small assemblage of six flakes and four chips were recovered from area 8088 (Table 3). Of particular note is the hammerstone (385 g) made on a re-used multi-platform flake core from context 5417. A single piece of burnt unworked flint (2 g) was also recovered. The flintwork is associated with early Neolithic Decorated Bowl pottery but radiocarbon determinations suggest a date in the middle Bronze Age for the deposit. The flintwork is undiagnostic and could belong to an industry of either date.

5.11 Palaeosol 4144

A total of 706 struck flints (including 448 chips) were recovered from a layer of remnant palaeosol (Table 3), which extends across large areas of the southern part of the site and was heavily disturbed by ploughing activity until the Roman period.

The variable condition of the flintwork reflects its disturbed context. Several pieces are rolled with heavy post-depositional edge damage, while others remains relatively fresh. The majority of flints are heavily corticated, although the fresher pieces tend to have a much shallower cortication. Calcium carbonate concretion noted on several flints.

Gravel flint appears to have been the preferred choice of raw material, although the use of bullhead flint is also represented in small quantities. A total of four pieces, including one tested nodule, were recognisably of bullhead flint; other non-cortical pieces may be present but, without the distinctive cortex, could not be identified.

The assemblage is mainly flake-based, while the single blade that it contains has the appearance of being earlier than the majority of pieces. Most flakes have been removed with a hard-hammer percussor and a few display platform edge abrasion. The retouched component is dominated by scrapers (5 pieces) and edge-retouched flakes (4 pieces). One piercer and one notched flake were also recovered, and several unretouched edges display use-wear. The quantity of chips (448 pieces) suggest that some of the flintwork was deposited following knapping activity, although any *in situ* scatters are likely to have been dispersed by later ploughing.

Technologically, the majority of the assemblage probably dates broadly to the Neolithic or Bronze Age period. Given its wide distribution and its condition, however, the flintwork probably represents an accretion of material resulting from several phases of activity rather than a single contemporaneous deposit.

5.12 The remaining assemblage

Along with the assemblage from the palaeosol (see above), a large number of the flints from White Horse Stone occur as residual finds in features dated to the Iron Age, Roman and Medieval periods, and a considerable amount came from unphased features (Table 3). The flake-based, debitage-dominated character of this material largely reflects that of the material from elsewhere. Chips are again heavily represented.

A total of 29 cores, five of which are unclassifiable examples, are included in the remaining assemblage. Of particular note are a Levallois-style core from post-medieval pit 6110 and a keeled core from early-middle Iron Age posthole 6098; these core types have been associated with the manufacture of blanks for transverse arrowheads (e.g. Green 1974, 84). As such, they can be tentatively dated to the mid or later Neolithic. The remaining cores are also, without exception, aimed at the production of flakes using one or more platforms. Fifteen tested nodules were also recovered.

The retouched component consists of 40 pieces and represents a wide range of tool types. These include retouched flakes, scrapers, piercers, notched pieces, serrated flakes. A burin was recovered from pit 5022; this piece can be dated to the Mesolithic. The denticulated scraper from Iron Age pit 7009 probably belongs to a Bronze Age or later industry.

The assemblage also includes three hammerstones, two of which came from Iron Age burial pits 2184 and 8012. The hammerstone from pit 2184 has been heavily used and is almost completely spherical. Another well-rounded example came from pit 4531. The hammerstones are of similar weight, ranging from 381 g to 469 g.

6 PILGRIM'S WAY

A total of 825 struck flints and 24 pieces (1010 g) of burnt unworked flint were recovered from Pilgrim's Way (Tables 1 and 2). As with White Horse Stone, nearly 40% of the assemblage is provided by chips.

The flintwork was recovered from a range of features: pits, tree-throw holes, layers, ditches and postholes (Table 5). Large assemblages of flintwork were associated with Grooved Ware pottery in nine pits across the site, some of which were found in pairs and groups. A substantial amount of flint (292 pieces) came from Roman, Medieval and unphased features.

Table 5: Struck flint by phase and feature from Pilgrim's Way

Category:	MN		LN						MBA				RO	MED	U	
	PIL pits 711 and 714	Features near/within house	Tree-throw holes 861 and 909	GW paired pits 898 and 904 (19397)	GW pits 911 and 913 (19395)	GW pits 958, 962, 964 and 966 (19396)	GW pit 968	Pit 952	BA complex: possible structure	BA complex: possible 2nd group postholes	BA complex: other postholes	BA complex: pits	Roman features	Medieval and later features	Unphased features	Total:
Flake	4	1	80	35	48	67	1	4	18	-	-	1	-	27	67	353
Blade	-	-	3	-	1	3	-	1	-	-	-	-	-	1	1	10
Bladelet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Bladelike flake	1	-	13	-	1	2	-	1	-	-	-	-	-	-	2	20
Flake from ground implement	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Flake from hammerstone	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Core face/edge rejuvenation flake	1	-	1	-	3	-	-	-	-	-	-	-	-	1	-	6
Rejuvenation flake tablet	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Irregular waste	-	1	9	1	-	6	-	-	11	-	2	-	-	9	8	47
Chip	5	4	37	8	4	81	-	41	24	2	-	-	-	86	28	320
Single platform flake core	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1	3
Multi-platform flake core	-	-	1	1	-	1	-	-	-	-	-	-	-	-	1	4
Tested nodule	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Retouched flake	-	-	6	3	4	3	1	-	-	-	-	-	-	-	3	20
Retouched blade	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	2
Side scraper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
End scraper	-	-	1	-	5	1	-	-	-	-	-	-	-	-	2	9
End-and-side scraper	-	-	1	-	-	1	-	-	-	-	-	-	1	-	-	3
Scraper on a non-flake blank	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1

	MN		LN						MBA				RO	MED	U	
Category:	PIL pits 711 and 714	Features near/within house	Tree-throw holes 861 and 909	GW paired pits 898 and 904 (19397)	GW pits 911 and 913 (19395)	GW pits 958, 962, 964 and 966 (19396)	GW pit 968	Pit 952	BA complex: possible structure	BA complex: possible 2nd group postholes	BA complex: other postholes	BA complex: pits	Roman features	Medieval and later features	Unphased features	Total:
Other scraper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Backed knife	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Piercer	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-	3
Notch	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Denticulate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Serrated flake	-	-	5	-	1	1	-	-	-	-	-	-	-	-	1	8
Petit tranchet arrowhead	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Chisel arrowhead	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Unfinished arrowhead/blank	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
Unclassifiable retouch	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	2
Unclassifiable heavy implement	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Total:	12	8	161	48	71	173	2	47	53	2	2	1	1	124	167	825

6.1 Features within/near PIL structure

A total of eight struck flints, including four chips, were recovered from context 739 (Table 5). The group includes a retouched thermal fragment, which has been retouched around the perimeter of the cortical face and down one edge of the other (thermal) face. The tool is ovate in shape and exhibits slight battering to narrower end. No chronologically distinctive types were recovered to allow a date to be placed on this small collection of flints.

6.2 Peterborough Ware pits 711 and 714

A very small quantity of flintwork (12 pieces) came from pits 711 and 714, which were located near the Pilgrim's Way early Neolithic structure (Table 5). The assemblage consists almost entirely of unretouched flakes and chips, which are generally in a fresh, heavily corticated condition. A small number have been utilised. The only retouched tool is a *petit tranchet* arrowhead (Fig. 1.8) from context 709; this piece is probably contemporary with the Peterborough Ware pottery found in these pits.

6.3 Grooved Ware pits

A total of 294 struck flints were recovered from nine Grooved Ware pits (Table 6). Although substantial assemblages were recovered from pits 904, 911 and 958, many of the pits produced only small quantities of flintwork (e.g. pits 898, 962, 964, 966, and 968).

The material is in a fresh, heavily cortication condition. Most pieces have been manufactured from gravel flint, although a few pieces of chalk flint (13 flints) and bullhead flint (6 flints) are also present. The pieces of bullhead flint occurred only in pits 911, 913, 898 and 904.

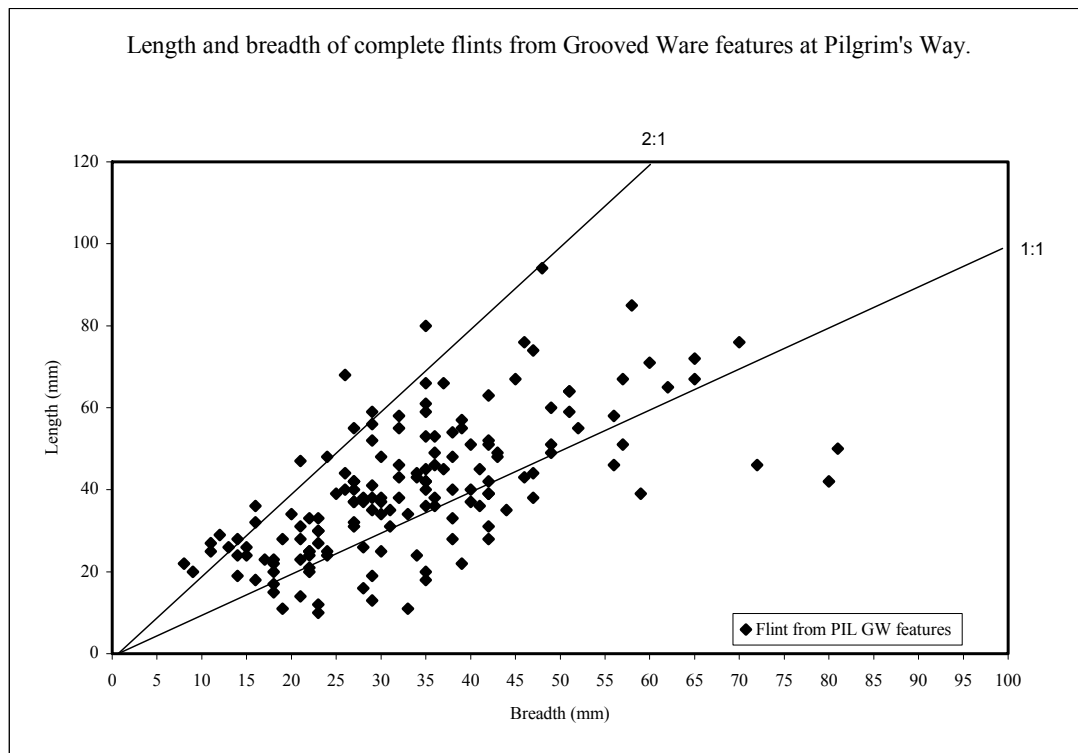
The assemblage represents an industry aimed primarily at the production of flakes; very few blades and bladelike pieces were recovered. Most of the flakes are broad and squat in form (Fig. 3.2) and, metrically, are almost indistinguishable from those at White Horse Stone (Fig. 3.1). Direct hard-hammer percussion was the normal method by which flakes were removed from the core (70 pieces); soft-hammers were less regularly used (21 pieces).

Table 7: Struck flint by type from Grooved Ware pits at Pilgrim's Way.

Category:	Pit:									Total:
	898	904	911	913	958	962	964	966	968	
Flake	8	27	33	15	49	6	5	7	1	151
Blade	-	-	1	-	2	-	-	1	-	4
Bladelike flake	-	-	-	1	1	1	-	-	-	3
Flake from ground implement	-	-	1	-	-	-	-	-	-	1
Flake from hammerstone	-	-	-	-	1	-	-	-	-	1
Core face/edge rejuvenation flake	-	-	1	2	-	-	-	-	-	3
Rejuvenation flake tablet	-	-	1	-	-	-	-	-	-	1

Irregular waste	-	1	-	-	3	-	1	2	-	7
Chip	-	8	4	-	81	-	-	-	-	93
Single platform flake core	-	-	-	-	1	-	-	-	-	1
Multi-platform flake core	1	-	-	-	1	-	-	-	-	2
Retouched flake	3	-	3	1	2	-	-	1	1	11
Retouched blade	-	-	1	-	-	-	-	-	-	1
End scraper	-	-	3	2	1	-	-	-	-	6
End-and-side scraper	-	-	-	-	-	-	-	1	-	1
Scraper on a non-flake blank	-	-	-	-	1	-	-	-	-	1
Piercer	-	-	1	-	1	-	-	-	-	2
Notch	-	-	-	-	1	-	-	-	-	1
Serrated flake	-	-	1	-	-	-	1	-	-	2
Chisel arrowhead	-	-	-	-	1	-	-	-	-	1
Unclassifiable retouch	-	-	-	-	1	-	-	-	-	1
Total:	12	36	50	21	147	7	7	12	2	294
Total number of burnt struck flints:	-	1	2	2	8	-	-	1	-	14
Total number of broken struck flints:	-	10	10	2	45	2	2	3	-	74

Fig. 3.2: Length and breadth of complete flints from Grooved Ware features at Pilgrim's Way.



A careful knapping strategy is reflected in the frequency of platform edge abrasion, which is present on 58 flints (34.7% of assessable pieces). A small number of rejuvenation flakes are present in the assemblage, indicating periodic attempts to adjust the platform between episodes of flaking.

There are nearly as many side- and distal-trimming flakes as non-cortical removals in the assemblage, suggesting that flakes with naturally-backed edges were often preferred for

utilisation. Preparatory flakes are under-represented (15 pieces), indicating that decortication waste was, for the most part, deposited elsewhere.

The presence of knapping microdebitage is confirmed by the retrieval of considerable numbers of chips. Evidence that elements of the same knapping sequence were deposited together is provided by three groups of knapping refits (Figs. 2.6, 2.7 and 2.8), one of which involves a refit between pits (Fig. 2.7). In this particular case, one of the flakes is in very fresh condition while the other is more worn; this implies that there was a delay, involving exposure, before the second flake was deposited. The two conjoining parts of a utilised blade were also recovered (Fig. 2.9).

Only three cores are present in the assemblage. These were all used for the production of flakes and have an average complete weight of 166.3 g. The Grooved Ware flint assemblage from White Horse Stone contains proportionally more cores than that from Pilgrim's Way, which may be significant of differences in the types of activity undertaken at each site.

A total of 27 retouched tools were recovered from the site (13.4% excluding chips). This component is dominated by edge-retouched flakes and blades (12 pieces) (e.g. Fig. 1.10) and by scrapers (8 pieces), particularly of the end scraper variety (e.g. Figs. 1.11 and 1.12). Serrated flakes are, however, comparatively under-represented (2 pieces). This is a reversal of the situation at White Horse Stone, where edge-retouched and serrated flakes dominate almost to the exclusion of scrapers. This is likely to reflect real differences in activity between the two sites. Other retouched types include one broken chisel arrowhead, two piercers (Figs. 1.14 and 1.15) and one notched flake.

Very little of the flintwork is burnt (14 pieces or 4.8%), particularly compared to the Grooved Ware associated flint assemblage from White Horse Stone where 57 pieces or 8% exhibit signs of burning (see Table 4). There is also less breakage in the Pilgrim's Way assemblage (74 pieces or 25.5%) compared to that from White Horse Stone (254 pieces or 35.6%). Again, this may reflect differences either in activity or in the process of deposition. The proportion of utilised pieces in each assemblage is, however, comparable: 55.6% for Pilgrim's Way compared to 52.8% for White Horse Stone. Further use-wear analysis at a more detailed level would help establish whether the compositional differences in the assemblages are truly a reflection of differences in activity and, if so, what these differences are.

Table 6: Struck flint by type from Grooved Ware pits at Pilgrim's Way.

Category:	Pit:									Total:
	898	904	911	913	958	962	964	966	968	
Flake	8	27	33	15	49	6	5	7	1	151
Blade	-	-	1	-	2	-	-	1	-	4
Bladelike flake	-	-	-	1	1	1	-	-	-	3
Flake from ground implement	-	-	1	-	-	-	-	-	-	1
Flake from hammerstone	-	-	-	-	1	-	-	-	-	1
Core face/edge rejuvenation flake	-	-	1	2	-	-	-	-	-	3
Rejuvenation flake tablet	-	-	1	-	-	-	-	-	-	1
Irregular waste	-	1	-	-	3	-	1	2	-	7
Chip	-	8	4	-	81	-	-	-	-	93
Single platform flake core	-	-	-	-	1	-	-	-	-	1
Multi-platform flake core	1	-	-	-	1	-	-	-	-	2
Retouched flake	3	-	3	1	2	-	-	1	1	11
Retouched blade	-	-	1	-	-	-	-	-	-	1
End scraper	-	-	3	2	1	-	-	-	-	6
End-and-side scraper	-	-	-	-	-	-	-	1	-	1
Scraper on a non-flake blank	-	-	-	-	1	-	-	-	-	1
Piercer	-	-	1	-	1	-	-	-	-	2
Notch	-	-	-	-	1	-	-	-	-	1
Serrated flake	-	-	1	-	-	-	1	-	-	2
Chisel arrowhead	-	-	-	-	1	-	-	-	-	1
Unclassifiable retouch	-	-	-	-	1	-	-	-	-	1
Total:	12	36	50	21	147	7	7	12	2	294
Total number of burnt flints:	-	1	2	2	8	-	-	1	-	14
Total number of broken flints:	-	10	10	2	45	2	2	3	-	74

6.4 Late Neolithic tree-throw holes 861 and 909

An assemblage of 161 struck flints and a single piece (3 g) of burnt unworked flint was recovered from tree-throw holes 861 and 909 (Table 5). The material is in a fresh, heavily corticated condition and is mainly of gravel flint manufacture. An unusually high number of bullhead pieces were recovered from both tree-throw holes (8 from 861 and 6 from 909). Two of these were found to refit (Fig. 2.4).

The assemblage is flake-based and includes 37 chips. Most of the flakes are broad and squat in shape. As would be expected, the previous removals are also generally of flake dimensions. Non-cortical removals are the largest category of removal type (53 pieces), although trimming flakes of side, distal and miscellaneous varieties are, as a group, equally abundant. Comparatively few preparatory flakes are present (11 pieces). Of 94 assessable pieces, platform edge abrasion is present in about a third of cases. Both hard- and soft-hammer removals are represented, with a slightly greater presence of hard-hammer struck flakes (34 pieces compared to 14 pieces). The most common butt types are plain (54 pieces) and cortical (14 pieces).

The assemblage contains two flake cores, one of single platform type (82 g) and one of multi-platform type (62 g). The latter has been made on a small cobble of bullhead flint.

The retouched component (12.9% excluding chips) is dominated by edge-retouched flakes (6 pieces) and serrated flakes (5 pieces). One of the serrated flakes has been made on a piece of bullhead flint (Fig. 1.9). Scrapers are less common, represented by two pieces including a burnt conjoining example from tree-throw hole 861 (Fig. 2.5). In general, however, very few flints have been burnt (seven pieces), while a relatively high proportion of the assemblage has been utilised (64 of 117 assessable flints).

Of further note is the possible arrowhead roughout from tree-throw hole 909. The blank has been snapped obliquely at the distal end and the striking platform has been removed with light bifacial retouch. It may represent an unfinished chisel arrowhead, which would be consistent with the likely later Neolithic date of the flintwork.

6.5 Late Neolithic pit 952

An assemblage of 47 struck flints and one piece (3 g) of burnt unworked flint was recovered from two deposits within pit 952 (Table 5). The collection is largely composed of chips (41 pieces), including one example struck from bullhead flint, along with a small number of unretouched flakes and blades.

The flintwork is in reasonably fresh condition and mostly heavily corticated. One blade and two of the flakes have been carefully struck and display platform edge abrasion; these pieces may belong to an industry of broadly Neolithic date. No cores or retouched tools were recovered and, as a group, the flintwork cannot be closely dated.

6.6 Middle Bronze Age features

A small assemblage of 58 struck flints was recovered from pits and postholes associated with middle Bronze Age settlement activity at Pilgrim's Way (Table 5). The assemblage consists entirely of flakes, chips and pieces of irregular waste. No retouched tools were recovered and only a very small proportion of the assemblage (2 pieces) has been utilised.

Most of the flakes are thick and squat in shape, and have been struck using direct hard-hammer percussion from a plain, unabraded platform. These technological traits are consistent with a later Bronze Age industry (Young and Humphrey 1987, 233). It is therefore likely that, despite the absence of diagnostic tool types, some or all of the flintwork is contemporary with the middle Bronze Age features from which they came.

6.7 The remaining assemblage

A further 292 struck flints were recovered from Roman, Medieval and unphased features (Table 5). This component consists mainly of flakes and chips, although a small number of

blades and bladelets are present. Cores are represented by two examples, both of which have been aimed at the production of flakes.

A total of 11 retouched tools were recorded. Simple edge-retouched flakes and scrapers (e.g. Fig. 1.13) are most common. One serrated flake (context 971) and one denticulated flake (natural layer 923) were also recovered; the latter may be Bronze Age in date. Also of note is the lozenge-shaped backed knife from context 971, which exhibits shallow semi-invasive retouch and rounded use-wear to the length of the right-hand edge. This piece can be attributed to the late Neolithic or early Bronze Age. Much of the remaining material is probably also of broad Neolithic or Bronze Age date.

7 EAST OF BOARLEY FARM

A total of seven struck flints and five pieces (54 g) of burnt unworked flint were recovered from the East of Boarley Farm site (Tables 1 and 2). The material came from colluvium (1001), the upper fill of a ditch (1013) and layers (1027, 1028). The broken leaf-shaped arrowhead (Fig. 1.1) from the colluvium can be dated to the earlier Neolithic; the remaining flintwork is chronologically undiagnostic.

8 WEST OF BOARLEY FARM

Excavation of the West of Boarley Farm site yielded a total of 14 struck flints and two pieces (27 g) of burnt unworked flint (Tables 1 and 2). The assemblage, which consists mostly of chips, was thinly spread across pit fills 1021, 1030, 1037 and 1041. These fills belong to pits dated to the Anglo-Saxon period and later, and thus the flintwork is almost certain to be residual.

9 DISCUSSION

The assemblage from the White Horse Stone group of sites provides valuable evidence for activity in the early and late Neolithic period. Of particular note are the flint assemblages associated with the Neolithic structures at both White Horse Stone and Pilgrim's Way. Although large numbers of chips were retrieved through sampling, only a small quantity of flints greater than 10mm² were recovered. This suggests that activities involved with the production and use of flint tools were sighted at some distance from the structures or that a deliberate effort was made to keep the buildings free of the larger elements of waste.

While technological and metrical similarities suggest a shared flintworking tradition, there are noticeable differences in the composition of the Grooved Ware flint assemblages. The pits and tree-throw holes at White Horse Stone contained a greater number of serrated flakes and cores than those from Pilgrim's Way, and are also marked by a higher proportion of burnt and broken flints. Although chronological factors may be partly responsible for the

observed differences, aspects such as site function and the spatial organisation of activity are also likely contributors.

10 BIBLIOGRAPHY

Bradley, P, 2001. *Worked and burnt flint* in White Horse Stone, Aylesford, Kent: detailed archaeological works assessment report, 96-111.

Ford, S, 1987 Chronological and functional aspects of flint assemblages in *Lithic analysis and later British Prehistory* (A Brown and M Edmonds eds) BAR British Series **162**, 67-81

Green, H S, 1974. Early Bronze Age burial, territory and population in Milton Keynes, Buckinghamshire, and the Great Ouse Valley. *Archaeol J* **131**, 75-139

Green, S H, 1980 *The flint arrowheads of the British Isles*. BAR British Series **75 (I)**

Pitts, M W, and Jacobi, R M, 1979 Some aspects of change in flaked stone industries of the Mesolithic and Neolithic in southern Britain, *J. Archaeol. Sci.* **6 (2)**, 163-177

Shepherd, W, 1972 *Flint. Its origin, properties and uses*, London, Faber and Faber

Table 7: Catalogue of flint illustrated in Fig. 1.

No.	Event code:	Feature:	Context:	ID/SF no.	Category:	Description:
1.1	ARC BFE98	Colluvium	1001	SF 1000/ AG-3405	Leaf-shaped arrowhead	Fairly minimal retouch. Invasive on both sides of dorsal surface; confined to tip and butt areas of ventral surface. Tip and butt slightly broken. Green's type 2b.
1.2	ARC WHS98	E. Neolithic feature [4917] S. of house	4918	AG-776	Backed knife	Broad tertiary flake with inverse retouch on both lateral margins. Small area of direct retouch to proximal right-hand edge. Use-wear and ventral gloss on left-hand edge. Distal break.
1.3	ARC WHS98	Grooved Ware pit [4943]	4944	AG-1826	Chisel arrowhead	Small chisel arrowhead, made on distal section of flake. Abrupt retouch on left- and right-hand edges. 'Hooked' form, similar to Green's type d.
1.4	ARC WHS98	Grooved Ware pit [4994]	4996	AG-757	Serrated blade	Long distal-trimming blade with very neat serrations to length of left-hand edge, 12 teeth/10mm. No gloss.
1.5	ARC WHS98	Grooved Ware tree- throw hole [5072]	5073	AG-956	Side scraper	Made on side-trimming flake. Abrupt, curving retouch to right-hand edge.
1.6	ARC WHS98	Pit [7000]	7002	AG-2285	End-and-side scraper	Almost a disc-scraper. Semi-abrupt retouch curving across distal end, right-hand edge and proximal end.
1.7	ARC WHS98	Food Vessel tree- throw hole [5128]	5130	AG-1066	Backed knife	Slightly worn condition. Large tertiary blade with continuous direct retouch to right-hand edge; further short length of retouch to distal left-hand edge. Use-wear.
1.8	ARC PIL98	House posthole [711]	709	AG-3191	Petit tranchet arrowhead	Neatly made using abrupt, crossed retouch.
1.9	ARC PIL98	L. Neolithic tree- throw hole [861]	862	AG-2931	Serrated flake	Made on bladelike flake of bullhead flint. Well-defined serrations on left-hand edge, c. 9 teeth/10mm. Ventral gloss.
1.10	ARC PIL98	Grooved Ware pit [911]	912	AG-3004	Retouched blade	Broad secondary blade with slightly invasive, inverse retouch to medial area of left-hand edge. Heavy use-wear. Probably functioned

No.	Event code:	Feature:	Context:	ID/SF no.	Category:	Description:
						as knife.
1.11	ARC PIL98	Grooved Ware pit [911]/[913]	912/914	AG-3009	End scraper	Made on plunging, bladelike tertiary flake with platform dressing. Neat, semi-abrupt retouch to distal end.
1.12	ARC PIL98	Grooved Ware pit [911]	924	AG-3061	End scraper	Made on thick side-trimming flake of bullhead flint. Semi-abrupt, invasive retouch to distal end. Appears to have been re-sharpened - exhibits an understorey of stepped retouch removals. Use-wear.
1.13	ARC PIL98	Roman ditch [903]	902	AG-2971	End-and-side scraper	Made on small tertiary flake. Abrupt retouch to distal end; semi-abrupt to left-hand edge. Lightly worn condition, with some edge-damage.
1.14	ARC PIL98	Grooved Ware pit [911]	924	AG-3048	Piercer	Finely made piercer, retouched on proximal end of broad, thin, tertiary flake. Abrupt direct retouch forming point c. 20mm long and 6mm wide.
1.15	ARC PIL98	Grooved Ware pit [958]	959	AG-3281	Piercer	Made on thick secondary flake. Abrupt retouch along left-hand edge with inverse retouch on right, isolating robust point at distal end.

Table 8: Catalogue of flint photographed in Figure 2.

No.	Event code:	Feature:	Context:	ID no.	Category:	Description:
2.1	ARC WHS98	Grooved Ware pit [4943]	4944, 4945	AG-1820, AG-753	Refitting flakes (ZZ-4)	Knapping refit between 2 large distal-trimming flakes, struck from same platform. Cherty flint with orange, iron-stained cortex. Very fresh condition.
2.2	ARC WHS98	Grooved Ware pit [4965]	4969	AG-1847, AG-1864	Refitting flakes (ZZ-18)	Knapping refit between 2 distal-trimming flakes, struck from same platform. Upper bladelike flake with inverse retouch on right-hand edge. Both utilised.
2.3	ARC WHS98	Grooved Ware pit [4994]	4996	AG-777, AG-806	Conjoining flake (ZZ-13)	Conjoin between 2 halves of flake, refitting along sirt fracture.
2.4	ARC PIL98	L. Neolithic tree-throw hole [861]	862	AG-2948, AG-3170	Refitting flakes (ZZ-3)	Knapping refit between 2 flakes of bullhead flint. Struck from same platform, with some platform edge abrasion.
2.5	ARC PIL98	L. Neolithic tree-throw hole [861]	862	AG-2930, AG-2933	Conjoining end scraper (ZZ-2)	Conjoin between 2 halves of finely and invasively retouched end scraper. Burning break, with distal fragment more heavily calcined than proximal piece.
2.6	ARC PIL98	Grooved Ware pit [904]	906	AG-2973, AG-2974	Refitting flakes (ZZ-7)	Knapping refit between 2 large flakes struck from same platform with some platform edge abrasion. Thick but stained cortex.
2.7	ARC PIL98	Grooved Ware pit [911] and pit [911]/[913]	924, 912/914	AG-3045, AG-3388	Refitting flakes (ZZ-8)	Knapping refit between two side-trimming flakes, struck from same platform. Upper flake significantly more worn than lower flake.
2.8	ARC PIL98	Grooved Ware pit [911]	924	AG-3039, AG-3064	Refitting flakes (ZZ-9)	Knapping refit between 2 flakes of a fine-grained, densely corticated flint with thermal areas on dorsal surface. Struck from same direction but one platform higher than the other suggesting intermediate period of platform flaking.
2.9	ARC PIL98	Grooved Ware pit [911]/[913]	912/914	AG-3384, AG-3390	Conjoining flake (ZZ-8)	Side-trimming, ?soft-hammer blade snapped medially.