APPENDIX 1 - GLASS

1.1 Assessment of the Glass

by Hilary Cool

Introduction

- 1.1.1 A total of 94 items of glass were recovered from excavation works at Thurnham Roman Villa and Hockers Lane (ARC THM 98 and WBSDI ARC 420 99 62+200-63+000). Only one fragment of glass was recovered from Hockers Lane, and as this was a base fragment from a modern bottle it will not be further considered.
- 1.1.2 The majority of the glass was recovered by hand excavation with only 10 items being retrieved from samples. Therefore the majority of the assemblage can be identified by form. Vessel glass from samples is frequently too small for any useful analysis.
- 1.1.3 The recovery and study of glass was undertaken in accordance with the Fieldwork Event Aims for the site, which are set out in section 2 of the main report, above. The recovery of this material was undertaken to contribute towards establishing a dated occupation sequence for the villa's development and determining the status, economic orientation and patterns of contact and trade of the site.

Methodology

1.1.4 As the assemblage was relatively small, all the glass was inspected. A basic archive catalogue was created following the guidelines set out by the Roman Finds Group and Finds Research Group (RFG & FRG 1993). This will provide sufficient information about the less diagnostic fragments for a full catalogue at the analysis stage, and the fragments themselves would not need to be inspected again.

Quantification

1.1.5 The glass is summarised in Table 3.1 and the range of Roman material is briefly described in the sub-sections that follow. One of the modern bottle fragments originated in Phase 3 context 20051, and must therefore be intrusive. Table 3.2 provides dating and descriptions for glass from all contexts.

The Roman vessel glass

- 1.1.6 The vessel glass is dominated by blue/green bottle fragments (Isings Form 50 and 51). Most come from the prismatic (probably square) form but there is also at least one hexagonal and one cylindrical bottle present. Fragments from the general prismatic form cannot be closely dated within the 1st to 3rd century period, but cylindrical and large hexagonal bottles went out of use early in the 2nd century.
- 1.1.7 A range of vessel types including tablewares is represented amongst the other fragments. Based on an inspection of the types and colours present, 1st to early 2nd century material was recovered from contexts 10413 (area of the 14-post structure), 20174 (fill of ditch 20400), and the interior of the main villa house (contexts 20048 and 20058); 2nd and 3rd century material from contexts 10487 and 11331 (boundary ditch group 10610), and the area of the Aisled Building (contexts 15186 and 15188); and 4th century material came from the area of the 14-post structure (contexts 10338 and 10339), 10347 (gully group 11240), demolition/collapse east of the temple (context 10934), and the surface/well area area west of the Aisled Building (contexts 11394 and 12361). It is noticeable that forms that are normally

very numerous during the later 2nd to 3rd centuries, such as the cylindrical cup of Isings Form 85b, have not been identified.

1.1.8 In general the vessel types are common ones but two are worthy of special note as being uncommon: a shallow dish of possible 2nd to 3rd century date from 10487 (boundary ditch group 10610) and a 4th century cylindrical bottle with faceted decoration from 11394 (the surface/well area west of the Aisled Building). The latter indicates a considerably later date for the context than the pottery spot date has provided.

Window glass

1.1.9 The only fragment of window glass came from context 10772 (late Roman rubble spread south of the main villa building) and was of the 4th century blown variety

Objects

- 1.1.10 Most of the glass objects are beads. They include a 1st to early 2nd century frit melon bead (context 20089, main villa house interior), and two glass beads of common types that are not closely datable within the Roman period (contexts 11394, Aisled Building, and the temple, 10870). Tiny beads such as those found in the soil sample from the backfill of the infant grave have most often been found in 4th century graves. The most unusual item is a fragmentary polychrome bead from 20058 (main villa house interior). On initial inspection this appears to have far more in common with the large gaudy beads of the later 5th to 7th century period, than to any Roman bead. Given the closely dated context it comes from, however, a Roman date seems to be required for it.
- 1.1.11 The only other glass object is a plano-convex artefact from context 20002 (main vill house interior). This seems too small to be a counter, and is likely to be a setting probably from a finger-ring. A 2nd century date would be most likely for this piece.

Provenance

1.1.12 Approximately 75% of the assemblage comes from phased contexts but there are no significant concentrations of material, and it will be apparent from context listings above that glass was found in all areas of the site. The glass associated with primary occupation deposits or features tends to be either from blue/green bottles or is relatively undiagnostic. A complete unguent bottle rim from the backfill of ditch 20400 (context 20174) is of some interest as this is from a type that goes out of use during the Flavian period. These were disposable containers valued for their content, and examples are unlikely to have remained in use into the 2nd century. This piece may provide valuable evidence for the dating of this deposit and the occupation of the proto-villa.

Conservation

1.1.13 This Roman glass is chemically stable and needs no conservation input. The glass is in good condition and will not have suffered from differential preservation on different parts of the site. The current packaging is adequate for long term storage. It is not normal practice to discard Roman glass.

Comparative material

1.1.14 Glass is recorded as having been found during excavations at Thurnham Villa in 1933 (Ashbee 1986, 153), but the descriptions provided are not sufficient for the forms to be identified. Approximately 35-40 fragments of vessel glass and one bead are now in the Maidstone Museum and could be studied.

- 1.1.15 There is a growing published corpus of Roman glass from domestic sites in Kent. The biggest assemblages are those from Canterbury (Shepherd 1995) and the villa at Lullingstone (Cool and Price 1987), but many other sites have produced smaller assemblages, for example, Springhead (Charlesworth 1958; 1959; 1960 *etc*). In addition to these the OAU excavations at Westhawk Farm Ashford, Kent have produced a moderate sized assemblage of fragments. These are due to be assessed this summer and will thus also be available for consideration.
- 1.1.16 No comparable assemblages are known to the author from other CTRL sites. A small quantity of glass (probably mostly beads) is reported from the cemetery at Pepper Hill/Waterloo Connection, and this should provide some comparative material. No glass is reported from the Late Iron Age/early Roman site at Northumberland Bottom. Glass beads are likely to occur in the Anglo-Saxon cemetery at Cuxton, although it is reported that no vessel glass fragments have been found there (URS 1999). Anglo-Saxon glass beads and vessels have been recovered from Saltwood.

Potential for further work

CTRL Landscape Zone Priorities and Fieldwork Event Aims

- 1.1.17 The glass from this site can contribute to the original Fieldwork Event Aims by assisting with dating the occupation sequence for the villa's development. In many cases where the fragments are relatively closely dated they agree with pottery spot dates, although in some instances the glass will refine the dating suggested by the pottery. As noted above (3.1.8) in one context (11394, the spread west of the Aisled Building) there is a wide discrepancy between the pottery and the glass dates, with the latter suggesting the context is later than proposed. A similar discrepancy is noted in context 10934, from the temple. In addition, closely datable fragments have been found in contexts that are unphased and/or without spot dates (such as Finds Reference context numbers 10338-9, from the area of the 14-post structure). Further integrated analysis would be carried out to review the dating of glass from problem contexts in conjunction with the dating of other artefacts present.
- 1.1.18 The glass will also assist in establishing the status, economic orientation and patterns of contact and trade of the settlement. The normal patterns of vessel glass usage on different types of sites (Cool and Baxter 1999) have begun to be established. The pattern seen at Thurnham in the later 1st to early 2nd century seems to be what can be expected on a relatively modest rural site. Unusually, there is little glass that can be assigned to the later 2nd to 3rd centuries. This might suggest either that the rubbish associated with this period was being disposed of elsewhere, or there was a diminution in the glass supply to the site.
- 1.1.19 It would be most helpful to examine the glass from the 1933 excavations to see if this pattern holds true for the rest of the assemblage. If so, it will be possible to explore the phenomenon by establishing whether the common varieties were normally available in the broad locality. This would be achieved by examining comparable assemblages from sites such as those noted above. The results, in conjunction with information about the contemporaneous supply of pottery to the site, would be likely to provide insights into the degree of prosperity at Thurnham, as well as its patterns of contact and trade. The lack of a single fragment of window glass of the type that would have been contemporaneous with the stone villa, suggests the building may have been modest and lacked glazed windows.

New research aims and objectives for the CTRL archaeology project

1.1.20 The pattern of use of glass in Roman Britain, on different sites at different times, is being investigated as noted above (3.1.18). A distinct difference between rural and

urban sites can be discerned but exploring it fully is problematic because the glass from such sites has often not been studied in detail (Cool & Baxter 1999, 84) The production of a quantified catalogue of the vessel glass from this site would thus be a valuable addition to our knowledge and contribute to future synthetic study.

- 1.1.21 The comparable sites suggested in 3.1.16 above will provide a very valuable group of small rural quantified assemblages from this area. These can eventually be compared to similar groups of assemblages elsewhere. The present author has worked on and quantified similar groups from Bedfordshire, West Yorkshire and Merseyside, and it is clear that regional differences are starting to emerge.
- 1.1.22 The two uncommon vessel fragments and the polychrome bead described above will make a valuable contribution to the *corpus* of glass vessels and beads known from Britain, especially as the bead and the dish are stratified and can thus be independently dated.

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Table 3.1: Thurnham Roman Villa ARC THM 98: Glass fragments identified

Type	Date	Number	Comments
Blue/green bottle fragments	RO	49	1st to mid 3rd century
			AD
Vessel fragments	RO	35	
Window Glass fragments	RO	1	
Glass Objects	RO	7	
Bottle fragments	MO	3	

Table 3.2: Thurnham Roman Villa ARC THM 98: Glass, contexts, dating and description

Context	Sf No	Sample	Phase	Count	Type	Period	Date Range	Comments
10015	10021		Medieval	1	Bottle	PM	Late C17-C18	Green
10307	10074		?2		Square	RO	C1-C3	Blue/green body
					bottle			fragment
10331	10080			1	Vessel	RO	C1-C3	Blue/green body
								fragment
10338	10085			1	Vessel	RO	C4	Greenish bubbly, body
								fragment
10339	10086			1	Vessel	RO	C4	Greenish bubbly, trailed
								body fragment
10347	10093		5	1	Vessel	RO	C4	Green bubbly body
					-			fragment
10407	10611		4-5	1	Square	RO	C1-C3	Blue/green body
10412	10(12		2.4	1	bottle	D.O.	I C1 F C2	fragment
10413	10613		2-4	1	Jug	RO	L C1- E C2	Dark yellow/brown;
								handle fragment, centra
10413	10612		2-5	1	Vessel	RO	C1 - E C2	Dark yellow/brown;
10413	10012		2-3	1	VESSEI	KO	C1 - E C2	body fr, ribbed
10461	10247			1	Square	RO	C1-C3	Blue/green body
10401	10247			1	bottle	KO	C1-C3	fragment
10487	10413		3-4	1	Conical	RO	C2-C3?	Blue/green rim
10107	10113		5 1	1	dish	RO	02 05:	fragment, fire-rounded
10487	10362		3-4	1	Base	RO	C2-C3	Blue/green, pushed in
								base ring
10518	10634			1	Bottle	RO	C1-C3	Blue/green cylindrical
								neck
10609	10412		3-4	1	Square	RO	C1-C3	Blue/green base
					bottle			fragment
10634		10027	4	2	Bead			2 tiny dark blue
10643	10520		2	16	Cylindri	RO	Late C1/ Early	Blue/green base & body
					cal		C2	fragments
					bottle			
10643	10520		2	1	Square	RO	C1-C3	Blue/green body
					bottle			fragment
10657	10432			8 +	Vessel	RO	C1-C3	Blue/green body
				chips				fragments
10772	10651				Window		C4	Green; blown
10870	10623		2-?4	1	Annular	RO		Blue/green fragment
					bead			
10934	10691		4-5	1	conical	RO	C4	Green-tinged colourless
10026	10055			1	beaker	D.O.	G1 G2	rim fragment
10936	10957		2	l I	Vessel	RO	C1-C3	Blue/green body
11022	10422		4	1	Prismati	RO	C1-C3	fragment Blue/green shoulder
11033	10422		4	1	c bottle	KO	C1-C3	fragment
11044	10574		5	2	Bottle	RO	C1-C3	Blue/green strain-
11044	103/4		3	3	Dome	KO	01-03	cracked chips
11044	10488		5	2	Bottle?	RO	C1-C3	Blue/green strain-
11011	10100				Bottle:	RO	C1 C5	cracked chips from rim
								?
11083		10023		1	Vessel	RO	C4?	Light green; body
								fragment
11107	10526			1	Prismati	RO	C1-C3	Blue/green body
					c bottle			fragment
11155	10532		?3-4	1	Prismati	RO	C1-C3	Blue/green body
					c bottle			fragment
11311	10728			2	Vessel	RO	C1-C3	Blue/green body
								fragment
11331	10749			3	Vessel	RO	C2-C3	Colourless body
								fragment

Context	Sf No	Sample	Phase	Count	Type	Period	Date Range	Comments
11346	10755		?2	1	Prismati	RO	C1-C3	Blue/green body
11252	10752		92	1	c bottle	DO.	C1-C3	fragment
11353	10753		?2		Chip	RO		Blue/green
11374	10405			1	Hexago nal	RO	C1-C2	Blue/green body fragment
					bottle			nagment
11376	10397			1	Chip	RO	C1-C3	Blue/green
11394			?2		Bottle	RO	C4	Greenish colourless;
								lower body & base
								cylindrical. Facet-cut
11394			?2		Bead		~. ~.	Opaque green; ovoid
11507	10789		4	2	Prismati c bottle	RO	C1-C3	Blue/green shoulder fragments
11738			Modern	1	Bottle	MO	Early C19-	Dark green.
11750			111040111		Bottle		Mid C19	Cylindrical; base
12361	10980		5	1	Vessel	RO	C4	Greenish colourless;
								body fragment
12363			3-4	1	Bottle?	RO	C1-C3	Blue/green body
12444		10415	21_2	1	Vessel	RO	C1-C3	fragment, melted Blue/green body
12444		10413	: 1-2	1	V CSSCI	KO	C1-C3	fragment; 2 abraded
								bands
12455	11012		2	1	Flask	RO	C1-C3	Blue/green cylindrical
12710					-	7.0	G1 G2	neck
12540			2	1	Jug, flask, jar	RO	C1-C3	Blue/green rim fragment, rolled
15001	10998		4	1	Vessel	RO	C1-C3	Blue/green body
13001	10,,0				V CSSC1			fragment
15001	10897		4	1	Square	RO	C1-C3	Blue/green shoulder
					bottle			fragment
15001	10897		4	1	Prismati c bottle	RO	C1-C3	Blue/green body
15001	10973		4	1	Prismati	RO	C1-C3	fragment Blue/green body
13001	10773				c bottle	RO	C1-C3	fragment
15007	10887		?3-4	1	Vessel	RO	C1-C3	Blue/green body
						_		fragment
15016	10826			1	Vessel	RO	C1-C3	Blue/green body
15017	10821			1	Bottle	RO	C1-C3	fragment blue/green handle
13017	10021				Bottle	ito	61 65	fragment
15090	10852		3	1	Bottle	RO	C1-C3	Blue/green neck
								fragment
15106	10853		?5	1	Mortar			With small area of vitrification, cf fuel-ash
								slag
15133		10280	?5	1	Vessel	RO	C1-C3	Blue/green body
								fragment
15186		10364	3/4	1	Vessel	RO	C2-C3	Colourless; body
15106				1	Voss 1	DM: MO	C10+	fragment
15186 15188					Vessel	PM; MO		Body fragment
13188	11010			1	Vessel	RO	?c2-C3	Colourless body fragment, heat affected
15201		10328		1	Vessel	RO	C1-C3	Blue/green body
								fragment
15207	10928		4?	1	Prismati	RO	C1-C3	Blue/green body
15214		10414	2	1	c bottle	DO.	C1 C2	fragment
15214		10414	3	1	Jug	RO	C1-C3	Blue/green, edge of handle
15263	11001		4	1	Prismati	RO	C1-C3	Blue/green body
					c bottle			fragment
15263	10991		4	1	Prismati	RO	C1-C3	Blue/green body
20001		10050		1	c bottle	D.C.	C1 C2	fragment
20001		10050	3	<u>l</u>	Vessel	RO	C1-C3	Blue/green body

Context	Sf No	Sample	Phase	Count	Type	Period	Date Range	Comments
								fragment
20002	10721		3	1	Setting			Dark green/blue appearing black, plano- convex
20008	10823		3	3 1	Melted fragmen t	RO	C1-C2?	Light yellow/green, melted
20048	10972		4	1	Jug	RO	C1-C2?	Blue/green; rod handle
20051	10762		3	3 1	Bottle	МО	C19-C20	olive green neck fragment
20058		10093	Early 5		Chips	UN	undatable	Colourless
20058		10093	Early 5	1	Vessel	RO	C1-C2?	Yellow/brown body fragment
20058	10797		Early 5	1	Bead?	EM	C5-C7?	Fragment, polychrome with opaque turquoise, yellow & white on b/g core
20079				1	Square bottle	RO	C1-C3	Blue/green base
20089	10832		Early 5	1	Melon bead	RO	C1-M C2	Frit, one quarter
20127	10940			1	Prismati c Bottle	RO	C1-C3	Blue/green body fragment
20174	11005		3	3 1	Unguent bottle	RO	Mid C1-Late C1	Blue/green; sheared rim fragment
20174	10886		3	3 1	Prismati c bottle	RO	C1-C3	Blue/green body fragment
20188				1	Prismati c bottle	RO	C1-C3	Blue/green prismatic body fragment