

## Wimpole bottles

During the 2011 Wimpole excavations a large number of broken wine bottles were recovered. There were 47 bottle bases and 48 necks . all were found embedded in mortar at the base of a buttress and under the adjoining clunch wall (Photographs 1 and 2). They appeared to have been used as foundation material.

The glass was mainly dark green in colour with vitrified surfaces, although there were also several small fragments of a lighter blue glass. No intact bottles were recovered. This note looks at the potential dating evidence provided by this find.



*Photograph 1. View showing the buttresses joined to the clunch wall, with the bottles visible above the measuring stick (photograph courtesy of Mike Coles)*

### Necks of the bottles

The bottle necks were comparatively short and had sloping shoulders. They also had one or two well defined ridges around the top of the neck known as 'string rims', as shown in Photographs 3 . 7 below (all courtesy of Robert Skeen). Bottle necks can provide diagnostic evidence which helps to date them.



*Photograph 2. Close up of the bottle fragments (photograph courtesy of Robert Skeen)*

Prior to the 1760s, bottle necks generally had a single string rim but then the necks began to be tooled back to form a lip which effectively creates a double string rim (Jones 1986, 33). This may have been intended to make them less

likely to break when .bottles were opened.



*Photograph 3. Double string neck*



*Photograph 4. Short single string neck*



*Photograph 5. Double string neck*



*Photograph 6. Double string neck*



*Photograph 7. Single string neck*

As can be seen, the necks are generally tapering and this is consistent with an 18<sup>th</sup> C date. Tapered necks predominated before 1770 but continued to be made after that date alongside more cylindrical shapes (Jones 1986, 47).

The string necks of the bottles recovered from Wimpole fell into 5 distinct types (as shown in Figure 1).

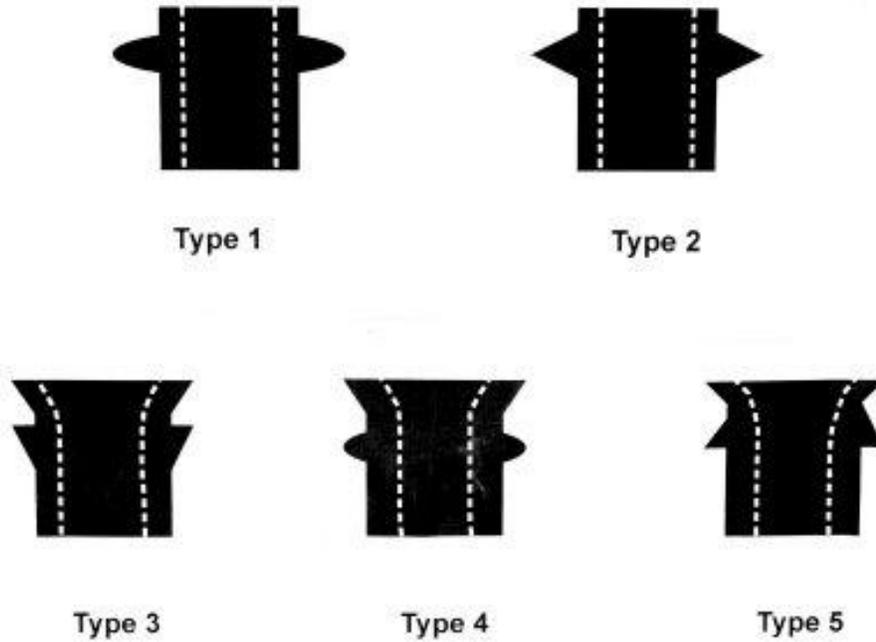


Figure 1. Main types of bottle neck shape

Types 1 and 2 are the earlier single rim shapes and 3, 4 and 5 appear to be consistent with a post 1760 date. Of the 48 necks recovered, 56% are type 1 or 2 and the remaining 44% are type 3, 4 or 5.

Table 1 gives some details of the neck types found.

Neck Type	Type 1	Type 2	Type 3	Type 4	Type 5
Numbers	7	20	9	7	5
%	15	41	19	15	10

Table 1. Analysis of the numbers of different neck types.

## **Bottle bases**

The bottle bases had onion shaped indents (known as 'domed kicks'). Their purpose is open to debate but it has been variously suggested that they:

- helped securely stack bottles neck to base when being transported by ship
- helped consolidate wine sediment or lees in the base of the bottle
- were the product of the hand glass blowing process - when the bottle was detached from the blowpipe, the base was pushed in slightly to create a more stable base. The slight raised mark in the centre of the underside of the kick shows where the blowpipe was detached and is known as the 'pontil' (Jones 1986, 102).



*Photograph 8. Pronounced dome  
(courtesy of Robert Skeen)*



*Photograph 9. Rounded dome (courtesy  
of Robert Skeen)*

All but one of the Wimpole bases are similar in appearance in that they appear to be hand blown with domed kicks. Many have clear 'pontil' scars, as is shown in the following photograph.



*Photograph 10. Pontil scar in the centre of  
the base (courtesy of Robert Skeen)*

The dimensions of the 46 round bases are:

Average diameter	127mm
Smallest diameter	94mm
Largest diameter	151mm
Spread of sizes	85% fell within range 110 to 139mm

These ranges seem consistent with bottles from the middle of the 18<sup>th</sup> century, although it is hard to date precisely (Jones 1984,134). The one exception to these rounded forms was a flat octagon shaped bottle which appeared to have been blown within a mould. Its length was 125mm, breadth 85mm, diagonal breadth 110mm with a slight kick (see photographs below, courtesy of Robert Skeen). This could also be consistent with a mid-18<sup>th</sup> C date since some new wine bottle shapes began to emerge after the 1720-1730s. These included both octagonal and flatly oval shapes (Leeds 1941, 54).



*Photograph 11. Side view of octagonal bottle (courtesy of Robert Skeen)*



*Photograph 12. Base of octagonal bottle (courtesy of Robert Skeen)*

### **Some comparisons**

A similar find which included bottle fragments was excavated at Saffron Walden (Walker 2002, 261-262). 47 fragments were found associated with the construction of a culvert from the second quarter of the 18<sup>th</sup> century. The wine bottles were dark green in colour with vitrified surfaces, had onion shaped bases 120. 140mm diameter with domed kicks and had short conical necks with single string rims. Similarly, 60 fragments of wine bottles from the very end of the 18<sup>th</sup> C were excavated at St Ebbe's (Hassall et al 1984, 181-263). The glass was cylindrical in shape with a diameter of 80-100mm with high domed bases

rising abruptly from the side wall. The absence of pontil scars suggests the use of a mould. Some had double string rims.

### **Conclusion**

While there are inevitably some caveats about the precise dating of bottles (different manufacturers may have reacted at different speeds in implementing new designs) it seems likely that the Wimpole bottles were made in a period spanning the 1760s. Of course, this is not necessarily the period that they were placed in the wall foundation since they may have been stored for some time before being used. However, we can conclude that the clunch wall was unlikely to have been built any earlier than 1760. There is little clue as to why they were so used and they probably simply represent an early example of recycling.

### **References**

Hassell, T G, Halpen, M, Mellor, M 1984 *Excavations in St Ebbe's Oxford, 1967-1976+ Oxoniensia XLIV*

Jones, O R 1986, *Cylindrical English Wine & Beer Bottles 1735-1850*, Research Publications, Environment Canada

Leeds, E T 1941, *17<sup>th</sup> & 18<sup>th</sup> Century Wine-bottles of Oxford Taverns+Oxoniensia VI*

Walker, H 2002 *Saffron Walden: the topography of the southern half of the town and the marketplace. Excavations & watching briefs 1984-87 +Transactions of the Essex Society for Archaeology & History Vol 33*

Version 1.0

RAS