Summary reports on the pottery and glass from the midden and waterlogged wood and leather objects from the well are included here. More complete reports and catalogues are available in the archive. Only finds from the midden and well were subjected to full analysis, following the requirements of CECAS.

6.1 Pottery from the midden, by George Haggarty

The original hypothesis was that the midden at Jack's Houses had served a single farmstead over a period of about 30 years and that the ceramic material represented the detritus of a single household. It would, therefore, have been an ideal group of material from which to obtain a snapshot of the social and economic status of the farm, and of the potteries supplying it.

The midden consisted of 14,666 sherds dating almost exclusively from the second, and more commonly the third, quarter of the 19th century. Residual medieval or post-medieval sherds were absent from the assemblage.

From 465 sherds – representing a minimum of 368 blacking bottles - only seven joins were noted, all from fresh breaks. Of over 1,000 redware sherds of internally white slipped dairy bowls, crocks and a few other forms - representing a minimum of c 460 bowls and c 70 crocks – only 18 joins were noted, and, of these, 11 were from fresh breaks. The horticultural redwares comprised 327 fragments, consisting mainly of flower pots and a few shallow seed trays with no joins. The agricultural redwares consisted of fragments of both flat and horseshoe extruded drainage tiles and again no joins were present in the assemblage. Some of the clay used for the extruded tiles was highly micaceous suggesting more than one source; this is unusual, as most farms and estates bought or made these locally and in a single fabric. Most of the softer earthenwares had finely abraded edges, suggesting that at some time they had been moved.

There were in total 171 shards from cups and saucers, with no joins, in late, highly developed, London shapes, of which 21 had small fragments of blue or mauve sprigs in a style common at some of the Glasgow potteries, while the rest were plain white earthenwares. The majority of the thousands of white domestic earthenware sherds came from bowls or plates with a very small presence of mugs, tureens and other forms. There were also in excess of 2,200 fragments of either single-colour sponge or polychrome-printed wares, many with banding. Again, these were mainly bowls of various sizes, plus a few mugs.

The assemblage comprised almost as many vessels as sherds. In particular, very few of the sherds of Rockingham glazed teapots, some which had distinctive moulded covers, spouts and handles, joined.

Scottish potteries of the period such as Jamieson & Co of Bo'ness, Methuen's of Kirkcaldy, the Clyde pottery and Bells of Glasgow are well represented in the assemblage, as are all the well-known Staffordshire makers like Spode, Wedgwood, Davenport, Rogers and Riley, and a host of lesser-known factories like Chatham & Robinson and John Meir & Sons. Almost all the patterns attributed to the above factories are represented by just one or occasionally two sherds at the most. Samples of these identified sherds have been retained but, given the nature of the deposit, it was decided to discard the remainder.

The ceramic material could not have originated from one farm steading; the midden represented only a tiny fragment of a much larger dump (possibly 20–50 times larger). Detailed examination demonstrated that the majority of the ceramic assemblage dates from c 1850–80 with a few residual sherds dating from 1820–50.

There appears no doubt that the Jack's House midden material can only represent a tiny fragment of a dump imported to the site around 1880. It was not unusual for imported ceramic material to be used by farmers to break up clay subsoils. While this material does not represent kiln refuse, it may have been used in the same way.

6.2 Glass from the midden, by Robin Murdoch

The majority of the glass from the midden dates from the second half of the 19th century with a few earlier and a few later shards.

The 19th century saw dramatic changes in the design and production of utilitarian glass, particularly bottles. They evolved from individually hand-made items at the beginning of the century to mould-blown mass production by the end. Moulds had been used to shape glass for at least 2,000 years but generally for items of status. The common bottle was generally free-blown, ie without the use of a mould, irregular in finish and capacity.

Hinged two-piece moulds were introduced in the middle of the 18th century but were generally used for chemists, or later, aerated water bottles (Fletcher 1976, 33). The practice of embossing lettering on bottles started at this time. However two-piece moulds do not seem to have been used on wine or beer bottles at this juncture and they remained largely undecorated apart from the occasional applied shoulder seal.

In 1822, Henry Ricketts of Bristol patented a moulding machine which greatly increased output rates and, equally important, reduced skill levels required for production. Ricketts' moulder was three-piece, with a solid lower body and two hinged sections for shoulder and neck (Wills 1974, 48). After Ricketts' patent expired in 1835 many variations of the three-piece moulder were introduced and it remained the predominant tool for bottle production until around 1870 (Fletcher 1976, 133). Bottles made in three-piece moulds are easily recognised from their mould marks, especially a horizontal one round the junction of shoulder and upper body. The body itself, although nominally cylindrical, was slightly tapered to allow easy removal from the solid lower mould. The base of the mould was pushed up to release the bottle.

The three-piece moulder met its demise because it was not possible to emboss the main part of the body and be able to remove it from the mould. Therefore, in the latter part of the 19th century, the hinged two-piece mould was also brought into use for wine and beer bottles so the body of the container could now be entirely embossed if wished. A favourite arrangement, particularly among chemists or those who sold a range of bottled wares, was to have the trader's name and address embossed on one side of the bottle and a paper label with the precise contents on the other. These paper labels seldom survive the buried environment.

Three-piece moulded bottles are well represented in this assemblage and it is interesting to note the minor variations in base and lip forms. Allowing ten years or so for Ricketts' technology to become established then these bottles must represent a date range of 1830 to c 1880.

An interesting feature of the three-piece moulded bases in this assemblage is that they all show basering wear from repeated use. The free-blown wine bottles of the 17th and 18th centuries were used to decant wine at table rather than as long-term storage, and they were refilled from the cask or by a vintner. The presence of base wear here may indicate a continuation of that practice with these 19th-century bottles.

There is no simple way of establishing the original contents of the bottles but base-ring wear may be telling us something. The heaviest wear is on the bases with a conical kick, a shape normally associated with wine bottles, while the more rounded pimple kicks have generally slight to moderate wear. This could mean that the latter were predominantly for beer or ale and were abandoned more readily than wine, but this is simply speculation at the moment.

There are three shards from 'classic' 19th-century aerated water (soda, lemonade etc) bottles, two from 'egg' or ovate bottles and one from a 'Codd' bottle. Ovate, or Hamilton, bottles are mentioned in a patent of 1809 for the production of soda and other mineral waters, but they may pre-date this slightly (Talbot 1974, 38). These bottles had a rounded base which meant that they had to be stored on their sides so that the cork remained wet and tight fitting and therefore retained the gas suspended in the contents. This style of bottle was made until c 1916 and seems to have been used mostly for soda from the late 1860s onwards (Fletcher 1976, 147). Hiram Codd took out his first patent for a globe-stoppered bottle in late 1870 and by the fourth patent in 1873 he had arrived at a design which remained in use in parts of England until the 1940s. The bottles seldom survive whole because children would break them to get the glass marbles that formed the stoppers.

A characteristic of really cheaply produced 19thcentury utilitarian glass can be seen in the three shear lips in the assemblage; the small ink bottles are typical (Wills 1974, 65). Once these containers were blown, they were simply 'wetted' or sheared off the blowpipe and the rough lip left untreated. However, the generally sharp lip would bite into an oversized cork, giving a good seal (Fletcher 1976, 50).

The 'wine' glass base with the low conical foot is probably 19th-century. Its stem has been hand-cut into seven facets. The technique of cutting, grinding with an abrasive wheel, started in the second half of the 18th century and was extremely popular in the 19th. A close parallel to the example here can be seen in a catalogue of glass and china dating to about 1883 (Silber & Fleming 1990, 120, pattern 5,045).

While the great majority of the glass in this assemblage appears to have been made in the UK, there is one bottleneck which is probably an import and possibly French.

6.3 Organic finds from the well, by Mike Cressey

Fifteen individual oak staves from a stave-built wooden barrel were recovered during the excavation of the well. The most complete stave measured 520mm long, 150mm wide and 8mm thick. A piece of a wooden hoop used to bind the staves together was made from hazel. Small holes within the staves indicated that the hoop had been attached using iron nails, suggesting that the barrel had been used to store dry materials and had later been discarded down the well. Associated finds suggest that the barrel was of 19th-century date.

Examination of the remains of two leather shoes, also recovered from the well, showed that one had a machine-stitched, composite leather sole. Iron tacks had been used to attach the heel to the sole. The inner sole had been worn through and had probably been considered to be beyond repair and hence discarded. The second shoe was represented by only the upper leather part. It had been attached to an inner sole by machine stitching, which was evidenced by small holes. The presence of machine stitching indicates that both shoes were

probably manufactured in the late 19th or early 20th century.