A Midlands Purple and Cistercian ware kiln at Church Lane, Ticknall, South Derbyshire

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Summary

Excavation at Church Lane, Ticknall, revealed a late 15th to mid 16th century Midlands Purple and Cistercian ware kiln. This paper details the findings

of the excavation and the range of wares associated with the production site.

Introduction

Ticknall in South Derbyshire has long been recognised as an important late- and post-medieval pottery production centre. Whilst the documentary evidence for the area has been comprehensively explored by Spavold and Brown (2005), archaeological exploration has been based on field walking surveys and limited excavation. This research has revealed the presence of at least 28 potteries operating in Ticknall between the 15th and the 19th centuries. Despite a wealth of evidence pertaining to the existence of production sites in the village, not a single kiln had been located by excavation. This situation was rectified in 2006 when excavation took place in the garden to the rear of a new property which was under construction on the Church Lane frontage (SK 352 239, Fig 1).

Permission was given to Janet Spavold and Sue Brown by the landowners Mr and Mrs Gray to investigate the site in advance of landscaping. The excavation was carried out with the assistance of the authors, Jane Young, Alan MacCormick and Derbyshire Archaeological Society.

Two trenches were excavated, one of which revealed a pottery kiln that had been disturbed by the digging of pits. A large deposit of *in-situ* saggars and wasters was encountered, as were elements of the kiln chamber.

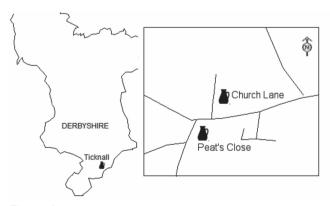


Figure 1
Location of Ticknall and Church Lane

This has provided the first excavated evidence of a pottery kiln in the parish. Midlands Purple wares were dominant in the assemblage from the infill of the kiln, and a small number of Cistercian ware vessels was also recovered. The Church Lane assemblage offers the first opportunity to associate particular wares and forms with a confirmed production site, to examine the structure of a Ticknall kiln and to explore the distribution of Church Lane pottery on consumer sites.

Historical background and site location

Ticknall is known to have developed into a major potting centre by the post-medieval period; evidence for medieval activity is limited and currently unsubstantiated archaeologically. The industry finally ceased in 1888 although it had been declining steeply for a century by that time due to competition from Stoke-on-Trent. The Church Lane kiln produced Midlands Purple wares and Cistercian wares, making it one of at least seven Ticknall sites associated with the manufacture of these types (Boyle 2006, 137).

The Church Lane site seems to have originally been part of a larger parcel of land. The plot may have originally belonged to Slade House; this property has early origins, as part of the extant building incorporates a much earlier manor (DRO D2375M/63/53). The land belonging to Slade House was at some point subdivided to create a plot fronting on to Main Street and running north-south along Church Lane. A now demolished cottage that stood on this plot may have been the potter's home, with workshops and kiln located towards the rear of the property as is typical of potting tenements (Boyle 2006, 61-2). On demolition of the cottage in the 1960s a new property, Becket House, was erected. The plot remained unchanged until 2004, when the land was subdivided again, with the northern end of the garden (containing the kiln) sectioned off to create a small plot which fronts on to Church Lane.

Local subsidy lists provide evidence of the potters active in Ticknall between 1538–1547 (DRO: D77 Box 22/5). Seven potters were wealthy enough to be listed as

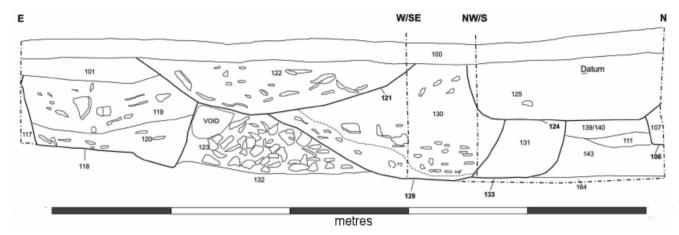


Figure 2
Trench I, section through the kiln: context (123) is the pottery backfill of the kiln (139/140, 111 and 143).
The later pits truncating (123) and the kiln are clearly visible

paying this tax: Thomas and Richard Tournr (Turner), John and Richard Cunway, Richard Knight (senior and junior), and William Hanbury. Hanbury is known to be operating at the High Street; the others remain possible candidates for the Church Lane potter.

The kiln uncovered at Church Lane had been subjected to 'back yard' pit digging but had not been ploughed like a number of the other suspected production sites in the parish. As the site had not been levelled by agricultural activities the build up of dumped pottery waste was clearly evident. The ground level was noticeably higher in the area around the kiln, with a sharp drop on the eastern side of the retaining boundary wall which is situated to the east of the plot.

The excavation

Two trenches were excavated; Trench 1 revealed the kiln structure and Trench 2 a dump of pottery waste.

Trench I

The excavations in Trench 1 were undertaken in two stages. The first stage consisted of the removal of topsoil by the landowner Mr Gray with a mechanical excavator. This was followed by manual excavation of what was believed to be layers of dumped unstratified pottery which had been cut into by a variety of post-medieval and modern pits (Fig 2). When it became clear that structural elements were extant beneath this layer of dumped pottery, the excavation was carried out stratigraphically. This second stage revealed a clay and stone kiln structure which had been in-filled with saggars and waster pottery.

Trench 1 was placed over the centre of the kiln, revealing a central pedestal or flue consisting of large fragments of undressed limestone (Fig 3). Some of the outer wall of the kiln, which was constructed of compacted orange clay, was visible and it appears to



Figure 3
Trench I, facing the section through the kiln: evidence of a possible central pedestal is located in the centre of the trench. Dumped pottery (123) backfilling the kiln is visible in the section. Increments on scales are at 0.25 metres

have been round or oval in plan. Whilst Midlands Purple and Cistercian ware kilns from across the country lack a standard design, the vast majority have multiple flues (Boyle 2006, 53–8). It seems likely that the Church Lane example falls into this type, although this remains speculation as the full extent of the kiln was not excavated.

The recorded sequence of deposits allowed seven phases to be identified. The site consisted of a layer of topsoil (Phase 7) which sealed three modern pits, one which contained fragments of a metal bath (Phase 6). The modern pits cut buried topsoil (Phase 5) which sealed seven large pits (Phase 4). The Phase 4 pits appeared to cut through a large dump of wasters and

saggars (Phase 3) which had been backfilled into a kiln structure (Phases 1 and 2); little remained of the kiln structure due to truncation by the Phase 4 pits.

Trench 2

A small second trench was excavated 2 metres to the west of the main trench, to a depth of 0.4 metres through the topsoil. No features were evident although some pottery was recovered. Hand excavation in this trench was limited; subsequent mechanical excavation during building works revealed deposits of bright orange fired clay and dense deposits of sherds. At a depth of around 3 metres natural deposits of sand were reached.

The pottery

During the excavation at Church Lane over 4,000 vessels were recovered from Trench 1. Initially, pottery was recovered from an extensive dump of unstratified material. Once structural remains were revealed the excavation strategy was altered accordingly and pottery was recovered by context. Due to the large amounts of pottery present at the site, a selective retrieval policy was put in place to a recover a representative range of fabrics and forms. The material recovered during this phase was the focus of post excavation analysis. This stratified assemblage amounts to 1,602 sherds from a maximum of 1,475 vessels, weighing 67 kilograms. Other ceramic objects, such as tiles, props and spacers are also present. The vast majority of the assemblage is Midlands Purple ware and only 76 vessels of Cistercian ware are present. Evidence from other Midlands Purple and Cistercian ware production sites indicate the two were often manufactured together and fired in the same kilns. Midlands Purple forms were evidently used as saggars and placed over the more delicate Cistercian ware drinking vessels (Boyle 2006, 63). Therefore, it is no surprise that the infill of the Church Lane kiln produced both Midlands Purple ware and Cistercian ware. Jars (including bunghole vessels), jugs, bowls and cups occur in the assemblage although saggars are the most common form.

Fabrics

Both the Cistercian and Midlands Purple wares were microscopically and chemically defined by Dr Alan Vince. He reports that the 'Cistercian ware cups have a very fine textured fabric with few inclusions over 0.1mm across visible, even at x20 magnification. Some of the waste was dark grey and vesicular but the intended firing colour appears to have been brick red. The Midlands Purple vessels, by contrast, have a very poorly mixed fabric and contain lenses and streaks of red- and white-firing clays, together with subangular quartz sand up to 1.0mm across.' (Vince 2007). The

fine, nearly inclusion free Cistercian ware fabric is most commonly grey (35 vessels) and orange (14 vessels) although brown, purple and red variations are also present. However, it is likely the intended colour was a brick red (Vince 2007). The widespread use of fine clays for Cistercian wares makes distinguishing vessels produced at different production sites very difficult, even using x20 magnification. Coarser Coal Measures clay, used for the Midlands Purple ware, may have been used straight from the source with little processing prior to throwing; this accounts for the streaks and lenses of clay visible in the fabric. Clays from Ticknall have long been recognised as high quality and little or no processing of the raw material is required in such instances. The range of colours encompasses purple, red, grey, brown and orange. Bowls from the site consistently have an orange fabric, which may indicate a deliberate attempt to produce a specific finish. The brown fabric appears similar to that used for later butter pots. Midlands Purple wares fabrics contain a range of inclusions, which might prove useful for indicating their provenance although the vitrified nature of these fabrics tends to eradicate such characteristics. It appears that the majority of textural and fired colours appear due to variations in firing conditions rather than the use of different clay sources or tempering agents The exception may be the few examples of light firing vessels in a cream or near white fabric; these account for a mere 14 vessels (less than 1% of the assemblage).

Dr Alan Vince conducted chemical and thin section analysis on the Midlands Purple ware and Cistercian ware from Church Lane and the nearby site of Peat's Close (Vince 2007). Vince concluded that the Cistercian ware and Midlands Purple wares from the two sites can be distinguished chemically, although the difference was more marked between the Cistercian wares than the Midlands Purple wares. From these results it would seem that the Cistercian wares and Midlands Purple wares were manufactured using different clays. It is likely that the abundance of different clay sources in this area, coupled (in the case of Cistercian ware) with a preference for a fine, inclusion free fabric, makes characterisation of a 'typical' Ticknall Cistercian or Midlands Purple ware fabric near impossible. Therefore, chemical analysis offers a way to characterise these wares and helps to confirm their appearance at consumer sites. Using this approach, it appears a combination of fabric, form and decorative elements are the most useful indicatorsof Ticknall products

Forms

In many cases forms could not be determined from non-diagnostic body sherds with any certainty and the majority of vessels were recorded as jars/saggars/ cisterns, jug/jar or jar/bowl. Where enough of the vessel was present, forms were recorded and a breakdown of

 Table I

 Range of forms present at Church Lane

form	sherds (number)	vessels (number)	weight (g)	vessels (%)
bowl	97	87	7986	6
cistern	2	2	272	>
costrel/bottle	I	1	9	>
cover/lid	5	5	499	>
cup/posset	105	76	570	5
jar	38	34	1353	2
jug	42	38	1353	2
saggar	462	447	31312	30
unknown	850	785	23923	53
total	1602	1475	67277	100

 Table 2

 Range of non-vessel ceramic forms at Church Lane

type	fragments (number)	weight (g)
tile	6	358
prop	4	71
spacer	I	15
? ridge tile	1	48
total	12	492

the range of forms is included in Table 1. A list of non-vessel ceramic forms found in the assemblage is listed in Table 2.

Thirty-eight jugs are present in the assemblage; these range in size from small to large and a single example has a narrow body. They are undecorated, although, as with the bowls, the majority have a knife trimmed basal angle. Jugs appear to be glazed internally and/or externally. They occur in all the Midlands Purple fabrics noted above and glazes are green to brown/black although only three of the jugs occur in the cream/white fabric, resulting in a green glaze.

Thirty-four vessels could definitely be identified as jars, though it is likely they represent a much greater proportion of the vessels produced at the kiln; unfortunately their similarity to the saggars found at the site made their identification difficult. The jar forms appear to have both trimmed and untrimmed bases and all the examples examined were undecorated. Some small jar forms are present. They occur in the range of Midlands Purple ware fabrics listed above and are not always glazed.

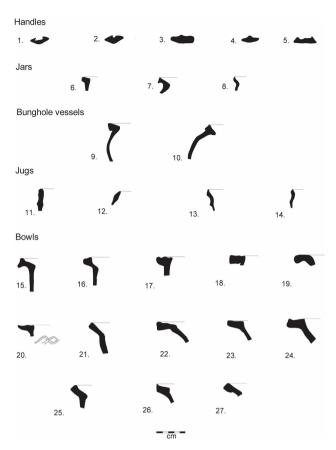


Figure 4
Midlands Purple ware handles and rim profiles

Bunghole vessels (Figures 4.9–10, 8.1–4)

Only two definite bunghole vessels are present, although as they share features with both saggars, jugs and jars their identification is difficult. Probable examples have cut outs along the rim and strap handles. All the bunghole vessels are in Midlands Purple ware.

Bowls are medium and large sized and only occurred in Midlands Purple ware. The bowl rim types are most commonly rectangular and flared, though everted and upright examples are also present. Decoration appears to be rare, with only one example having an incised wavy line on the inner rim. The external basal angle is often knife trimmed.

Of the 87 bowls present in the assemblage, 62 (71%) occur in the orange fabric. As a result, glazes are commonly yellow/orange or green, often with brown streaks from the iron naturally occurring in the fabric. The high percentage of bowls in an orange fabric suggests these were consistently fired in a cooler part of the kiln (most likely the centre); stacking scars on the inner surface of the bowls suggest they were stacked inside one another. Similar methods of stacking bowls are known at late and post medieval production sites in Lincolnshire.

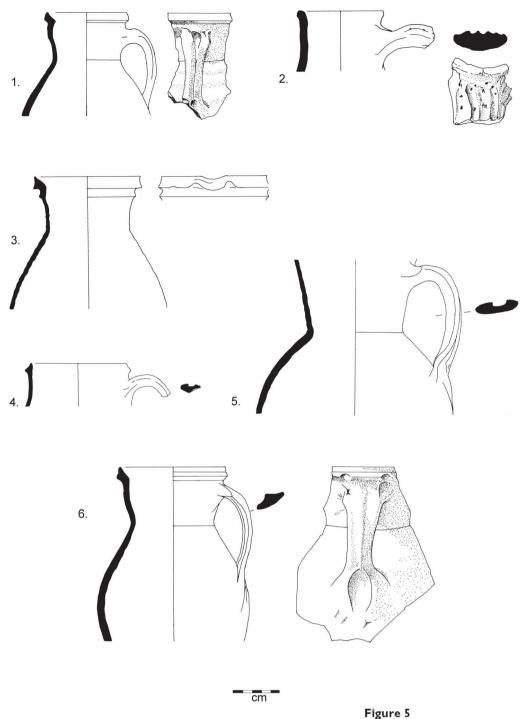


Figure 5
Midlands Purple ware jugs

Cups (Figure 9.1, 10.1–17)

Sixty-nine drinking vessels are present. Most are the small round-bodied cups with flared rims (Brears' type 4) which are characteristic of Cistercian ware, although some may be posset pots (Brears' type 1); one example has a ridged body and another may be a tall straight sided cup. The Cistercian ware cups are all in a finer fabric than the Midlands Purple ware, although four examples have coarse grey, purple and orange fabrics more typical of the latter. The cups have orange, green

and brown/black glazes depending on the fabric colour. Many are decorated with applied pads of light firing clay. These are arranged in flower patterns or are leaf shaped. The pads are sometimes incised or stamped with cartwheels or incuse designs. Worthy of note is an example of a Cistercian ware cup from the unstratified material which has an applied white clay pad inside the base stamped with a cartwheel and cross design.

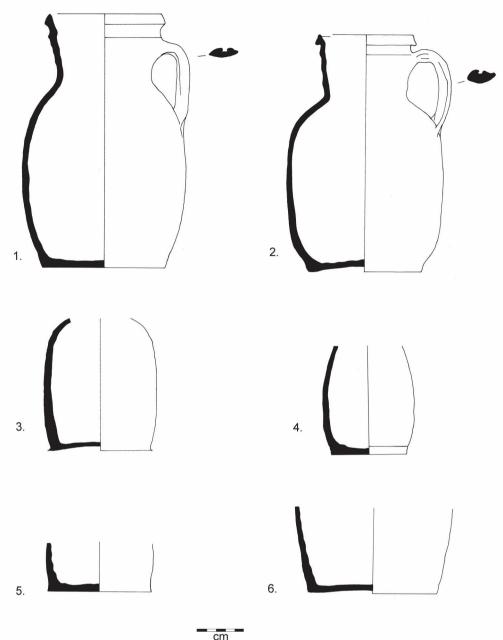


Figure 6Midlands Purple ware jug forms

Saggars and kiln furniture (Figure 7.1–13)

Table 2 lists the range of kiln furniture. Small kiln props, similar to those from Wrenthorpe (Moorhouse and Roberts 1992, Fig. 79.1–3, 139) were found in association with the pottery, as was a sherd that appeared to have been used as a spacer. Saggars accounted for 447 vessels (30% of the total number of vessels). These have a wide range of shapes and are often narrow. The rims often have multiple cut outs (curved or straight) although in some cases clay appears to have been pinched from the rim instead of knife trimmed. Holes in the body appear near the rim and near the base; some are square/rectangular and knife cut although the majority appear to have been created

by punching a finger or thumb through the body. As would be expected of such vessels, they show signs being vitrified and often have stacking scars and firing shadows from their time in the kiln. Many have blobs of vitrified sand adhering to them which was possibly added prior to firing to prevent the vessels fusing together.

Tile

Seven fragments of flat tile were recovered. These have varying thicknesses of between 12mm to 17mm. Three of these have stacking scars and glaze which suggests they were used as kiln furniture. However, the presence of ridge tile (with knife cut wavy crests) suggests that roofing tile may also have been produced at the site.

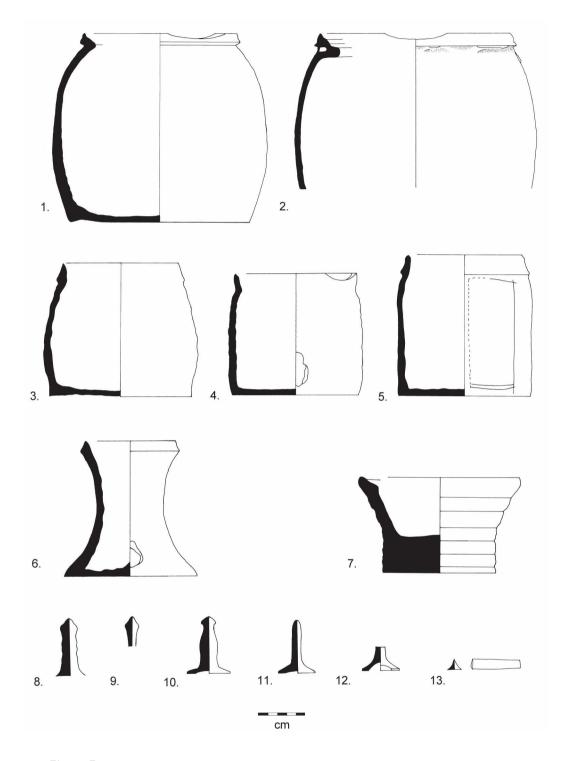


Figure 7Midlands Purple saggars and kiln props

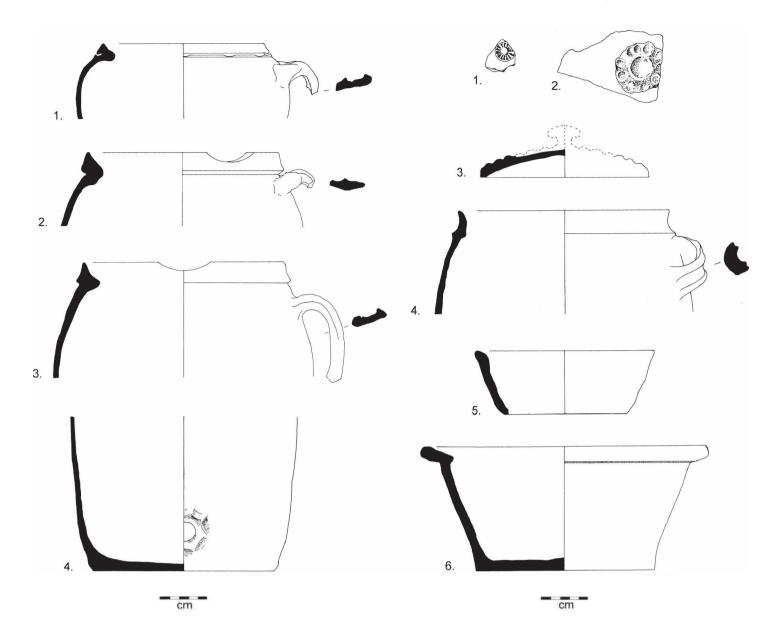


Figure 8
Midlands Purple ware bunghole vessel forms

Figure 9
Decorated sherds and Midlands Purple ware lid, side-handled jar and bowls

Miscellaneous (Figure 9.2-4)

A Midlands Purple ware ridged lid and a jar with a side-handle were also recovered, as was a sherd with an applied thumb pressed pad in an apparent floral design. A possible flask/costrel neck in a Cistercian ware fabric is also present.

Methods of manufacture

The material shows a limited range of manufacturing techniques which indicate that the assemblage is associated solely with the manufacturer based at the Church Lane, although there are enough differences to suggest more than one potter may have worked at the site. Several vessels are notable for being very finely thrown with well formed rims and trimmed bases. Some of saggars also share these characteristics, which is unusual for industrial vessels. Many of the handles appear to be thrown rather than pulled, and have a distinctive sharp central groove when seen in profile. Conversely, some of the material is very poorly thrown with thick walls. Some vessels appear to have thrown walls but a base that has been added afterwards as a rolled out piece which has been luted into place; this is often poorly executed resulting in a clear join on the underside of the base. Impressions on some of the bases suggest the pots were left to dry on roughly woven cloth.

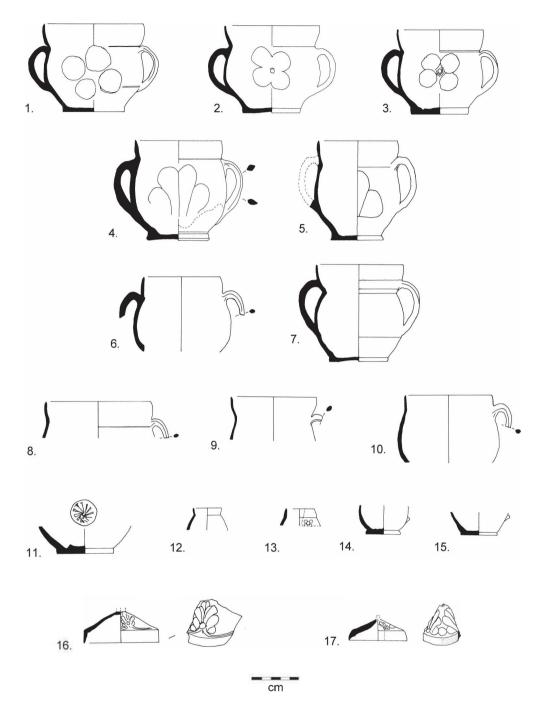


Figure 10
Cistercian ware cup forms

Discussion

The majority of the pottery assemblage appears to be associated with the deliberate backfilling of the kiln. Most was covered in an orange clay deposit that might be packing material, perhaps suggesting some of the pots were reused in the kiln structure, possibly to form a roof or dome. That the majority of the vessels are saggars indicates a deliberate backfilling event rather than an accumulation of material over time.

The inherent problems of using waste pottery for the definition of kiln products is well recognised, so any conclusions on the range of pottery produced by the Church Lane kiln must be accompanied by some caution. Also, cross-contamination with pottery from other sites appearing on the Church Lane site is a recognised problem. This is clearly a possibility as the ICPS analysis identified one of the Cistercian wares from Church Lane as probably a Peat's Close product. The site has clearly been disturbed by later activity and this may have led to material from other sites being dumped at Church Lane. Equally, potters are known to have shared kilns for firing and cross-contamination could have occurred in this way. However, it seems that overall this assemblage represents a homogenous group of material that is contemporary in date. Cistercian ware production in Ticknall is known at several other sites, although none of these industries appear to predate the late 15th century (Boyle 2002–03, 116).

Further evidence for dating the Church Lane material comes from consumer sites in the Midlands. The Greyfriars Library site at Lincoln produced a jug that can be paralleled with the Church Lane material and this was confirmed by ICPS analysis (Fig. 4.13 and Fig.6.1, CF Young et al. 2005, Fig 189.1399, 226, Vince 2007); this vessel occurred in a pre-dissolution deposit at the Friary (Jane Young pers comm.). At Lincoln St. Mark's Friary site, other examples of Church Lane style vessels are present in deposits dating to the end of the 15th and the first part of the 16th century (pers comm. Jane Young). Further evidence comes from Danes Terrace, where another example was associated with mid 16th century deposits (Young et al. 2005, Fig 189.1401, 226).

Other Midlands Purple ware forms found in Lincoln include bunghole cisterns that can be paralleled with the Church Lane products (Young et al. 2005, Fig 189.1402 &1403, 226). At the Leicester Austin Friars, similar vessels to the Church Lane material occur in groups 4B, 7A and 9A. Whilst the dating of Cistercian ware at the site is controversial (suggesting a mid 15th century date for its introduction), the Midlands Purple ware is dated from 1375 to 1538 (Woodland 1981, 128). The association in group 9A of Church Lane style Midlands Purple wares with Cistercian ware that appears typologically identical to the Peat's Close material may indicate that at least two Ticknall potters were supplying the site. Again, the Church Lane

Midlands Purple wares appear in groups dating from the mid 15th to the mid 16th century although, as already noted, the mid 15th century date is uncertain. However, a similar date was provided at the Bishop's Palace at Lincoln, where a Midlands Purple ware jug, which can now be paralleled with the products of Church Lane, appears in a deposit dated to the mid 15th century (Chapman et al. 1975, Fig. 9.76, 24). Recent revision of this material now suggests that this is not a sealed group and that the 1450s date is uncertain. Therefore, evidence from other sites supports a span for products typologically identical to the Church Lane material appearing between the late 15th and mid 16th centuries, giving some indication of when the kiln may have been active. It is hoped further work can be carried out to determine if these vessels are Church Lane products through ICPS and TS analysis.

Conclusion

The Church Lane kiln offers the first indication of how the potters of Ticknall operated. The limited area which was excavated and the complicated stratigraphy encountered on the site has inhibited interpretation; most importantly as to the structural layout of the kiln.

However, as the only known example of a kiln from Ticknall, the excavation can offer some indications as to the nature of production. It is likely that the kiln would have had a semi-permanent roof construction of waste sherds bonded with clay (Boyle 2006, 55). The presence of sandstone blocks appears to suggest elements of the structure, probably as a central pillar used to support the tile bats. Construction of the kiln towards the rear of the surmised tenement would be logical due to the smoke and fire hazard posed to dwellings near the street frontage.

The pottery assemblage provides the first link between a definite production site and a range of fabrics and forms, which can be paralleled with material on consumer sites. This has allowed a date span of the late 15th to mid 16th century to be proposed for the Church Lane pottery; further recognition of these products in excavated assemblages should allow refinement of this dating.

As the first kiln to be excavated in Ticknall, the Church Lane site highlights the need for further investigation into the village's prolific pottery industry. There is no doubt that the lack of typological work on Ticknall products has resulted in its presence on consumer sites being overlooked. This limited excavation has produced new evidence for the activity of potters in the village, as well as providing the first excavated groups of Ticknall pottery to be associated with a kiln.

Acknowledgements

Our greatest thanks go to Janet Spavold and Sue Brown for inviting us to take part in the project; their tireless research, hospitality and dedication are much appreciated and have enabled us to produce this report. The authors wish to thank Mr and Mrs Gray for their permission to investigate the site and Derbyshire Archaeological Society who funded the ICPS analysis of the pottery and whose members helped excavate at Church Lane. Also Jane Young, Alan Vince, David Palmer, Tom Lane and Alan McCormick, whose time, energy and invaluable comments are very much appreciated.

All illustrations and figures are by Sue Brown, Ian Rowlandson and Anne Boyle.

Endnote

I This unstratified pottery amounts to 2874 sherds from a maximum of 2741 vessels, weighing over 94 kilograms.

Résumé

Des fouilles entreprises à Church Lane, Ticknall ont révélé un four à poterie de type cistercien et de type 'Midlands Purple' datant de la fin du 15ème jusqu'au milieu du 16ème. Cet article fait une description détaillée des résultats des fouilles et du groupe de céramiques associées au centre de production.

References

- Boyle, A., 2002–03, 'The Cistercian ware products of Ticknall, South Derbyshire', *Medieval Ceramics* 26/7, 113–18.
- Boyle, A., 2006, Cistercian ware pottery in Yorkshire and the East Midlands, University of Nottingham, unpublished Ph.D. Thesis.
- Brears, P., 1971, *The English Country Pottery, Its History and Techniques*, David & Charles, Newton
 Abbot
- Chapman, H., Coppack, G., and P. Drewett, 1975, Excavations at the Bishops Palace, Lincoln 1968–72, Occasional Papers in Lincolnshire History and Archaeology 1.
- Moorhouse, S., and Roberts, I., 1992, Wrenthorpe Potteries, excavations of 16th and 17th-century Potting Tenements near Wakefield, 1938–86, Yorkshire Archaeology 2.
- Spavold, J. and Brown, S., 2005, *Ticknall Pots and Potters from the Late Fifteenth Century to 1888*, Landmark, Ashbourne.
- Vince, A., 2007, Characterisation of Late Medieval/ Transitional Pottery from Ticknall, Derbyshire, unpublished report 2007/14 [internet], available at http://www.avac.uklinux.net/potcat/pdfs/ avac2007114.pdf
- Woodland, R., 1981, 'The Pottery', in J.E. Mellor and T. Pearce, *The Austin Friars, Leicester*, CBA Research Report 38, 81–129.
- Young, J., Vince, A. and V. Nailor, 2005, A corpus of Anglo-Saxon and medieval pottery from Lincoln, Lincoln Archaeological Studies 7, Oxbow, Oxford.

Zusammenfassung

Eine Ausgrabung in Church Lane, Ticknall, brachte einen Brennofen aus dem späten 15. bis mittleren 16. Jh. ans Licht, in dem, Midlands Purpur'- und Zisterzienserware hergestellt wurde. Dieser Artikel gibt detailliert Aufschluß über die Ausgrabung und den Umfang der Waren, die zu dieser Produktionsstätte gehören.