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A ROMANO-BRITISH POTTERY KILN AT BLACKBOROUGH END, MIDDLETON

by David Gurney

Introduction

On April 28th 1989, contractors working on a site at Sandy Lane, Blackborough End, Middleton (Fig. 1) were removing topsoil mechanically from a development site for what is now 'Kiln House' when, in a corner of the site, the excavator broke through what later proved to be the remains of a Roman pottery kiln.

The owner and developer of the site, Mr. Peter Jackson of Blackborough End, immediately notified King's Lynn Museum, who then alerted the Norfolk Archaeological Unit to this discovery. The site was initially visited by Mr. Andrew Rogerson of the Unit, who, instantly recognising this as a Roman kiln, informed the author of the date and nature of the site.

An excavation was quickly organised in order not to delay the development, and in a single day, 1st May 1989, the kiln was largely cleared and excavated by the author. This, it should be stressed, was a very rapid rescue excavation to establish the form and nature of the kiln, and, in different circumstances, the site would have taken a number of excavators several days to excavate and record fully. Given the immediacy of the threat to the kiln, the archaeological response to the situation had to be rapid, and the kiln was excavated and recorded as fully as possible in the time available.

The author would like to thank Mr. Peter Jackson, who recognised the kiln during building works, notified the Norfolk Museums Service of this discovery, and allowed the author to excavate and record the kiln. The photographs were taken by David Wicks. The records of the excavation have been deposited in the Norfolk Sites and Monuments Record, and the finds in King's Lynn Museum.

Site Location and Background (Fig. 1)

The site is situated on the west side of Sandy Lane, Blackborough End (a hamlet in Middleton parish) at grid reference TF 6646 1502, in the south-east corner of Ordnance Survey Parcel No. 3900. In this pasture field, most of which is occupied by Site 3391 in the County Sites and Monuments Record, Roman sherds of late third century date were found by Mr. John Smallwood in 1967, and iron slag is currently found in any disturbance of the ground over this field (tree-planting holes and molehills) suggesting a large ironworking site. The kiln described here is located on the southern edge of Site 3391, and is Context 2 within that site number.

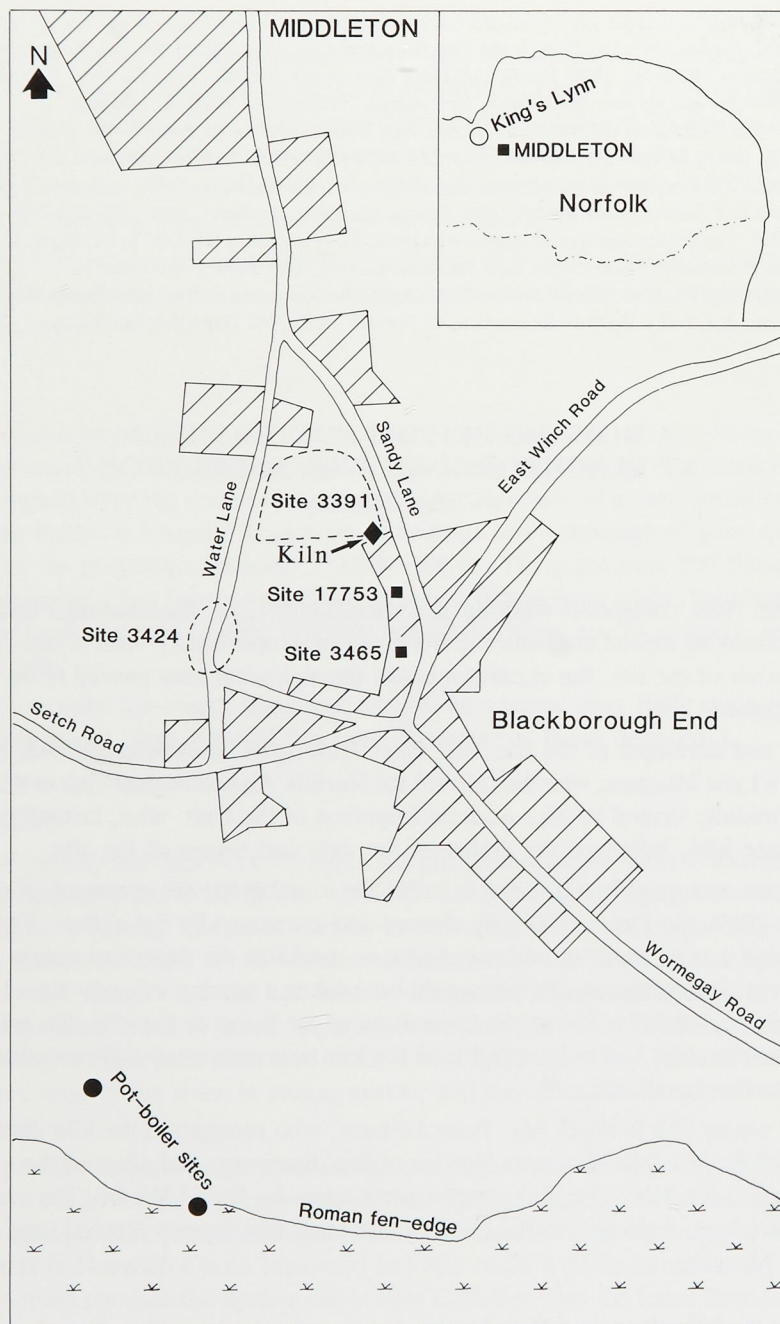


Fig. 1
Site location. Scale 1:10,000

Earlier work on building sites to the south of the site by Mr. Smallwood and pupils of King Edward VII school, King's Lynn, has recorded second and third century sherds, iron slag, ash and burnt daub on Site 17753 (Fig. 1) in 1980-81, and the possible footings of a wattle and daub

wall, with a post-hole, samian, rusticated sherds and piles of flint and carstone on Site 3465 (Fig.1) in 1961-62.

Other relevant finds in the area comprise one Late Iron Age sherd with Roman pottery from Site 3424 (Fig.1) in 1938, and Roman glass and a 'honey pot' (probably a double-handled bulbous jar with a wide mouth) found by Mr. Phillip Brasnett of Manor Farm in 1946 (Site 13938; in Middleton parish, not precisely located).

The southern part of Middleton parish, Blackborough End, has been partly surveyed by the Fenland Project, and a report has recently been published (Silvester 1988, 126-130). Readers are referred to that report for a discussion and assessment of this area, which concludes that Roman settlement in the area was focussed around the modern settlement of Blackborough End, with evidence in the survey area of considerable industrial activity; a Roman saltern on the fen-edge to the west, two pot-boiler sites (one with a single Iron Age sherd and the other with a scatter of Roman pottery) on the fen-edge to the south (Fig.1) and evidence of widespread industrial activity associated with iron deposits on top of the carstone. The evidence of Roman settlement in the Sandy Lane area outlined above is combined as Site U2 in the Fenland Survey report (Silvester 1988, fig.98).

The kiln site is located just below the 20 m contour, on the northern slopes of the valley overlooking the River Nar, the modern course of which runs approximately 1400 m to the south. In the early Roman period at least, the Puny Drain was still being flushed with sea water, and its tributaries extended to the Roman fen-edge (Fig.1) about 900 m south of the site (Silvester 1988, 128 and fig.98).

The steepish upland slopes here consist of sandy and coarse loamy soils of the Downham and Newport 2 Soil Associations (Hodge *et. al.* 1984, 164; 272) with the site located on the latter, the subsoil being a brownish-yellow sand (Munsell 10YR 6/6). The drift geology map (Geological Survey of Great Britain 1971, Sheet 12) shows the site to be situated in an area of Cretaceous carstone, Snettisham and Tealby Clays, Sandringham Sands and Spilsby Sandstone, with one small area of Gault. This is approximately 1 km east of the site, and it may be the clay source used.

The Blackborough End area has also produced evidence of pottery production in the medieval period, and the rescue excavation of a mid-twelfth century kiln has been published (Rogerson and Ashley 1985).

Description (Fig.2, Plates I and II)

Introduction

The kiln was located in the south-west corner of the area stripped for the development, and the back of the kiln and the stokehole area were respectively beyond the edge of this area and under large amounts of spoil. There were no signs in the stripped area or in the sections of further kilns or other archaeological features, so if the kiln was not an isolated feature, then other kilns or associated features may lie beneath the houses and gardens to the south-east (where earlier finds have been made) or in the pasture field to the west.

Survival

The site had been stripped by mechanical excavator to a depth of approximately 1.0 m, removing some 0.60 m of brown or dark brown sandy loam topsoil and 0.40 m of brownish-yellow sand subsoil. This operation had clearly removed much of the kiln superstructure which had survived undisturbed up to the base of the topsoil.

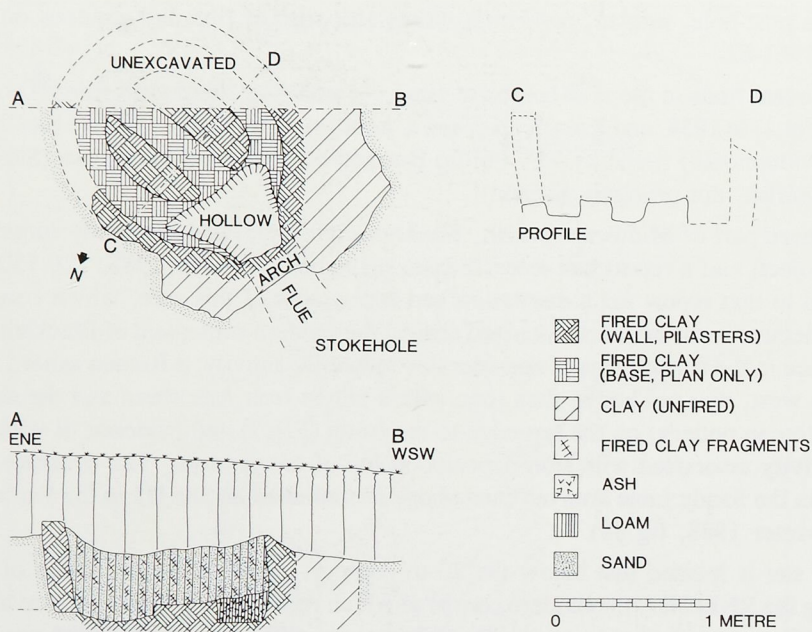


Fig. 2
Plan, section and profile of the kiln. Scale 1:50



Plate I

The kiln looking south. The kiln wall (machined away) is clearly visible in the section to the left.
Scale in 20 cm graduations. (Photo David Wicks, ref. EZS4.)



Plate II

The kiln looking east, showing the arch.

Scale in 20 cm graduations. (Photo David Wicks, ref. EZS15)

The section on the edge of the stripped area (Fig. 1, A-B) clearly showed that the wall on the east side of the kiln had survived to a height of approximately 0.62 m above the base of the kiln until removed by the mechanical excavator (Plate I). On the west side of the kiln, where less damage had been done, the kiln wall survived *in situ* to a maximum height of 0.52 m above the base of the kiln (Plates I and II).

The pit for the kiln and the kiln walls

The kiln was built in a large, probably irregular pit, dug into the sand subsoil to a depth of at least 0.52 m. The full extent of this pit was not ascertained.

The clay east wall of the kiln was 0.16 m thick, with a very hard-fired sooty grey/black surface merging into reddish fired clay to its full thickness.

On the west side of the kiln, the inner face of the kiln wall was up to 0.70 m from the edge of the pit, and while the inner 0.16 m or so of the clay lining was hard-fired grey/black merging into red like the east wall, behind this and filling the gap between the fired clay kiln wall and the edge of the pit there was a large deposit of unfired greeny-yellow clay.

The pit dug for the kiln had clearly proved to be larger than necessary for the kiln, and on the west side of the kiln, the pit had been filled to its edge with presumably the same clay as that used for the kiln structure.

The approximate internal size of the firing chamber can be estimated as c.1.14 m wide and c1.50 m from the back of the kiln to the flue arch.

The kiln arch, flue and stokehole

The kiln seems to have been oval in shape, with the flue to the north-west. The kiln walls ran into the flue underneath the flue arch (which miraculously survived the machining; Plate II), and they may have continued to the north-west with a clay-lined flue leading to the stokehole area.

Unfortunately, machining had disturbed the area beyond the arch quite badly, and it was impossible to be certain about the nature or length of the flue beyond the arch. Equally, disturbance and dumped soil made it impossible to define or excavate the area of the stokehole, which showed up as a large black area to the north-west of the kiln.

The mouth of the kiln beneath the arch was 0.40 m wide, and the kiln walls extended to about 0.50 m below the level of the underside of the arch. Below the arch however, undisturbed sand was only reached at a depth of 0.60 m below the underside of the arch, and it was clear that some 0.10 m of the loose sand subsoil below the level of the base of the kiln walls here had been removed when the kiln had been raked out. Raking out activities had also resulted in a deep ash-filled depression between the mouth of the kiln and the edge of the kiln base (which ran across the kiln at the ends of the two D-shaped pilasters) and this reached a depth of 0.34 m below the level of the kiln base before undisturbed sand was found.

The base of the kiln and pilasters

As noted above, the kiln base (of very hard fired clay) extended to the ends of the pilasters, beyond which there was a deep hollow created by raking out of the kiln (Plate I).

In the centre of the kiln there were two D-shaped integral fired clay pilasters, surviving to a height of 0.06 m to 0.08 m above the kiln base (Fig.2, profile C-D and Plates). Only the pilaster on the north side of the kiln was fully exposed, and this was 0.76 m long with a maximum width of 0.24 m. The other pilaster which ran into the section seemed to be somewhat larger, with a maximum width of 0.30 m. In plan, the pilasters are set at a slight angle to the apparent axis of the kiln structure.

There were no indications on the pilasters, or on the kiln walls, of the nature of the kiln floor or method of supporting vessels in the kiln, but it may be supposed from the absence of portable supports or firebars that the kiln perhaps originally had a solid-clay vent-holed floor supported by the pilasters.

Fills of the kiln

The kiln had two fills, the upper fill from the top of the surviving kiln walls to the tops of the pilasters being a brown loam with abundant fragments of kiln superstructure. This was virtually all removed by machining or in initial cleaning, and no finds were recovered from this layer.

The lower fill, an ashy black sandy loam, filled the lower part of the kiln up to the level of the tops of the pilasters. In section, it only appears against the west wall of the kiln. This layer ran across the base of the kiln and filled the raking-out hollow at the mouth of the kiln. It contained pottery, which, it will be suggested below, was almost certainly fired in the kiln.

The Pottery

Fifty-nine sherds were recovered from the lower fill of the kiln, the black ashy deposit which ran across the base of the kiln and into the raking-out hollow. With the exception of two sherds, one a samian ?South Gaulish body sherd which is certainly intrusive, and the other, a body sherd in a reddish-yellow fabric with a black well-burnished external surface (possibly intrusive), all the sherds recovered from the kiln are in the typical Nar Valley Ware fabric.

This is a hard, rough fabric, generally grey (2.5Y N3 /) throughout, although surfaces occasionally range in colour between brown, light brown and reddish-yellow (7.5 YR 5/4, 6/4, 6/6). Inclusions consist of moderate subangular quartz grains up to 0.50 mm, with a few larger grains up to 2.00 mm, and occasional fragments of flint up to 2.00 mm.

Of the 57 sherds in the Nar Valley Ware fabric from the fill of the kiln, no less than 42 have all or most of one surface flaked off, and it is clear that a mis-firing of the kiln resulted in the cracking and flaking of the vessels. None of the vessels are significantly warped or distorted.

In addition to the pottery recovered from the kiln during the excavation (Fig.3), a large collection of pottery was recovered from the spoil heaps in the area of the kiln. This collection is predominantly in the Nar Valley Ware fabric, but several other wares are represented. A selection of this collection in the Nar Valley fabric is published (Fig.4), to illustrate other possible kiln products.

Pottery from the kiln (Fig.3)

1. Necked jar, with parallel lines of diagonal stabbed and slashed decoration.
2. Jar rim.
3. Jar rim, fractured through the middle of the sherd.
4. Jar rim, with traces of burnishing inside the rim.
5. Jar rim.
6. Base and lower part of jar or bowl, flaked internally, with horizontal grooving.
7. Sherd from vessel shoulder with horizontal burnished lines.
8. Shoulder of jar with large slug-like rustication on the shoulder.
9. Sherd with vertical slashed decoration.
10. Sherd, flaked internally with horizontal burnished lines.

Pottery collected from area of the kiln (Fig.4)

11. Jar with stabbed decoration on the shoulder.
12. Necked jar with slight rustication on the shoulder.
13. Jar rim, with burnished rim and exterior.
14. Necked bowl with girth groove, burnished on the rim and exterior.
15. Large necked jar with slight groove on the rim.
16. Sherd from narrow-mouthed jar with slight horizontal lines on the shoulder.
17. Dish with small bead rim, straight sides and burnished surfaces.
18. Dish with curved sides, chamfered base and burnished surfaces.
19. Sherd from shoulder of thin-walled narrow-mouthed vessel with rouletted decoration.
20. Sherd from shoulder of large thick-walled narrow-mouthed vessel with deep slashed decoration.

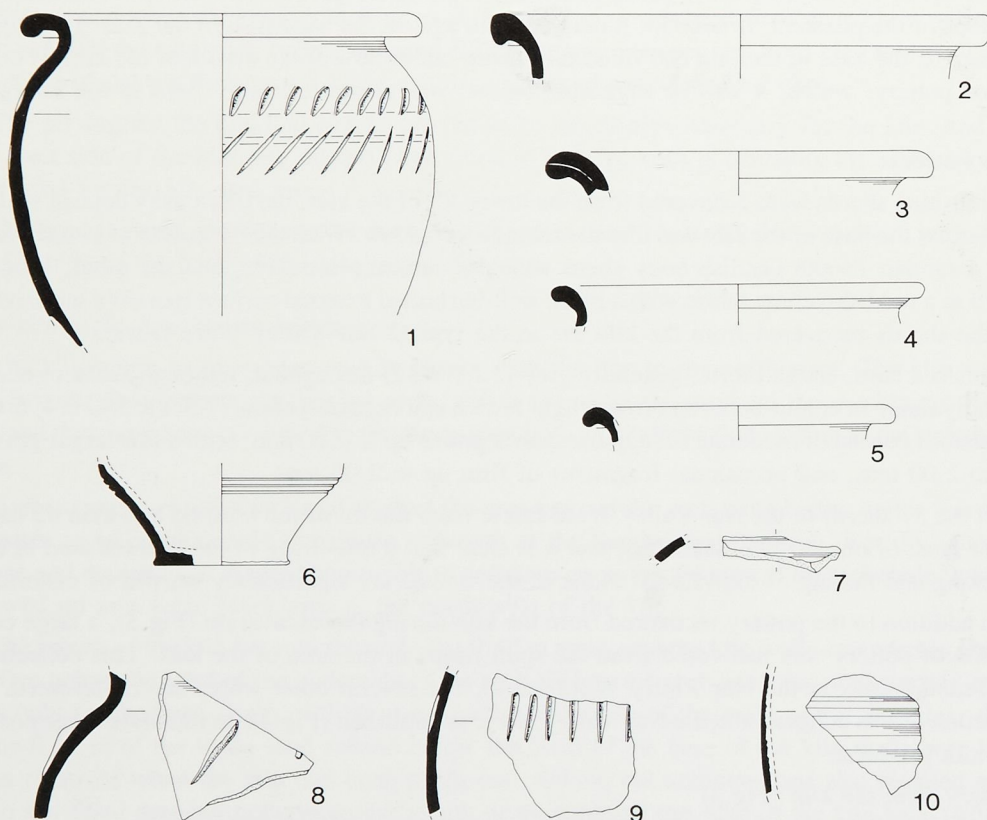


Fig. 3
Pottery from the kiln. Scale 1:4

- 21. Body sherd with widely-spaced stabbed decoration.
- 22. Body sherd with small circular stabbed decoration.
- 23. Body sherd with horizontal groove and slight vertical burnished lines above.

Other Finds (not illustrated)

These consist of fired clay fragments of the kiln superstructure, animal bones, two iron nails and an iron latch-lifter, all from the spoil heaps. A sherd of medieval glazed Grimston Ware was also found.

Discussion

The kiln was a roughly oval semi-sunken fired clay structure, with two integral D-shaped pilasters. These would have supported the raised oven-floor of the kiln. Similar kilns seem to form a small but distinctive regional group in Norfolk from the early to mid-second century onwards, with examples of the type at Brampton, Shouldham, Pentney, Witton and Hevingham (Swan 1984, 121). All these seem to have produced kitchen wares for local needs.

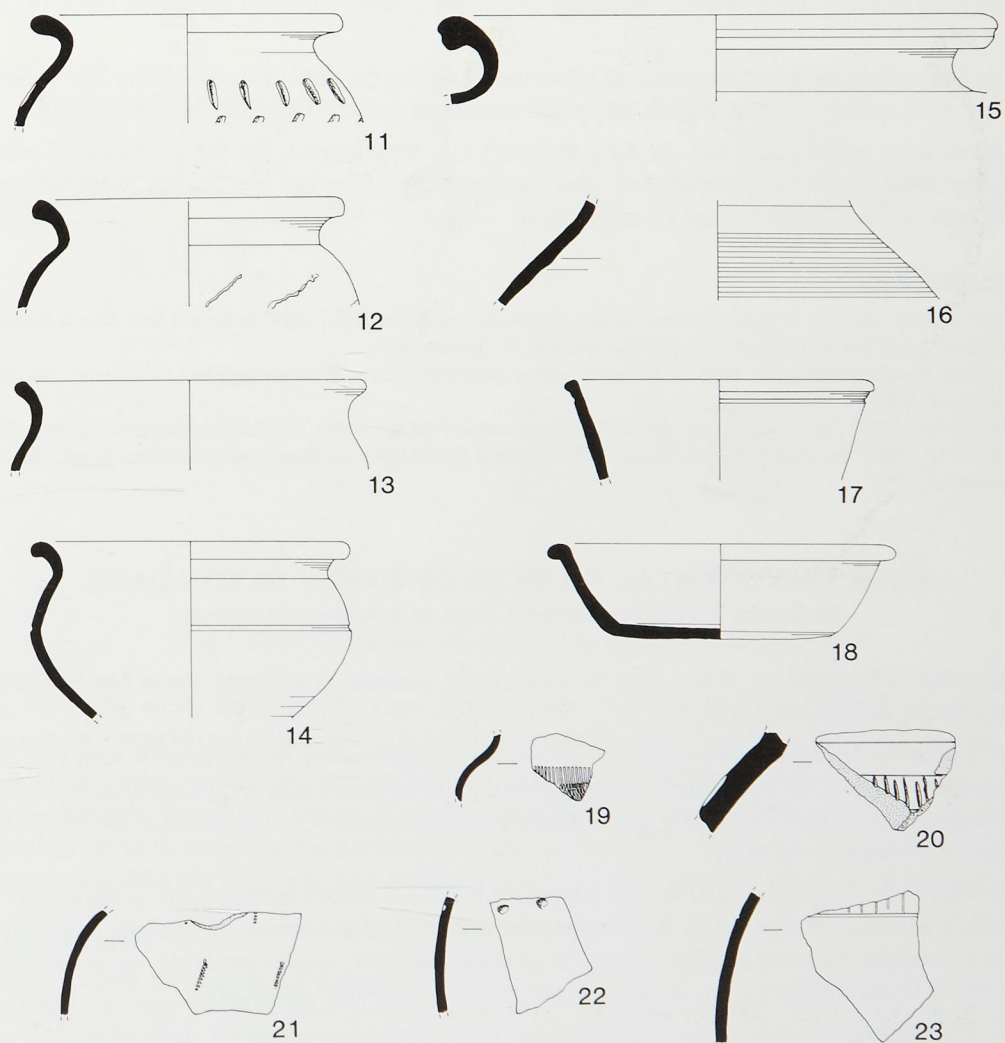


Fig. 4
Pottery from the area of the kiln. Scale 1:4

The pottery recovered from the fill of the kiln and the surrounding area suggests that this kiln was producing a range of vessels in Nar Valley Ware. Two other kiln sites which produced a similar range of forms in a virtually identical fabric are known at Shouldham and Pentney, both within a four mile radius to the south and south-east respectively. Both these sites are unpublished, and little work has been done on their products, but a fairly wide range of Nar Valley vessels can be found in the report on the Saxon Shore Fort at Brancaster (Andrews 1985, fabrics RW1 and OW1 with vessels scattered throughout the pottery type series).

The most common forms represented are jars, generally unburnished (but see Nos.4 and 13) and with decoration of rustication (Nos.8, 12), slashing or stabbing (Nos.1, 9, 11, 20-22) or

rouletting (No.19). Other forms, including bowls and dishes, are often burnished (Nos.14, 17 and 18).

At Brancaster, the principal source of coarse wares during the third century was the Nar Valley, and a third century date would fit the small sample of pottery from the Middleton kiln.

Shouldham and Pentney are, to date, the main kiln sites known, but the existence of other smaller local workshops is suspected, and the discovery of further Nar Valley Ware kilns in this area of west Norfolk may be anticipated.

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FOUR CONTINENTAL OBJECTS OF EARLY SAXON DATE

by Steven J. Ashley, Kenneth Penn and Andrew Rogerson

Four pieces of metalwork (Fig.1, one not illustrated), unusual in an Early Saxon Norfolk context, have recently come to light.

1: Complete headplate and upper part of bow of a copper alloy radiate brooch with five integrally cast knobs, cast and probably hand-finished grooved decoration, and punched dots; double pin-lug on reverse with iron spring bar. Found in Bylaugh parish (County Number 23473; NCM Accession Number 96.987).

2: Fragment of headplate and bow of copper alloy radiate brooch with two surviving integrally cast knobs, cast and probably hand-finished cross-hatched decoration on headplate, grooves on bow, and punched ring-and-dot decoration on knobs and bow; single central pin-lug on reverse. Found in Hindringham parish (County Number 25474; private possession).

3: Silver detached knob with cast animal-head motif, and some surviving niello inlay; hollow underside unequally divided by transverse ridge; broad end pierced by circular hole and upper edge of ridge by semi-circular notch. Found in Beachamwell parish (County Number 4562; private possession).

Not illustrated: Rectangular headplate of copper alloy brooch with five integrally cast knobs and cast decoration. This object was unfortunately mislaid before being taken to N.A.U. for recording. Found in Buxton with Lammas parish (County Number 24886).

The radiate brooch is rarely found in England outside East Kent. By 1940 Kent had produced 90% of known examples (Hawkes 1956). Usually either in silver or gilt copper alloy, the type was imported from the Frankish Rhineland during the first half of the sixth century (Chadwick 1958, 41). No.1 is closely paralleled by an example from Lyminge, Kent (Åberg 1926, fig.151). A pair differing from No.2 only in the use of zig-zag rather than grooved decoration on the edges of the bow was recovered from grave 133 in the cemetery at Little Wilbraham, Cambridgeshire (Neville 1852, pl.8; Reichstein 1975, 151, Taf. 106). They were accompanied by a cruciform brooch of Åberg's (1926) Group III and a wrist clasp of Hines' (1984) Form C.3. The lost unillustrated piece was similar to a brooch with a Kentish provenance (Åberg 1926,