# Assessment of the Iron Age, Roman and Later pottery from North Killingholme (CHP 2002)

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A collection of Iron Age, Romano-British and early modern pottery from an excavation at North Killingholme, North Lincolnshire, conducted by Humber Field Archaeology was submitted for identification, recording and assessment. The Iron Age pottery was examined at x20 magnification and assigned to fabric groups on the basis of the identity, quantity and other characteristics of the main visible inclusions. The Romano-British and early modern pottery was classified according to the system used in the city of Lincoln, most of which has a wide regional applicability.

The majority of the pottery dates to the Iron Age and where local parallels exist they appear to be dated to the late Bronze Age to early Iron Age or to the Middle Iron Age with nothing which need date to the late Iron Age. The Romano-British material consists of a scatter of sherds, datable to the mid to late Roman period (i.e. 3<sup>rd</sup> and 4<sup>th</sup> centuries). There is thus a long hiatus between these two phases of activity. Finally, there is a small group of early modern pottery which can be dated as a group to the 19<sup>th</sup> century.

Fragments of briquettage, daub and other fired clay and slag were identified in many of the assemblages but these will be assessed elsewhere alongside the remaining briquettage and fired clay from the site.

#### Description

#### **Iron Age Pottery**

Nine hundred and forty six sherds of Iron Age pottery were recorded. In many cases it was possible to identify sherds from the same vessel within an assemblage and from this we can say that there were no more than five hundred and eighty eight vessels present in the collection. However, no attempt was made to find cross-fits between different contexts and this total could well be much higher than reality. The pottery weighed, in total, 10.027 kg, giving a mean sherd weight of just over 10gm.

A large number of distinctive fabrics were identified in the collection (Table 1). These thrown light on cultural practices in the Iron Age (e.g. the inclusion of bone and slag as pottery temper) as well as indicating that the pottery was made from differing raw materials, probably indicating that the pottery was not made locally. For example, the fired clay from the site was made in two distinct fabrics, one of which contained rounded chalk inclusions whilst the other contained mainly quartz sand. The texture of these two fired clay fabrics and the details of their petrology at x20 magnification, indicate that they were made from chalky

and non-calcareous boulder clays, both of which outcrop extensively between the Lincolnshire Wolds and the coastal marshes. The briquettage, on the other hand, is made from a soft, silty fabric consistent with the silt found in the marshes and this too was probably locally-produced. By contrast, none of the pottery fabrics can be matched with these local clay sources.

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Fabric Code	Brief Description	Knight/Darling/Precious Code
B01	Angular fragments of bone	
C01	Rounded chalk inclusions	
E01	Angular fragments of igneous and metamorphic rock	
E10	Angular and rounded fragments of quartzite	
E11	Angular fragments of red sandstones	
E02	Angular fragments of igneous and metamorphic rocks and polished quartz grains of lower Cretaceous origin	
E03	Angular fragments of shell and igneous rock	
E04	A medium-grained sand containing moderate to abundant angular igneous and metamorphic rock fragments	
E05	Angular fragments of bone and igneous rock	
E06	Angular fragments of white sandstone	
E07	Angular fragments of igneous rock with a black, organic groundmass	
E08	Angular fragments of igneous rock in a groundmass containing rounded haematite nodules	
E09	Angular fragments of igneous rock in a light-firing groundmass	

F01	Sandy fabric with rounded haematite nodules (may be simply E8 with rock fragments too sparse to be seen)
G01	Polished quartz sand and sparse lower Greensand chert fragments
H01	Abundant angular shell fragments up to 10mm long, also some shelly limestone
H02	Sparse to moderate shell fragments in a silty groundmass
H03	Sparse shell fragments in a sandy groundmass
L01	Limestone fragments
O01	Organic inclusions in a silty groundmass
S01	Quartz sand tempered
S02	Fine quartz sand and silt
S03	Fine quartz sand in a clean groundmass
S04	Sparse to moderate shell fragments in a sandy groundmass (may overlap with H3)
S05	Rounded quartz sand, cf Nottinghamshire/Trent valley
S06	Rounded siltstone and mudstone inclusions in a sandy groundmass
S07	Untempered silty clay
SL01	Angular offwhite/grey fuel ash slag inclusions in a silty groundmass

The main fabric, E01, is well-known on sites in east Yorkshire and the Vale of Pickering and has been the subject of petrological analysis at the Department of Scientific Research at the British Museum (for example, {Freestone & Middleton 1991 #11113}; {Freestone & Humphrey 1992 #44343}) as well as the doctoral thesis of Dr P Wardle ({Wardle 1991 #45423}). Their conclusions are that the rock inclusions were deliberately selected and

prepared by the potters, probably through fire-cracking of larger pebbles. This would explain why within any one vessel there is a limited range of rock types present. Most of the fabrics coded E01 to E11 conform to this model. What cannot be determined from this existing work is whether the addition of selected fire-cracked erratic rocks was a cultural trait practiced over a wide area of East Yorkshire and north-east Lincolnshire or whether there were a few centres at which this pottery was produced which then supplied surrounding areas through trade or exchange. With this in mind, it is interesting to note that some of the Erratictempered fabrics contain polished quartz grains of lower Cretaceous origin whilst sparse fragments of flint also occur in many of the sherds. It is possible that further thin section analysis might tell us whether these vessels were produced on the south side of the Humber estuary, as common sense suggests should be the case, or on the north, which their similarity to the Yorkshire examples suggests.

The shell-tempered fabrics also have great potential for further study, since the shell in all three of the recognised fabric groups does not appear to be recent shell from the Humber Estuary or the marshes but fragments of shelly limestone. Several limestones composed mainly of shell fragments in a calcite matrix outcrop in the area. The closest to North Killingholme is the Claxby Limestone, which is a lower Cretaceous rock which has a limited outcrop on the west side of the Wolds north of Market Rasen. However, visually, the fragments in fabrics H01 to H03 appear more similar to fabrics made from Jurassic limestones, such as those of the lower Lias, the Great Oolite and the Cornbrash. It is likely that thin section analysis would allow us to determine which, if any, of these rocks was the source of the shell used in the North Killingholme pottery.

The site produced a few Scored Ware vessels, some of which were made in Erratic tempered fabrics whilst one has a sand-tempered fabric which is visually extremely similar to vessels made in the Trent Valley and Nottinghamshire, where such vessels are much more common. It is likely, therefore, that we have here one non-local vessel and a few locally-made copies. Again, thin section analysis would allow this tentative identification to be tested.

A few sherds contained slag and bone inclusions (Fabrics B01 and SL01). These materials must have been deliberately added and give us no indication of the source of the vessels. However, it is likely that thin section analysis would allow use to identify the broad area in which these vessels were made, as well as confirming or refuting the visual identifications.

#### Forms

It was only possible to identify the form of a small minority of the vessels found. However, it is likely that the majority of the unidentified sherds come from vessel types represented by more complete or reconstructable vessels. Only one complete profile could be reconstructed. This was a jar with a barrel-shaped profile from context 1223. The vessel has

a short vertical neck and a rounded rim. It was coil-built and has broken along the coil joins. These show that the vessel was probably from about 6 coils (5 can be positively identified) and that each coil was added to the inside of the coil below. The interior clay was then smoothed downwards and the exterior smoothed upwards. However, like most of the pottery from the site, the vessel is only crudely finished and there was no attempt to rotate the vessel to produce a more regular, smoother appearance.

In addition, 16 base sherds (not counting fragments of flat bases with no base angle) and 39 rims were recorded and where possible the overall shape of the vessel was also noted. This shows that there were three main types of base in use: a flat base with the walls of the pot rising straight from the base; a flat base with some sort of moulding of the base angle and a footring base in which the underside of the base had been scooped out to form a ring (noted on vessels of fabrics E01 and S04).

Rims were mainly simple rounded forms or flat-topped but there are examples with everted rims (4 examples) and with bead rims (3 examples, all from smaller, finer vessels).

Only six vessels showed any sign of decoration: two sherds of fabric E01 jars with vertical scoring on the exterior, close to the base, a body sherd of fabric G01 with grooved and twisted cord decoration, 22 sherds from a cylindrical-bodied jar of fabric H01 with a flat-topped rim decorated with finger impressions, a necklace jar with scored decoration on the girth and lower part of the body in fabric S05) and 19 sherds from a jar decorated with stamping and twisted cord impressions in fabric S03.

In many cases the sherds are too abraded for any traces of use to remain, however, in 45 instances such evidence remained. Mostly, it consists of sooting on the outside of E01 jars, often concentrated on the upper part of the body and outside of the rim (14 definite jars, 2 hemispherical bowls and 6 indeterminate forms), single examples of E04, E09 and G01 jars, two H01 jars and one H03 small jar. Sooting occurred on vessels whose wall thickness and diameter might have suggested that they were made for storage. Three jars with sooting on the outside had a black deposit on the interior, presumably evidence that their contents boiled dry. A further seven vessels had this internal black deposit with no sooting on the exterior. In one example an E01 jar had a charred deposit on the inside of the flat base. From this evidence we have no clear idea of what liquid was being heated or boiled in these jars but we can say that vessels of widely varying sizes were used for this purpose and by modern analogy the largest vessels were probably used for communal cooking (i.e. groups of 6 or more individuals rather than the nuclear family of 4-5 people). The thin black internal deposits may indicate that food was being boiled, either as vegetables or meat in water or as a thin soup, whereas the carbonised deposit is more likely to have come from a stew.

There were four other vessels with use traces: an E01 jar had a pinkish discolouration to the interior which is paralleled on briquettage. This may indicate that the vessel was made with

briny water or that it was boiled dry having been used to contain salted water. This might have been domestic or associated with salt extraction in some way; an S01 jar with an external burnished surface has an internal surface which is spalled, suggesting that its contents might have reacted with the body of the pot in some way; an H01 jar had leaching of the shell inclusions on the interior of the base of the pot and the S05 (Scored ware) jar was sooted on the exterior but heavily worn on the interior, presumably evidence for the cleaning of these vessels after use.

## **Romano-British Pottery**

Twenty-one sherds of Romano-British pottery were recovered from the excavation. They were assigned to five fabric codes, using the City of Lincoln classification (Table 2). Most of the sherds were small and abraded and they include types which range in date from the 1<sup>st</sup> century to the late 3<sup>rd</sup> or 4<sup>th</sup> century. The only unusual vessel for Lincolnshire is of Oxfordshire red colour-coated ware and the remainder are typical of the north east part of the county.

#### Table 2

Code	full name	Total
GREY	Romano-British greywares	15
NVCC?	Nene Valley Colour-Coated ware	1
OXRC	Oxfordshire Red Colour-Coated ware	1
SAMSG	South Gaulish Samian ware	1
VESIC	Vesicular ware	3
Grand Total		21

A couple of the greyware sherds come from wheelthrown vessels with sharp angled profiles which, like the South Gaulish Samian ware suggest a 1<sup>st</sup> century date. At that period it is likely that erratic-tempered coarsewares, of identical fabric to those found in the early to mid Iron Age, were still in use in the area and therefore there is a possibility that some sherds assigned to the Iron Age are actually of early Roman date.

The range of forms present (Table 3) is typical of a rural settlement and contains no amphorae, flagons, platters or mortaria but is dominated by jars and bowls (9 and 7 sherds respectively). In addition, two unidentified closed ware forms were found, a beaker, a lid and a Samian vessel, probably Form 18.

AVAC Report 2004/

Table 3

Broad ClassFormTotalJarsCP?1JarsJar2JBK11JBK11JEV11Jars TotalJar1BowlsB11BowlsB11BowlsBUP11Bowls TotalCLSD2Closed TotalCLSD2Beakers TotalI1LidsL1SamianI8?1Samian TotalI1Samian TotalI1Samian TotalI1Samian TotalI1Samian TotalI1Samian TotalI1Samian TotalI1Samian TotalI1Samian TotalIISamian T			
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BWM?1Bowls Total7ClosedCLSD2Closed Total2BeakersBK1Beakers Total1LidsL1Samian18?1		BG225	1
Bowls Total7ClosedCLSD2Closed Total2BeakersBK1Beakers Total1LidsL1Samian18?1		BUP	1
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Beakers Total1LidsL1Lids Total1Samian18?1	Closed Total		2
Lids L 1 Lids Total 1 Samian 18? 1	Beakers	ВК	1
Lids Total 1 Samian 18? 1	Beakers Total		1
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	Lids Total		1
Samian Total 1	Samian	18?	1
	Samian Total		1

Grand Total 21

#### **Early Modern Pottery**

Small groups of 19<sup>th</sup>-century pottery and clay tobacco pipe were recovered from the fill of two ditches, 2011 and 2022 (contexts 2010, 2012, and 2025). The pottery consisted of Pearl ware (PEAR), Transfer Printed ware (TPW), miscellaneous post-medieval slipware (SLIP) and 19<sup>th</sup>-century Buff ware (NCBW). The range of vessel forms represented indicate that the pottery was used for the preparation (mixing bowls, pancheons) and serving of food (plates and tureens) and is thus likely to have been used elsewhere. As a group, the material is likely to be mid 19<sup>th</sup>-century in date although taken individually the vessels could include both earlier and later pieces.

#### Discussion

The impression from looking at the assemblages in this collection is that they fall into two groups: those composed mainly of a small number of vessels, each of which is present as a number of sherds and those in which the assemblage consists of sherds from different sherd families. There is also an impression that the former assemblages consist of larger sherds than the latter.

Fig 1 shows a histogram of mean weight per sherd family by context. It indicates that the data is polymodal with peaks at 1-6gm, 21-26gm, and 41-46 gm. On the basis of this distribution it seems reasonable to assume that contexts where the mean sherd family weight is 16gm or more belong to the first of these two groups, which is likely to indicate primary refuse disposal whereas contexts where the mean sherd size is less than 16gm represent secondary deposits, including (or being solely composed of) redeposited material.

A second measure of deposit status is the number of sherds per sherd family. The mean value for individual contexts ranges from 1 to 14.5. Clearly, for large contexts the higher the ratio of sherds to vessels the more likely it is that the assemblage is primary but in fact most assemblages contained a "background scatter" of sherds which did not belong to sherd families and which help to depress the sherd:vessel ratio.

Combining both measures, we find 16 contexts which fulfil both conditions (mean sherd weight over 16gm and mean sherd:vessel ratio of over 2).

Table 4

Context	Sherds:vessel	Mean sherd family weight
1036	5.40	42.40

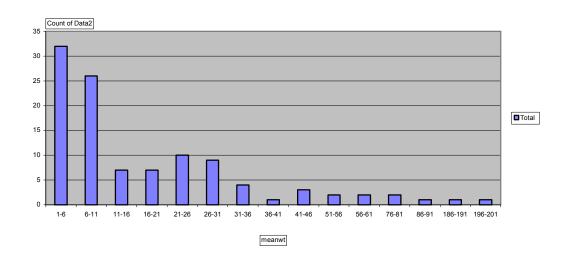
1097	2.11	34.44	
1121	2.72	28.89	
1197	6.50	21.00	
1223	5.43	187.29	
1270	4.00	60.00	
1278	14.33	79.33	
1334	2.43	18.14	
1335	3.33	35.33	
1336	2.17	29.17	
1337	3.67	22.33	
1350	3.25	17.50	
1396	3.00	30.00	
2023	5.00	38.00	
2024	9.00	200.00	
2054	4.33	90.50	

If, on the other hand, we just look for assemblages which have produced large fragments of vessels, composed of 4 or more sherds we get a different list (Table 3) which includes contexts 1067 and 1210, both of which were omitted from table 2 because of the number of single sherds present.

Table	5
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Context	No of large vessel frags	Included in Table 2?
1036	2	Yes
1067	1	No
1097	1	Yes
1121	3	Yes

1197	1	Yes
1210	2	No
1223	2	Yes
1278	2	Yes
1334	1	Yes
1335	1	Yes
1336	1	Yes
1337	1	Yes
2023	1	Yes
2024	2	Yes



Total

# Figure 1

From this discussion, it is clear that it is not possible to be absolutely confident about the deposit status of all of the assemblages recovered from the site but that there are clearly some which are very likely to be primary deposits and it is these assemblages which should be selected for further analysis (for example by C14 dating of associated material).

Other deposits may have produced individual sherds of interest and a total of 28 vessels were selected for illustration. However, seven of these vessels come from contexts which also contain Romano-British sherds and are either contaminated by intrusion or the vessels themselves are residual. One vessel comes from context 1330, which is unstratified. Three contexts stand out, since they produced several illustratable vessels. They are contexts 1067, 1097 and 1210.

#### Assessment

The pottery from CHP 2002 dates in the main from the Iron Age with local parallels in the early to mid Iron Age. There is a hiatus between the Iron Age occupation and the Romano-British activity, which seems to consist solely of a small quantity of pottery in the top fill of Iron Age features and in an overlying alluvial deposit. Finally, there are two ditches of 19<sup>th</sup>-century date.

It is possible that further work may be able to refine the dating of the site and perhaps produce a sequence of activity. However, only a small number of deposits contained assemblages which could be used for this purpose since most of the assemblages contain material which is likely to have been redeposited.

Further work is recommended on the Iron Age pottery fabrics and on the typology of the vessels, for which illustrations (which will in many cases involve temporary reconstruction of the vessels) would be required.

Two of the Romano-British vessels have been recommended for illustration.