



Jigsaw Cambridgeshire Best Practice Users' Guide

Roman Pottery Identification

Alice Lyons

edited by Jemima Woolverton



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Introduction

This is a brief introductory guide to identifying the main types of Roman pottery found in our region. If you are interested in finding out more about Roman pottery the best way is to try and gain some practical experience. Attending Jigsaw workshops where you can handle material is ideal.

The Study Group for Roman Pottery (http://www.romanpotterystudy.org) is also a great resource and provides useful conferences and publications. Currently it costs £15/year membership, which includes a free journal.

Two very useful publications – both of which are available online are:

Tomber, R and Dore, J., 1998	The National Roman Fabric Reference Collection. A Handbook, MoLAS monograph 2 ISBN 1 901992 01 2
	National Roman Fabric Reference Collection: http://www.molas.org.uk/projects/fabrics_tei.asp?report=nrfc
Tyres P., 1966	Roman Pottery in Britain. B T Batsford, London ISBN: 0 7134 7412 2
	Potsherd: http://potsherd.net/atlas/potsherd.html





1 How Roman Pottery was made

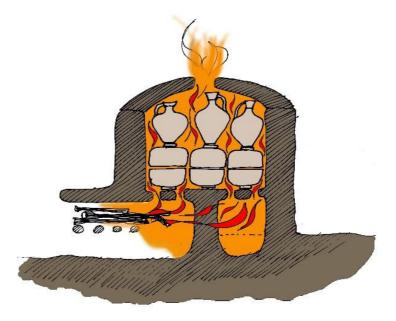
The introduction around the mid 1st century AD of the dual new technologies of the kick wheel and kiln firing drastically changed pottery production in Britain. Where before pottery had been handmade and bonfired, the introduction of the fast potters' wheel and the semi-permanent kiln meant pottery could be made much faster, in a more uniform way and fired more successfully in a controlled environment.

It is these methods of manufacture that make Romano-British pottery so distinctive from its Iron Age predecessors and its Saxon successors. Roman pottery tends to be thinner, harder and more uniform than Iron Age and Saxon pottery.

These technologies allowed Roman pottery to become mass-produced during and after the mid second century, and although small scale domestic production continued in most areas, large industries sprung up making distinctive and beautiful vessels until the end of Roman rule and with continuing influence in the early 5th century.



The fast potters' kick wheel



A section through a semi-permanent pottery kiln





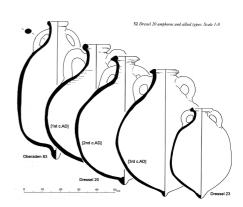
2 POTTERY TYPES

Amphorae (1st - 3rd centuries AD)

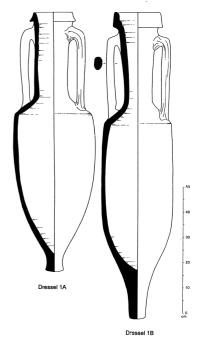
- 'Amphora' (pl. -ae) means 'two-handled vessel' and although commonly referred to as 'Roman' in this country, it was a form of pottery also used by the ancient Egyptians and Greeks, and continues to be used in some parts of the Mediterranean today.
- It is a coil-made, kiln-fired, self-colour vessel produced for long-distance trade (it can be packed neatly into the base of a boat to provide ballast). There are illustrations of people stretchering them as a means of land-based transport.
- Amphorae were first imported into Britain during the 1st century BC and continued to be imported into the 3rd century AD. However, most were imported between the mid 1st to 2nd centuries. They are commonly found on military sites and next to roads. 99% of all amphorae found in Britain were imported.
- The most common types of amphorae in East Anglia are globular olive oil vessels made in southern Spain. They are buff in colour with a flaking fabric and with numerous inclusions of mica and quartz (DR 20). Other types include fine pink to white fabric wine vessels from Italy (DR 1 or 2). Also recognised are the smaller white ware wine amphorae/flagons from Gaul that reached our region in some quantity but can be difficult to distinguish from domestic flagons.
- Wine was stored in the long thin amphorae, and oil in the globular amphorae. Stewed fruit and salted fish were also stored in them.
- Stoppers were made of cork and sealed with pitch (some can be seen in the British Museum).



A general view of multiple amphora



Dressel 20- olive oil amphora from Southern Spain



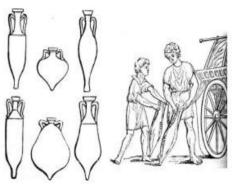
Dressel 1 wine amphora from Italy







Picture demonstrating how amphora can be stacked



Picture showing how amphorae were moved by rolling

Samian

- A glossy brick-red tableware, samian is the most recognisable Roman pottery found in Britain. It was industrially produced on a scale unequalled until the 18th century. It is estimated that one centre turned out a million vessels a year.
- Samian was primarily used for displaying and serving food. Bowls, dishes and plates are common, along with smaller 'cups' that may have been used to serve condiments and snacks rather than as drinking vessels.



A decorated samian bowl (Dr 30)

- Samian has been intensively studied and is known as 'terra sigillata' on the continent.
- Samian was first produced in north Italy at the end of the 1st century BC, but by AD43 it was
 nearly all being made in Gaul (France). The principal factories remained there for the next
 two centuries, although there were small-scale producers in Colchester and possibly in
 London. Many vessels are stamped with the potter's name.
- Some samian was decorated with elaborate floral or figural designs that were made by throwing the pot within a mould. Mould fragments are rare but a few have survived.



Samian mould fragments







- **South Gaulish:** (c. AD 35-110, mainly c. AD 65-100). Cups, platters, shallow bowls, deep bowls, occasionally beakers. Hard reddish brown fabric with yellow-white fleck and a high red gloss. South Gaulish samian is virtually ubiquitous on Flavian (AD 69-96) sites. High survival rate, as with all samian. Estimates suggest average life span of twenty to thirty years.
- **Central Gaulish:** Les Martres-de-Veyre, (*c.* AD 100-125). Cups, shallow and deep bowls. Rare although found in small numbers on most sites in East Anglia. Imported during time of low overall volume of samian importation. Later products of 2nd century also found, but fabric less distinguishable from Lezoux wares.
- Central Gaulish: Most from Lezoux. Later first century imports are very rare cups, bowls, platters. Bright orange, with a thick orange slip, soft and micaceous. Major exporter from c. 125-200, with some exports possibly slightly later. Peak around AD 140-160. The great majority of Antonine samian in Britain is from Central Gaul, and the great majority of that from Lezoux. Cups, bowls, platters, jars beakers, and from c. 150/160 mortaria.
- **East Gaulish:** Soft, with a porous, often dull and uneven orange finish. Numerous sources exporting in 2nd century, but the great majority is from Rheinzabern, from the later second into the first half of the 3rd century. Range of forms broadly as Antonine Lezoux. Imports later then *c*. AD 200 are very rare.
- **British:** A number of attempts to produce samian in Britain can be traced, notably at Colchester in the later 2nd century, but consumption appears to be localised.



A plain samian dish (Dr31), with a campanulate cup (Dr27), both showing signs of wear



Map showing samian production centres

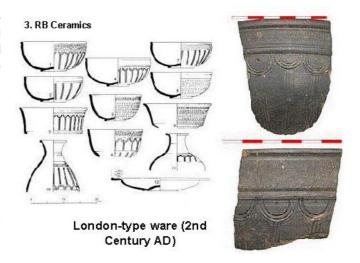




London-type ware

Early British pottery production, which took place at most large production centres such as the Nene Valley, attempted to copy the style of samian wares, although in a grey fabric. These are fairly high status wares made distinctive by their soft soapy feel.

- The London ware style is characterised by incised (including compass-drawn), rouletted and stamped decoration generally on fine grey or black fabrics in forms which copy samian proto-types.
- Produced between the early Flavian and mid 2nd century.
- Produced in several centres including, Ardleigh in Essex, West Stow and Wattisfield in Suffolk, as well as the Nene Valley and London.



Mortaria (singular: mortarium)

- Bowl-shaped vessels for grinding. They are diagnostic of the Roman period in Britain, since they were only used in Roman times, and more have been found in Britain than in the rest of the empire.
- The first mortaria were made in Italy from the 3rd century BC. Developed in industries in Gaul and along the Rhine in the 1st century BC, with occasional imports into Britain. Imported in larger numbers post-Conquest. Within 15 years of the Conquest, mortaria factories were established in eastern Britain.



A mortar and pestle

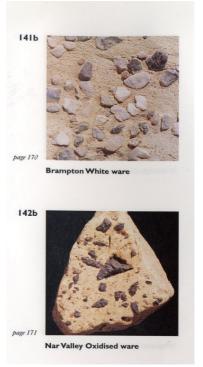
- Mortaria were used for grinding spices and sauces (hence presence of a spout). The popularity of mortaria shows a diet change, signalled by a desire to grind foodstuffs smaller.
- Mortaria get smaller through time and lose their spouts. Spouts were only present from the mid 1st to mid 2nd centuries in Britain, suggesting they were used for making sauces in this period. As the period progresses, they also move from being a kitchen ware to being a tableware.
- Potters' names are sometimes stamped on mortaria, e.g. 'Regalis' in Colchester, who started another workshop in Ellingham, Norfolk.
- Specially-designed pestles are rarely present in the archaeological record. We suspect they
 used sawn off amphora handles, or stones, or wood.





Norfolk and Cambridgeshire mortaria

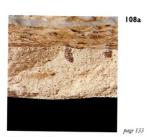
- Mortaria are mostly white, cream or buff wares (self-coloured). Usually with trituration (ground up)grit on interior body and base. Name stamps common from c. AD 50-190.
- Nene Valley and Nar Valley: very similar with reed rim forms and slag trituration grits. Nar valley tends to be more orange.
- Verulamium (St. Albans) region (c. 50-120): very sandy, buff, flint and quartz grit.
- Most Roman fabric types have a mortarium form (samian, Oxfordshire colour coat, Nene Valley colour-coat, white slipware).
- Broad development in flange from:
 - Bead and curving flange: early to mid 2nd century
 - Bead with flattish flange: mid 2nd to early 3rd century
 - Wall sided: 3rd to 4th century Reeded rim mortaria 3rd and 4th century
 - Reeded rim mortaria 3rd and 4th century



Examples of Norfolk mortarium, showing the different grinding grits used.

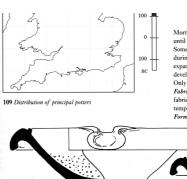
Essex mortaria

Colchester can be difficult to distinguish from other East Anglian production centres (notably Ellingham in South Norfolk) as same potter using similar clays.



Colchester White ware

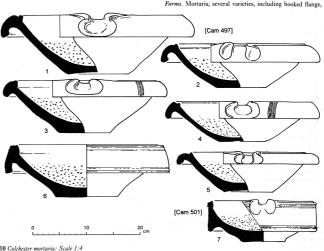




Colchester mortaria

Mortaria were produced at Colchester from c. AD 50/55, but until the mid-2nd cent. the industry was relatively small scale. Some Colchester potters moved to the Verulamium region during the 1st cent. (see VRMO). From c. AD 140 production expanded, influenced by potters from the Rhineland who developed colour-coated and sigillata in the same workshops. Only the 2nd-cent. Colchester mortaria are considered here. Fabric and technology. Fine-textured cream or creamy-yellow fabric with some fine quartz, flint and red-brown ironstone tempering; gritted with quartz and flint.

Forms. Mortaria; several varieties, including hooked flange,



Colchester mortarium fabrics and forms

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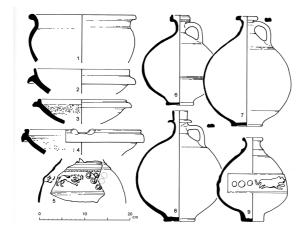


White oxidised wares

- Sources for white wares are diverse. Most kiln production centres produced some white wares, although flagon and mortaria production seems to have been a specialist trade that was undertaken together.
- Most oxidised fabrics (orange to white) were produced as flagons and mortaria.
- Clues to dating flagons: mainly produced in white, buff and white slip:
 - Ring neck: *c.* 50-220
 - Flange-neck c. 220-400 (usually the later 3rd to 4th century in East Anglia)
 - Colour-coated examples are more common in the 4th century.
 - Jugs (with pinched lips) same fabric range and dating, though 3rd century Nene Valley products not uncommon.



A white oxidised ware ring neck flagon



An example of white ware oxidised forms





Grey wares

- Grey wares were the predominant ware across East Anglia from the late 1st to 4th centuries AD and make up 80% of all Roman pottery found in Britain. Coarse wares, for cooking or food preparation or storage, are the most common wares on most sites. They were fired to a high temperature and used to boil water, as plates, lids, cups, cauldrons and frying pans.
- In most cases they will be from local sources but some coarse wares (such as the Black Burnished wares) were transported over long distances. It is not always easy to distinguish grey wares from Black-Burnished wares, which were produced from numerous local sources. Regional styles can be discerned, but considerable "cross-fertilisation" of ideas occurred. Fabrics are sandy or fine, occasionally with reduced slip.



An example of a grey ware vessel (restored)

- Clues to dating grey wares:
 - Rustication (clay drawn up from body or slip in lumps or spidery ridges) c. 50. 100/120 later in Norfolk (till end of the 2nd century).
 - Barbotine dots with rings c. 70-150
 - Burnished lines in large loops, on jars and bowls c. 3rd and 4th centuries
 - Burnished lattice covering wide area of body *c.* 120-250
 - Highly lustrous "metallic" burnish in wide zones *c.* 250-400
 - Reeded rim bowl (early military type) c. 60-130
 - Straight-sided dish with triangular rim (dog-dish or pie-dish) c. 120-200
 - Straight-sided flanged dish c. 250-400
 - Flanged bowl *c.* 150-250





Black Burnished wares

Black-Burnished wares are grey wares, which were originally produced in Dorset and transported over long distances.

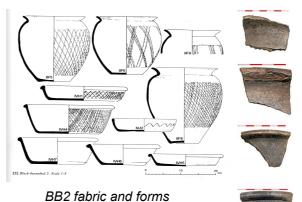
BB1 (c.120 – 370 AD)

- Hand-made, coarse sandy, black or dark grey. Jars, dishes and lids.
- From Dorset (Poole Harbour). BB1 is rare in northern East Anglia, possibly as they were traded from the south-west as receptacles for salt and salted goods such as meat, and East Anglia produced a large quantity of its own salt (from around the Wash) so may not have encouraged trade of these vessels.
- They were based on Iron Age decoration such as cross-hatching.



BB2 (c.120-250)

- Wheel-thrown, fine sandy, black or grey. Jars and dishes.
- From Colchester and Thames Estuary. These were copies of BB1 and were made in a lighter bluer fabric. They are most common in the Upper Thames Valley and East Anglia, not in Dorset. They were made and used locally in Cambridgeshire.



Clues to dating BB wares:

Acute burnished lattice c. 120-200 (dishes), c. 120-230

Obtuse burnishes lattice *c*. 230-370 (jars) Burnished arcs c. 180-370 (dishes), *c*. 120-200

Forms:

Jar with simple everted rim, dog dishes *c*. 120-200 Straight-sided dish *c*. 180-370 Jar with pronounced everted rim, flanged dishes *c*. 250-370 Lids are 2nd century.





Nene Valley colour-coat (mid 1st - 4th century AD)

Manufactured in the Nene Valley, centred around modern day Water Newton (near Peterborough) in Cambridgeshire, was the site of a huge industrial complex in Roman times. Pottery produced there is found all over East Anglia and was shipped up to Hadrian's Wall.



Nene Valley colour coated vessels

Mid 2nd century to early 3rd century

- Established in the mid 2nd century by potters from the Rhineland, the industry really began to thrive in the later 2nd century (at the same time as samian imports began to fail). It became dominant of the local markets in the 3rd and 4th centuries.
- Early production concentrated on beakers such as "hunt cups" and other bag-shaped forms.
 These vessels can be easily confused with imports from the Lower Rhineland, both having a white fabric with dark, nearly black slip.

Mid 3rd - 4th century

• Production in the 3rd and 4th centuries changed with the introduction of utilitarian forms such as jars and dishes which were more chunky, although still colour coated.

Other colour-coats

- Other colour-coated wares are made at various sources, in various styles and date-ranges.
- Non-British products (mostly beakers) include pre-Flavian (c. AD 43-70) imports from Lyon, 2nd century from Lower Rhineland, late 2nd century to early 3rd century from Trier, 2nd century from Central Gaul.
- British sources include Colchester (later 2nd and 3rd centuries) and other, minor industries such as Pakenham in north Suffolk, Two Mile Bottom in South Norfolk and others as yet unlocated.

Clues to dating colour-coats:

Rough-casting (pellets scattered on surface) in quartz sand *c.* 43-70 Rough-casting (pellets scattered on surface) in clay *c.* 70-180

N.B The Nene Valley colour-coat industry did not rough-cast it's products

Barbotine figures under slip c. 150-250

Indentations with barbotine scales c. 180-300 (mostly early-to-mid 3rd century)

Bag-shaped beakers c. 120-250 Bulbous body, tall neck c. 150+

Dishes c. 300+





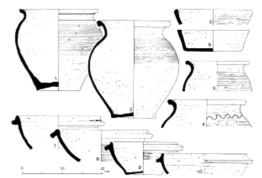
Shell-tempered wares

- Shell-tempered wares can be very confusing and undiagnostic body sherds are very difficult to identify, since the same shelly clay resources were used from the Iron Age through the Medieval period.
- The Lower Nene Valley produced shell tempered storage jars from the 1st to 3rd centuries, with very little change in form.



Shell-tempered jar

- Other centres include: Greetham-Bourne ware, Lincolnshire. Black fabric, undecorated. Jars with necks, pie dishes. Later 2nd to 3rd centuries. Rare.
- Dales-type wares also mainly in the Midland area, but certainly reaches our region in small numbers.
 Very distinctive rim form (also made in a grey ware fabric).
- South Midland shell-tempered ware was common in East Anglia from the late 3rd to early 5th centuries. Produced at Harrold (in Bedfordshire) and perhaps at Lakenheath (Suffolk) but other sources likely. Distinctive under-cut rims and rilled body sherds. Frequently found sooted which gives their exterior surface a dark colour.



Harold Vessel forms

Clues to dating:

Early: jars, with lid-seated or necked rims, latter mainly very large 'storage jars'. The former dates from the 1st to mid 2nd century. The latter can occur throughout the Roman period, but in orange or brown fabrics, a rounded rim tends to be 1st to early 2nd and an angular rim mid 2nd century onwards.

Late: jars with necks, dishes with flanges, both "rilled". Mainly mid-to-late 4th century. Rilling is a type of repeated horizontal grooving if body executed on the potters wheel whilst rotating. Rilled, small to medium sized jar, mainly mid to late 4th century.

N.B Rilling can occur on early and late vessels, lid-seated and 'storage' jars Combing, 1st to early 2nd century Dish, sometimes rilled, mid-to-late 4th century





Oxfordshire Products (3rd - 5th centuries)

In the later Roman period domestically produced red wares became fashionable. These wares mainly copied the samian style but are quite distinctive. Oxfordshire products are the most common found in our region.

Oxfordshire red/brown colour-coat (c. AD 240 – 400)

In East Anglia these date mostly from the 4th century, perhaps peaking in 3rd quarter. Mainly beakers and bowls, also flagons, jars, mortaria and occasionally others. White paint, rouletted, stamped decoration, or plain. Generally an orange fabric, often grey core. Slip adheres poorly and can be lost in adverse soil or post-excavation conditions.

lost in adverse soil or post-excavation conditions. Hadham red wares

Oxfordshire products are very easy to confuse with Hadham red wares (Hertfordshire) which were also produced in Late Roman Britain. Their fabric is typically red-brown, sometimes with a purple core and the vessels made share many of the same forms and decorative techniques at Oxford. This has led to a group of fabrics known as Had/Ox where differentiation has not been possible.







Oxfordshire fabrics