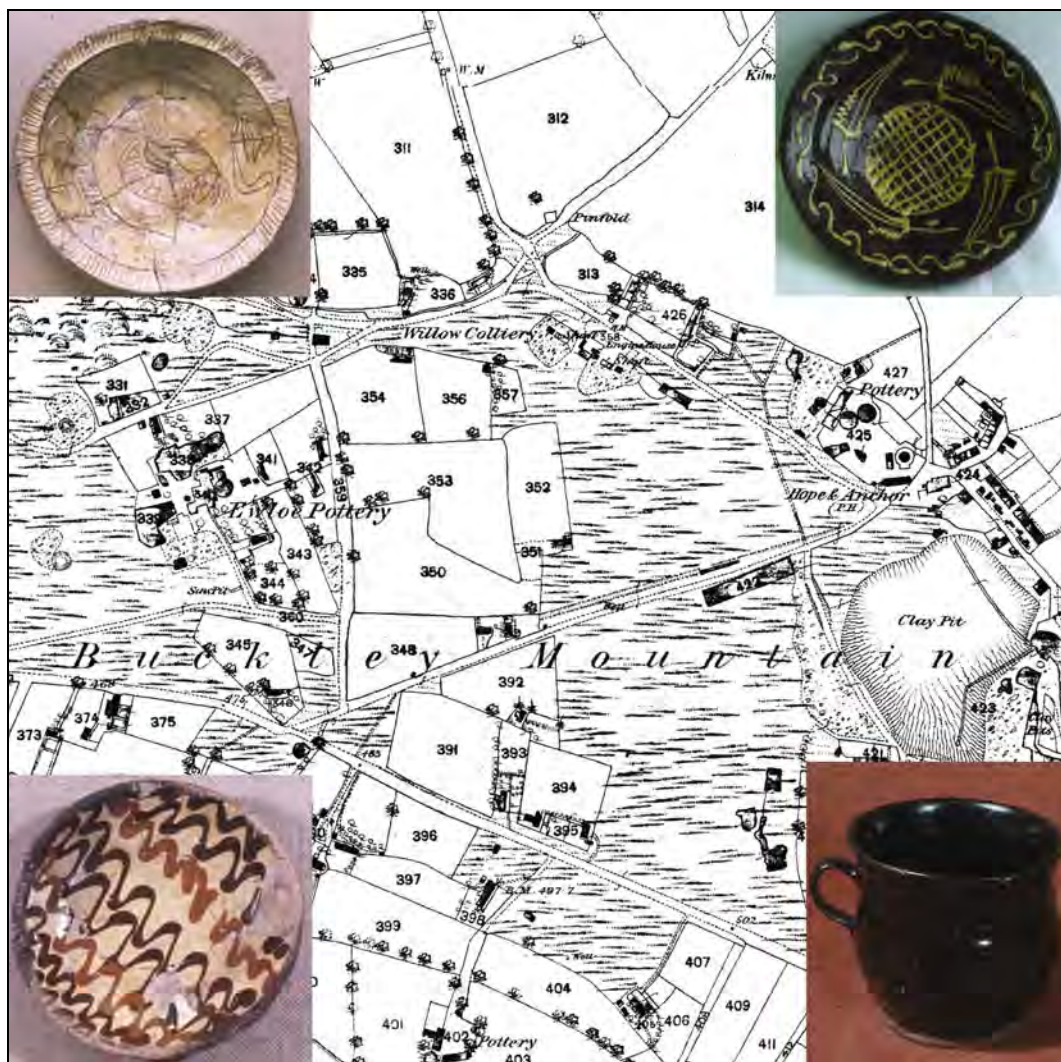


The Buckley Potteries

An assessment of survival and potential



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Summary

The area surrounding Buckley in Flintshire, has been associated with the production of pottery for at least 600 years, from the medieval period to the mid 20th century. The scale and location of pottery manufacture during the Middle Ages and through the Tudor period is poorly known, but by the early 17th century a group of cottage potters had settled around Buckley Mountain where they exploited the suitable supplies of clay, coal and, on Halkyn Mountain, lead. Potteries were often established on encroachments on common land, which can be readily identified in 18th- and 19th-century cartographic sources.

The significance of the Buckley pottery industry has been recognised for some time, attracting considerable attention, although the present study is the first to attempt a comprehensive review, particularly of the historic cartography and the results of previous work. Having started the project with 19 pottery sites the total has now increased to 31, although several are not well located.

Despite the extent and significance of the industry there are now few visible surface traces. The Buckley area has seen considerable new development in the last 20 years, such that most significant elements of the pottery industry have already been lost. There are, however, some remarkable survivals, including the site of the Brookhill Pottery (Site 1), which was in operation from c.1640-1720 and was partially excavated during the 1970s and 1980s. Excavations have been few, although important information has been forthcoming from development-related work at Cottrell's Pottery (Site 2), Taylor's Pottery (Site 3), Thomas Lewis' Pottery (Site 4) and Powell's Pottery (Site 15).

The present study, combining desk-based research with field visits, has made full use of GIS mapping which has been particularly valuable in establishing the location and survival of potteries, as well as tracing their development through time. Data from the project has enabled significant enhancements to be made to the regional Historic Environment Record and not only provides a baseline for future research, but will also be of particular value as part of the development control process. In this respect, it is perhaps regrettable that the study was not undertaken a decade or more earlier as recent years have seen a dramatic increase in housing development in the Buckley area, with the inevitable impact on buried archaeology.

At present there are only two potteries with any statutory protection: Taylor's Pottery (SAM Fl 165) and Cottrell's Pottery (SAM Fl 166). There are others, which have significant archaeological potential of which perhaps the most important is the only known medieval pottery, located near Ewloe, which is known from a scatter of pottery and wasters. The site of Charles Cunnah's 18th-century pottery (Site 25) is also not well located, but is unlikely to have been affected by later development, as is John Lewis Junior's Pottery (Site 4) which may retain some original, though ruinous buildings.

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Introduction

The medieval and early post-medieval industry scheduling enhancement programme (SEP), conducted in 2011-12, identified the Buckley potteries as a nationally important complex of early industry which required more detailed study in order to ascertain its true significance and potential. The current project follows on from that initial research and has been conducted during 2013-14, with funding from Cadw.

The area surrounding Buckley in Flintshire, has been associated with the production of pottery for at least 600 years, from the medieval period to the mid 20th century. The scale and location of pottery manufacture during the Middle Ages and through the Tudor period is poorly known, but by the early 17th century a group of cottage potters had settled around Buckley Mountain where they exploited the suitable supplies of clay, coal and, on Halkyn Mountain, lead. Potteries were often established on encroachments on common land, which can be readily identified in 18th- and 19th-century cartographic sources.

Contemporary accounts are few, although the Buckley potteries were noted by the late 18th-century traveller and writer Thomas Pennant: 'within the lordship are very considerable potteries of coarse earthenware; such as pans, jugs, great pots for butter, plates, dishes, ovens, flower pots, etc. There are fourteen works, which make annually between three and four thousand pounds worth. The ware is mostly exported to Ireland, and the towns on the Welsh coast, particularly to Swansea' (Pennant 1786, 91; see Table 1 for timeline of the potteries). Several years later, in 1798, the Reverend Richard Warner provided a fascinating and detailed account of pottery manufacture in Buckley (Warner 1813, 244-7), which is reproduced selectively in the section on Pottery Manufacture. His introduction to the area states that 'we ascended Buckley hill, in order to visit the large potteries scattered over the face of it; fortunately we met with the master of the works on the spot, who was so good as to conduct us round the manufactory'. Samuel Lewis, in his *Topographical Dictionary of Wales*, also made reference to the industry, although in less detail: 'potteries for the manufacture of coarse earthenwares, and kilns for making fire-bricks and tiles of superior quality, a considerable quantity of which is shipped to Ireland' (Lewis 1833, listed under Coed-Eulo).

It is worth noting here that while Buckley may have been an important supplier of traditional earthenwares, a number of other centres also made a very similar range of products, also based on Coal Measures Clays. The most important of these from a North Wales perspective are Stoke-on-Trent, Liverpool/South Lancashire, Whitehaven, the Glasgow area and the Ironbridge Gorge/Bristol. Each of these produced black-glazed, red-bodied earthenwares using very similar clays and techniques to those at Buckley. The identification, particularly in archaeological circles, of this style of pottery as 'Buckley Ware' is clearly unreliable and likely to be misleading (Davey and Longworth 2001, 64).

Evidence from the few excavations, and particularly as a result of work by Jim Bentley and Martin Harrison in the 1970s and 1980s has, however, identified a number of pottery styles and products which are sufficiently different to allow their possible or probable identification when they are found elsewhere. Broadly, these comprise the following, though readers are referred to Davey and Longworth 2001 for further detail:

- clay tobacco pipes with the initial TH or Thomas Heyes on the underside of the tailed heel.
- thrown sgraffito ware in a red fabric, all-over yellow slip and lead glaze, with the use of distinctive animal or geometric designs.
- Tripod cooking pots, found in the earliest contexts at Brookhill (Site 1).
- Thrown slipwares with a similar fabric and decoration to the sgraffito vessels.
- Press-moulded slipwares – fragments of moulds and wasters are known from Sites 1 and 2.

- Moulded handles applied to black-glazed and slipware products from Brookhill (Site 1).
- Distinctive thrown forms from Brookhill (Site 1), including large, flared, heavily built beakers, thick-walled pedestal cups or lamps, and trailed slip biconical vessels.
- Mottled-wares are not particularly distinctive, but Buckley products are dominated by dishes, many of which are slip-coated before glazing.

Research by the Buckley Society, the Buckley Clay Industries Research Committee and others from the mid-1970s onwards had previously identified nineteen possible pottery sites, few of which have been subject to any detailed examination. The Buckley area has seen considerable new development in the last 20 years, to an extent that significant elements of the pottery industry have already been lost. There are, however, some remarkable survivals, including the site of the Brookhill Pottery, which was in operation from c. 1640-1720 and was partially excavated by James Bentley, though his work remains unpublished. A substantial archive of finds, site records and related documents, including those derived from the Bentley and Harrison excavations at Brookhill and Pinfold Lane, has been donated to National Museums Liverpool. A smaller collection of material from a number of the sites is held by Flintshire Museums Service.

The Buckley pottery sites are a threatened and diminishing resource. Currently, only two sites are afforded statutory protection, Taylor's Pottery (SAM FL165) and Pinfold Lane Pottery (SAM FL166), although it is clear that there is significant potential for future scheduling enhancement and also the listing of standing structures.

Methodology

The project has involved close cooperation with Dr Peter Davey, a leading authority on the Buckley potteries and an Honorary Senior Research Fellow in the School of Histories, Languages and Cultures at the University of Liverpool, as well as his colleague Christine Longworth, also a notable pottery specialist. Their assistance in the development of this project has been of great value.

The initial stage of the project was a desk-based assessment of readily available sources, commencing with the interrogation of the Historic Environment Record (HER) to establish a baseline dataset which was augmented as the project progressed.

Material held by the following repositories was also accessed: Flintshire Record Office, Hawarden; the National Library of Wales, Aberystwyth; the National Monuments Record, Aberystwyth; the Central Register of Air Photography for Wales, Cardiff; and Liverpool Museum (by Dr Peter Davey).

An important element of the project has been the development of GIS mapping to identify the extent and survival of both standing and buried structures, which has been integrated into the HER to provide an aid to future management and development control.

A programme of field visits was also undertaken to the locations of each of the potteries in order to establish the likely survival of any upstanding or buried remains.

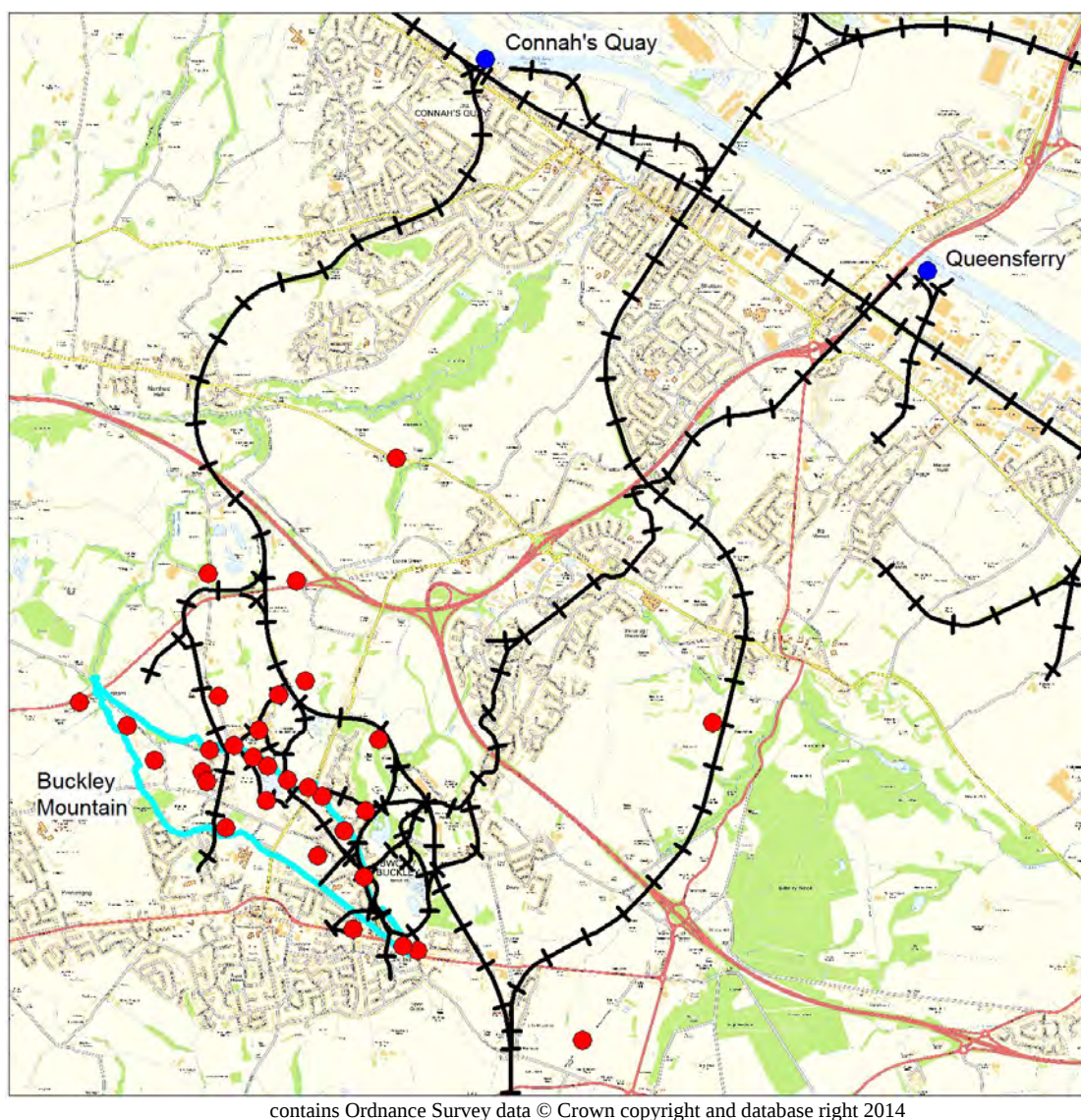


Fig. 1 The general distribution of the Buckley potteries, showing 19th-century railways and the outline of Buckley Mountain

History and Significance of the Buckley Potteries

By Peter Davey

Medieval background

Both archaeological and documentary evidence point to pottery manufacture in the Buckley area during the Middle Ages. Wasters recovered in field walking in the Ewloe area, just east of the present Buckley boundary demonstrate the production of pottery and ridge tiles in a coarse, highly-fired fabric from around AD 1350. The market for these wares, as was the norm at this period, was within a radius of around 20 miles from the site, especially in the regional economic and political focus of Chester. Although urban industries are known, for example in Exeter, the overwhelming majority of medieval potteries were located in rural areas on suitable clay sources within a day's journey from the markets at which they were sold. Whilst at urban centres such as London and Dublin as much as 10% of the pottery consumed was produced at greater distances, often on the continent, it is unusual for excavated assemblages to exceed two to five percent of non-local wares.

Ewloe wares are found throughout north-east Wales and in west Cheshire. In Chester, the main market, they were able to compete successfully with the long-standing industries based in the central Cheshire ridge. During this period Ewloe pottery is of regional significance; but with the exception of the short-lived activity in Rhuddlan, it is the only medieval production centre known in North Wales.

Early modern developments (c1500-1750)

Changes in demand for pottery

The 16th century saw an increase in urbanisation, the development of a larger middle class and marked changes in social structures and manners which led to a rising demand for new types of ceramics both for the table and for food preparation and cooking. These wares required a more advanced kiln design and a more sophisticated range of kiln furniture.

Exploitation of the coalfields

Although many of the coalfields of Britain, including Flintshire, were being exploited for their fuel throughout the Middle Ages, in the two centuries after 1500 the wider potential for industrial development began to be realised. The Coal Measures included clays with a range of specialist properties and supplies of minerals such as iron, copper and lead were often close by. This encouraged their development as centres of industrial innovation, particularly in the iron and ceramic industries.

Why Buckley?

On Buckley Mountain coal and fireclays outcropped and there were superficial boulder clay deposits that are suitable for pottery making. In particular fireclays were available which were essential for the provision of saggars in which to fire the finer wares and also formed a component in the boulder clays making them generally receptive to higher firing temperatures. Pipe clays allowed the development of local tobacco pipe production and lead sources for glazing were accessible on Halkyn Mountain only 8km to the north-west. Most significantly there was direct access to the River Dee by gravity tramways which had been developed for transporting coal (see Fig. 1). This meant that Buckley pottery could easily be exported by sea and the industry did not depend solely on local over-land markets in Chester and north-east Wales.

The status of the Buckley potters gave them advantages over their contemporaries in some other coal-measure areas. They were essentially full-time specialist artisans. In other developing ceramic industries, such as that in south Lancashire, for example, pottery making was carried out by farmers as a part-time, seasonal activity that could be fitted in to the farming year. In Buckley the potteries were small-scale, established on encroachments onto the common, and only provided sufficient land for subsistence crops and livestock. Consequently, pottery making was their main source of income.

Major products

In contrast to centres such as Wrenthorpe (Yorkshire), Ticknall (Derbyshire) or Rainford (Lancashire) there is no evidence so far of 16th-century pottery making in the Buckley area. The post-medieval ceramic technological package appears to have arrived fully fledged in the middle of the 17th century: high firing kilns, the use of fireclays, saggars, slips, lead glazes, moulds etc. The main products were in thrown red earthenware: lead glazed, yellow slip-trailed bowls, cups and small jugs together with larger, black-glazed storage vessels in both closed and open forms. Less common types include figurines, slipware bowls with *sgraffito* decoration and some buff-bodied slipware. Large press-moulded chargers were produced from early on, a number of mould fragments surviving. Mottled wares became important in the latter part of the century - the Buckley potters producing a wide range of forms in addition to the ubiquitous tankards. Tobacco pipes, using local clay in Broseley-style moulds were produced from around 1680 to 1720.

Markets

Although north-east Wales and west Cheshire remained the most consistent markets for the Buckley potters, evidence from archaeological excavations further afield, especially in the Isle of Man and Ireland, demonstrate that significant quantities of identifiable coarse ware and slipware, both thrown and press-moulded, were being shipped overseas. It is likely that a good proportion of the black glazed pottery present in these assemblages will have derived from Buckley; but this ware still needs definitive characterisation in order to discriminate between the different production centres.

The later potteries (c1750-1945)

Industrialisation and innovation

A number of developments within the wider ceramic industry in Britain had a significant effect on the Buckley potteries. The development of the canal system provided land-locked centres such as those in Staffordshire with greatly extended markets. During the first part of the 18th century technical innovations that included the development of white salt-glazed stoneware, porcelain, cream-ware and pearl ware placed the potteries of the English Midlands in a pre-eminent position not solely within Britain but also in terms of world-wide ceramic trade.

The effect of these developments on existing Coal Measures industries was profound. The market for the finer white-bodied earthenware and stoneware had effectively been captured by Stoke-on-Trent, so that such centres had to diversify or fail. In the case of Buckley a number of different responses can be seen.

Ownership and capitalisation

One segment of the potteries continued to operate on a small scale as extended family businesses right into the 20th century. These tended to focus mainly on the production of black-glazed kitchen and dairy wares which because of their bulk, low value and relatively high transport costs, could compete with Staffordshire in the local markets. Some of these small-scale potteries were able to develop niche markets in souvenirs and domestic accessories, such as furniture casters.

From around 1750 a number of the potters began to exploit the local fireclays in a more extensive manner. In particular Catheralls and Hancocks created more integrated industrial complexes, with part-ownership of collieries and lead mines and well as brick, tile and pottery production.

Markets and wares

Three main types of market existed, with different potteries specialising in different products: local, tourist and industrial.

The potteries continued to supply the Chester market and north Wales with black-glazed kitchen-ware of all kinds and a range of low cost tableware, such as crudely made press-moulded plates. They also evolved a series of rusticated and *sgraffito* decorated ware with local, often personalised legends including tobacco jars, plant pots, castors, candle sticks, shaving mugs and puzzle jugs. Some of the coarse wares were probably traded further afield, but they are difficult to distinguish from equivalent wares from centres such as Glasgow, Liverpool and Stoke-on-Trent. Finds of the other wares are very rare outside Chester and north-east Wales. In the 20th century some Buckley potters responded to national and international changes in taste and attempted to produce art pottery, including items with *art nouveau* designs. One interesting detail regarding the transport of pottery is the use of bracken as a packing material, while some potteries apparently kept a stand of rye straw for the same purpose (Hartley 1974, 175).

A number of the smaller potteries specialised in tourist wares, often using legends or quotations in the Welsh language. These were in demand in Chester and the seaside resorts of the Dee estuary and north Wales. The wares involved include tea-pots, cups and saucers, milk jugs, salts and sugar bowls. Specific domestic items such as door handles and buttons (the latter for Browns of Chester) were also produced.

The main firms such as Catheralls and Hancocks made refractory bricks for a variety of purposes, such as roof furniture, blast furnace linings, malt kiln floors, crucibles, acid resistant pipes and junctions for the lead industry, as well as low value pottery, including the latest devolved forms of slipware and crude stoneware. They operated on an industrial scale.

Significance

The Buckley potteries represent the most significant concentration of evidence for the post-medieval ceramic industry in Wales, with multiple sites and continuity of production from the mid-17th to the mid-20th century. Many of the sites are still identifiable on the ground and, at least partially, accessible to archaeology. From a ceramic research perspective they offer possibilities for the study of a set of inter-related issues such as:

- The inception and process of industrialisation within the industry
- Competition, adaption and innovation
- Assimilation and adoption of cultural norms
- Regionalisation and trade
- The characterisation of Coal Measures clays and lead sources by scientific methods

The Buckley potteries are much more than regionally significant. In the 17th and early 18th centuries they are important for the study of archaeological assemblages not only in Chester, west Cheshire and north-east Wales but also for the whole Irish Sea area including north-west Wales, north and east Ireland and the Isle of Man. From 1750 until the mid-20th century specialist Buckley refractory wares are found in the Americas, Africa and beyond.



Fig. 2 Examples of Buckley wares: a – medieval pottery from Site 18; b and c – sgraffito dish and slipware dish from Brookhill (Site 1); d, e and f – press-moulded dish, trailed slipware dish and black glazed cup from Cotterell's Pottery (Site 2); g – 19th-century storage vessel; h – 19th-century jugs, ; – 19th-century black glazed cup; j – Catherall's stoneware.

Photos courtesy of Peter Davey

Geology of the Buckley Area

By Richard Hankinson

The geology of the locality comprises rocks belonging to the Westphalian (Coal Measures) and Namurian (Millstone Grit) divisions of the Carboniferous period (1994 BGS map of Wales). Within these broad classifications, the main formation exploited at Buckley was the Ruabon Marl, previously known locally as the 'Buckley Fireclay' or 'Buckley Formation', which in this area is around 200m thick and comprises a sequence of mudstones, siltstones and sandstones; occasional thin seams of coal are known elsewhere in the formation. The fireclays outcrop along a major fault, known as the Great Fireclay Fault, as well as along several minor faults. The banding or mottling present in the marl often shows evidence that the layers were seatearths displaying evidence of rootlet penetration and soil formation. Overall, the rocks are associated with the accumulation of alluvial floodplain deposits in the late Westphalian, mostly above the water-table though periodically in anaerobic, waterlogged conditions (Davies *et al.* 2004, 110).

It is significant that the Ruabon Marl formation crops out at the surface in the Buckley district, where it occurs as a series of fault-bounded inliers, the mudstones of which were those worked for refractory clays (Davies *et al.* 2004, 110). Differential subsidence across faults in the Duckmantian part of the Westphalian led to the formation of block and basin topography, which gave rise to the erosion of higher ground and deposition in the intervening basins (Davies *et al.* 2004, 112), and this, perhaps in part, may explain the restricted extent of the suitable deposits at Buckley.

The material used at Buckley comprised grey, red and purple mudstones and fireclays, worked in two crops, but no more than the lowest 15m in the Ruabon Marl succession was worked (Davies *et al.* 2004, 166). While, historically, acid-resistant goods and refractories were produced using fireclays, in modern times the fireclays have been blended with the associated mudstones and sandstones to produce facing bricks and pavements (Davies *et al.* 2004, 166-167).

The material described above was extracted from the underlying rocks of the area and was generally used for coarser products, such as saggers and bricks, whereas the material from which the pottery was made comprised near surface clay deposits, or tills, which were deposited during glaciation; two sources of glacial material are known, one from north and central Wales and the second from the Irish Sea (Campbell and Hains, 1988, 84). The deposition of these near surface clays would probably also have been dependant on the local topography and they are therefore highly localised and most probably variable in composition. Local knowledge would have been an important factor in choosing a suitable clay for the particular vessels that were required and it is also possible that the surface clays and underlying marl were mixed when required (P Davey pers comm.).

The surface soils are fine loamy and clayey soils derived from the underlying rocks, and belong to the Brickfield 3 Soil Association (1983 Soil Survey of England and Wales map and legend).

Buckley Potteries: Map Regression Analysis

By Bob Silvester

Potteries

The most recent maps, covering the last decades of the 19th century and the beginning of the 20th century, are the large-scale Ordnance Survey plans (at 1:2500). Three editions are available, published in 1912, 1899 and 1870-1884. By the time that the earliest of these was surveyed much of Buckley Mountain had been enclosed. The potteries that existed were

represented on these maps, either by the depiction of a circular structure, reflecting the presence of a standard kiln, or in two instances as conventional rectangular buildings, though in the case of Hayes Pottery (Site 10) near St Matthew's Church, the building was accompanied by two kilns on the map of 1874, though on later editions their outline had been changed beyond recognition, although their function may have remained unaltered. Curiously this was only named as a pottery on the 1912 map. The second – Ewloe Pottery – shows no kilns since they were housed within a building, rather than being separate structures. These early Ordnance Survey maps show eight potteries in all.

An 1863 map shows a small part of the Mountain with its focus the Belmont brickworks and surrounding roads and encroachments. An 1860 tracing (GW/748) is at a large scale (2 chains to the inch) and shows 'pot works', and in addition shafts, lime kilns, brick works and a brick kiln. Individual fields and plots acreage are numbered and given acreages, but it is unclear whether a schedule has survived. At present it is not evident what map was the original for this tracing. A second 1860 tracing (GW/749) shows land to the north-west of Alltami along the River Wepre and is of interest in the context of this study. From 1857 is an estate map of the lands of P Davies Cooke (GW/752) which extends over the countryside to the north of Buckley Mountain. Alltami is shown on its southernmost boundary, and the edge of the mountain with just the one pottery kiln at Willow Grove (Llwyn Helig) near Pinfold Lane, while a rather earlier map of 1845 displays the field drainage plans for that part of the estate that borders on Buckley Mountain, though no additional detail is offered.

The Tithe maps, Buckley Mountain falling primarily in Hawarden (1841) with a little on the fringe in Mold (1839), are generally uninformative but do include some useful information. Not surprisingly pottery kilns, with the exception of one at Catherall's Pottery (Site 8), are not shown and buildings are stylistically depicted. There was more enclosed ground on Buckley Mountain in the early 1840s than thirty years later, though encroachments were very evident. The Ordnance Survey surveyors' drawing is late in the sequence of such maps and only five years earlier than the Mold tithe map. It is, however, a little more informative, in that six potteries are named, although the scale is such that it is difficult to determine precisely which buildings are indicated. Notwithstanding this, three of the six are potteries not found on later maps.

Three small maps of around about 1814 (GW/B/555) show encroachments in Ewloe, one map depicting Ewloe Green, the other two linear encroachments along what appear to be drove or roadways. None appears to have information directly relevant to the Buckley pottery industry.

An undated map attributed to the early 19th century by the Archives depicts the north-western end of Buckley Mountain, the enclosed land on the south side but north of the stream belonging to General Gascoigne. Four pot kilns are shown but not titled, as well as the Bye Pit and Engine Pit.

Moving back into the 18th century, it is estate maps that offer the only indications of the potteries and their representation is likely to be selective, dependent on whether the land on which they lay belonged to the commissioning estate. One of these, near the pinfold, does not correspond to any other known kiln. Its position cannot be precisely located because of boundary changes and indeed the only evidence that it was a pot kiln is the map symbol.

The 1792 map was created to show cottages and encroachments in the lordship and manor of Ewloe and in Ewloe Wood. Consequently, although it does show some farms lying away from Buckley Mountain, there is a strong likelihood that any potteries and bottle kilns on enclosed ground will not appear on this map.

On Map XI of c.1780 only two potteries are shown, on lanes leading off the north-western part of Buckley Mountain. Neither survived through to the end of the 19th century. On Map

XII in the same set and the original for the 1792 map there are several kilns shown but none named. It might be noted, however, that the reference book has become divorced from the maps and the former is in the National Library of Wales. A synopsis by the Flintshire Record Office indicates from internal evidence that the maps were drawn between 1779 and 1781 on the basis of payments to the Matthews family for their surveys.

The earliest map available is one of the Lordship of Ewloe, prepared in 1757. This has two main points of interest. Ewloe Pottery, missing from the later 18th-century maps, is shown on its enclosure in the middle of Buckley Mountain, implying either an error by the later surveyors or the fact that it was so long established that it was not relevant to the subject of the survey. The 1757 map also shows a group of three bottle kilns on the edge of the common by the later Belmont brickworks. As far as can be established no other map depicts these.

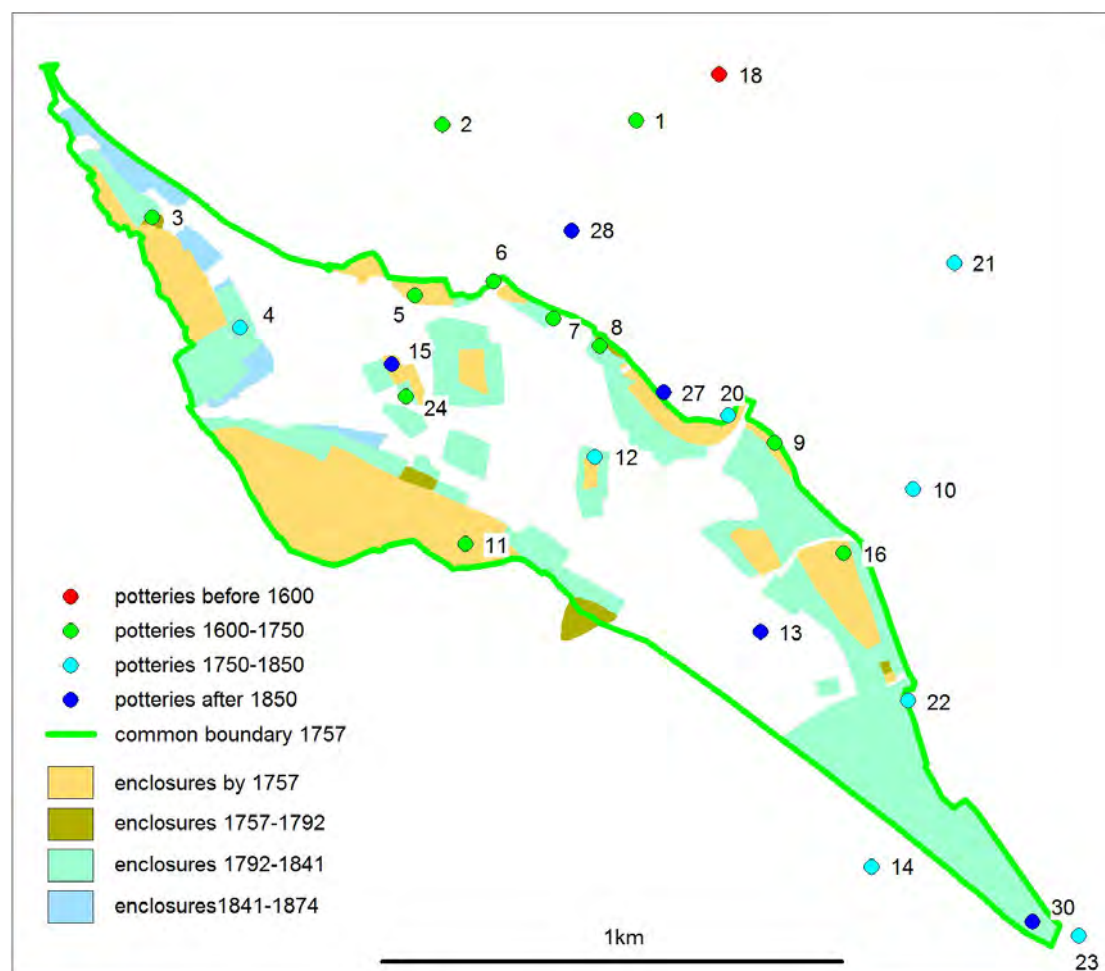


Fig. 3 The relationship between Buckley Mountain common, enclosures and the location of potteries. The date ranges for potteries is based on their earliest known date rather than their period of operation.

Buckley Mountain – the common

The most satisfactory map not only because it is the earliest but also for its clarity is the 1757 lordship map. The northern edge of the common is reasonably easy to define despite several encroachments which clearly pre-dated the making of the map, one of the give-away clues being the relative size of the fields and enclosures. The southern side too is straightforward because the stream known as the Alltami Brook on late 19th-century maps (but the Ewloe Brook on the 1834 Ordnance Survey map and the Aber Llanerch Brook in 1757) seems to have formed the edge of the common from early times, a fairly standard occurrence paralleled

in other lowland commons. One 1860 tracing (GW/748) shows two boundary stones along the stream marked P. B. Davis Cooke Esq, reinforcing its significance as a boundary in the 19th century. Other boundary stones in the vicinity of the Horse and Jockey Inn are marked 'E.L.' East of Hawkesbury Place, the boundary as seen today is rather more regular than its 18th-century predecessor, though the alignment remained broadly the same.

It is further to the south-east that difficulty is encountered in distinguishing the precise line of the common in the middle of the 18th century. The eastern boundary in the vicinity of Knowl Hill is clearly an artificial division – it separates the lordship of Ewloe from that of Hawarden. Buckley Mountain will almost certainly have continued but that continuation is not shown on the 1757 map, though it can be reconstructed on its northern edge with reasonable certainty from a map of Hawarden lordship in 1733. Its southern edge here is hypothetical because it fell within a third lordship, that of Mold, which is not represented cartographically in the 18th century and by the time the Ordnance Surveyors moved into the area in 1834, the common edge had retracted to the Knowl Lane crossroads. This apart, the 1757 map provides a reasonably accurate picture of Buckley Mountain, and there is as yet no evidence to suggest that previously it had extended as far south as Buckley village.

Buckley Mountain – encroachments and enclosures

The earliest map, that of 1757, shows encroachments along the length of Buckley Mountain. Some of these are readily identifiable within the overall layout of enclosures that were depicted on large-scale late 19th-century Ordnance Survey maps, others require a certain level of assumption in their plotting. Thus where the Belmont Brickworks were later to be established, the precise boundary of the preceding encroachment cannot be determined with precision. Similarly the introduction of a tramroad to serve one of the brickworks has resulted in a reconfiguration of the landscape that partially obscures the enclosure immediately south of St Matthew's Church.

The segment of land between Aberllanerch Farm and Hawkesbury Place and edged by the Ewloe Brook is considered to be encroachment, though not specifically signalled on any of the historic maps – its field pattern however is highly suggestive of progressive intakes, though of an earlier date than those which are highlighted in 1757.

Between 1757 and 1792 it appears that there was relatively little new enclosure, and where it did occur it took the form of enlargements of existing intakes. The exception could be Hawkesbury Place which is depicted on the 1792 map in a way that suggests a new encroachment. If this is the case one inference might be that the common land had extended south of the projected line of Ewloe Brook.

The fifty years that separated the 1792 lordship map from the tithe survey saw considerable enclosure of the common. Absolute precision in mapping the new enclosures is not always possible. The Tithe map is not as accurate as one would like and in particular in the vicinity of Knowl Lane there are errors in the mapping that cannot be resolved, necessitating some approximation in the mapping of enclosures.

The final stage of enclosure mapping, up to the Ordnance Survey mapping of 1873/4, reveals a tailing off of piecemeal enclosure, but also the increasing encroachment of other industries onto the mountain. It might also be noted here that there was no parliamentary enclosure of Buckley Mountain; it was all done with landowner agreement and perhaps on occasions by the landowner himself.

The 1757 map also shows two large pools – Buckley Lake and Bright Lake. Only their approximate locations can be plotted, for the former had gone by 1792, the latter between 1834 and 1841.

Pottery manufacture

The majority of the Buckley potteries were small family businesses and operated as self-contained units with all of the processes of manufacturing, save perhaps the extraction of clay, being conducted on a single site. The following descriptions are drawn largely from McGarva (2000, 38-46) and Pritchard (2006, 69-71), and the basic layout of a typical 19th-century pottery has been depicted by K Lloyd Griffith (Fig. 4).

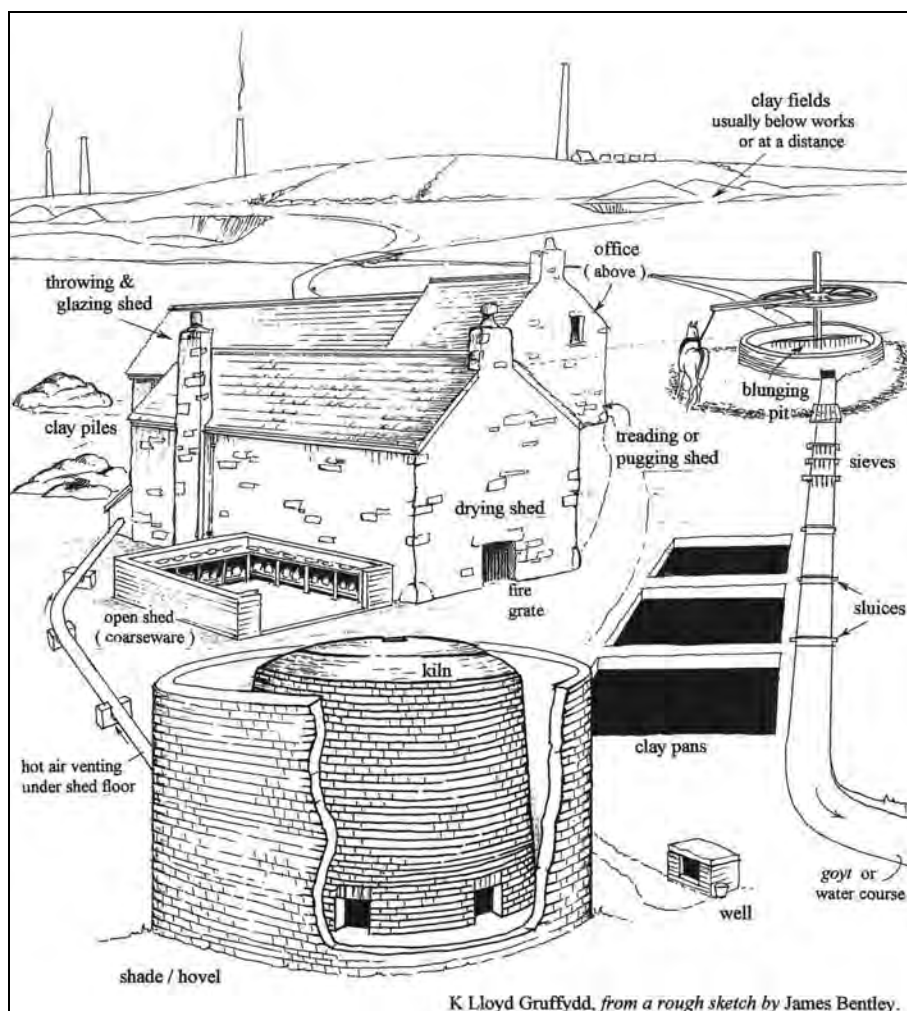


Fig. 4 A typical 19th-century pottery (reproduced from Pritchard 2006, 70)

Clay extraction

The digging of clay was usually a summer activity for most Buckley potters; this was purchased from land owners, transported to the potteries by horse and cart and paid for by the cart load. Much of the clay extraction was conducted on land owned by the Gwysaney Estate and their Clay Accounts for the period 1783-1810 provide an insight into which potters were operating (Messham 1956, 56-7), although there is no indication as to where their respective potteries were located.

There was a good supply of potting clay in the Buckley area, with noted fields north of St Matthew's Church, near both the Trap and the Willow, as well as on the Lower Common (Pritchard 2006, 69).

Warner (1813, 245) records 'the clay used for the purpose is of three kinds, differing from each other in their power of resisting the action of fire. The most tenacious is called the *fire clay* which forms the earthen receptacles and stands that receive and support the articles whilst they are baking. The second is a less-enduring species, and called the *stone clay*, of which the jars, pickling mugs, whiskey-cans, *etc.* are made. The third, least capable of resisting heat, affords materials for the *smaller glazed potteries.*'

Archaeological remains

Clay pits

Clay Preparation

Clay was sorted in heaps in the pottery yard prior to processing. It seems that the common practice in the Buckley area was a process known as 'blunging', whereby the clay was placed in a shallow trough or pit and reduced to a liquid slip by the addition of water. The mixture was then agitated, in its simplest and most labour-intensive form using a long-handled lever, although the process was later mechanised with the development of horse-powered blungers, utilising a series of paddles on a rotating horizontal beam to stir the mixture. This process was described by Warner in 1789 (Warner 1813, 246), during which he visited one of the larger Buckley potteries, probably Catherall's:

'The workmen place it in a circular cistern called a blunging pool when, whilst it is covered with water, it is kneaded by a cylindrical machine which performs a double revolution round its own axis and an upright pole in the centre, and pounds it completely.'

McGarva has suggested that this description is in fact a confusion of two machines, a blunger and a pan mill. The latter was a similar machine to a horse-powered blunger in that it was a circular structure with a central pivot, although instead of using paddles to mix clay slip the mill utilized rollers to crush hard, dry clay, which could then be mixed with water to form a clay slip.



Fig. 5 One of the soaking pits found at Site 2 in 1984. Photo courtesy of Peter Davey.

An alternative method to blunging was the use of soaking pits where the clay would be soaked for two or three days before pugging or wedging (see below). Two stone-lined soaking pits were found during excavations at Site 2, along Pinfold Lane, during 1984; one was used to soak the clay for throwing, and the other to produce the white clay slip for decoration (Fig. 5; McNeil 1985). A possible soaking pit has also been identified at Hayes Pottery (Site 10).

The advantage of blunging was that it purified the clay, removing any roots or stones, when the mixture was run through a sieve. The liquid was then fed via a channel or 'goyt' into large, shallow 'clay pans' where it was allowed to stand, possibly over winter, as the clay gradually hardened. Blunging required a good source of water, possibly from a well, or else via a leat from the nearest surface water supply.

The remains of a possible horse-powered blunger at Taylor's Pottery (Site 3) were excavated in 2005, revealing a brick-built structure around 5m in diameter with a central post surrounded by a brick and stone floor and a trough between this and the outer wall (Earthworks 2005) (Fig. 6). The presence of the trough might suggest that this was actually a pugmill rather than a blunger.



Fig. 6 The blunger or pugmill excavated at Taylor's Pottery in 2005 (Photo courtesy of Earthworks Archaeology)

Once the clay had hardened sufficiently it was removed to be mixed ready for throwing. Until the 19th century this process was done by 'wedging', a process also described by Warner: '(the clay) is then tempered by boys who tread it under their naked feet for some hours'. This was later replaced by the use of a pugmill, originally just a timber barrel within which blades were attached to a central axis to both cut the clay and push it towards an exit hole. Early pugmills would have been horse-powered before steam power came in towards the end of the 19th century. Horse-powered machines would have had a circular track for the horse and may have incorporated a soaking pit for the clay between this and the pug mill, assuming the process of blunging was not being used.

Archaeological remains

Blunging pit
Circular blunger
Soaking pit
Pan mill

Pugmill

Clay pan

Channel with sluices and sieves between the blunger and clay pan

Leat

Fig. 7 The well-preserved remains of a range of pottery buildings likely to have included the throwing and drying sheds was excavated at Lewis's Pottery (Site 5), also known as Willow Pottery, in 2000 (Earthworks 2000; Dodd 2003). Photo courtesy of Earthworks Archaeology.



Throwing, drying and glazing

Most of the Buckley domestic wares were wheel thrown, although press-moulding was introduced during the 17th century (Pritchard 2006, 71). The potter worked in a throwing shed and from the mid-18th century is likely to have used a crank-shafted kick wheel, operated by the potter himself and incorporating a flywheel to maintain and control momentum. A description of such a wheel is provided by Warner (1813, 246-7) at the end of the 18th century 'the articles are formed in a lathe by the hand, with the assistance of a flat stone, which has a rapid rotatory motion in a horizontal direction'. There is a photograph of a later style of wheel at Lamb's Pottery (Site) in 1909 which used a bevel-gear rather than a kick wheel and was hand-operated by an assistant (McGarva 2000, 49). Towards the end of the 19th century cast-iron machinery had become available with a variety of belt-driven wheels being produced, powered by a steam engine.

Once a pot had been thrown it was moved to the drying shed to harden before firing and at this stage handles would have been added and the pots decorated using a lead glaze, possibly with the addition of trailed clay slip decoration. The galena, or lead ore, used in the manufacture of the glaze would have been crushed to a powder, perhaps using what was known as a 'lead jack'. The only known archaeological evidence for this process comes from a small, circular pit excavated at Site 2 in 1984 (McNeil 1985). Drying sheds may have utilised hot air from the kiln, via ducts, to assist the drying process.

Again Warner (1813, 245-6) provides us with a contemporary account of glazing: ‘the mode of glazing the [jars, pickling-mugs, whiskey-cans etc] is by strewing a quantity of salt (in the proportion of two hundred pounds to eight hundred pieces of pottery) over the articles when they are heated to the highest degree, which, dissolving, distributes itself through the whole mass, and becomes fixed in the form of a shining incrustation or varnish. A method altogether different glazes the smaller pieces; that of dipping it into a liquor composed of pulverized lead and water, before they are exposed to the fire. Having *magnus* mixed with it, this liquor gives the ware a black glaze, and without the addition it renders it of light yellow colour. The articles are not, however, totally immersed in this preparation, as the lead being melted, would (in that case) occasion the ware to adhere to the earthen stand on which it is placed. Towards the bottom, therefore a space is left (as may be seen every day) untouched by the glazing liquor’.

Archaeological remains

Throwing shed

Drying shed

Soaking pit for clay slip

Means of crushing galena

Firing

The Buckley potteries appear to have used simple, circular, updraught kilns. The earlier kilns, such as those excavated at Brookhill (Site 1), had a cylindrical chamber perhaps 3m in diameter and were as tall as they were broad. Brick arches supported the floor over a single firebox and also formed flues beneath the floor to distribute the heat. The majority of the kiln structure would have been buried within a mound of earth and wasters to provide additional support for the structure as well as insulation. Only the top section of the chamber would have been visible above ground. Kilns of this type were still in use across Britain in the late 19th century, though some had by then been modified to include a domed roof by constructing a catenary arch (McGarva 2000, 90-94).

A more advanced type of circular updraught kiln was the beehive design which, rather than using a surrounding mound for support, utilised iron bands to maintain the integrity of the kiln superstructure. These were described by Warner in 1789 (1813, 246): ‘the articles are placed in brick-kilns formed like beehives, and heated to the requisite degree. Here they remain forty hours, when they are taken out, gradually cooled, and packed up for the market.’ The base of these kilns may have included as many as eight coal-fired fire-boxes, although the excavated example at Lewis’s Pottery (Site 5) had only six (Earthworks 2000; Dodd 2003) (Fig. 8). Kilns typically ran at temperature of around 1000°C. Some kilns may have been surrounded by a cylindrical brick wall known as a shade or hovel, the purpose of which was to protect the kiln and its workers from the weather, although there are tales of potters and their families cooking and eating breakfast there (Davey pers. comm.). The Ordnance Survey depicted three such kilns at Sites 8, 9 and 10 in the 1870s, while one example has been excavated at Thomas Lewis’s Pottery (Site 5; Fig. 8).

The firing cycle typically took a week with three days for setting, or stacking, the kiln, three days to fire it and a further day for unloading, or ‘drawing’ the kiln. A 3m-diameter kiln could fire around 6000 pots, using six tons of coal (McGarva 2000, 94-5). Kilns were densely packed and used a different type of kiln furniture and supports to allow a variety of wares to be fired simultaneously. Small, more delicate pots were placed inside open-topped cylinders known as ‘saggars’, while small cones of clay, or ‘stilts’ allowed smaller pots to be placed inside larger ones (Pritchard 2006, 71). Those pots which failed during the firing were known as wasters and were discarded on an ever-increasing waste dump adjacent to the pottery.



Fig. 8 The base of the beehive kiln at Lewis's Pottery (Site 5) during excavations in 2000 showing the six fire-boxes and a single doorway behind the scale, together with the foundations for the surrounding hovel (Photo courtesy of Earthworks Archaeology).

Archaeological remains

Kiln base

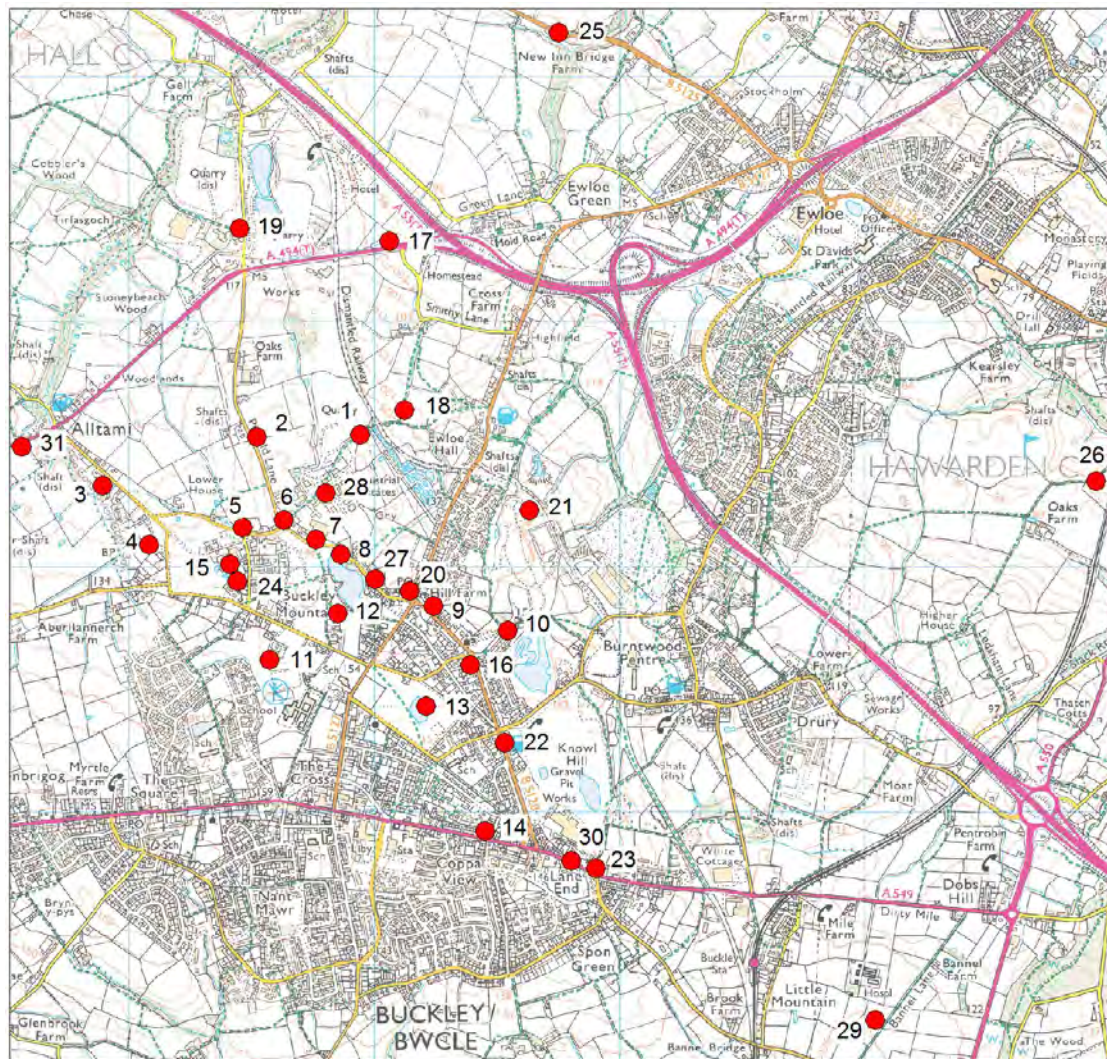
Hovel wall

Waste dump

Finds including wasters, saggars and kiln furniture

A Gazetteer of Buckley Potteries

This sequence of site numbers attributed to the potteries follows that originally established by Peter Davey (1976a) for Sites 1-19, with subsequent additions as a result of the current project. The overall distribution of potteries is shown in Fig. 9. A basic timeline has been developed for the potteries, based on available evidence, which indicates in broad terms their relative life spans (Table 1).



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Fig. 9 The distribution of known potteries in the Buckley area.

Table 1 The periods of operation for the Buckley potteries

pottery sites	approx. dates								
	1300- 1400	1400- 1500	1500- 1600	1600- 1700	1700- 1750	1750-1800	1800- 1850	1850- 1900	1900- 1950
site 1									
site 2									
site 3									
site 4									
site 5									
site 6									
site 7									
site 8									
site 9									
site 10									
site 11									
site 12									
site 13									
site 14									
site 15									
site 16									
site 17									
site 18									
site 19									
site 20									
site 21									
site 22									
site 23									
site 24									
site 25									
site 26									
site 27									
site 28									
site 29									
site 30									
site 31									

Buckley Potteries Site 1, Brookhill Pottery

PRN 101670

SJ 2794 6554

Date: 1640-1720

The earliest post-medieval site in Buckley, Brookhill has been dated by the clay tobacco pipes found throughout the excavation (see below) to around 1640-1720. The site occupies an overgrown plot within which the ruins of a 19th-century house and stable can be identified.

The site was excavated by Bentley between 1974 and 1985, revealing up to twelve kiln bases, ten of which were defined by shallow depressions filled with ash, coal dust, kiln furniture and wasters. These appear to have been clamp kilns with infilled material providing a firm refractory floor which, being porous, also acted as an underfloor flue. Two smaller kilns were set directly on the ground (Amery and Davey 1979, 51). The kilns all had internal diameters of between 1.5m and 2m (Gruffydd 2010, 88).

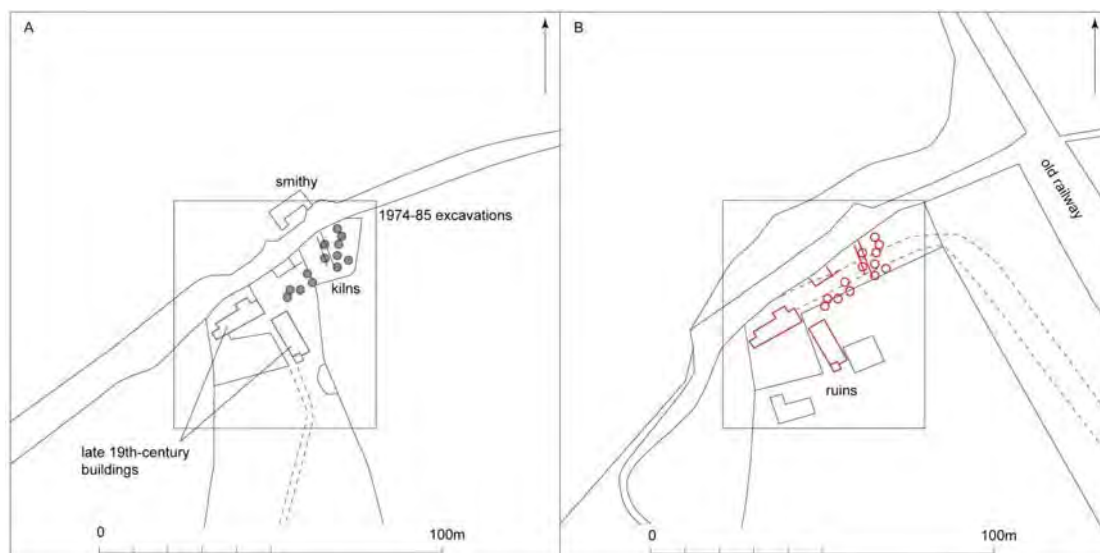


Fig. 10 Site 1, Brookhill Pottery. A – excavated evidence and 19th-century buildings, B – present day showing the location of pottery features in red.

The earliest wares include complex slip-decorated thrown bowls, executed in both sgraffito and trailing techniques (Fig. 2 b and c), porringers with press-moulded handles, a female figurine and large tripod cooking vessels. Later wares include mottled-ware tankards and bowls, slipware dishes and black- and brown-glazed cups and storage vessels (Davey 1976a, 18).

Events

Excavation 1974-85 (PRN 129925)

Status

Unscheduled

Condition

Partly excavated. The remainder of the site lies within a pasture field.

Potential

Although the site has seen substantial excavations its full extent is unknown and there is likely to be significant potential for further buried remains to the east of the excavated area.

Associated records

None

References

- Amery and Davey 1979
- Bentley & Harrison 1975a
- Bentley & Harrison 1975b
- Bentley 1976a
- Bentley 1976b
- Bentley 1977a
- Bentley 1977b
- Bentley 1978a
- Bentley 1978b
- Bentley 1979a
- Bentley 1984a

Bentley 1984b
Bentley 1984c
Bentley 1985a
Bentley 1985b
Bentley 1985c
Bentley n.d.
Davey 1976a, 18
Davey and Longworth 2001, 62-72
Gruffydd 2010, 88
Longworth and McLaughlin Cook 2000
Messham 1956, 31-61

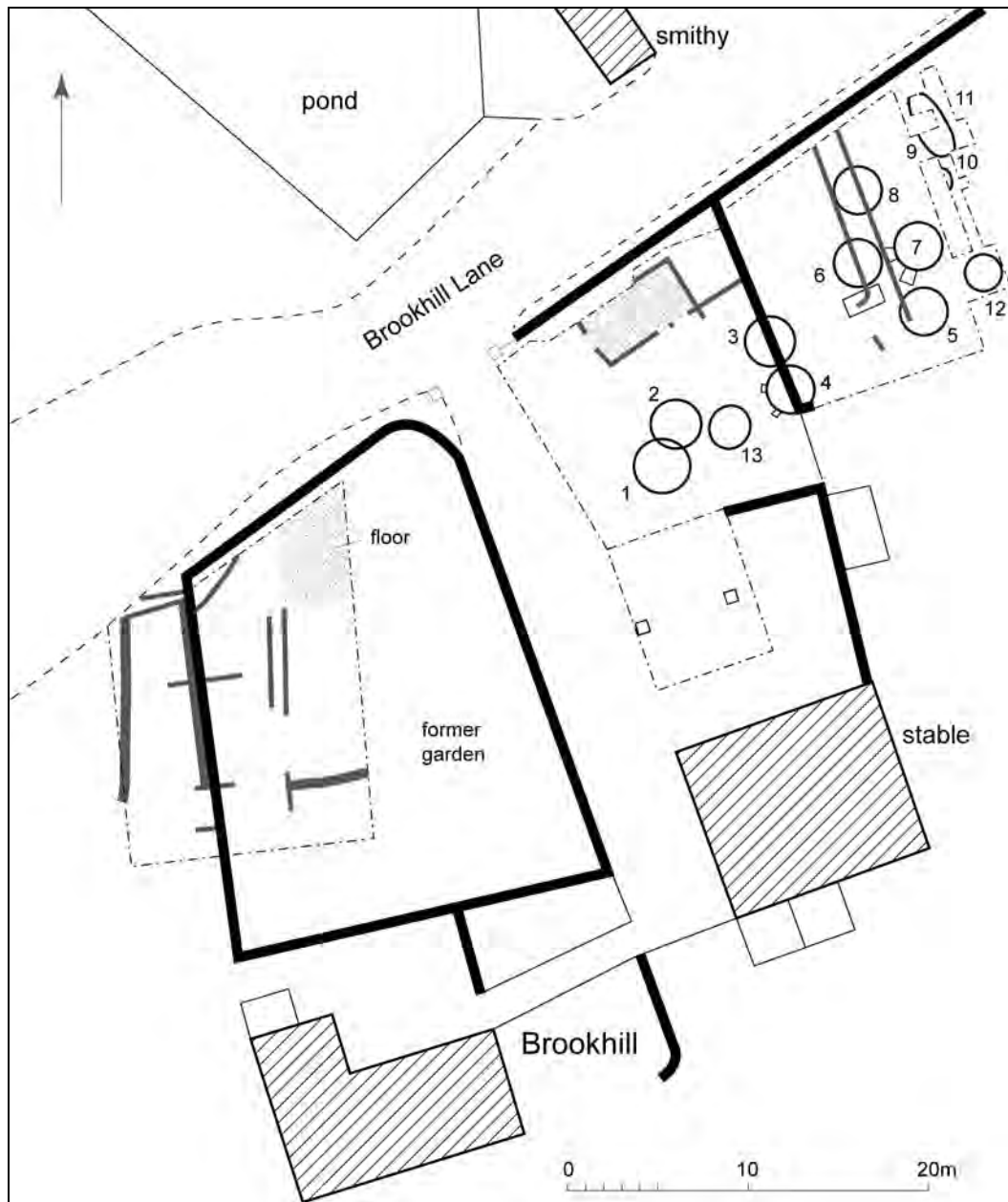


Fig. 11 Plan of the features excavated at Brookhill 1974-85
(after Amery and Davey 1979, 50)

Buckley Potteries Site 2, Cottrell's Pottery

PRN 101671

SJ 2752 6553

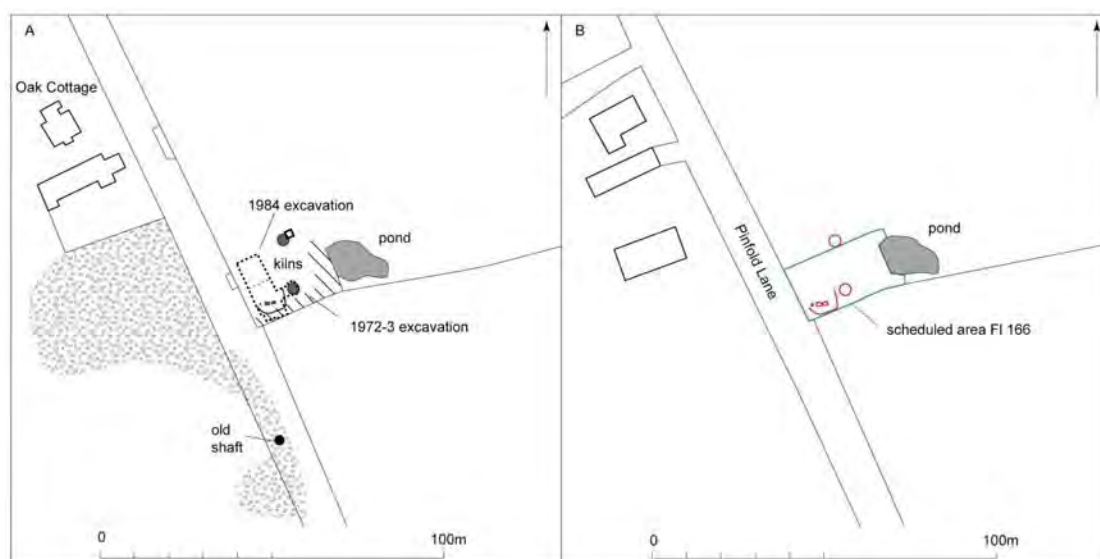
Date: late 17th century to early 19th century

Fig. 12 Site 2, Cottrell's Pottery. A – detail from the Ordnance Survey mapping of 1874, showing excavated areas; B – present day and the extent of the scheduled area.

The pottery lies on the east side of Pinfold Lane and was originally discovered when a dump of wasters was found, having been eroded at the edge a pond. Partial excavation in 1972-3 produced a series of well-stratified wares including kiln furniture belonging to the 17th and 18th centuries (Bentley and Harrison 1973). Further excavations were conducted in 1984, revealing two beehive kilns of the updraught type with eight flues, together with a small circular pit thought to be for grinding galena to make the glaze and two stone-lined pits, one for blunging and the other for the preparation of white slip for decorating the pots. The excavations also found evidence for later activity on the site, post-dating the pottery, comprising the foundations of an 18th-century building and a stone wall and brick floor belonging to a 19th-century building (McNeil, 1984).

The pottery appears to have been in operation from the late 17th century until the early 19th century, and is depicted on estate maps of 1757 and 1781, the latter identifying the tenant as Benjamin Cottrell with the plot being occupied by a mug-kiln and house. Between at least 1804 and 1815 the pottery was operated by William Leach.

While the kiln furniture and clay tobacco pipes are similar in form and fabric to those from the contemporary pottery at Brookhill (Site 1), the pottery is noticeably different. Bowls with simple slip-trailing round the rim are restricted to Pinfold Lane and there is a wider range of press-moulded dishes (Fig. 2 d-f). Both Pinfold Lane and Brookhill produced mottled-ware tankards and bowls, but Pinfold Lane has a wider range of bodies and slip decoration. Both sites produced a large collection of black-glazed wares (Davey 1976a, 18; Davey and Longworth 2001, 62-72). The site is now farmland.

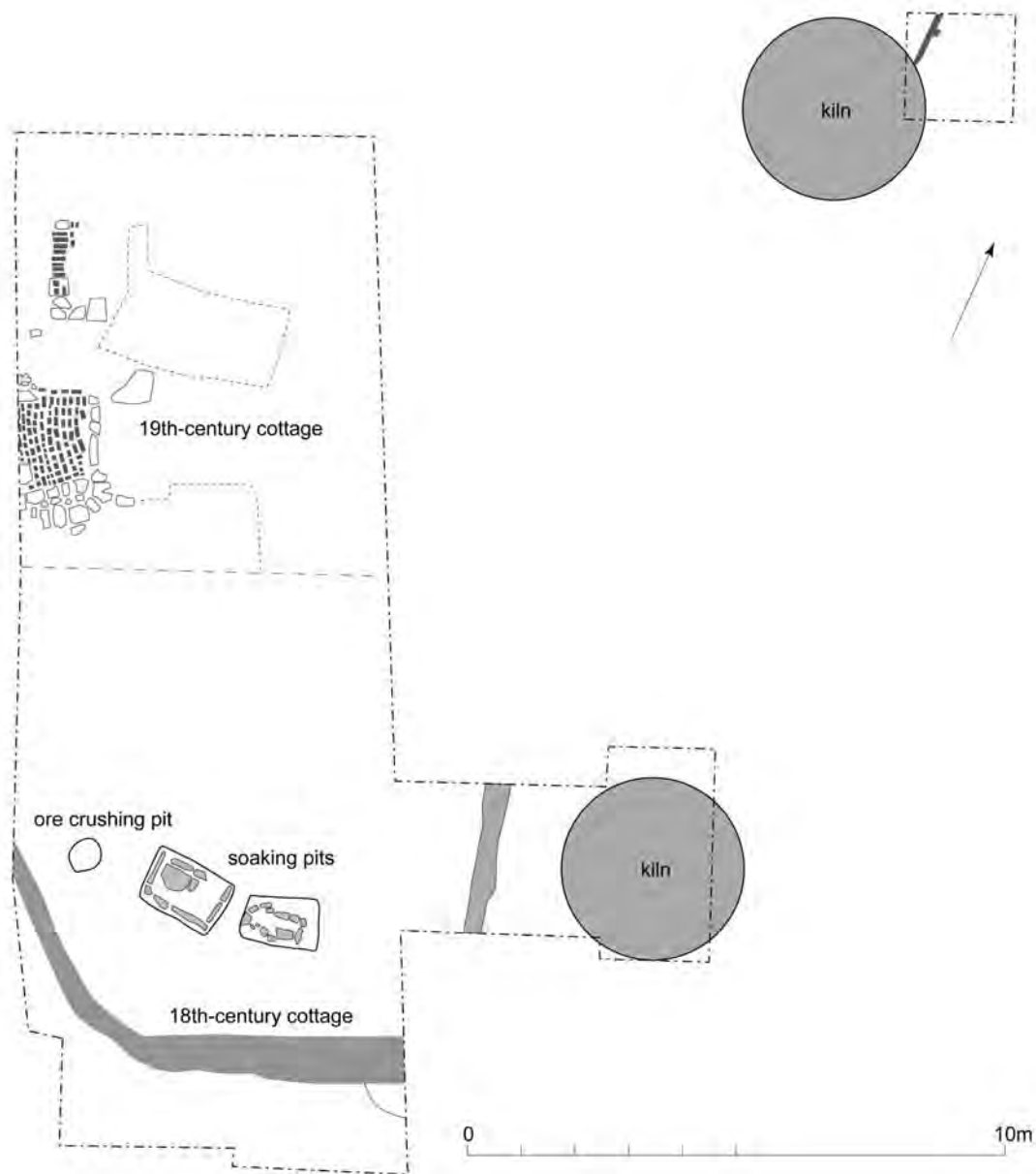


Fig. 13 Plan of the 1984 excavations at Cottrell's Pottery (Site 2)

Events

Excavation 1972-3 (PRN 58092; Bentley and Harrison 1973)

Excavation 1984 (PRN 70816; McNeil 1985)

Status

Scheduled (Fl 166)

Condition

Partly excavated, demonstrating good sub-surface preservation

Potential

The unexcavated areas are likely to contain significant remains and there is some uncertainty regarding the extent of the pottery and the exact location of the excavated features.

Associated records

None

References

Bentley and Harrison 1973

Bentley and Harrison 1974

Davey 1976a, 18

Davey and Longworth 2001, 62-72

McNeil 1985a

McNeil 1985b

Buckley Potteries Site 3, Taylor's Pottery

PRN 101673

SJ 2689 6533

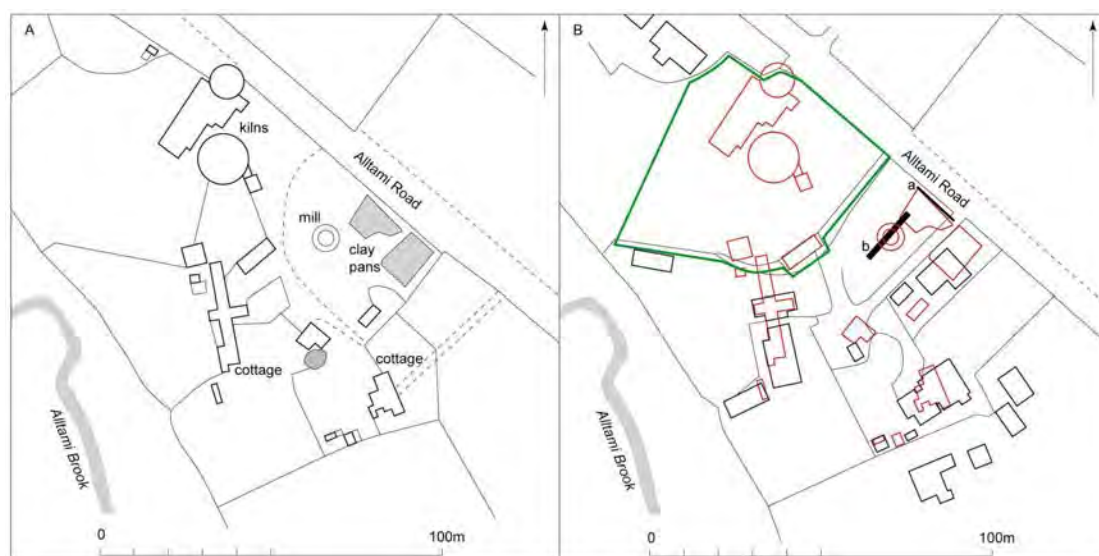
Date: 18th-early 20th century

Fig. 14 Site 3, Taylor's Pottery. A – detail from the Ordnance Survey mapping of 1874; B – present day showing the location of pottery features in red, the scheduled area in green and the location of the 2005 excavations.

The site occupies an encroachment onto the common and a kiln is recorded here on the Ewloe Lordship map of 1757, which shows a single kiln on the common and a rectangular building within an enclosure. The c. 1780 Ewloe Estate map (no XII) lists the tenant as Joseph Codrell's sister, describing the land as occupied by crofts, house, mug-kiln and garden. Later records indicate that the pottery was operated by the Taylor family (John Taylor in 1815; Taylor and Son in 1860; and Charles Taylor in 1886). Some 19th-century pottery and kiln furniture has been recovered from gardens (Davey 1976a, 20).

The pottery complex straddled both sides of Alltami Road and the 1874 mapping shows two kilns, a mill (a blunger or pan mill) and numerous potters' workshops and houses. To the north-east of the road, located on the common, the map depicts two ponds, likely to be clay pans, linked by a watercourse, as well as a kiln which had been recorded in 1860 as a brick kiln. Later editions of the Ordnance Survey mapping, in 1899 and 1912, show that the pottery was still active with minor changes to the layout.

The site of two kilns, chimneys, drying sheds and blunging pits lie in rough pasture, an area which is now a scheduled ancient monument (Fl 165). A range of other structures and features to the south-east are partly beneath later buildings, although some structures, including workers' housing, may be incorporated into the extant buildings. The slight earthworks of clay pans, or settling tanks, can still be discerned among the vegetation on the north-east side of the road.

An evaluation in 2005 revealed the remains of a relatively well-preserved circular, brick-built structure, which is likely to be a blunger, or perhaps a pan mill, for processing clay. A large feature nearby is likely to be a clay pan, a shallow pool where clay was stored and weathered. Both features are depicted by the Ordnance Survey in 1874. Pottery from the excavations included some kiln furniture as well as pancheons, bowls and black-glazed storage jars of likely mid 19th- to early 20th-century date (Earthworks 2005).

Events

Excavation 2005 (PRN 129926; Earthworks 2005)

Status

Scheduled (Fl 165)

Condition

The main pottery site is well-preserved in pasture and two workers cottages are still occupied, though altered, while other pottery-related structures and features are also likely to survive, either having been incorporated into later buildings, or as sub-surface remains. The site of the mill and clay pans is now occupied by a house.

Potential

There is considerable potential for significant buried remains, both within the scheduled area and beyond. The 1m-resolution LiDAR data indicates earthworks which relate to several of the pottery structures depicted on late 19th-century map sources, while features such as a kiln and the clay pans located on the common are likely to be undisturbed.

Associated records

PRN 98307 clay pit
PRN 126525 brick kiln
PRN 128079 settling tanks

References

Davey 1976a, 20
Davey and Longworth 2001
Earthworks 2005a
1757 Lordship of Ewloe map
1780 (circa) Ewloe Estate (Map XII)
1874/1884 Ordnance Survey 1st edition 25" map
1889 Ordnance Survey 2nd edition 25" map
1912 Ordnance Survey 3rd edition 25" map

Buckley Potteries, Site 4 John Lewis Junior's Pottery

PRN 101674

SJ 2708 6509

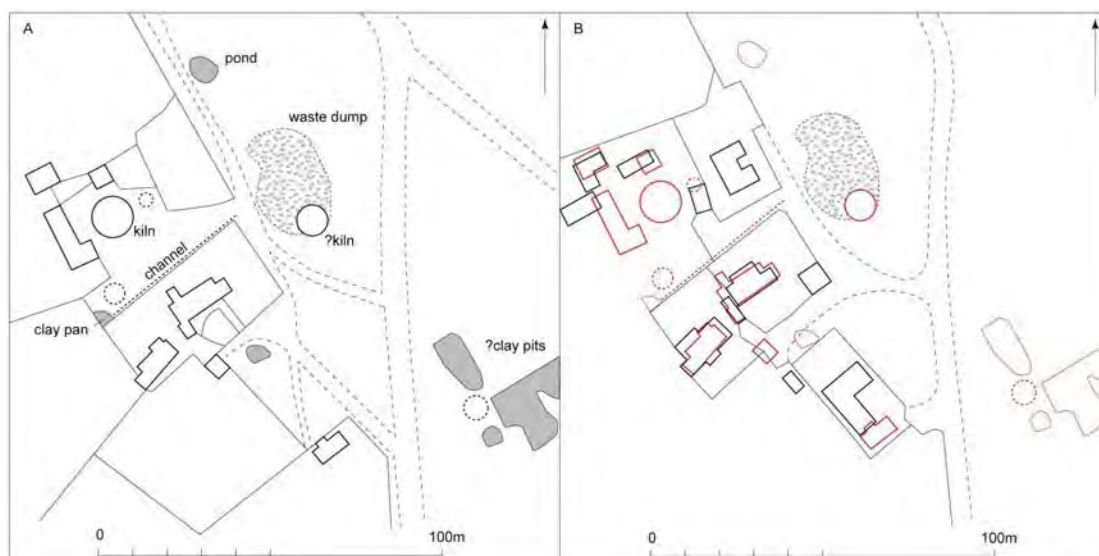
Date: 19th century

Fig. 15 Site 4, John Lewis Junior's Pottery. A – detail from the Ordnance Survey mapping of 1884; B – present day showing the location of pottery features in red.

A new pottery was built by John Lewis Junior around 1805 and worked until his death in 1831. His widow Mary continued the pottery after his death, and after she died it was run by Thomas Lewis. In 1860 it was tenanted by Jane Lewis, Thomas's widow, and was worked by Thomas Jones, who had married into the family (Messham 1956, 42).

A building is depicted here on the 1841 tithe survey, though no kiln is shown, while the Ordnance Survey 1st edition, published in 1884, shows a single kiln with a rectangular building to the west and a number of smaller structures elsewhere on the site. Also shown are a probable clay pan adjacent to a circular feature which may be a blunger. A waste dump is depicted on the common, at the southern end of which is a circular feature which could be a kiln. Further to the south-east, and also on the common, are a number of clay pits together with a circular feature which may be another blunger. The pottery had evidently closed by 1899 and the kiln and main building had been levelled.

The site of the kiln and main pottery building, including the possible blunger and clay pan, which was still visible during the 1970s, along with an associated conduit, lies in a pasture field. Two ruinous brick buildings within the field are likely to be pottery sheds or workshops. A worker's cottage (PRN 129918) survives to the south-east, adjacent to another house which was also contemporary with the pottery. On the common there are two obvious mounds, only one of which is depicted on 19th-century map sources, though both are probably waste dumps, a small amount of 19th-century pottery and kiln furniture having been recovered from there, as well as from the bungalow garden behind which the pottery is located (Davey 1976a, 20). There is, however, no sign of the circular feature depicted on later 19th-century mapping. The clay pits are still visible as earthworks in an area of scrub.

Events

None

Status

Unscheduled

Condition

Visible remains are restricted to those on the common, comprising the waste dump and clay pits. Some structures may survive, having been incorporated or reused as part of extant buildings, while the site of the kiln and pottery building are still undeveloped.

Potential

There is significant potential for the survival of buried remains to the rear of the modern bungalow, while the waste dump and possible kiln on the common appear undisturbed.

Associated records

PRN 129918

References

Davey 1976a, 20

Messham 1956, 42

1841 Tithe Survey

1884 Ordnance Survey 1st edition 25"

Buckley Potteries Site 5, Thomas Lewis' Pottery (also known as Willow Pottery)

PRN 101672

SJ 2746 6516

Date: 18th - early 20th century

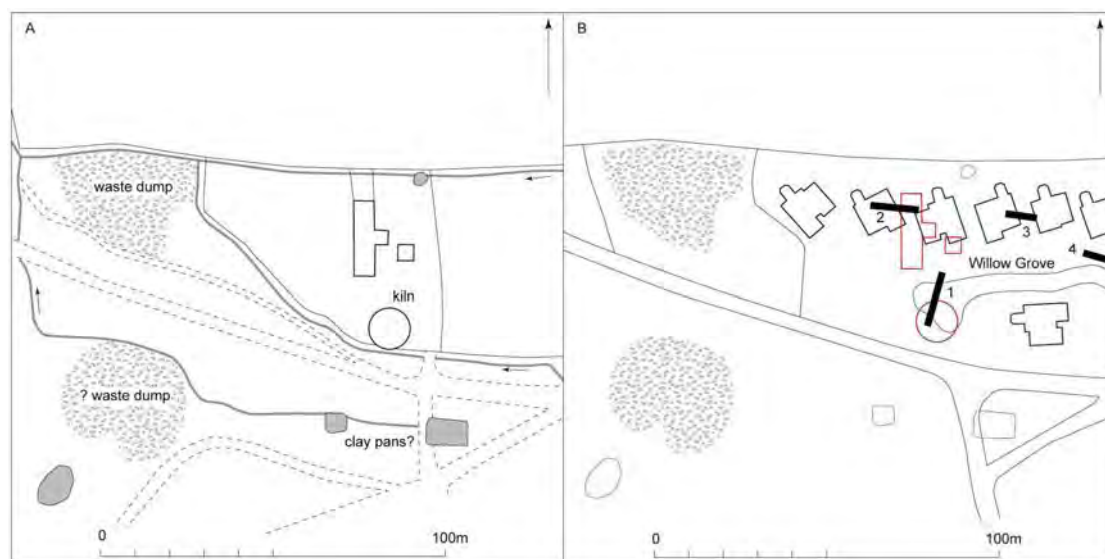


Fig. 16 Site 5, Thomas Lewis' Pottery. A – detail from the Ordnance Survey mapping of 1884; B – present day showing the 2000 evaluation (1-4) and the location of pottery features in red.

The older of the two potteries associated with the Lewis family appears on the Lordship of Ewloe map of 1757, identified as 'Robert Codrell's tenement' which, by 1781 was operated by Thomas Lewis. He continued until 1799, when it seems to have been taken over by his son, John Lewis (senior), who worked the pottery until 1835 after which he was succeeded by his son, also named John, and later by his daughter Mary. During Mary's tenancy the pottery was worked by George Powell, son of another potter, Samuel Powell of Bolton (Messham 1956, 42). By the early 20th century the site was occupied by John Hughes.

A kiln and a range of buildings are shown on the Lordship of Ewloe map of 1757, and also the c.1780 Ewloe Estate map. The layout of the pottery appears unchanged by 1884, the

mapping at that time also depicting a small square structure east of the pottery building and what is likely to be a waste dump some 60m to the west. A small pond is shown to the north of the pottery, positioned along a watercourse, associated with a well next to Willow Cottage, while a second stream or channel is shown to the south. Two rectangular features are located on the common, south of the pottery, which are likely to be clay pans, linked by another small watercourse. A small quantity of 19th-century pottery and kiln furniture was found on the edge of the common opposite the site in January 1975 (Davey 1976a, 21).

An evaluation, which included a geophysical survey, was conducted in March 2000 in advance of a housing development. This was followed in the summer by more detailed excavation which identified the well-preserved remains of a brick-built pottery with a circular firing chamber and six flues radiating outwards from it, the whole being surrounded by a shade or hovel kiln (see Fig. 8). The foundation of the main pottery building was also uncovered (see Fig. 7), together with a number of intercutting pits, the site as a whole preserving a good stratigraphic sequence. The pottery recovered during the evaluation suggests production of mostly glazed, coarse earthenware vessels and finer blackware vessels, such as cups, from at least the mid-18th century onwards. Production of other pottery types, in particular slipwares, seems almost certainly to have taken place and the production of finer wares is also implied by the presence of a single sherd from a white salt-glazed stoneware waster (Earthworks 2000; Dodd 2003).

Events

Geophysical survey 2000 (PRN 118705; GeoQuest 2000)

Evaluation 2000 (PRN 123659; Earthworks 2000)

Excavation 2000 (PRN 129928; Dodd 2003)

Status

Unscheduled

Condition

The majority of the site now lies beneath a housing development, although this has not necessarily destroyed much of the buried remains.

Potential

Despite the construction of the housing estate there is significant potential for the survival of buried remains. The site of the kiln lies beneath the turning area at the end of the access road, while much of the main building lies beneath a drive. The site of the waste dump appears to be undisturbed, lying in an area of trees and scrub, while the possible clay pans, located on the common, are also likely to survive.

Associated records

PRN 123663 pottery complex

PRN 123664 kiln

PRN 123665 kiln

PRN 123666 pottery workshop

PRN 123667 17th/18th-century features

References

Davey 1976a, 21

Dodd 2003

Earthworks 2000

1757 Lordship of Ewloe map

1780 (circa) Ewloe Estate (Map XII)

1884 Ordnance Survey 1st edition 25" map

Buckley Potteries Site 6, Benjamin Davies' Pottery

PRN 101669

SJ 2763 6519

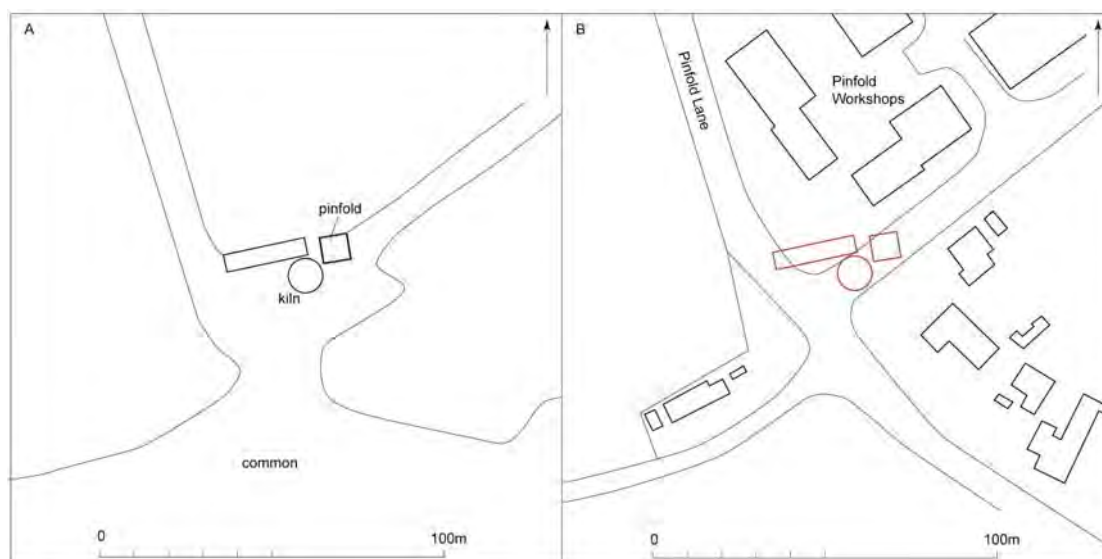
Date: 18th century

Fig. 17 Site 6, Benjamin Davies' Pottery. A – detail from the Ordnance Survey mapping of 1884; B – present day showing showing the location of pottery features in red.

The pottery is depicted on the 1757 lordship of Ewloe map, showing one, or possibly two kilns and a rectangular building located on the common near the Pinfold crossroads. The c.1780 Ewloe Estate maps clearly show the kiln and a building immediately west of the pinfold itself, and the accompanying schedule lists the tenant as Benjamin Davies.

It had previously been thought that the site lay further to the east, in an area where a small quantity of 18th-century pottery was found during excavations for a septic tank (Davey 1976a, 21).

Events

None

Status

Unscheduled

Condition

The area has been redeveloped and a road built over the site of the kiln, while the building is potentially located in an undeveloped corner of the area now occupied by the Pinfold Workshops.

Potential

It is possible that buried remains survive relating to the pottery building and perhaps other structures.

Associated records

PRN 97995 Pinfold

References

Davey 1976a, 21

1757 Lordship of Ewloe map
1780 (circa) Ewloe Estate (Map XII)

Buckley Potteries Site 7, Prescott's Pottery

PRN 101668

SJ 2776 6511

Date: 1783-1806

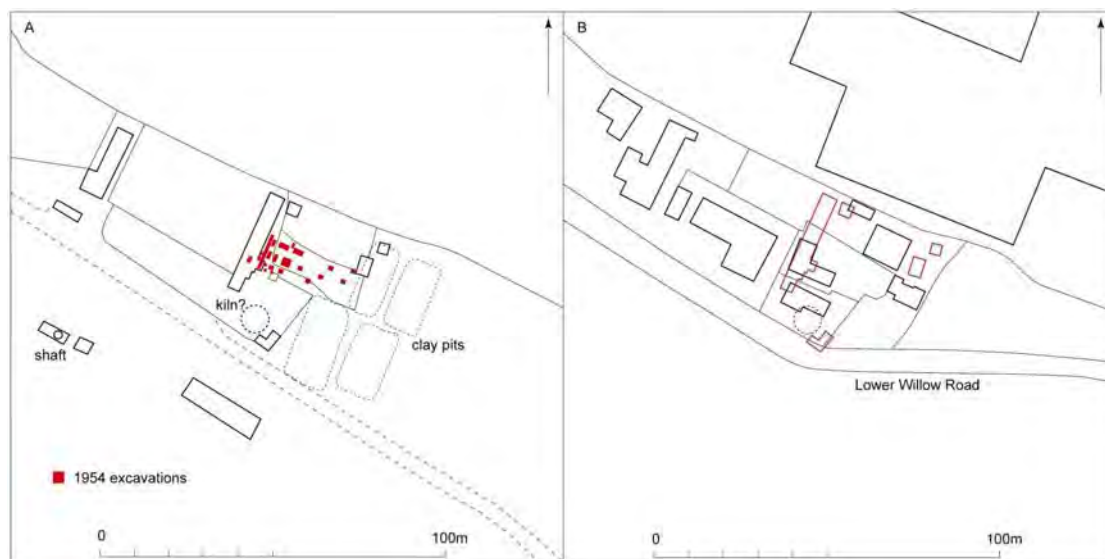


Fig. 18 Site 7, Prescott's Pottery. A – detail from the Ordnance Survey mapping of 1884, showing the location of the 1954 excavations; B – present day showing the location of pottery features in red.

Bartholomew Prescott built a pottery on a new encroachment on the common, which was in operation for just over twenty years between 1783-1806 (Messham 1956, 41). The period of activity falls between the major map sources and consequently no plan of the site is known. However, the Ordnance Survey 1st edition 25" map does show a range of buildings, perhaps comprising cottages and the workshop, together with three small buildings. Although there is no direct evidence for the location of the kiln, it has been suggested that it lay alongside the road on the southern edge of the site.

About a third of the area thought to contain the pottery was investigated by Barton in 1954. The kiln site was not located and structural finds in general were inconclusive. Pottery and kiln furniture of the period c.1740-1803 were recovered and are now in the Grosvenor Museum (Davey 1976a, 22). The excavation plan also indicates the position of four clay pits on the south-east side of the pottery site (Barton 1956).

The major product of this largely 18th-century site was a red-bodied, highly fired, black-glazed earthenware consisting for the most part of large kitchen or dairy storage vessels and coarse table-wares. This material provided the first definition of Buckley ware, that survives in many quarters (eg USA) today. The site also produced small quantities of other ceramics such as slip- and agate-bodied wares (Davey and Longworth 2001, 63-4).

Events

Excavation 1954 (PRN 13038; Barton 1956)

Status

Unscheduled

Condition

The site of the kiln may lie beneath a bungalow and recent extension, while the house behind could be part of the original row of cottages.

Potential

There is limited potential for surviving buried remains towards the rear of the site.

Associated records

None

References

Barton 1956

Davey 1976a, 22

Davey and Longworth 2001, 63-4

Messham 1956, 41

Buckley Potteries Site 8, Catherall's Pottery

PRN 101678

SJ 2786 6505

Date: 18th – late 19th century

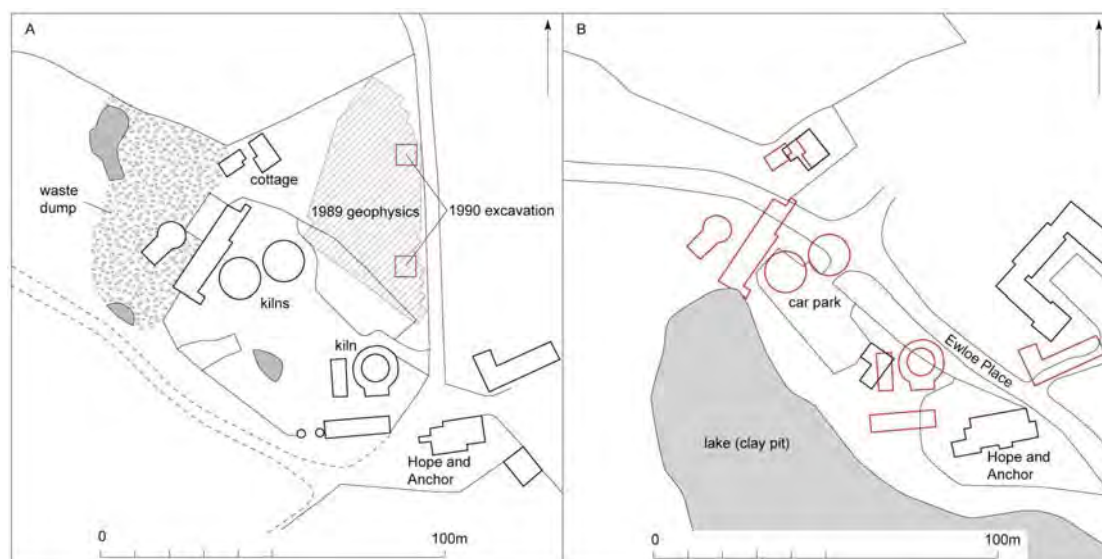


Fig. 19 Site 8, Catherall's Pottery. A – detail from the Ordnance Survey mapping of 1884, showing the 1989-90 investigations; B – present day showing the location of pottery features in red.

Jonathan Catherall I (1689-1761) was a founder of the fire-brick industry, having bought land from his brother John and nephew Joseph, and establishing a brickworks in the area which later became the Trap Brickworks. The 1757 Lordship of Ewloe survey identifies his lands as well as 'Jonathan Catrell's House and Intack', which was located on the common. There is, however, no indication of a pottery here at that time. That notwithstanding his will of 1751 bequeaths a pottery to his daughter Anne and her husband Edward Cunna, who had come to Ewloe to work for Catherall:

'my son in law Edward Conna of Ewloe, potter, has lately (by my permission but at his own expense) erected . . . an oven or pot-kiln . . . upon part of (my) freehold premises near to my dwelling house, where he now exercises the business of a

potter . . . he shall have the said oven or pot-kiln for the (term of his) natural life and the life of his wife Anne Cunna'

The pottery was worked by Cunna until his death in 1782, after which his wife Anne continued until 1794; its subsequent fate is unknown (Messham 1956, 37). It is not clear, however, which pottery this refers to.

Following the death of Jonathan Catherall I the business of pottery and brickworks fell to his son John and then from 1777 to John's wife, Martha and their second son, Jonathan Catherall II, until her death in 1792. They appear to have rented two potteries, known as the large and small earthenware works (Messham notes two kilns, one for large and one for small wares), and lived as tenants at the Hope and Anchor adjacent to what may be presumed to be the larger of the works (Site 8). In 1786 Jonathan II built a stoneware works to export jars and bottles to Ireland for the spirit trade and in 1792 he married Catherine Jones, thereafter building a new home at Hawkesbury House.

The 1841 Tithe survey shows a range of buildings, including at least one kiln, while the Ordnance Survey 1st edition 25" mapping of 1884 shows three kilns with sundry other buildings, probable clay pans and a large waste dump on the west side. To the south-east of the complex is the Hope and Anchor public house, which was formerly the house of John Catherall. By the time of the 2nd edition of 1899 the pottery was disused and a large clay pit from an adjacent brickworks had extended to take in the southern part of the pottery, including one of the kilns, while a second kiln had been lost to the construction of a new road which also cut through the waste dump.

Some elements of the pottery could still be identified as late as the mid 1970s, including a fine group of workers' terraces, while the sites of the kilns, sheds and chimneys could be seen as cropmarks next to the remains of an earlier potter's cottage. A stoneware flagon stamped Catherall, probably made at this site during the first quarter of the 19th century, is in the Grosvenor Museum, Chester (Davey 1976a, 22).

A watching brief by Earthworks Archaeology in 2002 found kiln furniture but appears not to have been within the area of the pottery itself (Earthworks 2002).

Events

Geophysical survey 1989 (PRN 70815; Gater and Gafney 1989)

Trial excavation 1990 (PRN 38549; Jones 1990)

Watching brief 2002 (PRN 110525; Earthworks 2002)

Status

Unscheduled

Condition

The majority of the pottery has been lost to clay extraction and redevelopment and the only visible trace is a worker's cottage on the north side of the road. The main pottery buildings could have preserved subsurface remains, although a new roundabout, carpark and building are likely to have had a significant impact on the kiln bases.

Potential

There is limited potential for buried remains surviving between the northern end of the clay pit and the road.

Associated records

PRN 86732 possible kiln revealed by geophysics

PRN 86733 possible kiln revealed by geophysics

References

Davey 1976a, 22
Earthworks 2002
Gater and Gaffney 1989
Jones 1990
1841 Tithe Survey
1884 Ordnance Survey 1st edition 25"
1899 Ordnance Survey 2nd edition 25"

Buckley Potteries site 9, Lamb's Pottery

PRN 101667

SJ 2824 6484

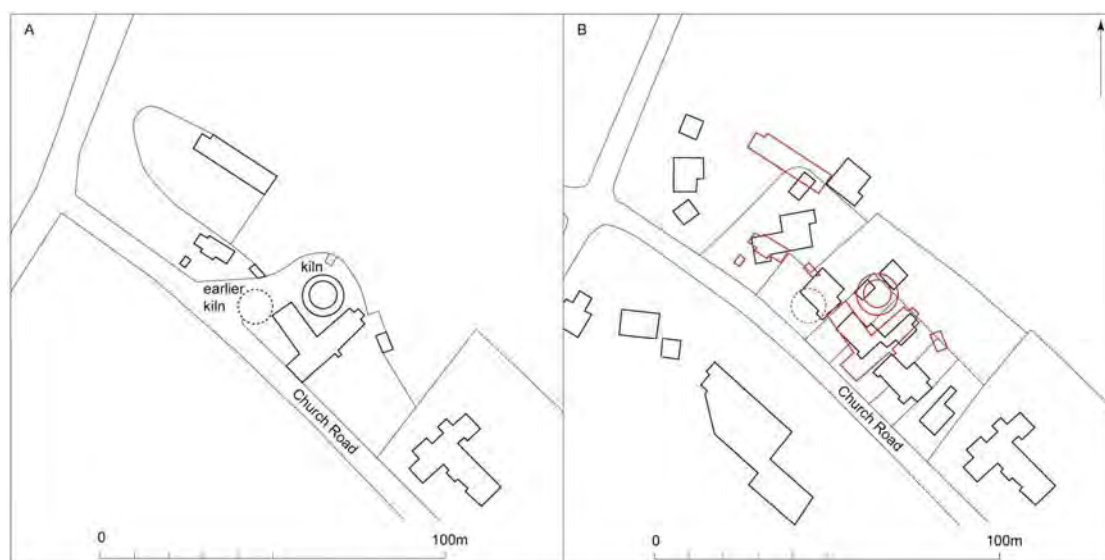
Date: late 18th century – 20th century

Fig. 20 Site 9, Lamb's Pottery. A – detail from the Ordnance Survey mapping of 1875;
B – present day showing the location of pottery features in red.

It is thought that the pottery might date from around 1740 and is certainly depicted on the 1757 map. In 1781 it was occupied by John Leach and in 1815 by Aaron Sharratt, who was born in Ewloe in 1751, his father (also Aaron) possibly having worked for Jonathan Catherall (the second). Sharratt set himself up as a master potter in 1800, presumably on this site, while in 1815 the pottery is recorded under the name of Anne Sharrat. Aaron had four sons, Aaron, Moses, Joshua and Jonathan, all potters, who continued the family business to the end of the 19th century.

The site of the pottery lies on the north-east side of Church Road and two kilns are shown on a map of 1860 and these, together with several ranges of buildings are shown by the Ordnance Survey in 1875, the layout changing little by 1912. There are several photographs of Lamb's pottery around 1909, which it has been assumed are at this site, since the pottery was also re-opened by Lamb after the Second World War, although only a one or two firings were produced (Messham 1956, 56). A small quantity of 18th-century pottery has been found on the site. (Davey 1976a, 22).

Events

None

Status

Unscheduled

Condition

The site of the kilns is now occupied by modern housing and driveways. One potter's cottage still survives on the opposite side of the road. The blunging pits were probably also on this side of the road. The site is now occupied by a petrol station.

Potential

There is little potential for surviving remains, perhaps with the exception of part of a kiln in the garden behind 134 Church Road.

Associated records

None

References

Davey 1976a, 22

Davey and Longworth 2001

McGarva 2000, 49, 86 and 102

Messham 1956, 56

1860 map of Buckley Estate

1875 Ordnance Survey 1st edition 25" map**Buckley Potteries Site 10, Hayes' Pottery**

PRN 101666

SJ 2854 6474

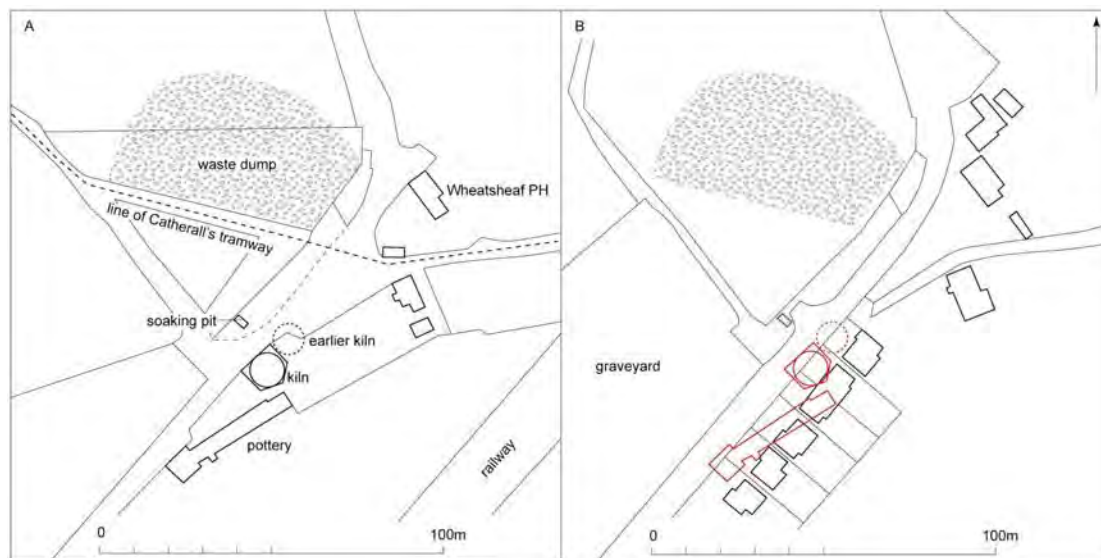
Date: 18th – 1942

Fig. 21 Site 10, Hayes' Pottery. A – detail from the Ordnance Survey mapping of 1875;
B – present day showing the location of pottery features in red.

The pottery was first mapped in the 1780s, being occupied by Jonathan Hayes, although Messham records that the pottery had originally been occupied by Richard Dean until his death in 1763. From 1764 it was taken over by Joseph Hayes, the brother of Dean's widow Jane and father of Jonathan Hayes. Dean's son Philip was also a potter, and one of his two sons, John, also set up as a master potter in 1789 but died two years later (Messham 1956, 33-4). By 1809 the pottery was run by Jonathan Hayes's sister Phoebe and his son Joseph and in

the early 20th century by Ollive Hayes. The pottery continued in the Hayes family until closing in 1942. There is a good photographic record of the pottery taken in 1960, copies of which are held at Flintshire Record Office, Hawarden.

There were two kilns here in 1860 and the Ordnance Survey 1st edition 25" map shows the kilns, together with a rectangular building which included the workshop and drying shed, with a small, rectangular pit on the opposite side of the road probably representing a soaking pit for preparing the clay. The later editions suggest that the pottery had been reduced to a single kiln, housed within a larger structure to which outbuildings were appended.

Events

None

Status

Unscheduled

Condition

The site of the kilns lies partly beneath the drives of modern houses and partly beneath the road, while the drying sheds are also beneath the houses and driveways. The waste dumps and blunging/soaking pits lie on the opposite side of the road, covered and somewhat obscured by trees and dense undergrowth (Davey 1976a, 23).

Potential

There is limited potential for the survival of the pottery structures themselves, although the waste dump appears to be undisturbed.

Associated records

None

References

Davey 1976a, 23
Davey and Longworth 2001, 63
Duckworth 1979
McGarva 2000, 10-11
Messham 1956, 33-4
1780 (circa) Ewloe Estate
1860 map of Buckley Estate
1875 Ordnance Survey 1st edition 25" map
1889 Ordnance Survey 2nd edition 25" map
1912 Ordnance Survey 3rd edition 25" map

Buckley Potteries Site 11, Price's Pottery

PRN 101677

SJ 2757 6462

Date: late 18th– 19th century

The 1757 Lordship of Ewloe map shows two rectangular buildings which equate with those of the pottery shown on the Ordnance Survey 1st edition 25" map of 1884, although no kiln is depicted to confirm this as a pottery at that time. A pottery is recorded here on the 1780s Ewloe Estate maps and appears to have been operational until the latter part of the 19th century, being disused by 1889.

The 1st edition mapping shows a single kiln and two buildings, as well as a small pond immediately to the north. The pottery was operated by Charles Price in the later 18th century and he was succeeded by his widow Martha and later his son Charles (Messham 1956, 34).

The site lies on the edge of the playing field of Elfed School and in 1974 works here led to considerable erosion of the pottery dump on its south and west sides. A quantity of 18th to 19th-century pottery and kiln furniture were recovered, including a number of very fine mottled ware tankards (Davey 1976a, 23).

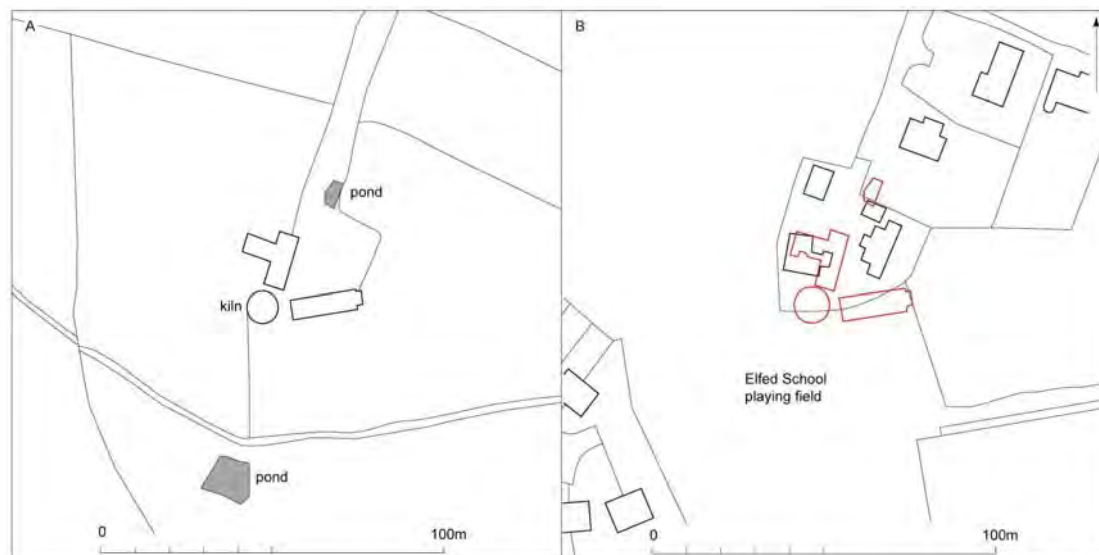


Fig. 22 Site 11, Price's Pottery. A – detail from the Ordnance Survey mapping of 1884;
B – present day showing the location of pottery features in red.

Events

None

Status

Unscheduled

Condition

One range of pottery buildings now lies under a modern house and the base of the kiln was demolished to erect a garage. The other range of buildings and the pottery dump are largely beneath the playing fields.

Potential

There is considerable potential for buried remains beneath the playing field, which may include the southern edge of the kiln.

Associated records

101677 duplicate record

References

Davey 1976a, 23

Messham 1956, 34

Rutter, 1977

1757 Lordship of Ewloe survey

1780 (circa) Ewloe Estate

1884 Ordnance Survey 1st edition 25" map

1889 Ordnance Survey 2nd edition 25" map**Buckley Potteries Site 12, Whitley's Pottery**

PRN 101676

SJ 2785 6481

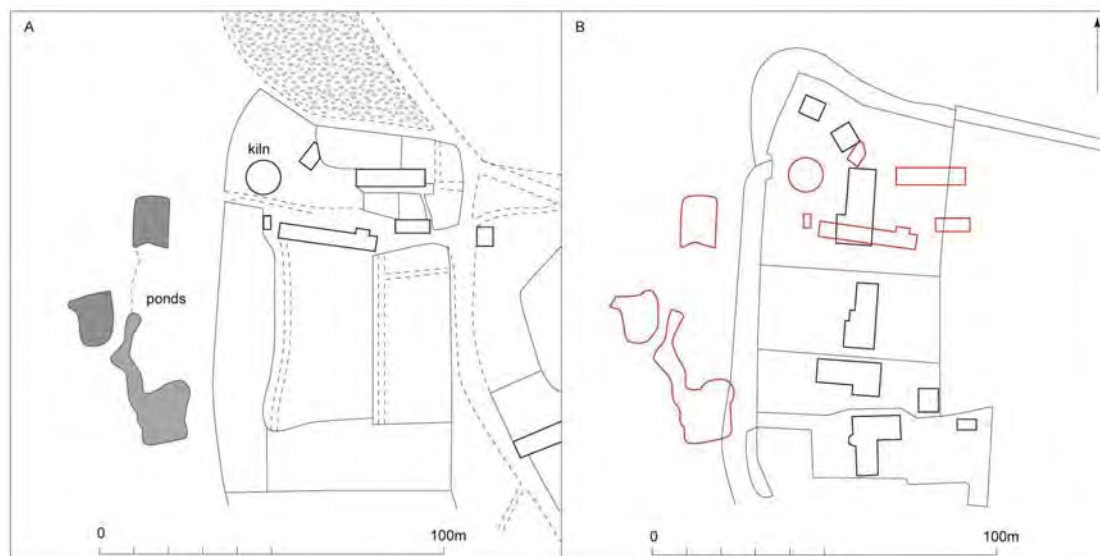
Date: 18th – 19th century

Fig. 23 Site 12, Whitley's Pottery. A – detail from the Ordnance Survey mapping of 1884, with the approximate location of the kiln taken from a 1780s survey; B – present day showing the location of pottery features in red.

The 1757 Lordship of Ewloe map shows an enclosure here with a building at its northern end, although there is no indication of a kiln. The 1780s mapping, however, shows a single kiln located on the common, adjacent to the building, recording the plot as being occupied by Edward Whitely (house, garden and mug-kiln), who died in 1782. By 1815 the pottery was run by Robert Whitely, who died in 1826. The names Mary Whitely and John Whitely appear in the clay accounts for 1783-1789 and 1783-4 respectively (Messham 1956, 56), perhaps indicating that they were operating the pottery after the death of Edward. The pottery had may have fallen out of use by the 1840s as no kiln is depicted on the tithe survey, though this and the 1884 the Ordnance Survey mapping do show the main pottery building and several adjacent structures. To the west are two clay pits and what may be a clay pan, or perhaps a clay pit.

Events

None

Status

Unscheduled

Condition

The site of the main pottery building is occupied by a modern house while the kiln lies beneath the drive and the site of other buildings is within the garden. There is no visible trace of the clay pits and possible pan, which lie on the common, although buried remains may survive.

Potential

The potential for significant buried remains is limited and restricted to the foundations of ancillary structures which may survive within the garden area, together with features on the common which could potentially include the site of the waste dump.

Associated records

None

References

Davey 1976a, 24

Davey and Longworth 2001, 63

1757 Lordship of Ewloe survey

1780 (circa) Ewloe Estate

1875 Ordnance Survey 1st edition 25" map

1889 Ordnance Survey 2nd edition 25" map

Buckley Potteries Site 13, Buckley Common pottery

PRN 44489

SJ 2783 6482

Date: 19th century

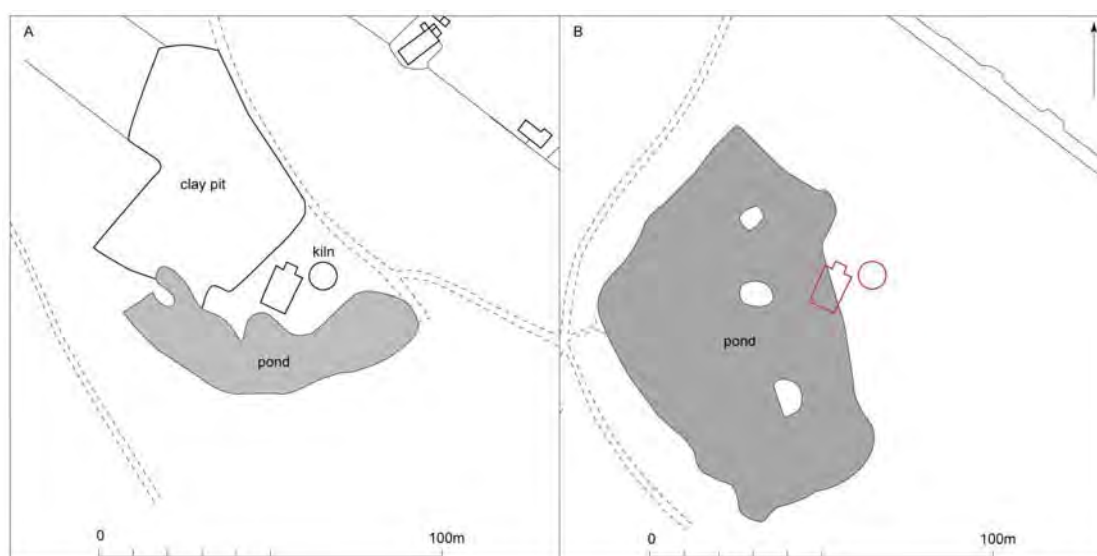


Fig. 24 Site 13, Buckley Common Pottery. A – detail from the Ordnance Survey mapping of 1875; B – present day showing the location of pottery features in red.

Little is known about this potential pottery which first appears on map sources in 1860, having been established on the open common. The Ordnance Survey 1st edition 25" map of 1875 shows a single kiln and an adjacent building surrounded by clay pits which appear to be too large for a small pottery, perhaps suggesting that the site was a brickworks rather than a pottery.

Events

None

Status

Unscheduled

Condition

The dumping of up to 3m of soil in the landscaping of the Upper Common has obscured any trace of the site (Davey 1976a, 24).

Potential

Unknown

References

Davey 1976a, 24

Davey and Longworth 2001

1875 Ordnance Survey 1st edition 25" map

Buckley Potteries Site 14, Hancock's Pottery

PRN 101665

SJ 2845 6392

Date: c.1790-1886

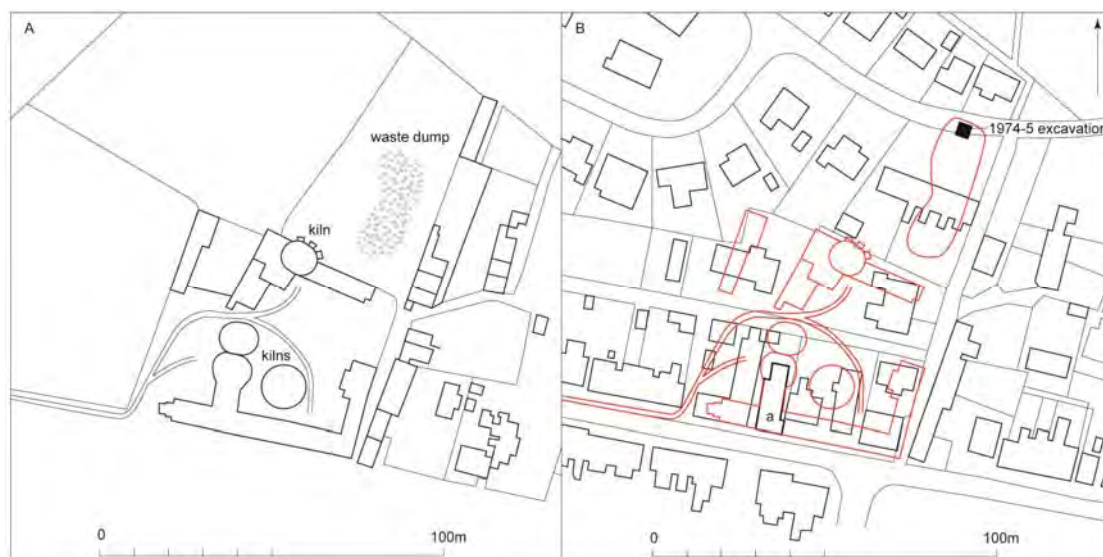


Fig. 25 Site 14, Hancock's Pottery. A – detail from the Ordnance Survey mapping of 1875; B – present day showing the location of pottery features in red and the site of the 1974-5 excavation.

Hancock's pottery, known as the Daisy Hill Works, was built in the late 18th century on land bought by Rigby and Hancock, occupying an existing enclosure on the commons, and is the only one of the Buckley potteries in the parish of Mold. It was founded by William Hancock whose mother was the daughter of the first Jonathan Catherall. In partnership with John Rigby, an ironmaster, Hancock founded the brick and colliery company of Rigby and Hancock in 1792, and later the pottery firm of William Hancock and Company, in partnership with William Williamson. Although their partnership was dissolved in 1817 the firm continued as one of the main brick and pottery concerns in Buckley throughout the 19th century (Messham 1956, 39-40).

Hancocks was the only pottery to be furnished with a purpose-built tramway, constructed in partnership with Rigby, which enabled the ready transportation of pottery, as well as bricks and coal, to the River Dee at Aston (Messham 1956, 39-40). The tramway is shown on the 1st edition Ordnance Survey 25" map of 1875 leading directly into the pottery complex, which then appears to have consisted of perhaps three kilns within a yard surrounded on two sides

by pottery buildings. The waste dump is depicted to the north of the site and a small excavation was conducted towards its northern end in 1974-75 by Flintshire Historical Society, Chester Archaeology Society and the Buckley Society, directed by Davey and Williams, recovering a large quantity of domestic and industrial pottery and stoneware (Davey 1976a, 25). This also demonstrated that the dump extended further to the north than shown by the Ordnance Survey.

The peak production was around 1803 followed by a general decline, closing in 1886. The two major production types were vessels for the lead industry and domestic cooking and storage vessels. The domestic wares were black-glazed and slipware storage vessels and bowls, black- and brown-glazed fineware and stoneware (Davey and Longworth 2001, 62-72).

Events

Excavation 1974-5 (PRN 129929; Davey 1976a, 25)

Status

Unscheduled

Condition

The site of the kilns and other pottery buildings is now occupied by the former Catholic Church, shops, modern houses and gardens. A long timber building associated with the church lies on the site of one of the kilns. The only obvious surviving remains are of a small stone-built building on Brunswich Road which has been incorporated into a later building, now a funeral directors (labelled 'a' on Fig. 21). This may have been the pottery office referred to by Davey (1976, 25). The dump lies beneath a 20th-century terrace, with the northern part occupied by gardens.

Potential

Despite the scale and significance of the pottery the potential is very limited, a result of its position in the centre of Buckley. There is, however, potential for remains relating to one of the kilns which may survive beneath a timber building, as well as the northern end of the waste dump, which is beneath gardens.

Associated records

None

References

Bentley 1973
Davey 1976a, 25
Davey and Longworth 2001
Longworth and McLaughlin Cook 2000
Messham 1956, 39-40
Philpot 1978
1875 Ordnance Survey 1st edition 25" map

Buckley Potteries Site 15, Powell's Pottery or Ewloe Pottery

PRN 101675

SJ 2741 6501

Date: late 19th – early 20th century

None of the early map sources suggests a pottery at this site, although an 18th-century pottery existed further to the south (Site 24), the earliest record here being in 1860, when two kilns are depicted. The pottery is named as Ewloe Pottery by the Ordnance Survey in 1884 and was

operated by the Powell family. Messham (1956, 55) suggests that prior to the Powells the pottery was worked by the Lewis family, although the source of this information is unclear.

In the 1880s the pottery comprised a single kiln with a range of buildings to the west, as well as numerous small features which are likely to include clay pans, perhaps as many as three circular blungers and large clay pits to the north and west. By the end of the century the works had expanded, with the kiln site incorporated into a large complex of buildings.

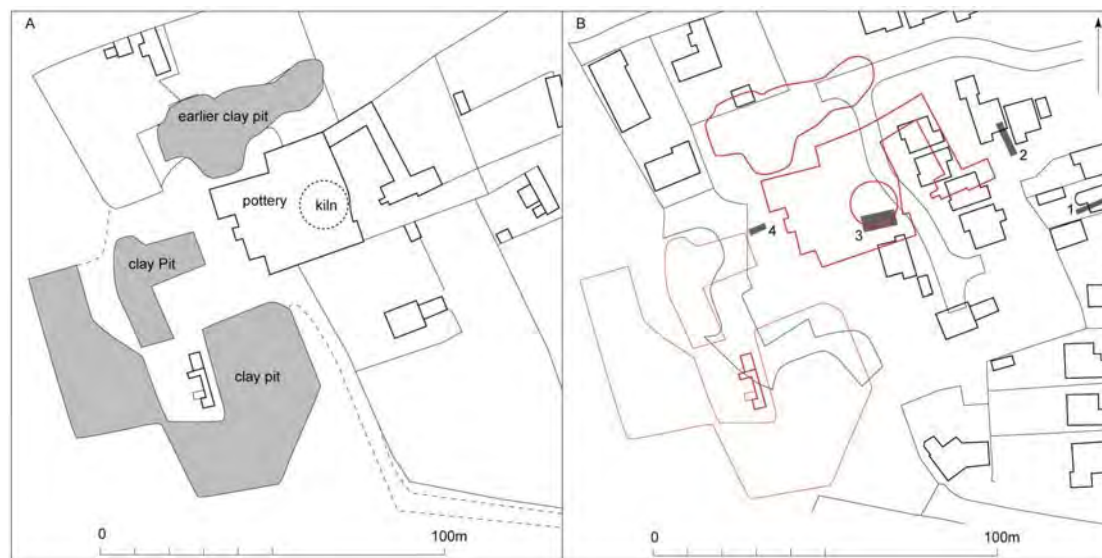


Fig. 26 Site 15, Powell's Pottery. A – detail from the Ordnance Survey mapping of 1912; B – present day showing the location of pottery features in red and the position of the 2004 excavations (1-4).

During the 1970s the site was occupied by an industrial complex with the drying sheds having been incorporated into the complex, although no other visible traces of the pottery survived and the waste dump had been almost completely removed (Davey 1976a, 25).

A rapid archaeological evaluation, comprising four trenches, was undertaken during November 2003 prior to the commencement of a residential development. The results revealed the well-preserved base of a post-medieval pottery kiln, of probable multi-flued 'bottle-oven' type. The survival of the kiln suggests that other buildings and kilns, shown on early maps, may also survive within the immediate area, lying immediately below the modern ground level (Earthworks 2003).

Events

Excavation 2003 (PRN 112379; Earthworks 2003)

Status

Unscheduled

Condition

The site is now occupied by a housing estate, although the position of the kiln and at least part of the main building complex lies within a green space in the centre of the development.

Potential

The 2004 excavation demonstrated that there is significant potential for buried remains to survive relating to the kiln and main complex and these have hopefully been preserved within the layout of the development.

Associated records

PRN 115573 Buckley, Pentre Lane, Potter's Cottage
PRN 126527 Ewloe Pottery, tank
PRN 128085 Buckley Potteries, Ewloe Pottery 18th-century phase
PRN 128159 Buckley Potteries, Ewloe pottery kiln
PRN 128160 Buckley Potteries, clay extraction pit

References

Davey 1976a, 25
Davey and Longworth 2001
Earthworks 2003
Messham 1956, 55
1860 map of Buckley Estate
1875 Ordnance Survey 1st edition 25" map
1889 Ordnance Survey 2nd edition 25" map

Buckley Potteries Site 16, Ledsham's Pottery

PRN 44490
SJ 2839 6460
Date: 18th century

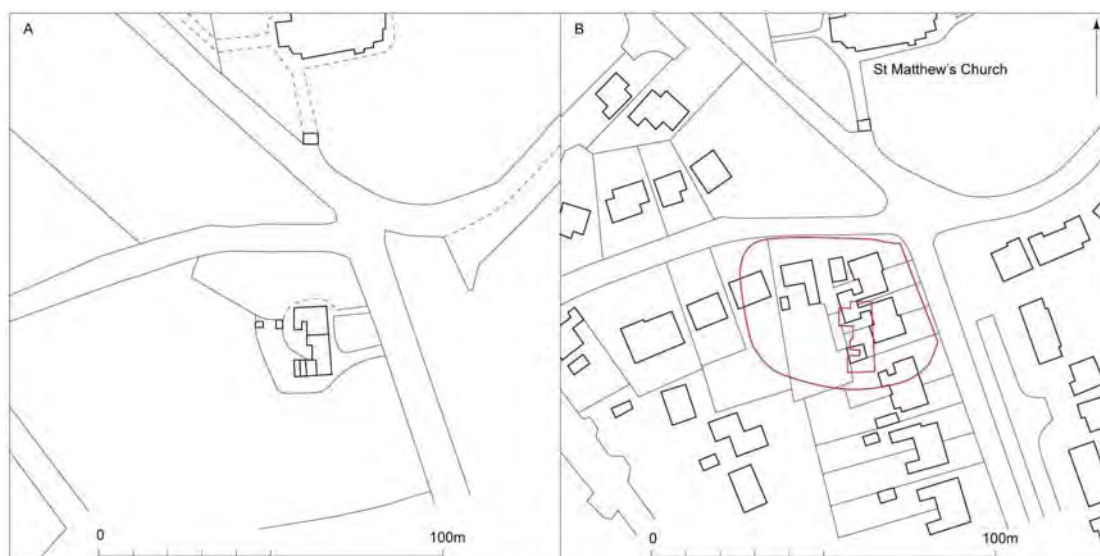


Fig. 27 Site 16, Ledsham's Pottery. A – detail from the Ordnance Survey mapping of 1875; B – present day showing the location of the 19th-century building and possible extent of the pottery in red.

A kiln and a range of buildings are depicted on the 1757 Ewloe Lordship map, the adjacent enclosures being described as 'Peter Ledsham's house garden and croft', and the 1780 Ewloe Estate map, which makes specific reference to a mug-kiln, but they do not appear on any 19th-century mapping.

Events

None

Status

Unscheduled

Condition

There are no visible remains of the pottery, the whole being covered by modern houses and gardens (Davey 1976a, 27).

Potential

The potential for surviving buried remains is low, being restricted to garden plots which could conceivably contain parts of the pottery building and waste dump.

Associated records

PRN 98344, Mug kiln and croft, 1757

References

Davey 1976a, 27

Davey and Longworth 2001

1757 Lordship of Ewloe survey

1780 (circa) Ewloe Estate

Buckley Potteries Site 17, Ewloe Green Pottery

PRN 58480

SJ 2806 6633

Date: 1850 – 1914

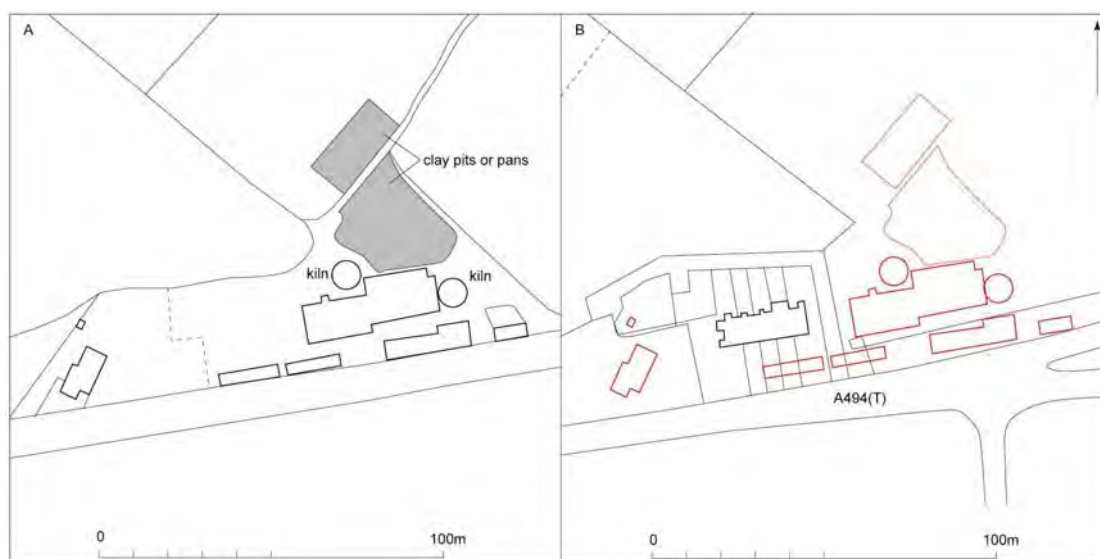


Fig. 28 Site 17, Ewloe Green Pottery. A – detail from the Ordnance Survey mapping of 1874; B – present day showing the location of pottery features in red.

According to Messham (1956, 55) the Ewloe Green pottery was started about 1850 by Hayes and Company and the 1860 Gwasaney clay accounts have a record for Hayes and Lathom, while an 1886 postal directory lists Jones and Jarrard (Gerrard), who continued in production until the First World War. William Jones and Charles Gerrard had a single kiln using clay from behind Oak's Farm on Pinfold Lane (Pritchard 2006, 80).

The Ordnance Survey 1st edition 25" map of 1874 shows a range of buildings which presumably incorporated the kiln, since no separate kiln is depicted, together with two 'mills' and two ponds, or perhaps clay pans. By the end of the century further buildings had been added along the roadside and the main works expanded, while the mills had disappeared.

Events

None

Status

Unscheduled

Condition

The site of the main pottery complex lies in a pasture field within which there are slight earthworks indicating in part the position of the main buildings. Associated buildings along the roadside have been disturbed by road widening, although buried remains may still survive beneath the verge and along the edge of the field.

Potential

There is considerable potential for surviving buried structures relating to the main complex.

Associated records

None

References

Davey 1976a, 27

Davey and Longworth 2001

Longworth and McLaughlin Cook 2000, 55-6

Messham 1956, 55

Pritchard 2006, 80

1874 Ordnance Survey 1st edition 25" map1889 Ordnance Survey 2nd edition 25" map1912 Ordnance Survey 3rd edition 25" map**Buckley Potteries Site 18, Ewloe medieval pottery**

PRN 44492

SJ 2812 6564

Date: medieval

The site of a medieval pottery kiln has been identified from a finds scatter discovered in 1975 by H M Harrison (Davey and Longworth 2001, 63). Over 1000 sherds of medieval pottery, including wasters, were discovered while fieldwalking an arable field, including 938 sherds of pottery and 161 ridge tile sherds. The main fabrics are gritty, highly fired white and grey wares with green and brown glazes. The major products were jugs, large storage vessels and roofing tiles, probably of 14/15th-century date (Fig. 2a; Davey 1976a, 27).

A geophysical survey was undertaken in 1986, followed by a small excavation, comprising one main trench, measuring 12m by 3m, and two smaller trenches, each measuring 3m by 3m. The trenches had been positioned to investigate anomalies detected by the geophysics, although these proved to relate to ferrous objects and no evidence was forthcoming for the kiln or any other pottery structures. The topsoil produced quantities of pottery, including one sherd of 13th/14th-century pottery, 60 sherds of 14th/15th-century pottery, 146 sherds of 16th-century pottery and some 500 sherds of 18th/19th-century pottery (Weetman 1986).

Event

Fieldwalking 1975

Geophysical survey (PRN 38251; Wheetman 1986)

Excavation (PRN 129930; Wheetman 1986)

Status

Unscheduled



Fig. 29 Site 18 showing the location of the 1986 geophysical and trial excavations

Condition

The area where the sherds have been found lies within a pasture field with no surface traces.

Potential

The site has perhaps the greatest potential of all the known Buckley potteries, being not only one of the earliest, but is also apparently undisturbed.

Associated records

PRN 102717 finds scatter

References

Davey 1976a, 27
Davey and Longworth 2001
Harrison and Davey 1975
Wheetman 1986

Buckley Potteries Site 19, Pinfold Lane Pottery

PRN 101679

SJ 2745 6638

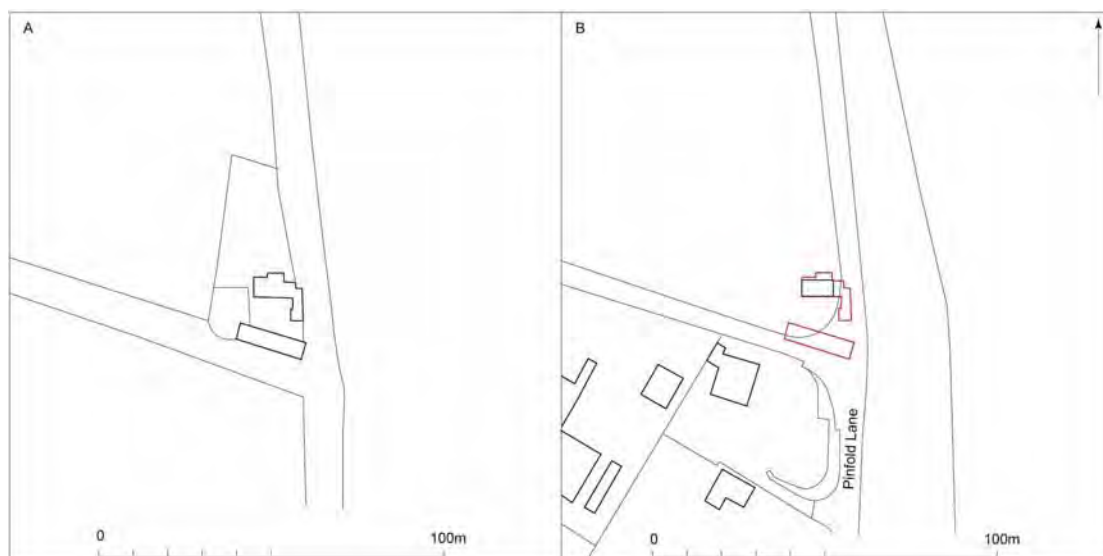
Date: 17th – 18th century

Fig. 30 Site 19, Pinfold Lane Pottery. A – detail from the Ordnance Survey mapping of 1874; B – present day showing the location of pottery features in red.

The site was discovered in 1975 during excavations for an electricity cable which exposed a layer of coal ash and clinker 0.2m thick extending for 10m and three pits full of kiln wasters. Finds included black-glazed wares and thrown, flanged bowls with yellow slip trailed decoration, probably dating to 1650-80. A derelict stone cowshed 3m north of the trench is a re-used cottage with a fireplace which may have been the potter's cottage. Irregularities in the pasture to the north may reflect other pottery structures (Davey 1976a, 28).

The cottage is depicted on 1757 and 1780s map sources, although there is no indication that this was then a pottery.

Events

None

Status

Unscheduled

Condition

The remains of the cottage are in a poor condition, while the immediate area is overgrown.

Potential

There is the potential for significant buried remains in the area immediately surrounding the cottage, although further to the west the land has been quarried.

Associated records

None

References

Davey 1976a, 28

Davey and Longworth 2001

Longworth and McLaughlin Cook 2000, 45-50
Morgan 1978
1757 Lordship of Ewloe survey
1780 (circa) Ewloe Estate

Buckley Potteries Site 20, Benjamin Catherall's Pottery

PRN 128081
SJ 2814 6490
Date: 18th century

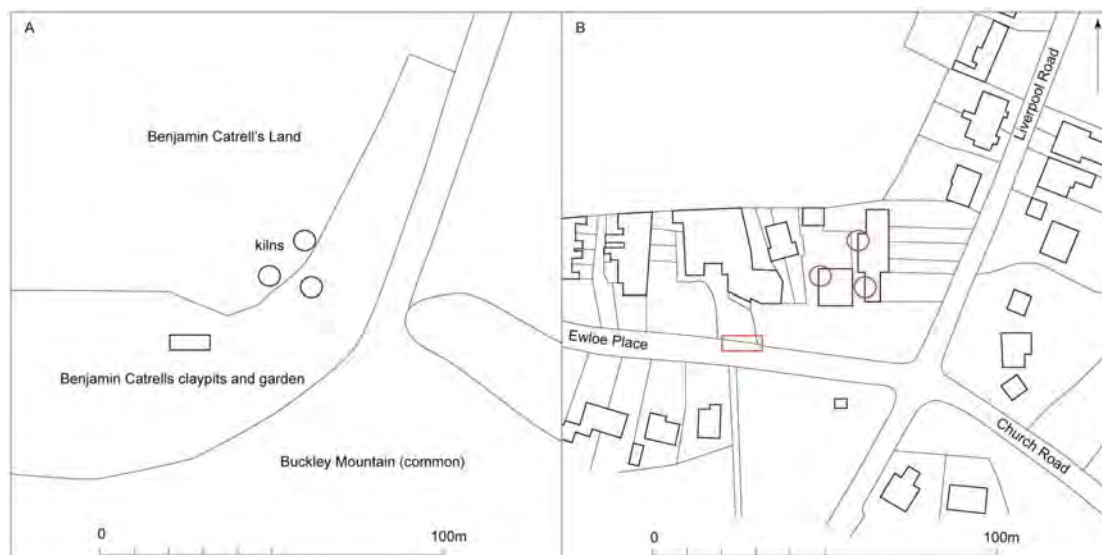


Fig. 31 Site 20, Benjamin Catherall's Pottery. A – detail from the 1757 estate map showing the approximate position of structures; B – present day showing the location of pottery features in red.

A map of the lordship of Ewloe in 1757 shows three kilns - two on Benjamin Catrell's Land and one on the edge of the common, together with a rectangular building. The accompanying schedule lists this as 'Benjamin Catrell's claypits and garden'. No pottery is recorded here on any later mapping. Benjamin was the nephew of the first Jonathan Catherall and owned land adjoining his, both Catheralls being pottery and brick manufacturers. The two branches of the family had widely differing fortunes, Benjamin appearing to be in constant debt (Messham 1956, 36-7). He died in 1801 and there is no subsequent record of a pottery at this site. He was also associated with the pottery on Pinfold Lane (Site 2) during the same period.

Events

None

Status

Unscheduled

Condition

The site is now occupied by modern housing, gardens and a carpark.

Potential

It is possible that some sub-surface remains survive, although the overall potential is considered to be low.

Associated records

None

References

1757 Lordship of Ewloe survey

Buckley Potteries Site 21

PRN 128082

SJ 286 652

Date: early 19th century

A pottery is recorded on the 1834 Ordnance Survey Surveyors' Drawing in approximately the location later occupied by the Etna Brickworks.

Events

None

Status

Unscheduled

Condition

Unknown

Potential

Unknown

Associated records

None

References

1834 Ordnance Survey Surveyors' Drawing

Buckley Potteries Site 22, Church Road Pottery

PRN 128083

SJ 285 643

Date: early 19th century

A pottery is recorded on the 1834 Ordnance Survey Surveyors' Drawing, although the precise location is unclear.

Events

None

Status

Unscheduled

Condition

Unknown

Potential

Unknown

Associated records

None

References

1834 Ordnance Survey Surveyors' Drawing

Buckley Potteries Site 23, Lane End Pottery

PRN 128084

SJ 290 639

Date: early 19th century

A pottery is recorded on the 1834 Ordnance Survey Surveyors' Drawing, although the exact location is unclear. However, a map of 1815 records a 'kiln field' with the owner or tenant as Joseph Saladine.

Events

None

Status

Unscheduled

Condition

Unknown

Potential

Unknown

Associated records

None

References

1815 Survey of the Township of Pentrobin

1834 Ordnance Survey Surveyors' Drawing

Buckley Potteries Site 24

PRN 128085

SJ 2744 6494

Date: 18th century

A pottery is depicted on the 1757 Lordship of Ewloe map, showing a single kiln and a rectangular building on the common, south of the site of the 19th-century Ewloe, or Powell's Pottery. According to Messham (1956, 55) Powell established a pottery on a site formerly worked by the Lewis family, who may therefore have run this pottery, although the enclosures on this part of the common appear to have been associated with Peter Ledsham in 1757 and Benjamin Davies in the 1780s, both potters with known sites elsewhere (Site 16 and 6 respectively).

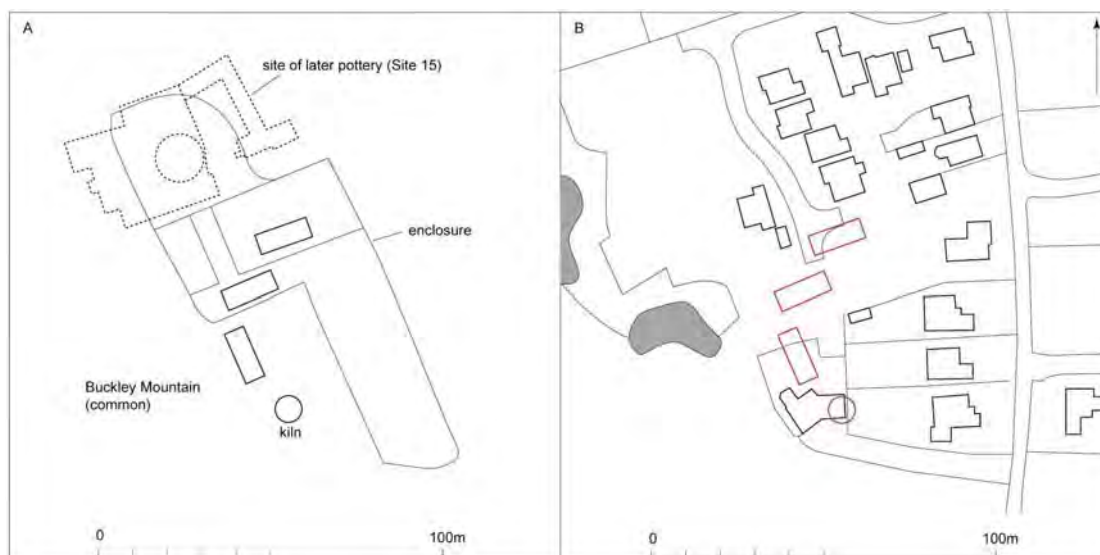


Fig. 32 Site 24. A – detail from the 1757 estate map showing the approximate position of structures; B – present day showing the location of pottery features in red.

Events

None

Status

Unscheduled

Condition

The exact location of the kiln is not known and the area has recently been redeveloped as a housing estate.

Potential

Despite the redevelopment there remains some potential for the survival of buried structures within the garden plots.

Associated records

None

References

Messham 1956, 55

1757 Lordship of Ewloe survey

Buckley Potteries Site 25, Charles Cunnah's Pottery

PRN 128086

SJ 2875 6718

Date: 18th century

The Ewloe Estate map of c. 1780 has a later schedule dated 1804 which lists 'Work House Field Mug Kiln', a tenement in the occupation of Charles Cunnah, the same details also being recorded in 1815. No buildings are shown on either map, or on the 1757 map. However, the 1815 map shows no pottery in this field but does depict a building further to the east, now Castle Bank Cottage (PRN 99013), where there is a record of clay pipes found within the garden and an old tip in the field behind. Although a building (now demolished) is depicted

along the roadside by the Ordnance Survey in 1871, this is too late to be associated with the pottery. The site lies somewhere in a pasture field within which there is a level area which could have been the site of the pottery, together with an obvious linear hollow further to the east, aligned north-north-east to south-south-west, that is perhaps unlikely to have been associated with the pottery.

Events

None

Status

Unscheduled

Condition

The exact location of the pottery remains uncertain and its condition is therefore unknown.

Potential

The undeveloped nature of the site suggests that there is considerable potential for the survival of buried remains which could be elucidated through geophysical survey, while a programme of fieldwalking might also shed some light on the position and extent of the pottery, as well as the types of wares it produced.

Associated records

None

References

1780 (circa) Ewloe Estate (Map XI) and 1804 schedule

1815 Survey of the Township of Ewloe Wood

Buckley Potteries Site 26, Hawarden Hayes

PRN 128087

SJ 3096 6536

Date: early 19th century

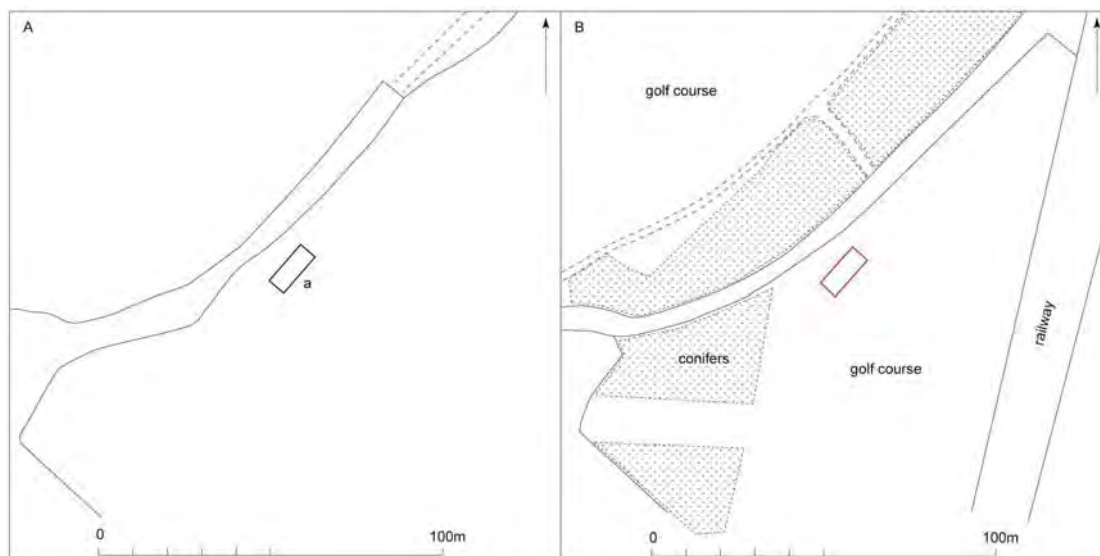


Fig. 33 Site 26. A – detail from the Ordnance Survey mapping of 1870 showing the approximate position of the building (a) depicted in 1815; B – present day showing the approximate location of pottery features in red.

A pottery was recorded in 1815 near Hawarden Hayes, the schedule noting 'pot kiln and works' owned and occupied by William Boydell, while the fields to the south evidently contained clay pits, one field also noted as 'pantile field'. According to Messham (1956, 61) the pottery was operated by a Mr Smalley, a member of a cotton spinning family from Holywell, who also established a brickworks near Hayes' pottery. The precise location is difficult to determine but now lies under grass within a golf course.

Events

None

Status

Unscheduled

Condition

There is no visible evidence and the site may have been impacted upon by landscaping for the golf course.

Potential

The site may have significant potential for the preservation of buried remains.

Associated records

None

References

Messham 1956, 61

1815 survey of the Township of Ewloe Town

Buckley Potteries Site 27, Wilson's Pottery

PRN 128089

SJ 2800 6495

Date: 1915

A short-lived pottery was started at Ewloe Place in May 1915 by Ernest Wilson, although Rice Jones is recorded as the potter (Pritchard 2006, 80). The exact location of the pottery is not known.

Events

None

Status

Unscheduled

Condition

Unknown

Potential

Unknown

Associated records

None

References

Pritchard 2006, 80

Buckley Potteries Site 28, Trap Pottery

PRN 128090

SJ 278 653

Date: 1918

A short-lived pottery is recorded at the Trap in 1918 (Pritchard 2006, 80), although its exact location is not known.

Events

None

Status

Unscheduled

Condition

There are no surface remains, although the site is likely to have well-preserved, buried remains.

Potential

The site lies in a pasture field and has significant potential for the preservation of buried remains.

Associated records

None

References

Pritchard 2006, 80

Buckley Potteries Site 29, Dirty Mile Pottery

PRN 128091

SJ 3004 6315

Date: 1918

A short-lived pottery is recorded along the Dirty Mile (Pritchard 2006, 80), the location of which is perhaps indicated by the identification of 'kiln field' on a map of 1915 (D/BJ/346), owned by Edward Lewis, and lying to the west of Bannel Lane. The adjacent field to the west contained clay pits. There is no visible trace of the pottery and although the adjacent field to the north-east does contain some slight earthworks these are not necessarily related.

Events

None

Status

Unscheduled

Condition

Unknown

Potential

Unknown

Associated records

None

References

Pritchard 2006, 80

Buckley Potteries Site 30, Welsh Art Pottery

PRN 128092

SJ 288 638

Date: 1914-16

Frederick James Holloday's Welsh Art Pottery Company operated along Chester Road, Buckley, from February 1914 to November 1916 (Pritchard 2006, 80), although its exact location is not known.

Events

None

Status

Unscheduled

Condition

Unknown

Potential

Unknown

Associated records

None

References

Pritchard 2006, 80

Buckley Potteries Site 31, Alltami Pottery

PRN 128094

SJ 2656 6549

Date: 1915

A pottery is depicted on a map of 1915 (D/DM/578/47), showing a rectangular building with a single kiln to the east. The pottery was presumably short-lived and no further details are known.

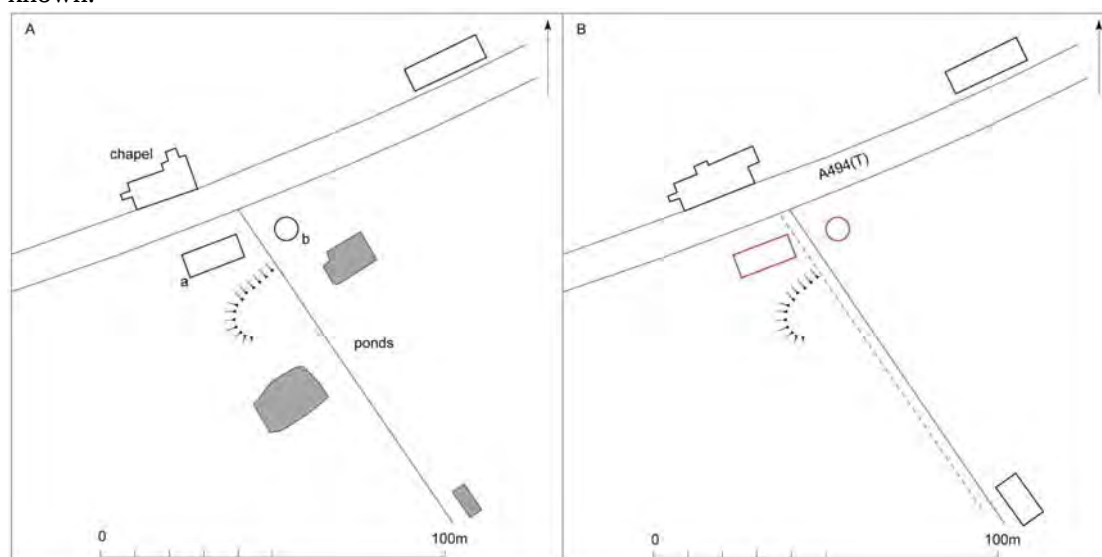


Fig. 34 Site 31, Alltami Pottery. A – detail from the Ordnance Survey mapping of 1912, showing approximate position of pottery (a) and kiln (b); B – present day showing showing the location of pottery features in red.

Events

None

Status

Unscheduled

Condition

There are slight earthworks defining a hollow which may have been the pottery building and if so the kiln could have been in the adjacent field to the east.

Potential

Unknown

Associated records

None

References

Pritchard 2006, 80

1915 Plan of Buckley and district

Workers' Housing

As a result of a field visit with Dr Davey, and subsequent assessment, it has become apparent that workers' housing in the Buckley area has previously been entirely absent from the archaeological record. The houses in question are typically small, single-storey dwellings, some lying within the pottery complexes and others adjacent to them. It is not necessarily possible, however, to distinguish between dwellings associated with the pottery industry and those which served brickmaking, since the settings of both industries are often intertwined.



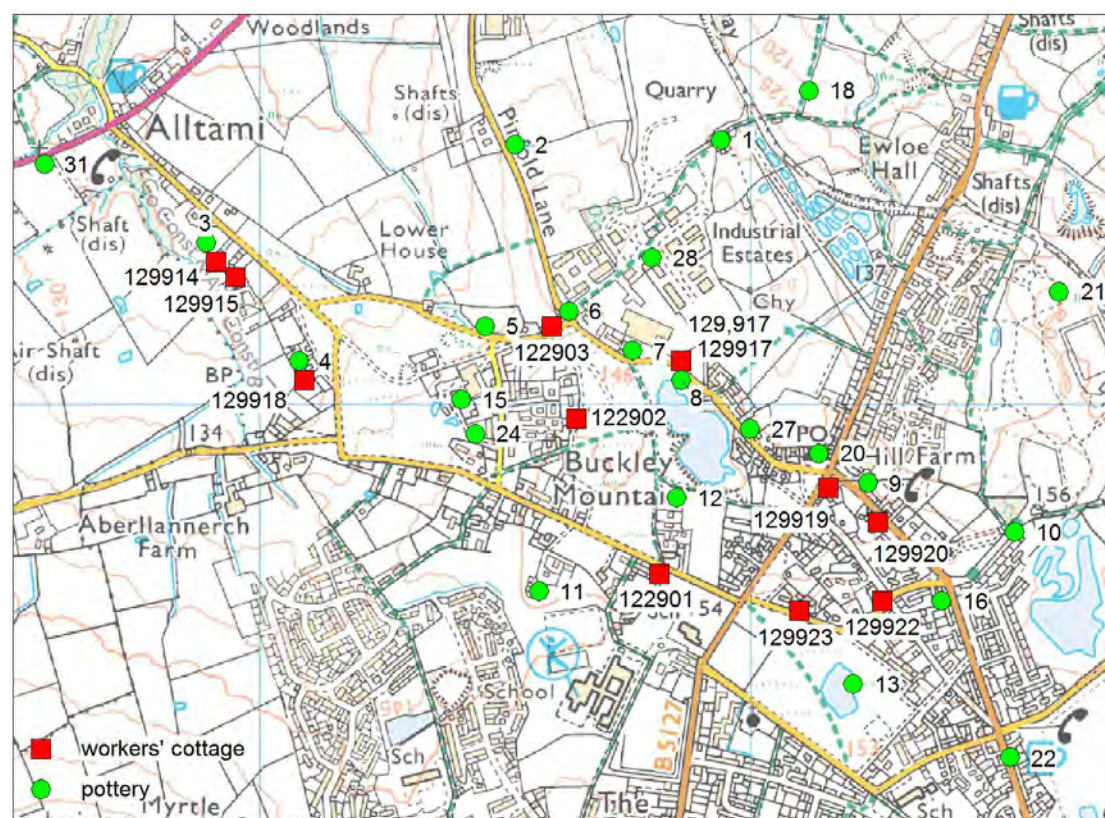
Fig. 35 A typical example of workers' housing near Site 5 (PRN122903).

Photo CPAT 3484-0011

Fieldwork has now identified nine surviving examples of workers' housing in the Buckley area. These typically remain single-storeyed and unsurprisingly some have seen significant external modifications and extensions, although there are others which have survived more or less intact. Each was viewed from the exterior only and their internal condition and survival is unknown. These houses are becoming increasingly rare and while none is currently listed the potential for designation is clear.

Table 2 Gazetteer of workers' housing in Buckley

PRN	Name	NGR
122901	Buckley, Cheshire Lane, Home Leigh	SJ2781564655
122902	Buckley, Red Lane, The Haven	SJ2764564970
122903	Buckley, Willow Cottage	SJ2759565160
129917	Buckley Potteries Site 8, Workers Cottage	SJ27866509
129918	Buckley Potteries Site 8, Workers Cottage	SJ27096505
129919	Buckley Potteries Site 9 Workers Cottage	SJ28166483
129920	Buckley, Church Road, Workers Cottage	SJ28266476
129922	Buckley, Tram Road, Workers Cottage	SJ2842464696
129923	Buckley, Higher Common Road, Workers Cottage	SJ2842464697



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Fig. 36 Distribution of surviving workers' housing in the Buckley area.

Ancillary features

Two other pottery and brick industry-related features are worthy of note. St Matthew's Churchyard, Buckley, has two, and perhaps more, ceramic grave markers, one of which is particularly ornate. The piece, which has no statutory protection, is believed to be unique and bears the following inscription:

'In affectionate Remembrance of Mary Hannah Krohn the beloved daughter of William and Ann Krohn who died at Buckley the 15 day of August 1876 aged 2 years and 8 months. Kind angels watch this sleeping dust till Jesus comes to raise the just. Then may she awake in sweet surprise and in her Saviour's image rise.'



Fig. 37 The elaborate ceramic memorial to Mary Hannah Krohn, 1876. Photo CPAT 3484-0004

The other known ceramic grave marker (PRN 129921) is plain by comparison, consisting of a single block of fired clay commemorating Elizabeth Price, 1828.

The other feature of note is a row of ceramic kerb stones (PRN 122900) along the north-west side of Etna Road, to the west of St Matthew's churchyard. The individual bricks are stamped with the name of two manufacturers, Hancock and Parry. Kerbstones such as these are reputed to have been used to line the streets of New York (P. Davey pers. comm.). These are the only examples known to survive in the Buckley area.

Conclusions and Future Research

The significance of the Buckley pottery industry has been recognised for some time, attracting considerable attention. A number of previous studies have already examined the potteries, notably by Messham (1956) and Davey (1976a), although the present study is the first to attempt a comprehensive review, particularly of the historic cartography and the results from previous work. Having started the project with 19 pottery sites the total has now increased to 31, although several are not well located. Despite the extent and significance of the industry, however, there is now little visible surface trace of this widespread activity.

The use of GIS mapping has been particularly valuable in assessing the location and survival of potteries, as well as tracing their development through time. Data from the project has enabled significant enhancements to be made to the regional Historic Environment Record and not only provides a baseline for future research, but will also be of particular value as part of the development control process. In this respect, however, it is perhaps regrettable that the study was not undertaken a decade or more earlier as more recent years have seen a dramatic increase in housing development in the Buckley area, with the inevitable impact on buried archaeology.

Excavations have been few and only Brookhill (Site 1) has seen significant area investigation, though important information has also been forthcoming from the work at Cottrell's Pottery (Site 2), Taylor's Pottery (Site 3), Thomas Lewis' Pottery (Site 4), Hancock's Pottery (Site 14) and Powell's Pottery (Site 15). None, however, have been published in full.

At present there are only two potteries with any statutory protection. The earthwork remains of Taylor's Pottery are clearly visible in a pasture field which is scheduled in its entirety (SAM Fl 165), although there are a number of associated buildings which survive, including workers' housing, which have no statutory protection. Cottrell's Pottery has no upstanding remains, although limited excavation has identified two kilns. Though scheduled (SAM Fl 166), a reassessment of the evidence has shown that the designated area does not include both kilns.

Of the remaining sites the one with perhaps the greatest potential is the only known medieval pottery, located near Ewloe, which is known from a scatter of pottery and wasters. The site has seen no modern development and there is every reason to believe that buried remains will be well preserved, although locating the site of the kiln will only be possible through geophysical survey and trial excavation. A similar approach could also be adopted to investigate the site of Charles Cunnah's Pottery (Site 25), which is thought to lie in farmland and may well therefore have significant potential.

While the majority of potteries have sadly been lost, or at least significantly disturbed by later development, the site of John Lewis Junior's Pottery (Site 4) appears to have remained largely untouched. Although it was not possible to gain access to the site during field visits it appears that several derelict buildings, presumably associated with the pottery, still survive and the potential for buried archaeology is also likely to be high.

Acknowledgements

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- 1913 Tracing of part of Buckley Estate belonging to PBD Cooke D/GW/761
- 1912 Tracing of part of PBD Cooke's estate in Buckley, revised up to 1912 D/GW/759
- 1912 Ordnance Survey 3rd edition 1:2500, Flintshire 10.14, 14.01, 14.03, 14.05, 14.06 and 14.10
- 1899 Ordnance Survey 2nd edition 1:2500, Flintshire 10.14, 14.01, 14.03, 14.05, 14.06 and 14.10
- 1884 Ordnance Survey 1st edition 1:2500, Flintshire 14.05
- 1875 Ordnance Survey 1st edition 1:2500, Flintshire 14.06
- 1874 Ordnance Survey 1st edition 1:2500, Flintshire 14.01
- 1872 Ordnance Survey 1st edition 1:2500, Flintshire 14.10
- 1871 Ordnance Survey 1st edition 1:2500, Flintshire 10.14
- 1870 Ordnance Survey 1st edition 1:2500, Flintshire 14.03
- Pre-1870 Tracing of part of Buckley Estate D/GW/742
- Book of reference D/GW/725

- 1863 Portion of common on Buckley Mountain, parish of Hawarden D/GW/724
- 1860 (circa) Tracing of part of Buckley Estate D/GW/748
- 1860 (circa) Tracing of part of Buckley Estate D/GW/749
- 1860 (circa) Plan of land belonging to Philip Davies Cooke Esq. in the County of Flint. D/GWI751
- 1857 (circa) Ewloe estate in the parish of Hawarden belonging to P Davies Cooke esq D/GW/752
- 1845 Drainage plan for land north of Buckley Mountain belonging to Philip Davies D/GW/756
- 1841 Tithe map Hawarden
- 1839 Tithe map for Mold (Argoed township)
- 1839 Tithe map for Mold (Bistre township)
- 1834 Ordnance Survey surveyors' drawing for Mold
- 1831 Plan of Brickworks on Buckley Mountain D/GW/709
- 1815 Tracing of the Townships of Bannel, Pentrobin, Ewloe Town and Ewloe Wood from the survey of Hawarden in 1815 D/DM/809/82 (D/BJ/346)
- 1814 (circa) Plans of Encroachments in Ewloe D/GW/B/555
- Early 19th century Part of Buckley Mountain D/GW/751
- 1801 (circa) Allotments on Buckley Mountain in the townships of Gwasaney and Mold, belonging to Mrs Puleston D/GW/681
- 1800 (circa) Hawarden area. D/DM/110
- 1792 Lordship and manor of Ewloe: cottages and encroachments. A copy of map XII. Flints Record Office
- 1780 (circa) Ewloe Estate (Map XI). Flints Record Office D/GW/671
schedule CROH MF3
1804 scheduled D/GW/B/476 pp41-58
- 1780 (circa) Ewloe Estate (Map XII). Flints Record Office D/GW/674
schedule CROH MF3
- 1757 Lordship of Ewloe. Flints Record Office D/GW/651
schedule D/GW/652 pp 1-10.*
- 1733 Lordship of Hawarden. Flints Record Office D/HA/599

Appendix 1Potters recorded in Buckley and Ewloe from the 17th century onwards

Surname	Christian name	Dates	Site
Bennett	George	1796-1800	
Catherall	Martha	1777-92	
Catherall	Benjamin	1757	20
Catherall	Jonathan I d. 1761	1751	8
Catherall	Jonathan II	1777-1815	8
Catherall	and Company	1860	8
Codrell's sister	Joseph	1781	3
Cottrell	Benjamin	1750s-60s	2,
Cunna	Anne (ne: Catherall)	1783-1794	
Cunnah	Edward d.1782	1740s	
Cunnah	Charles	1804	25
Davies	Benjamin	1781	6
Davies	Thomas	1681	
Dean	John	1789-91	
Dean	Philip d. 1748		
Dean	Richard	Pre-1748	
Graston	Thomas	early C18 th	
Hancock	William	1793, 1797, 1806-1810, 1815	14
Hancock	and Company	1860/1886	14
Hayes	Joseph	1764-79	
Hayes	Jonathan	1779, 1783-1809	
Hayes	Elizabeth	1860	10
Hayes	Henry	1886, 1913	10
Hayes	Jonathan	1871	10
Hayes	Phoebe and Joseph	1809, 1815	10
Hayes	Ollive	1910	10
Hayes and Latham		1860	17
Holloday	Frederick James	1914-16	30
Hughes	John	1913	5
Jones	Thomas	1860	
Jones	Rice	1915	27
Jones and Jarrard		1886	17
Lamb	J and Son	1913-14	9
Leach jnr	John		
Leach snr	John	1781-1815	2, 4, 9
Ledsham	John	1789	16
Ledsham	Peter	1781, 1783-1795	16
Lewis			
Lewis	John (jnr)	1805-10, 1815	4
Lewis	John (snr)	1783-1810, 1815-35	5
Lewis	John (son of John snr)	after 1835	5
Lewis	Mary (daughter of John snr)	after 1835	5
Lewis	Thomas	1781, 1788-99	5
Manifold	Joseph	early C18 th	

Norbury	Philip	1783-7	
Powell	Issac	1886	15
Powell	George	1860	5, 15
Prescot	Anthony	1768, 1793	
Prescot	Bartholomew	1783-1803, 1815	7
Price	Martha	1794-1801	
Price	Charles	1783-93, 1805-10, 1815/1860	11
Read	Robert	1679	
Richardson	John	1809-10	
Sharratt	Jonathan		
Sharratt	Aaron	1800-1810, 1815	9
Sharratt	Joshua	1860	9
Sharratt	Moses	1886	9
Smalley		1815	26
Taylor	William	1729	
Taylor	Charles	1886	3
Taylor	John (and Joseph Bellis)	1783-1810, 1815	3
Taylor & Son		1860	3
Taylor Brothers		1913-14	3
Whitely	Mary	1783-1789	
Whitely	John	1783-4	
Whitely	Edward d. 1782	1781	12
Whitely	Robert d.1826	1791-1810, 1815	12
Whitloe	John (1)	1729	
Whitloe	John (2)	1749	
Whitloe	Edward	1762	
Wilson	Ernest	1915	27
Wood	John	1741	

Many of the names and dates are derived from the work of J. E. Messham (1956), and with particular reference to the following sources: 1757 Survey of the Lordship of Ewloe; 1781 = Ewloe Estate Map and schedule; 1804 revised schedule for the 1781 survey; 1815 survey of Hawarden Parish; 1783-1810 and 1860 Gwasaney clay accounts; 1886 Trade Directory; 1913-14 Bennett's Business Directory.