RESEARCHES AND DISCOVERIES

MESOLITHIC GEOARCHAEOLOGICAL INVESTIGATIONS IN THE OUTER THAMES ESTUARY

Marine geoarchaeological work by Wessex Archaeology in advance of two separate developments identified a series of former Mesolithic terrestrial/semi-terrestrial land surfaces now submerged off the Kent coast.

Geophysical surveying identified a series of former channels that would have formed part of the wider palaeodrainage of the River Thames-Medway. As sea-levels rose, these channels were infilled, submerged and sealed by modern seabed sediments. Following extensive geotechnical surveys a series of three vibrocore sequences (VC7, VC606 and VC608) were taken for geoarchaeological analyses. They derive from two distinct areas, the first (VC7) located 12km off the north-east coast of Kent within the route of the Nemo Link UK-Belgium Electrical Interconnector, and the second area (VC606 and VC608) located off the north Kent coast within the export cable route of the London Array offshore windfarm (**Fig. 1**). The results provide an opportunity to investigate past physical and environmental change in the Outer Thames Estuary, occurring under the influence of rapid post-glacial sea-level rise, and the likely impact of these changes on Mesolithic hunter-gatherer communities.

The vibrocores contain sequences of organic sediment and were subjected to pollen, diatom, ostracod, foraminifera and molluscan analysis, supported by radiocarbon dating. The earliest peat in VC7, located at 34 mbOD (metres below Ordnance Datum), dates between 8240-7840 cal. BC. The pollen shows a clear sequence of woodland development dominated by pine and hazel on the dry ground with fringing freshwater swamp and carr woodland, but with sign of increasing marine influence towards the top of the peat. Organic deposits within vibrocores VC606 (15.08 to 12.82 mbOD; 6600-5970 cal. BC) and VC608 (8.12 to 7.28 mbOD; 5890-5390 cal. BC) are significantly later in date. They show that the pine-hazel woodland quickly gave way to oak, elm and lime dominated woodland with wetland habitats including fen-marsh and fringing saltmarsh and tidal flats.

The three palaeoenvironmental sequences provide an important addition to our understanding of environmental change in the region that has until recently largely been informed by studies located within the middle Thames Estuary, where peats of Mesolithic to Bronze Age date are widely preserved.

The radiocarbon dates from VC7, VC606 and VC608 include basal dates from peats resting on bedrock that acts as good sea-level indicator points (SLIPs). Together they demonstrate that sea-levels rose approximately 26m in the roughly two and half thousand years between 8200 and 5800 cal. BC. This is only a fraction

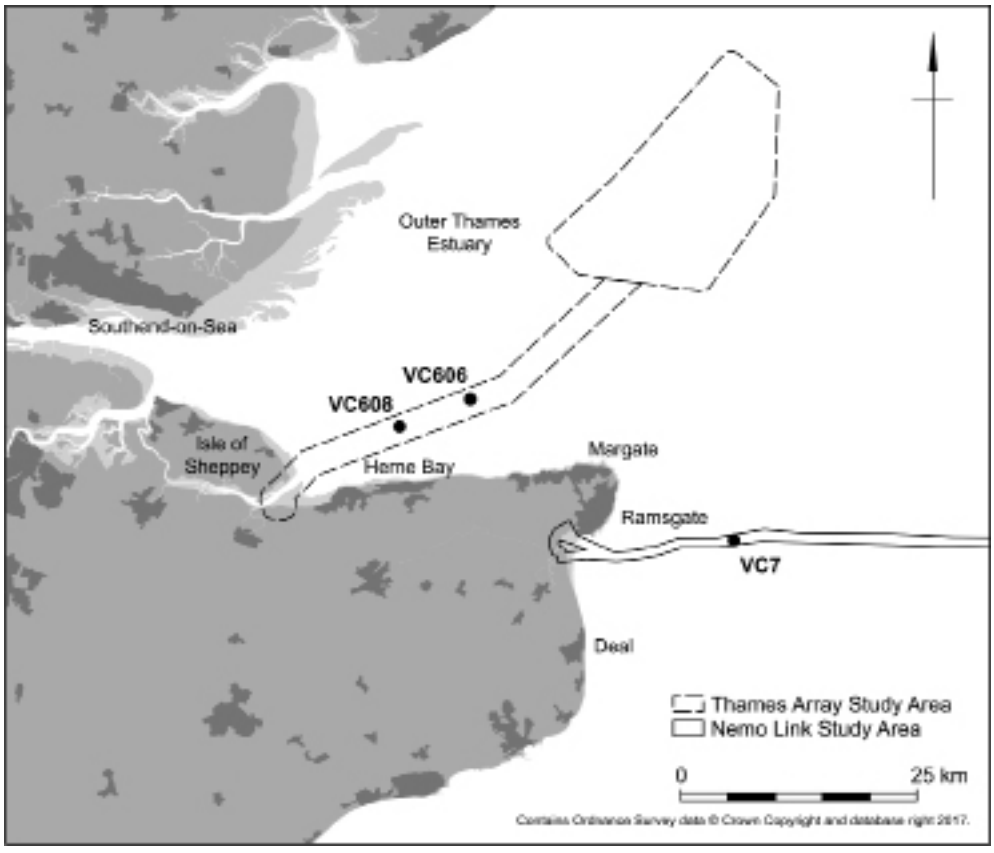

Fig. 1 Map showing the two areas covered by the geotechnical surveys.

of the 60m rise in sea-levels recorded over the early Holocene (*c*. 9500-5000 cal. BC) that progressively inundated what was formerly a vast habitable plain connecting Britain with the rest of the European continent.

The rapid rise in sea-levels included two major geological events that are argued to have resulted in significant episodes of inundation and coastal change, likely to have impacted Mesolithic communities living around the North Sea basin. The Storegga event, dated to *c.*8.2 ka, was a large submarine landslide off the Norwegian coast that triggered a giant tsunami. Traces of this tsunami are visible along the coast of Scotland, but present data suggests the tsunami had a limited impact in the southern North Sea basin and English Channel. However, at around the same time as the Storegga event there is evidence for a period of climate cooling and rapidly rising sea-levels, called the 8.2 ka event. Occurring over a *c*.200-year period, the cooling climate is generally considered to have been caused by the collapse of the North American Laurentide Ice Sheet and the drainage of two large proglacial freshwater lakes. This resulted in a significant meltwater pulse and a large jump in sea-levels, dated in the Rhine-Meuse delta to between 8540-8375 BC, similar to radiocarbon dates from VC606.

The impact on hunter-gatherer communities of rapid sea-level rise has been considered largely on a theoretical level. Chance finds are rare in offshore areas which places certain limitations on discussing how humans may have been impacted by, and responded to, potentially dramatic changes in the physical landscape. However, the palaeoenvironmental data indicates that Mesolithic communities living in coastal areas would have experience sea-level rise in the order of 12-13 mm/year. Over the course of a human life-scale this may well have been perceptible, particularly in lower-lying areas along coasts, river and estuary mouths. What is less clear is how people responded to these changes and the coping strategies that were employed to adapt to these changes. However, understanding these coping strategies can be better understood by using the palaeoenvironmental data to develop more detailed landscape models at both a temporal and spatial scale.

The full report on the geoarchaeological analysis can be found on the Kent Archaeological Society's website: *Mesolithic geoarchaeological investigations in the Outer Thames Estuary* (Alex Brown and John Russell) *Kent Archaeol. Soc. eArchaeol. Rep.*

ALEX BROWN AND JOHN RUSSELL

EXCAVATIONS AT CHURCH FIELD ROMAN VILLA, OTFORD, POSSIBLY A SITE OF VERY EARLY CHRISTIAN WORSHIP

A Roman building has been suspected at Church Field for over a century. Following a resistivity survey in 2012 which gave the outline of a large winged corridor villa, *Discover Roman Otford Project* has been investigating the remains to see if they can put some flesh onto the bare bones of broken brick and tile.

Church Field, Otford, sits adjacent to the scheduled areas of Otford Archbishop's Palace and two freshwater springs, known as Becket's Well. This was probably a stopping point for medieval worshippers travelling to Canterbury along the nearby Pilgrims' Way. Historic use of the field is unknown, but for part of the 19th and 20th centuries it was a hop garden.

Since at least the early 20th century there has been a suspicion of a substantial Roman building here. Brick and tile, along with fragments of painted wall plaster, have been picked up from the surface. In 1934 a small-scale investigation was carried out by a local historian, F. Godwin, in which two trenches officially came up with more of the same. A short paragraph in *Archaeologia Cantiana* (XLVII, 1935, 236-7) records that they may have found a 'small piece of pavement', although, according to the field notes, they actually found two possible walls. The site continued to be regarded as the villa that couldn't be found.

In 2012, with the kind permission of the landowner, West Kent Archaeological Society carried out a resistivity survey of the field. The results, backed up by targeted test pitting the following year, showed the buried remains of a sizeable winged corridor building, potentially the second largest in the Darent Valley, after the one at South Darenth. The main range at Church Field sits comfortably on the footprint of Lullingstone villa, while the east range extends 40m on the courtyard/garden side and 60m on the outside. These distances look fairly innocuous on paper, but when viewed on the ground show the building to be the colossal size it was.

Fig. 1 The apparent layout of the villa revealed by the walls uncovered so far (original base photograph, and overlay, by Anthony Mak).

A west range of the building is less clearly defined, as it is under a modern-day garden and a 1960s tennis court, but it appears to be truncated after about 10m, with a gap and a second building on the end. Limited excavation in 2015 revealed potential Roman foundations extending out from under the tennis court, but these appeared to be on a different alignment to the rest of the villa. Unfortunately, flooding of the trench led to it not being extended.

Although the test pits had confirmed the resistivity results, it was felt that a larger scale excavation was necessary to actually see what state the villa was in. The remains found in 2013 were less than half a metre under the modern ground surface, so hopes of any standing walls were not high. It was also desirable to find some dating evidence. A very small amount of pottery had been found in 2013 compared with the potential footprint of the building, and we hoped to find something that was more securely datable. This then led on to the inevitable questions about construction phasing, and when, and why, the building went out of use.

In May 2015 six trenches were opened across the site; Trench P1 has already been mentioned adjacent to the tennis court. Trench P3 was close to Becket's Well, and proved to contain no archaeology. Trenches P2 and P5 were over the southern end of the east range, and revealed foundations of the end wall of the range, together with the corridor wall, and both main walls of the range. What soon became apparent was that this part of the villa had never risen above foundation level. A layer of rammed chalk had probably been placed between gravel boards, and then built up with rubble to the height of around 150mm. This appeared to be an extension to the east range that had never been finished.

Trench 4 was over the front wall of the main range. At a depth of around 0.5m large Kentish ragstones were found in situ, fronting an *opus signinum* floor, from which all the floor tiles had been lifted. A robbed-out section of the wall had become a pit that was full of painted wall plaster and broken hypocaust tile. This structure could be confidently identified as the front wall of the main range of the villa. Judging from its size, and the depth of the foundations, this range was a grandiose affair, probably two storeys in height. Our current Trench 2 has revealed that the main range had a corridor or verandah, similar in size to the corridor running down the courtyard side of the east range.

One thing that only came to light in September 2018, following aerial photographs taken of the site, is that the main range and the east range are set at an oblique angle to each other. The resistivity results imply a 90° alignment, but in fact it is closer to 70°. This is not uncommon in larger villas – indeed, within the Darent Valley, the large villa at South Darenth is similar. As yet we do not know how the two ranges connected (or even if they actually did). This is something to be investigated, hopefully in the 2019 season.

At the northern end of Trench 2 a room has been uncovered that is interpreted as a food preparation area. This seems to be an extension to the main range at its north-east corner. Its foundations are shallow, and the walls less thick than at the front of the range, implying a single storey construction. At around 5m square, it is similar in both size and position to a room at Lullingstone villa. From this area several bucket loads of very large oyster shells were retrieved. A door threshold was also uncovered, leading out to a very rough 'yard'. This was composed of

broken tiles, and was probably a thoroughfare for slaves, not the villa owners. Close to this two iron door keys were found.

The east range has presented an interesting floor plan, consisting of several large rooms, separated by what appear to be waterproofed ante-rooms, each with a tiled floor. One of the main rooms has a channelled hypocaust, with the stoke hole still potentially retained in the main wall. This has probably stayed there because the mortar and stonework were baked so hard when the hypocaust was in use that it was not seen worth the effort to remove it. Two of the small ante-rooms only have traces of the *opus signinum* sub-floor remaining, but one room still retains its (cracked and broken) tiles in situ. One of these rooms may be from a later phase, as it appears to have been built over part of a small garden, about 6m wide, and possibly spanning the whole 15m width of the range. This garden may have contained a small tree, perhaps espaliered against the main wall to catch the afternoon sun.

This brings us to the main feature of the villa – its condition. The whole site appears to have been systematically demolished in a single event, probably in the late 4th century. That event may have taken several months, but was very thorough. We have not found one single complete brick or tile on any part of the site so far excavated. *Opus signinum* sub floors have shown imprints from where the tiles were lifted; even the standard clipped tile tesserae were removed. The whole site was levelled off, and then presumably covered over to obscure all traces of any building ever having been there.

Post holes were identified, which indicate the erection of scaffolding to support walls once the roof had been removed, and several walls were initially traced by following the 'damp course'. This consisted of Gault Clay (the local bedrock) having been removed and just dumped parallel to the wall from which it was extracted.

Post demolition ground disturbance seems to have been minor. There are one or two plough marks, but the archaeological features are so shallow that anyone trying to plough would probably soon give up due to the obstructions. It is likely, therefore, that the field was used as pasture for most of its history, until it became a hop garden in the 19th century. Currently mountain sheep are grazed on the part of the land that is not an archaeological site.

Church Field villa also has a possible claim to have one of the oldest places of Christian worship in the country. Nearby Lullingstone is well known for its house chapel and religious wall paintings, particularly a large *Chi-Rho* (the symbol of Christ), now in the British Museum. In the 1970s a fragment of wall plaster, almost certainly from Church Field villa was identified amongst some Roman rubble in the foundation trench of Tudor Otford Palace. This was confirmed by the British Museum as the centre of a *Chi-Rho*. If the demolition of Church Field can be securely dated to the late 4th century, then the building (containing the Christian symbol) was demolished before – or at the same time as – the Lullingstone house chapel was being built. Otford may be contemporary with Lullingstone as an early example of domestic Christian worship.

In 2019 it is hoped to completely uncover several of the rooms first excavated last year. Coins have dated the initial construction to the late 3rd century, and imply use of the site until the late 4th century. There is still a need to find out what happened at the end, and why such a large building disappeared while parts of it were still unfinished.

KEVIN FROMINGS

A MAP DRAWN BY CHRISTOPHER SAXTON OF THE ESTATE OWNED BY HENRY SAKER OF FAVERSHAM

The earliest estate map in the Kent History and Library Centre is dated 1590. Entitled:

> *A Plat of Homston Farme in the parishe of Feversham in the countie of Kent and in the tenor of Henrye Saker, which plate is colored with red, that which is colored with yelow belongeth to the manner of Westwood and the confines are left whit. Made by Christopher Saxton in September Anno 1590.*

The map is scaled in perches at 20in. to 1 mile and measures 28½in. vertically and 26in. in width. The farm is now known as Homestall (NGR 039 607) and the map shows 210 acres in the east of the parish of Faversham and includes a former detached part of Graveney. Field names are given together with the names of adjacent owners; it indicates a hopyard and state of cultivation; buildings are shown in perspective view, together with creeks and Watling Street ('London Waye'). In appearance it has typical late 16th-century cartouches to title and scale. Also marked are part of the land belonging to Feversham Abbey, and part of the parsonage land.

In the double red frame to the left 'The content of Homston farme' reads:

		acres	roods	dayworks	perches
Arrable land	One close called the 14 acres or wronges	15	0	5	0
	Olivers well close	12	0	5	2
	Wronges feld	14	0	5	0
	The est wronges feld	20	1	7	1
	One pece called wronges two acres	02	0	2	2
	Snagges feld	08	1	0	0
	Beane close, the ten acres, and callis feld	39	3	1	1
	Homston feld	81	0	5	1
	Somma	193	0	1	1
Pasture	Busbye Garden	09	3	0	0
	The fostall	02	3	9	0
	Somma	12	2	9	0
	The scite of Homston farme with the orchard, hopyerd and garden	03	3	3	0
	Somma totalis	209	2	3	33

This description contains various interesting details relating to land measurement at the period which are explained at **Appendix**.

At the Septentrio (northern) end of the map, coming off 'The lane leading from

Fig. 1 Details from the Saxton map of Homestall Farm (U390/P2, Courtesy of Kent History & Library Centre, Maidstone):
a) The north-west area showing, amongst other field names, part of the Queen's land belonging to the Abbey of Faversham, Ewell Creek, the salt marsh belonging to the manor of Westwood, parsonage and upland pasture. There is the unusual designation of 'Wronges' (i.e. crooked/ curved) field and close.
b) The south-eastern section showing the farm buildings and immediately surrounding fieldnames.

A

B

Feversham to Hernhill' is 'the lane leadinge to Puninge marshe'. There is a gated section which says 'Note that the farmer of Homston challengeth this waye to his close called the 14 acres as Wrongs through the scole land: [Part of the scoole land belongyng to Feversham called Punings Marshe]' now known as Poynings Marsh.[1]

This is possibly the earliest estate map executed by Christopher Saxton[2] who has been described as the 'father of British cartography'.[3] These early estate maps provide two main lines of interest; one on the information they provide concerning local topography and agrarian arrangements and secondly the interest which centres on the cartographer and his skills both with regard to decoration and representation but also surveying accuracy.

Saxton was born of an old Yorkshire family at Tinglow, near Leeds. He was educated at Cambridge, but what college is unknown. It is uncertain when he came to London, but he was attached to the household of Thomas Seckford, master of requests and the court of wards. At the instigation and expense of Seckford and with the authority of the queen, Saxton undertook to survey and draw careful maps of every county in England and Wales. These maps were commenced about 1574 and completed in 1579, in which year they were published with a dedication to Queen Elizabeth. Saxton obtained a licence to sell these maps for ten years. This was the first survey of the counties of England, and all subsequent maps of the period – e.g. those in Speed's 'Chronicle' – were based upon them. Seckford obtained for Saxton from the privy council special facilities 'to be assisted in all places where he shall come for the view of such places to describe certain counties in cartes being thereunto appointed by her Majestie's bill under her signet'. He was alive as late as 1596 when he measured and described the town of Manchester.[4]

Who was Henry Saker? Berry's *Kentish Genealogies* records the following information (see also **Fig. 2**):[5] extensive researches have proved that Henry's father was William Saker who was buried in the parish church of Faversham on the 29 July 1570 having made his will the previous day. We are fortunate that not only has his will survived but that a very detailed inventory still exists (*available on the KAS website*).[6] The first mention we have of William Saker in Faversham is

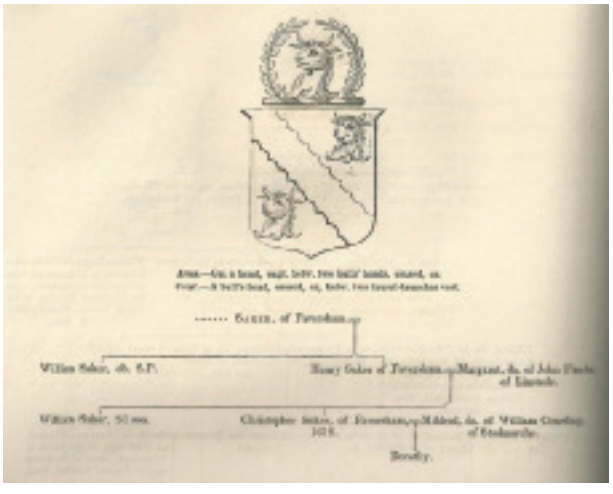

Fig. 2 Extract from Berry's *Kentish Genealogies* containing details of Saker family.

in 1560 when he was made a freeman of the town.[7] It seems possible that he may have married first a Margaret who was buried 4 May 1561 at Faversham and then remarried Agnes Marche widow on the 8 September 1561.[8] From a deposition in the church court records we know that William was born 1543/4 at Milton [?next Sittingbourne] and lived there until he moved into Faversham in 1560, the year in which he was made a freeman.[9] There is circumstantial evidence to suggest that his father may be the William Sacar of the parish of Milton [?next Sittingbourne] a deponent in an ecclesiastical court case 11 December 1548 between Johnson and Denbye where he is described as aged 32 years and thus born 1515/6 and aged about 55 when he died.[10] What is interesting is that from his will and inventory we know that William Saker, or Sakar, farmed and occupied the Abbey farmhouse and all the old abbey lands.

According to his father's will Henry Saker was under age in 1570, and may only have been about ten at his father's death. It seems likely that he, like his brother William (see later), was born at Milton [?next Sittingbourne]. Because the name is relatively uncommon the suggestion is that Henry Sakar, then described as of Sheldwich, a husbandman married at Faversham in February 1582 Margaret Porredge of Faversham a widow.[11] Further research may show whether this is the same Margaret who is described as Margaret, daughter of John Finch. In his article, 'Wills and other records, relating to the Family of Finch' James Greenstreet transcribed the will of John Finche late of Faversham and now of Fordwich.[12] From the document it can be seen that not only is Margaret mentioned but that Thomas Finch was then farming Homestall farm and that the lease of the manors of Goodnestone and Babford went to Henry Saker. What is not known is whether Henry Saker subsequently re-married in July 1600 at Preston next Faversham (being then described as a gentleman of Faversham) Eleanor Bennet of Stone, widow. Henry Saker was mayor of Faversham in 1595,[13] and like his father appears to have been farmer of the Abbey lands.[14]

We know little of his life as only a few records have been unearthed concerning him. However, it is reputed that Henry Saker built the house, now 83 Abbey Street, which has a finely carved portico to the entrance door. On the pediment of this is the monogram H.S. 1592.[15] Hasted says that Henry Saker became possessed of the manor of Buckland from Thomas and Dorothy Mendfield, Thomas dying in 1614 during his mayoralty and giving a number of important bequests to the corporation. Henry Saker's son Christopher sold the manor before 1625 to Sir Basil Dixwell, knight.[16]

DUNCAN HARRINGTON

APPENDIX

Among the field measurements recorded on the Saxton map the term *daywork* is used. One *daywork* was a fortieth part of an acre, that is to say 4 perches (40 perches equals 1 rood, and there were 4 roods to an acre).[17] Originally the acre was probably the amount of land which one yoke of oxen could plough in a day. The Kentish acre, varying indefinitely in length and breadth, was always a piece of land containing 160 perches of sixteen feet square, i.e. a fraction over 4,551 square yards. In the High Middle Ages the acre was standardized to 160 perches

by a rod of sixteen and a half feet. Thus every 1,000 statutory acres would contain over 1,063 Kentish acres. In Kent there had been a custom of measuring forest land by a rod of 20ft.[18]

The land measurements in Kent before and at the time of the Domesday survey were often expressed as a proportion of *sulungs*, or *ploughland* each sulung contained 4 yokelands (Latin; *Jugum*) of which each yoke is thus a quarter part. The *sulung*, nominally of 160-200 acres, means a heavy plough, and the unit was supposed notionally to represent the amount of land which could be cultivated by such a plough in the course of the year. It was natural to adopt the *yoke* for the quarter fraction, as representing one out of the four pairs of oxen in a full plough team. With the growth of population and the multiplication of holdings came the introduction of the quarter of the *yoke* known as a *virgate*[19] or otherwise *yardland*.

The Norman land measure was a *Carucate* otherwise known as a *hide* which appears to be roughly equal to a *Yoke of Land.* A hide probably originated as an amount of land needed to support a peasant family for the period of one year and, at the same time, as a unit for tax assessments. But by the beginning of the eleventh century the hide was usually expressed in terms of acres, with 60, 64, 100, 120, 140 and 180 acres being the most common. In addition, it was occasionally expressed as a division of land containing a certain number of virgates, for instance a hide of 4 virgates, each virgate containing 15 acres or 2 *bovates*, and thus 60 acres. Thus the eighth part of a hide, which seems at first to have been as much arable land as an ox and team could plough in a year, was termed the *oxgang* or *bovate*, but which in actual practice, varied between 7 and 32 acres depending on the quality of the soil in any particular region.

It is interesting to note that towards the end of the eighteenth century apparently the Kentish turn-wrest plough was in use all over the county. It was an exceedingly heavy wooden implement with two large wheels more like a cart than a plough and all the furrows were turned one way by the means of a shifting mould-board. In east Kent four horses could plough an acre and a half in a day; in the west owing to the greater tenacity of the soil, seldom more than an acre was ploughed in a day, even with six horses.[20]

1 In the Faversham Abbey Leiger Book (folio 44) 43 acres of this marsh was part of the School Lands and subject to an *Inquisition Ad Quod Damnum* on 4 October 1527: TNA, C142/46 no. 81. For information about the foundation of Faversham's first grammar school in 1526, see Peter Tann, *The Royal Charters of Faversham* (2013), pp. 141-149 and 'First Report of the commissioners ... an act for appointing commissioners to enquire concerning charities in England for the Education of the poor', House of Commons 4 March 1819.

2 I.M. Evans, *The Geographical Journal*, Vol. 138, part 4, Dec 1972.

3 *British Museum Quarterly*, Vol. XXIII, no. 3, p. 65; F. Hull, *Kentish Maps and Map-Makers 1590-1840* (Maidstone, 1973), iv; cartouche from the Faversham map used for title page to this book. See also G.M. Livett 'Early Kent Maps', *Archaeologia Cantiana*, XLIX (1938), 247-277, 256, where he says he cannot find any evidence that, 'in 1570 Saxton's survey of Kent was so far advanced that he had begun a map of the county'. *Archaeologia Cantiana*, XXXVIII, 94.

4 *Dictionary of National Biography*, 874.

5 Published in 1830, p. 144.

6 See PRC 17/41 folio 53 and PRC 10/5 folio 123.

7 Wardmote Book: Fa/AC1 folio 83; chamberlains' accounts 9 Dec 1560.

8 KHLC: Faversham Archdeacon's transcripts, DCa/BT 74.

9 KHLC: PRC 39/10 f. 234v. On 4 July 1584 lived in Faversham for 24 years and born Milton where he lived from childhood aged about 40 years.

10 KHLC: DCb/J/X.10.3 folio 91v.

11 J.M. Cowper, *Canterbury Marriage Licences Series* 1, column 363 dated 6 Feb 1582, and 11 July 1600.

12 *Archaeologia Cantiana*, XIII (1880), 335.

13 Edward Jacob, *The History of Faversham* (republ. 1974), 123.

14 TNA: E134/10 James 1 Easter 39.

15 *Archaeologia Cantiana*, XLVII (1935), 191.

16 Hasted, *History of Kent*, 2nd edn, Vol. VI, 399.

17 OED: The amount of land that could be worked (ploughed, mown, etc.) in a day. Christopher Dyer, *Everyday Life in Medieval England* (Hambledon Press 1994), p. 117, confirms the measurement of a daywork.

18 Ronald Edward Zupko, *A dictionary of English Weights and Measures* (Wisconsin, 1968), 3; Charles I. Elton, *The tenures of Kent* (London, 1867), 130.

19 K.P. Witney, *The Kingdom of Kent* (Chichester, 1982), 232.

20 Victoria County History: *Kent*, Vol. 1 (London, 1908), 457.

AN EXCEPTIONAL LATE EIGHTEENTH-CENTURY ASSEMBLAGE FROM FAVERSHAM

Only rarely do archaeologists (and historians) see directly into the lives of ordinary people as they coped with a catastrophic event. For the Faversham Society Archaeological Research Group (FSARG) it happened in the summer of 2017 when investigating a garden plot behind *Furlongs*, a single-storey alehouse in Preston Street. A keyhole approach, i.e. a surgically meticulous small-scale excavation was employed, obligatory in central Faversham's small and ancient gardens. The original aim was to find evidence of Anglo-Saxon occupation, but this old walled garden had about a metre of relatively modern make-up so the prospects for getting deep enough were small.[1]

At a depth of around 80cm of unusually finds-free soil, a solid mass of artefacts was suddenly encountered. This consisted of a huge quantity of pottery, wine bottles, brick, tile, worked stone and some attractive small finds such as a pair of later 18th-century ornate shoe buckles. Altogether 51 kilograms of pottery alone came from the extended 2m x 1m pit (**Fig. 1**).

It was not just quantity that made this assemblage impressive. The sherds of pottery were large and in pristine condition, and the types of pottery were multiple:

Westerwald chamber-pots, complete with handles and rims (**Fig. 2)**;[2]
Chinese Imari porcelain tea cups (**Fig. 3)**;[3]
large quantities of Wedgwood's earliest famous mass product of salt-glazed stoneware with classic plate border patterns;[4]
early creamware;
smaller quantities of beautiful Whieldon tortoiseshell wares;
that distinctive attempt by Stoke potters to copy Westerwald, known nowadays as debased scratch blue stoneware;[5]
English porcelain;
tin glazed blue and white with Chinese type decoration.[6]

Fig. 1 The extension of the original pit, shown at the end of excavation. The double shuttering shows the location of the original pit. (Scale: 0.5m per sector.)

Fig. 2 Reconstructions of Westerwald chamber pots, known as 'member mugs' in 18th-century English vernacular (Grose, F., 1811, *Dictionary of the Vulgar Tongue*, Hesperus Press: London). In the background, Frechen and a Nottingham tankard.

traditional types of earthenwares – Midland Black and Midland Yellow, also made in Stoke;

large quantities of Redwares,[7] probably London made, of a dizzying variety of types **(Fig. 4).**

Then there was the glass. Thirty-two wine bottle bases with pronounced kick-

Fig. 3 Reconstruction of a Chinese Imari tea cup made in Jingdezhen in South China.

Fig. 4 Two FSARG volunteers trying to match redware sherds with the daunting variety of types. In the background, Midland Black and tin glaze present similar challenges.

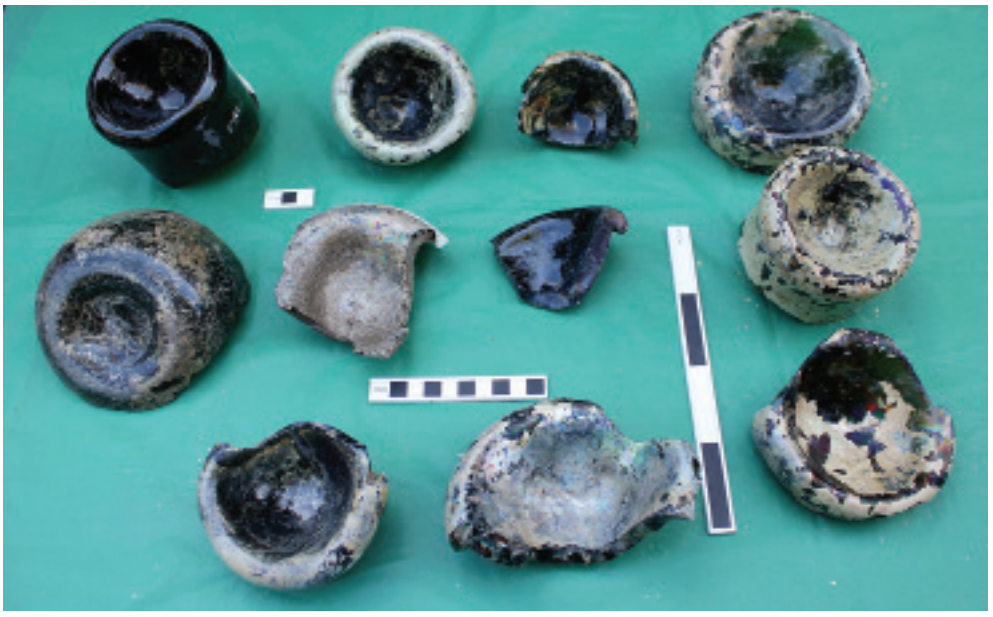

Fig. 5 A selection of bottle bases with kick-ups and pontils. (Scales: 1cm and 5cm.)

ups and pontil scars were particularly well preserved, also fifteen near complete bottle necks with hand rolled tops **(Fig. 5).** Colours ranged from palest brown and green to nearly black. There were four elegant wineglasses, five small complete apothecary or perfume bottles and a pipette**.** These items were clearly still being made in the traditional way, i.e. mouth-blown by highly skilled craftsmen (no mould marks) so their variability was continuous rather than grouped into distinct types as with the pottery[8].

Dating the higher-class pottery was easy. A stroll through the 6th-floor ceramic gallery of the V & A identified the classier types, with plenty of well-illustrated publications and websites for us to consult. All the upmarket types date from the second half of the 18th century, i.e. 1760-1790. The Chinese porcelain imitates the earlier Japanese porcelain that was so influential on European pottery in the 17th century. The redware is consistent with this 18th-century dating in terms of technical quality although the forms are traditional. There were no transfer wares.

The only dating puzzle was that of the tin glaze. FSARG finds a lot of tin glaze in central Faversham gardens such as those of West Street (FSARG's logo is a jolly mermaid from a tin glaze bowl found in a Tanners Street garden in 2005). Tin glaze is an interesting ware, an attempt to break away from medieval styles of pot making and decoration by copying Dutch Delft; this kind of pottery is often called Early English Delft. Unfortunately, the innovative tin glaze peels away and crazes over time and the colours dim, so the revolutionary high-quality mass-production innovations of Wedgwood and others in Stoke swiftly wiped out the tin glaze industry and most factories closed in the 1770s.[9] Nevertheless, the chinoiserie decoration of the assemblage points to mid-late 18th-century manufacture.

The red brick in the assemblage matched almost perfectly the known brick dimensions of the mid to late 18th century, before the 1784 tax per brick came in: this led to major increases in the size of bricks to keep the cost to the purchaser down.[10] The tile was mainly Kentish peg tile, but some were pantiles, popular in the 18th century**.** Finally, there was a fair amount of cattle and pig bone and a lot of oyster shells mixed in with the more glamorous items. Faversham in the 18th century was a major centre for oyster production under the care of the Company of Dredgermen.[11]

The great question was – what was the nature of the catastrophe? And why was there so much expensive material here, along with the more prosaic redwares? Faversham's local Historians reported that this address had been occupied between 1750 and 1780 by a china and glass shop run by Mrs Sarah Collier (later widow) and Susannah Blake (also widow). After 1781, it became a drapery.

This explained why there was so much pottery and glass and why it was so wide ranging in type. The 18th century was Faversham's wealthiest period as a merchant, seafaring and manufacturing town, and the gentry still lived in the centre of town (in the following century they moved out of what was becoming a noisy and dirty industrial place and went to live up on the Downs). Mrs Collier would have had an excellent customer base in the 1760s-70s. But what had happened to damage her precious stock so much that it had to be dumped, along with dealing a death blow to the property?

It was not a fire – the artefacts and building foundation showed no sign of burning – and in fact the probable answer is recorded in dramatic detail in Hasted.[12] On 17th April 1781, a huge explosion rocked the town of Faversham. It was visible from Thanet, Hasted tells us, and was felt as a minor earthquake in Canterbury. This disaster arose from Faversham's importance for the manufacture and export of gunpowder. Although founded by entrepreneurs in the 16th century, by this stage it had become a Royal Ordnance Powder Works, supplying the dockyard arsenals at Chatham, Sheerness and Woolwich. The explosion, by far the worst to have happened in the town – in the whole country, according to Hasted – took place in the Home Works corning house on Stonebridge Ponds, very close to town **(Fig. 6).** Only three men were killed but the damage to the town was profound. Davington Priory, directly above the Ponds, took the worst of the blast but for a mile around the air was unbreathable and properties severely damaged.

A link between Mrs Collier's shop disaster and this blast would, however, still be speculative, except for a document held at the Fleur De Lis Heritage Centre in the late Arthur Percival's archive. Because this was a Government owned factory, after several petitions to the House from the Town, compensation was agreed, and details were set out in a Bill that passed through the Houses of Parliament in 1786.[13] All owners and tenants are listed with the compensation amounts. William Sherwin, owner of Davington Priory, did best with £320 17*s*. 6*d*., and the smallest amounts of 2*s*. 6*d*. were paid to William Carter and others. Most important for us, Mrs Collier was awarded £5, equivalent today of around £1,000.

This destruction by the 1781 blast also goes towards explaining why Furlongs is a single storey building occupying a plot which formerly held the north end of a much grander 2- or 3-storey property (**Fig. 7**). This history also explains why the 18th-century brick wall at the rear encloses Furlongs garden as well as that of the

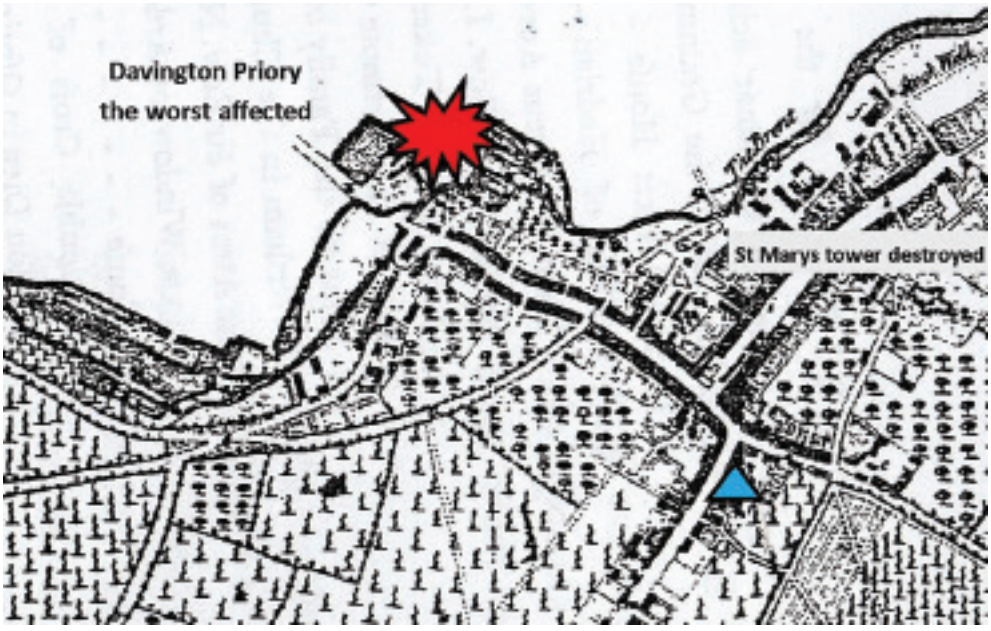

Fig. 6 A part of Jacob's map of Faversham, published in 1774, only seven years before the Stonebridge Ponds explosion. The star shows the origin of the explosion, the triangle the location of Sarah Collier's shop. The distance between the two is 500 metres.

Fig. 7 Frontage of *Furlongs* in Preston Street in 2017. The white building to the right is the surviving two-thirds of the original No. 6.

main property, with the enclosed garden's surface a metre higher than surrounding gardens. The surviving two-thirds of the original property was re-fronted in 1937, but side and rear views show that, as is so often the case in Faversham, the rear part of the house is much older, probably 17th century.

In March 2018, FSARG ran an exhibition called *Faversham's Glory Days* of all the finds, with abundant illustrative material, in the gallery of the Fleur de Lis. Over 500 people visited, fascinated by the story that was there, and to see and touch: Sarah Collier has become quite famous. There is, of course, more work to be done. The redware, for example, shows fascinating variation and some of it is probably imported. Historical research is also needed – what are the stories of Sarah and Susannah, and other people named on that compensation list? Meanwhile, this unique collection is cherished for the future.[14]

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14 More details of the assemblage can be found on the FSARG website: http//: community-archaeology.org.uk, report no. KP151/151A.