

The Burpham Big Dig
Burpham, Wepham & Peppering

Desk Based Assessment Report



James Sainsbury

This desk based assessment (DBA) has been completed in advance of the community excavations at Burpham, Wepham & Peppering. The project is titled 'Burpham Big Dig', which will focus on the excavation of test pits in the gardens of properties at Burpham and the adjacent settlements of Wepham and Peppering, West Sussex. A total of 31 test pits will be excavated over the period 10th-23rd August 2024.

The Big Dig project will be undertaken by members of the Worthing Archaeological Society, residents and Worthing Museum staff, along with a small number of student volunteers.

This DBA has been produced by Worthing Museum curator James Sainsbury for the proposed archaeological works associated with this community project. All work planned is in accordance with the relevant *Standards and Guidance* of the Institute for Archaeologists (IfA 2001).

Site Description, Location and Geology

Burpham village sits on a promontory of the South Downs, with the settlement situated to the immediate north of the earthen rampart of the Saxon burgh that gives the village its name. The ground to the west slopes steeply down to the River Arun. To the north the village stretches along a single road (The Street) towards the Downs. The east of the village is demarcated by sloping ground leading to an alluvial valley formed by an eastern tributary arm of the Arun, known as 'Boundary Brook'. The village is centred at TQ 04113 08948. Burpham sits on chalk geology, though some properties along the south-eastern side of The Street have superficial deposits of Head geology.

Wepham is situated to the southeast of Burpham, the two villages separated by an eastern tributary arm of the Arun. The closest households between the villages are only 0.1 miles apart. The settlements are connected by a ford which crosses the alluvial valley of Boundary Brook at Splash Farm, on the aptly named 'Wepham Ford' road. Peppering Lane connects the two to the north, rounding the valley at the first point of higher ground. Wepham is centred at TQ 04267 08556. Wepham sits wholly on chalk geology.

Peppering is a small hamlet situated some 0.2 miles to the north/northwest of Burpham church. The hamlet is centred at TQ 03639 09292. Peppering sits on chalk geology, with superficial Arun Terrace Deposits to the immediate north.¹

¹ <https://geologyviewer.bgs.ac.uk/>

Aims and Objectives

This desk-based study comprises the first stage of the Burpham Big Dig project, namely to determine the historic archaeological finds in the area, and to assess the potential for further archaeology during the project and beyond. Historic archaeological records are listed in the appendix, using reference to various sources including the Historic Environment Record entries within a 1km radius of Burpham itself. This list includes extant buildings with a proven historic origin, some of which will see test pit excavation within the property boundaries.

The objective of the Burpham Big Dig is to further enhance our understanding of the historic development of Burpham, Wepham and Peppering. The project aspires to bring these communities together and increase both local and general interest in the incredible history of the South Downs. Archaeological investigations after 2024 are envisioned in and around the three settlements in the form of limited excavations and community field walking surveys, with a general 'ten-year plan' in discussion at the time of writing.

There is also an aspiration to produce a comprehensive book on the archaeology and history of the parish in the coming years. This would cover everything from the Palaeolithic remains at Peppering through to the social history of the settlements up to the millennium.

Project Methodology

The excavation site will be spread across thirty separate gardens across the parish of Burpham, namely in Burpham, Wepham and Peppering, an area roughly a mile square.

A total of 21 will be opened in Burpham, 10 in Wepham, and a single test pit in the hamlet of Peppering.

Test pits will be 1x1m in size, with the potential to excavate down to 1m, dependent on where the chalk bedrock appears. Excavation will be conducted by hand, with any turf reinstated once the test pit and any features are recorded. Residents will inform the excavators where they are happy for test pits to be inserted.

Finds processing will take place at the village hall. The aim is to excavate two test pits per day, though we understand that some pits will contain more complex archaeology than others and may take longer. Conversely there may be test pits where the natural bedrock is met without meeting archaeological features.

Residents are encouraged to visit the village hall throughout the project, where they can view the finds processing in action and enquire about the progress of the Big Dig.

Archaeological Potential

The area of the project is rich in archaeological remains, dating from the Palaeolithic through to the early modern period. Below is a general discussion on the recorded archaeology of the three villages, and the prospect of further finds during the Big Dig.

Palaeolithic (Old Stone Age) c.700k-10,000BC

The discovery of mammoth tusks and bones at Peppering in 1821 and 1824 respectively², is an example of the potential for Palaeolithic remains in the immediate area of Peppering House and Green Garden cottages. Furthermore a Palaeolithic ovate hand axe was discovered at Green Gardens in the early 20th century by Mr H C Collyer. The river terrace gravel and sand geology holds a high potential for further Palaeolithic faunal deposits and flint tools.

Mesolithic (Middle Stone Age) 10,000-4000 BC

The single recorded Mesolithic find comes from 'Peppering' and is described as a tranchet axe, supposedly discovered by Mr H C Collyer. No further information is available on this flint axe, and it is possible that this is a replicated record to the 'pre-Dolmen celt' referenced below.

Neolithic (New Stone Age) 4000-2250BC

The discovery of a 'pre-Dolmen celt' (i.e. a flint axe) that was found 'in Burpham' in 1929 and donated to Lewes Museum. Wymer & Bonsall³ suggest that this find is actually a Mesolithic tranchet axe (see above). Unfortunately this axe has not been traced in the collections at Lewes, and nothing more is known about the exact findspot or the finder. The Arun Valley Archaeological Project recovered a Neolithic flint scraper from Town Field, immediately north of the church, in 2019.

² Curwen, E. & Curwen, E. C, *Notes on the archaeology of Burpham and the neighbouring Downs*, Sussex Archaeological Collections, Volume 63, 1-53.

³ Wymer, J. J. & Bonsall, C. J, *Gazetteer of Mesolithic sites in England and Wales*, CBA research reports, Volume 1, 294.

Bronze Age 2250-800BC

The Bronze Age is represented by the discovery of an Early Bronze Age beaker inhumation in the garden of Elmbank cottage in August 1954.⁴ Workmen uncovered, and damaged, the burial during construction of a cesspool. Dating to approximately 2000 BC, this inhumation is the earliest recorded in the project area. It has been proposed that there was originally a barrow covering the burial, which at some point in the historic past was levelled, leaving the original grave untouched within the chalk bedrock. The skeletal remains have since been lost, though the 'Type A' beaker is on display at Worthing Museum.

A barrow cemetery is noted to the immediate south of Peppering House, being investigated by antiquarians in the 1830s. A single Bronze Age cremation urn 'from a barrow near Peppering' is in Littlehampton Museum. This urn is proposed to have come from one of these barrows, which are no longer traceable on the ground.

Iron Age 800BC-43AD

There is a promontory fort that forms the southern east-west boundary of the present form of Burpham village (see full details below under 'Scheduled Monument') The origins of the fort may be Iron Age, with later reuse in the 9th century AD against Viking raids.

Other Iron Age finds date to the later period (100BC-43AD) and include an unknown number of gold staters found in Town Field. The first is recorded as being recovered by a ploughman 'near Burpham Church' in 1911.⁵ Another gold coin of Cunobelin was found in the same field in the early 20th century (though this may be a duplicate record of the coin above) The author has been told by a member of the public that 'dozens' of gold staters were looted from the same field in the 1970s by a group with metal detectors.

⁴ Lewes, G. *Some recent discoveries in West Sussex*, Sussex Archaeological Collections, Volume 98, 1960. 12-28.

⁵ Johnston, L. *Notes and queries: British coin found at Burpham*, Sussex Archaeological Collections, Volume 55, 1912. 305-306.

This suggests a high status settlement in the vicinity, which could be represented by a sub-circular enclosure seen on aerial photographs⁶ in the north part of High Field. This feature is also visible on satellite images dating to 4/2015 on Google Earth and there is an aspiration for this to be the focus of future investigations in the coming years.

Roman 43AD-450AD

Roman-era activity in the area is extensive, though mostly found in the surrounding downland. Within the settlements we have records for at least two Roman coins, a coin of Antoninus Pius (138-161) from 'a garden in Burpham', and a coin of Maxentius (306-312) from 'a roadside bank', located in Wepham. The coin of Antoninus Pius is of interest as it was found in a garden in close proximity to St. Mary's church, where there is a record of a 'Roman pavement' being seen during works to restore the north transept in the mid-19th century.⁷

We would expect there to be evidence of significant Roman activity either side, and at the head of, Boundary Brook, based on evidenced trackways from the northern portion of the parish that date to the Iron Age/Roman period, and numerous farming settlements in the area, with the Burpham/Wepham locale containing some form of quayside or small port to move tradable produce into the wider Empire.⁸

There is a tantalising anecdotal reference to 'a moon-shaped breast plate, possibly a Roman Centurion's, found in the field by the chalk spring (which is now pasture) at the eastern end of Burpham village. This apparently was cleaned and displayed in Arundel Castle'. This find of potentially national-significance has not since been traced, despite efforts by a member of Worthing Archaeological Society.⁹

6 Andrew Miller/11-DEC-1992/RCHME: AP Primary Recording Project. NMR 4335:80-1; NMR 4483: 33-4

7 Cooper, T. Notes by the Revd Robert Foster. WSRO, 2018.

8 Sainsbury, J. *The Romano-British landscape of the Burpham Downland*, forthcoming.

9 King, A. Worthing Archaeological Society Journal, Vol 5. No.3, 2020.

Early Medieval/Anglo-Saxon 450-1066AD

Despite the 9th/10th century refortification of the Burgh¹⁰ there is little recorded archaeological material from this period in Burpham or Wepham villages. Oak-hewn log boats were been found in the meadows in the western part of the parish in the 19th century. They were radio-carbon dated to the 11th century but a more recent analysis has suggested they date from the 5th-7th centuries (these dates also apply to the log boats at North Stoke, Amberley & Hardham)

At Peppering there are antiquarian records to the discovery of a 5th/6th century Anglo-Saxon inhumation within an earlier Bronze Age barrow cemetery. A barrow was excavated in 1835, ‘containing a cist 2ft 6ins below the original ground surface, with an inhumation 6ft 1ins long, and remains of an iron sword and possible spearhead’¹¹ Other barrows within the cemetery were ‘to be opened in 1835’ but no record of these works survives – it is possible that the ‘single Bronze Age cremation urn’¹² came from one of these features.

An important early charter by King Noðhelm of Sussex survives which pertains to land at Peppering. In 705AD Noðhelm granted four hides of land at Peppering to one Berhfrith, on condition he builds a church where prayers could be said for the king. No trace of this building has been uncovered, though it is possible that the wooden church stood on the site of the future St. Mary’s.

Medieval 1066-1500AD

Medieval Burpham is somewhat of a mystery as far as archaeological records are concerned. There has been little recorded Medieval archaeology from Burpham, with the notable exception of an ‘Arabic glass vessel’ found in the river bank¹³ There is also an unresolved issue as to why the village didn’t grow *within* the rampart, as happened in the vast majority of the fortifications listed in the Burghal Hidage.

10 See page 13.

11 Welch, M. *Early Anglo-Saxon Sussex*, BAR British Series 112 (II), 1983, 514.

12 See **Bronze Age**, p.7

13 See MWS2981, p.17

The Domesday Book records Burpham as containing 8 villagers, 12 cottagers and 10 slaves. As only the heads of household are recorded in Domesday we can estimate a population of 150-200 people. Meadow and woodland are included, as is the church of St. Mary's. The taxable value of the estate is £8, suggesting a middling sized settlement under the lordship of Sir Roger Montgomery, builder of Arundel castle. Before 1066 it had been held by one Leofwin, under King Edward the Confessor, and briefly King Harold II.¹⁴

Wepham is recorded as containing 18 villagers and 9 cottagers, giving an estimated population of 135-160 people. Meadow and woodland are recorded. Interestingly both a mill (rendering 2 shillings and 5 pence per annum) and 2 fisheries are recorded, suggesting the Boundary Brook was firmly within the bounds of Wepham, rather than Burpham. The taxable value of Wepham increased from £8 in 1066 to £10 in 1086, almost certainly due to the construction of the mill (5624 mills are recorded in Domesday, a large increase on the 100 mills recorded a century earlier) By 1086 Wepham was held by one Picot of Sai, who held many estates in Shropshire, as a tenant of Roger de Montgomery. Before the Conquest it was held by 'two free men', unnamed.¹⁵

There is no record of Peppering in the Domesday Book, though this shouldn't be read as Peppering not existing at this time – many settlements that we know were thriving when Domesday was compiled are not included in the survey, for various reasons, such as being tax exempt.

The parish seems to have developed slowly between the 11th and 15th centuries, though the Black Death must have affected the population. There is a local belief in plague pits at Wepham, though these have yet to be proved by excavation. Furthermore, outlying hamlets attached to the parish were abandoned between the 14th-15th centuries, partly due to population loss through the plague, and partly due to economic changes which saw landowners replace their tenants with more profitable sheep.

14 Sussex Domesday, Phillimore ref: Sussex 11, 68

15 Sussex Domesday, Phillimore ref: Sussex 11,74

Church Cottage has been dated to c.1470 in an archaeological building survey. It is probably the oldest standing vernacular structure in the parish.

Early Modern to Modern 1600-1950AD

Over twenty buildings survive in the parish from the 17th and early 18th centuries. Their origin as the houses for yeoman farmers and tenants alike changed little in this period. The farming of sheep dominated the local economy well into the early 20th century, as it had done for over half a millennia. A sheep-wash is still visible at low tide below the cliff immediately to the west of the fort, where thousands of sheep were washed each year into the early years of the 20th century. The series of so-called Agricultural Revolutions that took place in Britain between the 17th and late 19th centuries generally passed the villages by, though of course the introduction of threshing machines and other technologies drove some residents into more urban areas in the search for employment.¹⁶ The writings of Laurence Graburn, Revered Foster and others describe the parish in intimate terms from the mid-19th century through to the mid-20th century, and much of the information pertaining to the demolition and rebuilding of farms, houses and other structures is found in these works. **A history of each plot involved in the Big Dig will be included in the official report, due for release next year.**

16 Jones, P. *The Agricultural Revolution: Changes in Agriculture 1650-1880*. 1977, p3.

Discussion

The potential for producing archaeological material during The Big Dig is high though hindered in scope by the limited nature of the open excavation areas.

It is likely that the project will uncover material from early 20th century garden features and landscaping. We would also expect to find middens/rubbish pits dating from the mid-20th century back to the medieval period, and possibly earlier. In properties nearest Burpham church there is the chance that we will uncover inhumations from a period before the churchyard had planned boundaries.¹⁷

The gardens of historic houses are more likely to contain material from the 17th or 18th century onward, whereas more modern properties have a higher likelihood of containing older archaeology that hasn't been disturbed by a period of relatively recent activity on the site.

There is always the possibility that pre-Roman features will be excavated, especially when we look at the plethora of different prehistoric finds and sites in the immediate vicinity of the project area.

A full list of the recorded archaeological sites and finds is below.

17 Worthing museum correspondence

Historic Environment Record (HER)

The following is a detailed list of important archaeological remains and finds within a 1km radius of Burpham, Wepham and Peppering.

In addition there are 23 Listed buildings identified within the same search area. With the exception of the Grade 1 listed parish Church of St Mary, all of the entries relate to Grade II houses or barns dating from the early 17th century onward.

An accompanying map of the HER data below can be seen in the appendix

Scheduled Monument

MWS3790 – Burpham Camp

The monument includes an Iron Age promontory fort, later occupied by an Anglo-Saxon burh, surviving as earthworks and below-ground archaeological remains. It is situated on a long, narrow, elevated area of land, which extends southwards from the village of Burpham and overlooks the flood plain of the River Arun to the west and south, and the valley of a tributary stream to the east.¹⁸

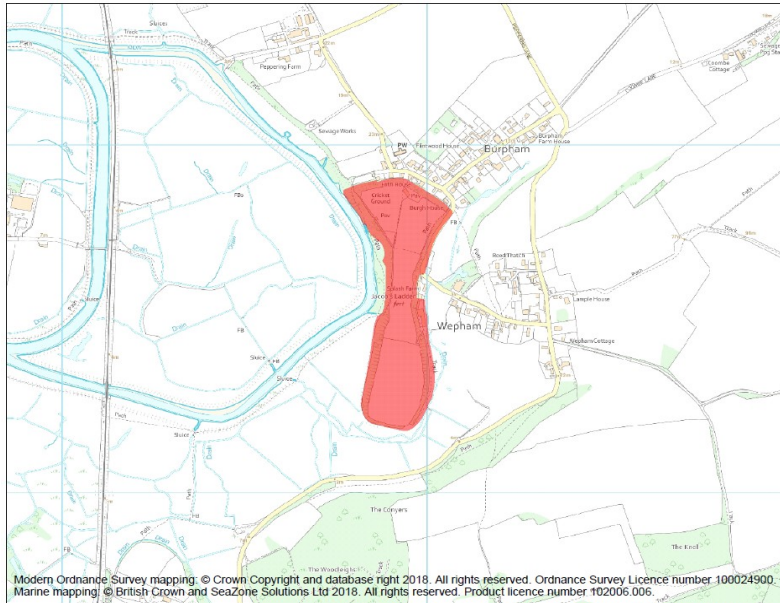
The promontory fort is bounded by steep natural cliffs on all but the north side. It is about 700m long north-south by 250m long east-west, reducing to 50m towards the centre and widening again to about 150m at the south end. The north end is enclosed by an earthen rampart, formed of a bank up to 7m high with an external ditch (outside of the scheduled area and yet to be conclusively proven through archaeological investigation) and with an entrance cut into the rampart in the centre. The interior of the fort falls gently southwards, the cliffs reducing in height from about 15 m to 4.5 m. To compensate for the weakening natural defences southwards, a bank encircles the southern half of the promontory at the base of the cliffs. This bank is up to about 8m wide and 1m high, but has

¹⁸ historicengland.org.uk/listing/the-list/list-entry/1005894

been reduced by flood waters and an inner ditch present here has silted up. Partial excavation was carried out on the site in the 19th century. Sherds of late Saxon pottery were found within the interior of the fort in around the mid-20th century. In 1972-3 partial excavation was carried prior to the erection of a cricket pavilion at the northern end of the site. About 170 postholes were uncovered.¹⁹ These are thought to represent two separate buildings, lying end to end and parallel to the bank. One of the 'buildings' was rectangular in plan with a small 'room' partitioned off at the west end. The side walls were constructed of double posts and a small, double-sided, extension was attached to the south wall. The second 'building' was of the same structural type. Two deep pits were also discovered, probably later in date and containing late Saxon and early Norman pottery. The interior of the fort is likely to have been re-occupied in the late Saxon period and was probably the site of the burh at Burpham. Burpham is mentioned in the early 10th century Burghal Hidage list (a survey of defended places), as a burh holding 720 hides. There is a recreation ground and car park at the north end of the fort. Geophysical survey of the burh was undertaken by Dr Scott Chausseé²⁰ in 2011. The survey revealed a series of historic ditches cutting across the promontory at its thinnest point, dividing the interior in two. Chausseé argued that these features could date to the Iron Age or Anglo-Saxon period. If the latter then they could have formed the *burh-geat*, delineating the thegn's personal area within the promontory. Craters from bomb damage in World War II were noted on the east side of the rampart, as was modern disturbance across the northern portion of the site. Little else was seen on the survey, possibly due to damage of archaeological features from ploughing in the last century and the activities of Canadian soldiers based on the site during World War II.

19 Sutermeister, H., *Burpham: a settlement within the Saxon defences*. Sussex Archaeological Collections 114, 194-206.

20 Chausseé, S.M., 2011. Geophysical survey results for Burpham, West Sussex.



Heritage Category:	Scheduling
List Entry No :	1005894
County:	West Sussex
District:	Arun
Parish:	Burpham

Each official record of a scheduled monument contains a map. New entries on the schedule from 1988 onwards include a digitally created map which forms part of the official record. For entries created in the years up to and including 1987 a hand-drawn map forms part of the official record. The map here has been translated from the official map and that process may have introduced inaccuracies. Copies of maps that form part of the official record can be obtained from Historic England.

This map was delivered electronically and when printed may not be to scale and may be subject to distortions. All maps and grid references are for identification purposes only and must be read in conjunction with other information in the record.

List Entry NGR:	TQ 03920 08544
Map Scale:	1:10000
Print Date:	9 May 2024

Name: Burpham camp

This is an A4 sized map and should be printed full size at A4 with no page scaling set.



Burpham Camp – Scheduled area in red



Magnetometer survey data produced by Dr Scott Chausseé

WSSC HER No.	Description	Period
MWS2694	Saxon burial ground at Peppering Farm investigated in 1835 and found to contain an inhumation with iron sword and possible spearhead	Anglo-Saxon
MWS2701	Type A Beaker associated with a crouched adult male burial found in 1954 during excavation of cesspool in the garden of Elmbank	Early Bronze Age
MWS2704	Palaeolithic axes found on the ground surface in the field north of the 'Green Garden'	Palaeolithic
MWS2705	Gold coin of Cunobelin found whilst ploughing east of Peppering House. Gold stater found whilst ploughing 'near Burpham Church' Potential that these records refer to the same coin.	Iron Age
MWS2706	Moated area northwest of Great Peppering, measuring c. 60 yards square. Medieval pottery found in the area	Medieval
MWS2713	Coin of Maxentius (306-312) found close to a roadside bank, Wepham?	Roman
MWS2978	Parish Church of St. Mary. Cruciform church with south aisles, porch and west tower. North transept and arch of the south transept is Norman. The nave arcade is Transitional-Norman. Chancel is 13 th century and the tower is 15 th century. The south transept, south aisle and	Norman-19 th century.

	porch were demolished in 1800 and rebuilt on the old foundation by Sir Thomas Jackson in 1868-1869 when the church was restored.	
MWS2981	11 th -12 th century amber glass vessel found in the bank of the river at Burpham – may be a near-Eastern import	Medieval
MWS2986	A tide mill used to be situated on the Boundary Brook immediately to the east of Burpham Camp, close to the west end of the modern bridge.	Medieval
MWS3296	Possible Bronze Age urn from a barrow near Peppering	Bronze Age
MWS3425	Neolithic(?) axe found in the Burpham area	Neolithic
MWS3607	Coin of Antoninus Pius (138-161) found in a garden of a house in Burpham	Roman
MWS3655	Dugout canoe found in 1862 when clearing a drainage dyke 25-30 yards west of a sluice through a retaining bank	Late Roman/Anglo-Saxon
MWS3790	Burpham Camp (see above)	Iron Age/Anglo-Saxon
MWS4290	Earthwork building platform at Wepham Green with flint walled structure with brick quoins and possible former hollow way in close association	Post-Medieval
MWS4361	Small excavation undertaken by ASE (formerly SEAS) in 1994 revealed possible post holes and stake holes of an uncertain date	Undated
MWS6560	Cast iron water pump and horse basket in close proximity in Burpham	Post-Medieval

	village	
MWS7557	WWII Home Guard firing butts	Modern
MWS8032	Malt House shown on 1876 OS 25" map west of Peppering Farm	Post-Medieval
MWS8287	Lead coffin found in the 1950s when a tractor wheel sank into the grave whilst ploughing – reburied?	Undated
MWS8599	Green Garden Cottage. Originally built around 1400 AD (if not earlier) as an open-hall house of at least four bays	Medieval
MWS9606	Burpham Farm, L-plan regular courtyard farmstead.	Post-Medieval, 18 th c.
MWS10316	Farmstead, Wepham, 3 sided L-plan courtyard farmstead.	Post-Medieval, 18 th c.
MWS10417	Farmstead, 102 Wepham, U-plan regular courtyard farmstead with detached farmhouse	Post-Medieval, 17 th c.
MWS13306	Peppering farmstead, regular courtyard farmstead.	Post-Medieval, 19 th c.
MWS13941	Wepham farm, L-plan loose courtyard farmstead.	Post-Medieval, late 19 th c.
MWS14089	Yard, Wepham, L-plan regular courtyard farmstead.	Post-Medieval, 17 th c.
Archaeological Survey	Church Cottage – oldest dwelling in Burpham	Medieval, c. 1470



Map of HER designations and location in Burpham parish



Map of proposed test pit locations in Burpham parish

I would like to acknowledge the efforts of both Trevor Cooper and Karen Campbell in helping to make the Big Dig Project a reality. I would also like to thank the residents of the parish for enthusiastically participating in the proposed project. In addition thanks is owed to The Worthing Archaeological Society. Without the offer of their experience, time and expertise this project would be impossible to undertake. A grant from the South Downs National Park Community Fund was gratefully received in 2023. Further support has been received from the Ian Askew Charitable Trust, and support is forthcoming from other archaeological and community institutions. This funding will ensure a legacy for the Big Dig in the form of post-excavation analysis, an exhibition at Worthing Museum (August 2025) and a series of lectures about the project.