# Worthing Archaeological Society Journal

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WAS memorabilia

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#### **Dear Members**

The one bright spot in this blighted year is that the enforced restriction of being at home has encouraged a wealth of articles for this Annual Journal.

Connie Shirley has continued her saga on how the flints found at the Enhancing Places, Inspiring Communities Project (EPIC) site at Sompting came to be there in view of the ever-changing drainage systems of this area.

James Sainsbury, Archaeological Curator at Worthing Museum and Art Gallery has shared his experiences of digging a remarkably boggy site at Edburton, close to Upper Beeding in West Sussex.

Alan King has continued his work on the area around Burpham, near Arundel, with the emphasis on the Burgh. Part 3 of this series will be published in the Newsletter in the New Year so there is not long to wait.

Alex Vincent has written about the position of medieval windmills on the Worthing Downs.

Anthony Brook has discovered a gem of forgotten and disturbing medical history buried in the history of Storrington.

And finally, an offering from me especially for those who have good memories of Jane Russell's fascinating trips and are looking forward to their resumption.

As you can see, these once again reflect the wide range of interests of our members and cover both archaeological investigation through heat in the case of the EPIC project led by James Sainsbury and the waterlogged conditions of his work at Edburton, and turning the dusty pages of history while remaining safe at home.

We have adapted to modern technology throughout the autumn with online lectures, quiz evenings and committee meetings via Zoom, so I thought the cover picture would remind members of another time when a ticket to a lecture cost 1/-.

I wish you all good reading and a brighter New Year. And, of course, many thanks to this year's contributors without whom there would be no journal.

Cheryl Hutchins Editor

# Continuing the theme of Water at Sompting

By Connie Shirley

#### Introduction

Last year's report about Sompting concentrated on water and wells in the medieval and later periods, while in 2018 Gordon Hayden reviewed the liminal aspects of the Malthouse Field site between the wet and the dry. This year we continue with our watery theme by looking at the landscape of the site of our excavations during the Summer of 2020.

Our very limited excavation in July 2020 focused on an area where the Ouse and Adur Rivers Trust (OART) are undertaking changes to the landscape

as part of the Enhancing Places, Inspiring Communities (EPIC) project by rerouting the Sompting Brook and creating a community park. Details of the project are available at https://oart.org.uk/epic/.

In 2019 we had the opportunity to examine the spoil from the cut of the new river for struck flints and located an area on the bank of the new river where the debris appeared to be the result of a single knapping episode. The EPIC team invited us to investigate further before the river bank was disturbed by the bridge installation works proposed for late Summer 2020.

Preliminary results from the analysis of flint finds indicate that the bulk of them appear to be associated with knapping activity and most likely to be dated to the early Neolithic period.

This article looks at the formation of the landscape to assist with answers as to how the flints came to be deposited in this location.

#### The Site Location

The site is centred TQ 164 044 south of West Street in Sompting and north of the railway line, located between the two built-up areas of Sompting and Worthing and within fields used for arable crops. Figure 1 shows the location of the new river in an area already criss-crossed by drainage ditches and streams.

Figure 2 shows the limited area of the excavation site location near the new river, new ponds and older drainage ditches.

Much of the area cleared for the new park was covered in vegetation, in places head-high (Figure 3). However, we all enjoyed working in this beautiful landscape and the shade provided by the vegetation was very welcome in the hot weather.

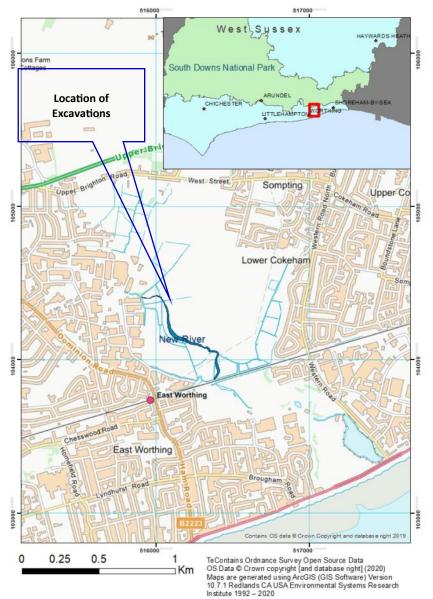


Figure 1. The New river Site

The site lies in the low-lying and previously marshy area of the Broadwater Innings (Baggs et al, 1980). The Key to English Place Names project (KEPN, 2020 - run by Nottingham University) shows the derivation of English place names from a variety of sources and defines Sompting as meaning "Dwellers at the marsh" derived from:

sumpt (Old English) A marsh, a swamp, boggy
ground and

-ingas (Old English) The people of . . . ; the people called after . . .

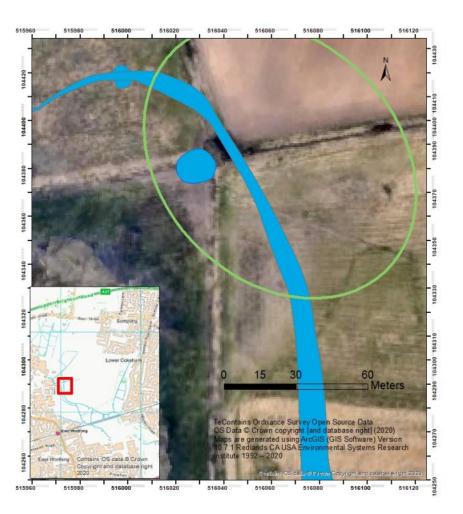


Figure 2. Excavation works area



Figure 3. Searching the river bank for struck flint

#### The Geology of the Site

Figure 4 shows the geology of the area and the alluvium deposits of a river system. The green/yellow/red coding denotes the current flood risk area and suggests that the excavations took place near an area of high flood risk.

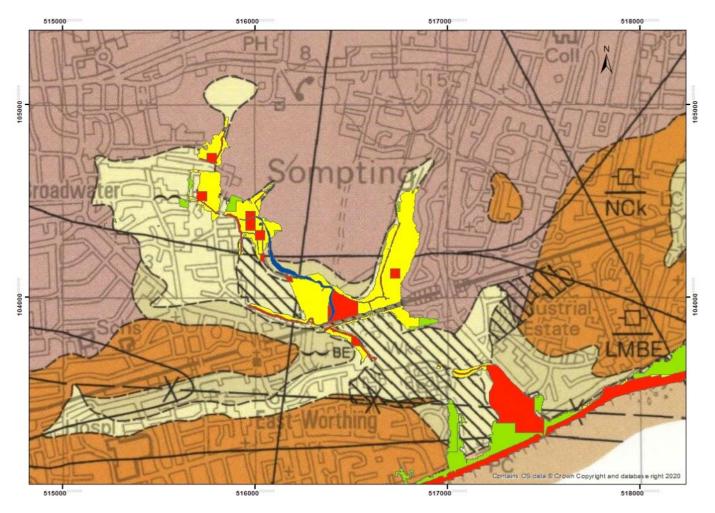


Figure 4. Geology and current flood risks (Contains British Geological Survey materials © UKRI [2020], BGSa, 2020 and EAa, 2020)





The cross-hatched symbology in Figure 4 denotes "made land" defined by BGS (b,2020) as "an area where the pre-existing (natural or artificial) land surface is raised by artificial deposits." Up until 1820 the outflow from the bay was along the coast to the River Adur but in 1820 the sea broke through (Baggs, et al, 1980) and flooded the area. Thereafter, the outflow to the sea was through Brooklands Park. The made land raises the land out of the flood risk area.

Another feature shown on Figure 4 is the Raised Beach Deposits (  $\checkmark \lor$  BE) shown along the bank of the Teville Stream and curving around into the innings area. Young and Lake (1988) report that there is no evidence of the raised beach on the south bank of the Teville Stream, so perhaps this was the old coastline indicating that the innings were possibly part of a bay in the Flandrian Period (Young and Lake,1988).

Examination of LiDAR data (EAb, 2020) (Figure 5) shows the bay feature formed if the 5m contour is postulated as the approximate coastline of the bay in the 11<sup>th</sup> Century (Kerridge, 1979).

The old parish boundary (pre-1933) of Sompting does not run to the coast but extends some distance inland to the South Downs (Figure 5). From Figure 5 it can be seen from that only about a third of the area of the parish is below 20mOD but most of the population of Sompting lives below this level.

Sompting Parish Council (SPC,2013) note the risk of surface water flooding is still an issue in the area in their 2014 Parish Plan and Baggs et al, (1980) note that the area to the south of West Street was until recently prone to flooding.

Viewed from the centre of the innings, the Church of St Mary in Sompting must have provided a prominent landmark in the landscape.

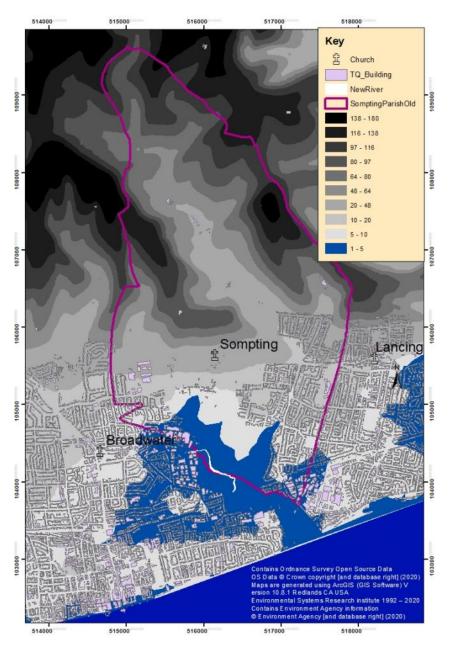


Figure 5. The site relative to the South Downs and the coastal plain



Figure 6. A View of Sompting church from the area of Excavation

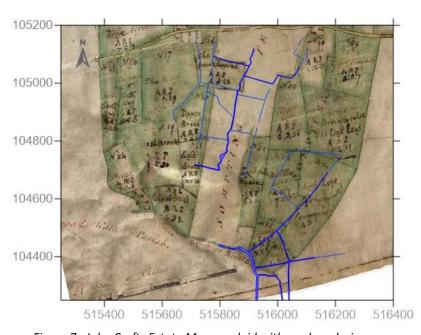
#### A review of the Site through Maps, Old and New

A review of old maps was undertaken to review when the area of the innings filled in and when the existing drainage shown in Figure 1 became established.

The map prepared in 1587 by Palmere and Coverte in anticipation of invasion by the Spanish Armada, (WSROa, 1587) does not show any particular innings around Worthing although narrow lagoons run alongside the coast which give some credence to the fact the Arun did once

flow along to Lancing. However, at the period of this map the Arun outflow is alongside Littlehampton. (Vine, 1986).

Kerridge (1979) shows the dam at South Lancing shown in the Armada map of 1587 to have been built around 1575. The drainage stream, later to be the Sompting Brook, appears to have been well established in the marshland of the old Broadwater innings by 1575.



1772), the main river flow is designated the Colts Brook or River Ditch. The names of the field testify to the low lying nature of the land as "brooks" and "leys".

On John Crofts Estate Map of 1772 (WSROb,

Figure 7. John Crofts Estate Map overlaid with modern drainage

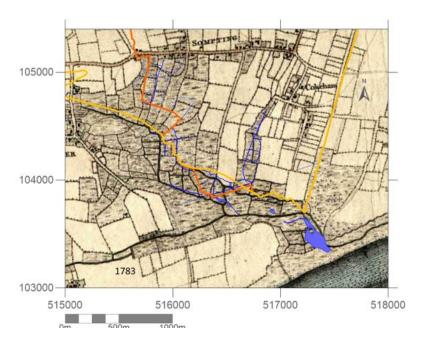
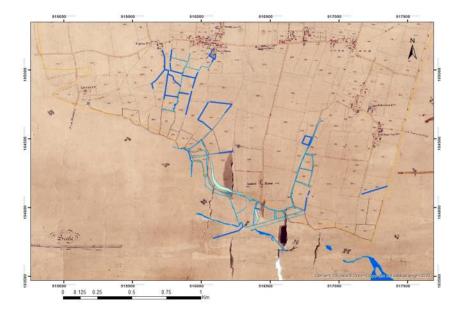


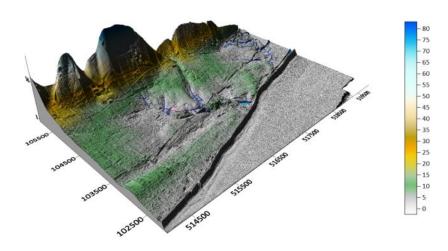
Figure 8. Yeakell and Gardner Map (1783)

Just a few years later, Yeakell and Gardner show the old parish boundary (in gold in Figure 8) established along the river and the marsh land extending all the way up to West Street. Many of the field boundaries are linear rather than following bends in the streams and river suggesting that drainage ditches were cut to drain the land.



The tithe map of 1834 perhaps implies better surveying techniques rather than any significant changes as now the field boundaries do seem to be exactly in line with modern drainage.

Figure 9. Sompting Tithe Map 1834 (WSROc)



The detail from the Lidar 3D hillshade view (Figure 10 and Figure 11) gives an indication of how much of the system of small fields can still be traced in the landscape and raises the question of how much of the post-medieval digging of ditches resulted in deeper flint deposits being brought to the surfaces. The pattern of drainage hints at the establishment of drainage for water meadows (Dean, 2008).

Figure 10. Lidar overview (EAb, 2020)

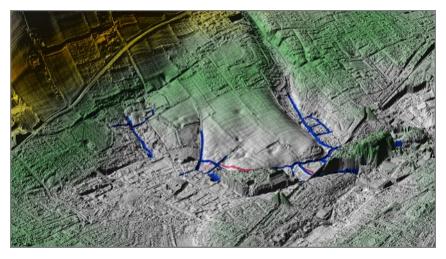


Figure 11. Lidar detail (EAb, 2020)



Figure 12. A small selection of flints

#### What Next?

Work is in progress to analyse the flint collection and other artefacts from the site. Understanding the formation of the landscape in the different periods helps to consider how artefacts have been deposited and how far from their original deposition spot they may have moved.



Figure 12 gives a very small sample of our flint. Typically, one of most intriguing finds (the black flint tool in Figure 12) was found in the last five minutes of the last day of excavation at the base of the new pond. We also have to think about where a stone pestle (Neolithic?) and a Romano-British tegula fit into our story.

We look forward to seeing the river at full capacity. Figure 13 shows the vegetation and flow from ground water run-off in Summer 2020, the wide banks showing how much room for expansion was created. Our friends at OART advise that the primary flow comes from the chalk aquifer and that the river should be a spectacular sight in the Spring.



Figure 13. The New River - Summer 2020

#### Acknowledgements

James Sainsbury for undertaking the management of the WAS team.

Alistair Whitby (EPIC) and Peter King (OART) for inviting WAS to take part in this project.

Mike Tristram and Sompting Estates for suggesting and supporting our work with OART and EPIC.

All the members of Worthing Archaeological Society who took part in the excavations and in the post excavation works.

#### References

**Mapping Data** 

Mapping throughout contains

OGL (2020) Ordnance Survey Open Source Data OS Data © Crown copyright [and database right] (2020) and other public sector information licensed under the Open Government Licence v3.0.

Maps are generated using:

Either:

ESRI (2020) ArcGIS (GIS Software) Version 10.8.1 Redlands CA USA Environmental Systems Research institute 1992 – 2020

Or

GS (2020) Golden Software LLC Surfer - Version 17 and contain information extracted from Google maps (2020).

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### Gold in the Pond: Investigations at Edburton 2018-2020

By James Sainsbury

#### Introduction

I have written this article to give members a general idea of the investigations that have taken place at Edburton over the last two years. Various reports are in the process of being written by a number of specialists, relating to geophysics, metallurgy, preserved timber etc - these will form parts of an official complete report in the future. This is a broad and necessarily incomplete narrative of what we've uncovered so far. Going forward we expect to continue our work in the immediate vicinity of the pond for at least another year, before expanding our horizons to the higher ground adjacent.

This enigmatic site (also called "the pond" in this article) was originally discovered by both accident and pure luck. The landowner wanted to create a fishing lake out of an area of historically boggy ground, work for which commenced in the spring of 2018. After nearly 2 metres of humus and peat had been removed from an area 80m by 55m, a large chalk "wall" was noticed. The landowner called in an old friend, a metal detectorist who happens to be the detectorist for our small group, "The Arun Valley Archaeology Project". After an afternoon with no finds, the detectorist went to leave the site, when with the final sweep of his machine he picked up a 4th century Roman coin next to a spoil heap. Within an hour, eight other 4th century Roman coins had been uncovered from the sides and below the chalk wall.



Edburton Lidar (from David Staveley) - Pond within black box

I was called in to help the next day and we decided to dig a number of large test trenches deep into the black soil originally uncovered during the creation of the pond. This black soil turned out to be full of Roman coins, metal-work, pottery sherds, CBM and more. The site has continued to produce wonderful finds right up to the present day.

#### The Landscape

Before we get to the detail of the finds it is worth a brief look at the landscape setting for this site. The site sits on a meeting point of various geology including greensand, gault clay, clay-with-flints and sandstone outcrops. A substantial spring rises at the scarp-foot of the Downs less than a mile to the south, whilst other smaller springs emerge within the pond itself. The scarp-foot spring is formed into two streams which feed the pond.

Though counter-intuitive to my mind, having lived my life on the coastal plain, the flow of water is to the north, before bending towards the west and debouching into the Adur via Woods Mill Nature Reserve. Therefore it is perfectly possible that water-borne vessels could have reached the site via the Adur nearly two millennia ago. Also worth bearing in mind is the Greensand Way, which crossed the Adur at Small Dole, just 0.8 miles north of the pond. Historic settlement along the Greensand belt is well-attested, with most villages today having their origins in the early Medieval period. However, evidence for Romano-British habitation is common - the substantial villa/bathhouse complex at Plumpton to the east is a good example. Having said this, with the exception of various scatters of worked flint, very little was thought to have been at Edburton much before Domesday. There is a very brief mention in Arthur Stanley Cooke's Off The Beaten Track In Sussex (1923) of "an antiquarian excitement which fluttered for a brief space over some Roman remains, chiefly notable for their scantiness" Unfortunately we don't know where these "Roman remains" were uncovered, though it is possible that 19th century land-drainage work in the vicinity of the pond uncovered the odd coin or pot sherds.

#### The Finds

The first thing I established on site was that the chalk "wall" was in fact part of a later 19th century drainage system. Large blocks of chalk and/or sandstone were placed in hand-dug trenches to encourage water to travel through the boggy area, which the landowner had now dug out into a pond. Undoubtedly these Victorian labourers would have uncovered Roman finds though it's impossible now to say what was found.

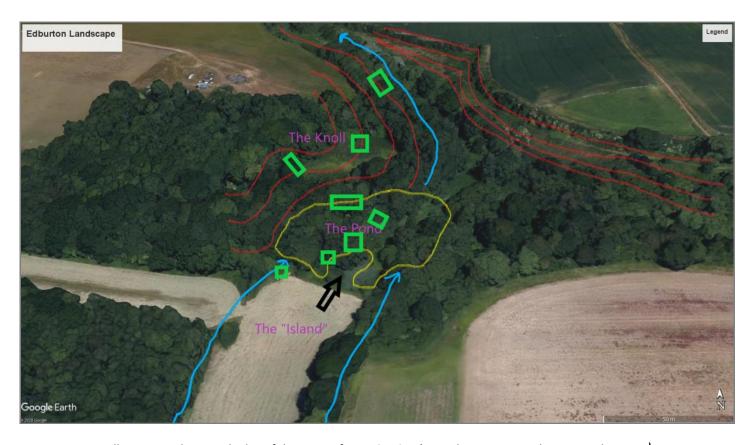
We quickly discovered that the "Roman layer" (Context 4 from hereon in) was not universal in thickness, nor was it present in all areas of the excavated pond. For example, Trench 2 (in the centre of the pond) demonstrated that Context 4 had a depth of 2.7 metres with dozens of coins produced from just this one trench. On the other hand the eastern half of the pond produced no finds and consisted of a solid natural brown clay - this was quite possibly the natural land surface 1600 years ago. However, on the western side of the pond Context 4 had an average 2 metres depth. Over the last two years we have become attuned to the "rhythms" of the site, and know with certainty that this black soil always contains 4th century finds, whether coins, pot sherds or even preserved timber (more on that shortly) Another area of interest was "The Knoll", sandy high-ground immediately to the north and west of the pond. This seemed like the likely site of settlement, and thus would explain the finds in the pond area below. Surprisingly the three test trenches on The Knoll produced one rather beautiful Mesolithic core, some lovely greensand and absolutely nothing Roman in date.

The first season, during the summer and autumn of 2018, produced 119 coins through the method of mechanical excavation down to the natural gault clay (which Context 4 sat upon). Other metal finds were uncovered - small molten pieces of lead, very thin bronze items with pierced holes and fragments of a plethora of other metal artefacts. All coins dated from the 4th century, with the majority belonging to Emperors of the House of Constantine. A large quantity of pot sherds was also uncovered using this method. Again, the vast majority of the pottery belongs to the later Romano-British period. We noted that the pot sherds found in the northern area of the pond were smaller and more abraded than some large body sherds and rims found to the south, suggesting the north-bound flow of water has moved items from their original place of deposition.



A typical coin from the Pond

Much of the site is inaccessible outside of the summer months due to the waterlogged nature of the ground. On our return in late spring 2019 we decided a more balanced approach was needed - one of our main aims was to find the western and eastern edges to context 4, which we firmly believed to be a Roman-era ditch or pond. We did this by scraping off the layer of water left by the winter floods, thus revealing the full extent of our Context 4. This also meant we could clearly see the eastern edge, where the natural brown clay began. A near-complete greyware pot was uncovered from the western side of "The Island" (see below) and as we worked our way south we found another 35 coins, again all 4th century.



Edburton Pond - a rough idea of the areas of investigation (green boxes are trenches inserted in 2018)

It is worth mentioning that there doesn't seem to be any stratigraphical sequence within Context 4. Metalwork, pottery etc is what can only be described as "jumbled" and found within the Context, rather than heavier items found at the lower end. This is suggestive of two possible scenarios. The first possibility is that there was a flash flood soon after these deposits were put into the ditch/pond and they settled without any discernible pattern. The second possibility, which is perhaps more likely, is that these deposits were made over a number of months or years whilst the ditch/pond was silting up.

Despite the Covid pandemic halting work at the site for much of 2020, we did manage to spend a number of days on-site from August. This year, despite having little of Context 4 left to excavate, was probably our most productive as far as finds are concerned. As we worked south we noticed the presence of a small spring near the South-West corner of the excavated pond area. Slowly approaching this feature from the north, our detectorist revealed the first piece of gold from Context 4.

Gold In The Pond!

The same day revealed a simple bronze plate-brooch and another tranche of well-preserved coinage of Constantine and his sons. Were we dealing with a "sacred spring", with the finds of the last two years adding up to a ritual process of depositing metal and coinage into a spring-fed body of water? Anticipation grew as we uncovered a broken gold bracelet just two metres from the spring itself (and downstream of its flow). Alas, a trench carefully excavated over the spring produced just(!) three paltry worn coins - though we still have hope for an unexcavated area immediately to its north.



A glint of gold in the late summer dusk

Perhaps our most exciting find was revealed in September this year. After the landowner began grading the banks for the pond we noticed Context 4 running into The Knoll in the form of a ditch. This was finally outside of the main pond area, and thus wouldn't fill with water as we excavated the feature! At 50cm depth we came across an eight foot long piece of worked timber, which had unfortunately broken in 15 fragments (see below). Directly underneath this was another single piece of timber nearly seven foot in length and shaped like the "shoe" from a watermill. After some debate we came to the conclusion that this was part of a watermill that would have sat on the edge of the ditch/pond (which increasingly looks like a Roman mill pond). The preservation is impressive, and we hope to raise funds for Dr Damian Goodburn to analyse, draw and conserve these pieces in the new year. We are also hopeful that we can gain accurate dates from the preserved timbers, though we are quite confident they belong to the 4th century, having recovered more coinage from above and below the wood.



Watermill axle? Cart axle? The debate continues...

#### Conclusion

In conclusion this site has produced 207 coins, over two kilograms of metal of various types, 1200+ pot sherds and over forty fragments of CBM, including a few complete floor tiles. This is all suggestive of a substantial Romano-British building and/or settlement nearby to the pond. Accordingly we had a large geophysical survey undertaken in the fields to the west and north of the pond, and despite some results suggesting industrial activity on The Knoll, we had no hint of a villa, bath-house or settlement. Finding this will become the focus of our work at Edburton going forward.

We have evidence for metal-working, possible evidence for pottery-manufacture, substantial evidence for animal butchery and of course on top of this a significant hoard of coins and personal metal items from near a fast-flowing spring. In addition to finds from the later Romano-British period, we have evidence for at least one large knapping episode in the Mesolithic (found in Context 4 and elsewhere). We also have a number of pottery sherds which may belong in the Iron Age or early Medieval period - more on this in the official report!

It is no doubt a complex site, not even taking into account the volume of water we have to deal with, which precludes the opportunity to excavate most areas by hand. Questions still remain and will take further work to answer. For example - how far north does Context 4 continue? And how deep does Context 4 run throughout the pond? We estimate that we've excavated less than 10% of the volume of Context 4 from the pond. Despite this we are confident that over the next season (or two!) we will start to pull together the disparate elements to this enigmatic site.

The hoard itself will be recorded by the Sussex FLO in 2021, before going to the British Museum for further analysis. We hope to acquire this hoard into the collections at Worthing Museum & Art Gallery, where it will be on permanent display.

My thanks to the landowner for his continued patience and support. I am in debt to our metal detectorist, without whom this site would never have been revealed. His hard work at Edburton in particular has led to the discovery of an important Romano-British site, helping to fill in a very blank space on the archaeological map of Sussex.

I'm happy to answer any questions you may have about this site, please feel free to email me on arunvalleyarchaeology@gmail.com. There is also the possibility of a site-visit for W.A.S members next summer.

# An Iron - Age Promontory Fort

# within an Anglo Saxon Burh at Burpham - Part 2

By Alan King

Part 1 of this discussion appeared in the Worthing Archaeological Society's August-September 2020 newsletter entitled 'Burpham and the Lead Coffin', but this article can be read independently.

Burpham and the surrounding area is rich in predominantly Anglo Saxon history. However, extending just south of Burpham Village and St Mary's Church lies an Iron Age promontory fort, later occupied as an Anglo-Saxon burh. This fort is situated on a long, narrow, elevated area of land, overlooking the flood-plain of the River Arun.

The area was settled in Neolithic and Iron Age times and remains have been found to this effect. The Romans came to this area in AD43, when the area was occupied by a Belgic tribe, the Atrebates. After the Romans left in AD 410 the area was filled by a group known as South Saxons (from which the name Sussex is derived). Roman paving stones have been found in the churchyard. A Saxon Church stood on this site prior to the Norman Church we see today. There was also a story, way back, which is associated with the finding of 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.

James Sainsbury's archaeology group recently spent a few days on the 'Burpham Church Field' and despite deliberately looking for the lead coffin (referred to in Part 1), they have not as yet found anything (MWS8287 refers). The group did however recover a few Roman coins and also a beautiful (though broken) silver stirrup ring, dated to the 15th century.

The Iron Age enclosure is visible on Google earth, within the burh which stretches from the village green entrance towards Splash Farm in Wepham.



Splash Farm in Wepham, 1900, showing burh wall to the right of the building



Aerial Photo of Burpham and surrounding area (Image from Google Earth)

The typical construction of a burh was to find high ground, preferably already protected by water on one side. The area would consist of raised mounds of earth with a wooden palisade erected on top. Houses and barns would be constructed inside together with a central defensive building. In most cases a Church would also exist, although Burpham is one of three known burhs where the church is outside the defences. This was probably due to an existing church being there before the fort was built.

The huge walls of the fort/burh are particularly noticeable when looking at the height of the gardens on the hill towards the George and Dragon Public House and skirting the cricket pitch. It may be that the cricket pitch sits on top of the old fort. The entrance to the village green is generally regarded as the entrance to the fort.



Aerial Photo of Burh/Fort (Image from Google Earth)

Descent to the River Arun can be achieved by walking down Jacobs Ladder (just past the existing children's play area) which in effect is the side of the fort. The River Arun also played a defensive position, being tidal and having a large, un-drained, flood plain.

The promontory fort is bounded by steep natural cliffs on all except the north side. It is about 700 metres north-south by 250 metres east-west, reducing to 50 metres towards the centre and widening again to about 150 metres at the south end. The north end is enclosed by an earthen rampart, formed of a bank up to 7 metres high with an external ditch, and with an entrance cut into the rampart at the centre. The interior of the fort falls gently southwards, the cliffs reducing in height from about 15 metres to 4.5 metres. 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 8 metres wide and 1 metre high, but has been reduced by River Arun flood waters and an inner ditch present here has silted up.

Partial excavation was carried out on the site in the 19th century and sherds of late Saxon pottery were found within the interior of the fort in around the mid 20th century. During 1972-1973 part excavation was undertaken prior to the erection of the cricket pavilion which is now at the northern end of the site. About 170 postholes were uncovered. 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 perhaps a small area, perhaps a 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. Alfred the Great (871-899), is mentioned as an original builder and the burh was probably later enhanced by Edward the Elder (899-924) as a defence against the Danish invaders coming up the River Arun.



Photo of Burh taken from the road which runs from Arundel Railway Station, Crossbush Lane towards Burpham - taken on the east side looking west in the direction of Arundel.

Burpham is mentioned in the early 10th century Burghal Hideage list (a survey of defended places), as a burh holding 720 hides.

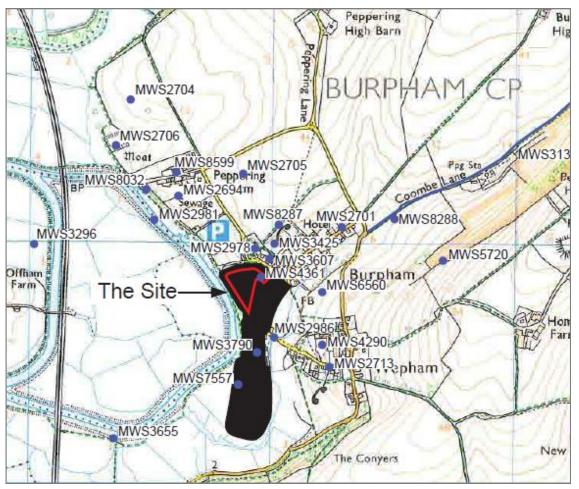
The average sized burh garrison would have less than a thousand men. Each man in the garrison would have been drawn from a hide of 120 acres, each of which needed to be assigned by the landowner, with each hide expected to support that man with its produce. As a comparison, Winchester and Wallingford each were assessed at 2,400 hides.

In early Anglo-Saxon England the hide was used as the basis for assessing the amount of food rent (known as feorm) due from a village or estate and it became the unit on which all public obligations were assessed, which included, in particular, the maintenance and repair of bridges and fortifications and the provision of troops for manning the defences of a town or for a defence force known as the 'fyrd'. For instance, at one period, five hides were expected to provide one fully armed soldier in the King's service, and one man from every hide was to be liable to do garrison duty for the burhs and to help in their initial construction and upkeep. A land tax known as geld was first levied in 990 and this became known as the Danegeld, as it was used to buy off the Danes who were then invading and ravaging the country. Danegeld literally means 'Dane Yield' or tribute. It was raised again for the same purpose on several occasions. The already existing system of assessment of land in hides was utilised to raise the geld, which was levied at a stated rate per hide (e.g. two shillings per hide).

The hide was a measure of value rather than a measurement of area, but the logic of its assessment is not easy to understand, especially as assessments were changed from time to time and not always consistently. By the end of the Anglo-Saxon period it was a measure of 'the taxable worth of an area of land', but it had no fixed relationship to its area, the number of plough teams working on it, or its population. Nor was it limited to the arable land on an estate. It is noticeable that there was a general tendency throughout Domesday for a hide of land to be worth £1, or, put another way, for land producing £1 of income to be assessed at one hide.

After 1066, the Normans in Sussex under the control of Roger de Montgomery (1005 to 1094) concentrated their defensive efforts on building the castle in Arundel. Eventually Montgomery left to become Earl of Shrewsbury and to build many of the Welsh border castles found today. The last Norman to control the area was the Baron John FitzAlan (1348 to 1379) and when the last died without male issue the land became the property through marriage of the Duke of Norfolk. As a tribute to the FitzAlan family the then Duke added FitzAlan to his name to become the FitzAlan Howards and it is this family that still lives here and owns the land around us. Amongst his many titles, the Earl of Arundel is the oldest continuous title in England.

A one kilometre radius search by West Sussex County Council Historic Environment Record, centred on the burh site, has the following entries relating to archaeological sites or find spots (see map on following page). In addition a further twenty three listed buildings were identified within the same search area. With the exception of the Grade I Listed Parish Church of St Mary all of the entries relate to Grade II houses or barns dating from the early 17<sup>th</sup> century.



MWS2694 Saxon burial mound 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 garden of Elmbank. Early Bronze Age

MWS2704 Palaeolithic axes found on ground surface in field north of The Green Garden. Palaeolithic

MWS2705 Gold coin of Cunobelin found whilst ploughing east of Peppering House. Gold stater of c. 150BC found whilst ploughing near Burpham Church. Potential both refer to the same coin. Iron Age

MWS2706 Moated area northwest of Great Peppering measuring c. 60yds square. Medieval pottery found in area. Medieval

MWS2713 Follis (coin) of Maxentius (Roman Emperor AD306-312) found close to a roadside bank. Roman

MWS2978 Church of St Mary the Virgin. Pre-conquest north wall of nave with 12th-century, 15th-century and modern additions/alterations. Late Saxon / modern MWS2981 11th- to 12th-century amber glass vessel found in the bank of the river at Burpham and may be a near-eastern import.
Early medieval

MWS2986 Location of former tide mill on the Boundary Brook immediately east of Burpham Camp. Medieval

MWS3296 Possible Bronze Age urn from a barrow near Peppering. Bronze Age

MWS3313 Terrace way known as Leper's way ascends out of Peppering Bottom. May be of Roman origin but more likely thought to relate to the possible leper settlement at Lee Farm /? / Medieval

MWS3425 Neolithic axe found in the Burpham area. Neolithic

MWS3607 Sestertius (coin) of Antoninus Pius (Roman Emperor AD138-161) found in 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 /?/ Iron Age or Roman

MWS3790 Burpham Camp. Scheduled Monument WS 48.See above. Saxon and /?/ Iron Age

MWS4290 Earthwork building platform in a field 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 uncertain date. Undated

MWS5720 570yd long and 25-30ft wide terrace runs along west side of Perry Hill.

MWS6560 Cast Iron water pump and horse basket in close proximity in Burpham Village. Post-medieval

MWS7557 WWII Home Guard firing butts. Modern

MWS8032 Malt House shown on 1875-5 OS 25" map west of Peppering Farm. Post-medieval

MWS8287 Approximate location of lead coffin found in 1950s when tractor wheel sank into grave whilst ploughing. Unknown

MWS8288 Short stabbing sword found by Leper's Lane in 1930s /?/ Roman

MWS8599 Green Garden Cottage. Originally built around AD1400 (if not earlier) as an open-hall house of at least four bays. Medieval.

To be continued:

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Burghal Hidage -914AD – During the reign of Edward the Elder

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West Sussex Historic Environment Record

### The Ancient Windmills of Highdown

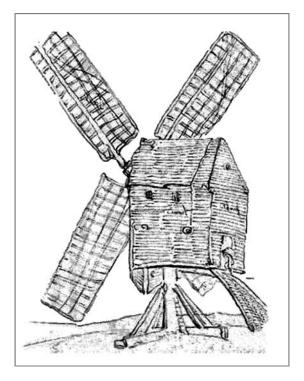
By Alex Vincent

The windmill, which stood on Highdown Hill at the south-western end of the hillfort, was built in the 16<sup>th</sup> century. It is marked on the Armada map of 1587 as "highe downe mille". It is also marked on John Speed's map of 1610 and on George Randall's map of West Ferring of 1621. This mill was used as a signal post for the Armada. John Olliver milled in this post mill during the second half of the 18<sup>th</sup> century. It was demolished in 1826/27 and on the site today is a mound where it once stood.

Windmills may have existed on this site since the 12<sup>th</sup> century. In ca 1190 Bishop Seffrid II built a windmill on Ecclesden Hill (Highdown Hill) and granted it to his steward Thomas of Ferring. Shortly afterwards Thomas granted it to Tortington priory, which then was sold to the dean and chapter of Chichester in 1197. The latter then granted the mill's vacant site to William de Vescy to rebuild it. There was a windmill and a watermill in the manor of Ecclesden in 1324.

The bishop had his own mill at Ferring by 1210. The manorial windmill had blown down shortly before 1362, but had been rebuilt on Highdown Hill (Grenedon) by 1380 and again by the mid 16<sup>th</sup> century. It is possible that these Medieval windmills stood on the site of the later mill, which John Olliver worked.

In Goring, a windmill (possibly on the Downs) was included in Haydon manor in about 1320, but a new one was erected in 1346/7 for the lord. In 1432 a West Field included a Mill Furlong. The dean and chapter were landlords of Ecclesden or Highdown Mill in 1595. Was this windmill on the same site as the later Highdown Mill? It is possible that two windmills stood on Highdown near each other in Medieval times, one in the manor of Ecclesden and the other in the manor of Goring. One of the sites could be west of the hillfort where there is a group of trees.



It is possible that on the site of Highdown Windmill there could be burials of the Anglo-Saxon cemetery, which existed within the hillfort at Highdown. There is also a possible Neolithic flint mine complex on Highdown as well. There are pits to the north of the mill site, which may represent flint mine shafts and one of these may have existed where the mill stood. It is possible that a flint mine shaft was later used as a mill mound. Some Bronze Age barrows were used as mill mounds.

Archaeologists are hoping to carry out excavations on Highdown in the near future to find further graves on the mill site and further to the north. They could well find traces of the older mills, which may have existed here. These Medieval mills were smaller than the later ones and are likely to have sunken posts like others that were found in Sussex. These sunken posts were planks of wood (usually oak) in the form of a cross.



Site of Highdown Windmill. The Medieval mills could be on the same site. The mill mound may have once been a Neolithic flint mine shaft and Anglo-Saxon burials could also exist here.

(Photo by Alex Vincent)



A group of trees west of the hillfort, which may be the site of a Medieval windmill. The windmill, which John Olliver worked is to the right in the distance.

(Photo by Alex Vincent)

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### Dr George Dixon and Dixon's Pills

By Anthony Brook

The lockdown last April gave me an overdue chance to look through old files and discard lots of old papers. In so doing, I came across three photocopied pages from a local history book on the village of Storrington. At first, I wondered why I had photocopied and kept them, until I realised that they concerned Dr George Dixon, with an illustration of his business card (see below). The section about Dr Dixon in this book reads as follows:

Storrington in Georgian and Victorian Times, Joan Ham, 1988, 180-81

'An interesting 19<sup>th</sup> century gentleman of medicine was Dr George Dixon, [younger] brother of the Rev. Joseph Dixon, Rector of Sullington. He lived at West Chiltington parsonage, and was possibly apprenticed to Mr Curtis in 1768. He prescribed some anti-bilious pills for his wife, which became a generally-popular remedy. 'Pink pills for all Ills' was a catchphrase, and their fame spread as far as the colonial settlers in India and the Far East. A pill factory was established in Battcock's house, west of [Storrington] churchyard.

George Dixon evidently decided to practise his profession among the carriage trade and had [business] cards printed setting out the terms upon which he was prepared to attend patients [See below, 'Chiltington Parsonage, near Storrington, Jan. 6, 1800]. His fees were expensive. Consultation at his home cost 7 shillings, and each visit within 6 miles of his home half a guinea. This was a far cry from [Dr] James Coates, who charged a half-a-crown for a call to the Cootham Workhouse; certainly,

AT THE SOLICITATION OF SEVERAL RESPECTABLE FAMILIES,

Mr. GEORGE DIXON

PROPOSES

TO Attend PATIENTS upon the following Terms:

(MEDICINES INCLUDED).

Within the Diffance of FOUR Miles,
Attendance every Day.

TWO GUINEAS a Week,
ONE GUINEA,
Single Visits

HALF-A-GUINEA,
Advice at Home, Mondays, Wednesdays, and Fridays, from Nine
'till Twelve,
SEVEN SHILLINGS each Time.

Wiehin the Diffance of SIX Miles,
Each Visit,
HALF-A-GUINEA,
To TEN Miles,
Each Visit,
ONE GUINEA.

Childragton Parnomage, near Storrington, Jan. 6, 1800.

George Dixon's card

Dr Dixon was not to be called out by the poor people, whose wages were subsidised by the Parish to bring them up to breadline existence. There was one record of payment in the Overseer's accounts to Dr Dixon of £3 6s 6d in 1802, which might have been for attendance or a supply of medicine. Storrington's Society doctor died aged 58 in 1821, and was buried in Storrington churchyard. It was not the end of the pill factory next to the churchyard, however. In 1871 Elizabeth Battcock and Mary Puttock were living in Pill House in Church Lane, and Mrs Battcock was earning a living as a 'pillmaker', with Dixon's afterwards, in brackets, in the Census records. She was 93 years old, and had been in business for at least the previous 20 years. Elizabeth Battcock lived to celebrate her centenary [a remarkable achievement, for those times!]'.

George Dixon was the paternal uncle of Dr Frederick Dixon, celebrated geologist and archaeologist of Worthing, and the creator and entrepreneur of Dixon's Pills. He was born in 1763 in Westminster, and died in 1821 in Storrington, West Sussex, aged 58. He was apprenticed to William Curtis, surgeon, in 1768, and qualified as a surgeon, i.e. doctor, in 1785, aged 22. The next year he married Elizabeth Mason, but there were no children of the marriage. In due course, using his apothecary's knowledge, he prescribed some home-made, anti-bilious pills for his wife. They were so efficacious that he began recommending them to all his aristocratic friends and acquaintances. Rave reviews only encouraged him to go into business, making and marketing Dixon's Antibilious Pills on a large scale. By the mid-1790s he was making and selling thousands of his little pink 'Pills for all Ills'.

In 1795 he moved to Chiltington Parsonage, and, 5 years later, had Business Cards printed, offering his expensive services as a surgeon to the local Sussex gentry (see Figure). By the turn of the century, Dixon's Pills had become dominant in his life. By 1801, they were available everywhere in the UK, at 5s 9d per box, or 1 guinea for 5 boxes—an expensive remedy for the time.

Dr George Dixon moved into a large house in the centre of Storrington in 1803, and acquired neighbouring lands in 1813 and 1817, land situated below the bank in Storrington churchyard, which was where the pill-making house was located. Later in the 19th century, it became known as Dixon's Field.

He died in 1821, with an obituary in The Times on 29 June, by which time Dixon's Pills were famous throughout the burgeoning British Empire. He died a very wealthy and world-famous man, having made a small fortune from a medical cure-all for the time. The business of Dixon's Pills was continued under his elder brother and partner, Rev. Joseph Dixon, of Sullington. When he died 3 years later, it was continued by two of his sons, Rev. Henry Dixon, later Vicar of Ferring, and Dr Frederick Dixon, and provided a steady source of unearned income for many years for them both, thanks to their uncle's entrepreneurshin

The Battcock family, who had for many years and several generations, made the pills in the Pill House next to Storrington church, continued to do so until the end of the 19<sup>th</sup> century, by which time Dixon's Pills were superseded by more scientifically-based medications.

# Central Hearths and Drystone Walls

By Cheryl Hutchins

As autumn turns to winter and the temperature drops and the nights get longer, we instinctively creep closer around a cosy fire, be it an open fire, a log-burner or more humbly in my case, a gas fire with fake flames. We are programmed to seek out the comfort and warmth of a hearth. Just like those who have gone before us.

You don't need to go far to see the truth of this. At the Weald & Downland Living Museum in Singleton, there are houses from the early medieval period built around a central hearth. Part of the village of Hangleton in East Sussex was excavated by Eric Holden, and John and Gillian Hurst, between 1952 and 1954, and its buildings date from the thirteenth to the fifteenth centuries (Holden, 1963, & Hurst & Hurst, 1964). A reconstructed house based on two of the original thirteenth century floor plans can be seen at the museum. This consists of a 2-roomed, flint-walled, thatched building, an inner room with a domed oven and the outer with a central hearth cut into the chalk floor. The outer room was where the domestic activity of the household took place, while the oven in the inner room is thought to have been used for baking bread for sale outside the village, or perhaps for drying barley malt for ale brewing, to provide an additional income for its peasant inhabitants for whom life was precarious (www.wealddown.co.uk/explore/buildings/

Also reconstructed at the museum is the Wealden hall house from Chiddingstone, Kent, known as Bayleaf, the earliest part of which dates to the early fourteenth century and has been incorporated into a Tudor farmstead by the addition of surrounding buildings, not originally connected to the house itself. The name "Wealden" is given to a style of house built with a recessed front wall to the hall and jettying to the front of the upper and

further-readisng/hangleton-medieval-village/).

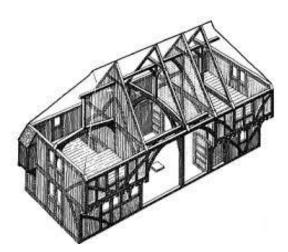


Figure 1. : Bayleaf
(drawn by Richard Harris in Houses of the
Weald & Downland by Danae Tankard)

lower ends. This was a high status house built to impress passers-by with its prominent jettying, and, while now forming a homogenous whole, has at least two or three building stages. Medieval hall houses consist of a hall open to the roof with a central open fire to provide cooking/heating facilities, where everyone on the farm met to conduct farm business and to eat as a household. This hall was flanked by an "upper" or solar end for family privacy of its main occupants, and a "lower" or service end for the making of dairy products and brewing with an overhead chamber for farm produce storage/probable extra sleeping space for servants, some of whom slept on the floor of the hall. The arrangement of the high end table against the inner wall of the solar and marked by a moulded dais beam and bench facing down the hall to the tables where the less important workers/servants sat for meals around the central fire, illustrates a clear hierarchy within

the household. Figure 1 shows the square hearth at the centre of the house from which smoke rose through the open crown-posted roof and filtered through the thatch.

From the comparatively recent past of 700 years ago in southern Britain, we move to the Neolithic villages of Orkney at the northern tip of Scotland. The most well-known of these is Skara Brae, built in two distinct phases, the first phase dating to 3100BC and the second, constructed over the remains of the first, dating to 2800BC. A severe storm in 1850 blasted the sand from the stone-built village which was originally already half-buried in an existing midden for insulation and protection. The eight houses are grouped



Figure 2. Plan of Skara Brae



Figure 3. Inside of later house showing "dresser", bed, niche in wall, square hearth, and quoin stone (photo C Hutchins)

together and connected by pathways although house 8 is separated and probably had a different function. Houses 1-7 follow a similar pattern of one room with a stone construction which we have labelled a "dresser" only because it looks like one, opposite the doorway. A square slab-built hearth lies at the house's centre and beds lie within the wall in the earlier houses and are built of stone slabs projecting out into the room in the later houses (Wickham-Jones, 2013). From a glance at the map, we may wonder at the apparent loneliness of living on islands so far north but we should bear in mind that the Atlantic is a great highway, and in the Neolithic people and ideas travelled more easily by water than over inhospitable land masses. And the sea provided a rich harvest in especially shellfish, the shells of which formed the insulating midden in which the village lies. As the doors led out into a covered pathway and there were no windows to the outside, it can be seen that a hearth gave light as well as heat, especially during the winter.

A structure known only in the north-west of Scotland including the Northern and Western Isles, is the broch. In their original form these structures date to the 1<sup>st</sup> centuries BC and AD and their function is a matter for discussion (Wikipedia.org/wiki/Broch). They appear to be defensive and it is thought they were built to indicate status and authority at a time of tension. However some smaller ones may simply be the northern version of a farmhouse. However, one of the best preserved brochs is on the tiny island of Mousa, off the east coast of Shetland Mainland, and in common with many brochs, it overlooks a navigable waterway. It is over 13m high and consists of a windowless tower-like construction of two skins of dry-stone walling with stone steps within the walls. Timber galleries within would provide accommodation and animals were kept on the ground floor and in tunnels formed within the walls. Some illustrations showing a conjectured interior show a central hearth on the upper wooden galleries, and excavations have found evidence of a central hearth on the ground floor. A well or cistern was often sited on the ground floor.

As a further development, especially in Orkney, brochs were often surrounded by small stone-built houses, each with central hearths, more than one room, niches and "cupboards" and individual yards, such as are found at the Broch of Midhowe, Rousay and the Broch of Gurness, Mainland. These were added later around the brochs, some clearly reusing stone from the broch itself (Wickham-Jones, 2013).



Figure 4. Mousa broch (photo C Hutchins)

Standing 13 metres tall, Mousa has thicker walls than any other known broch and it was possibly unusually tall, father than simply a well-preserved normal broch, it probably survived because of fits height and the more readily available, easily-worked stone on the shore nearby.

Brochs were probably built to reflect the prestige and status of their inhabitants. Although they may have provided some pretection against sporalite raiding, their inhabitants were farmers like nearly everyone at the time.

There are no inter locals where the early will be a survive and took up his residence in the Broch of Mousal and made great proportions for define. where Earl Handl or and took up his residence in the Broch of Mousal and made great proportions for define. where Earl Handl or and took up his first than the seeignt the Broch and cut off all arminimization but it was deficiall to take it by associal.

Figure 5. Mousa broch site information board (photo C Hutchins)



Jarlshof on Shetland has remains representing thousands of years of habitation from the late Neolithic houses to the sixteenth century fortified laird's house in which Walter Scott set part of his 1821 novel The Pirate and which he named Jarlshof. The Norse built a substantial settlement continuously inhabited from the ninth to the fourteenth centuries, of which seven houses can be seen although no more than two were in use at any one time. The largest longhouse is a 20 x 5 metre rectangular chamber with opposing doors, timber benches along the long sides, and a hearth in the centre. This represented communal living under one roof and was also used to shelter domestic animals. This plan was so successful that it remained in use for hundreds of years, and developed by separating the animals from the family, and containing the central fire into chimneys often in stone-built gable ends into croft houses continued on well into the twentieth century over the Scottish highlands and islands.



Figure 6 & 7. Longhouses at Jarlshof (photos C Hutchins)

Remaining in the northwest of the Scotland, we can see so-called blackhouses as having their roots in Norse longhouses although their use was most typical through the nineteenth and twentieth centuries. Walls of blackhouses are made from an inner and outer layer of unmortared stones, the gap between filled with peat and earth. The wooden frame of the roof rests on the inner stone walls, giving a characteristic wall-ledge, and over this is laid a layer of heathery turves, and then a layer of thatch. The thatch would be secured by an old fishing net or twine attached to large rocks whose

Figure 8. Abandoned crofthouse on Isle of Lewis, Outer Hebrides (photo C Hutchins)



Figure 9. Restored crofthouse at Gearrannan Blackhouse Museum, Lewis (photo C Hutchins)

weight held everything down. Traditionally the roof had no chimney, the smoke from the peat fire in the central hearth would filter up through the thatch. The single entrance led to the living area at one end of the house, and to a lower end where the animals would be housed on an earth floor with a drain used for waste run-off. An area would be used as a barn for storage and processing of grain (www.undiscoveredscotland.co.uk/lewis/

blackhousemuseum/index.html).

George F Geddes draws attention to similarities between brochs and blackhouses, both having double walls of unmortared stone, a single entrance, and a style of roofing involving a wall-ledge. This naturally reflects architecture designed to withstand savage storms but he also conjectures that brochs were roofed with a wooden frame supported on the inner wall and draining over a sealed wall space to the outside. The roofing frame would have been thatched similar to those of blackhouses. The reasoning for both broch and blackhouse roof frames resting on inner walls is to give easy access when re-roofing by using the wall-ledge to stand on (Geddes). This is, without doubt the reasoning for such ledges in blackhouses, however at the height brochs are built to (Mousa is just over 13m), this theory involved a bold breed of thatcher.

The central hearth lived on into the twentieth century. Kirbuster Museum on Orkney's Mainland was inhabited for approximately 500 years but the oldest part is the traditional "firehoose" which appears in a farm rental in 1595, when it had a value of "1 barrel butter, 9 pultrie". One end of this building was used as a kitchen/living/sleeping room and the other end was where agricultural stores were kept alongside a small dairy projected out from the main house-wall. The building was heated by a central hearth which has no chimney, simply a lum (hole) in the roof which is offset from the fire so that rain or snow would not fall directly onto the flames. The peat smoke gravitated towards the hole in the roof. (https:// orkneymuseum.wordpress.com/category/ kirbuster-museum/). Similarities with the earlier houses at Skara Brae, stretching back into the Neolithic, are also reflected in the "neuk" bed (inserted into the wall). Kirbuster was lived in until the 1960's when the last family of 2 brothers and a widowed sister occupied this earliest part of the farm complex.



Figure 10. The central hearth and, just visible behind the hook, the bed in the wall (Photo https:orkneymuseum.wordpress.com/category/kirbuster-museum/)

We can see from our sample of vernacular houses through the centuries the similarities and differences which demonstrate a response to climate and weather both in the north and the south of Britain and, above all, reflect on the adaptability of the people who lived there.

All of the above dwellings are either in museums or are conserved in their historic landscape, but I remember visiting a house where the resident proudly pulled aside the hearthrug, and lifted a trap door built into the floor in front of the sixteenth century hearth, and revealed one of the former hearths, a square of tiles laid on end on a lower floor level: the central open hearth. And we don't know how many such hearths are preserved in private houses around the country and which are waiting to delight the interested researcher.

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Our gifted Society member Theresa Griffiths reminds us of happy, sunny days as she captures the final clean up of the lime kiln at Lambleys Lane. And we hope to return to more carefree work in the green gym this coming summer. Thank you, Theresa, for the good memories.

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All contributions to the Journal are very welcome!

Supply in Word format with inserted photos and send to Cheryl Hutchins, Editor

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