

LATE BRONZE AGE/EARLY IRON AGE SITE ON THE BANKS OF GORESEND CREEK, MINNIS BAY, BIRCHINGTON

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Following the overview of the intertidal archaeology of Minnis Bay in the 2017 volume, the Bronze Age and Early Iron Age part of the site has been examined in more detail. The finds relating to the site have been reviewed – both at the Powell-Cotton Museum (PCM) and British Museum (BM), together with the school magazine report written by Jimmy Beck, who discovered the site in 1938, and the report by Worsfold published in the Proceedings of the Prehistoric Society in 1943.

Maidstone Museum's (MM) 'Worsfold Papers' relating to the site, which include the original field book diary by F.B. Byrom (Worsfold's right hand man) and the full critique by Christopher Hawkes, then an Assistant Keeper at the British Museum, have also been revisited.

Two significant letters, dated 1970, have recently been found in the PCM's extensive archives. These were addressed to Ronald Jessop following the publication of his book, *South East England*, in that year. Jessop passed the letters to Antoinette Powell-Cotton, knowing her involvement at Minnis Bay, with a covering note saying that 'he had met with the writer of the letters once only'. He accepted the contents of the letters as fact.

The letters were from E.H. Newcome Wright, who explained that in 1932-33, when he was 14-15 years old, he had an interest in archaeology and had found some early pieces of pottery during the building of the new houses on the clifftop between Minnis Bay and Grenham Bay. In the summer, when there was a very low tide, he saw some men, possibly 'Fathers-on-holiday with their families', digging some 300 yards from the shore out beyond the 1895 wreck of the *Hero* (**Fig. 1**).

The letter continues:

The main site on which the men worked comprised a series of hollows some large (8 feet across?) some smaller in the rock area. In at least one of these, perfectly preserved woven wood 'floors' – I was so told they were – came to light. I recall my astonishment at seeing even the bark on the wood, which appeared to me to be cherry, as I thought, or possibly willow. It looked to me exactly like the woven hurdles then to be seen on the marshes between Birchington and St. Nicholas erected to provide shelter for the sheep. I was told by one of the men that bronze tools and an axe (axes) had been found and I myself saw the men find two or three bronze 'needles', or now I think more probably large pins, from between the weave of the woodwork.

For my part I was told to work at the edge, or rather told to get out of the way ...



Fig. 1 Plan showing location of Minnis Bay creek and the BA and EIA pits.
 (© Courtesy Trustees of the Powell-Cotton Museum.)

It was however rewarding. All along the perimeter of the site where the sand ended and the rocks began I uncovered what even I recognized to be a low protective bank to the site as if what now formed the sands of Minnis Bay had then been lower, probably marshy land. I uncovered the bank to a depth of some 18" and of some 6' or more in length. It sloped at about 45 degrees and what has always stuck in my memory is my amazement at its apparent construction. It appeared to me to be made of tamped chalk faced with broken flint and put me in mind of the appearance

of many Kent churches, old farm buildings and walls. It remained firm and solid leading me to think that there must have been a good depth of each flint behind its black outer face driven into the chalk.

Newcome Wright's reason for writing to Jessop was to ask his opinion as to whether what he had seen and found could be a new Bronze Age site in Minnis Bay. Jessop deduced from the information given that the pits in question were part of the Beck site, much to the disappointment of Newcome Wright.

This revelation by Newcome Wright preceded the find of Jimmy Beck's Bronze Hoard by 5-6 years but no record of the finds made at the time exists. Antoinette Powell-Cotton, assisted by John Clements, did however excavate a hollow, Pit K, in 1966. This pit was 300 yards from the shore out beyond the wreck. It was 5ft 0in. in diameter, depth 2ft 0in.-2ft 6in., with a filling of dark mud with some chalk and flint knobs, but no signs of worked flint. Finds included small pieces of bone and one small black rim sherd with herringbone decoration made by finger (nail) or stab. This sherd (**Fig. 2**), when washed in clean water, showed up a white infill in the decoration indents, which was definitely intended and was not surface chalk as first thought. Antoinette Powell-Cotton established that this sherd was similar to one illustrated in E. Cecil Curwen's book, *The Archaeology of Sussex* (1938, p. 247, fig. 79).



Fig. 2 Early Bronze Age sherd, 2000-1600 BC, found in Pit K in 1966.
(© Courtesy Trustees of the Powell-Cotton Museum.)

In 2017 Nigel Macpherson-Grant re-examined this rim sherd and assessed it as being from a large diameter storage jar, giving it a likely date of 2000-1600 BC. He concluded that it was 'from a Potbekker similar to rusticated Beakers from East Anglia' (cf. Bamford H. 1982).

The Bronze Hoard Site

The finding of the Minnis Bay hoard in April 1938 by 14 year-old Jimmy Beck and its subsequent excavation recovered 51 pieces of bronze, and many sherds. During these excavations Beck began to think that he had found the site of a Bronze Age fishing village built round an open space on the banks of the creek that once

flowed out to sea at this point in Minnis Bay (Fig. 1). All this and the subsequent excavations indicated that Minnis Bay was a flourishing port during the Bronze Age. Some of the finds give evidence that this navigable creek at Minnis Bay close to the northern mouth of the Wantsum Channel, was part of the important shipping route connecting the English Channel with the Thames Estuary trading with Northern Europe (Allen 2012).

As previously recorded (Gibbons 2017, 257), F.H. Worsfold had contacted Christopher Hawkes of the BM in March 1939 and invited him down to visit Minnis Bay. Hawkes commented after seeing the site, 'the circumstances of the discovery I really think likely to make the scientific value of it quite exceptional'.

On Hawkes' advice, Worsfold formed a team including Beck and his friend R. Grace, together with F.B. Byrom and Roy Carr, both amateur archaeologists, to excavate the site further. Despite grave illness, Beck was able to help on the Bay and answer questions about his original discovery of the hoard. Beck had read *The*

Mr Walker, says, "Towards the end of the Bronze Age, types of tools began to increase. New tools being the gouge and chisel. At Minnis Bay, there is an immense amount of woodwork. In the collections of Bronzes there are two gouges, one chisel, but no adze or flat axe.

He says that the adze was for the shaping of the woodwork and hollowing out dugout canoes. As Minnis Bay site, was probably a trading village, trading with Gaul,

Fig. 3 Page from Beck letter showing sketches of BA tools.
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Bronze Age by W.F. Walker (1938), loaned to him by Antoinette Powell-Cotton's father. Beck's letter of thanks to him, dated 7 October 1939, (**Fig. 3**) describes what he had observed and relates it to the comments made in Walker's book:

Mr. Walker says that towards the end of the Bronze Age, types of tools began to increase. New tools being the gouge and chisel (see **Fig. 4**). At Minnis Bay there is an immense amount of woodwork. In the collection of bronzes there are two gouges, one chisel, but no adze or flat axe.

He says that the adze was for the shaping of woodwork and hollowing out dugout canoes.

As Minnis Bay site was probably a trading village, trading with Gaul...'

Beck had already located 16 pits or hollows where Bronze Age (BA) artefacts were found before the team began excavating. A further seven new pits adjacent to the hoard site were added to Beck's list. It appears that Worsfold left the task of recording the dig to Byrom, who wrote it as a dig diary. The 1939 excavation began on 10 June and ended on 23 August. The pits were excavated over 19 days. Byrom recorded the names of the participants each day as well as recording the finds. He also produced drawings of the pits. A trench was excavated to provide a west to east section of the site, 3ft north of an established base line (**Fig. 5**).



Fig. 4 Photo of gouges etc., from Beck Bronze Hoard, photographed at BM 2016. (Copyright Trustees of the British Museum.)



Fig. 5 Worsfold's team digging the trench in 1939 for west/east section.
(Reproduced courtesy of Maidstone Museum.)

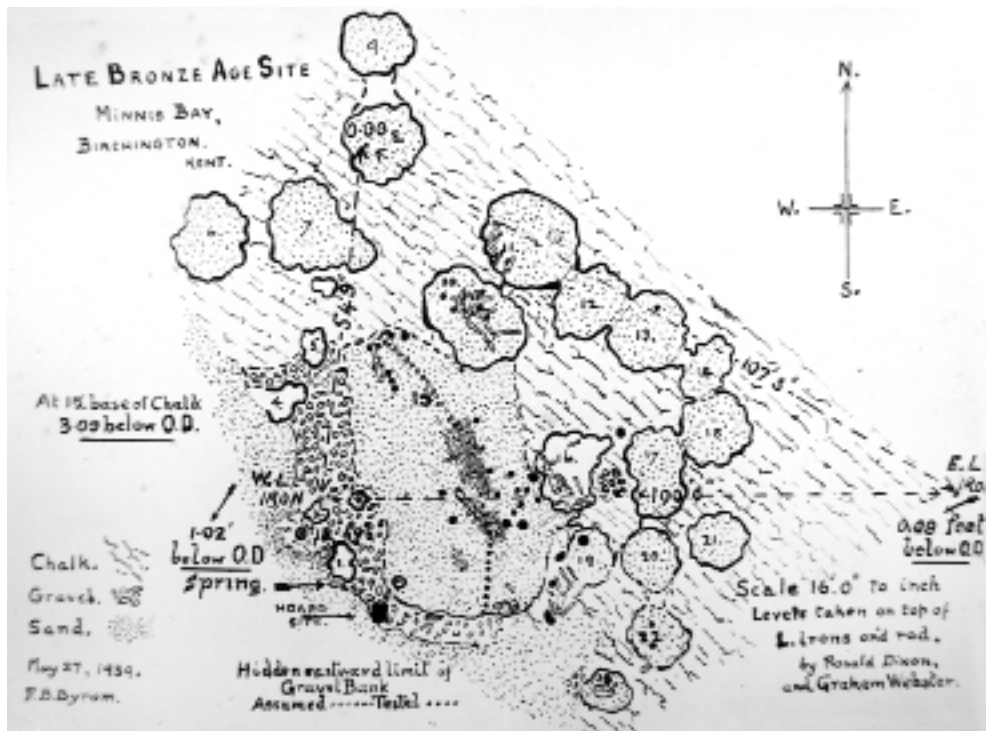


Fig. 6 Byrom's 1939 scale plan of Bronze Age site.
(Reproduced courtesy of Maidstone Museum.)

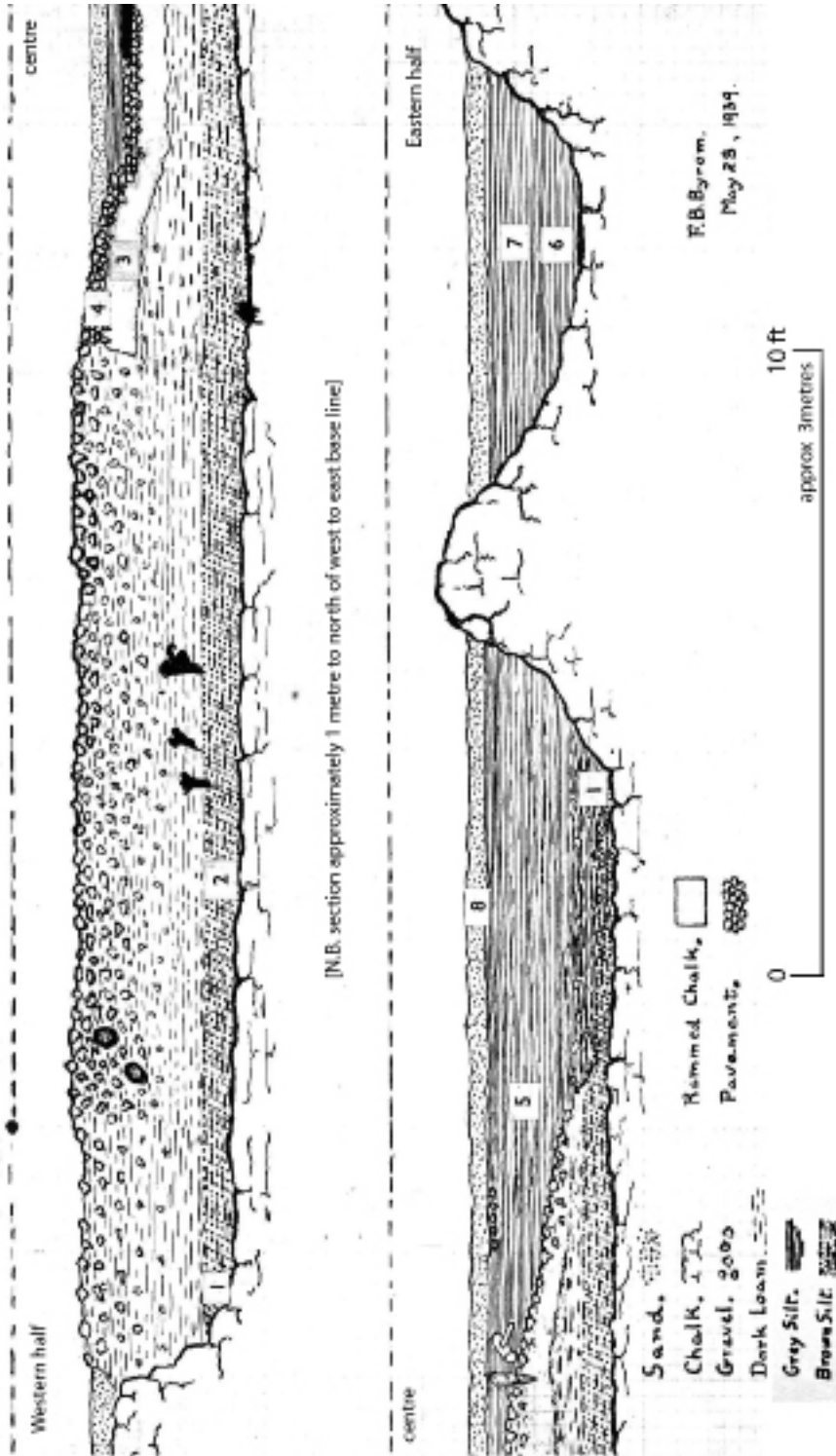


Fig. 7 Cross section of BA site, west half (top), east half (bottom). (Reproduced courtesy of Maidstone Museum.)

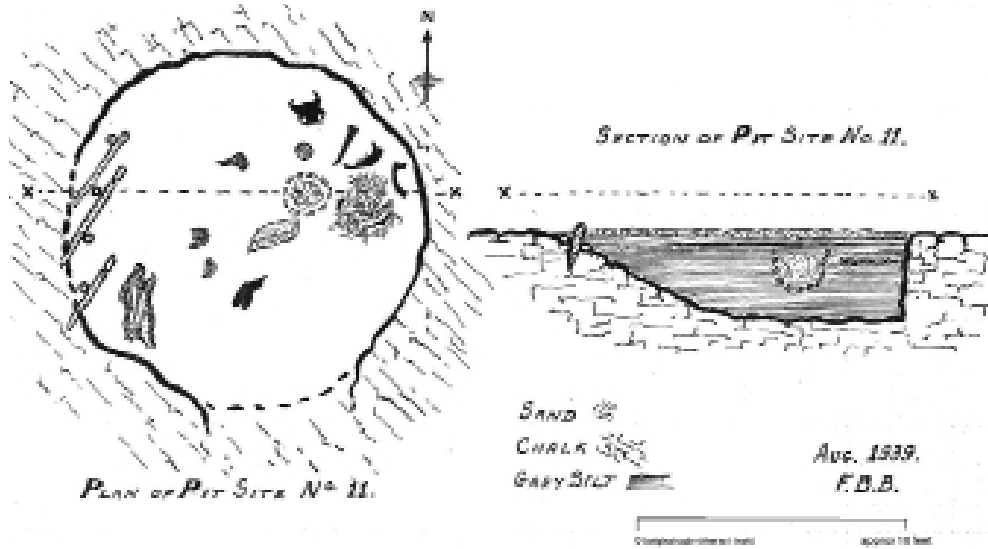


Fig. 8 Pit BA 11; detailed plan and section showing profile.
(Reproduced courtesy of Maidstone Museum.)

It was the Byrom general plan (**Fig. 6**) and the excavated section (**Fig. 7**) that enabled Hawkes to provide a constructive critique for Worsfold's final publication. Samples were also taken by Worsfold for analysis by experts recommended by Hawkes.

Some of the pits were only shallow depressions being at the most 1ft 0in. in depth, with one pit being 4ft 0in. deep. The size of the pits ranged from 42ft x 24ft across to 2ft 6in. x 3ft 0in. The shallow nature of some of the pits probably meant that they had been eroded over the years, in 1939 Pit BA 11 (**Fig. 8**) measured 12ft 0in. in diameter but it had been reduced to 9ft 0in. by 1966! Several of the pits had a common profile. The sides were vertical and the base was level over part of the pit with a section sloping up to the top edge.

As the excavation progressed the team was surprised by a freshwater spring appearing just over 1ft below Ordnance Datum in the upper edge of the gravel adjacent to the Beck Hoard site. Late Iron Age (LIA) shaft bases in the seabed to the east had evidence of seeping fresh water. (Gibbons 2017, 260).

Worsfold included in his report a schedule of all the pots together with a list of 32 other sherds all of which were fully recorded and drawn (*Proceedings of the Prehistoric Society* 1943, p. 36). Timber was a key feature in this group of pits. Hawkes on being consulted summed up Pit 10 (**Fig. 9**) as follows:

No. 10. The structure here appeared to be a 'sturdy platform' built towards the N. end of the pit, consisting of upright stakes on piles driven into the chalk bottom, with three courses of horizontal timbers lying between them. The top course including a squared timber like a railway sleeper in the middle, and long roughly trimmed boughs on either side of it leading off towards the N and SE edges of the pit. These are supposed to be as it were joists for a wattle floor, which will have been secured to the pit edges all round.

The plan on Pl[ate] 15 shows that 5 upright stakes were found forming the

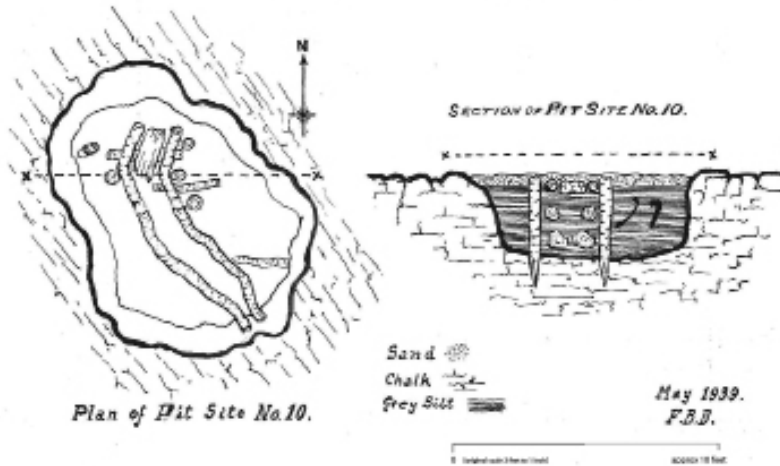


Fig. 9 Pit BA 10: detailed plan and section showing timber construction. (Reproduced courtesy of Maidstone Museum.)

vertical members of the platform ... (The plan Pl[ate] 6 shows them arranged a little differently).

I imagine that you presume that these are just the survivors of a larger number, making the structure more substantial and perhaps extending over more of the pit.

Pit BA15 contained a wattle panel with a timber baulk beyond (Fig. 10) similar to that described by Newcome Wright.

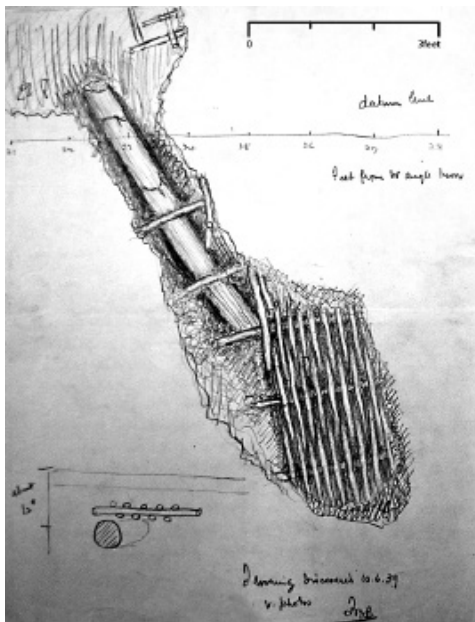


Fig. 10 Drawing by Byrom of wattle and timber in BA 15. (Reproduced courtesy of Maidstone Museum.)

The first report on the BA site written by Worsfold

Work on the site came to a halt when war was declared on 3 September 1939. Worsfold set about the task of collating all the information recorded in Byrom's notes together with any photographs taken by him or any other helpers. His subsequent report laid out all this information together with his own interpretation of the site. In early 1940 he sent the finished report, drawings and photographs to Hawkes. His first comment was on the length of the typewritten report, approximately 22,000 words, which meant that in the light of the wartime paper shortage, the report would not be accepted for publication in *PPS*. He then suggested that it could be cut to 18,000 words including the expert reports. Worsfold incorporated some of Hawkes's recommendations in his final submission to *PPS*.

Hawkes found the plans and sections of the site a little confusing. A letter to Worsfold dated 9 April 1942, succinctly outlines his views, prior to the fully detailed nine-page 'Queries & Comments' that followed a few days later:

I think the occupation must be divided into two periods. Both are Late Bronze Age, and by the same people. But the first was before the site was flooded, and is represented by the big excavation 15 and the pits. There must also have been timber buildings in this period, but they cannot be identified.

The site then suffered some amount of flooding, leaving some amount of clayey silt behind it, and after that the inhabitants returned, built the gravel bank and rammed chalk flooring over 15, and constructed a new lot of buildings, for which stakes were driven into the wet chalk, where necessary down through the flood-silt into the bottoms of some of the pits, and also into the rammed chalk flooring just mentioned – also, besides, into the chalk surface itself, but the sea must subsequently have planed most of the traces here away.

Finally, the site was completely flooded and abandoned. My view is, in fact, that the pits and the timbers do not go together, but are successive features.

The settlement thus began as a dry-land village, and ended as a wet pile settlement.

Of course, this will give a very close dating to the subsidence which caused the flood, and to the further subsidence which drowned the site altogether.

The earliest pottery is so Continental in type that it cannot be appreciably later than the first arrival of the Late Bronze Age immigrants from the direction of the West Alpine region, and I think we may safely put this about 750 B.C. One can hardly allow less than half a century for the first period, though it might be as much as a century – thus, 750 to 700 or 750 to 650 B.C.

The flood will then be dated 700-650 B.C., with the second period following, for another half century or century, this will leave the renewed, final flooding, causing the abandonment of the site, to follow about 600 B.C.

The Bronze Hoard must belong to the second period, of course, and this agrees with the types represented in it, the socketed sword, in particular, being not a primary associate of the Late Bronze Age immigration typologically, but a slightly later British development.

You will of course realize that in putting forward this interpretation I am going against you in several important respects, as well as in details. I take your conception of the site as a dry-land one as correct, but only for the first period, and I take the pits then dug as not the 'basements' of little huts, but as pits, for storage or what not, as we know them in this same period at Scarborough [Yorks.], and in more developed form in the Iron Age farmsteads like Little Woodbury, or villages like All Cannings

Cross [both Wilts.]. The big excavation 15 seems then most naturally explicable as a working-hollow for hand threshing of grain, as at Little Woodbury.

Hawkes concluded in his letter that what did remain of the timber showed that oblong or rectangular buildings once existed. He was sceptical about the horizontal wattle-work being flooring. He saw it as ‘fallen wattle walling, as at Glastonbury Lake village’.

Throughout his analysis Hawkes emphasizes that these were his considered opinions and that they were ‘solely to help make the published account worthy of the devoted labour you all put in the actual work of excavation’. He had also made a caveat in his analysis that it may be cut quite heavily by the editor as space was at a premium. This did happen (see *PPS* 1943) and was a great disappointment to Worsfold who felt that the published article did not fully reflect his original report.

Excavation resumes

After the War in 1953 Antoinette Powell-Cotton returned to Quex Park from London and with encouragement from Hawkes she resumed excavating at Minnis Bay in her spare time. It was not until 1957 that she decided to re-open the Bronze Age pits excavated by the Worsfold team (**Fig. 11**). She felt that the original excavations may not have been cleared out thoroughly due to the military restrictions. She extended the Late Bronze Age (LBA) site by excavating a further five pits. She found a few pieces of bronze, which were given to the BM, together with a few pottery sherds including pieces of briquetage.



Fig. 11 The re-opened BA site, Pit 10 (1957 photograph by Antoinette Powell-Cotton).
(© Courtesy Trustees of the Powell-Cotton Museum.)

Antoinette Powell-Cotton additionally found a series of Early Iron Age (EIA) pits in a line running south-east from the BA site along the eastern edge of the creek. These pits were coded as the alphabet pits. The first of these pits, Pit A (or 'orange pit' as labelled by Byrom on his plan) is 54 yards to the south-east of the Hoard site. A few of the early alphabet pits on the east bank, some being hollows without finds were re-lettered as satellites of an adjacent significant pit. Others were located on the west bank (see Fig. 1) and beyond towards Reculver.

The east bank of the creek

Like the BA pits several of the EIA pits on the eastern bank contained large baulks of horizontal wood and posts. Plotting these timbers on a plan shows a line running from the north-west and the BA site to the south-east along the eastern creek edge. Wooden remains were found in the majority of the pits in this series. Items found included posts of various diameters together with obvious post holes. The pot sherds from the foreshore alphabet pits confirmed EIA, with the exception of Pit Q, which contained largely Late Iron Age (LIA) to Mid Roman (MR) sherds but it did have 51 sherds from the EIA to Middle Iron Age (MIA).

Four of the pits yielded animal remains including two cattle skulls and other bones from ox, sheep or goat (identified by the BM). Some human bones were also found. Botanical remains occurred including patches of decayed straw or thatch and grass in Pit D; what appeared to be a small patch of rushes and a piece of skin from a puffball fungus of the genera *Calvatia* or *Lycoperdon* was found in Pit E (Fig. 12). Despite the age of these pits, well-preserved beetle remains could still occasionally be found, along with a few small land snail shells, within the filling of the pits. No seashells were recorded in the eastern bank pits.



Fig. 12 Chalk foreshore showing Pits D and E, with *Hero* wreck at sea edge.
(© Courtesy Trustees of the Powell-Cotton Museum.)

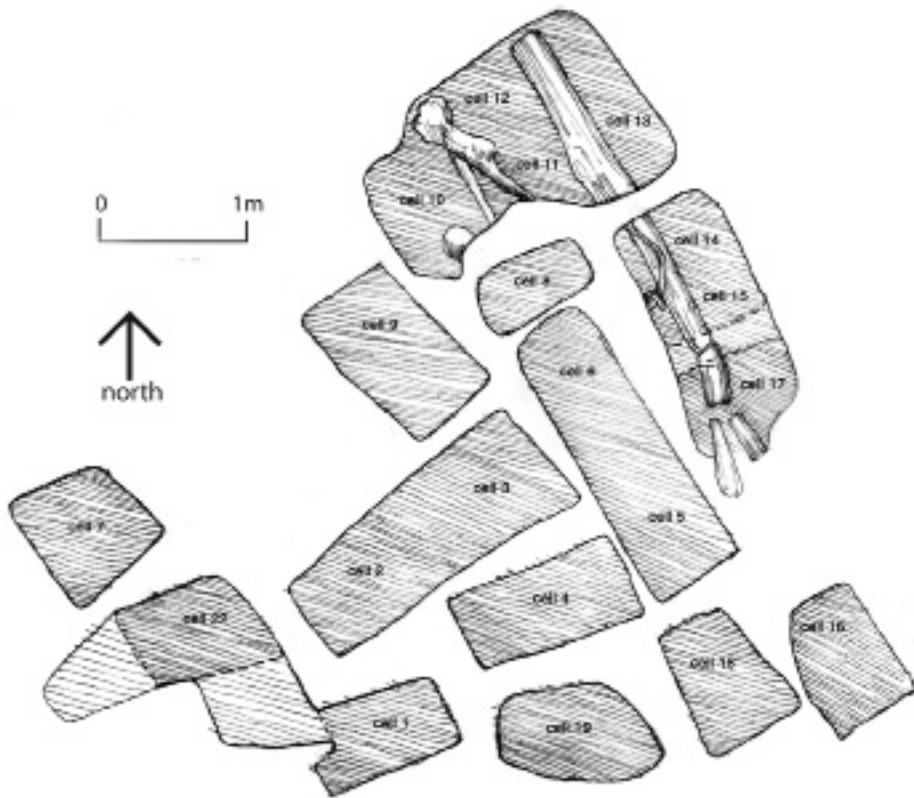


Fig. 13 Plan of Early Iron Age Pit N showing the cells as excavated.
(© Courtesy Trustees of the Powell-Cotton Museum.)

Pit N was the largest and the most south-easterly of the EIA pits (**Fig. 13**). The pit was excavated as a series of 22 cells to accommodate the timescale for excavation between tides. The finds attributed to Pit N include some more generally located material found on the surface.

The impression gained from the fill of this pit is that it contained a fairly high quantity of small sized, sometimes very abraded body sherds, which could suggest an initial deposition of 'sweepings' that predate the arrival of the fresher elements. The latter comprises at least 1 near-complete coarseware jar, the greater part of a fineware highly decorated fineware bowl elements and 2-3 other part profiles of coarsewares, all of which are near fresh and may represent the latest arrival, suggesting that the pit could have been open for some time. Although dated here between 950 and 750 BC on the basis of radiocarbon dates from the recent Cliff Farm excavations (Wessex Archaeology), the presence of the red finished pottery could, technically, suggest a date after 900 BC (Macpherson-Grant, 2017).

In all, this pit contained nearly 9kg of varying types of sherds, the greater majority of flint tempered coarseware. Seven red-finished fineware sherds were of especial

note and were analysed by the BM Department of Scientific Research. Three particular sherds, two conjoining, were from a remarkably concave-necked angle-shouldered bowl with heavy unifacial external abrasion. Notably, the pit also contained:

2 fresh conjoining sherds forming a fairly large unit from rim and upper body of an MBA type bucket jar, heavy coarse flint tempering, but thin walled. Decorated externally below rim with single horizontal line of spaced fingertip impressions, with 2 vertical lines of similar descending from latter downwards. Unique in context. The vertical aspect is similar to the example from Bon Secours, Ramsgate (BSE03). Also similar to a number from Ardleigh, Essex (Macpherson-Grant, 2017).

This example has been dated as 1550-1350 BC. Pit N also contained an intrusive sherd of organic tempered ware, which was very worn, possibly Saxon, 7th-century AD.

In Cell Group 10-13, towards the north-west corner, three pieces of wood were found (Fig. 14). One piece, which showed on the surface appeared to be rubbish, but

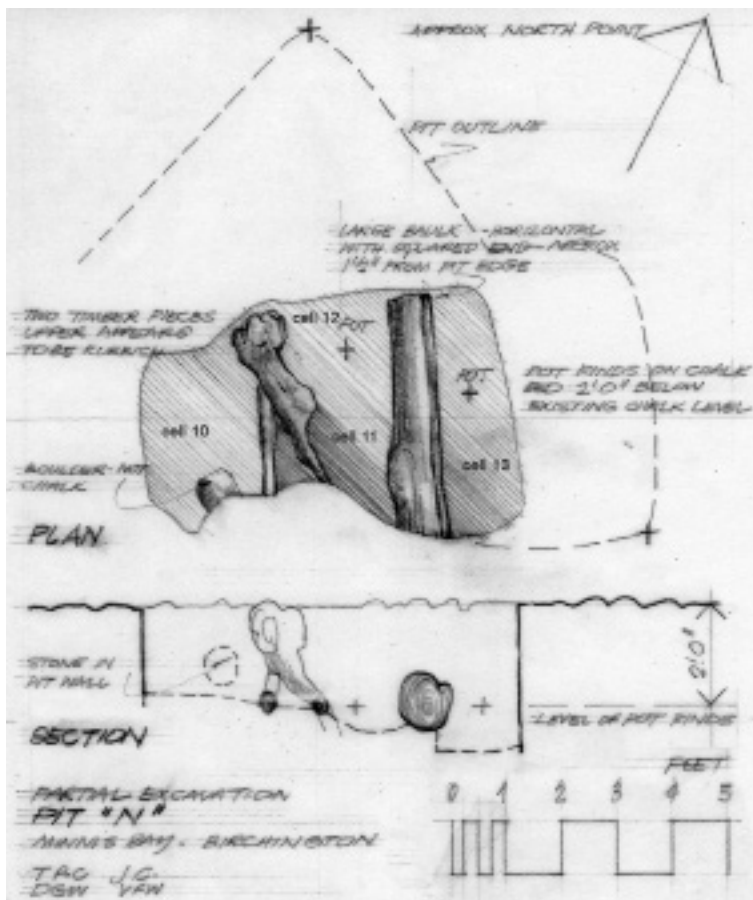


Fig. 14 Detail scale plan and section of cells 10-13 of Pit N locating timbers. (© Courtesy Trustees of the Powell-Cotton Museum.)

below it lay a slender rod. The third piece of timber was a substantial square-ended baulk, about 30cm x 30cm, which lay on the bottom 750cm down. Another 12.5cm x 68cm plank of timber found in cell 22 of Pit N has a square hole in the centre.

The west bank of the creek

On the low-lying west bank of the creek is EIA Pit U. Its dimensions were 2.13m x 2.45m, depth 60-73cm, and it yielded 256 sherds (2kg+), which have been recently re-assessed (paraphrasing notes made for the PCM by Macpherson-Grant in 2014 and 2017):

The assemblage contained fairly large quantities of elements from briquetage evaporation vessels, including body sherds, knife trimmed tops and ends and base angles (**Fig. 15**). Overall the assemblage includes both worn and mostly near fresh elements, of small to frequently large size. Some of the sherds showed both horizontal and in some cases vertical finger wiping, which is similar to another assemblage at St Mildred's Bay about 2.75 miles to the east of Minnis Bay. Some pieces show exterior salt deposits or staining and some have very worn interior surfaces.

... virtually nobody in the academic world knows that Minnis Bay, together with



Fig. 15 Briquetage sherds from Pit U, some showing salt deposit.
(© Courtesy Trustees of the Powell-Cotton Museum.)

St Mildred's Bay, has produced the largest assemblage of c. 1000-700 BC salt-making briquetage in the county and that the form of the evaporating vessels used has links all the way to contemporary settlements along the Atlantic coast of western France.

Vessels of this type were used in northern Europe for the production of salt, used for the preserving of food and in the tanning of leather from 2000 BC through to Mediaeval times. Salt was produced by collecting sea water in large open tanks and leaving it to evaporate naturally. When the brine was sufficiently concentrated it was transferred into smaller coarseware ceramic tanks, briquetage, that could be placed over fires and heated to concentrate and dry the solution even further. Many more briquetage sherds were found amongst the other EIA pits and on the BA site.

Pit U also contained sherds of various sizes, in a fairly fresh condition, of both fineware and coarseware from two other pottery vessels. One group forms a part profile of an elegant jar and the other is a jar rim with a neat cable style decoration on the rim and horizontal fingertip impressions on the shoulder. There was one piece of sub fineware. The sherds show signs that these vessels were either used in the salt making processes or had been contaminated by them.

A remarkable find in this pit was part of a wooden ladder (Gibbons 2017, 273). The ladder was leaning upright against the wall of the pit. The two uprights of the ladder are about 36cm apart at the level of the one remaining rung, which was mounted at a slight angle and wedged in place. There are three other rung positions, spaced at varying intervals ranging from 15cm to 24cm.

In addition to the specific pits covered above are larger areas where Antoinette Powell-Cotton gleaned the foreshore and found a considerable amount of Early Iron Age pottery. Two areas are within the confines of the original creek. Area V is associated with a specific pit where more briquetage was discovered together with similar sherds to the 'south of V'. The second area is more general and is designated 'central'.

Beyond the west bank of the creek is area 'S', where in 1959 she discovered human remains. A kilometre further west is an area she refers to as 'north west of P', Pit P being an EIA feature close to the Brooksend Stream and offshore sewage outfall pipe. Much human as well as animal bone was noted. This was investigated in 1971 but not fully excavated.

The evidence of later occupation

To the east of the creek beyond the EIA pits are the group of LIA 'Belgic' pits/shaft bases in the chalk sea bed (Gibbons 2017, 260) and the relevant cliff-top pits above (Gibbons 2017, 266). The authors are completing the more detailed analysis of these excavations by Jimmy Beck in 1938 and Antoinette Powell-Cotton from 1954.

Surrounding and extending southwards on both sides of the creek are 42 Mediaeval pits which show the continuing occupation and importance of this site. These pits will be part of the continued collating and researching of Antoinette Powell-Cotton's collection, which will be the subject of a future report.

ACKNOWLEDGEMENT

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BIBLIOGRAPHY

- Allen, T., 2012, 'Bronze, boats and the Kentish seaboard in Prehistory: the role of coastal Kent in a major trans-continental trade route', *Archaeologia Cantiana*, 132, 5.
- Bamford, H., 1982, 'Beaker domestic sites in the Fen edge in East Anglia', *East Anglian Archaeology*, 16.
- Gibbons, T. and V., 2017, 'The remarkable multi-period finds at Minnis Bay, Birchington: the major contribution to inter-tidal zone archaeology made by Antoinette Powell-Cotton (1913-1997)', *Archaeologia Cantiana*, 138, 257-278.
- Hawkes, C.F.C., 1942, Maidstone Museum archives, 'Worsfold Papers' – unpubl. document.
- Macpherson-Grant, N., 2014, 'Powell-Cotton Museum archives' – unpubl.
- Macpherson-Grant, N., 2017, additional analysis for Gibbons, T. and V.; 'The Archaeological pits of Minnis Bay, Birchington – Bronze Age & Early Iron Age', PCM archives (unpubl.).
- Walker, W.F., 1938, *The Bronze Age*, p. 10.
- Wessex Archaeology, 2015, Cliffs End Farm, Isle of Thanet: a mortuary and ritual site of Bronze Age, Iron Age and Anglo-Saxon period with evidence for long-distance maritime mobility.
- Worsfold, F.H., 1943, 'A report on the Late Bronze Age Site, excavated at Minnis Bay, Birchington, Kent, 1938-1940', PPS, vol. IX, 28.