

Friends of Brandy Bottom Colliery Pucklechurch



(Photos 1-30 will be found on page [6](#) onwards. The photo above, showing the chimney, Old Pit heapstead and the Cornish Engine House, was taken from the top of the Horizontal Engine House in June 2019.)

There have been 12 work parties since the last newsletter, bringing the total to date for 2019 to 26.

The repair work to the top of the north-west wall of the Vertical Engine House has been completed. Repairs to the south-west end of the Old Pit heapstead continue, with several tie rods being inserted to support the bulging brickwork in the end wall of the extension. Spoil excavations have revealed more details about the layout of the Cornish Engine House and uncovered a fragment of the cast iron beam.

Brandy Bottom will be opened to the public on 14 and 15 September as part of the Heritage Open Days series of events. We had a stand at the Lyde Green Community Association's 'Summer Sizzler' and have also given the Association some display boards on the local industrial heritage for use in their community centre.

Progress: May - August 2019

Historic England made a site visit in the middle of July, and we have started work on the renewal of the Scheduled Monument Consent. We are also preparing applications for grants from some environmental trusts, which will be used to fund our plans for future conservation work.

Repair work started on the top of the north-west wall of the winding drum pit in the Vertical Engine House in June, and Ken finished the job by the end of that month (photo right). The outside of the wall



was found to be in a better condition than the inside, probably because of the protection given by the

covering spoil. The scaffolding that has sat in the winding drum pit for months has now been dismantled.

There was also more work on the water shaft outside the entrance to the Vertical Engine House. Jeff unbolted the metal ring from the top (photo [4](#)) and it was taken off-site for conservation. The masonry at the top has been repaired. Photo [7](#) is a view down the shaft before the safety cage, made by Jeff, was fitted while photo [8](#) shows the cage in place.

More spoil was excavated from behind the bulging brick wall at the south-west end of the Old Pit heapstead, and a second Acrow prop was fitted. Hamish and Jeff inserted four tie rods (photo [11](#)) with spreader plates through the outer wall and grouted them into anchorages in the inner wall. Spreader plates were also fitted to the two original tie rods after they were refurbished, and all the nuts tightened. This had the immediate effect of reducing the bulge in the wall, enough to make the second Acrow prop redundant before the end of that work party. A fifth tie rod was added mid-July. The nuts are being tightened a little at a time at each work party, slowly stabilising the wall. We appear to have acted in time before the wall collapsed or before it had deteriorated so far that it had to be completely rebuilt. Expanded polystyrene is being used as a low weight filler in the space behind the wall, which will reduce the outward pressure on the wall. The remaining space will eventually be backfilled with spoil and covered with a waterproof membrane. The photo on the right is a view of the area behind the wall, taken in mid-July, and showing the tie rods and some of the polystyrene in place. The outward curve of the wall on the left can be seen, and daylight can be seen through the crack running up the corner between the left hand and back walls.



Spoil removal continued in the condenser pit of the Cornish Engine House. There was a general tidy-up mid-June, when the stone stockpiles were sorted out and encroaching wildflowers removed. A piece of scale was found during the tidy-up, which had been uncovered at an earlier work party and put to one side. On examination it was seen to have been deposited on the outside of a large (around 12") diameter pipe as the concave side was smooth and the convex side rough. The cross section showed that the scale had been deposited in many thin layers (photo [14](#)). On one work party in July many pieces of lime scale were recovered, several of which appeared to have been deposited on the outside of a structure made from two pieces of wood fitted together at a right angle (photo [15](#)). Another piece had been deposited on a sharp right-angled corner (photo right, 5 cm x 5 cm scale). The smooth surface suggests that it had been deposited on a metal sheet.



Yet another piece appears to have been deposited on the outside of a large diameter curved object, such as a pipe. Measurements suggest that the diameter of the object is in the region of 18". The curvature can be seen in photo [17](#), while photo [18](#) is a view of the internal face of the object. There is a short length of smooth deposit, seen around the artefact ID number at the bottom, while the rest is rough.

A fragment of what is thought to be the cast iron beam (photo right, two 30 cm scales) was found about 9 feet below floor level. The (approximately) 21" x 15" x 3" piece weighs an estimated 2 cwt and took two strong men to lift and move it. Photo [19](#) is a close-up of the pivot point for some of the ancillaries, which has become elliptical in shape due to wear. According to the 1930s notes of George Watkins, the Bristol-base photographer of steam engines, the beam was 24' long, 3' 6" deep at the middle and weighed 11 tons. This suggests that we have recovered just a small part of it, raising the question as to why the scrap metal workers had left this piece behind. It may be that the pit was full of water at the time and it was not considered to be worth the effort of trying to recover this small part of the beam. The extent of the lime scale deposits on the walls of the vaults suggest that the whole area was one big sump that was filled with water up to the base of the arched roofs. The photo on the right shows the northern corner of the north-east vault, and photo [20](#)



the eastern corner. There does not appear to be any access from this part of the engine house to the underside of the engine bed. We know that there is a space under the engine bed, which would be used at intervals to tighten the engine holding down bolts. It may be that the door to this space is in the north-east wall. Work on the outside of the wall in 2012 uncovered an area of uncompacted soil, but this oddity was not fully investigated at the time. That is another item on the 'things to do' list.



By early July, so much spoil had been removed from the condenser pit that it was no longer possible to lift a full bucket by hand onto the main floor of the engine house. Jeff constructed a mini crane to do the job instead, and the photo on the right shows Mick using it to raise a bucket of spoil. Rather than just dumping the spoilt, some of it is being used as the filler in the weak screed mixture that is being laid as the subfloor in various parts of the engine house. Up till now this involved an amount of double handling, as the contents of one wheelbarrow were sieved into another, with the lumps being tipped into a third. Hamish came up with the clever method of sorting the spoil into lumpy and sandy fractions as it slid down the chute. As can be seen from photo [21](#), it consists of a screen at the end of the chute with two wheelbarrows side by side. The photo also shows the sandy material falling through the screen into the left-hand wheelbarrow and the lumps passing over it and falling into the second wheelbarrow. The art of making a good separation between the two fractions lies in the rate at which the material is tipped down the chute. Too fast results in a sizeable amount of the sand being mixed with the lumps and so being lost to the dump. The sand is being stored in jumbo bags. Photo [22](#) shows one bag suspended from a scaffolding frame as it is being loaded, while the frame is being moved in photo [23](#) to allow another bag to be loaded.



Also buried in the spoil under the floor of the Cornish Engine House was the piece of pottery seen in the photo on the right (5 cm grid). The diameter of the outer rim is about 2¾"-3", suggesting it was once part of a mug. An internet search showed that the portrait could be of Queen Mary, the wife of King George V. The decoration surrounding it suggests that it may be a fragment from a mug produced to celebrate an event such as the 1911 coronation. Has anyone any information that might



confirm or refute our guess that the portrait is of Queen Mary? However, all that conjecture does not answer the intriguing question as to why it was in the sump in the first place. Was one of the enginemmen using it for his mid-shift cuppa until it broke? Or was it a piece from the domestic waste tip by the Old Boiler House that somehow made its way to the Cornish Engine House? While that may at first sight seem a far-fetched idea, two pieces of a pottery flagon were unearthed at one work party in September 2017. One piece was found by the perimeter fence outside the south-west wall of the Cornish Engine House, and the other in the Old Boiler House some 50+ yards away. It was only discovered that they came from the same flagon when they were being cleaned after the work party. The two pieces had writing on them and being able to make the connection gave us the name and location of the company.

Jeff has been working on the railings for the steps outside the south-west wall of the Cornish Engine House and brought part of the structure to the site in early August (photo [24](#)). After checking the alignment, he took it away to finish the welding. The intention is to have the railings in place by the Heritage Open Days weekend.

Work at one party was briefly interrupted by the appearance of a Barn Owl (photo right) and a Little Owl (photo [25](#)) near the Old Pit information board. The falconer was giving a talk on owls as part of a nature trail organised by the Lyde Green Community Association. If the author heard correctly, these two species of owls could be hunting in the vicinity of Brandy Bottom.



As well as site tours for casual visitors who happened to be passing, there have been three by organised groups. This has raised £30 in donations.

Lyde Green Community Association

In June we gave the Lyde Green Community Association a set of A2-sized display boards on the local industrial heritage, and these are to be displayed in their community centre. The four boards briefly cover the Parkfield, Brandy Bottom and Ram Hill Collieries, the Dramway, and the Shortwood brickworks. There is also a section on Handel Cossham, together with information on the AIBT, the Bristol Industrial Archaeological Society (BIAS) and the South Gloucestershire Mines Research Group (SGMRG). Unlike the AIBT, both BIAS and the SGMRG have programmes of talks and walks. We hope that the boards will act as a starting point for anyone interested in the industrial history of the area. There are copies of the artwork on our website.

We had a stand at the association's 'Summer Sizzler' in July (photo right), where we had the display boards on Brandy Bottom and local industrial heritage on show. Visitors could also see the models of the Cornish Engine House and the New Pit heapstead/Horizontal Engine House. Mick brought his carbide lamp from his caving days (photo [28](#)). While it is a modern lamp, Victorian miners would be familiar with its operation. The stand brought two potentially useful contacts, one of whom may return as a volunteer.



Heritage Open Days

Brandy Bottom will be open to the public on 14 and 15 September as part of the Heritage Open Days (HOD) series of events. There will be 45-minute long guided tours, starting every 30 minutes from 10.30 am until the last tour leaves at 3.30 pm.

New for this year are: the view down the shaft outside the entrance to the Vertical Engine House, which seems to be part of the site's water distribution network; the vaulted floors inside the Cornish Engine House; and the model of the Cornish Engine House. As mentioned in an earlier newsletter, this was produced by a student at Bournemouth University as part of her degree course on modelling. One of the lecturers on the course came up with the idea when he was a visitor at the 2018 HOD. The display boards on conservation have also been updated, as have the boards on the local industrial heritage. The latter now include copies of two of the nine photos showing miners underground at Parkfield. These were given to us at the 2018 HOD – another bonus from that event.

Vandalism

The site is fenced off for safety reasons, as it is a working site with unprotected high (~16 ft plus) drops around the heapsteads, and deep pits elsewhere. At intervals we find that holes have been cut in the boundary fences, where passers-by have decided that they must venture inside the secure perimeter. Sometimes they are content to merely look around, leaving us the frustrating task of repairing the boundary fence. One of the items on the 'to do' list is upgrading the quality of the fencing, based on advice from the police.

Regrettably, some of the intruders indulge in acts of wanton vandalism. The site is a Scheduled Ancient Monument, making vandalism a criminal offence and such incidents are reported to the police. If any readers are passing the site and spot a hole in the fence, would they please contact us by email at info@aibt.org. We will then arrange to make the place secure again.

Visitor Access, Future Work Parties, and Joining In

At present visitor access to the site is limited to days when there is a work party in progress. It is usually possible to give small groups a guided tour during the work parties on a 'turn-up on the day' basis though this cannot be guaranteed as it depends on there being enough volunteers present. Special arrangements can be made for parties of 10 or more people by making contact through our email address of info@aibt.org.

The dates for work parties in 2019 are: Saturday 24 August, Saturday 07, Saturday 14 and Sunday 15 (Heritage Open Days), Saturday 28 September, Saturday 05, Wednesday 16, Saturday 26 October, Saturday 02, Wednesday 13, Saturday 23 November, Saturday 07, Wednesday 18 December.

Please note that work parties, and their starting and finishing times, may be altered at short notice. The nominal opening times are between 10.30 am and 3 pm, but these timings are not fixed so we may start later and/or finish earlier. Because of this, newcomers who would like to join a work party or pay a visit are advised to first make contact via the AIBT's email address of info@aibt.org. Youngsters, either as visitors or as part of a working party, must always be accompanied by a responsible adult .

At present there is only a small team working on the conservation, so newcomers are welcome to pay a visit and see if they would like to join in. The work varies, sometimes excavating spoil and recording both the buried objects and the structures that have been revealed, at others rebuilding and repointing masonry walls. Any major rebuilding required, such as the work on the chimney and the edges of the heapsteads is done by contract masons. Other tasks include keeping the vegetation under control. If you would like to find out more about work parties at Brandy Bottom, please contact us by email at info@aibt.org.

There is a location map on a dedicated page of the website www.aibt.org, together with directions on how to reach the site. This page can be found by using a link on the main Brandy Bottom project page.

Information on Website

There are copies of all earlier newsletters on the Archive page of the website www.aibt.org. There is a brief history of the pit and reports on work parties on other pages, as well as around 500 photographs of the buildings, work parties, artefacts and structures discovered, and the wildflowers and insects.

Photographs



Photo 1 – Spoil from the batch has been removed from the outside of the north-west wall of the Vertical Engine House, so that it is ready for rebuilding ...



Photo 2 – ... Mike preparing the top of the wall of the winding drum pit for the rebuild ...



Photo 3 – ... and a section of the rebuilt wall.



Photo 4 – Jeff getting ready to remove the nuts holding the ring down at the top of the water shaft outside the entrance to the Vertical Engine House, using some heat and a large adjustable spanner ...



Photo 5 – ... The nuts and iron ring have been removed ...



Photo 6 – ... A discussion as the safety cage is lowered into place on a trial run ...



Photo 7 – ... and a view down the shaft before the safety cover was fitted.



Photo 8 – The safety cover in position and bolted down.



Photo 9 – Hamish and Jeff fitting the second Acrow prop at the south-west end of the Old Pit heapstead, while Mike, Ken and Pete look on ...



Photo 10 – ...The second Acrow prop in place. This was removed later in the same work party when the tie rods were tightened ...



Photo 11 – ... Jeff and Hamish drilling holes for the new tie rods ...



Photo 12 – ... The five new tie rods have been installed, and two existing ones refurbished.



Photo 13 – Pete shovels spoil out from under the floor level of the Cornish Engine House, while Mick waits to empty the bucket of spoil down a chute situated in the doorway behind him. The other end of the chute can be seen in photo [21](#).

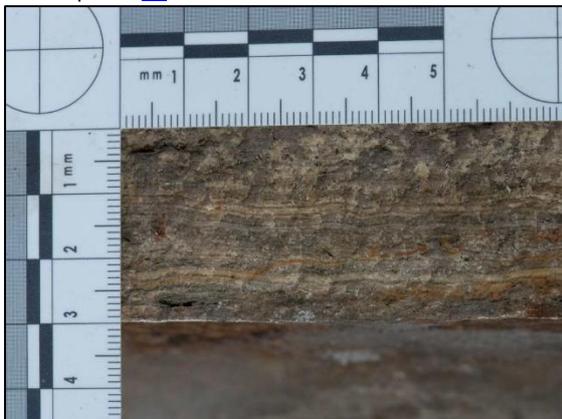


Photo 14 – Cross section through a piece of scale found in the Cornish Engine House, showing how it has been deposited in layers. (See [p.2](#), 5 cm x 5 cm scale)



Photo 15 – Collection of lime scale found in the vaults of the Cornish Engine House. Several have been deposited on the outside of a wooden form with a right-angle joint. (15 cm scale)



Photo 16 – Lime scale deposited on a smooth surface with a sharp right angle. (See comments and another photo on [p.2](#), 5 cm x 5 cm scale)



Photo 17 – End on view of a piece of lime scale deposited on a large diameter object which may have been a pipe. (See comments on [p.2](#), 5 cm x 5 cm scale)



Photo 18 – View of the inside of the piece of lime scale seen in the previous photo. (30 cm scale)



Photo 19 – A close-up of the pivot point of the fragment of the cast iron beam seen in the picture on p.3, showing that it has become elliptical in shape with use. The internal diameter of the hole varies between 1½” and 1¾”.



Photo 20 – Lime scale deposited on the walls of the north-eastern vault in the Cornish Engine House. This view of the eastern corner shows that the deposit reached up to the base of the brick arch. (See also the photo on p.3)



Photo 21 – The sieve mentioned on p.3 at the end of the chute. The lumps of oversize are the dark grey spots against the grey walls of the right-hand wheelbarrow.



Photo 22 – Pete about to dump a barrowload of fine spoil into a storage bag suspended from a scaffolding pole frame, while Ken looks on.



Photo 23 – Ken, Hamish, Mick, Pete, and Mark moving the scaffolding frame so that another bag can be filled.



Photo 24 – The railings for the steps outside the Cornish Engine House are being measured for size before final welding takes place.



Photo 25 – By chance, the organiser of a nature trail had arranged for a talk on owls to take place at the side of the cycle path at Brandy Bottom. A Little Owl perches on a falconer's glove, while a Barn Owl can be seen on p.4.



Photo 26 – Steve G brings a potential artefact to the photographer. (The object in question can be seen a few inches above his right hand)



Photo 27 – Ken, Mike and Pete stow scaffolding planks on top of the tie rods in the Horizontal Engine House, saving space on the floor for other items.



Photo 28 – Mick's carbide lamp from his caving days was on display at the Lyde Green Community Association's 'Summer Sizzler'. While it is a modern lamp, the design would be familiar to old time miners.



Photo 29 – This small common frog, with an estimated body length of less than 2", appeared when vegetation was removed from the area above the East Flue extension in May 2019.



Photo 30 – Two male Swollen-thighed Beetles, *Oederima nobilis*, on a poppy in the Old Pit enclosure, May 2019. Just before the photo was taken, they were fighting over which one would feed off the pollen. The loser has retreated to the lip of the flower.

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 (21 August 2019)

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