

AN ARCHAEOLOGICAL SURVEY OF THE REMAINS OF WATER MILLS AND ASSOCIATED FEATURES ON THE RIVER HONDDU IN SOUTH POWYS

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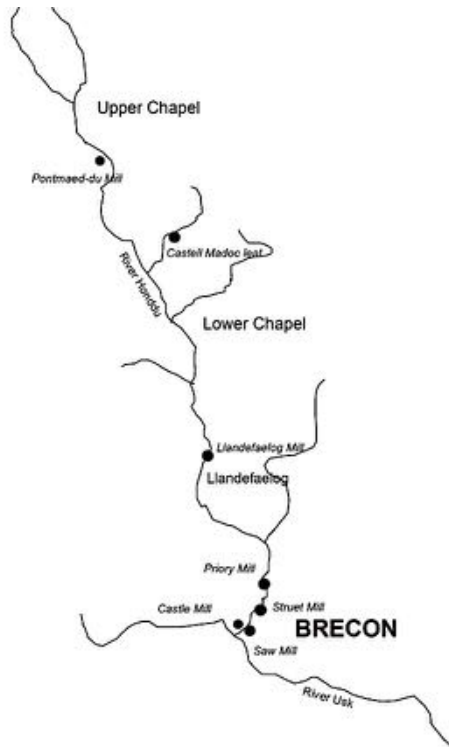


Figure 1 Map of mills on River Honddu

The aim of this paper was to survey the remains of watermills along the part of the River Honddu shown on Figure 1. Of the six possible mill sites which I can identify, only two retain derelict buildings or machinery. Little remains of the others except the leats, which required careful groundwork to record, and even the evidence of these is being destroyed and lost.

Old maps were studied to identify possible leats, and comparison with modern maps showed changes which have affected them. Written sources and oral information from older people in the area were sought out for further information. Such sources help the understanding and perhaps dating and background of the mills, but the emphasis of the study is archaeological rather than historical. The bulk of the material is drawn from field study and from surveying the sites.

The River Honddu stretches some 16km from where it rises on Mynydd Epynt to its meeting with the River Usk in Brecon. Fed by small mountain streams which are close to their sources, the Honddu is at least 8m wide and regularly over 1m deep by the time it reaches Brecon. This could have provided a large amount of power for water mills, so that in some cases two mills could be situated virtually opposite each other. As well as the villages of Upper Chapel and Lower Chapel, there are many small farms scattered across the valley. What is now mostly grazing land was presumably once used for arable farming, providing corn for the mills. The first water mills in Brecon were for grinding corn, and this purpose remained by far the most widespread use of water power. Of the mills I have studied, only one was an industrial saw mill rather than a corn mill.

A century ago or so, in Wales, working water mills could be found every three or four miles along the river valleys, wherever people lived and farmed. In the Honddu valley the land was divided between a small number of wealthy owners, who consequently owned the mills. Each mill served the people living around it, who paid tolls to the owner who in turn paid the miller. The decline of water mills began when competition with cheap imported grain coincided with worn-out machinery which hadn't been replaced.

Castle Mill also known as Watergate Mill (SO 043286)

Castle Mill is situated on the west bank of the river by Honddu Bridge in Brecon. It was certainly in use by 1780 as it appears on Camden's map of that date. It was apparently derelict by the early 20th century. The machinery was removed soon after the First World War and the mill itself was converted into a house sometime between the wars. Most of the building is original stonework, but windows have been replaced, with concrete sills and lintels. Most of Brecon's buildings have slate roofs, so the fact that the mill roof is still covered with stone suggests that it may be the original roof.

An old photograph shows that the wheel was undershot, confirmed by the level of the leat which is not high enough to have fed the wheel from above. The wheel is no longer there, but it seems that the line of the leat is still preserved in the line of a wall. Upstream the position of the stone-walled leat is still clearly visible as a steep-sided ditch passing under Castle Bridge. The position of a weir feeding the leat is shown on the Ordnance Survey map of 1887, but the area has been much altered by the rebuilding of the bridge, and detailed surveying

in the river failed to find any trace of it. South of the mill, a C19th print shows that the tailrace flowed into the River Usk; but the line had been destroyed by the rebuilding of Honddu Bridge, and it is impossible to see exactly where it would have been.



PLATE 1 Castle Mill c.1920; the appearance of the water wheel proves that it was undershot (source: Brecknock Museum)

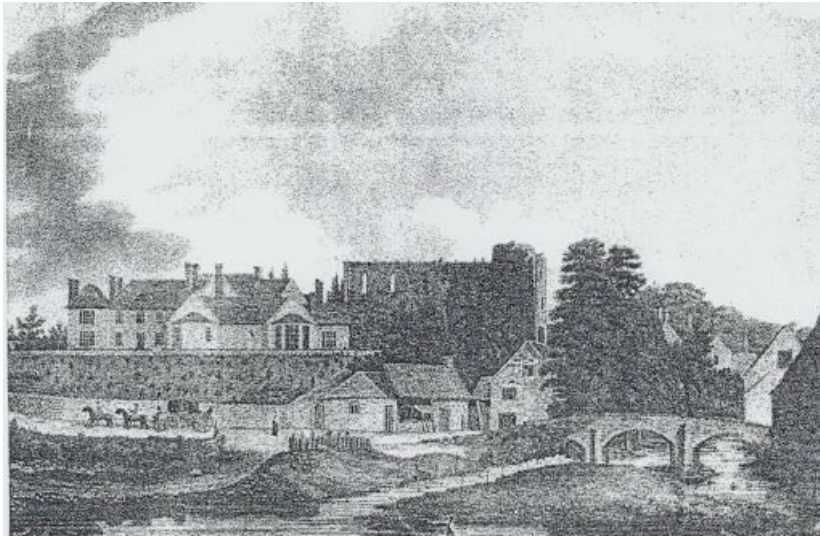


PLATE 2 C19th print showing position of tailrace (source: Brecknock Museum, artist unknown)

a photograph taken during the 1979 floods shows a slate roof in poor condition. The site is now a car park, but the stone-built, concrete-topped weir is well preserved, and a sluice controlling the entry of water into the leat was still open as recently as 1998. As at Castle Mill, the wheel must have been undershot as the potential fall of water is very small.



PLATE 3 The site of the saw mill and the weir (1988)

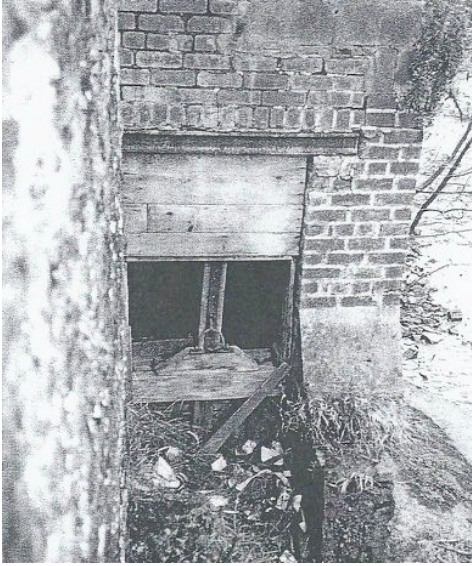


PLATE 4 The water intake in 1998: the perforated iron strip and peg would have held the gate open (source: A. Dowling)



PLATE 5 Undated C19th print showing saw mill building



PLATE 6 Photograph from 1979 showing saw mill in derelict condition

Struet Mill (SO 045290)

Struet Mill was depicted on the Meredith Jones map of 1744, and a mill-like structure is shown on John Speed's map of 1610. Also John Wood's map of 1834, where it is referred to as Tanners Mill. Its location is shown on the Figure 3. The mill was then converted into a garage in 1927, and the mill stream was then used briefly to generate electricity. The original L-plan building was demolished. The mill pond was filled and became Elston's Garage car park, destroying all evidence of the former outfalls from the pond which are shown on John Wood's map of 1834. An outfall, formerly from the mill itself could still be seen behind the garage in the late 1990s.



Figure 3 Location of Struet Mill

The mill leat itself is still clearly visible, and at 2 metres wide is considerably wider than most leats I have surveyed (Plate 7). It is embanked by an impressively-built stone wall, and is 7 metres above river level where it reached the mill pond. There is a weir, but the leat immediately downstream from it has been destroyed where the road has been straightened. The weir has clearly been rebuilt since the road alterations, and water must have been piped under the road to the existing leat. There is an intake next to the weir, now fully blocked but with railings around it clearly intended to prevent blockage; but there is no sign of a pipe (Plate 8).



PLATE 7 Leat for Struet Mill



PLATE 8 Struet Mill intake behind railings

Priory Mill (SO 149296)

Unlike all the others, Priory Mill is still a large, well-preserved building and some of the machinery remains.

The first record of tenants at the mill is in 1840 (although there may have been a mill on the site as early as 1651), and it continued working until 1938. The last miller was Mr John Williams, whose son Thomas still lived at the mill at the time of my survey and remembers working there. The mill was originally used for barley and oats before it became a flour mill, and was running for two to three hours a day to serve around twelve local farms.

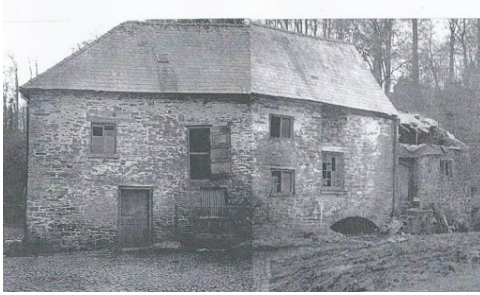


PLATE 9 North-East face of Priory Mill (Despite the appearance of the composite photograph the roof line is straight)



PLATE 10 The south-east face (Note: the join is on the right hand edge of the two doors, not on the roof line change: the wall-plate from the original building can be seen below the later roof)

The appearance of the building suggests that it is C19th in origin, and this was corroborated by Mr Williams. The mill appears to have been built in three phases, as can be seen from the evidence of straight joints, immediately to the south-east of the arch (Plate 9) and at the north-east side of the two doorways (Plate 10); this shows that the mill started out as a simple rectangular building, with the external wheel on the north-west gable (marked A in Figure 4). Sometime later another building (B) was added to cover the wheel, and a single-storey building (C) beyond served as a kiln. Later again a south-west wing (D) was built, making the whole plan L-shaped. The windows provide further evidence of different dates; the original building has simple two-pane windows and stone lintels, whilst the section over the wheel and the south-west wing have multi-pane windows, with low arches over openings in the south-west wing. The roof of this wing extends over part of the original building, exposing part of the original wall-plate. The whole mill might have been re-roofed, retaining the original roof trusses, but Mr Williams had no memory of alterations since his arrival in 1919. There was no cart entrance, and carts must have been loaded from the upper doors.

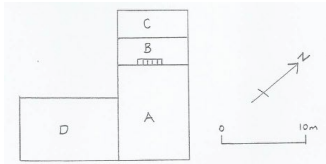


Figure 4 Stages in development of Priory Mill

Inside the building much of the machinery is missing, but some parts remain in situ and others are stacked against the walls. Three bedstones are in place, although the runner stones are missing. One pair was never used, and the others were set so as to produce different grades of flour. Wear marks on a beam from a chain, and worn trapdoors show the position of sack hoists. A dip on a window sill shows where a shaft ran across the yard to operate a chaff cutter in another building. The kiln consisted of a floor made of perforated tiles about a foot square, some of which remain. Underneath, the fireplace is intact. There are doors providing entry from the mill itself and from outside.

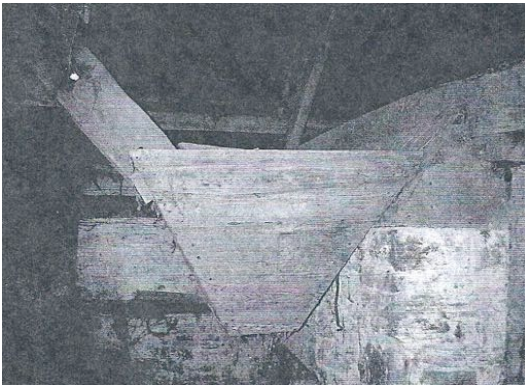


PLATE 11 The sloping beam to the left of the hopper is part of the earlier roof structure

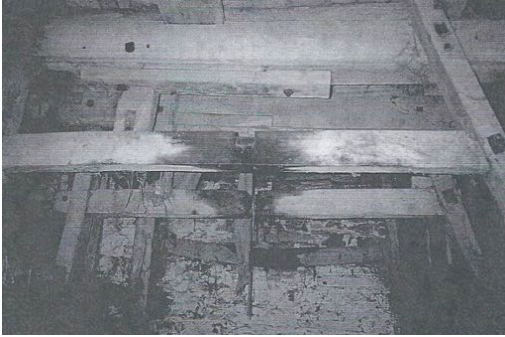


PLATE 12 Oil staining as evidence for a rotating shaft

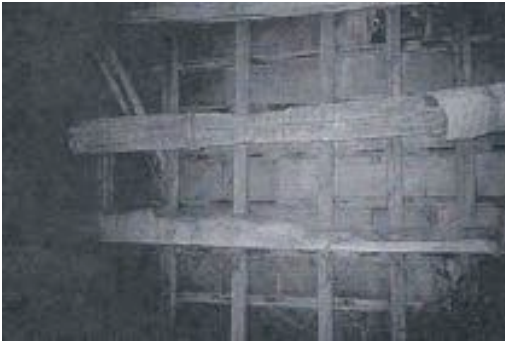


PLATE 13 Wear marks from a chain

The wheel has gone, but the height difference between the arch letting water in and the tailrace arch confirms that it was overshot. The ground level would have been lower than today to allow space for the 3 metre diameter wheel. The water entered from a long, narrow mill pond which was filled in long ago, although the edging stones are still visible on one side. Further away the leat is apparent, leading to the remains of its sluice and weir. The weir and a bridge alongside it are shown on the 1887 Ordnance Survey map (Figure 5) and in two C19th prints. The bridge was derelict by the time Mr Williams arrived in 1919, and the weir has not been maintained since the mill ceased work in 1938. One edge of the weir remains to show that it was 3 metres high; the rest has been destroyed by floods and erosion.



PLATE 14 The sloping edge in the background is the only remaining evidence for the weir. Mr Williams gives an indication of scale

Priory Mill was a far larger enterprise than other sites I have investigated, and it would be possible for an architectural historian to unscramble the evidence of building layout and machinery.



Figure 5 Location of Priory Mill

Note: Noel and Susie Gaskell moved to Priory Mill in 2001 (after this dissertation was written) and are preserving and restoring the collection of traditional stone buildings at the site. This includes relocating the waterwheel from Llandefaelog (Pant-y-Cored) Mill (see below).

Current repairs and restorations have concentrated on external works: re-roofing all buildings, excavating mill pond and rebuilding wall, rebuilding pig courts from foundations; rebuilding double flued stone chimney stack, remaking metal leaded casement windows. Other ancillary works have included excavating the well and restoring the Ty-Bach (two-seater spring flushed).

Having acquired the wheel-rims and machinery from Llandfaelog (Pant-y-Cored) mill, they will continue the restorations internally.



PLATE 15 Priory Mill in 2018 (source: Noel and Susie Gaskell)



PLATE 16 Priory Mill in 2018 (2) (source: Noel and Susie Gaskell)

Llandefaelog Mill (SO 036326)

Sadly this mill became more and more derelict during the course of my investigation. A photograph taken by the owner in 1982 shows the building in good condition, and it was still in reasonable condition in 1994 although the roof had begun to collapse. The mill is now in a dangerous state, and likely to suffer total collapse within the next few years.



PLATE 17 Llandefaelog Mill in 1994

Llandefaelog Mill was built around 1880 and continued working until the 1950s. The mill was kept running all day to serve around thirty farms in the area, but was operated by only one man. Despite the derelict state of the building, much of the gearing is still in place, though difficult of access. The kiln building was a later addition, built against an existing wall in which a window had been blocked, and built more roughly and with smaller stones than the mill itself. Inside the kiln there are remains of the perforated tiles and the iron frame on which they rested, and the fireplace is still intact.



PLATE 18 Llandefaelog Mill in approx. 2000

The overshot wheel is still in place, and the launder has survived because it is cast iron rather than wood. It terminated in an iron tank over the wheel, and there is evidence of an arm from inside the building to let water onto the wheel. The wheel still has its massive oak shaft and cast iron shrouds, and there are the last remains of wooden buckets. The leat is 350 metres long, stone-walled near the mill where it is close to the river and at risk from erosion. The weir is in very good condition, and the stone abutments of the sluice leading into the leat are complete, with slots for the gate evident in the stone. This weir was the best preserved of all those I have studied.

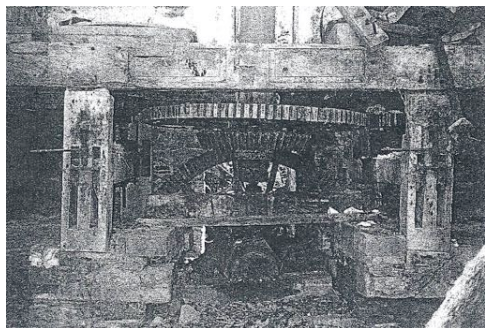


PLATE 19 Internal gearing 1994



PLATE 20 Conditions in Llandefaelog Mill in 2000



PLATE 21 The join between the two walls is evidence that the kiln building (on the right) was a later extension



PLATE 22 The blocked window indicates that this was once an outside wall



PLATE 23 The dip in the 'sill' and in the tank edge below are evidence for a rotating pivot controlling the flow of water from the tank



PLATE 24 An outfall from the leat



PLATE 25 The stone abutments of the sluice leading to the leat, with slots for the gate evident in the stone

Castell Madoc (SO 030376)

This location looked promisingly like a mill leat, but although it had the correct dimensions and was of considerable length, careful groundwork revealed that it could not have been used for this purpose. There was no sign of a take-off at the upper end, and a clinometer survey showed that there was no drop in level over a length of 400 metres. Although this was clearly a man-made structure, its purpose remains unclear.

Streams centred on SO 014391

Older maps suggested that there might have been a mill in this area. On investigation, what looked like a mill leat turned out to be a series of drainage channels for a particularly marshy area. Ground survey of what looked like a mill pond revealed no signs of an outfall or sluice, and the embankments seems far too recent. Subsequent inquiry showed that this was built by a farmer in the late 1980s for fishing.

Pontmaendu Mill (SO 011395)

I could find no evidence for the beginnings of this mill, but the 1st edition Ordnance Survey map of 1839 shows a building on the site, though it is not named as a mill. The mill ceased work in 1929 and was later converted to a house, leaving little evidence other than the leat. Several extensions have been added, but the original buildings are similar to those at Priory Mill, suggesting a similar date.



PLATE 26 Pontmaendu Mill with recent extensions

Some of the leat survives and still carried water, but about 275 metres away from the house it disappears. Although the wheel has gone, the tailrace is still complete, and a pipe runs under the house from the position of the launder, where a small blocked arch must have provided access to the wheel. The height difference shows that the wheel was overshot. The mill pond has been filled in and is now a driveway.

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Noel and Susie Gaskell, the current owners of Priory Mill, are also thanked for contributing current photos and an update on progress at their mill.