

Hopwood Corn Mill

A report on the general condition of the remains

Middleton Archaeological Society (MAS)

Cliff Ivers December 2014



Contact; treasurer.mas@live.co.uk

Executive Summary

The remains of Hopwood Corn Mill are possibly the best surviving example of a water powered manorial grist mill in Greater Manchester and demonstrate that renewable energy has been around for some considerable time. The 18th/19th century remains of the mill were excavated by archaeologist from Greater Manchester Archaeological Unit (GMAU) in 1993 as part of a country park restoration project which was never completed.

MAS cleaned up the mill in 2014 and this report highlights that as much as 10% of the brick and stonework has fallen down since the excavation. It is estimated that the remaining walls could be in danger of further collapse in the next 5-10 years. The oak axle of the waterwheel has deteriorated with one of the bearing assemblies becoming detached. MAS were unable to locate any of the 5 large machinery parts and 7 small finds recorded in 1993.

The 1993 excavation report suggests a restoration of the mill to its earlier Victorian use as a garden feature. This may fit in with ongoing plans to restore Hopwood Hall and would facilitate safe public access to the mill. MAS are planning to excavate the miller's cottage next year but would need assistance to complete the further archaeological work recommended by GMAU.

Overview of the Site

There is written evidence of a water powered corn mill at Hopwood in 1570 although, as the estate was in existence as early as 1307, some earlier archaeology may exist. The present mill ruins and pond are located in private woodland about 300M northwest of the grade 2 listed Hopwood Hall.

The last mill structure ceased operation in the 1870's but was preserved by the Hopwood family as a picturesque garden feature together with a Chinese style waterfall on the east side of the mill pond. There were over 25 manorial corn mills in existence in Rochdale and Middleton during the 17th century most of which were converted to fulling and cotton manufacture during the 18th and 19th century. The early preservation by the Hopwood's ensured that the remains of the corn mill survived and is possibly the last one in Greater Manchester.

The structure of the mill building gradually deteriorated in the 20th century and was partially demolished for safety reasons in the 1940's. In the 1970's and 80's there was some preservation activity by the De La Salle College who owned Hopwood estate and the adjacent training college. By the 1990's, the estate had been sold to Rochdale Metropolitan Borough Council (RMBC) who began developing the Hopwood Hall College. Greater Manchester Archaeological Unit (GMAU) carried out a full excavation of the mill in 1993. This was as part of a scheme to develop Hopwood woods into a country park. The mill and pond would have been conserved as a major landscape feature in this park.

Unfortunately, the country park scheme never went ahead and mill and remaining timbers were left exposed to nature and vandalism. The Mersey Basin Trust attempted some reconstruction of the mill walls, however the work was never finished and it is reported that quantities of stone have since disappeared from the site.

The Clean-Up Process

MAS approached Hopwood Hall College to request permission to clean up the remains of the Mill and investigate its condition. The College were very supportive of the society and provided secure

fencing and mess facilities. MAS members visited the site for two days in autumn 2014 with an average of 15 people attending both events. This included members of the Friends of Hopwood Woods group and affiliates from local societies.

The clean-up consisted mainly of the removal of debris from the floor and wall surfaces as well as the accessible areas of both the wheel pit and pitwheel pit. Apart from four or five bags of modern rubbish, most of the debris consisted of flora, fallen branches, and modern brick. A small quantity of small rough stones and several broken stone roof tiles were also found. All the debris was piled 5M east of the mill building. The bags of modern rubbish were removed by the college for recycling. A number of large ashlar stone blocks were displaced and lying in the two pits. These were too heavy to be moved so were left in the pits.

The condition of the remains

1. The **southern and western walls** of the old mill had been partially rebuilt in the 1970's using stone from the original building. Consequently, when GMAU carried out their investigation in 2003 the walls were excluded from their report. A 2m length of the south wall has fallen over but remains intact. Also the reconstructed doorway and stone lintel have collapsed with the lintel sited several yards away.
2. The **wooden axle tree** has suffered from further rot at its western end. The axle's cast iron journal and bearing stool had fell into the pit wheel pit. The bearing stool was cleaned and given to Hopwood College staff for safekeeping. The journal was too heavy to lift so was left in the pit. The eastern axle bearing remains in position but is badly rusted due to exposure to the weather.



Figure 1 west and east views of axle, western bearing journal and stool

3. The **mill floor** appears to have suffered little physical damage since the plan was drawn by GMAU in 1993. Following the clean-up, nineteen missing pieces of stone flooring were identified and have been highlighted in red in appendix one. There are a number of stone blocks with uniform sized slots on the top edges located on the mill floor. It is believed that these were main joist for the kiln that was located to the west of the mill. These were re-used for the expansion of the mill in the 19th century. The smallest main joist has been dislodged from its original position.



Figure 2 main kiln joists reused in gear cupboard and the mill floor

4. The **wheel pit wall** was examined and its condition is drawn in appendix one. Seven large ashlar finished blocks have gone from the top of the wall. The wall has been used as a shortcut down from the millpond and stones have probably been dislodged by vandals. The stones appeared to be located in the wheelpit but were too heavy for MAS members to move. Several of the stones at the top of the wall were loose due to the deterioration of mortar. However this may suggest that the top of the wall has been rebuilt. The circular axle hole in the wall looked in generally poor condition and will probably be the next part of the wall to collapse.



Figure 3 Western face of wheelpit wall and supports for branch tree

5. The **north wall** lies against the mill dam and consist of three different building phases. The ashlar blocks in the centre and western end remain largely as they were in 1993. The later addition of handmade bricks at the eastern end of the wall was probably associated with the drying kiln. Approximately 25 of these bricks have been dislodged probably due to rain fall from the steep embankment above the wall. It should be noted that MAS members are not civil engineers and cannot comment on the structural strength of this or any part of the ruins.



Figure 4 The north wall

6. The **wheel pit and pit wheel pit**. Both these structures were in sound condition but had been partially filled with debris that was removed. MAS were unable to remove large pieces of stone from the bottom of the pits. The wheelpit was never fully cleared by GMAU and is one of their recommendations. MAS managed to clear access to the tailrace lintel at the southern end of the wheel pit and extracted several loose handmade bricks (180x120x50mm) which could suggest an earlier build at this location.



Figure 5 wheelpit south showing tailrace, wheelpit north showing expansion work

- 7. Finds.** Apart from the axle bearing support previously mentioned, MAS did not record any finds at the clean-up days. GMAU recorded 5 large machinery parts and 8 small finds in their report. The College were unable to locate these at the time of the clean-up but it is believed that at least one (cast iron fragment of pit wheel) is stored in Hopwood Hall. The remainder of the large parts were timber components and may have suffered further deterioration

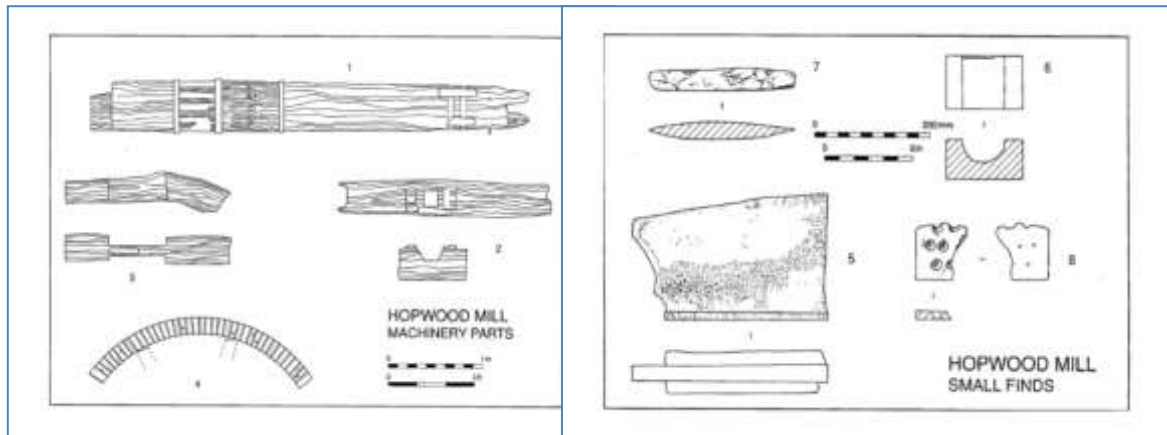


Figure 6 GMAU 1993 Finds

The Future of the Mill

It is very clear that the remains of the mill have suffered serious decline since being excavated in 1993. Several of the walls look in poor condition and will probably collapse within the next 5-10 years if no remedial work is carried out. The mill pond is overgrown and its banks are eroded.

The mill is located in private woodland and owned by Hopwood College. The College have some plans to develop the adjacent hall into a hotel and conference facility. This plan may lead to the restoration of the woods to its prior usage as a garden and some restoration of the mill.

The mill head race appears to have disappeared off maps by 1890 so the pond is fed solely from a local spring which does not have sufficient flow to move a waterwheel. At some stage MAS would like to investigate the head race to date its construction. This would possibly present an opportunity to consider the viability of restoring the race and wheel to generate renewable electricity for the college.

The 1993 GMAU report suggested a sensible approach would be to reinstate the mill back to its late 19th/early 20th century role. This would involve a short programme of further excavation followed by conservation and preservation. Their recommendations are listed below;

1. *Total excavation of the wheel pit.*
2. *Total excavation of the corn kiln to expose the remains of the furnace which must occupy the ground floor.*

3. *Demolition of the 1970s' rebuilt fabric in the mill. It is undoubtedly of poor quality, and is of little value to the final site interpretation. The stonework can be reused for supplementary conservation works on the site.*
4. *A programme of physical consolidation of the mill fabric is required in order to interpret the site as a restored garden feature. A water cascade into the wheel pit could be created, and the pit wheel segment reinstated, with supports, into the base of the pit wheel pit. ,*
5. *The large timber elements which remain at the site, formerly parts of the mill machinery, are slowly deteriorating with exposure to weathering. These require treatment with appropriate preservative materials to stabilize their condition to the standard suitable for permanent outdoor display.*
6. *The site of the miller's house was identified, and the wall footings were found to be in situ. A limited amount of shallow excavation work could partially or fully expose this feature in its woodland setting. If the adjacent footbridge which formerly existed across the stream were to be reinstated, then the conserved house remains would form a further feature relevant to the overall site interpretation.*
7. *Satisfactory completion of the scheme would involve placement of interpretative boards around the site to explain the various features.*

MAS are keen to continue working on the site but as a local society do not have the resources to take on major projects such as the excavation of the wheel pit and corn kiln (1&2) without professional support. We feel that the excavation of the millers house (6) is within our capability and, with the permission of the College, plan to start this in Spring 2015.

MAS have also been researching and compiling a history of the mill and will make this available to the college, local libraries and on the middletonas.com website once completed. An interpretation and history of the mill will be presented locally by MAS as the work continues.

Our thanks go to;

Rochdale Touchstones Library

Middleton Library

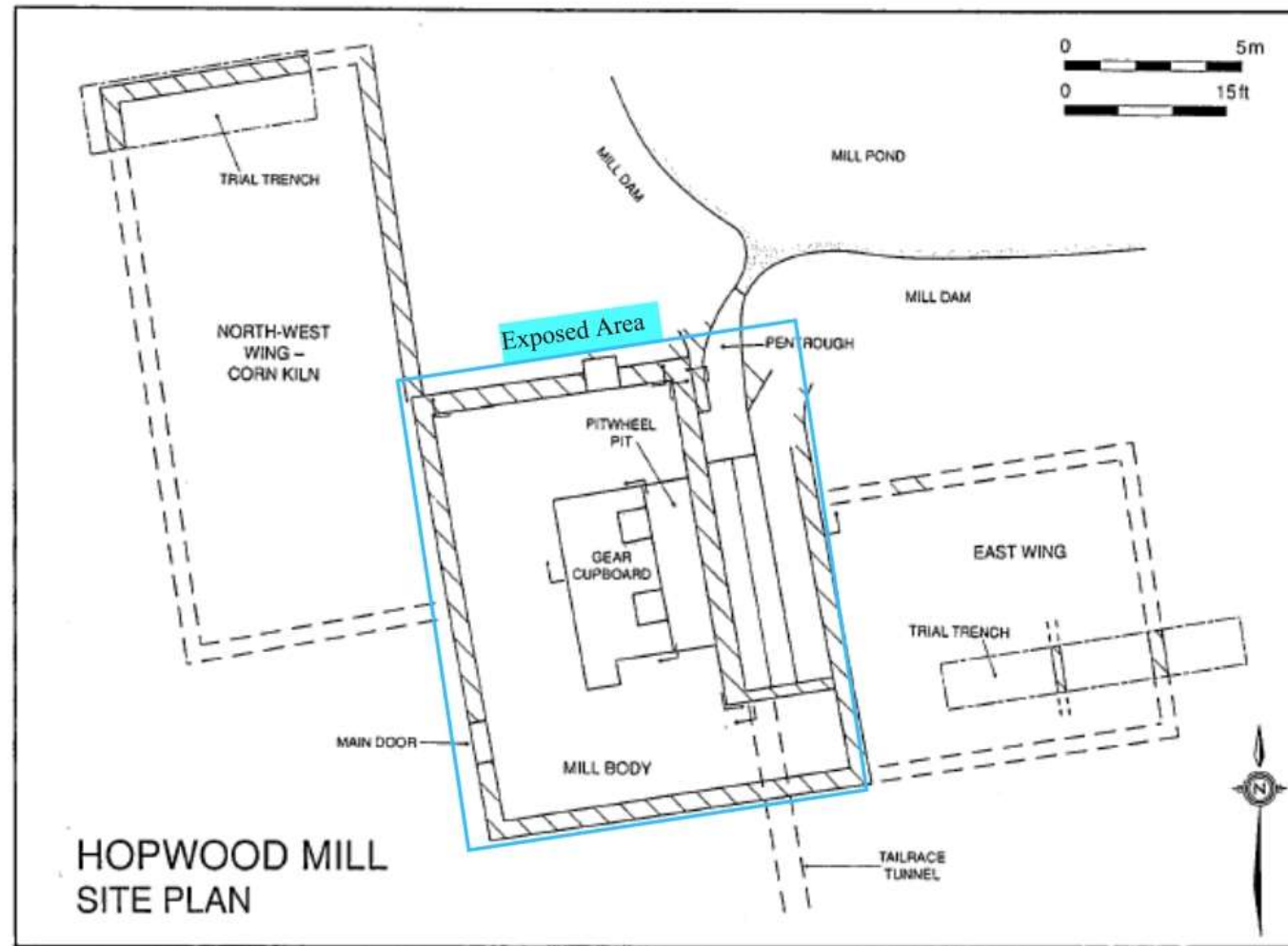
Lancashire Archives

Hopwood College Corporate Services Dept.

Greater Manchester Archaeological Advisory Service

Friends of Hopwood Woods

APPENDIX ONE GMAU 1993 PLANS WITH MAS ANNOTATIONS



Areas in pink indicate missing items.

