Ampthill & District Archaeological

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An Investigation into a Dam Across Gull Brook in the Parish of Clophill.

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Abstract.

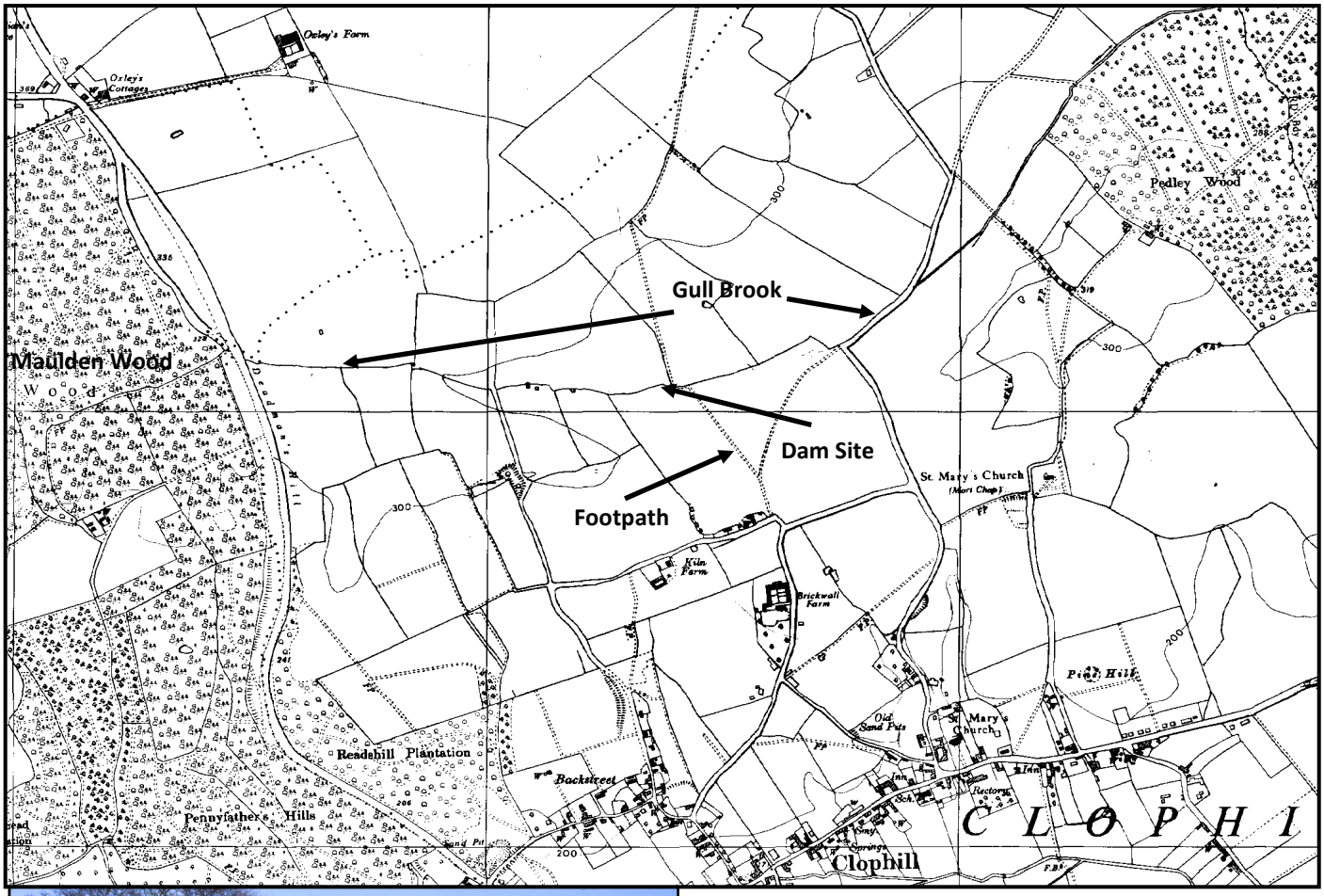
An archaeological and documentary investigation was carried out in an attempt to establish the origins and purpose of a dam across Gull Brook in the Parish of Clophill Bedfordshire.

Introduction.

During a field walking exercise in the Spring of 1999 a broken dam was discovered in Gull Brook, which drains the upper farmlands in the north of Clophill Parish. The brook rises in Maulden Wood, runs roughly west/east across the parish, skirts Pedley Wood and then crosses Chicksands Wood before draining into the River Flitt in the Parish of Shefford.

As the main water supply for the brook is from land drainage, the flow is very spasmodic, ranging from nothing in a dry summer to extremely fast in winter. It drops more than 30 metres from source to outlet over 5.6 kilometres as the crow flies. The dam was approximately 0.8 kilometres from the source.

Location of Dam TL 0835 3910. Map 1





Ph 1. View of the brook upstream of the dam looking east in 1999.

Note the width and depth of the stream bed.



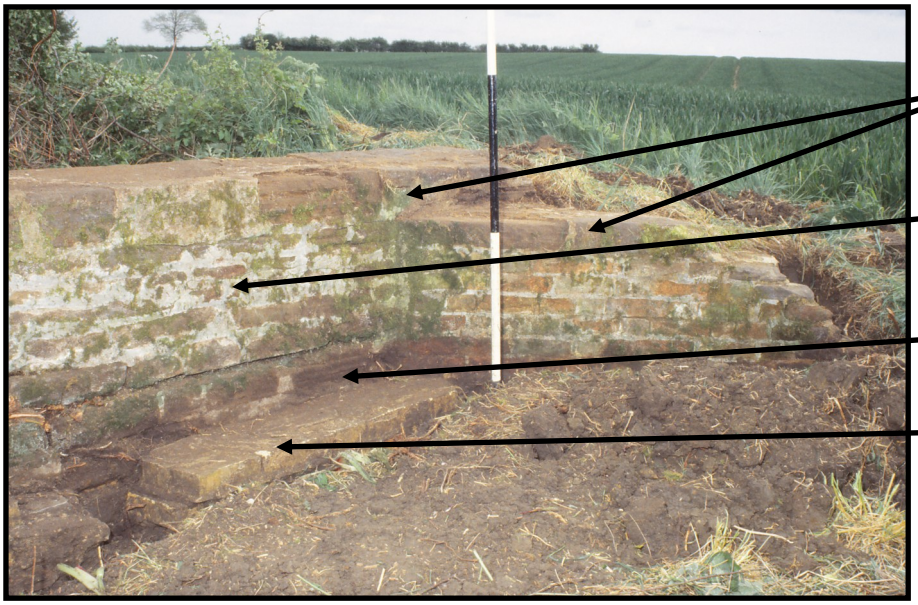
Ph 2. The remains of the dam with a breached wall. The water flow would have been right to left on the photo. Note the “spur wall” on the south bank and the “step” in the stream bed.

While the dam was being cleaned up we were approached by the local farmer who admitted breaking down the dam as the water overflowed and damaged his crops.

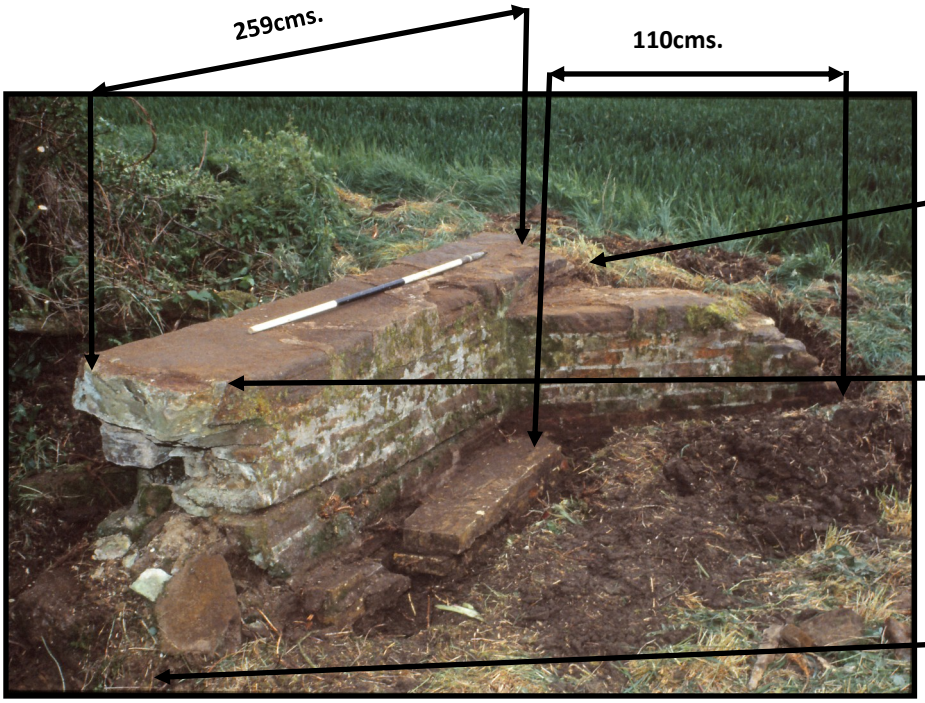


Ph 3. This view shows the foundation left when the wall was breached, there is no sign of a corresponding spur on the north bank. The bottom of the wall is wider at the exposed part 127cms, compared with the top 61cms. The outside walls above the sandstone base are of red brick with rubble between. The downstream wall is vertical, all capped with dressed sandstone slabs.

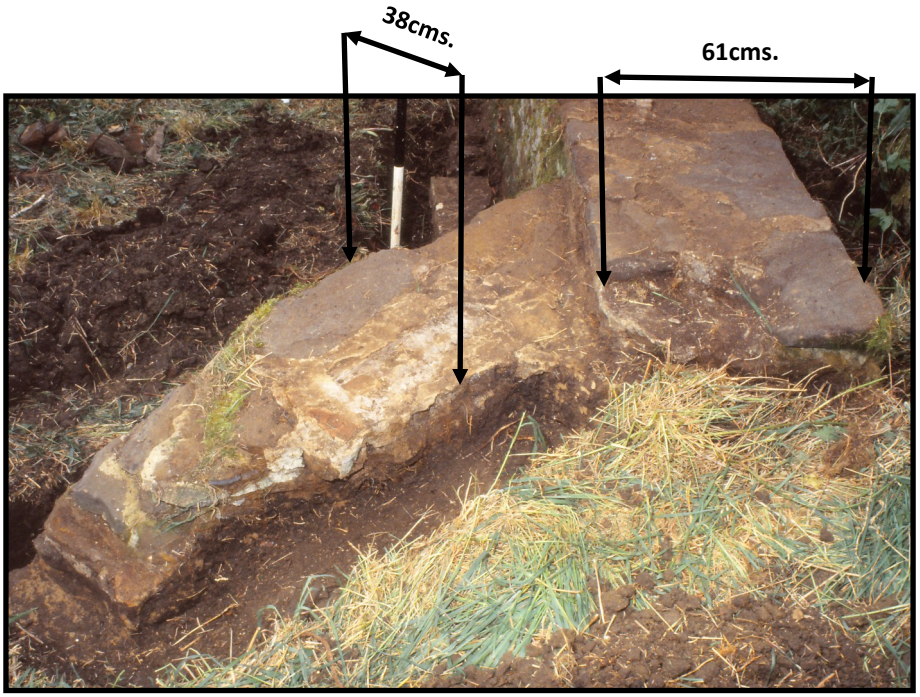
The “step” was of yellow bricks well constructed but with no obvious use. It could have been a repair if water was escaping under the structure, this would have been very necessary to prevent the structure from being undermined.



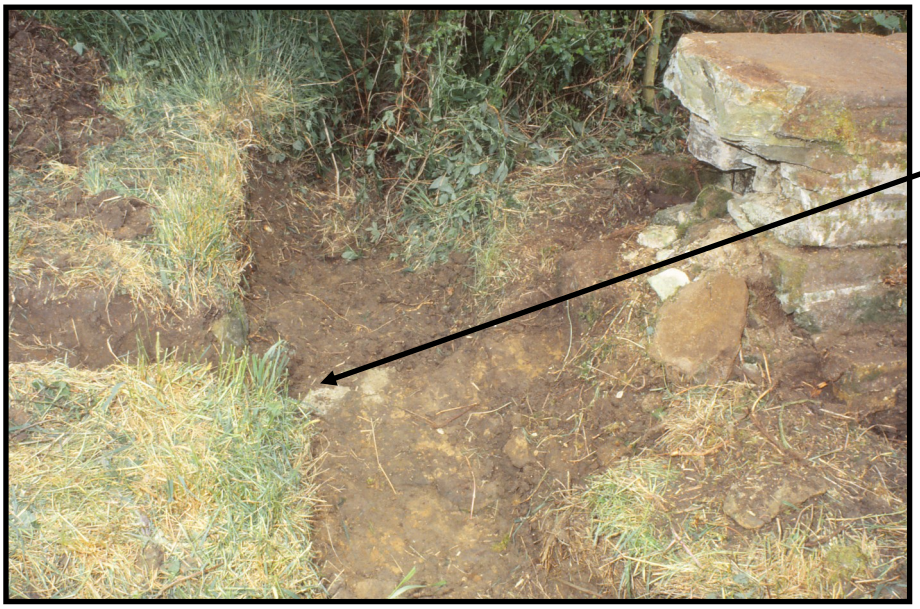
Ph 4. Structure of dam.



Ph 5. Dam dimensions 1.



Ph 6. Dam dimensions 2.



Ph 7.

View through dam wall where it was breached allowing the water through scouring the bank.

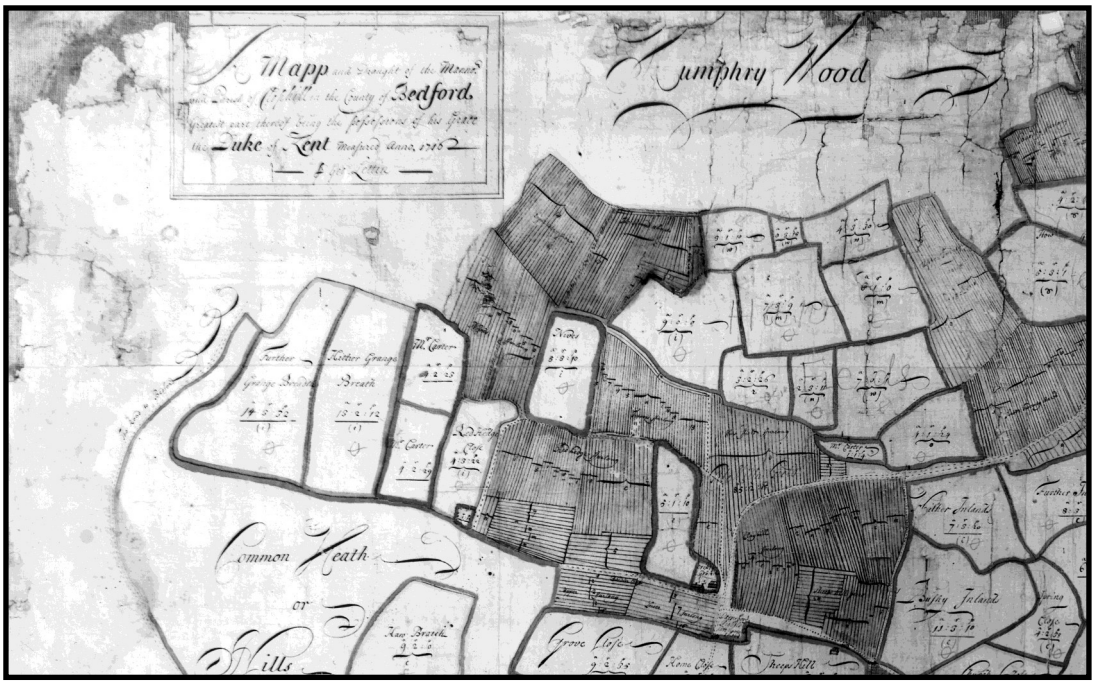
Discussion.

The quality of the structure is remarkable, the foundation is of dressed sandstone expertly laid to take the red brick walls sloping at an angle on the dam face, and vertically on the downstream face, capped with dressed sandstone slabs. The yellow brick "step" is of equal quality but almost certainly a later addition as all the other bricks were red.

All the indications are that the dam completely closed the brook until it became completely full and then it overflowed. Certainly, it did burst its banks in very wet weather and caused the farmer to breach the wall. (Local knowledge confirms that Great Lane which runs alongside the brook downstream of the dam sometimes floods in winter due to the high flow). This raises the question of why was the dam constructed? The very intermittent water flow rules out a watermill. A sheep-wash is possible, but it would not need such a substantial structure, a temporary dam would seem more likely for this purpose. The most likely reason is a water store for whatever reason. The dam would have held water back from an intermittent flow forming a lake in an otherwise dry area.

Historical Research into the Purpose of the Dam.

In 1716 his Grace Henry Grey, 12th Earl and Duke of Kent from Wrest had a map drawn of his Manor in the Parish of Clophill. Surprisingly detailed and accurate it shows the three field system and strip holdings at that time. The Freeholders and Tenants are named **Fig 1.**



Map 2. Detail from the 1716 map of The Duke of Kents Manor of the Parish of Clophill.

The Gull Brook runs from west to east from the Parish of Haynes.

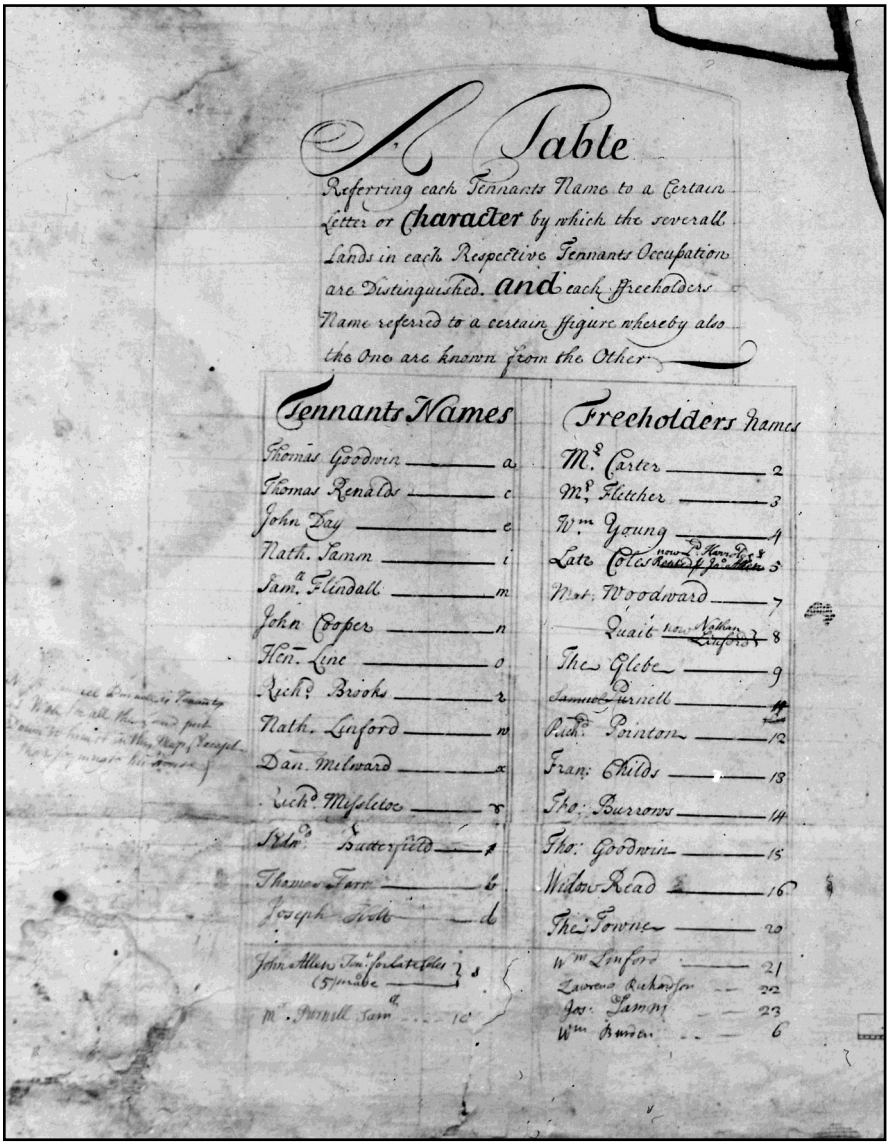


Fig 1. Detail showing names of Tenants and Freeholders.

Names of note are John Cooper (n) and Nathaniel Samm (i).



Map 3. Annotated detail of the 1716 survey showing what appears to be a widened strip of the brook from the northeast corner of "Nives" field to the site of the dam making an effective lake, it is marked with an (n) showing it was tenanted by John Cooper. He also tenanted eleven land strips to the south of the brook with a footpath running down the east border, and another field north of the brook downstream. Nathaniel Samm is noted as he tenanted the field bordering the brook to the north and "Nives" to the west and may have run stock, probably sheep on those fields.

If, as it appears on the survey, John Cooper held the water rights for the lake formed by the dam, it would be in his, and the Manor's interest to sell it to the owners of livestock in the area in addition to his own requirements. This could answer why the dam was built and the quality of the construction, presumable by the Wrest Park bricklayers who were qualified.

The survey was carried out in 1716 on the whole parish, this indicates the dam was built prior to that date, the yellow bricks used to repair the dam were similar to bricks used by Wrest Park Estates in nearby Brickwall Farm renovations in the 19th century[1].

Observations.

The archaeological evidence shows the dam completely spanned the brook thereby forming a lake, it was well built and survived for at least 280 years, its prime use can only be guessed at unless further historical evidence emerges. In an agricultural area where water was only available from rainfall, open springs or wells[2] it was a very valuable resource.

It is possible John Cooper used the water to irrigate crops grown on his strips adjacent to the brook, he had eleven strips which would have made it worthwhile. .

It should be noted that clay tiles were manufactured within easy carting distance and could have been another outlet for the sale of water.

The footpath shown on the survey appears to end at the brook slightly down stream of the dam. On the OS map (Map 1) it still exists but continues north. This is an excellent example of an ancient "right of way". It logically crosses the brook on the dry side of the dam and would have been legalised to the north at the 1808 enclosure. Prior to the enclosure it would not have been necessary to show on open field plans.

Visit to the site in April 2024



Ph 8.

The dam has been destroyed, the only evidence for its original position is in the south bank covered in under-growth. (Picked out by yellow line).



Ph 9.

A part of the red brick wall remains on the north bank.



Ph 10.

A land drain upstream from the dam site, an example of the brook's main water supply.

References and acknowledgements.

Map 1. Detail from OS 6 inches to 1 mile, provisional editionTL03 NE. Contains OS data © Crown copyright and database rights 2025.

Map 2, 3, & Fig 1. Details from 1716 Map of the Manor and Parish of Clophill. Bedfordshire Archives Service Ref. L33/10a.

English Heritage Guide Book: Wrest Park.

All photographs are from the authors collection.

Taken from Bedfordshire Archives Service Community Histories: Clophill Brickwall Farmhouse.

Brickwall Farmhouse was listed by English Heritage in January 1985 as Grade II, of special interest. They dated the building to the 18th century, noting that it had been reworked in the 19th century. The original block is constructed of red brick on a coursed ironstone plinth, later works are in [1]mottled yellow brick. Brickwall Farm comprised 240 acres and the valuer made a number of comments: [2]"Water pumped from well has to cart occasionally".