



Darganfod Hen Dai Cymreig

Discovering Old Welsh Houses

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Discovering Old Welsh Houses studies and celebrates the traditional houses of North Wales and the lives of the people who lived in them.

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Please note that these reports are being updated as part of an ongoing programme of revision. Older reports sometimes refer to the old names of the Group. Between 2005 and 2012 also known as The Snowdonia Dendrochronology Project, then the N W Wales Dendrochronology Project and then the Dating Old Welsh Houses Group.

New reports will be added from time to time. Keep an eye on our website for updates.



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Dai Cymreig



Discovering Old
Welsh Houses

Barn at Hendre Farm Gwyddelwern

Denbighshire

Historic Buildings Record

Martin Cherry & Ross Cook

September 2019



Final Version



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This report has been compiled and completed by Discovering Old Welsh Houses.

Written in the language chosen by the volunteers and researchers undertaking the work.

PLEASE NOTE ALL THE HOUSES IN THIS PROJECT ARE PRIVATE AND THERE IS NO ADMISSION TO ANY OF THE PROPERTIES

Discovering Old Welsh Houses is a registered charity with nearly 200 members across north Wales working alongside local organisations, communities & interested individuals to discover, record and research the histories of houses built before 1700 A.D

Registered Charity No.1131782
Bryn Bedd, Nantgwynant, Gwynedd LL55 4NL
Tel : 01766 890550

www.discoveringoldwelshhouses.co.uk

Contact Us

The Secretary,
Discovering Old Welsh Houses
c/o; Bryn Bedd, Blaen Nanmor Rd,
Nantgwynant,
Gwynedd,
LL55 4NL

This report has been supported by:



ArchaeoDomus
Archaeological & Heritage Services

3 Cysgod-y-Coed, Cwmann, Lampeter, Cernm. SA48 8DN
01570 218048 / 07910 213557
ross.cook@archaeodomus.co.uk
www.archaeodomus.co.uk

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Barn at Hendre Farm Gwyddelwern, Denbighshire

Historic Building Record

Summary

This historic buildings record was undertaken on 12th September 2019, by Martin Cherry and Ross Cook, members of Discovering Old Welsh Houses. This report forms a part of a larger project to identify, understand and date historic buildings in North Wales, and seeks to provide an interpretation and record of the building at the time of investigation.

The building has been visually investigated and recorded photographically, with a survey plan made to aid interpretation. Ross Cook (ArchaeoDomus) was commissioned by the Group to undertake the measured survey and drawn interpretation.

*Dendrochronology has also been undertaken, which provided a date of **1547-64**.*

A timber-framed threshing barn built within the first part of the statistically derived date range of 1547-64d, modified at various dates and extended in the 19th century. Two cruck trusses survive largely intact as do some sections of the wall framing. Pulleys, shafting and other equipment associated with a Pelton wheel survive internally.

1 - Introduction

This report has been compiled as part of the Discovering Old Welsh Houses project to identify, interpret, date and understand the development of houses across North Wales. This report will be held by Discovering Old Welsh Houses and in perpetuity the Royal Commission on the Ancient and Historical Monuments of Wales.

The Barn at Hendre Farm was identified by the Group as a potential candidate for dendrochronological (tree-ring) dating. To understand the building prior to the commissioning of any dendrochronological works, this Historic Building Report brings together a written interpretation, photographs and a survey plan.

The building's address is Hendre Farm, Gwyddelwern, Denbighshire.

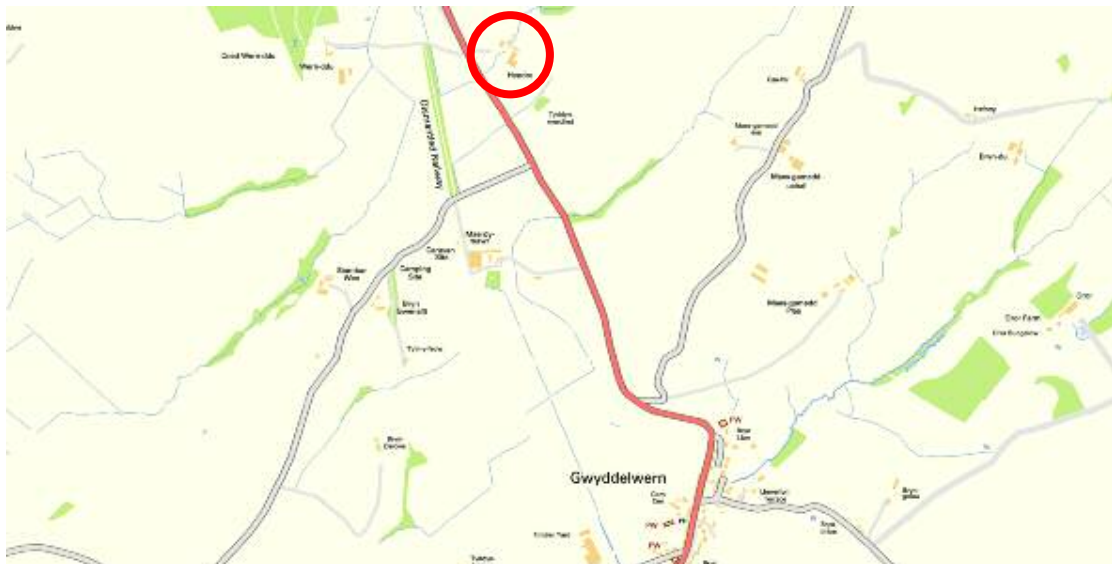
It was recorded by Martin Cherry and Ross Cook on 12th September 2019.

2 – Location and Context

Hendre Farm is located to the east of the A494, some 1.2km to the north north-west of the village of Gwyddelwern, in the county of Denbighshire. The farmyard is bisected by a small unnamed tributary of the Afon Clwyd, which enters the farmyard to the east and exits to the north. The barn sits within a farmyard, which is formed of stabling, barns and other ancillary buildings. The farmyard is immediately bounded to all sides by open pasture. The barn is on a north-south alignment. The nearest church is St Beuno in Gwyddelwern, some 1.3km to the south-east. The building is at an elevation of 197m above sea level, the postcode is LL21 9SB and is orientated on NGR **SJ 07056 47936**.



Location of Hendre Farm. Contains Ordnance Survey OpenData © Crown copyright and database right 2019.



Location of Hendre Farm, Gwyddelwern. Contains Ordnance Survey OpenData © Crown copyright and database right 2019.

3 - Aims

The aim of this Historic Buildings Record is to provide a written, drawn and photographic account of the focus building. This work forms one element of a larger research project to understand, date and record the historic buildings of North Wales.

4 - Method

Measured Survey

The survey was undertaken by Ross Cook (ArchaeoDomus) by recording measurements taken with a Total Station with direct input to AutoCAD. This survey was then drawn to scale using AutoCAD 2013.

Apex detail was added to the drawing using photogrammetric modelling, whereby photographs were used to produce a metric, scalable model to draw elements of the truss within the roof-space.

Photographic

The photographic record was made using a compact camera.

Investigation

The visual investigation was undertaken with full permission of the owners. This requires all areas of the house to be visually inspected to ascertain the development and form of the building.

5 - Dendrochronology

Dendrochronology (obtaining the felling date of a tree by tree-ring dating) works by utilising the variation in width of the annual growth rings as influenced by climatic conditions common to a large area. It is these climate-induced variations in widths which allow calendar dates to be ascribed to undated timbers when compared with a firmly-dated sequence. If a tree-section is complete out to the bark edge then a precise date-of-felling can be determined. A narrow core is extracted from across the annual growth rings of the timber, with no detriment to its strength or stability.

The date obtained for Hendre Barn is:

❖ Primary Phase: **Spring 1547-64**

All dendrochronological reports commissioned by the group can be downloaded from the Discovering Old Welsh Houses website:

www.discoveringoldwelshhouses.co.uk

Oxford Dendrochronological Laboratory was commissioned by Discovering Old Welsh Houses to undertake assessment and sampling.

6 - Interpretation

Two full-cruck trusses (Alcock type B) survive relatively intact. The blades rest on padstones. In addition to the collar, tie beam and purlins, the packing pieces, cruck spurs and cruck studs are either still extent or evident from mortices and peg holes. Later cladding in stone commonly removes nearly all the evidence for the side wall framing of timber-framed buildings, but enough survives at Hendre to indicate that it consisted of a wall-plate, mid rail and sill beam and wall posts; the panels had wattle infill. The dendrochronology analysis indicates that the timber was locally sourced.

Although the stone cladding was carried out in stages, the earliest walls so treated were most likely the 'show fronts', that is the walls facing the house, farmyard and principal approach: the small rubble stones are carefully coursed and the gable adorned with large flat stones resembling kneelers (Fig. 2). The fact that the plinth of the gable wall extends beyond the line of the original side wall suggests that the 19th-century extension to the SW replaced an earlier structure.

The listed building description makes much of the Pelton wheel. 'Additional historic interest arises from the preservation of a Pelton waterwheel at the south corner and associated electrical equipment, and a shaft with multiple pulleys suspended beneath the eastern cruck frame for transferring power to farm machinery. This wheel was installed in the late 1920s by Mr Hugh Thomas Parry and drove a generator to supply electricity to the farm and house, Hendre being the first house locally to be so provided. The power was also used to grind feed meal for horses and cattle and to run a sawmill.' A Pelton wheel is an impulse-type water turbine invented in the 1870s, which extracts energy from moving water rather than from the water's dead weight as in a conventional overshot wheel. (https://en.wikipedia.org/wiki/Pelton_wheel)

8 - Miscellaneous

Insurance

Insurance is provided for the volunteers of the group by Towergate Insurance and for ArchaeoDomus by Wessex Insurance.

Health & Safety

All volunteers adhere to the requirements of the Health & Safety at Work Act, 1974.

Equipment

The project used equipment supplied by the group and ArchaeoDomus Archaeological & Heritage Services.

Appendices



Fig. 1 - Cruck truss T1 with equipment associated with the Pelton water wheel.



Fig. 2 - The western gable, carefully coursed with a large flat stone intended to imply a simple kneeler, faced the house and farmyard and was meant to be seen and admired.



Fig. 3 - Detail of horn and packing piece.

