

North West Wales Dendrochronology Project Ty'n Llwyn, Llangar, Denbighshire



**EAS Client Report 2009/17
December 2009**

**Engineering Archaeological Services Ltd
Unit 2 Glanypwll Workshops
Ffordd Tanygrisiau
Blaenau Ffestiniog
Gwynedd
LL41 3NW**



Registered in England N° 286978

A report commissioned by The North West Wales Dendrochronology Project in partnership with The Royal Commission on the Ancient and Historical Monuments in Wales (RCAHMW).

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EAS Client Report 2009/17

**Commissioned by
Margaret Dunn
For
North West Wales Dendrochronology Project**

December 2009

**By
I.P. Brooks and K. Laws**

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North West Wales Dendrochronology Project

Ty'n Llwyn, Llangar

SJ 0626 4162

NPRN 28846

Status: Grade II* Listed

Introduction

This report details the recording of the house Ty'n Llwyn, undertaken to compliment both the dendrochronological sampling, undertaken by Oxford Dendrochronology Laboratory, and the documentary study undertaken by volunteers for the North Wales Dendrochronology Project. The fieldwork took place on 16th November 2009.

Methodology

The recording of this house was based on a plan provided by the owners, which was slightly modified to show the positions of the timbers. The drawings of the timberwork were carried out by direct measurement at a scale of 1:20 with the exception of the windbrace which was drawn at a scale of 1:10. Photographs were taken with a Nikon D80 digital SLR camera at a resolution of 10.2 mega pixels. Where practical all the photographs included a metric scale.

Survey Report

Ty'n Llwyn is set at right angle to the hill slope on the eastern side of the valley of the River Dee, approximately 800 m NE of Cynwyd at a height of approximately 200 m OD. The platform on which the house sits is partly cut into the hillside and partly built up on it's down hill side. The property is behind Brynllwyn, which replaced Ty'n Llwyn as the main residence (M. Crewe *pers. comm.*). It also is associated with a large "H" plan barn and associated agricultural buildings.

Externally the house appears to be a storey and a half range running at right angles to the hillside with a short wing on the northern side (Figure 2, Plate 2). The walls are rendered, although small areas of exposed walling on the southern side of the property would suggest that they are constructed of randomly built stonework. The roof is covered by small slates and there is a tall central chimney projecting from the ridge. This chimney has a noticeable lean to the west (Plate 3). A secondary chimney protrudes from the southeast corner of the property. There are also a series of gabled and external dormer windows in the upper storey on both sides of the house which are assume to be later additions.

The short wing on the southern side of the property is two storeys high with a roof covered by similar slates as the main range. Throughout the property the windows and doors are all relatively modern replacements.

Three, probably original, trusses were located within the main range of the building (Figure 2). Truss 1 was exposed, both in a first floor storage room at the west end of the property and in the master bedroom adjacent. The clearest exposure; however, was in the storage room. It consists of a cruck frame with a tie-beam, slightly curved collar and queen struts (Figure 3, Plates 4 and 5). A mortice in the foot of the current extent of the northern principal rafter (Figure 4, Plate 6) may suggest that this sat on a post and therefore could have been a raised cruck. Between the curved collar and a high straight collar, near to the peak of the truss was a panel of white washed lime plaster, assume to be a surviving wattle and daub partition (Plate 7). Two pairs of butt purlins and a ridge purlin were also noted. A series of peg holes along the lower side of the tie-beam mark the positions of a series of studs, presumably from an original partition, now lost. A cut out on the northern principal rafter is assumed to mark the position of a later modification, possibly a partition, now lost (Plate 8).

Truss 1 sits above two posts which appear to be replacements. On both sides are iron pintels, presumably recording double doors below this truss at some point. Probably related to these pintels are two blocked openings in the gable wall (Plate 10) which appear to be agricultural in nature. Below the tie-beam of the truss are a series of three wide planks supported by modern wooden studs and jointed by an iron fishplate.

There is only limited exposure of Truss 2, in a cupboard off the north side of master bedroom (Plate 9). It extends over the front of the main chimney breast. It is assumed that the chimney was inserted against this pre-existing feature.

Truss 3 appears to mark the western side of the cross passage, separating the hallway from the kitchen (Figure 3). The principal rafters have a slight curve at their base suggesting they may have been cruck frames (Plate 11). Once again there is a tie-beam and a slightly curved collar. The queen struts have been damaged by the insertion of a door, below the collar and between the queen struts. The relationship between the tie-beam the southern queen strut and the underlying post has been revealed by the insertion of the door (Figure 4). There is some indication that there have been windbraces linking this truss to the lower purlin in the form of an open socket on the upper surface of the purlin (Plate 12). On the ground floor there is a stud and rail partition on the southern side of the house (Plate 13). The post forming the southern side of the partition has its lower end removed at a height of 0.6 m above the current floor level which has been supported by two short studs supporting a short rail. Peg holes on the post suggest that the main middle rail of the partition may have continued.

The chimney and upper floor are inserted into an earlier structure. The fireplace was inserted against the central truss, preserving the probable extent of the original passageway. Graffiti on the side of the fireplace of 1656 presumably gives a *terminus post quem* for the insertion of the fireplace and the upper floor. The floor in the main room consists of a main beam and a series of housed joists (Plate 14). Both the joists and the beam are moderately chamfered (Figure 4) and are stopped at both ends. The beam has flat stops (Plate 15) whilst the joists have stepped stops (Plate 16). A slot cut into the main beam (Plate 17) suggests the position of a temporary division of the room.

The room currently used as the kitchen also has an inserted ceiling consisting of a central chamfered beam with squared cheek pieces on either side of the beam (Figure 4). Both the beam and the joists have angled run-out stops (Plates 18 and 19). The beam also has a daisy-wheel (Plate 20) inscribed on its eastern side near to the current external door to this room. It is likely that this floor was added in the eighteenth century and may relate to a cupboard door carved with a date of 1735.

Dendrochronology Sampling

Seven samples were taken by Oxford Dendrochronology, three from the cruck frames forming the primary phase of construction of the house and four from elements of the inserted floors both in the current kitchen and the parlour.

Conclusions

Ty'n Llwyn appears to have started life as a late-medieval hall house set at right angles to the hill slope in a characteristic way. Three main phases of development have been defined consisting of:

1. A late medieval hall house of 'gentry' type with a probable central open truss, in the hall, of cruck truss construction.
2. The conversion into a hearth–passage house in the 17th century with the insertion of the central fireplace against the central truss and the upper floor.
3. The conversion of the outer room into a kitchen and the insertion of the ceiling beams into this room probably took place in the eighteenth century, possibly together with the construction of the small wing on the northern side of the building.

There is some indication that the western end of the building may have been used for agricultural purposes. The extent of agricultural use is uncertain, however the presence of pintels below Truss 1 and blocked openings in the

eastern gable wall suggest that this was at least the area to the east of Truss 1. This may relate to the construction of Brynllwyn.

Acknowledgments

The recording of this building was commissioned by Margaret Dunn for the North Wales Dendrochronology Project and she also organised access to the building. The owners of the house are gratefully acknowledged for their forbearance during the recording of the house. They also supplied an architect's plan of the house on which the plans produced in this report are based. The buildings were also visited by Richard Suggett of the Royal Commission on the Ancient and Historical Monuments of Wales, whose analysis of the buildings was extremely useful.

References

Haslam, R., Orbach, J and Voelcker, A. 2009 *The Buildings of Wales. Gwynedd. Anglesey, Caernarvonshire and Merioneth*. Yale University Press, London



Plate 1: Ty'n Llwyn looking south.



Plate 2: Ty'n Llwyn looking NE



Plate 3: Exterior view of the central chimney looking NE



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Plate 4: Truss 1 looking NW



Plate 5: Truss 1, looking SW



Plate 6: Mortice in foot of northern principal rafter of Truss 1, looking north.



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Plate 7: Lime plaster panel in Truss 1, looking west



Plate 8: Cut out on northern principal rafter, Truss 1, looking west.



Plate 9: Truss 2, looking NW



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Plate 10: Blocked opening in western gable end, looking east.



Plate 11: Truss 3 looking west.



Plate 12: Lower purlin adjacent to Truss 3, looking south.



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Plate 13: Stud and rail partition between the hall and kitchen, looking SW.



Plate 14: Main room ceiling beam and housed joists, looking west.



Plate 15: Chamfer and stops on the main ceiling beam looking north



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Plate 16: Chamfer and stops on the joists in the main room, looking up



Plate 17: Slot cut in base of ceiling beam, looking west



Plate 18: Form of the ceiling beam in the kitchen, looking south



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Plate 19: Form of the joists in the kitchen, looking west.



Plate 20: Daisy wheel on main kitchen beam, looking west.

Appendix 1: Sources

Haslam, R., Orbach, J and Voelcker, A. 2009 *The Buildings of Wales. Gwynedd. Anglesey, Caernarvonshire and Merioneth*. Yale University Press, London 580

Tŷ'N-Y-LLWYN, behind Brynllwyn, ½ m. NE. Low, heavily rendered, but with lovely roofs of small thick slates. The tall ridge chimney marks a C17 inserted fireplace, when a late medieval cruck framed hall was encased. The gable projection with a two-storey slightly jettied bay may have been a C17 parlour, off the hall. Cruck-trusses with arched collars.

Coflein (<http://www.coflein.gov.uk/en/site/28846/details/TY%27N+Y+LLWYN%3BTYNLLWYN%2C+LLANGAR/>)

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Grid Reference SJ06274163

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Unitary (Local) Authority Denbighshire

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Old County
Type of Site
Period

Merioneth
DWELLING
Post Medieval

Community
Broad Class

Cynwyd
Domestic

Site Description

A late-medieval hall-house with a characteristic and rather dramatic downslope siting. There are three principal phases:

1. Late-medieval hallhouse of 'gentry' type, i.e. with a central open truss to the hall. Evidence for three cruck-trusses survive defining the two-bayed hall and inner and outer-rooms. The dais partition truss appears to have lost the post-and-panel partition. The central arch-braced truss (partly visible in a cupboard) is set against the inserted chimney. The passage-partition truss, which rarely survives, has a large doorway into the outer room and possibly open panels (now infilled) suggesting a feed-walk.
2. Hearth-passage house. The C17th successor to the medieval house has retained the cross-passage plan. A large fireplace with tall chimney has been inserted against the central truss preserving the passage. The broad-chamfered fireplace beam has been cut back. A graffiti date on the side of the fireplace of 1660 provides a terminus post quem for the fireplace.
3. Additional phase. The outer room seems to have been converted into a kitchen and possibly rebeamed in the C18th. A dated panel (possibly a cupboard front) may date the conversion: E I 1735. The central chamfered beam has a scribed daisy wheel. A small wing, in the manner of an oriel, has also been added on the yard side with a rather awkward entry from the side of the fireplace.

(RFS 19/11/2009)