

NORTH WEST WALES DENDROCHRONOLOGY PROJECT 2009-2012
PROSIECT DENDROCHRONOLEG GOGLEDD ORLLEWIN CYMRU

DATING OLD WELSH HOUSES / DYDDIO HEN DAI CYMREIG

Cwm Farm, Cwm Cynfal, Ffestiniog, Gwynedd



ARCHITECTURAL RECORD /COFNOD PENSARNIOL

October 2011

Peter Thompson
Llwyndu Farmhouse
Llanaber
Barmouth
Gwynedd
LL42 1RR



DYDDIO HEN DAI CYMREIG

PROSIECT DENDROCHRONOLEG
GOGLEDD ORLLEWIN CYMRU



DATING OLD WELSH HOUSES

NORTH WEST WALES
DENDROCHRONOLOGY PROJECT

Buildings in this project are mostly privately owned and are not open to the public

Project Data

Job No.	HW-CWM- BR17
Building Name	Cwm Farm, Cwm Cynfal, Ffestiniog, Gwynedd
Reference	NGR SH7331 4130
Job Description.	Building Record
Draft	HW-BR17-Dr01
Author	Peter Thompson 21 st September 2011
Client	North-West Wales Dendrochronology Project
Document Location	M:/HW/2011/Cwm Farm Report/draft BR017/CWM draft.pdf

Peter Thompson
MA., PG Dip HEC
Llwyndu Farmhouse, Llanaber, Barmouth, Gwynedd, LL42 1RR
peterthompson@heritagewales.org.uk
Tel: 01341280144 m: 07912 748367

Cwm Farm Cwm Cynfal, Ffestiniog, Gwynedd Building Record

TABLE OF CONTENTS

	<i>Summary.....</i>	<i>1</i>
1	INTRODUCTION	1
	1.1 Background to the project	2
	1.2 Extent of report.....	2
2	AIMS & OBJECTIVES.....	2
3	METHODOLOGY.....	3
	3.1 Documentary Research.....	3
	3.2 Historic Building Record.....	3
4	BUILDING RECORD – DESCRIPTION.....	4
	4.1 Exterior.....	4
	4.2 Interior.....	4
5	DENDROCHRONOLOGY.....	7
6	DISCUSSION	
	6.1 Origins & Development.....	8
7	ACKNOWLEDGEMENTS.....	9
8	SOURCES.....	9

APPENDIX LIST OF PHOTOGRAPHS

Figures & Plates

Figure 1: General location. Kind permission OS	11
Figure 2: Location in Cwm Cynfal OS End user	11
Figure 3: Aerial Image courtesy Google Earth	12
Figure 4: Ground Floor Plan	13
Figure 5: First floor Plan	14
Figure 6: Truss 1 & 2	15
Figure 7: Truss 3	16
Figure 8: Dais Partition	17
Figure 9: Closed partition- conjectural	18
Plate 1: Front elevation	19
Plate 2: Front elevation & SW rebuilt gable	19
Plate 3: Window alterations	20
Plate 4: Front elevation mullion window	20
Plate 5: Harr Hung door & socket	20
Plate 6: NE gable – corbelled external chimney breast	21
Plate 7: NE gable; external breast & windows	21
Plate 8: SW elevation- mullion window & plain door	22
Plate 9: Hall & 1 st Fl window, rear elevation; first floor window	22
Plate 10: Mullion lintel in hall	22
Plate 11: Hall and inserted fireplace	23
Plate 12: Dais partition	24
Plate 14: Rear side of dais – door head R	24
Plate 13: Rear side of dais partition; door head L	24
Plate 15: Truncated cill	24
Plate 16: Screen detail – nailhead stop & chamfers	24
Plate 17: Dais canopy, screen and later pine beam	25
Plate 18: Joists over inner room with supporting beam to left	25
Plate 20: Solar and fireplace	26
Plate 19: Truss 1. Lost tie beam to collar, post and tie beam truss.	27
Plate 21: T1 – view to north	27
Plate 22: T1 – truncated tie beam	27
Plate 23: Matt Hurford sampling wall plate. Dated 1523.	27
Plate 24: T2W: arch-braced truss from north east	28
Plate 25: T2W: Pegs, wind brace mortise; smoke black	29
Plate 26: T2:E From SW – eastern principal by stack	29
Plate 27: T2E: eastern principal -wind brace detail	29
Plate 28: T3: From NE	30
Plate 29: T3: truss showing erosion, stave holes	30
Plate 30: T3: wind braces and stave holes	30
Plate 31: T3: base of principal and tie-beam; housing & peg holes?	31
Plate 32: T3: base of principal and tie-beam; housing & peg holes –close-up	31
Plate 33: T3: rafters & wind braces	32

Cwm Farm

Cwm Cynfal, Ffestiniog, Gwynedd

Standing Building Record

Summary

Cwm Farm is located on the outskirts of the village of Llan Ffestiniog in Cwm Cynfal and situated in that valley head at its north east end. It is centred at NGR SH 7331 4130. It is on the Statutory List of Buildings of Architectural or Historic Interest and is listed Grade II. It is included on the National Monument Record of Wales PRN 28320. A recording of the building was made in September 2011 as part of the North-West Wales Dendrochronology Project. (NWWDP) which was undertaken in partnership with the Royal Commission on the Ancient and Historic Monuments of Wales.(RCAHMW) The record formed part of an individual survey that was determined by dendrochronological sampling and analysis which has established an initial construction phase from c1523 with possible adaptation within two decades.

Cwm Farm originated as a typical three unit hall house of four bays divided by a centrally placed arch-braced truss with a closed truss of tie-beam, post and collar on either side, thus dividing the accommodation into three cells of hall and passage, inner room/s and service room/store. It seems from the dendrochronology that the insertion of the central stone chimney was dated by the fireplace lintel of 1536, suggesting a quick progression from open hall to an improved chimney arrangement within a relatively short period. The inserted stack created a 'hearth passage' rather than the more usual lobby entry. The first floor which was inserted over the hall is intriguing because the main floor beam is of softwood and the joists that run from this to the fireplace are of inferior scantling, quality and are widely spaced.

The building was later altered to form two units with the cross passage and store rooms being separated from what became the domestic quarters and a doorway inserted into a former window opening sometime in the 19th century.

1 INTRODUCTION

1.1.1 Background to the project

1.1.2 Cwm Farm, Cwm Cynfal, Gwynedd was recorded in September 2011 as part of the North West Wales Dendrochronology Project and undertaken in partnership with the Royal Commission on Ancient & Historic Monuments Wales.

1.1.3 Cwm Farm is located on the outskirts south east of the village of Llan Ffestiniog, Gwynedd on the east side of the A470 on an unclassified lane that terminates at Cwm Farm. The house is the last building in Cwm Cynfal (E) NGR SH 7331 4130. Immediately north is the B4391. A long track leads to a spectacular location that widens and undulates towards and around the house & buildings which stand in isolation on the valley bottom. Sited in close proximity to the Afon Cynfal which flows rapidly some 6m to the south of the building.

1.1.4 Cwm Farm is included on the Statutory List of Buildings of Special Architectural or Historic Interest at Grade II (Cadw ID 5192). It is also included on the National Monuments Records of Wales (NMRW PRN 28320).

1.1.5 This standing building record was requested after dendrochronological sampling and analysis was undertaken by Mr. Matt Hurford and Dr. Dan Miles of the Oxford Dendrochronological Laboratory. Further samples were taken in order to date the secondary phase. This was successful and has been reported (Miles & Bridge, 2011; see section 5)

1.2 Extent of Report

1.2.1 The following report gives the results of the building survey and has been prepared in accordance with *English Heritage guidelines as published in Understanding Historic Buildings: A Guide to Good Recording Practice* (EH 2006) and the Association of Local Government Archaeological Officers' *Analysis & Recording for the Conservation and Control of Works to Historic Building* (ALGAO, 1997).

1.2.2 Report prepared upon research and survey correct in September 2011

2 AIMS AND OBJECTIVES

2.1 The objective of the historic building record, as per the design brief, was to produce a measured drawing, photographic record and a written record to supplement the dendrochronological survey.

3 METHODOLOGY

3.1 Documentary Research

- 3.1.1 The brief requires that the individual buildings are assessed and documented by a number of project 'partners' which includes documentary research by volunteers of the NWWDP. The building recording is an activity independent of the documentary research. However, reference may be made to known sources where relevant.

3.2 Historic Building Record

- 3.2.1 The requirement was to provide the report based on an examination of both the exterior and interior of the building and the production of measured drawings, photographic and written data.

The measured drawings.

- 3.2.2 A measured plan of the site was produced for the ground floor and first floor at a scale of 1:50. Reduced to A4. Measurement was by tape and telescopic measuring rod. Cross sections of the building at each truss were also prepared. Drawing of oak screen to scale 1:25. Reference was also made to archive material and plans. Register of project drawings APPENDIX A

Photographic Record

- 3.2.3 Images were captured on a Nikon D2X digital single-lens reflex camera giving 10mega pixel RAW files. Photography was to the standard of a Level 3 survey defined by English Heritage (2006, 14). The record comprises exterior and interior images as follows

General images of elevations and features exterior and interior rooms

Detail images of architectural features of note exterior and interior both constructional and decorative.

A scale divided into 500cm sections is used in a number of photographs. Photographs are listed with all relevant photographic data as well as subject, orientation, photographer and date. A List of images is included APPENDIX A. A copy of digital images prepared in JPEG format is included in a CD at the back of the report. TIFF images are available.

Written Record

- 3.2.4 To complete the drawing and photographic records, a written description detailing features, use and changes to the building plus a brief discussion and this follows below.

4 BUILDING RECORD - DESCRIPTION

4.1 Exterior

- 4.1.1 Cwm stands on a single rectangular plan form of one phase (figure 4), running north-east to south-west. The building stands on almost level ground and the northern elevation faces a wide expansion of grass meadow gradually rising before climbing steeply to form the valley side. The construction is of roughly coursed rubble stone and slate, and comprises a two - storey dwelling. It has a continuous pitched roof with a mixture of slating but of even size and coursing of later date. (Plate 1, 2) The original building layout was of a classic medieval open hall of 2 central bays with further small rooms at either side. To the NE end was an inner room or rooms with solar above and to the SW on the ground floor service or store rooms with further room above. Closed partitions separated these rooms from the hall.
- 4.1.2 The stonework on this elevation displays evidence of alterations as part of its development. The walling sits on top of a plinth of larger rougher boulders that run the entire length and width of the building. The façade reveals its origin as a sub-medieval building of standard type with the offset, large (Plate 3) doorway. This opposes a similar doorway in the rear elevation to form the cross passage, originally situated at the service end of the open hall. The latter was lit by a small mullion window (plate 4) to the right of the door. The doorway itself displays a fine, shallow head of split slate and a rough V keystone stone to form a characteristic voissior lintel. Good slate quoins to the sides. The modern door, made of elm, and copied from a harr-hung door, utilises the stone socket (Plate 5) at the base of the door which would have accommodated the original¹ To the left of the door is a small opening with modern window. This has replaced a doorway inserted in the 19thC to form a second entrance to the building on this elevation. A higher lintel, above the current window lintel clearly shows this earlier opening. The owner, when replacing this door with the new window opening recalls the inner lintel being mortised as for a mullion window. It has been concealed by plaster now and is not visible. It is possible that it was similar to the next window to the left where the lintel is still exposed inside (Plate 10). This window also suggests masonry disturbance below the window, possibly for a door or merely to enlarge the window. To the extreme left is another small window opening with modern window. Originally this lit the inner room behind the dais screen. The distance from ground to soffit is 3.7m. An extension was added to the NE gable in the 19thC. The building stands in close proximity (6m) and parallel to the Afon Cynfal.
- 4.1.3 The roof is pierced by three chimneys. To the left, NE gable, a small square stack protrudes from the masonry. This forms the original chimney that heated the solar and a small corbelled chimney breast extends the masonry beyond the gable wall on three roughly shaped corbel

¹ Pins are formed on the innermost plank of a boarded door. The bottom pin sits in a socket fashioned from stone while the top pin is retained by a wooden or leather strap. The current edition has been in place for 30 years. (Brunskill, 2000, Alcock, Barley, Dixon & Meeson, 1996, F27E)

stones (Plate 6). The top of this breast stops short of the chimney and is capped with slates. (Plate 7) The central chimney protrudes from the large stack that was inserted into the hall just right of centre. The chimney to the right is a modern fabrication, added after the complete rebuilding of the SW gable c 1979-84 (owner)

- 4.1.4 The southern elevation shows two alterations and changing window sizes. From the left hand gable facing the wall a small early mullion window lights what was the service room [GF2] (Plate 8). To its right the opposing cross passage doorway has a flat stone lintel and has no decorative features although it shares the chased rebates that are displayed on the 'front' doorway. This doorway had been converted, until recently, to a window, probably 19thC.

To the right are a ground floor window that lights the hall. The masonry has clearly been altered and reduced in size. (plate 09) Above this a small metal casement window has been inserted into the wall to eave level at a later date. Disturbed masonry and lintel of re-used timber. A small outshut with pitched roof has been added to the south-east corner of the building. A lean to single storey extension was added to the NE gable in the 19thC. This partially obscures the external chimney. Above the roof of this outshut are two small windows, original phase, either side of the chimney breast with modern oak casements (Plate 7)

4.2 Interior

- 4.2.1 The building was divided into 4 bays by three roof trusses. The interior is now divided into 4 ground floor rooms including a small lobby and two large rooms on first floor. Evidence of the four bays is now only apparent when viewing the trusses in the upstairs rooms. Entering the main door opens into a lobby [GF1] formed as a much later adaptation, built of concrete block to the right. Door gives off into [GF2] the former the cross passage, with service room to the right. Modern floor inserted over. Gable wall rebuilt (c1979-84) and now no evidence of former use as service or store room except small mullion windows to northern and southern walls. Evidence for service room is mortise groove underneath tie beam in FF7 above indicating a closed truss to ground level. Replaced mullions to northern window. NE wall in this room is formed by the back of the inserted chimney. Random stone roughly pointed with lime. The chimney thus inserted forms a hearth passage rather than the more usual lobby entry. However, secondary masonry (figures 4,5) rises to the roof which effectively separated the building into two units. The inserted secondary doorway to the left of main door, front elevation, did form a lobby and relegated the service end of the building to a perhaps distinct non-domestic use.

- 4.2.2 Room [GF3] (Plate 11) occupies the hall as floored over with inserted chimney. It is lit by two windows on NW wall. The northernmost with oak lintel (Plate 10) still exposed with mortises to house five mullions now gone. Modern oak casement windows now in situ. Opposite, on southern wall, is a further oak casement. Masonry changes on exterior show window reduced or altered at some time. (Plate 9)
- A fine dais partition to north-eastern end of room in almost complete condition. (Plate 12) (figures 8,9). It is not fixed to the wall at either end and does not retain outer doorposts but clearly had them. It has two shallow round arches formed out of the head beam at either end

and is fitted with 6 posts and 5 planks/panels. The cill has been crudely truncated at the bottom (Plate 13-16) of the inner door posts of the screen to afford a more convenient circulation. The partition posts are decorated with a plain stopped chamfer while the head beam also has a chamfer interrupted by 'nailhead' bosses. (Plate 16) The head beam and the joists that formerly sat in the housings cut out of the top of the head beam do not now meet, being raised approximately 110mm to sit on later inserted pine beam.) These joists were originally pegged into the head beam and sailed on to meet the bottom of the partition that travelled down from the truss [T1] directly above. This formed a canopy of around 380mm. (Plate 17) A bench was fixed to the partition and is clearly indicated by an arrangement of mortises. The partition has been moved back slightly. The joists over the partitions are now seated into a large, pine beam, squared and chamfered. This beam also supports the widely spaced and rather crude joists of the later floor that divided hall into ground and first floor spaces, running from this beam to the inserted chimney stack.

The large chimney stack was inserted into the hall sometime after the primary phase. This fireplace has a large section lintel and dendrochronology suggests it dates c1535. If this lintel is contemporary rather than a re-use of timber at a later date it is used barely a decade after the first phase. Smoke blackened timbers in the hall indicate that an open hearth was in use prior to the later chimney stack.

- 4.2.3 Room [GF4] comprises the former inner room behind the dais partition. The joists over the partition (Plate 18) are supported at the external NE wall on a beam running the length of the original wall. Where once this beam was built into the wall it is now supported on a post. This arrangement was utilised probably when the room was extended into the out shut [GF5]. A short stone stair rises from this small extension to the next floor. The upper part of this stair is a modern timber construction. The original access to the solar was possibly by steps or a ladder in the NE corner of the room of [GF4] but the evidence is inconclusive.

4.3 First floor & Roof Structure

- 4.3.1 The upper floor rooms [FF6] and [FF7] (Figures 4, 5) reveal clearly the roof structure from the primary build. There are three trusses from NE to SW [T1/T2/T3]. Trusses [T1] and [T3] comprise a collar, post and tie beam. Truss [T2] spanned the former hall and is an arch-braced collar type and the bay either side formed the hall. The principal rafters in [T2] are cusped above the collar but not the collar itself which is often seen. Visible on western principal rafter only. The principal rafters sit on continuous wall plates. The purlins are threaded and all seem to be primary although there is a repair with later timber to the upper purlin west in bay 1. There is evidence of smoke blackening on the hall timbers. All truss timbers are secured by three pegs through mortise and tenon joints.
- 4.3.2 Truss [T1] displays holes and grooves for staves and wattle that formed a closed truss within the A frame and a continuous mortise slot underneath the tie-beam for a partition below, possibly boarded rather than wattle and daub or a mixture of post and wattle. This truss has been severely truncated leaving just a stump of the tie-beam at either end. A portion of the post dropping from collar to tie beam was removed at the same time. A softwood, tie beam has been attached with bolts at a higher level to afford a more convenient circulation

sometime after the floor had been inserted over the hall. (Plates 19, 21,22,) A modern partition from this later tie beam existed until recent years. (pers. Comm. owner)

- 4.3.3 Lifting the floorboards over the GF softwood beam show both the early joists over [GF4] and the later, wider spaced joists of the new floor over [GF3] fitted and pegged or nailed in their own housings into this beam . The joining of the older joists to the former partition can only be conjectural but is suggested by a drawing after Peter Smith (Figure 9)
- 4.3.4 Room [FF6] occupies bays 1, 2 and a portion of bay 3. The first bay accommodated the primary phase solar. This was heated by a first floor fireplace with large timber lintel and lit by two windows, now modern casements, either side of the chimney. (Plate 20) The later stairs from [GF5] rise to this room from the outshut. A window breaks the wall plate to light this room.
- 4.3.5 The second and third bays represent the hall. The upper segment of the inserted stack reaches up and envelopes the truss [T2] leaving only the NW section visible.(Plate 24) The principal and the bracing arches of the truss are chamfered and stopped with a nailhead type stop, similar to the partition in [GF2] (Plate 25). Three casement windows have been inserted, two to the NW and one to the SW wall, the insertion interrupting the wall plates. Western wall plate gave the felling date of 1523. (Plate 23) All timbers in the hall display smoke blackening, particularly the top of the central truss. (Plate 25)
- 4.3.6 Room [FF7] has truss [T3]. Similar to [T1], with collar, post and tie beam but showing considerable signs of wear/ erosion and distortion.(Plates 28, 29) It is holed and grooved in the same way as [T1] for staves and wattle to form another closed screen to ground floor level. It is not clear whether a post and panel or a post and wattle screen dropped below the tie beam. The NW principal of [T3], has dated with dendrochronology, to a precise felling date of the winter of 1567/68. Given the context of the truss and rafters it is probable that this date is explained by a repair/replacement. The rafters have been removed and re-positioned with some replacements. Some rafters 127mm wide.
- 4.3.7 Room [FF7] and the hall [FF6] are divided by the inserted central stack and the rear of the stack in [FF7] has been plastered recently. A photograph belonging to the owner displays the whole stack from ground floor to chimney as being pointed and not plastered. On the SE side of the stack the lower part of eastern principal of [T2] is visible together with a wind brace at the lower purlin. (Plates 26, 27).
- 4.3.8 The evidence of the mortises for wind bracing both on principals and purlins indicate that every truss was wind braced on both sides. Those that were visible from the hall were cusped while the two that exist on the service side of [T3] have only a plain board. (Plate 30, 33) This may be later. Remnants of the wind brace tenons remain in several of the mortises throughout the roof. On T3 SW side is a curious set of peg holes and rough housing (Plates 31,32) (figure 7).

5 Dendrochronology

- 5.1.1 Cwm Farm was sampled on March 7th 2011 & July 2011 by the Oxford Dendrochronology Laboratory. Because of an anomaly with a particular timber – a principal rafter in [T3E] it

was decided to take further samples to understand better the chronology of the building. This was done in July by Dan Miles. The results have now been reported (Miles & Bridge, 2011)

- 5.1.2 Eleven timbers were sampled. A wallplate NW retained complete sapwood and gave a felling date of **Summer 1523**. It is felt that this dates the trusses. Five of the PRs were cut from the same tree. One principal rafter, (T3 W) however, dated to the **winter of 1567/68** and may have been a repair. The head beam for the partition gave a date of **1533-5** and the second sample from the fireplace lintel, which had complete sapwood, dated similarly to **c1535**.

6 Discussion

6.1.1 Origins & Development

- 6.1.2 Cwm originated sometime around 1523 as a classic three cell hall house of four bays with the two central bays occupied by an open hall. The inner and service or outer rooms were separated by closed trusses and partitions. The construction was of principal rafters bearing on wall plates sitting on mass walls of stone. Two ties of threaded purlins and a ridge beam supported common rafters and the roof was tensioned throughout by wind braces in 12 pairs. The purlins appear to be butt jointed within the socket of the principal rafter as no joint is visible. The open hall was customarily heated by a central hearth and vented through a louvre on the apex of the roof but there is no evidence for this on inspection. Smoke blackened timbers, however, seem to confirm an open hearth.

- 6.1.3 A chimney stack was inserted after this initial phase in what was a common modification to open halls. A floor was also inserted. Problematic is the inserted pine beam. It cannot be dated dendrochronologically. It is likely that it replaced the arrangement where joist and partition met to form the solar above although in exactly the same position. The dais partition is in a lower position so that the joists are raised above the housings in the head beam that they originally occupied to locate on the later pine beam. The screen sits on later material - brick, concrete and so is possibly not at its original height in any case. The inserted floor is of a much lower standard of workmanship and scantling of joists than that over [GF4]. Of further interest are the dates given for the dais screen and the fireplace lintel, both offering a date around **1533-5**. This would suggest a second phase of building a mere decade after the first timber was felled. It suggests the screen was an addition, rather than integral to the customary primary build of closed partition and dais screen unless the primary phase was continuous. Of course, another possibility for the lintel is that the lintel was a re-use of timber at a later date - as at nearby Bryn y Rodyn.

- 6.1.4 The stack has been inserted allowing the continued use of the cross passage as a hearth passage rather than a lobby entry type of construction and the stack envelopes the arch-braced collar with little heed for the aesthetics of the original display. A floor was inserted, with inferior timber and at some time [T2] was cut away to allow access to the new first floor. An outshut was added with a stone staircase to afford better access to the next floor. The outshut may date from this time allowing a stone stair to be incorporated, but it could be later.

- 6.1.5 A repair to the roof is suggested by the erosion of timbers at the south- west end where there is clear evidence of rafters being moved and this is confirmed by the 1567 principal rafter NW being inserted, most likely as a repair. It is not clear if the first floor was completely separated by the secondary masonry attached to the chimney stack, but since opened to allow access to [FF7]. Certainly, the 'service end' of the building appears to have been relegated to a non-domestic ancillary use because of this until recently. The owner recalls a former occupant relating that animals were kept in this separated end of the building end, amongst other uses, during the 20thC. At some time a door was let into the front façade, to the left of the main door. This created a lobby entry, which remained until recently.
- 6.1.6 With one or two modifications Cwm Farm remains essentially, and quite readable as, the building constructed and altered during the 16th century with only a couple of early accretions.

7 ACKNOWLEDGEMENTS

- 7.1 This building recording was commissioned by Mrs. Margaret Dunn, Project Director for the North-West Wales Dendrochronology Project and great thanks is extended to her. I would like to thank Mr. Dennis Bassford, the owner, for his co-operation, understanding and hospitality during the course of several sampling visits and the recording itself. Hopefully, he will understand a little more about the building he has lived in and mused over for many years.

8 Sources

a) Published sources

ALGOA, 1997. *Analysis and Recording for the Conservation of Works to Historic Buildings*

Brunskill, R.W. 2000. *Vernacular Architecture: An Illustrated Handbook*. Faber & Faber, London

Alcock, N.W., Barley, M.W., Dixon, P.W & Meeson, R.A. 1996. *Recording Timber Framed Buildings: An Illustrated Glossar*. CBA

English Heritage, 2006. *Understanding Historic Buildings: A Guide to Good Recording Practice*

Smith, P. 1988. *Houses of the Welsh Countryside: A study in Historical Geography*, 2nd Ed. 1988

Ed. Beverley Smith, J. & Beverley Smith, Llinos, 2001. Ch. 10, *Smith, P. Houses c 1415 –c 1642*

b) Unpublished

Miles, D. & Bridge, M. C. 2011. *The Tree-Ring Dating of Cwm Farm, Cwm Cynfal, Ffestiniog, Gwynedd*. Oxford Dendrochronology Laboratory, Report No. 2011/22

RCAHM Wales, Site file. Cwm Farm. NRPN 28320

APPENDIX: List of Photographs

HWCWM 17	Subject	Orient'n	date	photographer
1101	Front elevation	From NW	3.09.2011	Peter Thompson
1102	Front elevation & SW modern, rebuilt elevation	From NW	3.09.2011	Peter Thompson
1103	Front elevation; windows	From NW	3.09.2011	Peter Thompson
1104	Mullion to right of main door	From NW	3.09.2011	Peter Thompson
1105	Harr hung door – door pin & socket	From NNE	3.09.2011	Peter Thompson
1106	Corbelled chimney breast	From NE	3.09.2011	Peter Thompson
1107	NE gable; external breast & windows	From NE	3.09.2011	Peter Thompson
1108	Southern elevation S end	From NE	3.09.2011	Peter Thompson
1109	Hall & 1 st Fl window, rear elevation; first floor window	From SE	3.09.2011	Peter Thompson
1110	Mullion lintel in hall	From SE	3.09.2011	Peter Thompson
1111	Hall and inserted fireplace	From NE	3.09.2011	Peter Thompson
1112	Dais partition	From SW	3.09.2011	Peter Thompson
1113	Rear side of dais partition; door head L	From NE	3.09.2011	Peter Thompson
1114	Rear side of dais – door head R	From NE	3.09.2011	Peter Thompson
1115	Truncated cill; dais partition	From NE	3.09.2011	Peter Thompson
1116	Dais detail: nailhead stop and chamfers	From SW	3.09.2011	Peter Thompson
1117	Dais canopy	From NW	3.09.2011	Peter Thompson
1118	Joists over inner room	From NW	3.09.2011	Peter Thompson
1119	Truss 1:	From SW	3.09.2011	Peter Thompson
1120	Solar; fireplace	From SSW	3.09.2011	Peter Thompson
1121	T1: view to south	From NE	3.09.2011	Peter Thompson
1122	T3: Truncated tie beam T1	From NE	3.09.2011	Peter Thompson
1123	Matt Hurford sampling wall plate	From SW	3.09.2011	Peter Thompson
1124	T2W: arch-braced truss from north east	From NE	3.09.2011	Peter Thompson
1125	T2W: Pegs, wind brace mortise; smoke black.	From SW	3.09.2011	Peter Thompson
1126	T2:E From SW – eastern principal by stack	From SW	3.09.2011	Peter Thompson
1127	T2E: eastern principal -Wind brace detail	From SW	3.09.2011	Peter Thompson
1128	T3: From NE	From NE	3.09.2011	Peter Thompson
1129	T3: truss showing erosion, stave holes	From NW	3.09.2011	Peter Thompson
1130	T3: wind braces and stave holes	From SW	3.09.2011	Peter Thompson
1131	T3: base of principal and tie-beam; housing & peg holes	From SW	3.09.2011	Peter Thompson
1132	T3: base of principal and tie-beam; housing & peg holes –close-up	From SW	3.09.2011	Peter Thompson
1133	T3: rafters & wind braces	From SW	3.09.2011	Peter Thompson



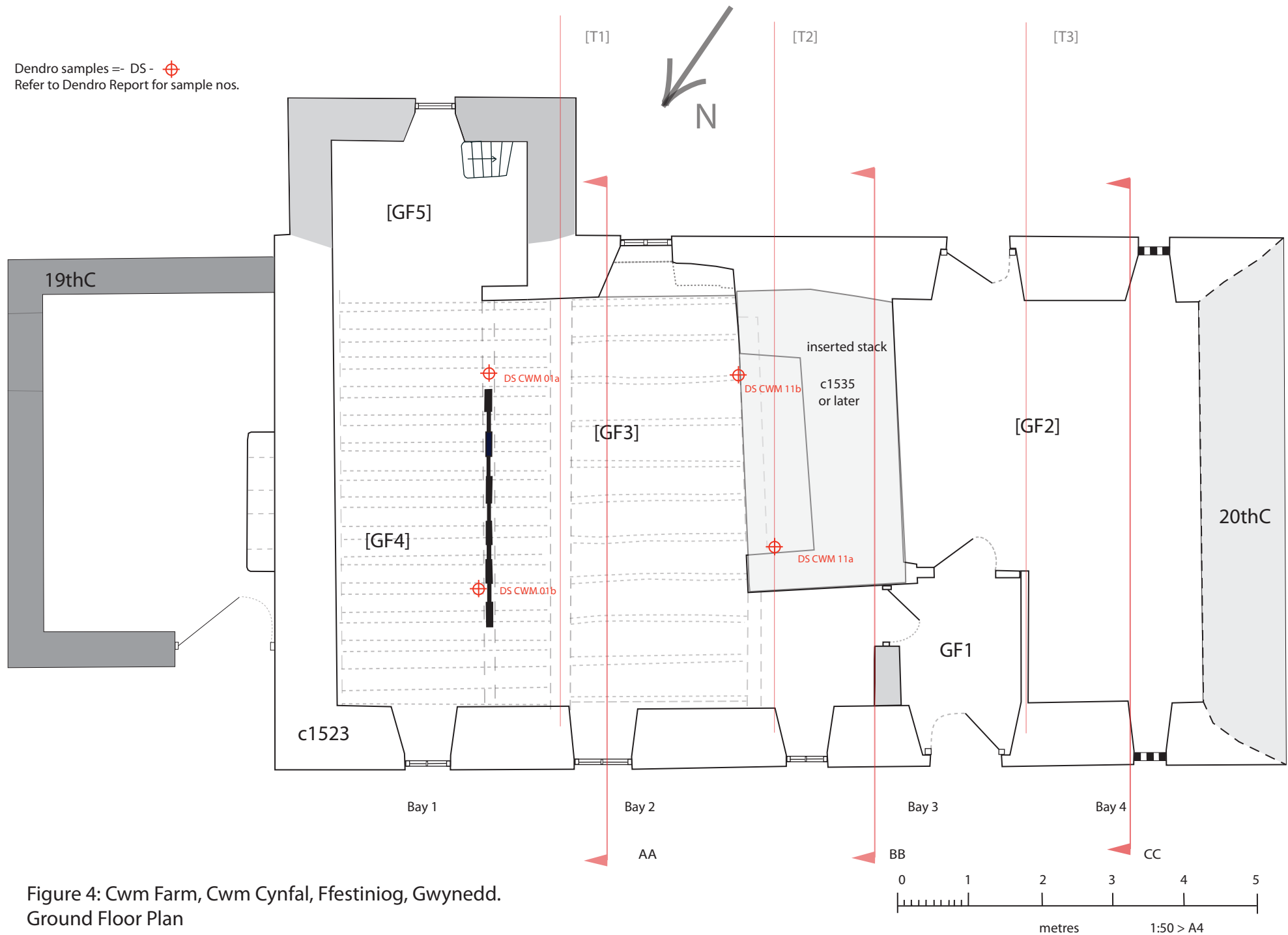
OS End user

Cwm Farm: satellite view



Figure 3: Aerial Image courtesy Google Earth

Dendro samples =- DS - 
Refer to Dendro Report for sample nos.



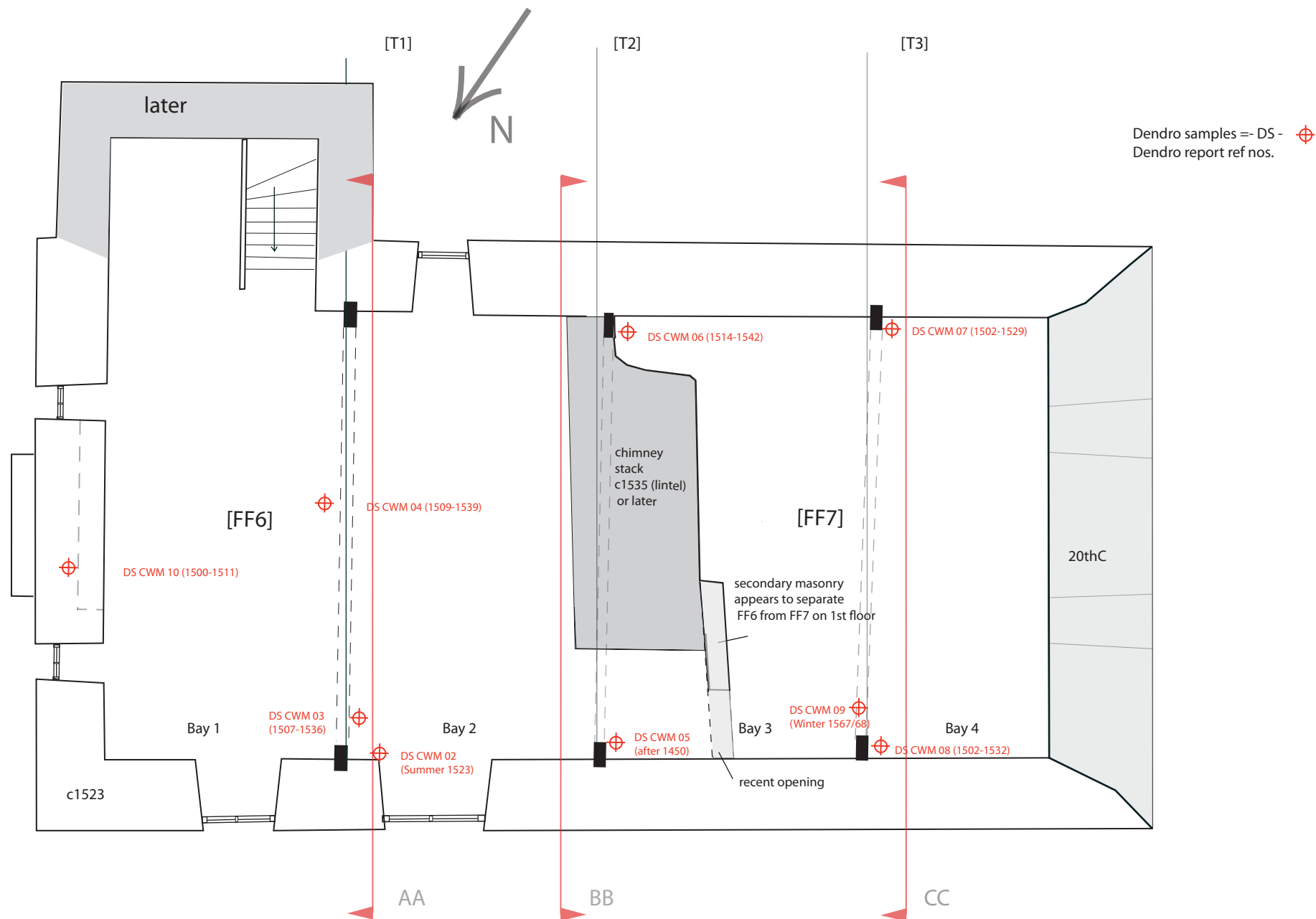
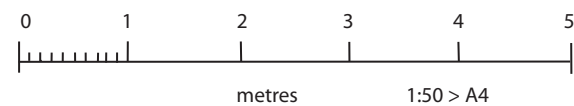
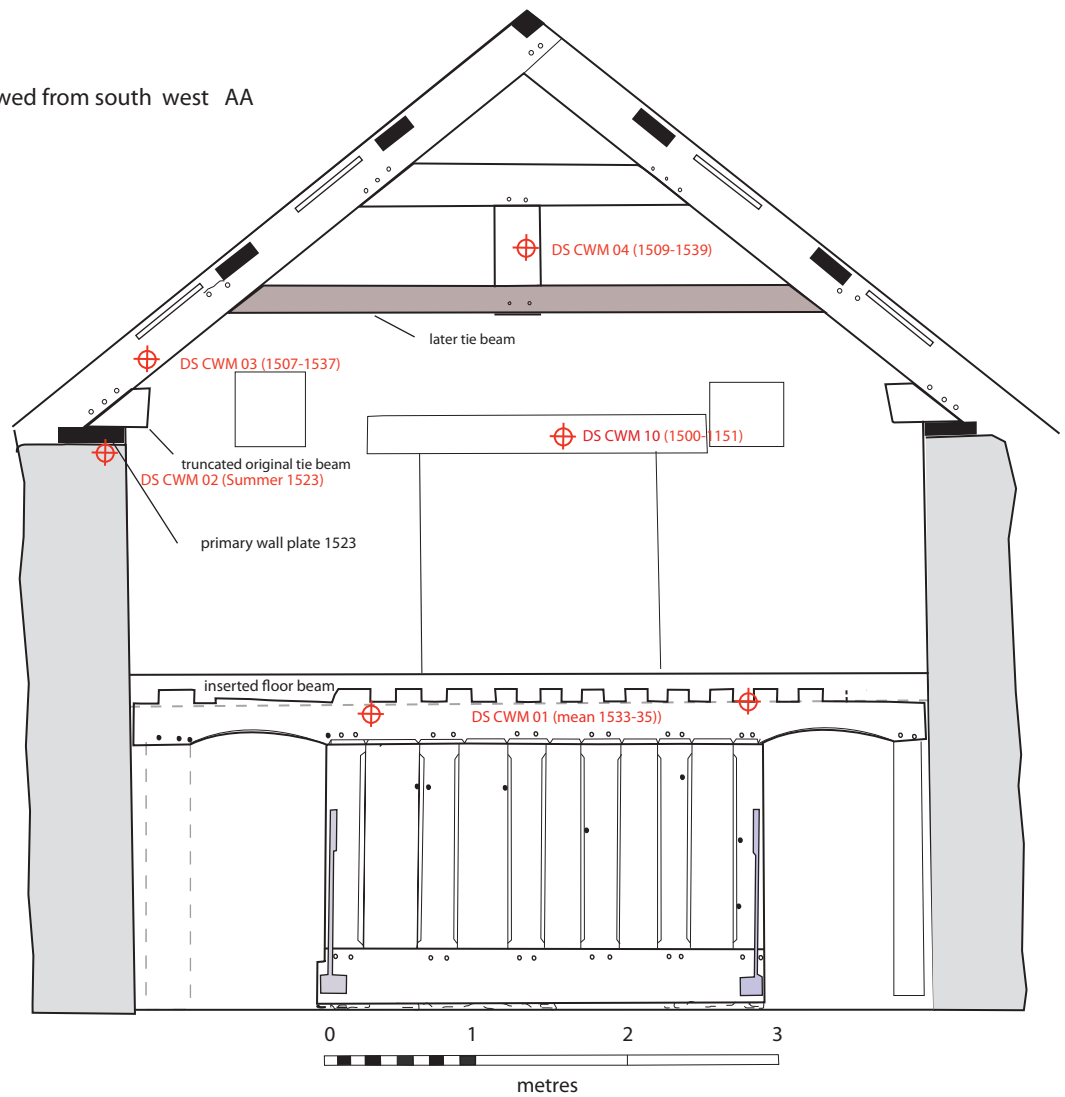


Figure 2: Cwm Farm, Cwm Cynfal, Ffestiniog, Gwynedd,.

First Floor Plan



Truss 1 viewed from south west AA



Truss 2 [T2] viewed from the north east BB

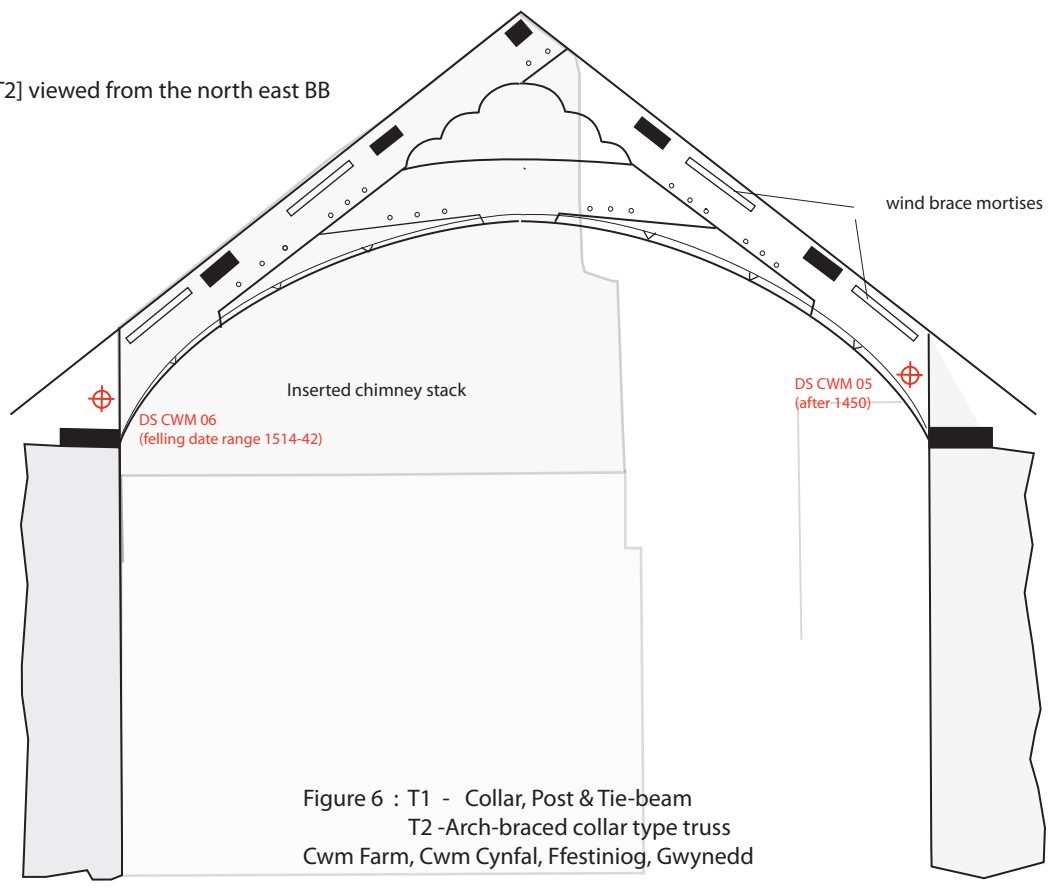
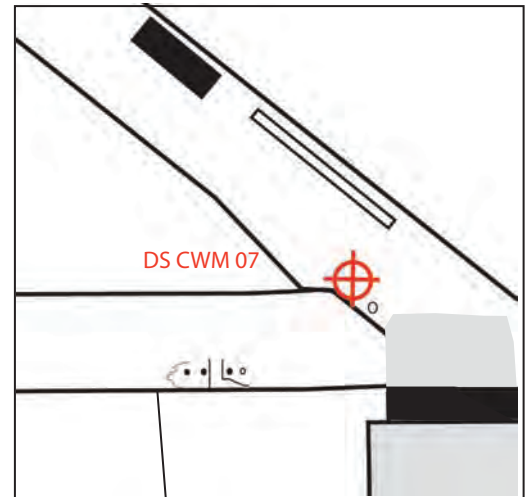


Figure 6 : T1 - Collar, Post & Tie-beam
T2 -Arch-braced collar type truss
Cwm Farm, Cwm Cynfal, Ffestiniog, Gwynedd

Truss 3 viewing northwards
collar, king strut & tie beam.
Evidence of quite severe weather
erosion with PR west replaced c1567.

Viewed from south west



peg holes and housing.
Possible ladder arrangement
for access from service room

Principal rafter E
dated winter 1567.
Replacement/repair

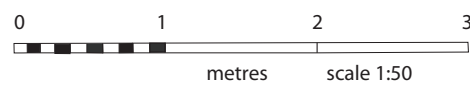
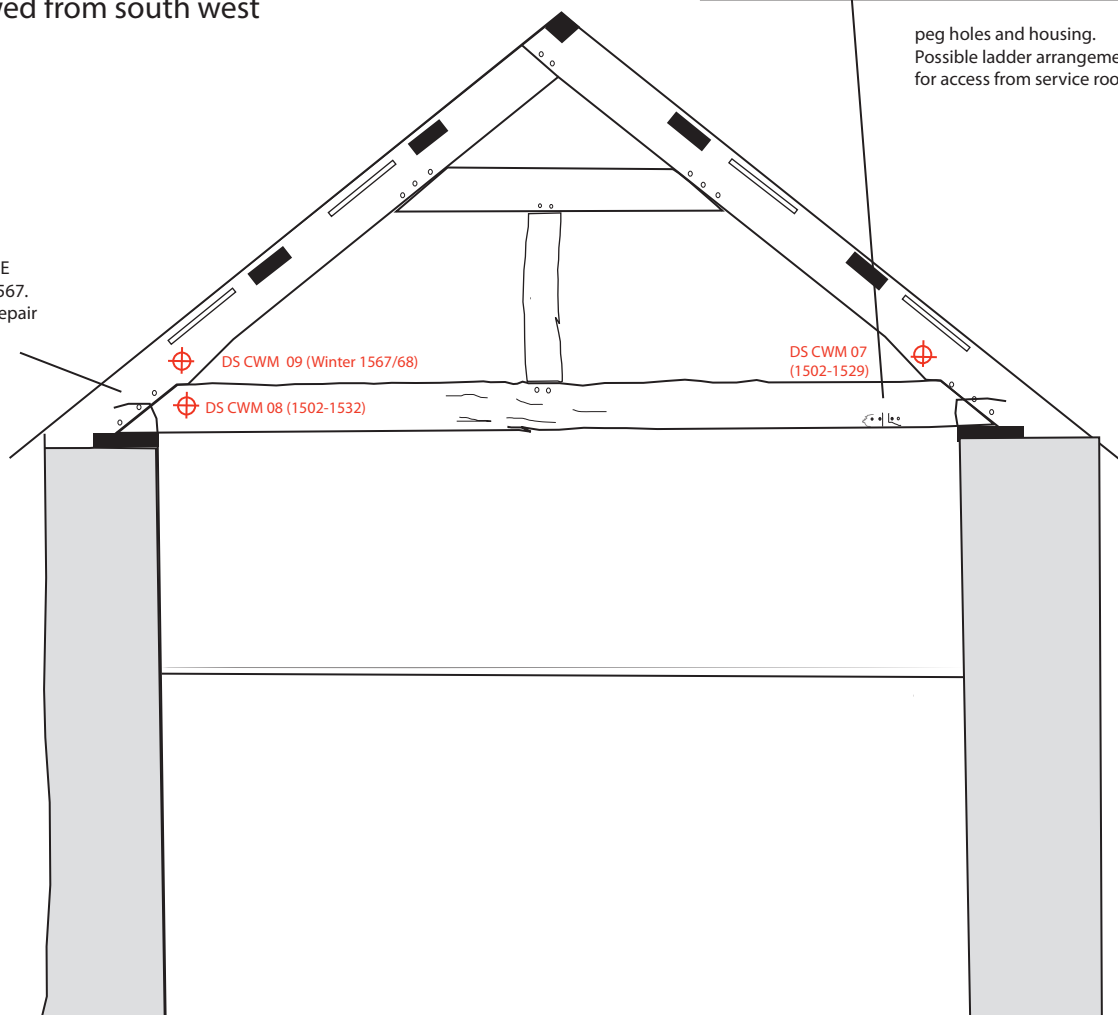


Figure 7 CC - Truss 3 [T3]
Cwm Farm, Cwm Cynfal, Ffestiniog, Gwynedd

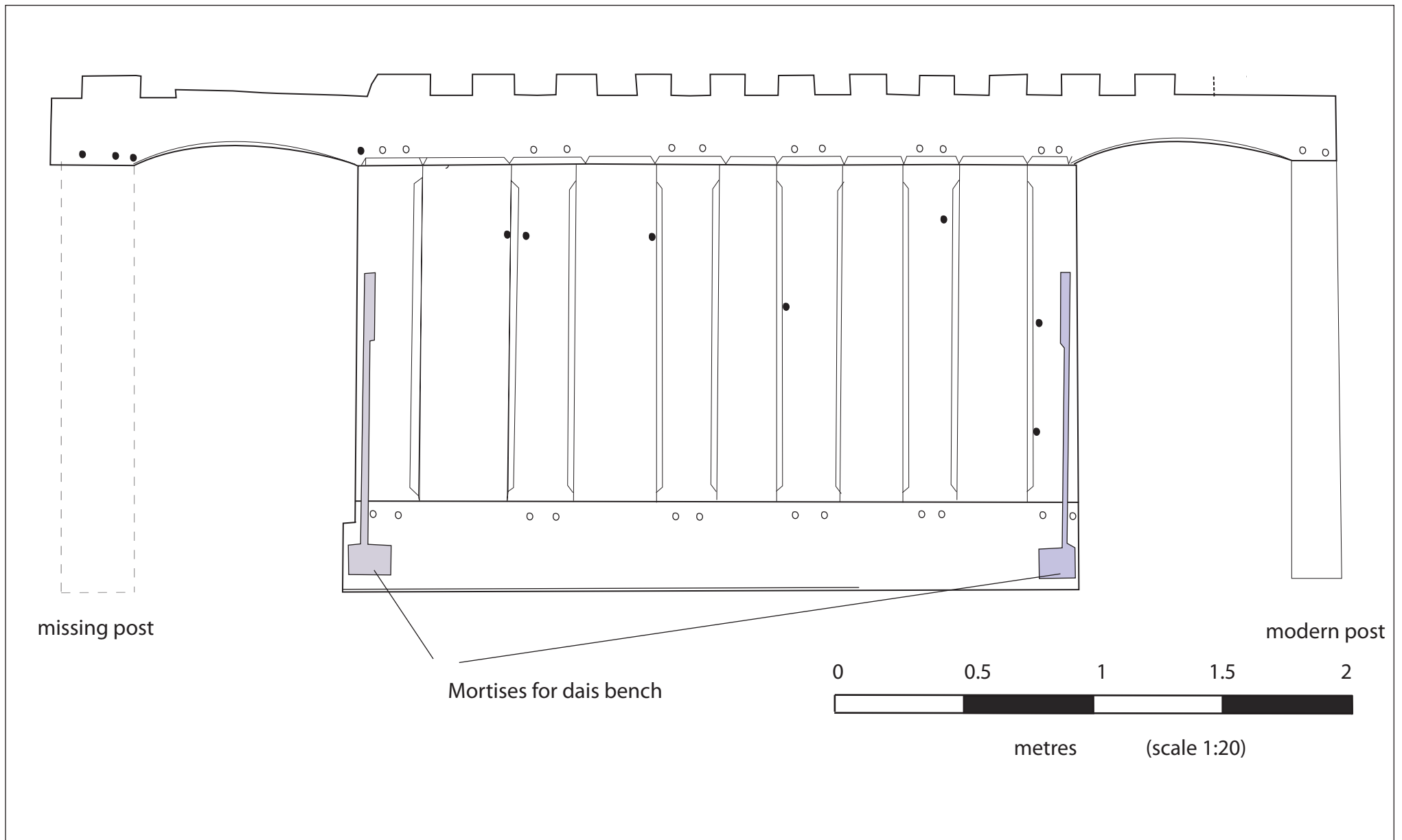
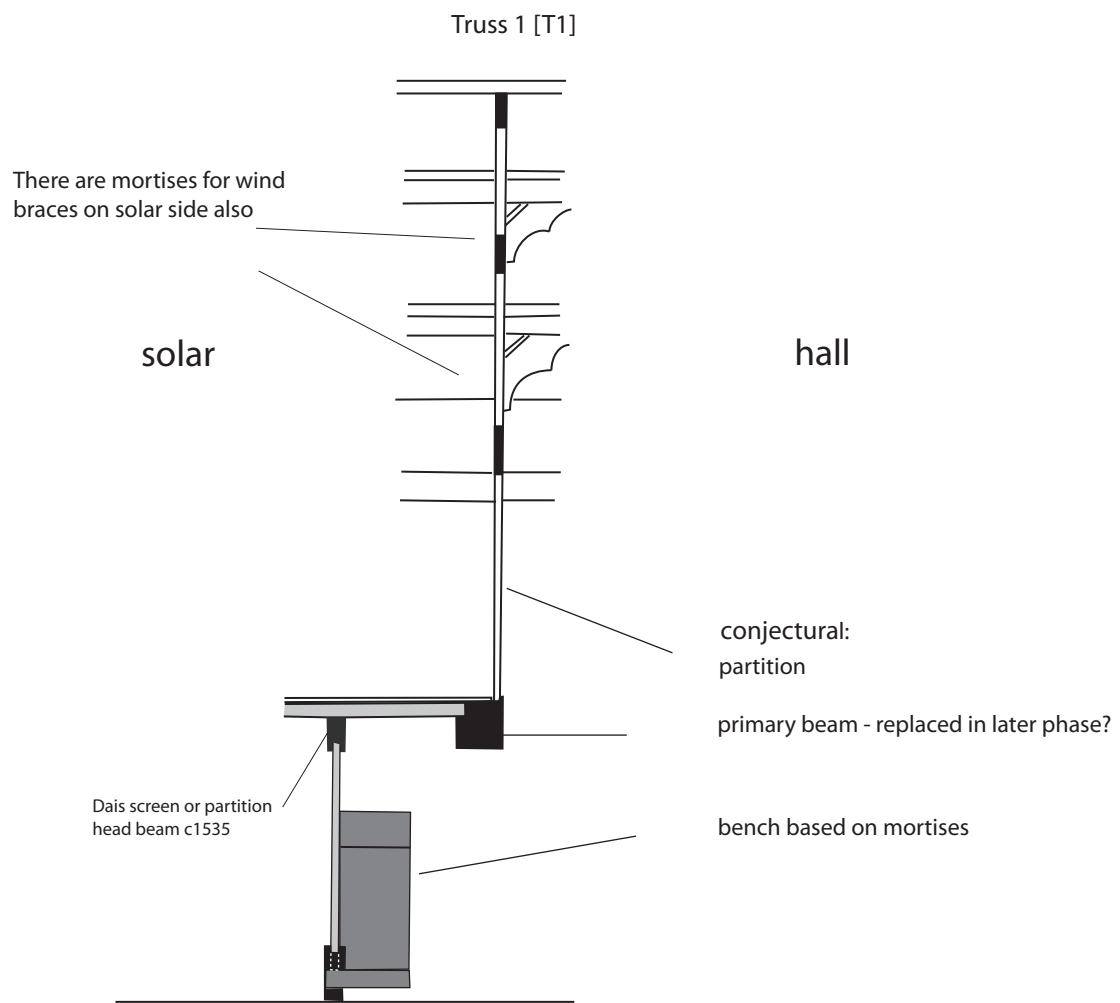


Figure 8 : Dais partition : Cwm Farm, Cwm Cynfal, Ffestiniog, Gwynedd.

Peter Thompson HW/



Conjectural arrangement of dais partition and closed partition above (from Peter Smith, 2001). Dendrochronology suggests the dais screen was installed some years after the solar was constructed as primary phase?

Figure 9: Closed partition - solar
Cwm Farm, Cwm Cynfal, Llan Ffestiniog, Gwynedd



Plate 1: Front elevation:



Plate 2: Front elevation & SW rebuilt gable



Plate 3: Window alterations



Plate 4: Front elevation mullion window



Plate 5: Harr Hung door & socket



Plate 6: NE gable – corbelled external chimney breast



Plate 7: NE gable; external breast & windows



Plate 8: SW elevation



Plate 9: Hall & 1st Fl window, rear elevation; first floor window



Plate 10: Mullion lintel in hall



Plate 11: Hall and inserted fireplace



Plate 12: Dais partition



Plate 13: Rear side of dais partition; door head L



Plate 14: Rear side of dais – door head R



Plate 15: Truncated cill



Plate 16: Screen detail – nailhead stop & chamfers



Plate 17: Dais canopy, screen and later pine beam



Plate 18: Joists over inner room with supporting beam to left



Plate 19: Truss 1. Lost tie beam to collar, post and tie beam truss.



Plate 20: Solar and fireplace



Plate 21: T1 – view to south



Plate 22: T1 – truncated tie beam



Plate 23: Matt Hurford sampling wall plate. Dated 1523.



Plate 24: T2W: arch-braced truss from north east



Plate 25: T2W: Pegs, wind brace mortise; smoke black



Plate 26: T2:E From SW – eastern principal by stack



Plate 27: T2E: eastern principal -wind brace detail



Plate 28: T3: From NE



Plate 29: T3: truss showing erosion, stave holes



Plate 30: T3: wind braces and stave holes



Plate 31: T3: base of principal and tie-beam; housing & peg holes?



Plate 32: T3: base of principal and tie-beam; housing & peg holes –close-up



Plate 33: T3: rafters & wind braces

