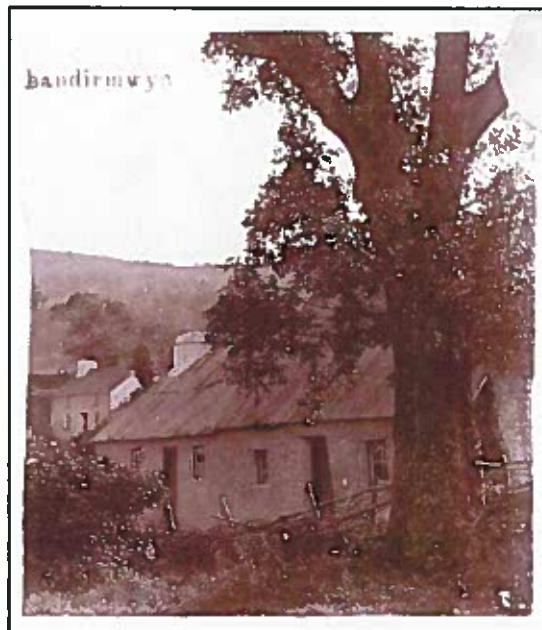


Louise Mees.
October 2010.

Tairheol. Level 3 building survey of an early 19th
century lead miners' cottage, Cilycwm,
Carmarthenshire



Tairheol c.1900



Tairheol 2011

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Summary

A Level 3 building survey, according to English Heritage guidelines, has been undertaken of Tairheol, one of only a few small, domestic, vernacular cottages surviving in the Upper Tywi Valley.

The survey was designed to:

- Record the fabric of the 'at risk' building.
- Undertake research of historical documentary evidence regarding the building.
- Record local recollections associated with the building.

The evidence obtained has informed a descriptive and analytical interpretation.

1. Introduction

1.1 Location

Tairheol is a small cottage situated in the northern part of Cilycwm parish in the upper Tywi valley, Carmarthenshire, Wales, grid reference SN 77113 44097 (see figure 1).

Though lying within the parish of Cilycwm, the property is only 2km from the village of Rhandirmwyn (in the parish of Llanfairarybryn): in comparison to the 5km distance by road to the village of Cilycwm. Rhandirmwyn lies on the southern edge of the Cambrian Mountains. The predominant land-use and economy of the area are based on agriculture and, historically, lead mining: the former creating a landscape of dispersed farmsteads with associated small, irregular fields; and the latter, redundant by the mid-nineteenth century, evident as extensive deposits of lead mine waste, industrial remains from the former mining industry and small clusters of workers' housing (Dyfed Archaeological Trust, 2011).

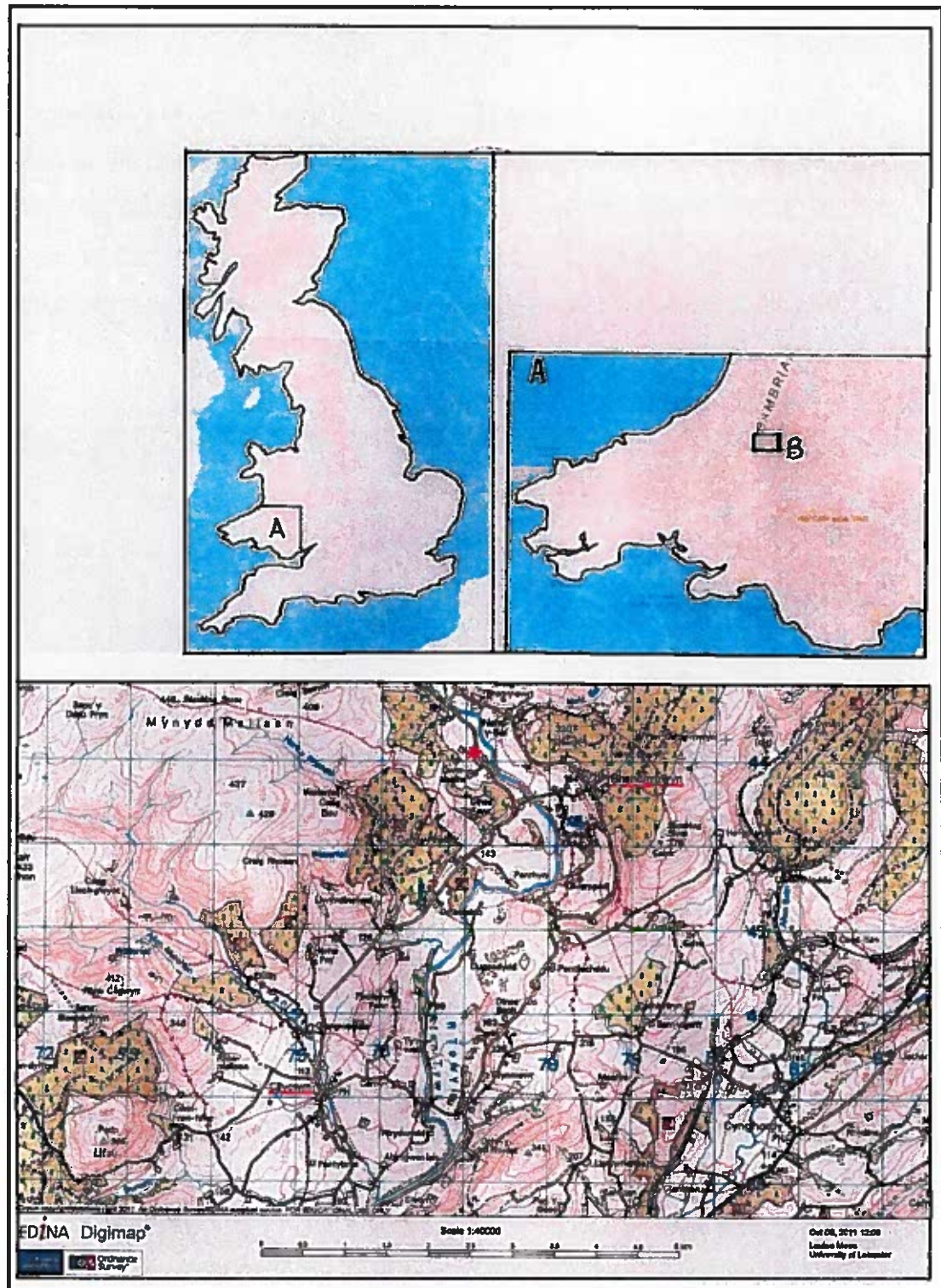


Figure 1. Location map (Tairheol highlighted by red asterisk, villages of Rhandirmwyn and Cilycwm underlined in red) (Edina, 2011).

1.2 Reasons for undertaking a building survey

1.2.1 The northern gable and the northern end of the front elevation have collapsed (see figure 2). Though not at risk of demolition, the vacant building is clearly at 'extreme risk' according to the 'Critical Element Factor' (CEF) system of recording building condition, developed by the Handley Partnership and used to assess the condition of listed buildings in Wales (Cadw, 2009: 3) (buildingsatrisk.com, 2011).



Figure 2. Tairheol: collapse of northern elevation and northern part of front elevation.

1.2.2 In response to the serious condition of the building a Level 3 survey has been undertaken in compliance with the English Heritage *Understanding Historic Buildings: A guide to good practice* (EH, 2006) and the Institute for Archaeologists' *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures* (IFA, 2007).

1.3 Legal status of the site

The building has no heritage environment statutory protection as a scheduled ancient monument or listed building. The building is not recorded on the local historic environment record (Archwilio, 2011). The building is not designated as a protected site or landscape in an environmental context (CCW, 2011).

1.4 Stakeholders

Cadw, Welsh Historic Monuments: covered personal liability insurance for Ms. L. Mees.

Dyfed Archaeological Trust: Miss A. Pyper M.A. accompanied Ms. L. Mees during site visits, to ensure that lone working was avoided, and assisted in the measurement and recording of the building. D.A.T. covered personal liability insurance for Miss. Pyper.

Leicester University: student Ms. L. Mees, undertaking MA in Archaeology and Heritage. The University's insurer provided buildings liability insurance.

Private owner: Mrs. C. James.

1.5 Access

Access was arranged with the owner of the property.

1.6 Fieldwork

1.6.1 An initial site visit was undertaken on 04/08/2011 to view the current condition of the building and to undertake a brief risk assessment prior to commencement of the non-invasive building survey. The small, single storey building is adjacent to a minor road. Though parts of the building have partially collapsed the remainder appears to be structurally stable. Access in and around the building is good. There are a few trees and stands of hazel coppice around the building, which shade the ground surface and reduce ground vegetation.

1.6.2 In response to the minimal risks identified a working programme was devised in which lone working would be avoided (E.H. 2008: 5); personal protective equipment, including hard-hat, fluorescent jacket, steel-toe cap boots, would be worn; and work would be undertaken during fair weather.

1.6.3 A survey, including measurements, field notes and photographic record, was conducted at the property on 19/08/2011. Further survey work was planned for the 28/08/2011, however, a period of high winds and heavy rainfall had caused some damage at the property: the remains of the door frame had become dislodged and a narrow, fragile, section of masonry was the only support to the remaining section of roof at the northern end of the front elevation. As a consequence of this damage the condition of the property was re-assessed, and deemed to be un-safe. The survey was suspended until the building could be made safe.

On 29/08/2011 Acrow Props were inserted into the building: two to support the door lintel and one to support the central tie beam. To protect the cottage floor debris was cleared and timber supports were fitted underneath the Acrow Props. The clearance was restricted to the area immediately at the base of the supports. This work enabled the floor of the cottage to be partially investigated.

The final measurements, field notes and photographic record were made on 29/09/2011.

1.7 Documentary and other resources

A retrogressive map analysis of the property was made with reference to historic Ordnance Survey maps, tithe maps and Cawdor Estate maps accessible in the Historic Environment Record at Dyfed Archaeological Trust and in the records held by the Carmarthenshire Archive Service. Census, births, marriages and deaths records held by the Carmarthenshire Archive Service were also investigated. Personal memories of the cottage were

researched by interviewing members of the family who own the property and other local residents.

2. Research Aims

2.1 General background

The Tairheol survey originated from a requirement for the author to undertake a building survey for the 'archaeology of standing buildings' module of a M.A. in Archaeology and Heritage, distance learning course with the University of Leicester.

As outlined in section 1.2.1. Tairheol is a cottage in a dilapidated condition and clearly a building at 'extreme risk'. The building is one of only a few unaltered traditional dwellings in the Upper Tywi Valley and has the potential to reveal much information about local vernacular building styles, small rural dwellings in Wales and the social and economic status of their occupants (Cadw, 2003: 14, 23).

2.2 Previous survey and research on comparative buildings

An early twentieth century study of houses in Wales was made by Iorwerth C. Peate (Peate, 1940). The study of small rural buildings has been undertaken by several organisations and individuals in Wales and the National Museum of Wales has several reconstructed buildings in the open air museum at St. Fagans (National Museum of Wales, 1998). Recording of traditional cottages has been undertaken by the Royal Commission on the Ancient and Historic Monuments of Wales since it was established in 1908, culminating in the recent publication of *'The Welsh Cottage'* by Iorwerth C. Peate (Peate, 2010), also the author of *'The Historical Farm Buildings of Wales'* (Peate, 1986) and *'Home-made Homes'* (Peate, 1988). Agricultural and industrial workers' housing have been the subject of publications (Lowe, 1977; 1985) and the study of industrial workers' housing

has played a significant part in the study of the industrial landscape of Swansea (Hughes, 2000: 155-240).

2.3 Objectives of the survey

The primary objective of the survey of Tairheol is to record the fabric of a building under threat: from loss or possibly as a result of restoration (E.H. 2006: 14; Cadw: 2003, 14). The objectives of the survey are those required for a Level 3 building survey (E.H. 2006: 13) involving the collection of evidence (description, measured drawings and photographic record) and informed analysis (E.H. 2008: 2) in order: to establish whether the building was single or multi-phase; to ascertain if the building materials altered from the original construction; to attempt to understand the social and economic status of the inhabitants; and to fit the building into its wider landscape.

2.4 Context within local and national research agendas

In a national context the project is to consider research aims specified in the *Research Framework for the Archaeology of Wales* (Archaeolog, 2011), specifically:

Post-medieval (1539-1750) settlement:

- 'integration of above ground archaeology and building archaeology with the insights of architectural historians'
- 'integration of material and documentary sources'
- 'the 'great rebuilding' is a key concept for this period and needs to be examined'

Wales in the industrial and post-modern period (post 1750):

- 'the erosion or survival of local and regional characteristics in domestic building from the later eighteenth century onwards'
- 'the varieties of planned and unplanned settlement'
- 'evidence for migration and social diversity in housing stock'

These research aims reflect those set out for England (Palmer: 2005: 16-17).

3. Building survey methodology

3.1 Introduction

An initial impression of Tairheol is that of a lofted, single-storey cottage of rubble stone construction, with timber lintels and a timber roof construction, overlain by tin-sheet. The author considered that the rarity of surviving examples in this locality, and the fragility of the building, required a measured survey of the overall plan, front (northeast) elevation and surviving gable (south-east) elevation, though a stone-by-stone approach was not required for the random courses of the majority of the main fabric (ASB, 20: 19.4 – 19.6).

The building lies on a south-west to north-east orientation. The simplicity of the building has enabled the description of features according to right / left and front / rear, to limit references to compass points. The following convention has been followed:

Front: north-east elevation

Rear: south-west wall

South-east gable: south-east elevation

North-west gable: north-west elevation

Left-hand room: southern room

Right-hand room: northern room

3.2 Survey Technique

The non-intrusive survey was undertaken using 2 x 20m tapes, measuring stick, spirit-level, drawing equipment, photographic equipment and ranging rod. The plan and elevations were drawn at a scale of 1:20. The measurement of the building, recording, description and final inked plans were completed with reference to *Understanding Historic Buildings, A guide*

to good recording practice (E.H. 2006), *Measurement and Recording of Historic Buildings* (Swallow, Dallas, Jackson and Watt, 2008) and *Recording Standing Buildings* (Hutton: 1986).

3.3 Photographic Survey

A photographic record of the cottage was made using a 35mm single lens reflex digital camera (Canon EOS). A 1m ranging rod, with 0.5m sub-division, was used as a scale. A catalogue of the photographic record is included in Appendix 1. Photographs from the collection have been used to illustrate the text of this report where required.

Elevational information obtained by photography, rather than by drawn record, has been utilised to record the fireplace and the full elevational section. This was considered to be the safest method of recording, considering the fragile condition of the building (E.H. 2006: 9).

3.4 Archive deposition

The building survey, including text, drawings and photographic record, will be structured in accordance with IFA specifications in *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown, 2007). A copy of the digital archive will be deposited with the local Historic Environment Record held by Dyfed Archaeological Trust and the National Monuments Record held by the Royal Commission for the Ancient and Historical Monuments of Wales, within 3 months of the end of fieldwork. The owner of the property will be provided with a paper and digital copy of the archive.

Wider dissemination of the results, excluding any confidential information, will be undertaken via local interest groups. Presentations will be tailored to encourage up-take and to further understanding (Hodder, 1989: 273-274).

4.0 Description

Tairheol is a small cottage situated in the northern part of Cilycwm parish in the Upper Tywi Valley, Carmarthenshire, Wales (grid reference SN 77113 44097).

The north-east facing building is set at a 45° angle to, and slightly back from, the western side of the minor road between Cilycwm and Cwrt-y-Cadno.

The strip of grass between the front elevation and the edge of the modern road surface is only 1.5 m wide at the narrowest point. The northern gable and the eastern end of the front elevation have collapsed.

The single-storey cottage has two rooms, separated by a partitioned hallway, with a loft over the south-east room: the ground-plan of the building is shown in figure 3.

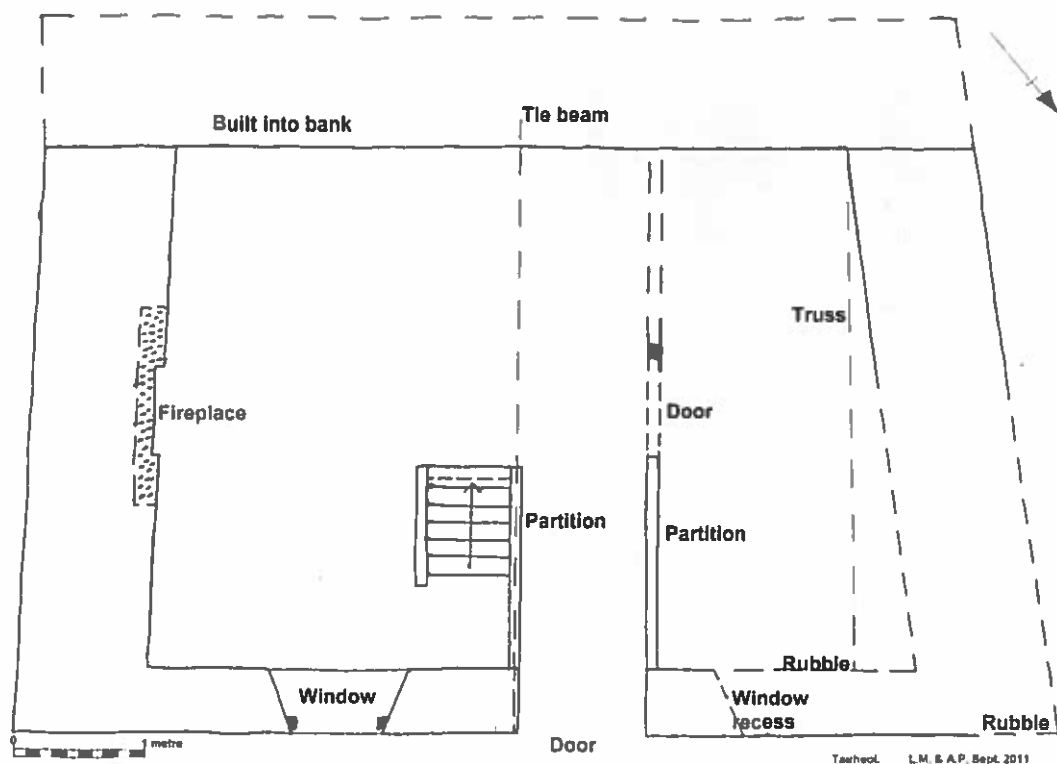


Figure 3. Tairheol: ground plan.

The overall plan of the building does not exhibit 90° angles in the four corners: the gable end walls splay slightly outwards towards the front elevation. The building measures approximately 6m in length by 5m in width externally, is constructed of stone rubble (lime mortar bonded on the south-

east gable and front elevation) and roofed with tin-sheet. The front wall measures 0.5m in thickness and the gable end walls measure 1m in thickness. The north-west gable wall, though very collapsed, appears to be a dry-stone rubble, battered, wall. A measurement of the thickness of the rear elevation of the building, a dry-stone rubble revetment wall built against the natural bank of the hillside, could not be taken because it is obscured by the overshoot of the tin roof, earth from the bank and has suffered from partial collapse. Both the gable walls appear to butt against the rear revetment wall. There is a single chimney at the south-east gable end, which is obscured by ivy.

The remains of the most recent coat of lime-wash on the building show that the front elevation had been coloured red and the south-east gable had been coloured white. Other pigments can also be seen underneath the final wash: yellow, orange and blue in the doorway; and red, pink and yellow on the front elevation (figure 4).



Figure 4. Tairheol: variety of lime-wash pigments.

The front elevation is asymmetrical, with a doorway offset to the right, and a window to each side of the door (figure 5). The openings were finished with roughly squared jambs from undressed rubble, timber lintels and timber frames. The 1m wide x 1.8m high (measurements to stone rubble jambs

and timber lintel) doorway had a painted, beaded, soft-wood timber frame, with a diagonal spliced joint in the left-hand side evidencing previous repair. The timber, planked door (now collapsed into the interior), was mounted by hinges on the right-hand side.

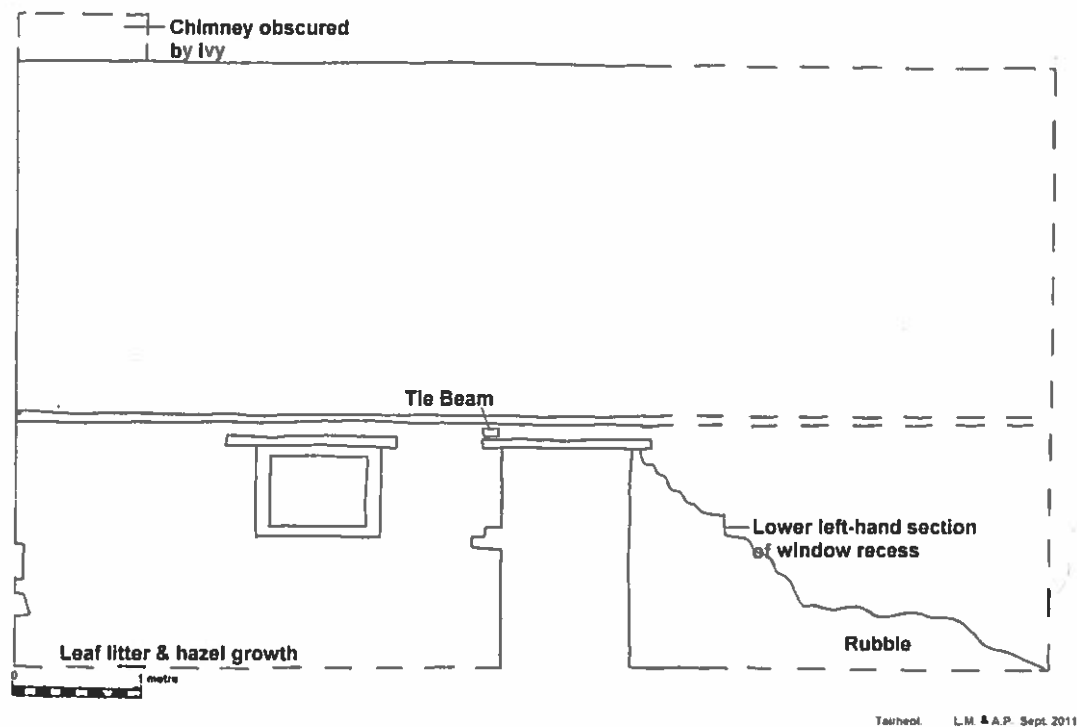


Figure 5. Tairheol: front elevation.

The window recess to the left hand side of the doorway, c. 0.5m high x 0.75m wide (measurements to stone rubble jambs and wooden lintel), has a painted, beaded, soft-wood timber frame, with a central socket in the upper section. The glazing is missing. The window was constructed without a stone or timber sill: the rubble stone sill was lime rendered. The window to the right-hand side of the door, in the section of collapsed wall, is only evident as a surviving fragment of the lower left-hand side of the window recess. The loft was lit by a small, four-pane glazed frame in a 0.4m square window recess, with timber lintel, in the south east gable end wall (figure 6).

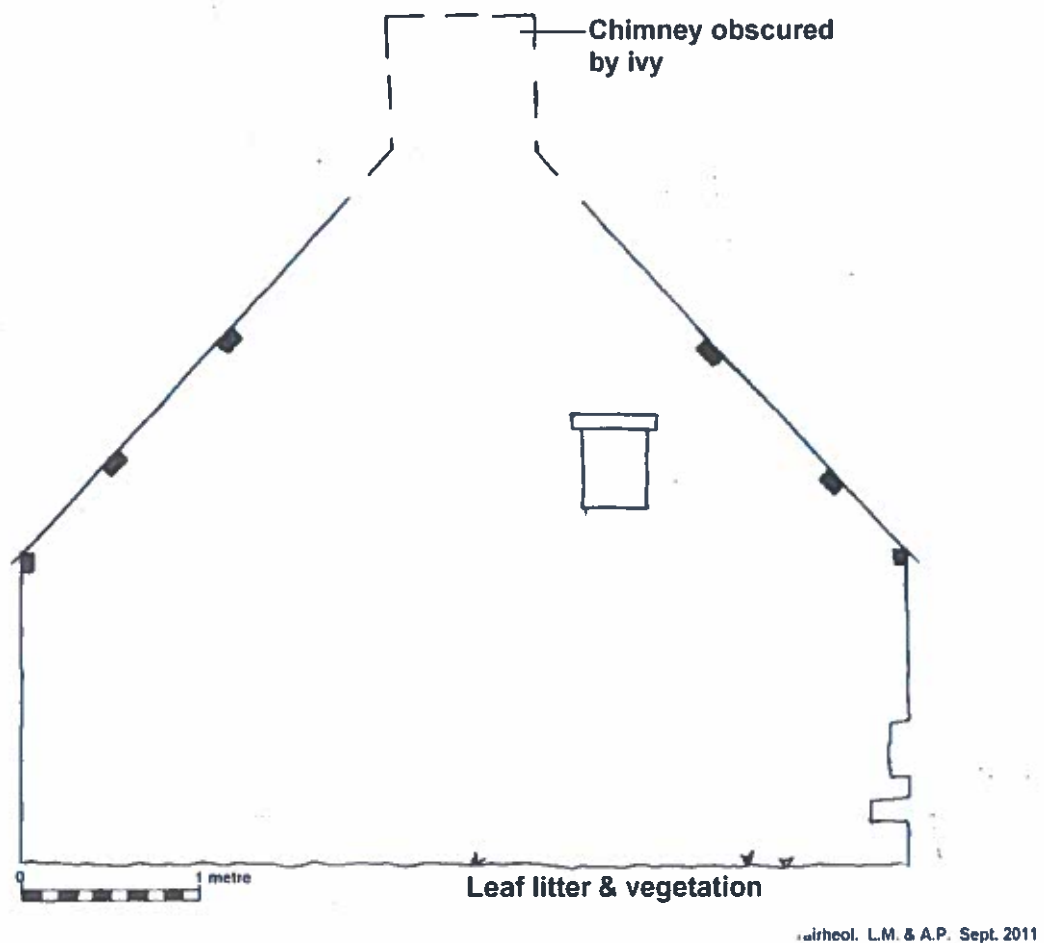


Figure 6. Tairheol: south-east gable.

Over the central and south-east part of the building tin-sheet, underlain by tongue-and-groove timber, is set upon a light-weight timber truss roof. A sawn timber ridge piece is supported by sawn timber principal rafters (fixed by iron bolts), a double row of sawn timber purlins and sawn timber wall plates (figure 7). A central tie beam, supporting two sawn timber queen post struts, extends through the front elevation so that its end is flush with the external face of the wall. The gap between the wall tops and the underside of the roof is in-filled by rubble stone work: 0.6m high and only a single stone in width (figure 8).

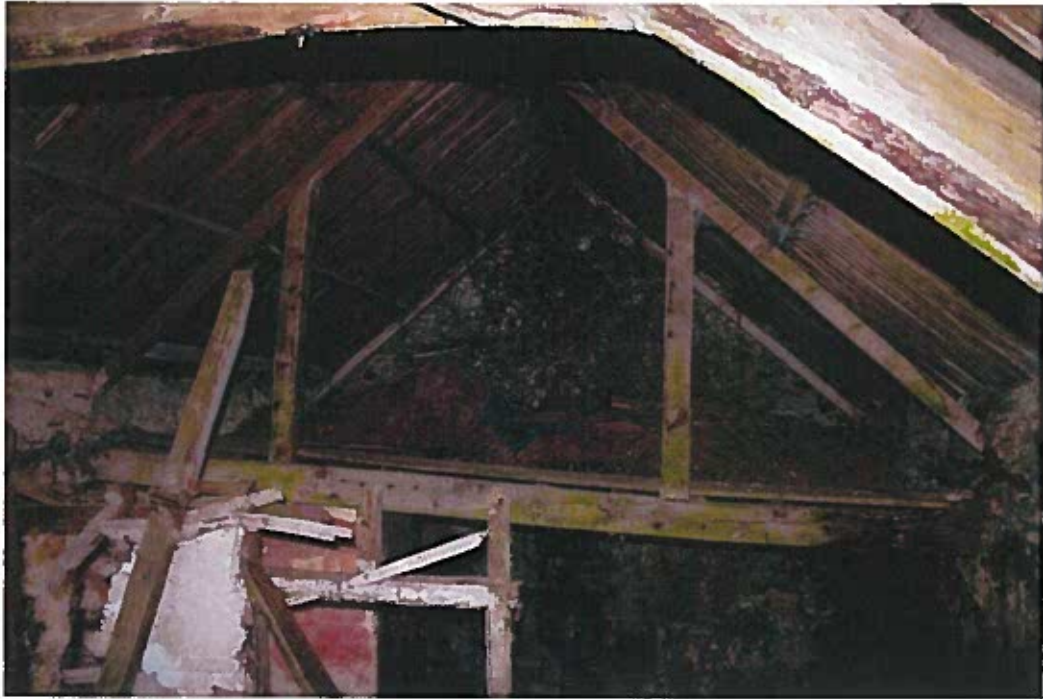


Figure 7. Tairheol: roof structure, central and southern section of building.



Figure 8. Tairheol: infill between wall top and underside of roof.

The north-west end of the roof has the remnants of a different structure: an un-sawn, half-round timber truss roof with two principal rafters (their ends cut off), a collar and a queen strut join the structure to a principal rafter of the sawn-timber roof structure (figure 9). The front principal rafter is hanging above the collapsed section of the front elevation. The rear principal rafter is set onto a pad-stone in the rear wall (figure 10).



Figure 9. Tairheol: roof structure at the northern end of the building.



Figure 10. Tairheol: truss on pad stone.

The cottage is entered through the front doorway: stepping over the stone-paved doorstep (figure 11), which led into the lath and plaster lined passage. The left-hand side partition is shorter in length than the right-hand side partition.



Figure 11. Tairheol: entrance into partitioned hall-way.

The passage leads directly into the larger room on the left-hand side of the cottage. This room was heated by a fireplace, central to and set flush against the south-east gable wall. The stone and brick built fireplace has a cast-iron bread oven to the right-hand side of a central iron grate. Above the main fire setting is an iron bar lintel. Five stones of an earlier stone archway survive two courses of stone above the iron lintel: three stones on the left-hand side and two stones on the right-hand side. A wooden lintel is set one course of stone above the stone arch. The central portion of the chimney breast, above the iron bar and up to loft height, has collapsed (figure 12).



Figure 12. Tairheol: fireplace in south-east gable.

Natural light for the room was provided by the window in the front elevation. The window sill has been raised: an in-fill of rubble stone has been built over a lower stone sill, which is set at c.1m from the floor level of the cottage (figure 13).



Figure 13. Tairheol: rubble stone in-fill above window sill.

Sawn timber joists, running from the central tie beam into the south-east gable wall, support the floor boards of the loft. The loft boarding extends over half of the roof space of the kitchen-living room, the other half of which is open to the roof, though a full loft is evidence by fallen joists above the right-hand room and sockets in the central tie beam (see figure 9). The loft is accessed by a narrow single flight of seven steps (the bottom of which is missing), not much more than ladder, boxed in by timber boarding. The stairwell is partially lit by natural light from the window in the front elevation.



Figure 14. Tairheol: stairwell, viewed from window.

The right-hand side partition has a door frame leading into the smaller room. Natural light for the room was provided by the window in the front elevation. The front elevation and gable elevation of this room have both partially collapsed and no further features could be distinguished.

The internal walls show traces of lime render and lime-wash, colours of which include white, yellow, orange, red, pink and blue. The stone-paving on the door-step and inside the doorway were exposed when an Acrow-prop had to be inserted to stabilise the building. Clearance of debris from the floor revealed two sockets, one on either side of the entrance (figure 15).

Another Acrow-prop was inserted under the central beam, towards the rear of the building, where stone-paving was also revealed.



Figure 15. Tairheol: stone paving and door frame sockets (pivot stones for a harr hung door?) in entrance.

5.0 Documentary research & local knowledge

5.1 Retrogressive map analysis

5.1.1. 1970

The OS Mastermap (Edina, 2011) shows a single cottage, identified as 'Banc-glas', at the exact location of Tairheol (see figure 16). The building is set on the same orientation as Tairheol, alongside the minor road.

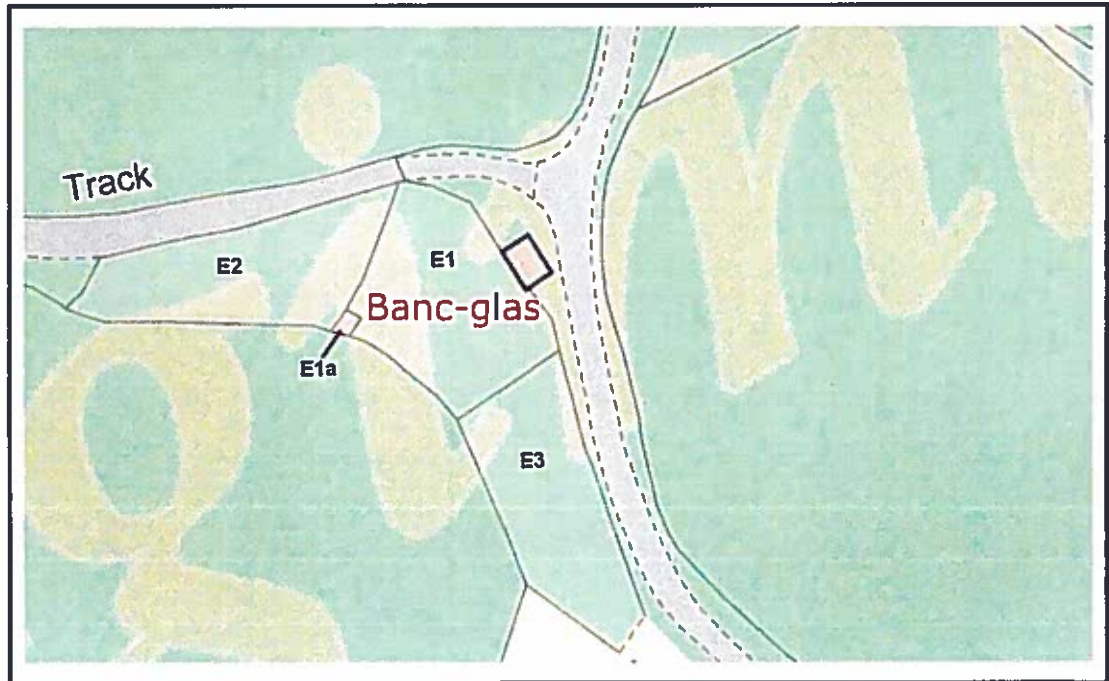


Figure 16: 1970 Banc-glas, with annotations for enclosures and associated building (after 1970 O.S. Master Map) (Edina, 2011).

Three enclosures lie to the west of the building, for the purposes of this study they have been numbered 1 – 3. The southwest elevation of the property is set against a small enclosure (E1), which has a small structure in the southwest corner (E1a). There are two additional enclosures: one adjacent to the NW boundary of the enclosure (E2); and one adjacent to the SE boundary of the enclosure (E3).

5.1.2. 1905

The Ordnance Survey 1st edition 1:2500 revised map (Carmarthenshire, 1905, sheet SN74) shows two buildings: one is the building on the 1970 map (A); the other building (B) adjoins the former at the northwest gable end. The properties are identified as 'Banc-glâs' (see figure 17).

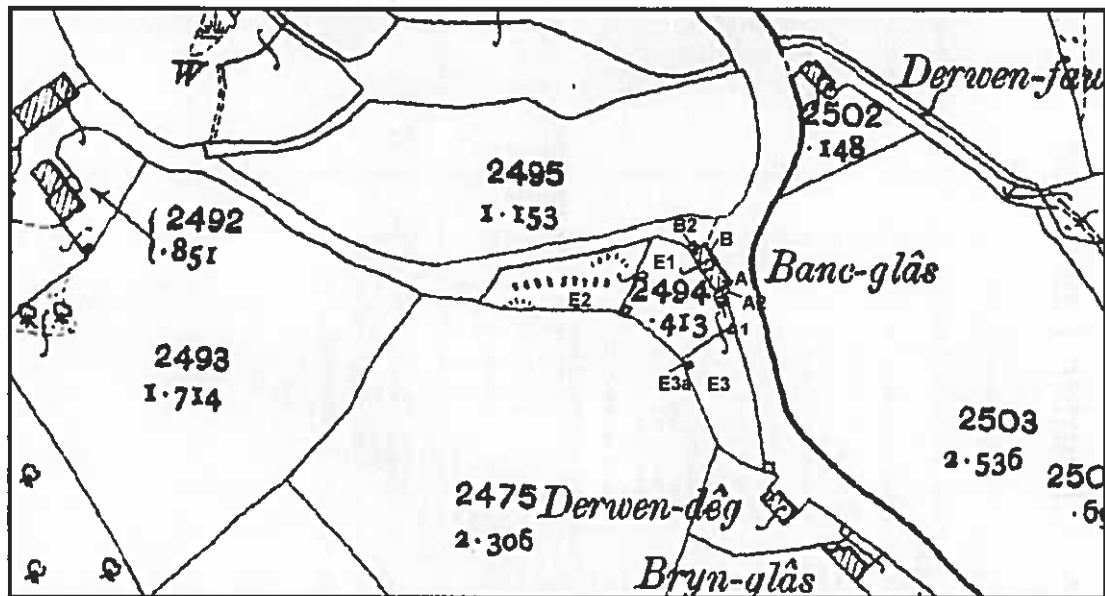


Figure 17: 1905 Banc-glas, with annotations for enclosures and associated building (after 1905 O.S. Map) (Edina, 2011).

Building A has smaller structure situated close to the southern corner of the building (A1). Building A1 is approximately one fifth the size of building A. A narrow building (A2) is located between building A and A1.

Building B has a small structure situated adjacent to the northwest elevation (B1). Building B1 is depicted as approximately half the width of building B, and approximately one tenth of the size of building B.

The three enclosures, E1, E2 and E3, are depicted as associated with Banc-glas. Enclosure E1 includes the small building E1a. The southwest enclosure, E3, has a small structure (E3a) depicted in the northwest corner.

5.1.3 1888

The Ordnance Survey 1st edition 1:2500 map (Carmarthenshire, 1888, sheet SN74) shows buildings A, A1, B and B1 identified as Banc-glas (see figure 18). Building A2 is not present.

The three enclosures, E1, E2 and E3, are depicted as associated with Banc-glâs. Buildings E1a and E3a are not present.

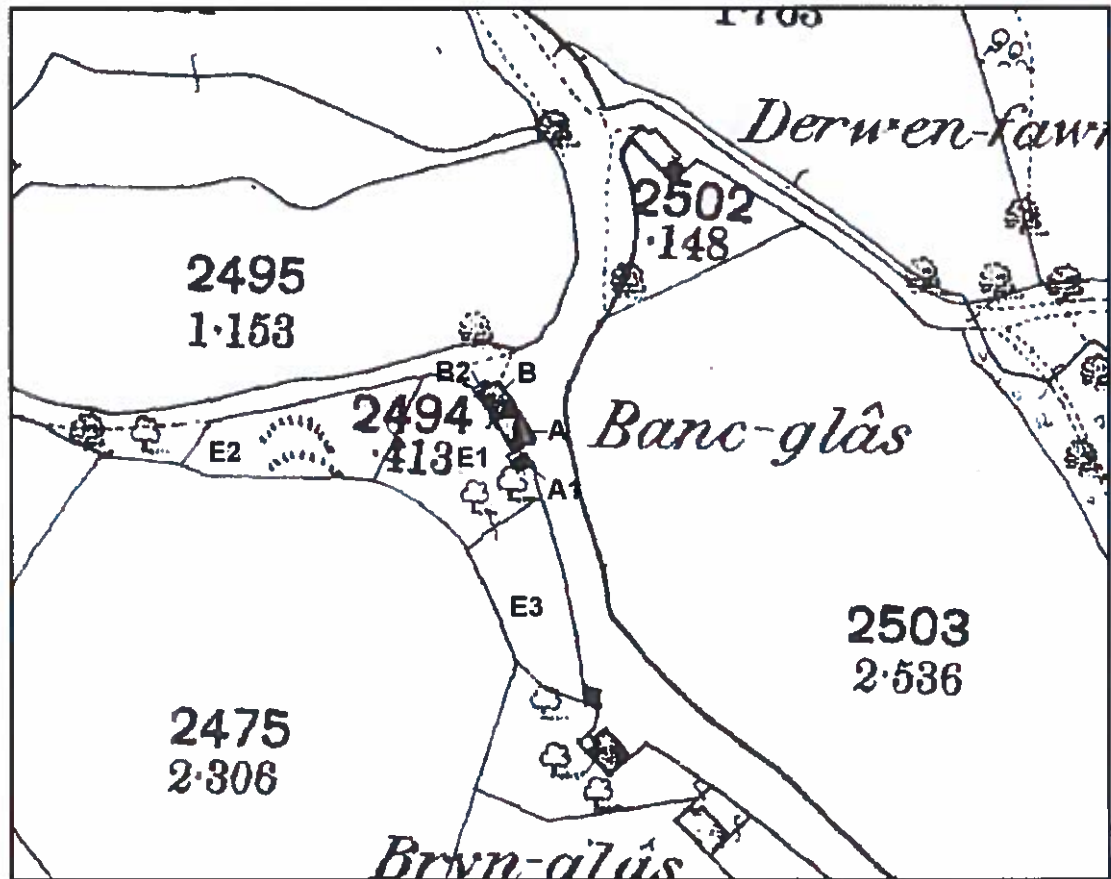


Figure 18. 1888, Banc-glas, with annotations for enclosures and associated buildings (after 1888 revised O.S. 1st edition map) (Edina, 2011).

5.1.4 1843

The tithe map and apportionment recorded on the 30th January 1843 for the parish of Cilycwm (CAO, 2011a), in the County of Carmarthenshire, includes an entry for Evenezer Davies, tenant of John Frederick Campbell, Earl of Cawdor, at Galltyrerw. In addition to the house and lands of Galltyrerw, the entry for Evenezer Davies also includes two records of 'House and Gardens, part of ditto', numbered 48 and 49 on the tithe plan (figure 19). Property number 49 relates to Banc-glâs, shown on the later Ordnance Survey maps.

Property number 48 relates to Derwen-fawr, also shown on the later Ordnance Survey maps.



Figure 19: Extract from 1843 tithe, Tairheol shown as no. 49 (after 1843 Tithe Apportionment) (CAO, 2011a)

5.1.5. Late 18th century

The 1795 Cawdor estate records (CAOb, 2011) include a map and schedule for Gallt-'r-Erw, in Kil-y-cwm Parish. The location of Tairheol is included in the map of the farm, but no buildings are depicted (figure 20).

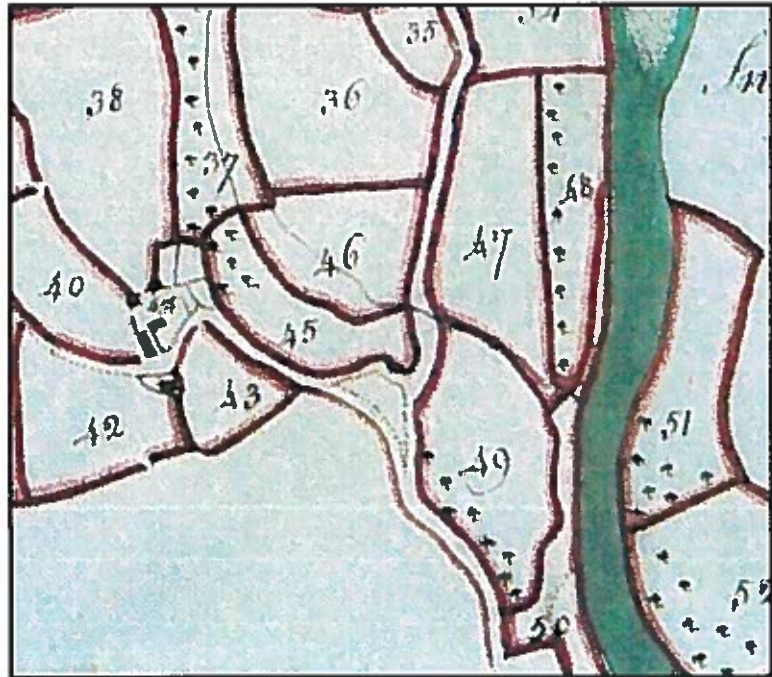


Figure 20: Extract from 1795 Cawdor Estate map (Tairheol not depicted)
(after 1795 Cawdor Estate map) (CAO, 2011b).

The 1777 Cawdor estate records (CAO, 2011b) include a map and schedule for Gallt-y-rerw (figure 21). The location of Tairheol is included in the map of the farm, but no buildings are depicted.

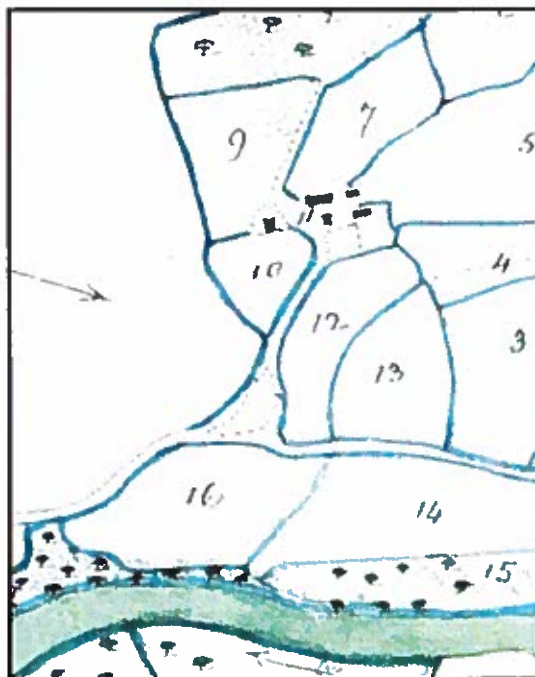


Figure 21: Extract from 1777 Cawdor Estate map (Tairheol not depicted) (after 1795 Cawdor Estate map) (CAO, 2011b).

5.2 Census Records

Census records from 1841 to 1911 for the *Administrative County of Carmarthenshire, Civil Parish of Cilycwm, Ecclesiastical Parish of Ystradffin*, the district in which Tairheol is located, are available at the Carmarthenshire Archives Office (CAO, 2011c). The records were searched for the properties 'Tairheol' and 'Bankglas'. Alternative spellings including: Tayrheol; Tai'rheol; Tarheol; Bankglâs; Bankglas; and Bank Glas were encountered. In such cases neighbouring properties in the census record were checked to ensure that they matched the neighbouring properties shown on the available maps, for example: Galltyrerw, Derwen-Fawr, Cwmsaethe and Bryn-Glas.

The census sheets have been transcribed by the author of this survey, to facilitate analysis of the records, and are attached to this report in Appendix 2. In the condensed versions below the names of the occupants are given with their ages shown in brackets. Known relationships are given in ordinary font, conjectured relationships (and circumstances) are shown in italics.

5.2.1 1841

Tayrheol:

Elizabeth Price *widowed* (33), living with a 1yr old, Thomas Price, and 6mth old, Jane Price.

Jane Jones (60)

Thomas Morgans (75), cooper, living with *children*: David Morgans (25), agricultural labourer; and Margret Morgans (30).

Bankglâs:

The Lewis family: Joseph (45), miner in lead mine, living with *wife* Anne (35) and *children*: John (11); Rees (6); Thomas (5); and Lewis (1mth)

5.2.2 1851

Tairheol: not recorded

Bankglas:

The Lewis family: Joseph (57) miner in lead mine, married to Anne (47) and living with children: John (21) miner in lead mine; Rees (19) miner in lead mine; Thomas (15) miner in lead mine; William (6); and Mary (3).

NB: since 1841, William and Mary were new additions. The older boys: John, Rees and Thomas were all working in the lead mine.

5.2.3 1861

Tairheol:

Thomas Lewis (22) lead miner, married to Rachel (21) and living with children: Elizabeth (2); and Mary (6mths).

Bankglas:

Anne Lewis (58), widowed: 'formerly lead miners wife', living with children Lewis (19) lead miner, William (16) lead miner and Mary (12) scholar.

NB: since 1851 Joseph Lewis has died, leaving Anne as a widow. Their son, Thomas, has married and moved into Tairheol. Their sons, John and Rees, are no longer resident at the cottage.

5.2.4 1871

Tairheol:

Thomas Lewis (32) lead miner, married to Rachel (32) and living with children: Mary (10); Morgan (9); Anne (5); and Sarah (2).

NB: Eldest daughter Elizabeth (would be 12) is no longer resident. Morgan, Anne and Sarah were new additions to the family.

Tairheol:

Anne Lewis (69) alone woman (widow of Joseph Lewis) living with her daughter, Mary (23), a dressmaker.

Bankglas: not recorded.

NB: both properties may be referred to as Tairheol, as they are occupied by the extended Lewis family.

5.2.5 1881

Tairheol:

Thomas Lewis (42) lead miner, married to Rachel (41) and living with children: Mary (20) miner's daughter; Morgan (19) lead miner; Rachel (9) miner's daughter; Catherine (9) scholar; Ameliah (4) scholar; Jane (3) scholar; and Mirriam (2).

NB: Morgan working as a lead miner. Rachel, Catherine, Ameliah, Jane and Mirriam were new additions to the family. Anne Lewis was no longer resident (deceased?). Mary (who would be 33), dressmaker, was no longer resident.

Bankglas: not recorded.

5.2.6 1891

Tairheol:

Morgan Lewis (29) lead miner and widower, living with his children: Miriam (12); and Thomas (7). Morgan's sister, Sarah (22) living with the family as a 'servant'.

NB: Morgan's daughter Miriam was recorded on the previous census as the daughter of Thomas and Rachel. Morgan Lewis had been married, and widowed, since the previous census. Thomas was a new addition to the family.

Bank Glas: Mary Lewis (41), dressmaker, living alone.

NB: Mary Lewis had returned to the cottage, since her absence from the 1881 census.

5.2.7 1901

Tairheol:

David Thomas (43), 'ordinary agricultural labourer', married to Elizabeth Thomas (38) and living with children: Benjamin (11); John (9); Margaret Anne (7); and Thomas (1).

NB: David Thomas was born in Laugharne, Carmarthenshire, and Elizabeth was born in Bucknock, Llanwrtyd. Their two younger children were born in the parish of Cilycwm, whilst the two older children were born in the

neighbouring parish of Llanfairarybryn. The family had lived in the parish of Cilycwm for at least 7 years and in the immediate area for at least 11 years.

Tairheol:

Mary Jones (38), pauper, living with Mary Evans (71) and Elizabeth Jones (12): both of whom were boarders.

Bankglas: not recorded.

5.2.9 1911

Tarheol:

Mr. Thomas was the recorded occupier in the property where a total of 6 people resided: 4 males and 2 females.

Tarheol: Mrs. Thomas was the recorded occupier in the property where a total of 2 people resided: 2 females.

Bankglas: not recorded.

5.3 Births, Marriages and Deaths

Parish records of baptisms, marriages and deaths are available at the Carmarthenshire Archives Office (CAO, 2011e). The records for Cilycwm include: baptisms, marriages and burials (1704-1812); baptisms (1813-1832); and burials (1813-1876).

The earliest reference to Tairheol or Bankglas is regarding the baptism of John Lewis, son of Joseph and Anne Lewis, Bankglas, on October 9th 1829. John Lewis is recorded on the 1841 census, when he was 11 years of age.

5.4 Cawdor Estate Lead Mine Returns

Production figures for the Nantymwyn Lead Mine, recorded and retained by the Cawdor Estate, are available in the Carmarthenshire Archives Office. The loads transported by Thomas Lewis, Tair Heol, are recorded from 28th February 1843 to December 1846 (CAO, 2011d).

5.5 Historic images

Mr. Alun Jones, Rhandirmwyn, kindly provided copies of the images described below.

5.5.1 Photographic

A photographic image from c.1900 (figure 22) shows the lime-washed, front elevation of two cottages at the location of Tairheol, validated by the inclusion of the neighbouring property of Bryn-glâs in the background (Lewis, 1900). The cottages abut each other and have a continuous tin-sheet roof. The cottage on the left-hand side of the image appears to correlate with the surviving structure at Tairheol. The cottage on the right-hand side of the image is no longer standing.

The cottages are not identical: the windows in the cottage on the right-hand side of the image are set lower from the roof-line, as compared with the windows in the cottage on the left-hand side of the image. The large oak tree obscures the gable end wall of the right-hand side cottage, and perhaps also the chimney. The chimney of the left hand cottage appears to have a course of stone jutting out just below the chimney top.

A hedge, laid in the Carmarthenshire style, runs along the front of the two cottages. The photograph appears to have been taken from the field opposite the properties, to enable the image to include both cottages. In which case, the laid hedge is on the eastern side of the road (which is obscured from view).

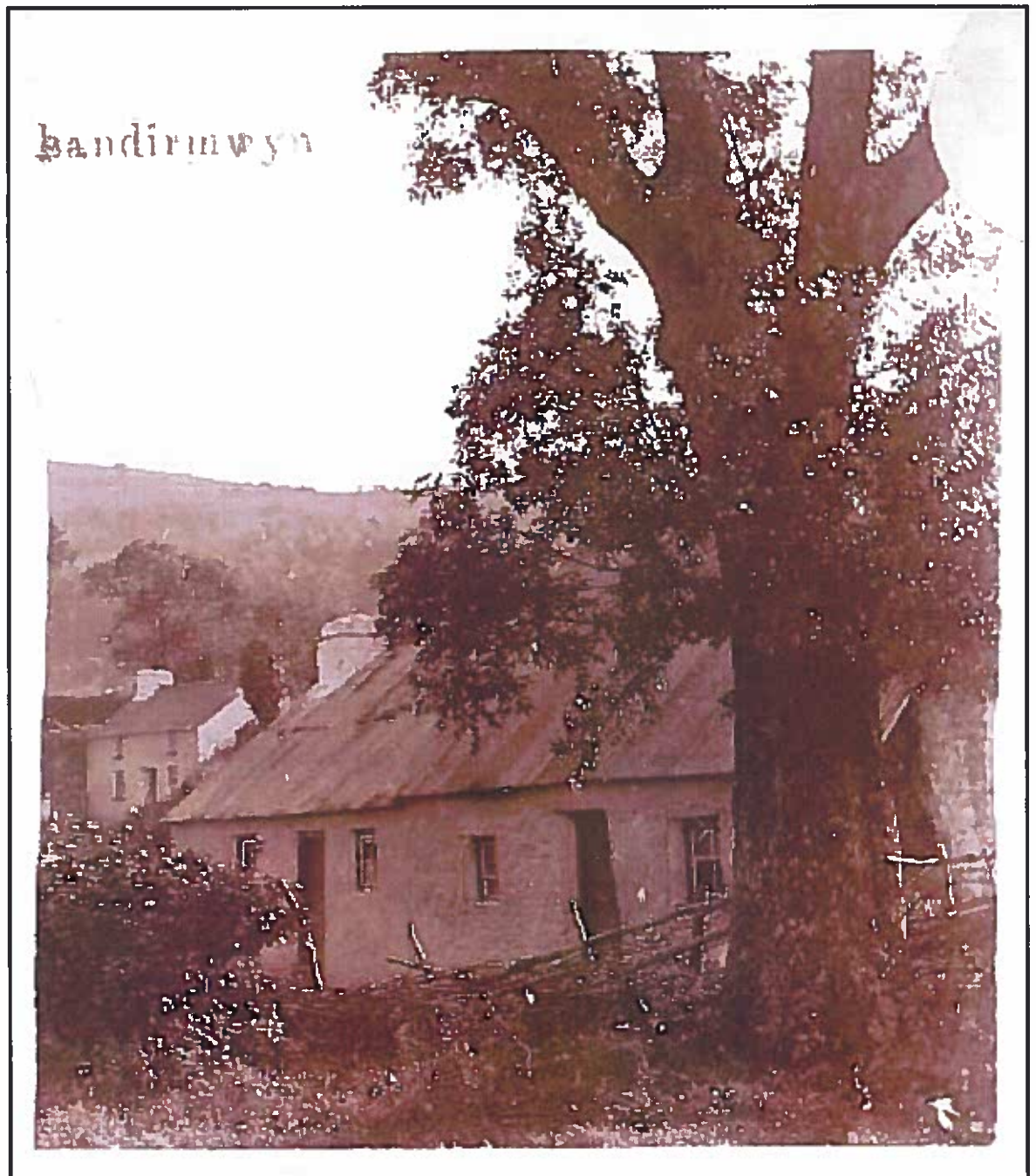


Figure 22: Tairheol c.1900, photograph by Thomas Lewis, reproduced with the kind permission of Mr. A. Jones.

5.5.2 Artwork

Monica Barnes (daughter of Thomas Lewis, photographer) painted Tairheol c. 1960 (figure 23). The painting records a view of the cottage from the southeast: showing a partial view of the southeast gable wall, front elevation and roof. The window to light the loft is shown in the southeast gable wall, which is lime-washed white. The front elevation is lime-washed in pink.



Figure 23: Tairheol in the 1960's, painting by Monica Barnes, reproduced with the kind permission of Mr. A. Jones.

5.6 Local recollections

A relation to the family of Alltyrerw and a member of the local community kindly offered their recollections of Tairheol as a contribution to this project. The memories of the occupants are a valuable addition to the research when considering that census information is not available from 1911 to date.

5.6.1 Mr. Thomas Gwilym Williams, Troedrhiw Hir, Rhandirmwyn (born 04/04/1916, aged 95).

Daniel and Margaret Theophilus moved to Alltyrerw in approximately 1907. Their son, Dan, had been born at Troedrhiw Hir. Tairheol formed part of the holding of Alltyrerw.

During the 1950's the cottage was occupied by the village post-man: Mr. Dai Hughes. Mr. Hughes was a veteran of World War I and was the village post-man during the period between WWI and WWII (figure 24). He collected the mail from Rhandirmwyn Post Office (then at Grove Cottage): delivering the Nantyrast round on Monday, Wednesday and Friday; and the Fannog round on Tuesday, Thursday and Saturday. The pony used for the postal deliveries was stabled at Broncwrt Farm, to the northeast of (and over the Tywi River from) Tairheol.



Figure 24: Postman, Mr. Dai Hughes, delivering mail to Ystrad-ffin in May 1930, reproduced with the kind permission of Dyfed Cultural Services Department (Dyfed Cultural Services Department, 1991: 156).

Mr. Harry Swash resided at Tairheol in the late 1950's. Mr. Swash had started life as an orphan in a children's home. He was an agricultural worker, following seasonal work around the farms. He once spent a winter working on a Tregaron farm, returning to the cottage in the spring. He was an honest, hard working man, who had a tendency to spend a large portion of his earnings in the local Towy Bridge Public House.

5.6.2 Mr. Thomas Theophilus, Rhiwmallaen, Cilycwm (born 14/07/1931, aged 80)

Mr. Theophilus was born in a nearby property, Nantyrhydifor, and moved to Rhiwmallaen in 1947.

Thomas Lewis, recorded on the 1891 census as living at Tairheol when he was 7 years old, was deaf and dumb (omitted from the census). Mr. Thomas Lewis is not recorded as living at Tairheol at the time of the 1901 census, by which time the family (Morgan Lewis, Sarah Lewis and Thomas Lewis) had moved to 'Brynteg', only a short distance to the south. Thomas' sister Catherine was married to the landlord of the Towy Bridge Inn, where she lived with their other sister, Miriam (dressmaker).

Mr. Thomas Lewis worked in the lead mines. An incident occurred where he and two other lead miners were trapped in a fall in the mine. Mr. Thomas, who could not communicate with the other miners due to his disability, was inconsolable and in a terrible state of panic. Though the three men were rescued Mr Thomas never returned to work in the mine.

In the 1940's Mr. Thomas worked as a 'lengths-man', a road labourer, for Carmarthenshire County Council, maintaining the section of road which led to Nantyrhydifor. Mr. Theophilus used to meet him at the end of the working day to let him know that it was time to finish work and return home. Latterly, Mr. Thomas lodged with his sister Miriam at the Towy Bridge Inn, when she had become the landlady.

When Dai Hughes, 'Hughes the postman', lived at Tairheol in the 1930's he used to maintain a cut grass lawn in front of the cottage. To either side of the path, leading up to the front door, Mr. Hughes cut out the word 'Tairheol': 'TAIR' to the left of the path; 'HEOL' to the right, and in-filled the letters with sand. The property was vacant from the time that Mr. Hughes died to when Mr. Swash moved in.

5.6.3 Mrs. Sonia Stone: letters from America

Letters from Mrs. C. Stuck, a descendant of the Lewis family, to Mrs. S. Stone, Rhandirmwyn, relate the story of the emigration to Philadelphia of Rees and Tom Lewis (born in Bancglâs) in 1868: 'Rees Lewis and his brother, Tom, were Welsh miners. They discovered a rich vein and received a \$1500 sum for it. This paid their way and their families' ways to the U.S.A.' A photograph from c. 1900 shows Rees Lewis with his daughter Katherine, son William, and another, un-named, daughter (figure 25). Rees Lewis' wife died shortly after arriving in Philadelphia.



Figure 25: Rees Joseph Lewis (seated right), with William R. Lewis (seated left), Katherine Lewis (standing left) and un-named daughter (standing right), c. 1900. Photograph reproduced with the kind permission of Mrs. S. Stone.

5.6.4 General recollections

It is noteworthy that the cottage is known locally as Tairheol, not as Bancglâs. Mr. Williams and Mr. Theophilus were not aware that there had been two cottages at the site, nor had they ever heard any stories relating to the demise of the other building.

5.6.5 The last resident

The last resident of Tairheol was a steer, reared by Dan Theophilus of Alltyrwrw. The cottage briefly features in an episode of Cefn Gwlad filmed in 1983, which shows Mr. Theophilus feeding the steer inside the cottage and then loading it into a trailer. The brief, tantalising, clips of film do show some features of the cottage, such as glazing, which have since been lost (figure 26).



Figure 26. Tairheol: 1982. Showing glazing (Griffiths, 1983).

6. Discussion

Although the 1970 mapping (Edina, 2011) records the name of the standing cottage as Banc-glas, the owner, family and local community know it as

Tairheol: and it is referred to as such in this final discussion. 'Tairheol' translates in to English as 'three roads', referring to: (1) the road running in a southeast direction towards Cilycwm; (2) the road running in a northwest direction to Cwrt-y-Cadno (both still in use); and (3) the road running in an east south-easterly direction alongside the course of the River Tywi towards the river-crossing at Pwlpriddog, now out of use (Edina, 2011).

Tairheol is the only surviving cottage of a pair, built after 1795 and prior to 1829 according to the retrogressive map analysis detailed in section 5.1 (CAO, 2011b) and the parish records detailed in section 5.3 (CAO, 2011e). Banc-glas, the other cottage, is only evident today as the footprint of the building and as a low spread of rubble obscured by leaf litter and vegetation. The c.1900 photograph (Lewis, 1900) shows that the cottages, although similar in size and style, were not identical: the windows in the left-hand cottage are set higher than those in the right-hand cottage; the glazing is different; and there appears to be a slight difference in the height of the wall where the two cottages join.

These differences suggest that the cottages may not have been constructed as a single build, such as those at Banc Tai Newydd, Carmarthenshire, which were identical and separated only by a wattle and daub partition (William, 1975: 125). The earliest phase of building at Tairheol is the rear revetment wall. The gables and front elevation are one build, with the gable walls butting against the revetment wall. There is no evidence to suggest which cottage was built first.

The surviving cottage is fully-lofted with two rooms on the ground floor separated by lath and plaster partitions. The right-hand partition would have extended to the rear wall, hence the requirement for the door-way into the right-hand room. There is no evidence to suggest that the left-hand partition extended to the rear wall to create a 'blind' cross-passage for additional storage, as recorded at Aberarth (McDermott, 1978: 326-8): the partitions at Tairheol form an entrance hall-way. The paving in the door-way and at the rear of the cottage may be restricted to the entrance area: the remainder of

the cottage may be floored with a rammed and trodden floor of ash, land sand and weathered lime as at Banc Tai Newydd (William, 1975: 128).

The analysis of the right-hand room is limited by the poor condition and lack of surviving features, however, the evidence indicates that this, smaller, room was lofted, lit by a window in the front elevation and may have fulfilled the function of a parlour.

The larger, left-hand room, also lofted and lit by a window in the front elevation, was heated by a fireplace in the gable wall and can be identified as a kitchen-living room. The fireplace is multi-phase: an earlier open-hearth fireplace with stone arch lintel over was partially in-filled and replaced by an iron grated hearth and oven. An earlier window sill appears to have provided window seating, where work requiring natural light could have been undertaken in the poorly lit room. The window also provided natural light for the stairwell.

The stairwell is enclosed by the partition wall and boarding, the latter supported a shelf for the kitchen-living room. The side facing the rear of the room is damaged: this may have been boarded or may have provided under-stairs storage. The steps led to the loft, which would have been poorly lit by the small window in the south-west gable. Some attempt at draught exclusion was made by in-filling the space between the wall tops and the underside of the roof with a narrow course of masonry.

The draught-proofing modification is associated with alterations to the roof: the addition of the sawn timber structure overlain by tongue and groove panelling and tin-sheet. This later roof replaced an earlier timber structure, in which the trusses were set upon pad-stones, rather than a wall-plate, and the profile of which indicates a lower ridge height. The addition of the new roof involved the heightening of the rear wall by 0.3m. The former structure, built when tin-sheet was not available, would have been covered in thatch as seen in other local cottages of the period (figure 27).



Figure 27. Pentwyn, Rhandirmwyn, 1912, photograph by Thomas Lewis, reproduced with the kind permission of Mr. A. Jones. NB: Nantymwyn Terrace (built 1892), in the background.

Tairheol was built on a minute fraction of the extensive Cawdor-Campbell Estate, which held other properties in Wales and Scotland. The Rhandirmwyn estate was purchased to obtain the lead mine of Nantymwyn (originally known as Cerrigmwyn): one of the most productive metal mines in Southern Wales, flourishing between 1775 and 1823 (Hall, 1993: 51-59). The mines were the major employer of local residents and migratory workers in the area: employing up to 400 people between 1775 and 1797 (Davies, 1995: 102).

A report to Lord Cawdor, following a survey of property on the Cawdor estate at the beginning of the nineteenth century, described the poor state of housing:

"I have examined the condition of every house and outhouse upon the Estate.....nine in ten are such miserable hovels that it would be wasting Materials and labour to attempt to do anything with them" (CAO, 2011f).

The requirement for improvements to existing buildings, and the construction of additional industrial workers housing, correlates with the commissioning of building on the great estates seen in North Wales and Scotland (Wiliam, 2010: 15) (Maudlin, 2008: 7). Fully-lofted cottages, built in North Wales during the period 1850-1900, replaced earlier, more primitive, half-lofted (croglift) cottages (Wiliam, 2010: 15).

Considering the construction date of Tairheol, at the beginning of the nineteenth century, it may originally have been constructed as a single storey, thatched, croglift cottage. The building was certainly not as substantial as later examples of industrial housing constructed in Rhandirmwyn: Pannau Street, built c.1850 (figure 28); and Nantymwyn Terrace, built 1912 (see figure 27).



Figure 28. Pannau Street, Rhandirmwyn: industrial workers' housing constructed c. 1850.

The construction of Tairheol as industrial workers' housing is suggested by the many references throughout the census records to the status of the

occupants as 'lead miners'. The lead miners did not receive a regular wage, but worked the mines on a 'tribute' system: bidding to work veins of ore, using materials and tools purchased from the mine owner (Willies, 1999: 28). The miners' income, directly related to productivity, could be meagre. However, rich veins were occasionally struck and miners' could make their fortune, as experienced by the Lewis brothers who emigrated to America.

The decline of the lead mining industry in Rhandirmwyn, affecting the economy of the local area, is reflected in the social and economic status of the occupants of Tairheol and, ultimately, in the condition of the building. The mine profits had diminished to such an extent by 1923 that Lord Cawdor decided to lease the works. Finally, in 1932, the mines were abandoned.

Tairheol: the last occupier of which was a poor agricultural labourer; and which was finally used to house a steer, eventually fell into decay.

7. Recommendations

Tairheol is an unstable structure categorised as an 'at risk' building. Future collapse or restoration will result in the loss of original features. In order to stabilise the structure and to maximise the understanding of the cottage elements of conservation and further research are advised.

7.1 Conservation

The following urgent works are recommended:

- Remove excessive growth of ivy from the chimney and south-west gable. Close-growing ivy should be retained, to act as a natural covering, unless immediate recording and re-consolidation of masonry can be implemented.

- Hazel stems growing against the front elevation should be cut at ground level and removed. Roots should be left in-situ and stumps treated with herbicide.
- The masonry on the northern side of the door in the front elevation is extremely fragile: re-consolidation is urgently required, using lime-mortar matched to original material.

7.2 Further research

7.2.1 Documentary research

This survey has revealed a rich documentary record for the cottage, with the potential for a great deal more information to be discovered in the Cawdor Estate Records in the Carmarthenshire Archives Office. Additional information may be obtained from local archives associated with chapel, church and school records.

7.2.2 Archaeological Excavation

The connection between building remains and archaeological remains could be explored by archaeological excavation.

Aims and objectives to be considered:

- Establish the extent of the properties
- Enable a comparative analysis of the two cottages
- Establish the building phases: which property was built first?
- Establish the function(s) of out-buildings
- Recover artefacts relating to the properties and the occupants.

8. Acknowledgements

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Dyfed Archaeological Trust: for assistance with accessing the Historic Environment Record.

McCanns Design and Construction: for the use of their copying equipment to scan and reduce elevations and plans.

9. Appendix 1: Archive Material

Photographic Record	
No.	Title
1	Tairheol: collapse of northern elevation, viewed from NE looking SW
2	Tairheol: variety of lime-wash pigments, section of walling in doorway LHS
3	Tairheol: roof structure, central and southern section of building, viewed looking SE
4	Tairheol: infill between wall top and underside of roof, section of wall to RHS of door, viewed from NE
5	Tairheol: roof structure at the northern end of the building, viewed from NE
6	Tairheol: truss on pad stone, N corner of NW gable
7	Tairheol: entrance into partitioned hall-way, NB paving stones
8	Tairheol: fireplace in south-east gable
9	Tairheol: rubble stone in-fill above window sill
10	Tairheol: stairwell, viewed from window
11	Tairheol: stone paving and door frame sockets in entrance
12	Tairheol: SE gable butting against rear revetment wall
13	Tairheol: NW gable butting against rear revetment wall
14	Tairheol: sockets in tie beam
15	Tairheol: wooden fixing in window frame
16	Tairheol: footprint of Banc-glas
17	Tairheol: window in SE gable
Measured Drawings	
1	Tairheol: ground plan 1:20
2	Tairheol: front elevation 1:20
3	Tairheol: south-east gable 1:20

10. Appendix 2: Transcribed Census Records

1841 Cilycwm Census

Place	Houses		Names	Age & Sex		Profession, Trade, Employment or of Independent Means	Whether born in same county	Whether born in Scotland, Ireland or Foreign parts
	Uninhabited or building	Inhabited		male	female			
Tayrheol		1	Elizabeth Price		33		y	
			Thomas Price	1			y	
			Jane Price		6mth		y	
ditto		1	Jane Jones		60		y	
ditto		1	Thomas Morgans	75		Cooper	y	
			David Morgans	25		Agri lab	y	
			Margret Morgans		30		y	
Bankglás		1	Joseph Lewis	45		miner in lead mine	y	
			Anne Lewis		35		y	
			John Lewis	11			y	
			Rees Lewis	6			y	
			Thomas Lewis	5			y	
			Lewis Lewis	1 mth			y	

1851 Cilycwm Census

No. of house-holders schedule	Name of Street, Place or Road, and Name or No. of House	Name and Surname of each Person who abode in the house, on the Night of 30th March, 1851	Relation to head of family	Condition	Age of	Rank, Profession or Occupation	Where Born
					Male		
39	Bankglas	Joseph Lewis	Head	Mar	59	Miner in Lead Mine	Carmarthenshire-Llanfair-ar-y-Bryn
		Anne Lewis	Wife	Mar	47		Carmarthenshire-Llanfair-ar-y-Bryn
		John Lewis	Son	U	21	Miner in Lead Mine	Carmarthenshire-Cilycwm
		Rees Lewis	Son	U	19	Miner in Lead Mine	Carmarthenshire-Cilycwm
		Thomas Lewis	Son	U	15	Miner in Lead Mine	Carmarthenshire-Cilycwm
		Lewis Lewis	Son	U	9		Carmarthenshire-Cilycwm
		William Lewis	Son	U	6		Carmarthenshire-Cilycwm
		Mary Lewis	Daughter		3		Carmarthenshire-Cilycwm

1861 Cilycwm
Census

No. of schedule	Road, street and No. or Name of house	Houses		Name and surname of each person	Relation to head of family	Condition	Age of		Profession, Trade, Employment or occupation
		Inhabited	Uninhabited or building				male	female	
6	Bankglas	1		Anne Lewis	Head	W		58	formerly lead miners wife
				Lewis Lewis	Son	Un	19		Lead Miner
				William Lewis	Son	Un	16		Lead Miner
				Mary Lewis	Daughter	Un		12	Scholar
7	Tai'rheol	1		Thomas Lewis	Head	Married	22		Lead Miner
				Rachel Lewis	Wife	Married		21	Miner's Wife
				Elizabeth Lewis	Daughter	Un		2	
				Mary Lewis	Daughter	Un		6mths	

1871
Cilycwm
Census

No. of schedule	Road, street and No. or Name of house	Houses	Uninhabited or building	Name and surname of each person	Relation to head of family	Condition	Age of	Profession, Trade, Employment or occupation	Where born
5	Tairheol	1	Inhabited	Thomas Lewis	Head	Married	32 male	Lead Miner	Cilycwm
				Rachel Lewis	Wife	Married	31	Miner's Wife	Llanfairybryn
				Mary Lewis	Daughter		10	Daughter	Cilycwm
				Morgan Lewis	Son		9	Scholar	Cilycwm
				Anne Lewis	Daughter		5	Miner's Daughter	Cilycwm
				Sarah Lewis	Daughter		2	Miner's Daughter	Cilycwm
6	Tairheol	1		Anne Lewis	Head	Widow	69	Alone Woman	Llanfairybryn
				Mary Lewis	Daughter	Unmarried	23	Dressmaker	Cilycwm

1881
Cilycwm
Census

No. of schedule	Road, street and No. or Name of house	Houses		Name and surname of each person	Relation to head of family	Condition	Age of	Profession, Trade, Employment or occupation	Where born
		Inhabited	Uninhabited or building				male		
10	Tairheol	1		Thomas Lewis	Head	Married	42	Lead Miner	Cilycwm
				Rachel Lewis	Wife	Married	41	Miner's Wife	Llanfairarybryn
				Mary Lewis	Daughter		20	Miner's Daughter	Cilycwm
				Morgan Lewis	Son		19	Lead Miner	Cilycwm
				Rachel Lewis	Daughter		9	Miner's Daughter	Cilycwm
				Catherine Lewis	Daughter		6	Scholar	Cilycwm
				Ameliah Lewis	Daughter		4	Scholar	Cilycwm
				Jane Lewis	Daughter		3	Scholar	Cilycwm
				Miriam Lewis	Daughter		2		Cilycwm

Census

No. of schedule	Road, street and No. or Name of house	Houses	No. of rooms occupied is less than 5	Name and surname of each person	Relation to head of family	Condition	Age of	Profession, Trade, Employment or occupation	Employer	Employed	Where born	Deaf /dumb blind, lunatic, imbecile or idiot	Lang spok
		Inhabited	Uninhabited or building				male						
23	Tairheol	1	3	Morgan Lewis	Head	Widower	29	Lead Miner		X	Cilycwm		Wels
				Sarah Lewis	Sister	Single		Servant			Cilycwm		Wels
				Miriam Lewis	Daughter			Scholar			Cilycwm		Wels
				Thomas Lewis	Son		7				Cilycwm		Wels
											Cilycwm		Wels
24	Bank Glas	1	2	Mary Lewis	Head	Single		Dressmaker		X	Cilycwm		Wels

Cilgwyn
Census

No. of schedule	Road, street and No. or Name of house	Houses	No. of rooms occupied if less than 5	Name and surname of each person	Relation to head of family	Condition as to marriage	Age last birthday		Profession or occupation	Employer, Worker or Own account	Where Born	1. Deaf and dumb 2. Blind 3. Lunatic 4. Imbecile, feeble- minded
		In- habited					male	female				
14	Tairheol	1	2	David Thomas	Head	M	43		Ordinary Agricultural Labourer	Worker	Carmarthen, Laugharne	
				Elizabeth "	Wife	M		38			Bucknock, Llanwrtyd	
				Benjamin "	Son		11				Carmarthen, Llanfairarybryn	
				John Rees "	Son		9				Carmarthen, Llanfairarybryn	
				Margaret Anne "	Daughter			7			Carmarthen, Cilgwyn	
				Thomas "	Son		1				Ditto	
15	Tairheol	1	2	Mary Jones	Head	S		38	Pauper		Ditto	
				Mary Evans	Boarding	S		71	Pauper		Ditto	Feeble bodied from childbirth
				Elizabeth Jones	Boarding			12			Ditto	

No. of schedule	Address	Kind of Building	Name of Occupier	Dwellings or tenements		Uninhabited	Building	Population		Persons
				Inhabited				Males	Females	
11	Tarheol	Cottage	Mr. Thomas	1				4	2	6
12	Tarheol	Cottage	Mrs. Thomas	1				-2	2	2

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