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# TIR GOFAL MANAGEMENT PLAN: HERITAGE MANAGEMENT INFORMATION (Call Out) Prepared for: Tyn y Fron



Tir Gofal Reference No: W/11/5095

Report Number: 2005/117 Project Record Number: 53677

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# **INTRODUCTION AND OBJECTIVES**

## Call Out Visit

A farm visit was undertaken at the request of the Countryside Council for Wales to address specific management issues on this farm. The owner wishes to spend the capital works budget on the restoration of traditional buildings. There are a number of buildings within the farmstead, and the aim of the call out visit was to establish which buildings should be prioritized. The aim of this report is to make an assessment of the buildings, in order to provide management recommendations to be incorporated into the Tir Gofal Management Plan. This report is not intended to assess the structural condition or stability of the buildings.

The Call Out Report responds to management concerns regarding specific sites, it does not provide management advice for all known sites on the farm, for these recommendations please refer to the Historic Environment Report 1 (He1).

## Introduction

Ty'n Y Fron farmstead is sited on a south-facing slope, which runs down to Nant Meurig, a small tributary of the Aeron. It is marked on various historic map sources, including the Old Series Ordnance Survey of 1834. The first edition shows the farm in sufficient detail to identify individual buildings. The layout incorporates two parallel rows of buildings, aligned north – south (across the contour of the slope), which form the core of the farmstead, with several outlying buildings; a layout that has survived relatively unchanged until the present day.

The farmhouse itself has seen only minor modification. The traditional buildings have also survived in close to their original form. The entire farmstead is constructed of a combination of clom (the term used in Wales for earth walling), and stone. Both materials have been used to form different elements of the same buildings.

'Clom' was a cheap and versatile building material, and can be very durable when maintained correctly. Clom was often used where stone was in short supply, but the construction process is labour intensive. The clay had to be mixed with straw and small stones (frequently done by cattle trampling the earth and straw together in a pen). The mixture was then built up in layers on top of a stone plinth, and each layer had to be allowed to dry before adding the next. This meant that even small buildings could take months to construct. After construction the earth walls were usually protected with a coat of limewash or plaster, and sheltered by broad eaves of a thatch or slate roof.

Clom was likely to have been sourced locally; in fact the present owner believes that the earth used in the walls of the buildings was from a small 'quarry', to the east of the farmstead. The local provenance of the materials makes it quite likely that the buildings were originally thatched prior to being roofed with slate, however, no direct evidence was found for this at the time of the call out visit. The importance of Tyn y Fron farmstead is high, as it represents a rare survival of an entire range of buildings that have clom in their fabric. Other examples of clom buildings are known in the surrounding area, even though their survival rate is generally low. This part of Ceredigion may be unique, both in terms of the incidence of survival of clom buildings, and also the extent to which clom was used regularly as a building material. Every effort should be made to repair and maintain the buildings sympathetically, to help ensure the future survival of the group.

Ideally it would be possible to provide funding for all the buildings within the complex, however, within the scheme several are ruled out as they are currently used for residential purposes, whilst several are in a reasonably good state of repair, and will survive with the level of maintenance which they are currently receiving. Therefore, the priorities for funding are those buildings, which without significant input will become irreparable in the near future. The western row of buildings falls into this category.

## The eastern range

The farmhouse occupies the southern end of the eastern row of buildings. It is of traditional two storey, three bay type, and is roofed with slate. It appears to have been built using both stone and clom elements, although the fabric is not visible in most places as it is cement rendered externally.

Upslope (to the north) continuing under the same roofline as the house, is an outbuilding with a distinctive arrangement of doors. On the west elevation is a pair of doors that extend from ground level to roof height, whilst on the east side of the building is an opposing, slightly smaller pair of doors. These doors are evidence of its past use as a threshing barn. Both sets of doors could be opened to provide a through draft to separate the ear from the straw during the process of threshing.



The threshing barn, showing paired doors on the western elevation

The first edition Ordnance Survey map shows a horse gin (engine) to the rear (east) of the building, evidence that the threshing process on this farm became mechanized, probably during the latter part of the nineteenth century. The horse gin is not marked on the second edition Ordnance Survey map, suggesting it was no longer used by this

time. This building has been renovated and is now used as a workshop. It appears to be in a good state of repair, and retains a number of original features.

#### The western range

The western range comprises two buildings, which lie opposite, and are parallel to the range described above.

The building at the north end of the western range is two storey, with a slate roof. The lower part is constructed of rubble-stone, whilst the upper storey is constructed of clom, however, more recent repairs have incorporated breeze-blocks into the structure. The north gable-end is built into the hillside with a doorway at second story level (ground level on the outside of the building). The doorway gives access to a loft, although during modification to the buildings, the original loft has been removed. The joists now run longitudinally along the length of the building, supporting an upper floor, which is currently used for storage. The joists originally ran across the width of the building, and their former positions can be seen inside the building, in sockets within the clom on the east and west walls.



Sockets in the clom on the east wall show the former position of joists supporting the upper floor.

Below this floor at ground level is an area that was probably a cart house in the past. There are two wide entranceways at ground level on the east elevation. Two wooden lintels are supported on either side by the original fabric of the building, but are now supported centrally by a pillar made of breeze-blocks.



The building at the north end of the western range (east elevation, showing wide entranceways at ground floor level, and remaining protective lime render).

On the east elevation, there is what appears to be an original window to the second storey. At this level the remains of the protective coat of lime wash can be seen. However, the condition of this wall is deteriorating – much of the lime wash has disintegrated, and several stress cracks and animal burrows can be seen within the fabric of the wall. The west elevation of this building is also in a poor state of repair, with the clom now exposed to the elements. Again, the protective coating of lime wash has disintegrated, and slates missing from the eaves are allowing the core fabric of the wall to be dissolved by penetrating water.

The south gable-end of this cart house abuts a single-storey building that forms the southern element of the western range. The upper part of this gable-end is now built of breeze-blocks, so its original form is uncertain. The lower part of the wall is rubble-stone, and it seems likely that the element now built of breeze-blocks was formerly clom. This would have allowed for the provision of sockets for the roof purlins of the southern building. These purlins are no longer tied into the southern gable end of the cart house, and the roof of the southern building has separated from it leaving a wide gap. From inside the southern building, it is apparent that the apex of its roof has shifted southwards (longitudinally) with relation to the building. The rafters lean to the south, so that the points at which they meet at the apex are no longer directly above the point at which they meet the wall tops, a process known as 'racking'. Racking must have occurred prior to the current slates being hung, as the slates are laid with joints running vertically, compensating for the angle of the roof timbers.



Inside the southern building of the western range, showing the 'racked' roof.

This south building in the western range is also constructed partially of stone, whilst the upper parts of some walls are clom. The front (eastern) elevation is built entirely of rubble-stone, and has several door and window openings, topped with wooden lintels. The style of the door and window fittings suggest that these may be original, although it is possible that glazed windows were a later addition (see discussion below). A low brick out-shut was added at a later date to this eastern elevation.

In the western wall of the building, ventilation slits with wooden lintels are visible, but have been blocked. There is currently a breeze-block outbuilding attached to the external face of the western wall. From within this outbuilding it is possible to see the former position of the ventilation slits.



Blocked ventilation slits in west wall of southern building.

The original function of the southern part of this range is unclear, but it may have been put to numerous uses. Several features suggest that at least part of the building was used as a dairy in the past. Dairies needed to be well ventilated, and this was often achieved by the provision of ventilation slits. The window openings may have been shuttered with slatted wood prior to the more recent addition of glazing. The internal walls of the building are lime washed, which was a traditional method of sanitising the inside of a building, due to the mildly antiseptic properties of lime.

#### Other outbuildings

South-east of the two rows which form the main focus of the farmstead are two further outbuildings. The most southerly building is built of rubble-stone to a height of one and a half stories. It is the only building in the range that does not appear to have a clom element to it. At second storey level, there is a loft, with two small window openings on the south elevation, and one window and a doorway on the north elevation, which is reached by an external set of stone steps. The ground floor has ventilation slits in the stone walls and is accessed by a single, wide entranceway on the eastern gable-end of the building. This gable end now has timber cladding to the upper storey, but it is not clear whether this is an original feature of the building. The building is in good repair generally.



Southernmost outbuilding showing timber cladding to gable end.

To the north, and set back from the rear elevation of the farmhouse is a small twostorey building, made of rubble-stone and clom, and roofed with slate. It appears on the second edition Ordnance Survey map, but not the first, making it the most recent building within the historic farmstead. The building has been recently repaired, and modified to incorporate a chimney. It is not clear to what extent the remainder of the building has been modified, but externally the building appears well looked after, and repairs that have been made are in keeping with the style of the rest of the farmstead. The owner has sourced earth from the immediate vicinity to carry out repairs to the clom elements of the building.



Small building to the rear of the farmhouse, repaired using locally sourced clom.

# MANAGEMENT RECOMMENDATIONS

The priority for capital works funding is the western row of buildings, as without significant input, this range will become irreparable in the near future. Cambria Archaeology cannot advise on the structural stability of the buildings, and advice should be sought from a professional builder on this matter.

The join between the roof of the southern building and the gable-end of the cart house should be consolidated.

Repairs to the surface of the clom need to be made in order to prevent damp from penetrating the core fabric of the walls. Roof slates should be replaced where necessary, to prevent water from penetrating wall tops.

New clom shrinks as it dries, so this must be born in mind when carrying out repairs.

Holes in clom are often the result of animal activity. Large holes and tunnels are often made by rats. Fill in tunnels and render over. Medium sized holes could be caused by birds looking for nest sites, fill and render over in the autumn, so that nesting birds are not disturbed.

If older repairs (ie. those using concrete blocks) are sound, they should be left in situ, and monitored. If they are separated from the clom, and causing further damage, remove and replace with clom block repair.

It is not possible to stick new clom onto an old clom wall surface, as it will fall off. However, a system of oak pegs driven into the old material, can be used as a framework around and over which new clom can be packed.

Protective lime render should be re-applied to exposed walls to prevent erosion of the surface of the clom. (Schofield and Smallcombe, 2004)

For further information on repairing clom see enclosed SPAB (Society for the Protection of Ancient Buildings) technical advice sheet. A more detailed discussion of the different repair techniques for earth walled buildings can be found in Schofield and Smallcombe, 2004: 'Cob Buildings. A Practical Guide.'

## REFERENCES

#### Maps

Ordnance Survey Old Series, Sheet XVII, 1834 Ordnance Survey 1<sup>st</sup>. Ed. Cardiganshire (25" to 1 mile) Sheet XXVI.9; 1889 Ordnance Survey 2<sup>nd</sup>. Ed. Cardiganshire (25" to 1 mile) Sheet XXVI.9; 1905

Tithe Map Gartheli Parish (Hamlet in Llanddewi Brefi), Cardiganshire;?undated

#### **Other Sources**

Schofield J, and Smallcombe, J. 2004: 'Cob Buildings. A Practical Guide.' Black Dog Press, Devon.

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