

Tre'r Ceiri Iron-Age Hillfort Management Plan



Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Tre'r Ceiri Iron-Age Hillfort Management Plan

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CONTENTS

1. INTRODUCTION	1
2. LAND OWNERSHIP AND MANAGEMENT	1
3. THREATS TO THE MONUMENT	1
4. THE TRE'R CEIRI CONSERVATION PROJECT	1
5. MANAGEMENT OF THE SITE FROM 1999 TO 2013	3
6. PROPOSALS FOR THE LONG-TERM MANAGEMENT OF THE SITE	4
6.1 Aims of the management plan	4
6.2 The current condition of the site and its environs	4
6.3 Management proposals	5
6.3.1. <i>Protection of the monument</i>	5
6.3.2. <i>Footpaths</i>	5
6.3.3. <i>Education engagement and provision of information.</i>	6
6.3.4 <i>Health and Safety</i>	6
6.3.5 <i>Land Management</i>	7
7. Conclusions	7

TRE'R CEIRI IRON-AGE HILLFORT: MANAGEMENT PLAN

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1. INTRODUCTION

One of the most striking aspects of the Iron Age in north Wales is a series of hillforts defended by dry-stone walls. Many of these sites contain evidence of dense occupation. Of these, Tre'r Ceiri is by far the most spectacular and best preserved and is one of the best examples of this type of monument in Europe.

Tre'r Ceiri is thought to have been constructed in the late Iron Age but was occupied and modified during the Roman occupation. The hillfort is surrounded by a massive dry-stone wall which stands close to its original height of 3.5m in many places (Fig.1). A further outer defensive wall, constructed from massive blocks of stone guards the north-western side of the fort. A well-defended pathway passes through both the inner and outer walls and this was probably the main entrance. Four smaller entrances have also been identified, the most unusual of which is a narrow covered passage through the rampart at the north of the site.

Within the ramparts are the remains of in excess of 150 dry-stone huts. The earliest huts were large roundhouses. Most of these were subdivided during the Roman period and a series of small irregular and rectangular huts were constructed in clusters around the fort. A series of small terraces and enclosures cover the slopes below the rampart on all but the eastern side of the fort. The highest point of Tre'r Ceiri is marked by a Bronze Age cairn which would already have been hundreds of years old when the hillfort was built.

Tre'r Ceiri was scheduled as an ancient monument in 1923. It also lies within the Llŷn Area of Outstanding Natural Beauty, The Llŷn Heritage Coast, the Llŷn Peninsula Environmentally Sensitive Area and Yr Eifl Site of Special Scientific Interest.

2. LAND OWNERSHIP AND MANAGEMENT

The site is managed by Gwynedd Council and is in private ownership

3. THREATS TO THE MONUMENT

An archaeological site of this importance inevitably attracts many visitors. The Cambrian Archaeological Association was the first body to draw attention to the erosion of the site in 1894 but no concerted effort was made to combat the problem until 1978 when a survey of the site was carried out for the Welsh Office. This revealed that about 20% of the length of the rampart was in a state of collapse and that many of the huts had been badly damaged. The dry-stone masonry had lost structural integrity at the points of collapse resulting in accelerating rates of erosion. Recent surveys suggest that between 7,000 and 10,000 people visit the site every year.

4. THE TRE'R CEIRI CONSERVATION PROJECT

A conservation project was set up in 1989 by Cyngor Dosbarth Dwyfor with financial support from Cadw and Gwynedd County Council. Three stonemasons from a local firm, E and E Stonemasons (later T.I.R.) of Penrhyndeudraeth, were contracted to carry out the dry-stone work on the site. Gwynedd Archaeological Trust was contracted to provide archaeological supervision and to carry out the archaeological recording. The aims of the project over an initial five-year period were threefold:

- i. Education of visitors to the site.
- ii. Stabilisation of unstable masonry.
- iii. The development of appropriate conservation techniques.

An information board was set up on the path to the south-west entrance giving details of the site. Various building and recording techniques were developed and refined during the first few years of the project.

Detailed archaeological recording was required before any building work could be carried out. This consisted of the production of detailed plans using a total station with the addition of hand-drawn details. All standing elevations were recorded photographically using an architectural shift lens thus producing a detailed and very accurate record of all masonry both before and after conservation.

It was decided that the best way to conserve the unstable masonry was to clear the already collapsed areas and to add new stonework in the style of the original masonry. This would support the *in situ* masonry to either side and make both the ramparts and huts much more resistant to erosion. The original building techniques were analysed and the masons were able to duplicate the style of the Iron Age masonry. Detailed written, photographic and drawn records were kept at all times which were integrated into a two-volume report at the end of each season. Monthly meetings were held with Cadw's ancient monument inspector in order to monitor the progress and quality of the works.

A large proportion of the ramparts and a number of huts were stabilised during the first five seasons. It could be seen that erosion had almost completely ceased on the conserved areas. It was felt that the conservation techniques had developed to the point where the huts could be conserved so an outline management plan and a condition survey was produced. A further five-year project was then undertaken allowing the conservation of the remaining ramparts and huts.

Local government reorganisation in 1996 led to the formation of a new unitary authority, Gwynedd Council, who took over the management of the project from C.D.D. again with financial help from Cadw. The conservation work was completed in late autumn 1998 and three new information panels were erected. All huts and ramparts had been conserved to a point of optimum stability and the north, north-west and south-western entrances had been cleared. A survey of the condition and stability of the site was undertaken at this point so as to assess the overall impact of the conservation programme.

The results of the survey were impressive; erosion to the huts and ramparts had been almost eradicated. Eleven minor instabilities could be identified, four of which were results of deliberate damage. None of the erosion amounted to anything more serious than the displacement of a few stones. This was in direct contrast to the condition and stability of the site before the conservation project started when substantial areas of masonry were being lost every year.

The long term stability of the site is much improved due to several factors;

- i. The dry-stone masonry on the site is considerably more stable than before conservation. The many points of weakness caused by collapses have now been stabilised.
- ii. The site is more visitor-friendly. Access points to the site are now through the original entrances, where previously many paths ran through collapses in the ramparts and the entrances were blocked.
- iii. There are interpretation boards at three key points on the site allowing visitors to better understand the history and importance of the site. The notice boards also ask visitors to refrain from walking on the walls and point out that the use of metal detectors is prohibited.
- iv. The site is more visually impressive. The huts in particular are better defined allowing visitors to see them more as interesting features of the site and less as heaps of stone. The general improvement in the appearance of the site will encourage visitors to respect the monument.

One of the guiding principles of the project was to avoid the disturbance of *in situ* archaeology. Despite this, a significant amount of new information has been discovered about the site. The minute examination of almost all of the masonry on the site has revealed many useful details about the phasing and structure of the huts, clearly demonstrating a progression from conventional roundhouses to smaller irregular and rectangular structures. A broken late 2nd century Romano/British pottery jar was recovered from the base

of the wall in the north-west entrance giving us valuable evidence that the defences of Tre'r Ceiri were being added to during the Roman occupation. A publication recording the new information revealed during the stabilisation works is currently close to completion and will be published in *The Archaeological Journal*.

Digital copies have also been produced of all of the 20 volumes of reports on the conservation project. This provides a stable archive of the works carried out and a detailed record of the site after the works were completed. This is essential both for research purposes and also for the long-term management of the site.

5. MANAGEMENT OF THE SITE FROM 1999 TO 2013

A long-term management plan was produced at the end of the conservation project (Hopewell D, 1998 *Draft Proposals for a Long Term Management Plan for Tre'r Ceiri Iron Age Hillfort*). This recommended the following in order to maintain the condition of the site:

'It is recommended that two monitoring visits be carried out per annum. This work should be carried out by a recognised archaeological organisation and preferably by someone who is familiar with the site. This work can also incorporate minor stabilisation work such as backfilling metal detector holes and the replacement of occasional stones. A contingency budget must also be put in place allowing a team of 3 stonemasons to be contracted for three days per annum to allow for the conservation of more serious problems that will inevitably occur from time to time. This approach is the most efficient way of managing the site as damage will be stabilised soon after it occurs. If instability is not quickly identified and consolidated large collapses can occur. The conservation of a major collapse can involve large amounts of archaeological recording along with several days on site for a team of stone masons. Major collapses in the ramparts may also require scaffolding to be erected on site at considerable expense. It would therefore be a false economy to allow minor damage to the site to go unchecked.'

Monitoring visits were carried from the end of the conservation project out until 2004 at which point they lapsed. The reason for this is not entirely clear but the somewhat overcomplicated management of the process was certainly a factor. The work was carried out by Gwynedd Archaeological Trust; this was managed by Gwynedd Council who needed to apply for funding from Cadw. The process was however found to be effective and there was no deterioration of the site during this period.

Several of the footpaths providing access to the site were upgraded shortly after the completion of the conservation project with eroded areas being infilled and a stone surface being laid in areas vulnerable to erosion. A steep path that was causing a large eroded scar on the south side of the peak was blocked off with a wooden barrier.

The notice boards deteriorated during this period. The board close to the summit was vandalised; the Perspex covering was smashed with a rock. The main cause of deterioration on the other two was caused by faults in the construction of the boards. Both of these are however still legible. The oak frames of all of the boards are still intact.

Many of the management and interpretation issues that are discussed in detail below were outlined in the 'Interpretation media recommendations' chapter in *An Interpretation Framework for the Origins and Prehistory of Wales 250,000 BC to AD 47/78* (C. Lloyd Brown and D. Patrick, 2011. Cadw).

6. PROPOSALS FOR THE LONG-TERM MANAGEMENT OF THE SITE

6.1 Aims of the management plan

The aims of the management plan are:

To retain and protect the archaeological resource

To provide safe access to the site

To enhance the understanding of the site by providing information for visitors and the local community

To integrate the use of the site as an archaeological resource with the demands of agriculture and conservation

6.2 The current condition of the site and its environs

6.2.1 Site Condition

A new plan of the site has been produced by Gwynedd Archaeological Trust (Fig. 1). This required a detailed examination of all of the masonry on the site. This was carried out by David Hopewell who supervised the last seven years of the conservation project. This therefore, also allowed a detailed review of the stability of the site to be carried out. There had been no work carried out on the site since 2004 and a few areas of masonry were beginning to deteriorate. These were mostly in the huts close to the main footpath through the site and on the ramparts close to the entrances. None of the instability is currently serious but in all cases will inevitably lead to wider deterioration if left unchecked. The causes of the damage are twofold. The most common is deliberate damage with stones being thrown from the ramparts and stones being removed from hut walls to provide seats for picnics etc. The other is general erosion either from footpaths crossing archaeological features or by visitors walking on the ramparts. The damage caused by the latter was found to be minor. Deliberate damage was more serious. Two seriously destabilising areas of damage caused by a large treasure hunter hole in the floor of a hut that was threatening the wall above, and a large stone pulled from the base of a hut wall to provide a seat, were conserved during the survey. The other less serious areas of damage are in original masonry and require archaeological recording before conservation.

6.2.2 Site access

The footpaths approaching the site are in fairly good condition although there are some areas of erosion. These are mostly caused by visitors avoiding the laid stone paths in sloping areas because they become very slippery in the wet. The blocked-off steep footpath is still used occasionally but the severe erosion has been halted and much of it is now overgrown with heather.

There are three main routes that are used by most visitors to Tre'r Ceiri (Fig. 2).

(i) The first starts at two lay-bys on the minor road between Llanaelhaearn and Llithfaen. The largest of the lay-bys is asphalted and there is a gate and a footpath sign, with no marked destination, leading from it (Plate 1). The footpath leads towards the road to Trefor and provides no access to the site. Visitors who are not familiar with the site commonly assume that gate leads to a path up Tre'r Ceiri. There is, in fact, no easy way to the fort from this point. There is no access to the main footpaths to the site, which are further to the south-west because an unbroken dry-stone boundary wall runs from the road to the fort ramparts. The only way get to the site from this direction is over a hazardous scree and boulder slope. There are also no entrances through the ramparts on this side of the fort.

The correct access to the fort is via a footpath which is accessed from the road 300m to the south-west of the main lay-by (Plate 2). There are, however, no signs directing visitors to this footpath from the lay-bys.

The footpath itself is in fairly good condition but there are some patches of erosion and it is slippery when wet.

(ii) The second route is from the car park above Nant Gwrtheyrn. This is a longer but less-steep route. It is somewhat confusing to visitors unfamiliar with the site because Tre'r Ceiri is not visible from the first half of the approach. Footpaths are in reasonably good condition but signage is not clear. This forms part of the Llŷn Coastal Path.

The third approach is from the peak of Yr Eifl. There are no official footpaths for this route.

The first two approaches lead to the steep stony path to the south-west entrance. This is reasonably accessible when dry but very slippery and somewhat hazardous when wet. It is noted that an online walks guide class the difficulty of the walk as “moderate” (walkingworld.com).

6.3 Management proposals

6.3.1. Protection of the monument

Tre'r Ceiri is a site of national importance and is one of the best-preserved examples of a stone-walled hillfort in Europe. It is a scheduled ancient monument; the scheduled area covers all known remains including the terraces and enclosures outside the ramparts. As noted above, the conservation project considerably lessened the previously extremely serious levels of erosion to the monument. All extant masonry was found to be stable in a review of the site in 1998 and subsequent monitoring visits along with minor repair works prevented deterioration of the site until 2004. Since these ceased there has been a small amount of damage and erosion and the stability of several areas of masonry are currently threatened.

It is recommended that regular monitoring and maintenance visits should be carried out. Rates of damage and erosion are generally low, so one visit per year, preferably in the autumn after the end of the main tourist season would be sufficient. The work should be carried out by an archaeologist who is familiar with the site and ideally by someone familiar with dry-stone building techniques. Maintenance work could either be carried out by a suitably experienced archaeologist or by a dry-stone walling contractor under archaeological supervision. Current digital technology allows the entire 20-volume site archive to be carried on site on a laptop or other device for reference.

6.3.2. Site Access (Fig. 2)

The two main routes to the site both have issues that need to be addressed.

Route 1. From lay-bys on the B4417 to the south-west entrance of Tre'r Ceiri (1.6km)

The most urgent problem on this route is a lack of coherent signage. There are no directions from the lay-bys to the start of the footpath that runs from the road (Plate 1). This leads to visitors trying to access the monument from the gate at the main lay-by. This has led to damage to the dry stone boundary wall to the south-west when visitors have tried to climb over it. The most urgent task is therefore to provide signage directing visitors to the footpath and informing them that the gate and right of way in the lay-by do not provide access to Tre'r Ceiri. The route to the footpath involves walking along a fairly busy road for 300m. This is potentially dangerous and consideration should be given to the provision of a footpath, either alongside the road or within the adjacent field, along with the provision of a stile to cross the boundary wall. A second option would be provision of parking closer to the start of the footpath. The verge is sufficiently wide to add a lay-by either immediately to the south-west of the start of the path or a few metres to the north-east (Plate 2). There may however be some issues with line-of-sight for motorists with either of these options. Route 2 (below) is a safer route and information directing visitors from the lay-bys to Nant Gwrtheyrn car-park are also recommended.

The footpath runs from the road, through fields and then across unenclosed uplands to the final approach to Tre'r Ceiri. There are some limited areas of erosion that are either very wet or slippery and hazardous. Provision should therefore be made for some improvement to the footpath. The wooden barriers at the bottom of the steep footpath that was closed off in the 1990s have mostly collapsed, and tend to attract attention to the line of the mostly overgrown track. These should be removed and replaced by an inconspicuous low barrier of piled stone. There is at least one junction in the path as it crosses the uplands. This should be way-marked in an understandable way. The final approach to Tre'r Ceiri is along a steep path, over large, often slippery and unstable stones to the south-west entrance. This has not been conserved or stabilised because unless highly out-of-character steps are added there is no way of producing a suitable stable surface. It is suggested that the currently narrow footpath to the north-west entrance should be widened and visitors should be encouraged to enter the fort via this route. This also tends to be slippery in rainy conditions but is much less rough and steep. This route also has the advantage of passing through the massive outer rampart which would not be seen if the south-west entrance is used.

Route 2. From Nant Gwrtheyrn car-park to the south-west entrance of Tre'r Ceiri. (2.2km)

This route is less steep and there is good car-parking. It should therefore be seen as the preferred option. This is part of the Llŷn Coastal path and it has been significantly improved in recent years. The route initially follows a field wall and then takes a direct route to Tre'r Ceiri across open uplands. The main problem with this route is that the site cannot be seen for the first 1.3km and visitors have been known to climb up Yr Eifl, the adjacent peak by mistake. Good signage and way marking is thus essential. This route also leads to the steep south-western approach to Tre'r Ceiri. Visitors should, as with route 1, be encouraged to use the north-western entrance.

The path runs past the remains of a portable site cabin that dates from the conservation project. This was destroyed in a gale and is both unsightly and a health hazard. It is recommended that the remains are removed from the area.

There are no marked footpaths within the fort (Fig. 1). Most visitors follow a simple circuit from the south-west entrance to the cairn and then around the north-west side of the fort either to the north-west entrance or back to the south-west. This path crosses some archaeological remains but there is, at present, little erosion that threatens the site. It may be possible to slightly upgrade this path by infilling areas of erosion and making it more obvious by management of the vegetation or provision of unobtrusive way-markers. Any major upgrading of the path would be visually intrusive and is not recommended unless erosion becomes a major problem.

6.3.3. Education engagement and provision of information.

The current information panels on the site are in poor condition and need to be replaced. There is currently one panel outside the south-west entrance, one outside the north-west entrance and one close to the cairn. Boards close to or within the fort have the advantage of providing illustrative material on the site that can easily be seen in context. They are, however, visually intrusive and vulnerable to damage. Replacement panels should therefore be as unobtrusive as possible, and could possibly be mounted on low stone plinths. Additional panels are not recommended; an excessive use of information panels and way-markers would be detrimental to the setting of the monument. Alternative methods of providing information should therefore be explored. Gwynedd Archaeological Trust produced a guided-walk leaflet in 2012 that could be modified for use as both a leaflet and a downloadable file. Provision of information at local tourist attractions, public houses, hotels and community centres is also recommended.

Information panels should also be provided in the car-parks at the beginning of the two main paths. These would provide visitors with information about the site and its environs, access routes and health and safety.

Tre'r Ceiri is now listed in several local guidebooks and it has been observed that a high percentage of visitors find out about the site from these publications. This type of low-level publicity is to be encouraged as it attracts visitors to the site who are likely to respect the monument as an important archaeological site. Visitor numbers are however slowly increasing. The site can withstand a moderate increase in foot traffic

but any major publicity campaigns should be avoided as a large increase in visitor numbers would cause irreparable damage to the site without major capital expenditure on footpaths, wardens and site management.

6.3.4 Health and Safety

Tre'r Ceiri is on the top of 450m mountain. Parts of the site and its approaches are covered in loose, slippery lichen-covered rocks. The weather can be extreme, even at the height of summer and the area is often covered in dense low cloud. The site itself is uneven, with long unprotected drops from ramparts and outcrops.

This is, however, no different to any other mountain top. Visitors should be informed of the hazards and difficulty of access. Even in the current litigious climate it is unlikely that damages can be sought for the effect of bad weather or slippery rocks. The maintenance of the rebuilt masonry and entrances is however recommended.

6.3.5 Land Management

Grazing on Tre'r Ceiri and its environs has decreased over the last two decades. A scattering of small trees is becoming established on the lower slopes and heather is becoming more dominant both in and around the fort. These changes are currently having little or no direct impact on the archaeology although the tall heather makes it more difficult to access some parts of the fort interior. Gwynedd Archaeological Trust has been consulted about proposals for heathland management on the slopes around the hillfort although no works have so far been carried out. Continued consultation is essential because there may be unrecorded enclosures and outer-works on the bwlch between Yr Eifl and Tre'r Ceiri. Low walls would be hidden by the heather and would therefore be vulnerable to damage.

7. Conclusions

Tre'r Ceiri is one of most important archaeological sites in Wales and requires long-term management. The most important recommendations are as follows.

The access to the site needs to be improved by the provision of safe well-signposted paths and associated visitor information. The current lack of information and directions to the correct path from the lay-bys at the south-east is of particular concern.

A long-term programme of monitoring and archaeological site management should be set in place to ensure the stability of the site. The conservation project stabilised the site to a large degree but this substantial investment in time and resources will eventually be lost if the site is allowed to deteriorate.

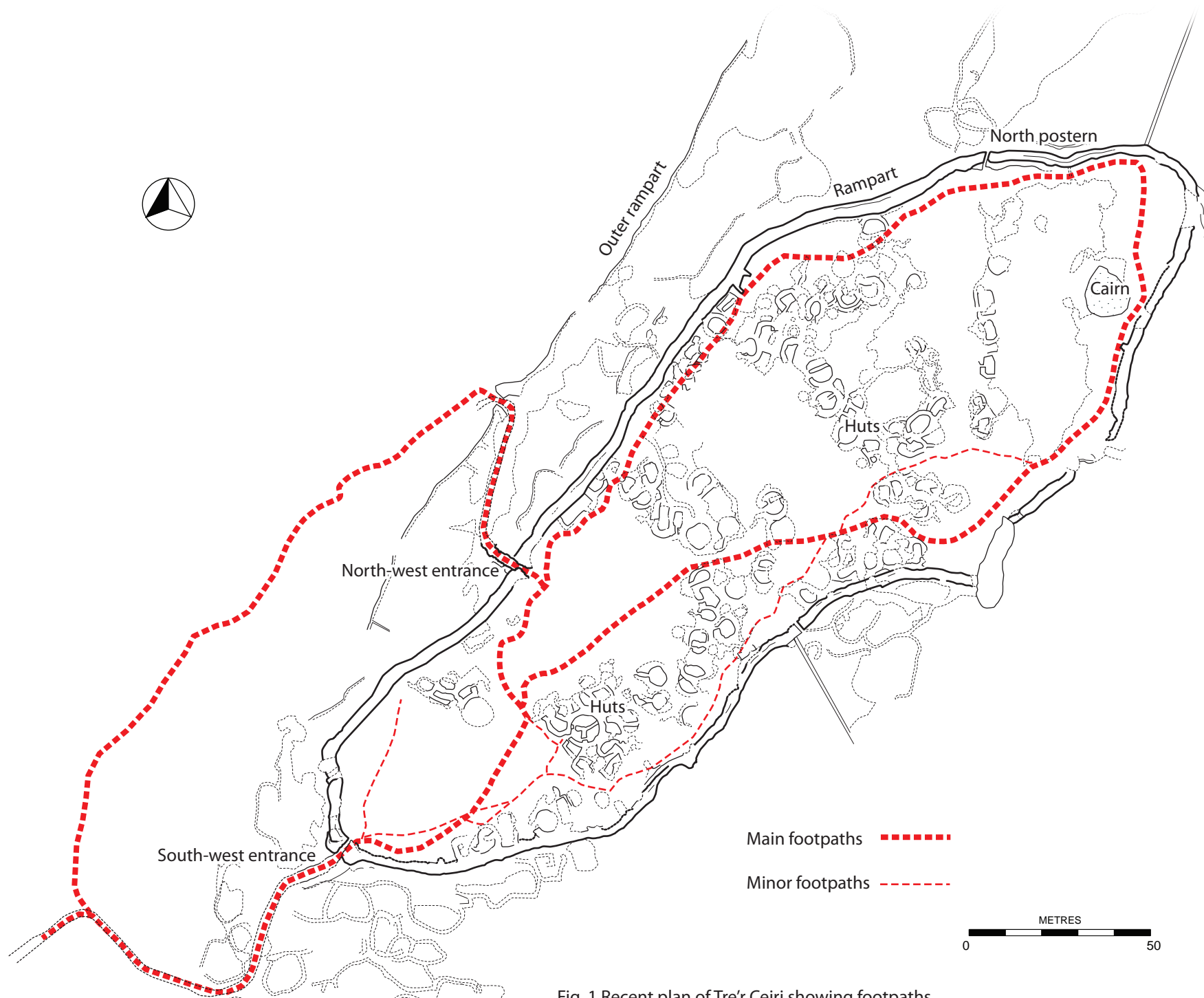


Fig. 1 Recent plan of Tre'r Ceiri showing footpaths

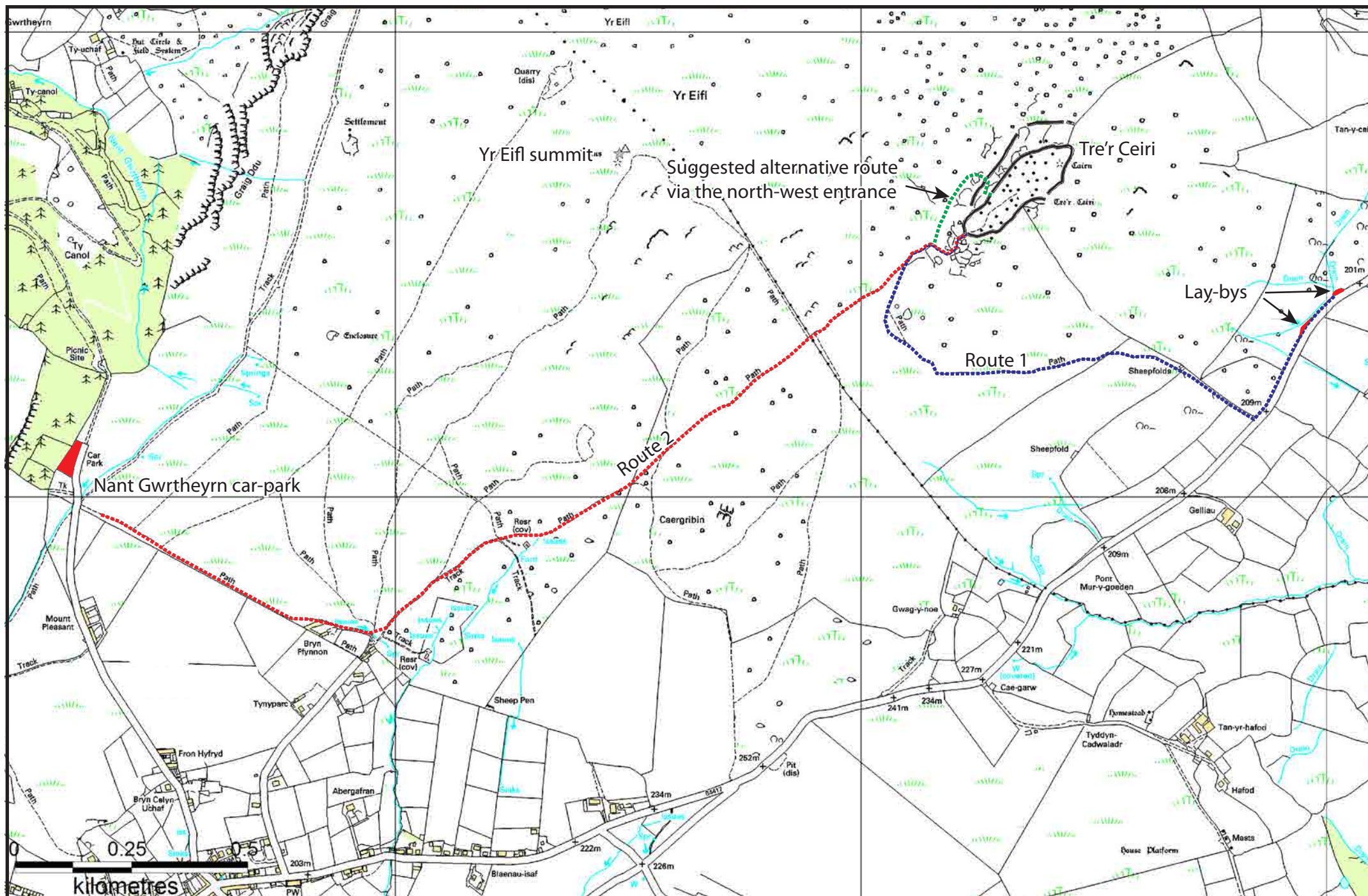


Fig. 2 Tre'r Ceiri: Main access routes



Plate 1 The lay-by to the south-east showing gate and sign



Plate 2 The start of route 1 showing footpath sign and boundary wall



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