

**THE CLWYD-POWYS ARCHAEOLOGICAL TRUST**

# **Heather and Hillforts**

**ARCHAEOLOGICAL CONDITION SURVEY**



**CPAT Report No 658**

# Heather and Hillforts

## ARCHAEOLOGICAL CONDITION SURVEY

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Report for Denbighshire County Council



Gyda chymorth  
**Cronfa Dreftadaeth y Loteri**  
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## 1 INTRODUCTION

- 1.1 In May 2004 the Field Services of the Clwyd-Powys Archaeological Trust (CPAT) was invited by Denbighshire Countryside Service (DCS) to prepare a tender document for undertaking a programme of survey to record the condition of six hillforts in the Clwydian Hills and Llantysilio Mountain, namely Penycloddiau, Moel Arthur, Moel y Gaer Llanbedr, Foel Fenlli, Moel y Gaer Llantysilio and Caer Drewyn, all of which are scheduled ancient monuments. The survey forms part of the Heather and Hillforts Project Planning Phase, which is grant aided by the Heritage Lottery Fund, Denbighshire County Council and Cadwyn Clwyd. A brief was provided by DCS which detailed the nature of the required survey and this formed the basis for a specification of the project proposals and costings submitted by CPAT. The specification and quotation were accepted and the survey was undertaken during July and August 2004.
- 1.2 The objectives of the survey were to establish the current condition of the hillforts to assist in the development of a detailed management programme, and also provide information to assist the interpretation of the historic landscape. Specifically, the survey aimed to record baseline data to facilitate the following:
- development of actions plans for the management of the hillforts
  - identification of priority areas within the hillforts for further survey
  - information gathering for the purposes of interpretation and education
  - future monitoring of the hillforts' condition
- 1.3 The survey was designed not only to provide a record of the condition of the hillforts but also contribute to the understanding of their significance and potential. A Geographic Information System (GIS) was developed as the main product of the survey, and was used as a basis for this report, with copies of all digital data being passed on to the client for subsequent use. It should be stressed that this report is intended as a summary of the survey results, and to some extent as a guide to the information available in GIS format, and that the digital data includes a greater level of detail than can be presented within the report format.

## 2 METHODOLOGY

- 2.1 The methodology was developed from outline guidance drafted by Dr J N Rimmington in 2003, as part of a project to record the condition of Hadrian's Wall. Prior to the commencement of the field survey a training day was arranged with Dr Rimmington on Moel y Gaer, Llantysilio, which was attended by representatives from CPAT, DCS and Cadw: Welsh Historic Monuments. This provided a useful insight into the general methodology for undertaking the condition survey, although it was clear that this would need to be modified to suit the specific requirements of the Heather and Hillforts Project and the need to input the results into a GIS model.
- 2.2 A recording system was developed which would provide data on three levels, with pro forma record forms produced for each level (see Appendix 1), the results from which were entered into separate GIS tables (see Appendix 2). At the broadest level, a general assessment was undertaken for each hillfort recording, for example, the date, weather and soil conditions, vegetation, and providing a summary of the types of management issues affecting the hillfort and appropriate management recommendations. In addition, a record was made of the potential for public participation, interpretation, future research and improved public access. The field survey was generally conducted within an area which extended no more than 15-20m beyond the outer ramparts of each hillfort, although with certain exceptions, particularly with regard to the main public access routes and specific management issues relating to Moel y Gaer, Llantysilio.
- 2.3 Following the guidance provided by Dr Rimmington, it was decided to divide each hillfort into a number of units, based largely on differences in the nature of the archaeology and changes in vegetation and landuse, although for Penycloddiau the interior was divided on a more arbitrary basis, simply to provide more manageable areas for recording due to the size of the hillfort.



Within each unit an assessment was made of the general condition, survival, archaeological potential, vulnerability and overall stability.

- 2.4 The main purpose of the survey, however, was to record the individual management issues affecting each hillfort, assessing their significance, stability and archaeological impact. The record included a brief description of the issue, its location, management recommendations and an assessment of the priority for remedial works. Locational information was derived from the use of a hand-held Global Positioning System (GPS), and the position and extent of related features was annotated on large-scale control maps, based on the Ordnance Survey digital data provided by DCS for use under licence during the project. Broad areas of management issues were defined either as polygons, linear objects or point data, based on the annotated field survey mapping, to which data were attached as part of the GIS model. Each issue was photographed to provide a record for future comparison, the location and direction of view being recorded in each case, with data subsequently being entered into a separate photographic database which could be interrogated through the use of GIS.
- 2.5 A further element of the field survey was to identify any archaeological sites within each hillfort, such as potential round-hut platforms. A previous survey of Penycloddiau, undertaken by CPAT in April 2004 following an extensive heather burn, revealed a significant number of previously unrecorded hut platforms (Jones 2004) and it was considered likely that similar sites could be identified during the present survey, even in areas of dense heather. Each archaeological feature was assigned a unique Primary Record Number (PRN) and information from the field survey records was entered into a predetermined database structure which included, for example, the form, condition and site type. The format of the database was determined following consultation with the DCS, and was also designed to be compatible with the Regional SMR. The resulting point data can be viewed and interrogated through the use of GIS.
- 2.6 Full use was made of recent colour vertical aerial photography, provided for the project by DCS. Photographs of each hillfort were rectified using AutoCAD13 and visible features, such as footpaths, sheep tracks and larger areas of erosion, were digitally mapped. In addition, for Foel Fenlli it was possible to identify a significant number of potential hut platforms, the positions of which were also plotted. The resulting plots were added to the control maps for the field survey so that the details and locations could be checked.

### 3 CAER DREWYN (Figs 1-2)

- 3.1 Caer Drewyn (PRN 100809; SAM Me 012 (Den)) occupies a strategic location above the Dee Valley to the north-east of Corwen (SJ 088444; plate 1). The hillfort would appear to have two main phases of construction, the earliest comprising a small earthen enclosure on the summit of the hill, only the eastern part of which is now readily identifiable. The main hillfort is considerably larger, cutting across the earlier enclosure and extending downslope to the west, defended by impressive stone-revetted ramparts. There are two inturned entrances, the more impressive of which is located at the north-east corner, with a second, smaller entrance on the west side. A later small enclosure has been constructed on the east side of the hillfort, in the angle between the ramparts and the earlier enclosure embankment, within which one or two hut circles are visible. It is thought that this may be Romano British, or later, in date. There is also evidence for Medieval occupation inside the western entrance, where a long hut is clearly visible (PRN 100812). The main ramparts are pitted with numerous circular depressions, some of which contain dry-stone revetment, the function and date of which are uncertain. The hillfort has been subject to two excavations, by Rev H Pritchard in 1887 and W Gardner in 1922, both of which appear to have been largely limited to the clearance of rubble to expose sections of the ramparts, including the north-east entrance.

#### *Condition*

- 3.2 At present the site is used as sheep pasture, the vegetation being largely grass, but with bracken and gorse encroaching, particularly on the eastern side. The hillfort provides an excellent example of good management which in recent years has restricted the grazing, allowing past erosion scars to stabilise and heal. Although a number of management issues remain, all are of minor significance and largely relate to small areas of sheep scrapes, minor animal tracks and several areas of rabbit burrowing. The last affect small sections of the early



enclosure bank, areas of the north-west ramparts and a larger area of the interior, but would appear to have a relatively minor impact on the archaeology. There are two walkers' cairns on the north-east entrance, the larger of which has been removed in the past only to be reconstructed using material from the ramparts (plate 2).

#### *Management recommendations*

- 3.3 As noted above, all of the erosion issues are of minor significance and presently require no more than continued monitoring. The walkers' cairns should be retained as evidence suggests that removal may encourage additional damage to the ramparts. The encroachment of bracken and gorse is of some concern and consideration should be given to some form of control, particularly within the hillfort interior (see plate 3).

#### *Interpretation and access*

- 3.4 At present there is no interpretation on the site, and although public access has been improved, the waymarked path from the lane to the west of the hillfort is steep and difficult and could be improved further. There is considerable potential for installing a series of interpretation panels at key points around the hillfort which would aid public appreciation of what is a fine and impressive site.

#### *Future research*

- 3.5 The hillfort has not been the subject of any serious investigation for a period of over 80 years and the interior has never investigated. A programme of survey and trial excavation could reveal significant new information about the occupation and dating of the hillfort which would greatly assist the interpretation of the site and its presentation to the public.

## **4 FOEL FENLLI (Figs 3-4)**

- 4.1 Foel Fenlli (PRN 102310; SAM De 010) occupies a prominent site at the southern end of the Clwydian Range (SJ 163601; Plate 4). The highest point is at the eastern end, with the hillfort largely occupying ground which slopes to the west and falls steeply beyond on all but the east side. The defences are generally bivallate, with the most substantial banks and ditches on the more gently-sloping eastern side, and utilise the natural scarp in places, particularly on the south side where the outer bank gradually peters out. There is a single inturned entrance on the western side. A Bronze Age burial cairn occupies the summit of the hill (PRN 102313) and within the interior a number of roundhut platforms have been previously identified. The present survey has identified a total of 40 potential roundhut platforms, most of which were previously unrecognised, and further huts may have been located in the internal quarry ditch. Excavations were undertaken on the ramparts by Wynne Ffoulkes in 1849 which produced a number of artefacts including a stone knife, flint arrowheads and Roman pottery. In 1816 a hoard of over 1500 Roman coins (dating from 250 to 307 AD) was found on the inner north-eastern rampart.

#### *Condition*

- 4.2 The majority of the hillfort is presently covered by mature heather and bilberry and used as rough grazing for sheep. Foel Fenlli has seen considerable efforts to address a range of erosion issues in the past and many of these have proved to be successful, although several areas are now showing signs of recurrent activity, notably in relation to several former tracks across the northern ramparts. Despite the size of the hillfort only 40 management issues were identified, of which 29 were related to visitor activity and 11 to livestock. Of these, only four are considered to require urgent attention, all relating to the main visitor routes. The main northern approach in particular has a number of problems which require attention, as does the path through the southern ramparts. Two sections of the Offa's Dyke footpath also require attention, in the hillfort entrance and on the south side. Elsewhere, the majority of management issues are of relatively minor significance, comprising narrow paths along the ramparts, sheep tracks across the ramparts and interior, and a number of sheep scrapes.

#### *Management Recommendations*

- 4.3 Further remedial works are required on the northern approach to the hillfort where the footpath is steep and showing signs of more rapid erosion, in part through water action (Plate 5). The use of angled drainage gullies to divert water and steps to break up the gradient should alleviate the situation. The timber steps up the ramparts have further erosion developing at the base and the steps should be extended. Former paths on the northern ramparts are now



recovering but should be re-covered with brash. On the south side, the main path through the ramparts is steep and actively eroding, such that the provision of steps may be the only solution (Plate 6). Steps may also be required on a short section of the Offa's Dyke footpath where it rises onto a former track on the south of the hillfort. In the hillfort entrance the footpath has previously been diverted away from the entrance and across the rampart where an erosion scar has now developed. This should be infilled with brash and the path returned to the entrance itself where any archaeological impact would be minimal. The path along the northern ramparts should also be diverted through the entrance, rather than continuing with its present course which descends directly to the waymarker post.

#### *Interpretation and access*

- 4.4 Public access to Foel Fenlli is already very good with car parking to the north and the Offa's Dyke footpath crossing the western side of the hillfort. There is, however, currently no interpretation available and an information board in the carpark would greatly aid public appreciation of the site. Improved waymarking for the Offa's Dyke footpath could also divert some visitors around the western defences, reducing visitor pressure on the main path.

#### *Future research*

- 4.5 No modern investigations have been undertaken on Foel Fenlli and there is considerable potential for trial excavation and survey to aid the interpretation and presentation of the site. In particular, the development of management proposals for the heather within the interior may include recommendations for controlled burning which would afford an ideal opportunity for further survey. The results from Penycloddiau in April 2004 (Jones 2004) clearly illustrate the potential for new archaeological discoveries once the heather cover has been removed and the recent identification of 40 potential roundhut platforms on Foel Fenlli strongly suggests that further platforms are likely to be masked by the heather.

## **5 MOEL ARTHUR (Figs 5-6)**

- 5.1 Moel Arthur (PRN 102278; SAM FI010) occupies the summit of a hill which descends steeply on all but the northern side, where the ground falls gradually to a shallow col (SJ 145660; plate 7). Around the steeper sides the ramparts are simple, comprising a low bank and broad inner quarry ditch. On the northern side the ramparts are more impressive, consisting of a double bank and ditch, with an additional counterscarp bank near the intrenched entrance on the north-east side. There are no clear indications of roundhut platforms within the interior and it seems most likely that huts were located on the relatively flat ground provided by the internal quarry ditch. Small-scale excavations were undertaken by Wynne Ffoulkes in 1849 which revealed sections of dry-stone walling and produced a number of artefacts, including flint arrowheads and Roman pottery.

#### *Condition*

- 5.2 Much of the hillfort is presently covered by mature heather and bilberry and used as rough grazing for sheep. The hillfort is generally in very good condition, with only 24 management issues identified, of which 13 relate to livestock and six to visitors. The only issue of any significance is the southern approach (plate 8), comprising a narrow braided footpath with a steep gradient. Erosion is most serious on the steepest sections where bedrock and loose stone are now exposed. Grazing levels do not appear to be a concern and there are only minor issues relating to sheep tracks and small scrapes. One issue which may need addressing in the future is the boundary which follows the western defences (plate 9), comprising a stone wall with a post and wire fence on the upslope side.

#### *Management Recommendations*

- 5.3 Visitors should be encouraged to use the Offa's Dyke footpath which skirts the eastern side of the hillfort and then follow the main path through the entrance to minimise pressure on other routes.

#### *Interpretation and access*

- 5.4 There is good public access from car parks to the north and south and no further improvement is required. At present there is no interpretation, and information boards in both carparks would greatly aid public appreciation of the site.



*Future research*

- 5.4 No modern investigations have been undertaken on Moel Arthur and there is considerable potential for trial excavation and survey to aid the interpretation and presentation of the site. In particular, the development of management proposals for the heather within the interior may include recommendations for controlled burning which would afford an ideal opportunity for further survey.

**6 MOEL Y GAER, LLANBEDR (Figs 7-8)**

- 6.1 Moel y Gaer (PRN 100607; SAM De 010) is located to the south-west of Moel Famau, on the summit of a ridge extending westwards from the main Clwydian Range (SJ 149617; plate 10). The defences consist of a double bank and ditch, with an additional outer bank across the spine of the ridge. There are two inturned entrances, the main entrance lying to the north-east, and the second on the west side. Small-scale excavations were undertaken in 1849 by Wynne-Foulkes near the main entrance, revealing stone ramparts, evidence of burning around the gateway and a sherd of Roman pottery. The recent survey has identified 13 potential roundhut platforms, all of which lie on the northern side of the hillfort, with some within the internal quarry ditch.

*Condition*

- 6.2 The hillfort is largely covered in grass, with bracken and gorse encroaching around the ramparts, and an area of gorse in the interior. The present landuse is as sheep pasture and a number of sheep scrapes have developed, particularly along the ramparts. Although these are generally not serious issues at present, there are three areas of high impact where more urgent remedial action is required. Of the 27 issues which have been identified, the majority relate to sheep scrapes and tracks, in addition to which there are several areas on the western ramparts and inside the western entrance where rabbit burrowing is also active, although this is not presently causing significant damage.

*Management Recommendations*

- 6.3 The majority of issues are minor, although a small number of sheep scrapes around the ramparts should be infilled with brash (plate 11) and the general grazing levels should be assessed to determine whether a reduction could benefit the site. The encroachment of bracken and gorse is of some concern and consideration should be given to some form of control, particularly within the hillfort interior (see plate 12).

*Interpretation and access*

- 6.4 Public access to the hillfort is currently very poor with only an unmarked path leading from the main access to Moel Famau. The path should be waymarked and vegetation controlled. As part of the Moel Famau Country Park there is carparking to the south and an information board here would greatly aid public appreciation of the site.

*Future research*

- 6.5 No modern investigations have been undertaken on Moel y Gaer and there is considerable potential for trial excavation and survey to aid the interpretation and presentation of the site.

**7 MOEL Y GAER, LLANTYSILIO (Figs 9-10)**

- 7.1 Moel y Gaer, Llantysilio (PRN 101366; SAM De 126), is the smallest of the six hillforts, occupying one of the lower summits of Llantysilio Mountain (SJ 167464; Plate 13). The defences consist of a single rampart with a discontinuous external ditch and an inturned entrance on the eastern side. The recent survey has identified at least eight roundhut platforms on the eastern side of the interior, although more are likely to be masked by the dense heather.

*Condition*

- 7.2 The hillfort lies within an area of moorland largely covered by heather and bilberry. Of the six hillforts within the study, this has by far the most serious management problems, all of which relate to unauthorised access by off-road vehicles and scrambling bikes, a problem which is not



confined to the hillfort, but extends across the ridge of Llantysilio Mountain. A broad, rutted vehicle track rises from the col to the east to the hillfort entrance and then across the interior, over the western rampart (plate 14) and down to the col beyond. On the western side there is an additional problem where a large area of heather has been eroded to reveal the thin peat and bedrock where a scrambling circuit has been established (plate 15). Both the track and the circuit are highly visually intrusive and the former in particular is actively eroding the archaeology of the hillfort. Other issues are all of minor significance, including several small sheep tracks, areas of sparse vegetation and a fence across the foot of the south-east rampart.

#### *Management Recommendations*

- 7.3 The problem of unauthorised access by off-road vehicles and scrambling bikes is a very serious issue which requires urgent attention. Any potential long-term solutions are likely to address the issue as a whole, perhaps looking to the origin of the individuals involved and in particular approaching any related organisations or clubs where a policy of education and information may be constructive. In the short-term, consideration should be given to ways of preventing vehicular access from the county road (which is now an unmaintained track) across the col to the east of the hillfort, as well as any other points of access onto this part of Llantysilio Mountain. While it may be possible to prevent off-road access to the hillfort it is unlikely that scrambling bikes can also be prevented from intruding on the area.

- 7.4 Assuming that vehicular access can be restricted, measures will need to be adopted to allow the vegetation to regenerate across the major erosion scars caused by the vehicle track and the scrambling circuit.

#### *Interpretation and access*

- 7.5 The only public access at present is via an unofficial permissive path which follows the ridge from the Horseshoe Pass, although the area will eventually be subject to open access under the Countryside Rights of Way Act. Access should be restricted to walkers and a formal waymarked footpath should be adopted once the new access rights come into force.

#### *Future research*

- 7.6 No investigations have been undertaken on Moel y Gaer and there is considerable potential for trial excavation and survey to aid the interpretation and presentation of the site. In particular, the development of management proposals for the heather within the interior may include recommendations for controlled burning which would afford an ideal opportunity for further survey.

## **8 PENYCLODDIAU (Figs 11-12)**

- 8.1 Penycloddiau (PRN 102273; SAM FI009) is the largest of the six hillforts in the Clwydians, lying on the central ridge, between the Wheeler Valley and the Vale of Clwyd (SJ 128676; plate 16), which at this point rises to an altitude of around 440m OD. Penycloddiau is one of the largest hillforts in Wales, with the defences enclosing an area of 21 ha. The hillfort is multivallate, with a continuous inner rampart and discontinuous outer rampart, together with additional outer defences at the northern end. The summit of the hill, at the northern end of the hillfort, is surmounted by a small mound which may be a Bronze Age burial cairn (PRN 102277; plate 17).
- 8.2 The northern end of the hillfort was subject to a total station survey by CPAT in 2000 in connection with erosion control works along the Offa's Dyke footpath, which follows the ridge through the hillfort. Further detailed survey work was undertaken by CPAT in April 2004 over an area of around 7ha within the interior which was affected by a serious heather burn in April 2003 (Jones 2004). The results from that survey identified up to 16 certain or potential hut platforms, most of which are terraced into the natural hill slope, with a further 27 roughly circular hollows (could have contained huts) in the lee of the ramparts which. In addition, a number of areas were also identified where huts could have been located due to their sheltered position and the relatively level ground. These results clearly demonstrate the potential for detailed survey once the heather cover has been removed.



*Condition*

- 8.3 The majority of the hillfort is covered with heather and bilberry, although with some bracken encroachment on the east side and an area of scrub along the outer western defences. With the exception of the western defences, which are surmounted by a boundary fence, the hillfort is entirely rough grazing for sheep. As noted above, the heather burn of 2003 affected a large area of the interior, although this is now largely regenerating. There are, however, a number of areas on the north-eastern ramparts where sheep scrapes are developing and preventing satisfactory regeneration. Of the 79 management issues identified, 46 relate to sheep scrapes and tracks, while only 14 are related to visitors, four to vehicles, two to mountain bikes and three to fencing. The majority of sheep activity occurs on the ramparts, and in particular the eastern inner rampart and both entrances. There are several areas of more extensive sheep scrapes which require remedial action, as do some of the tracks. On the whole, visitor erosion is not a significant issue, largely due to previous works to manage access across the northern ramparts with the installation of steps and brash cover. There are signs, however, to suggest that at this point the path is still an area for some concern, due in part to the use of mountain bikes which are forming new erosion scars alongside the steps where the brash has deteriorated (plate 18). Of more concern is the active erosion of the potential burial cairn on the summit, which is crossed by the main footpath and is actively eroding. The post and wire fence along the western inner rampart, and those fences crossing the defences, are all likely to need replacement which will impact on the ramparts, and are presently visually intrusive.

*Management Recommendations*

- 8.4 Although a large number of management issues have been identified, this is only to be expected on such a large hillfort and the majority appear to be of relatively minor significance. Only eight issues have been identified as having a high priority for remedial works, seven relating to sheep scrapes on the ramparts and the other to visitor erosion to the summit cairn. Previous attempts to infill scrapes with brash have been partly successful, although in some areas this has only led to the development of adjacent scrapes. The evidence suggests, however, that in general the practice is worthwhile and brash should be installed in the main areas of disturbance, and also in relation to the footpath through the northern defences. The level of grazing may be partly to blame for the extent of sheep erosion and this should be assessed. The nature and significance of the summit cairn remains uncertain and this should be addressed (see 8.6). If this is confirmed as a Bronze Age burial cairn, then the footpath should be diverted to avoid further erosion.

*Interpretation and access*

- 8.5 Public access to Penycloddiau is already very good with car parking to the south and the Offa's Dyke footpath crossing the hillfort. There is, however, currently no interpretation available and an information board in the carpark would greatly aid public appreciation of the site.

*Future research*

- 8.6 No excavations have been undertaken on Penycloddiau and there is therefore considerable potential for trial excavation to aid the interpretation and presentation of the site. Consideration should also be given to trial excavations on the summit cairn to determine its date, degree of preservation, and the extent and significance of visitor erosion. In particular, as the previous detailed survey has demonstrated, there is considerable potential for revealing more of the occupation patterns within the hillfort and the development of management proposals for the heather within the interior may include recommendations for controlled burning which would afford an ideal opportunity for survey.



## 9 CONCLUSIONS

- 9.1 The condition survey has provided a detailed assessment of the various management issues affecting each of the six hillforts within the study area. The resulting data provide a baseline of information against which future changes can be assessed, as well as identifying those areas where immediate remedial action is required. The data can thus be used to target resources effectively through the development of management plans for each of the hillforts. In addition, for several of the hillforts the survey has resulted in the discovery of significant new evidence for occupation, in the form of roundhut platforms, which enables a better understanding of settlement patterns within the hillforts.
- 9.2 The condition of each of the hillforts, and the range of management issues affecting them, shows considerable variation within what is a very small study sample. Sites like Caer Drewyn, where grazing levels have been successfully managed, now have no significant issues affecting them. Even for the largest hillforts, Penycloddiau and Foel Fenlli, there are relatively few issues of major significance, and these largely relate to visitor pressure on particularly vulnerable areas and generally isolated sheep erosion around the ramparts. Ironically it is the smallest hillfort, Moel y Gaer, Llantysilio, which is subject to the most serious erosion and where there is the most urgent need for remedial action. This is, however, a unique circumstance where, because of the openness of the surrounding countryside, it has so far proved impossible to restrict unauthorised vehicular and motorcycle access which is continuing to have a serious impact on the hillfort.
- 9.3 There is considerable evidence to suggest that appropriate management can significantly improve the condition of the hillforts, and in many cases entirely alleviate many of the erosion issues. On Caer Drewyn, for example, where there had previously been a significant problem with the development of sheep scrapes and tracks, a reduction in grazing levels has allowed the majority of areas to stabilise and revegetate. Major erosion control works have previously been undertaken on both Foel Fenlli and Penycloddiau, both of which have been largely successful. The use of brash to infill sheep scrapes, minor tracks and divert visitors onto the main footpaths have all helped to revegetate problem areas. These methods are not always successful, however, and can lead to increased pressure on adjacent areas and the effectiveness of the brash will deteriorate with time. The installation of solid steps on the northern approaches of both hillforts has largely prevented further erosion, although in both cases the need for further works is now becoming evident.
- 9.4 Where possible, the survey has sought to identify ways in which public access and appreciation can be improved, either through the development of better access routes, or through the provision of information panels and self-guided walk leaflets. Any resulting increase in visitor numbers is likely to have an impact on more vulnerable areas, particular on paths traversing the ramparts, and the significance of this can only be determined through regular monitoring.
- 9.5 It is therefore to be hoped that the results from this survey can be taken forward through the development of specific management plans to enable significant and lasting improvements to be made to the condition of the hillforts. Any project such as this can only succeed through the development of long-term solutions and continued monitoring, and with the baseline data now in place the future of these important monuments will hopefully be secured.

## 10 ACKNOWLEDGEMENTS

- 10.1 I would like to thank the following people for their assistance during the project: Wendy Owen, CPAT; Helen Mrowiec and Fiona Gale, Denbighshire County Council; and Dr Neil Rimmington.

## 11 REFERENCES

- Jones, N W, 2004. *Penycloddiau Hillfort, Flintshire: archaeological survey*. CPAT Report No. 631.
- Wynne Ffoulkes, W, 1850a. *Castra Clwydiana, Archaeologia Cambrensis* new series Vol. II, 81-89.
- Wynne Ffoulkes, W, 1850b. *Castra Clwydiana, Archaeologia Cambrensis* new series Vol. II, 174-181.

## APPENDIX 1: PROJECT RECORD FORMS

HEATHER AND HILLFORTS CONDITION SURVEY  
GENERAL ASSESSMENT

SITE NAME ..... NGR .....  
 PRN ..... SAM NO .....  
 Surveyor ..... Date .....  
 Start time ..... Finish time ..... Time on site .....

Environmental Factors

Weather .....  
 Ground conditions .....  
 Soil type .....  
 Vegetation cover (percentage) .....

Agricultural use .....

Access type and openness .....

Management Issue Types

Livestock Y / N  
 Visitor Y / N  
 Bicycle Y / N  
 Motorcycle Y / N  
 Vehicular Y / N  
 Scrub, tree or bracken Y / N  
 Burrowing animal Y / N  
 Fencing Y / N  
 Water action Y / N  
 Vandalism Y / N  
 Horse riding Y / N  
 Unvegetated Y / N  
 Other .....

General description

.....  
 .....  
 .....  
 .....  
 .....  
 .....

Opportunities

	Opportunity (H / M / L)	Priority (H / M / L)
Management .....	.....	.....
Public particip. ....	.....	.....
Interpretation .....	.....	.....
Future research .....	.....	.....
Public Access .....	.....	.....



## HEATHER AND HILLFORTS CONDITION SURVEY MANAGEMENT UNIT ASSESSMENT

**SITE NAME****PRN** .....**SAM NO** .....**MANAGEMENT UNIT** .....

Surveyor .....

Date .....

**Environmental Factors**

Weather .....

Ground conditions .....

Soil type .....

Vegetation cover (est. proportions) .....

Agricultural use .....

**Overall Assessment**

Survival &gt;60% = 3 / 30-60% = 2 / &lt;30% = 1 .....

Condition poor = 1 / medium = 2 / good = 3 .....

Stability stable = 1 / improving = 2 / deteriorate = 3 / rapid deteriorate = 4 .....

Vulnerability low = 1 / medium = 2 / high = 3 .....

Archaeological potential (circle) .....

*visible structure / buried structure / buried landsurface / palaeoenvironmental potential / associated finds*

(Score = number of elements present) .....

**General photographs**

Location .....

View from .....

Location .....

View from .....

**Management Issue Types**

Livestock Y / N

Visitor Y / N

Bicycle Y / N

Motorcycle Y / N

Vehicular Y / N

Scrub, tree or bracken Y / N

Burrowing animal Y / N

Fencing Y / N

Water action Y / N

Vandalism Y / N

Horse riding Y / N

Unvegetated Y / N

Other .....

**Description**

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**Overall Recommendations**

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# **HEATHER AND HILLFORTS CONDITION SURVEY MANAGEMENT ISSUE ASSESSMENT**

**SITE NAME****PRN** .....**SAM NO** .....**MANAGEMENT UNIT** .....**MANAGEMENT ISSUE No** .....

Surveyor .....

Date .....

<u>Management Issue Types</u>	<u>Type 1</u>	<u>Type 2</u>	<u>Type 3</u>
Livestock	Y / N	Y / N	Y / N
Visitor	Y / N	Y / N	Y / N
Bicycle	Y / N	Y / N	Y / N
Motorcycle	Y / N	Y / N	Y / N
Vehicular	Y / N	Y / N	Y / N
Scrub, tree or bracken	Y / N	Y / N	Y / N
Burrowing animal	Y / N	Y / N	Y / N
Fencing	Y / N	Y / N	Y / N
Water action	Y / N	Y / N	Y / N
Vandalism	Y / N	Y / N	Y / N
Horse riding	Y / N	Y / N	Y / N
Unvegetated	Y / N	Y / N	Y / N
Other .....			

Location .....

NGR 1 .....

NGR2 .....

Photographs

Location .....

View from .....

Photo No .....

Location .....

View from .....

Photo No .....

SignificanceOverall area affected in m<sup>2</sup> (<10 = 1 / 10-20 = 2 / 20-50 = 3 / 50 -100 = 4 / >100 = 5 .....Stability stable = 1 / improving = 2 / deteriorate = 3 / rapid deterioration = 4 .....Archaeological impact H / M / LPriority H / M / LDescription

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Associate issues

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Recommendations

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**APPENDIX 2****DIGITAL DATA FORMAT****General assessment:**

condgen.tab

**Unit assessment:**

condunit.tab

**Issue assessment:**

condissu.tab

**Archaeological data:**

smr1.tab

smr1.dbf

**Photographic survey:**

condphot.tab

condphot.dbf

condphot.doc

**Digital images**

CPAT Film nos:

1695	Foel Fenlli
1696	Moel y Gaer, Llantysilio
1697	Caer Drewyn
1698	Penycloddiau
1699	Penycloddiau
cs04/37	Moel Arthur
cs04/38	Moel y Gaer, Llanbedr





Fig. 1 Caer Drewyn: management units, issues and archaeology, scale 1:2,500

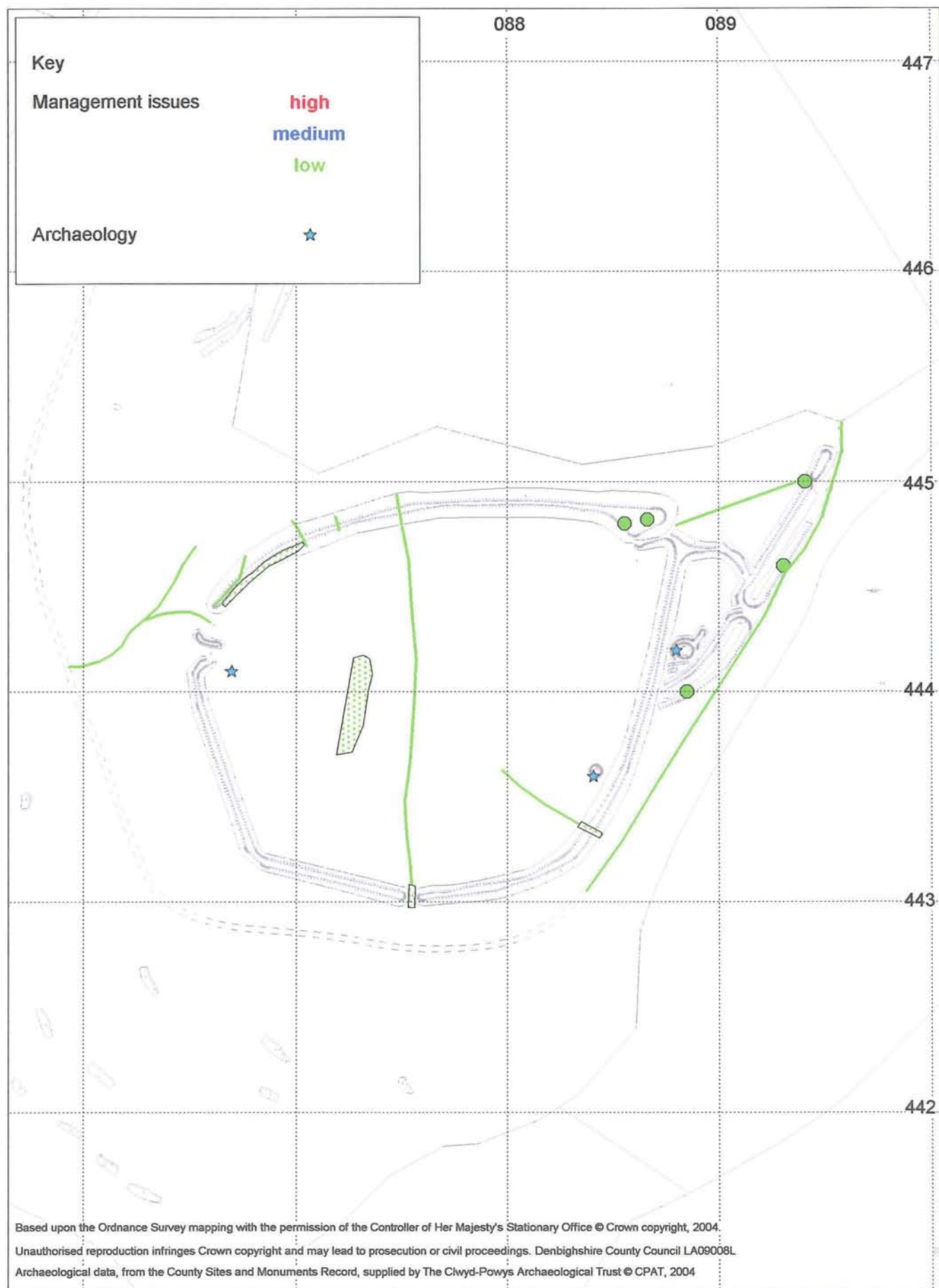


Fig. 2 Caer Drewyn: management issue priorities, scale 1:2,500



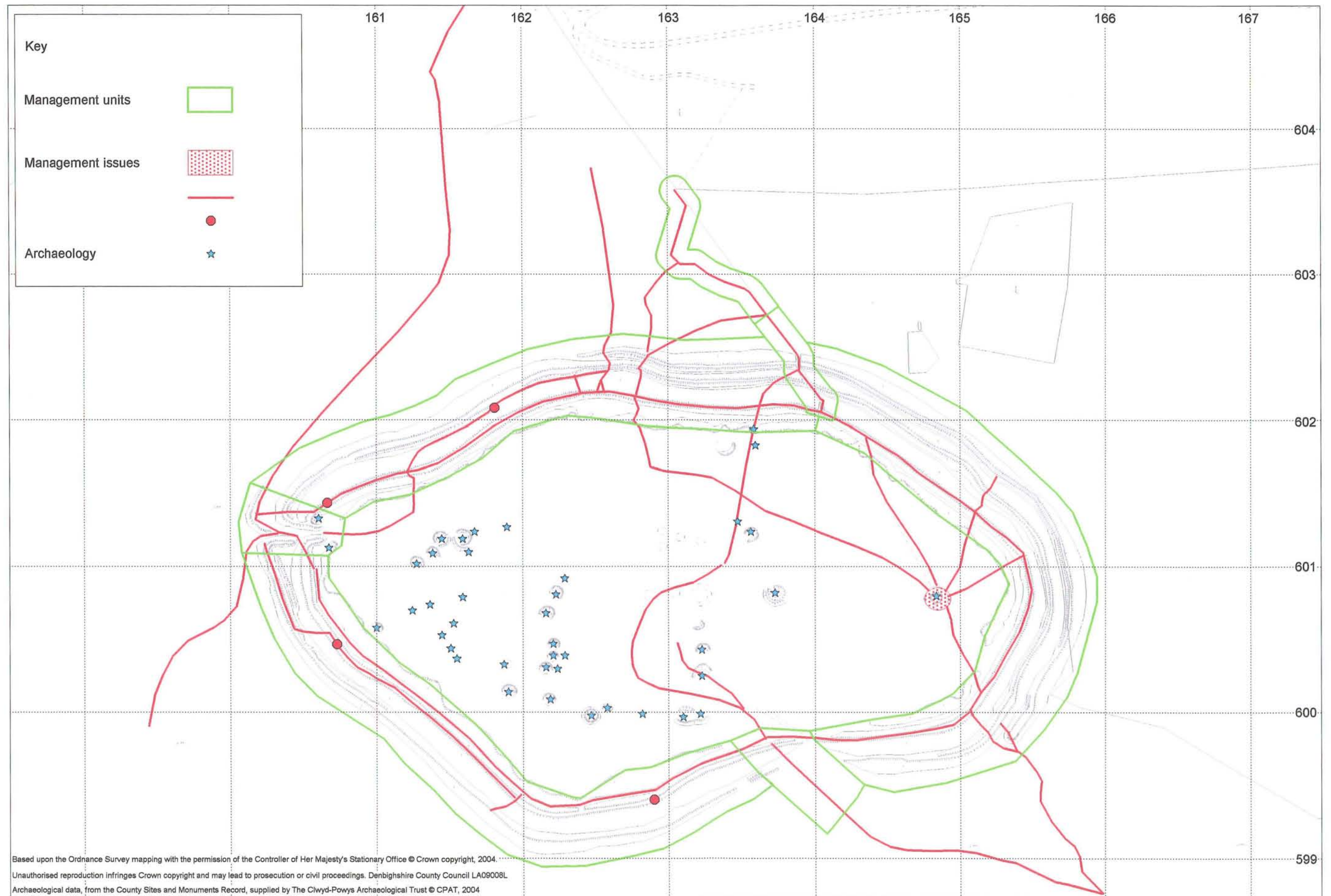


Fig. 3 Foel Fenlli: management units, issues and archaeology, scale 1:2,500



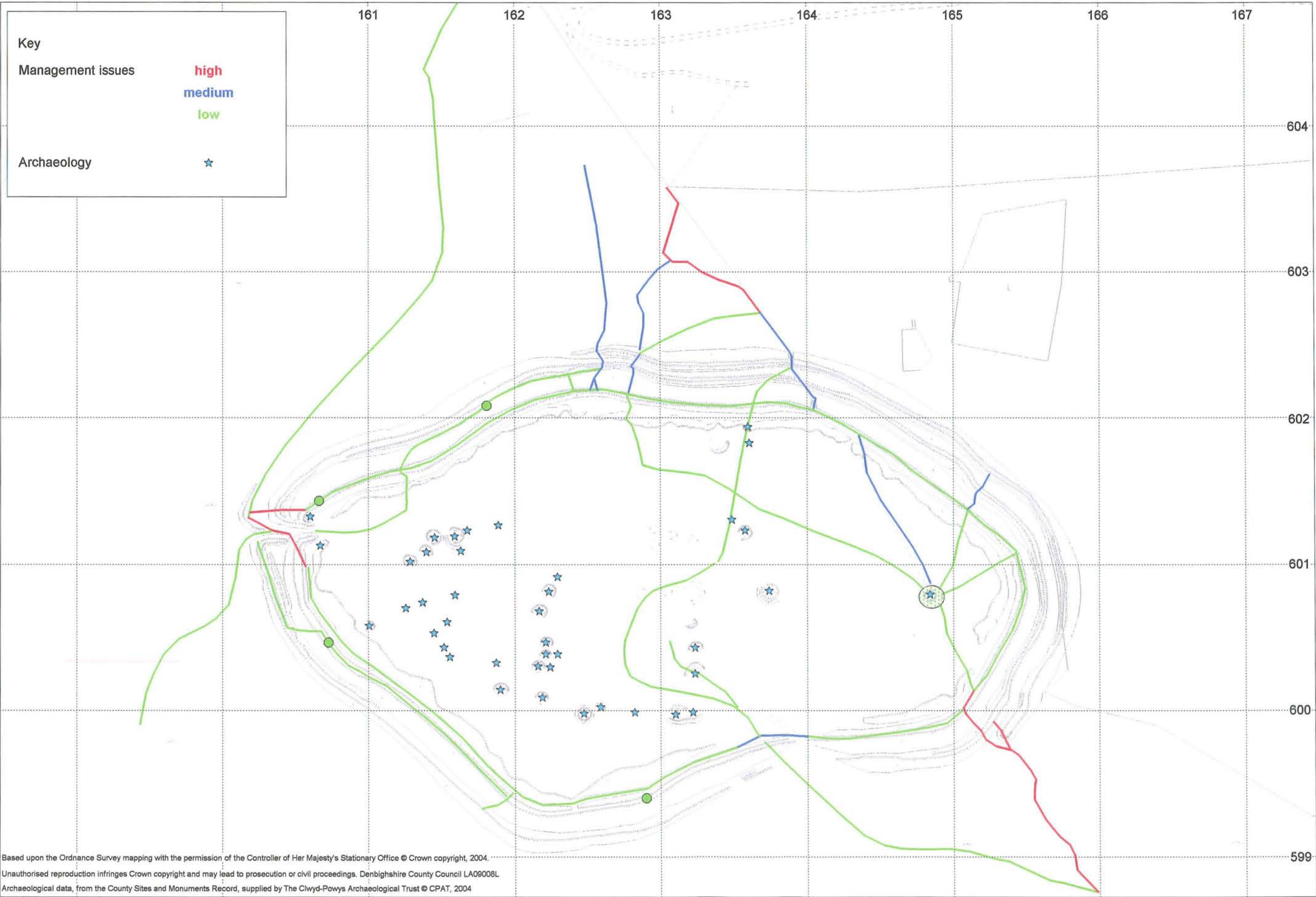


Fig. 4 Foel Fenlli: management issue priorities, scale 1:2,500

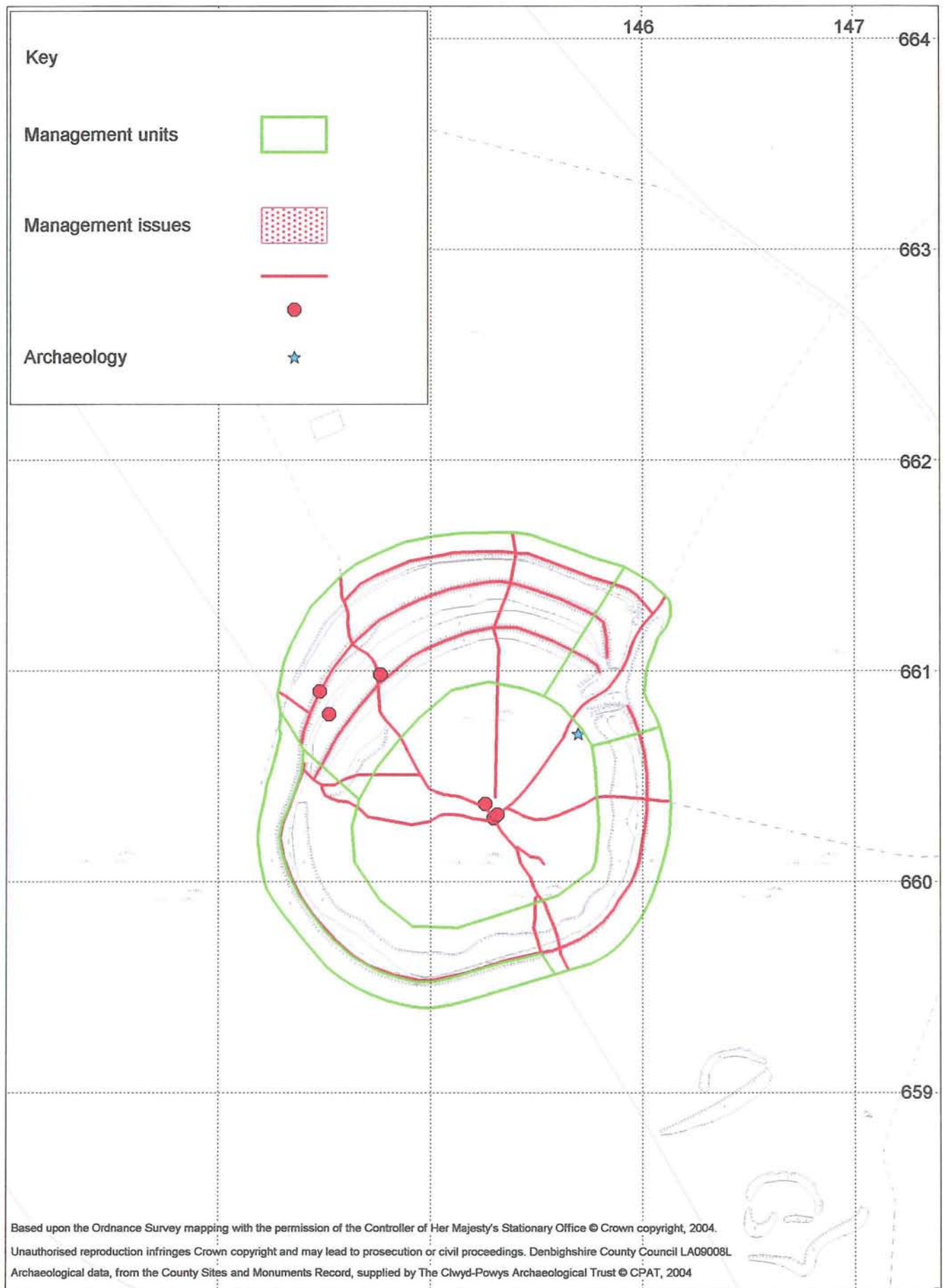


Fig. 5 Moel Arthur: management units, issues and archaeology, scale 1:2,500



Fig. 6 Moel Arthur: management issue priorities, scale 1:2,500



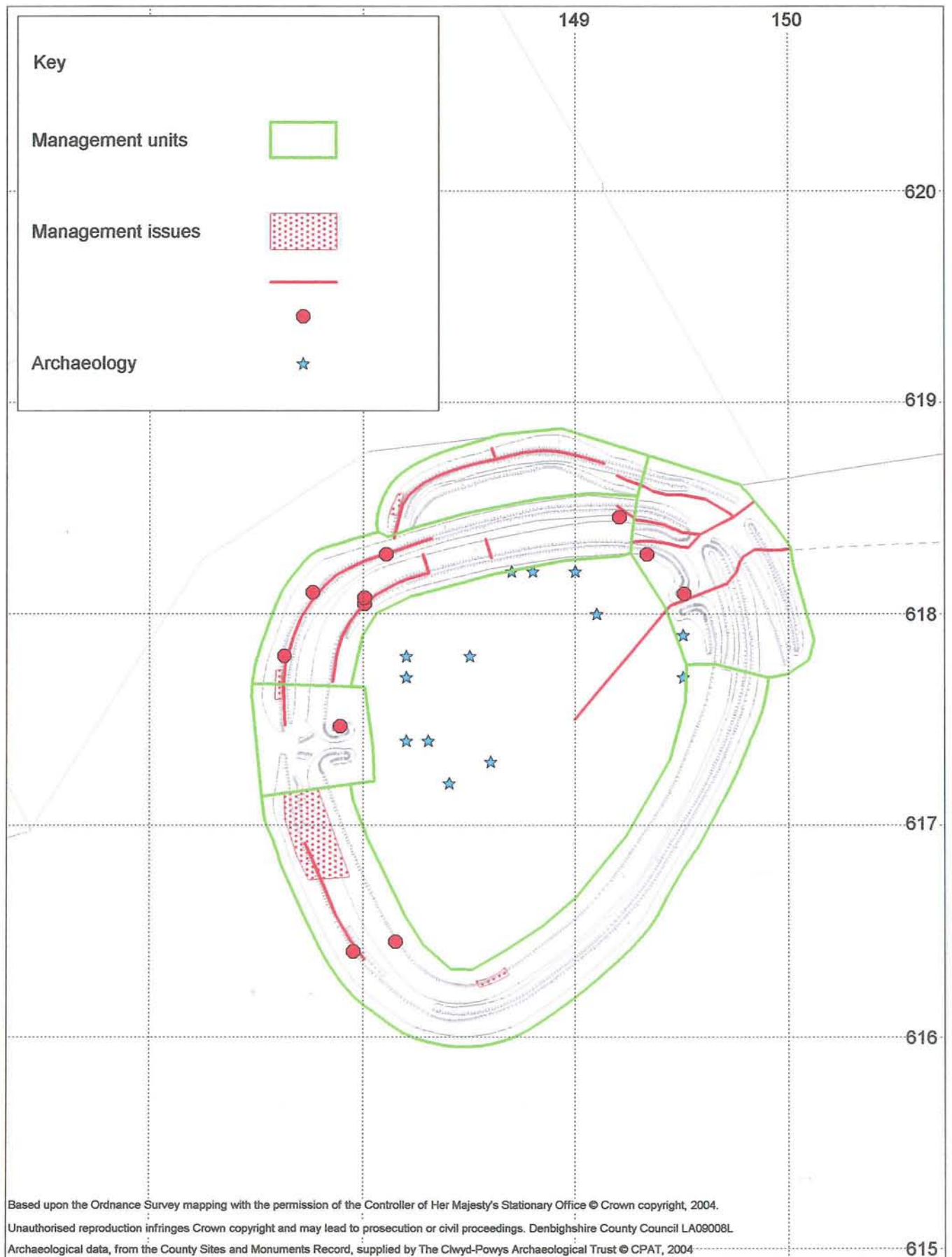


Fig. 7 Moel y Gaer, Llanbedr: management units, issues and archaeology, scale 1:2,500

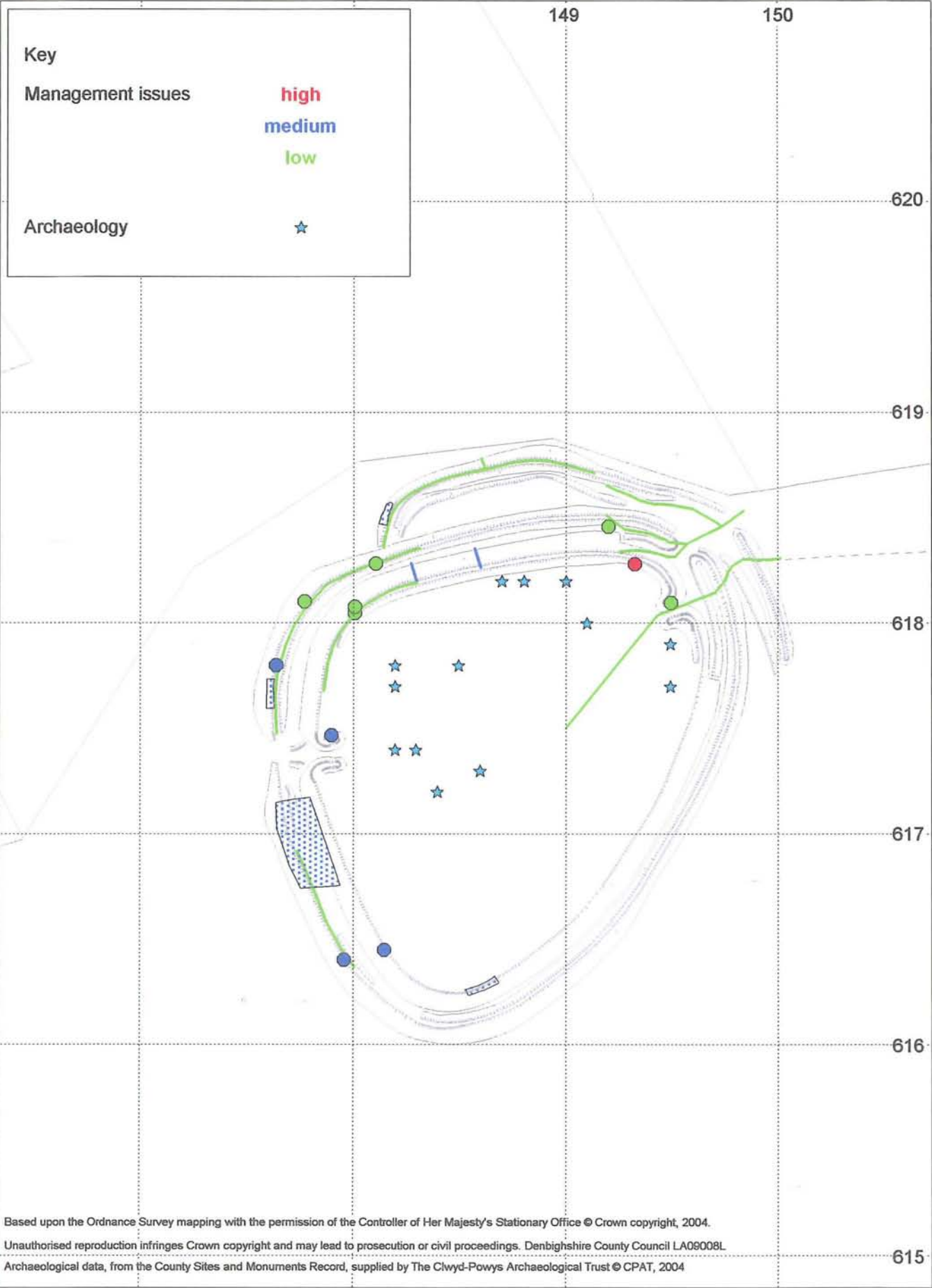


Fig. 8 Moel y Gaer, Llanbedr: management issue priorities, scale 1:2,500



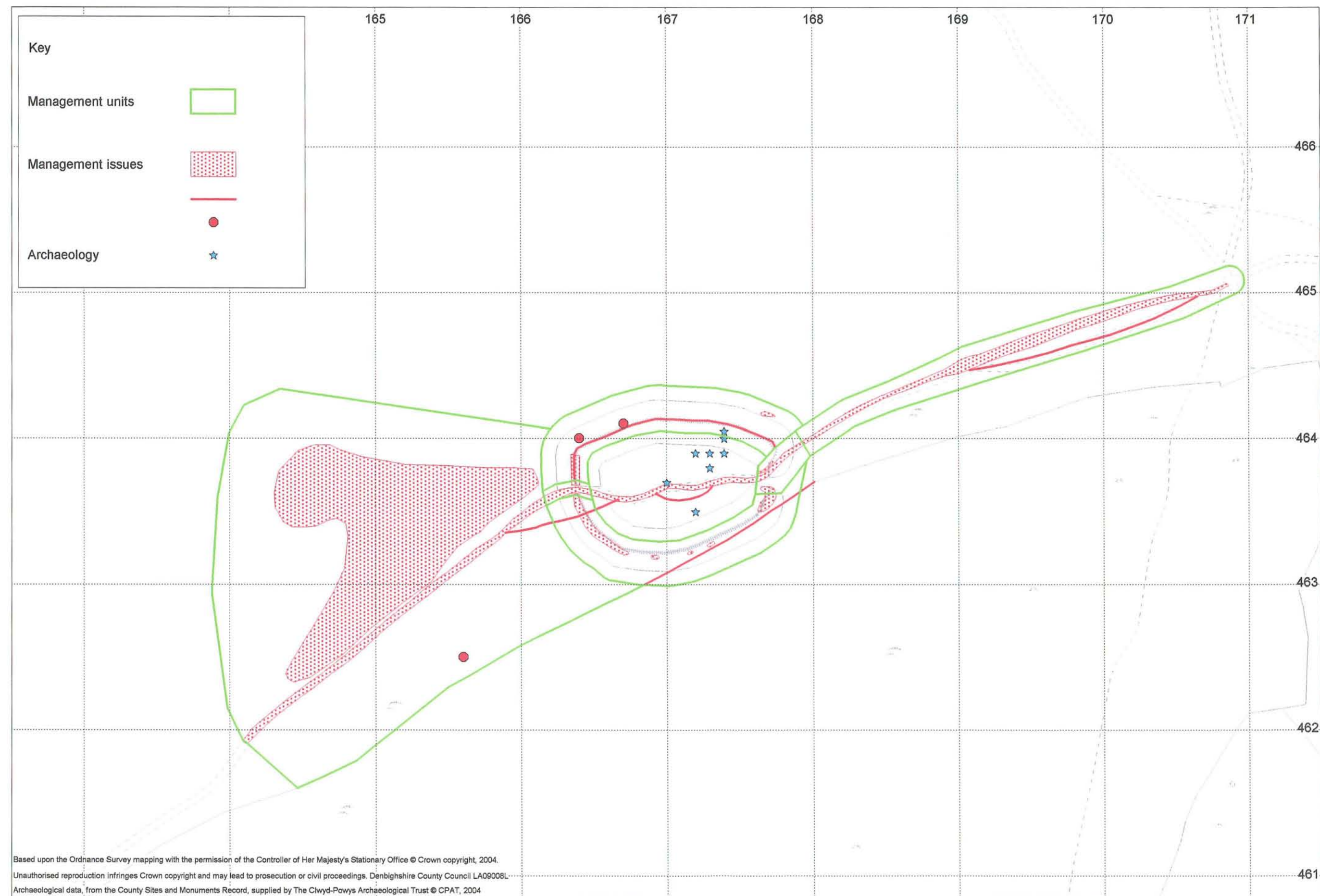


Fig. 9 Moel y gaer, Llantysilio: management units, issues and archaeology, scale 1:2,500

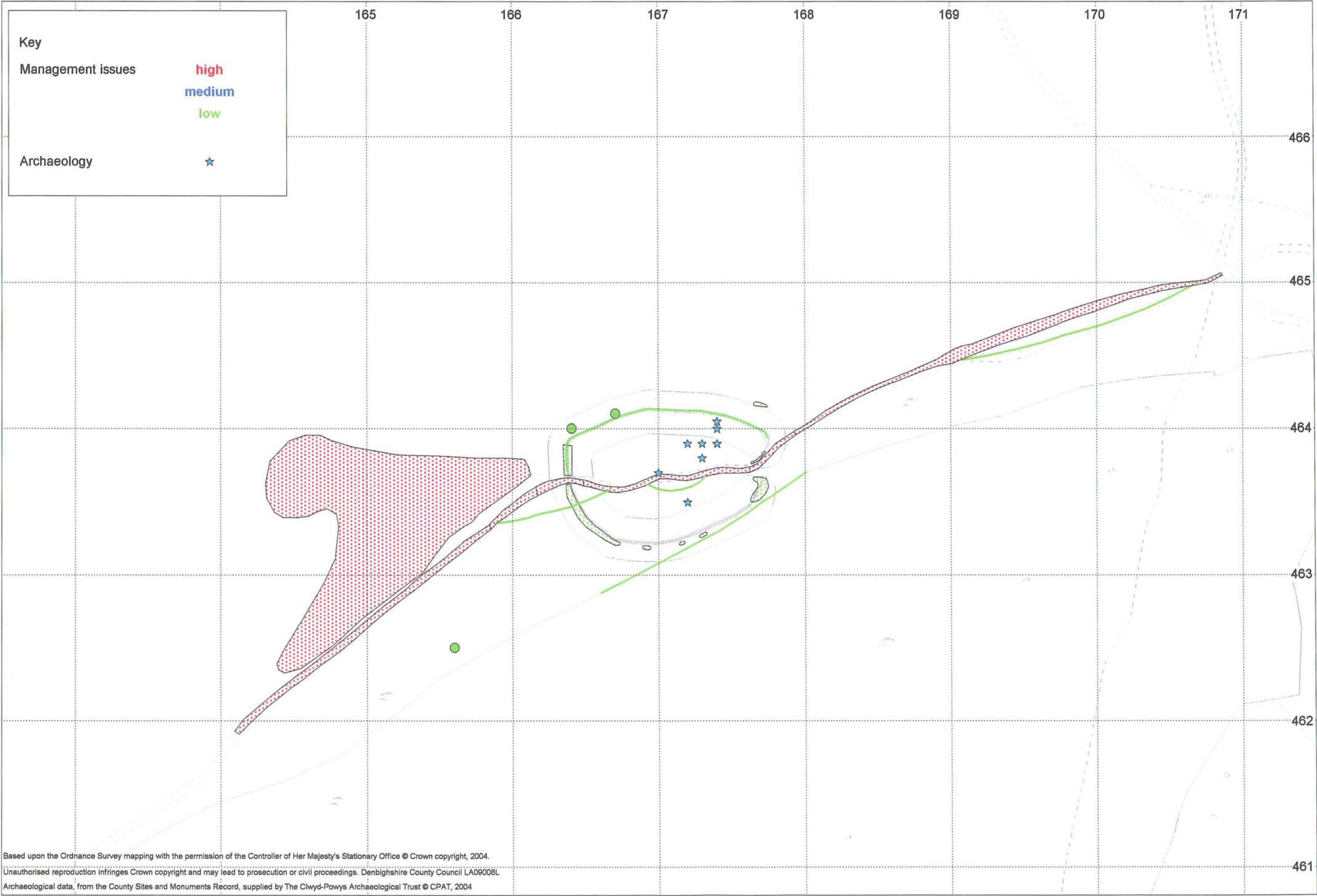


Fig. 10 Moel y Gaer, Llantysilio: management issue priorities, scale 1:2,500





Fig. 11 Penycloddiau: management units, issues and archaeology, scale 1:2,500



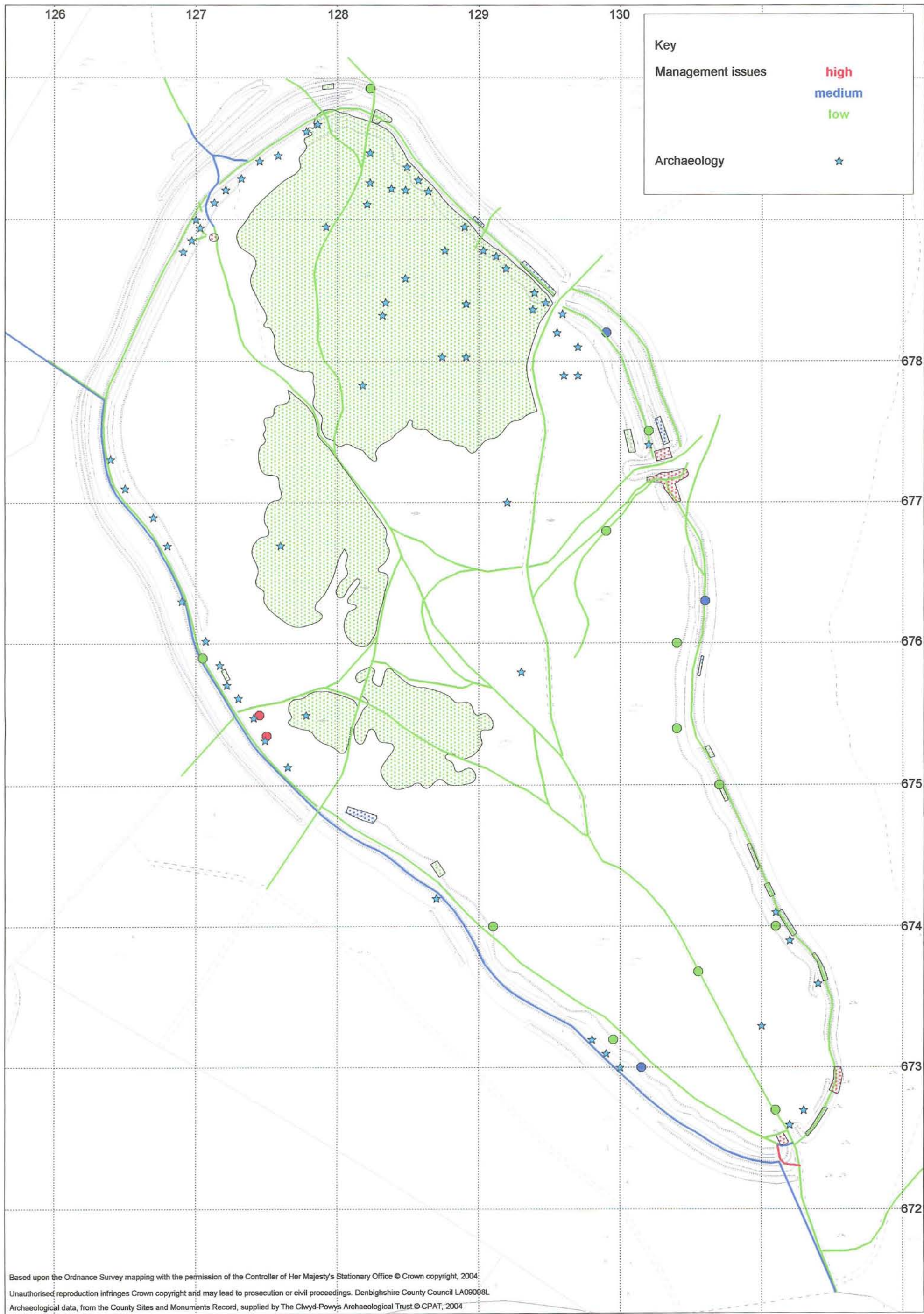


Fig. 12 Penycloddiau: management issues priorities, scale 1:2,500





Plate 1. Caer Drewyn from N. Photo CPAT 85-c-031

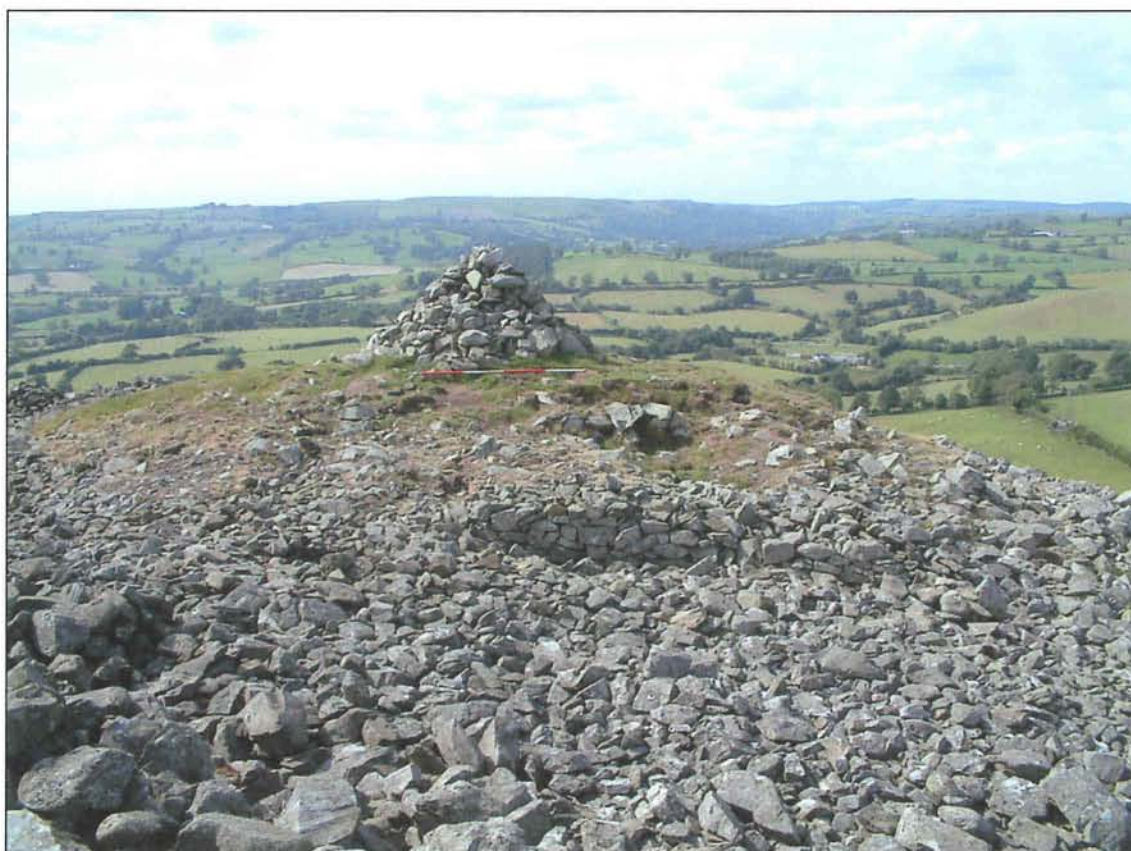


Plate 2. Caer Drewyn – north-eastern entrance and walkers' cairn. Photo CPAT 1697-07





Plate 3. Caer Drewyn northern defences showing bracken encroachment. Photo CPAT 1697-11



Plate 4. Foel Fenlli from the north-west. Photo CPAT 84-c-277





Plate 5. Foel Fenlli northern approach. Photo CPAT 1695-26



Plate 6. Foel Fenlli – path ascending southern ramparts. Photo CPAT 1695-10





Plate 7. Moel Arthur from the north. Photo CPAT 84-c-275



Plate 8. Moel Arthur – path ascending from the south. Photo CPAT cs04-37-06





Plate 9. Moel Arthur – boundary wall and fence around western ramparts. Photo CPAT cs04-37-25



Plate 10. Moel y Gaer, Llanbedr from the north. Photo CPAT 84-c-276



Plate 11. Sheep scrape on the northern ramparts. Photo CPAT cs04-38-16



Plate 12. Moel y Gaer, Llanbedr – gorse encroachment in the interior. Photo CPAT cs04-38-34





Plate 13. Moel y Gaer, Llantysilio from the south-east. Photo CPAT 83-c-539



Plate 14. Moel y Gaer, Llantysilio – vehicle track through western rampart. Photo CPAT 1696-13





Plate 15. Moel y Gaer, Llantysilio – vehicle track and scrambling circuit to west of hillfort.  
Photo CPAT 1696-14



Plate 16. Penycloddiau from the north. Photo CPAT 87-c-109





Plate 17. Penycloddiau – steps ascending north ramparts. Photo CPAT 1698-31



Plate 18. Penycloddiau summit cairn from the east. Photo CPAT 698-37