

# WOODLAND MANAGEMENT ON ALLT PENGEGIN ISAF (SAM Pe486)



**Prepared by Cambria Archaeology as part of a  
Service Level Agreement with Pembrokeshire  
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### **Woodland Management on Allt Pengegin Isaf SAM Pe486**

Gan / By

**Polly Groom**

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ARCHAEOLEG CAMBRIA  
Ymddiriedolaeth Archaeolegol Dyfed Cyf  
Neuadd y Sir, Stryd Caerfyrddin, Llandeilo, Sir  
Gaerfyrddin SA19 6AF  
Ffon: Ymholiadau Cyffredinol 01558 823121  
Adran Rheoli Treftadaeth 01558 823131  
Ffacs: 01558 823133  
Ebost: cambria@cambria.org.uk  
Gwefan: www.cambria.org.uk

CAMBRIA ARCHAEOLOGY  
Dyfed Archaeological Trust Limited  
The Shire Hall, Carmarthen Street, Llandeilo,  
Carmarthenshire SA19 6AF  
Tel: General Enquiries 01558 823121  
Heritage Management Section 01558 823131  
Fax: 01558 823133  
Email: cambria@cambria.org.uk  
Website: www.cambria.org.uk

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HUGHES BA FSA MIFA**

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## **SUMMARY**

Allt Pengegin, a small area of mixed woodland, lies on the north side of the Gwaun Valley and contains two Scheduled prehistoric enclosures. Pembrokeshire Coast National Park Authority carried out careful thinning of woodland on one of the enclosures in order to encourage a greater diversity of ground flora and fauna, and to ensure that the earthworks would not be damaged by wind-thrown trees in the future. The site is now available to a local school, for use as an outdoor classroom. The woodland management methods were carefully considered, and caused no damage to the ground surface, demonstrating how low-key forestry techniques can be used on sensitive archaeological sites.

## **INTRODUCTION**

Allt Pengegin is a small area of mixed woodland which lies along the north side of the Gwaun Valley, centred on NGR SN032340, in the community of Cwm Gwaun. The woodland is managed by Pembrokeshire Coast National Park Authority (PCNPA).

The woodland contains a number of features of archaeological interest, including two prehistoric enclosures – Allt Pengegin Isaf (Pe486) and Allt Pengegin Uchaf (Pe487). Both of these are Scheduled Ancient Monuments. These sites are an integral part of a prehistoric 'defended' landscape – between Llanychaer and Tregynon (a length of approx. 7.5k) there are six well preserved defended enclosures located within around 200m of either side of the river, in landscape positions which generally overlook either the Gwaun Valley itself or one of the small tributary valleys which runs off it. Modern field boundaries may suggest the position of at least one more enclosure, now destroyed.

Both the enclosures in Allt Pengegin are under woodland. This is mostly, but not exclusively, forestry commission conifer plantations. PCNPA have carried out works to remove many of the conifers in an attempt to increase both the nature conservation value and the archaeological stability of the eastern enclosure (Pe486). The site is now available for use as an 'outdoor classroom' for the local school. Similar works are planned for the western enclosure, Pe487.

## **PROPOSED MANAGEMENT**

### **Management objectives for Allt Pengegin Isaf**

1. To improve the condition of the archaeological site, ensuring its future survival.
2. To improve the value of the site for nature conservation and bio-diversity.
3. To enhance the aesthetic and amenity value of the site, making it available and accessible to local schoolchildren and visitors.

### **Condition and concerns**

The enclosure was under woodland, mostly conifer, with very little understorey. Trees were growing both within the centre of the enclosure and also on its banks and ditches. The trees were of a fairly mixed age range, with some potentially vulnerable to wind-throw.

In order to ensure the survival of buried archaeology, the ideal may have been to clear-fell the whole site. However, this would adversely affect the bio-diversity of the site, and would also allow far more light into the area, encouraging the growth of scrub, bracken and brambles. This would make the site difficult to access and understand and, ultimately, be potentially damaging for its long-term survival. Instead, it was decided to thin the woodland, removing selected trees. This would create small 'clearings' within the woods, allowing limited sunlight to encourage the growth of a mixed ground flora and increasing the site's amenity and bio-diversity value.

Although the most visible aspect of the site is its banks and ditches, it was considered that the most archaeologically sensitive may be the interior – this is where the footings of buildings, hearths etc. are most likely to be preserved. Consequently, the thinning was to concentrate on the interior. Any trees on the banks which looked as though they were either approaching the ends of the natural lives or were in danger of windthrow were also marked out for removal. Trees were chosen for removal by the PCNPA woodland officer and archaeologist. Since the site is a Scheduled Ancient Monument (SAM), all disturbance to the ground surface is prohibited and would require Scheduled Monument Consent (SMC). Furthermore, disturbing the ground surface could be very damaging to the monument. A method statement was therefore drawn up for the site work which did not involve any ground disturbance. Cadw were consulted on the site's management, but formal SMC was not required.

## **METHODOLOGY**

All work was carried out while the ground conditions were dry. After felling, brash was removed, and the trunks cut into manageable lengths. These were extracted via plastic chutes, laid down over the shallowest gradient of the banks. No damage was caused to the ground surface. Stumps were treated against re-growth, and left *in-situ*.

Platforms were constructed of corrugated metal sheeting lifted off the ground surface by being laid over large logs. The brash was then gathered up into bundles, and burnt on these platforms. The fires were carefully regulated to ensure, firstly, that they did not get out of control and, secondly, that they were not burning hotly enough to scorch the ground surface.

The stumps were left in place as seating, and some of the larger timber was processed on site to produce rough benches. These have been arranged in such a way as to form an 'outdoor' classroom for the local school, giving them the opportunity to engage more fully with a variety of topics including conservation, archaeology and woodland management.



## PHOTOGRAPHIC RECORD



**Pictures 1 and 2** (left and below)  
A plastic chute was constructed, and laid over the earthworks along the shallowest possible gradient.







**Pictures 3 and 4** (above and below). Brush was trimmed on site, leaving trunks which had no side branches to catch on the ground surface and cause damage during extraction.







**Pictures 5 and 6** (above and below) Trunks were removed via plastic chutes, and brash was burnt in small bundles on platforms raised above ground level.







**Picture 7** (above) After extraction and burning, it can be seen that there is no damage to the ground surface. The area is lighter, and the earthworks (in the background of this picture) can be seen more clearly. More thinning may be undertaken here once the understorey is established.

**Picture 8** (below) Benches (made from timber cut on site) will allow this area, within the enclosure, to be used as an outdoor classroom. Thinning has enabled the earthworks to be seen more clearly, and has also cleared much of the interior of the enclosure to aid in the survival of buried archaeological deposits. With more sunlight coming in, the area will develop more varied ground flora and fauna, enhancing the bio-diversity value of the site.



## **FUTURE MANAGEMENT**

The re-growth of ground flora at Pengegin Isaf will need to be monitored, to ensure that the site is not overgrown with scrub and bracken. Ideally, a few more trees could be taken out of the interior of the enclosure, and several more on the banks could be removed. However, this should only be done once a stable understorey has been established.

The predicted use of the seating within the enclosure is fairly light, but occasional checks should be made to ensure that is no footpath/visitor erosion developing.

The woodland in and around the enclosure should continue to be managed in order to ensure that any vulnerable trees are felled, in order to prevent the effects of windthrow from damaging either the banks and ditches or the interior of the enclosure.

Finally, a similar scheme has been proposed for the other enclosure, Allt Pengegin Uchaf (Pe487). When carried out, this will highlight the relationship, and differences, between the two sites. At this stage, it may be appropriate to consider some form of interpretation of the two sites, perhaps at the entrance to the woodland itself.

## **DISCUSSION**

Many archaeological sites under woodland, whether native woodland or conifer plantation, are unmanaged, and woodland cover is often perceived as detrimental to archaeological survival. Whilst this can certainly be true, appropriate woodland management can actually play a significant role in ensuring the integrity of the site. However, it is not always necessary or advantageous to completely clear-fell a site unless there is a clear follow-up management plan to prevent the incursion of scrub and/or bracken.

Landowners and land-managers are often confused or unclear about what can and cannot be done on a SAM, and appropriate advice must be given as early in the grant-application process as possible.

This work at Allt Pengegin has demonstrated how it is possible to combine archaeological survival, bio-diversity and public access in a very simple management plan. Although a cost was incurred in terms of time and labour, costs for material were minimal. A key factor in this work was early consultation, allowing all interests to be considered before the grant application was submitted. All too often, archaeology (and, sometimes, bio-diversity) are seen as 'bolt-on' extras once the management plan has been drawn up and the grant application submitted. It is hoped that, with the advent of the 'Better Woodlands for Wales' scheme, this kind of integrated planning will take on a statutory role within the grant process. It is clear that, with time and imagination spent in the planning stages, very positive results can be achieved.

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SAM Pe486**

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Paratowyd yr adroddiad hwn gan / This report has been prepared by Polly Groom

Swydd / Position: Archaeologist (Pembrokeshire Coast National Park)

Llofnod / Signature ..... Dyddiad / Date

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith  
This report has been checked and approved by  
Louise Austin

ar ran Archaeoleg Cambria, Ymddiriedolaeth Archaeolegol Dyfed Cyf.  
on behalf of Cambria Archaeology, Dyfed Archaeological Trust Ltd.

Swydd / Position: Principal Archaeologist (Heritage Management)

Llofnod / Signature ..... Dyddiad / Date

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