



COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



## LIFE17NAT/UK/000020 – Coedwigoedd Glaw Celtaidd LIFE

### TENDR: Gwaith Rheoli Coetir yng Nghoed Llwybr Caerynwch, Brithdir SH754185

Mae Awdurdod Parc Cenedlaethol Eryri (APCE) yn dymuno comisiynu gwaith rheoli coetir yng Nghoed Llwybr Caerynwch gyda'r nod o wella cyflwr ecolegol safle coetir hynafol sydd â statws Planhigfa ar Safle Coetir Hynafol (PAWS). Fe'ch gwahoddir i gyflwyno dyfynbris am y gwaith y manylir arno yn y ddogfen dendro hon.

#### Cyd-destun:

Mae Coed Llwybr Caerynwch yn safle coetir hynafol wedi'i blannu o 8.82 hectar ger Dolgellau, Gwynedd. Mae gan Awdurdod Parc Cenedlaethol Eryri (APCE) arian cyllido drwy Brosiect Coedwig Law Geltaidd Cymru LIFE i gefnogi gwaith teneuo y mae mawr ei angen ar draws y 3 gyfadran. Mae'r coetir yn rhan o'r Coedydd Safle o Ddiddordeb Gwyddonol Arbennig (SoDdGA) Dyffryn Wnion ac mae presenoldeb y blanhigfa gonifferaidd yn bygwth y cynefin lled-naturiol ar y safle, yn ogystal â choetir glannau afon cyfagos ceunant Afon Wnion sydd o dan berchnogaeth ar wahân. Gan weithio gyda Choed Cadw, sicrhawyd caniatâd SoDdGA gan Cyfoeth Naturiol Cymru (CNC) i gynnal gweithrediadau teneuo sensitif a gynlluniwyd i leihau effaith y conwydd ar goed llydanddail aeddfed cyn plannu a nodweddion cynefinoedd lled-naturiol eraill. Ychydig iawn o waith rheoli sydd wedi digwydd ers sefydlu planhigfa yng nghanol yr 20fed ganrif. Mae clystyrau trwchus o gegid y Gorllewin a chedrwydd coch gorllewinol yn cysgodi coed llydanddail aeddfed, yn enwedig derw mes digoes a phisgwydd dail bach. Mae problemau sydd a wnelo'r nentydd yn disgyn drwy'r safle i'r Wnion, mae'r ymylon glannau hyn yn cynnal casgliadau o blanhigion coetir hynafol sy'n weddill ond maent hefyd yn dioddef o gysgodi planhigfeydd conwydd.

#### Amcanion rheoli:

Nod y contract hwn yw dod â'r coetir yn ôl o dan reolaeth gadarnhaol, adfer nodweddion coetir hynafol tameidiog a chynyddu gwynwch y safle. Bydd gwaith teneuo yn lleihau'r bygythiad gan gonwydd anffrodorol, gan ddod â golau i goronau cysgodol llydanddail aeddfed a mw y olau i lawr y coetir.

Mae gennym drwydded torri coed i gael gwared ar 520m<sup>3</sup> o goed conwydd ar draws adrannau 2, 4 a 5, arwynebedd o 3.96 hectar gydag echdynnu 40% o Gedrwydd Coch Gorllewinol a 60% o Gegid gorllewinol.

Felling Site/ Cpt	Type of operation	Actual Species (name of species to be in full)	Marking of trees	Area (ha)	Approx. age of trees	Total number of trees	Estimate of Volume (m3)
2	T Thinning	Western red cedar 100%	Paint mark	0.39	70	32	40
4	T Thinning	Western hemlock 100%	Paint mark	2.11	70	210	284
5	T Thinning	Western red cedar 100%	Paint mark	1.46	70	230	196
Totals				3.96		472	520

#### Mynediad ac echdynnu:

Mae cae o fewn ffin perchnogaeth y gellir ei ddefnyddio i bentyrru a llwytho pren. Mae'r cae yn cael ei bori gan denant ar hyn o bryd ond gellir trefnu caniatâd i ddefnyddio'r cae. Mae yna nifer o hen draciau a llwybrau mynediad y gellid eu defnyddio ar gyfer echdynnu ond bydd angen eu hadfer yn dibynnu ar gynlluniau gweithredol. Gweler y map isod. Byddai'r contract yn addas ar gyfer craen nenlinell neu graen cebl ond gallai peiriannau coedwigaeth effaith isel eraill weithio hefyd.

Bydd unrhyw drafodaeth gyda thrydydd parti yn cael ei hwyluso gan staff prosiect Coedwig Law Geltaidd Cymru.



COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



### Cyflwyno tendr:

Gwahoddir tendrau ar gyfer gwneud gwaith cwmpo cyfeiriadol gofalus o fewn celloedd planhigfeydd, gweithrediadau teneuo o fath 'halo' a thynnu coed a fydd yn cael ei gynllunio a'i weithredu gyda gofal priodol tuag at briddoedd coedwig a nodweddion coetir hynafol. Mae hwn yn weithrediad coedwigaeth cymhleth a sensitif a fyddai'n addas ar gyfer contractwyr sydd â phrofiad o, neu barodrwydd i ddatblygu sgiliau mewn, gweithrediadau teneuo, coedwigaeth cadwraeth, adfer coetir hynafol, dulliau echdynnu effaith isel a gweithrediadau coedwigoedd i drawsnewid planhigfeydd oed cyfartal i strwythurau afreolaidd. Darperir cefnogaeth gan staff APCE a Choed Cadw drwy gydol y contract.

Yn y ddogfen dendro, rydym yn disgwyl gweld darpariaeth ar gyfer Rhywogaethau a Warchodir gan Ewrop (Ystlumod, Dyfrgwn a Phathewod) a chynefinoedd coetir sensitif yn ogystal ag arddangosiad o sut y bydd gweithrediadau'n cael eu cyflawni o fewn canllawiau Cytundeb Diogelwch y Diwydiant Coedwigoedd (FISA) a Safon Coedwigaeth ar fer gorau'r DU (UKFS). Gweler y ddogfen amodau caniatâd SoDdGA amgaeedig am ragor o fanylion am sensitifrwydd y safle. Gweler y mapiau isod hefyd am fanylion ar lefel y cydrannau a llwybrau echdynnu posibl a manau pentyrru/llwytho.

Mae cyllid prosiect LIFE ar gael i dalu am y contract cyfan felly ni fydd angen gwerthu'n sefydlog.

Mae perchennog y safle wedi rhoi caniatâd i ymweld â'r safle ac mae coed i'w torri a'u cloddio wedi'u marcio â phaent marciwr pinc. Rydym yn argymhell yn gryf bod pob darpar contractwyr yn trefnu i gyfarfod ar y safle ymlaen llaw i drafod y gwaith. Os hoffech drefnu ymweliad safle cyn cyflwyno tendr, cysylltwch ag Adam Thorogood (Cynghorydd Allgymorth Coetiroedd - Coed Cadw ) ar 07733012452 neu drwy e-bostio [adamthorogood@woodlandtrust.org.uk](mailto:adamthorogood@woodlandtrust.org.uk).

Gofynnwn i chi ddefnyddio'r tabl yn Atodiad I wrth gyflwyno dyfynbrisiau. Dylid dychwelyd dyfynbrisiau i'r cyfeiriad isod cyn 12:00 (canol dydd), ddydd Mercher, 5<sup>ed</sup> Hydref 2022. A allwch nodi yn y tabl a yw'r dyfynbris yn cynnwys TAW.

Bydd ceisiadau'n cael eu sgorio'n annibynnol gan dri pherson sy'n ymwneud â phrosiect Coedwigoedd Glaw Celtaidd Cymru gan ddefnyddio'r matrices sgorio isod:

Criteria	Weighting (%)
Proposed fee	55
Ability to demonstrate previous experience of PAWS work	35
Written reference(s) - minimum of one expected*	10

\* noder na ddylai geirdaon / tystlythyrau ddod gan staff sy'n gweithio'n uniongyrchol ar brosiect Coedwig Law Geltaidd Cymru.

Dylid anfon pob tendr mewn amlen wedi'i labelu 'Cyfrinachol' a'i chyfeirio fel a ganlyn:

Tendr – Coed Llwybr Caerynwch  
Cyfarwyddwr Gwasanaethau Corfforaethol  
Awdurdod Parc Cenedlaethol Eryri  
Swyddfeydd y Parc Cenedlaethol  
Penrhyndeudraeth  
Gwynedd



COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



LL48 6LF

Sylwch, os derbynnir unrhyw dendrau nad ydynt yn dilyn y cyfarwyddiadau uchod, ni fyddant yn cael eu hystyried.

**Amserlen:**

Unwaith y'i penodir, dylai'r gwaith gael ei gwblhau erbyn 31 Mawrth 2023. Fodd bynnag, rydym yn agored i weithrediad graddol ar draws dau dymor rheoli gaeaf (h.y. hyd at 31 Mawrth 2024).

**Taliad:**

Gwneir taliadau wrth gyflwyno anfoneb ar ôl cwblhau pob elfen o waith i safon foddhaol.

Bydd angen i'r sawl a ddyfernir y contract iddynt yn llwyddiannus ddarparu dogfennaeth ar y canlynol os yw'n berthnasol:

- Aseiad risg, gan gynnwys mesurau bioddiogelwch.
- \* Prawf o'r holl gymwysterau perthnasol sydd eu hangen i gwblhau'r gwaith megis tystysgrif llif gadwyn NPTC, tystysgrifau chwistrellu cemegol, ac os yw'n berthnasol, tystysgrifau perthnasol i ddefnyddio rhaffau.
- \* Tystiolaeth bod un neu fwy o bobl sy'n gweithio ar y safle wedi'u hyfforddi mewn Cymorth Cyntaf.
- \* Yswiriant atebolrwydd cyhoeddus.
- \* Yswiriant Atebolrwydd Cyflogwyr.

\*Oni bai nad oes gan APCE y rhain ar ffeil yn barod.

Gyda chyfarchion

Uwch Reolwr Prosiect  
Awdurdod Parc Cenedlaethol Eryri  
[gethin.davies@eryr.llyw.cymru](mailto:gethin.davies@eryr.llyw.cymru)  
07887 452 469



COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



## Atodiad I

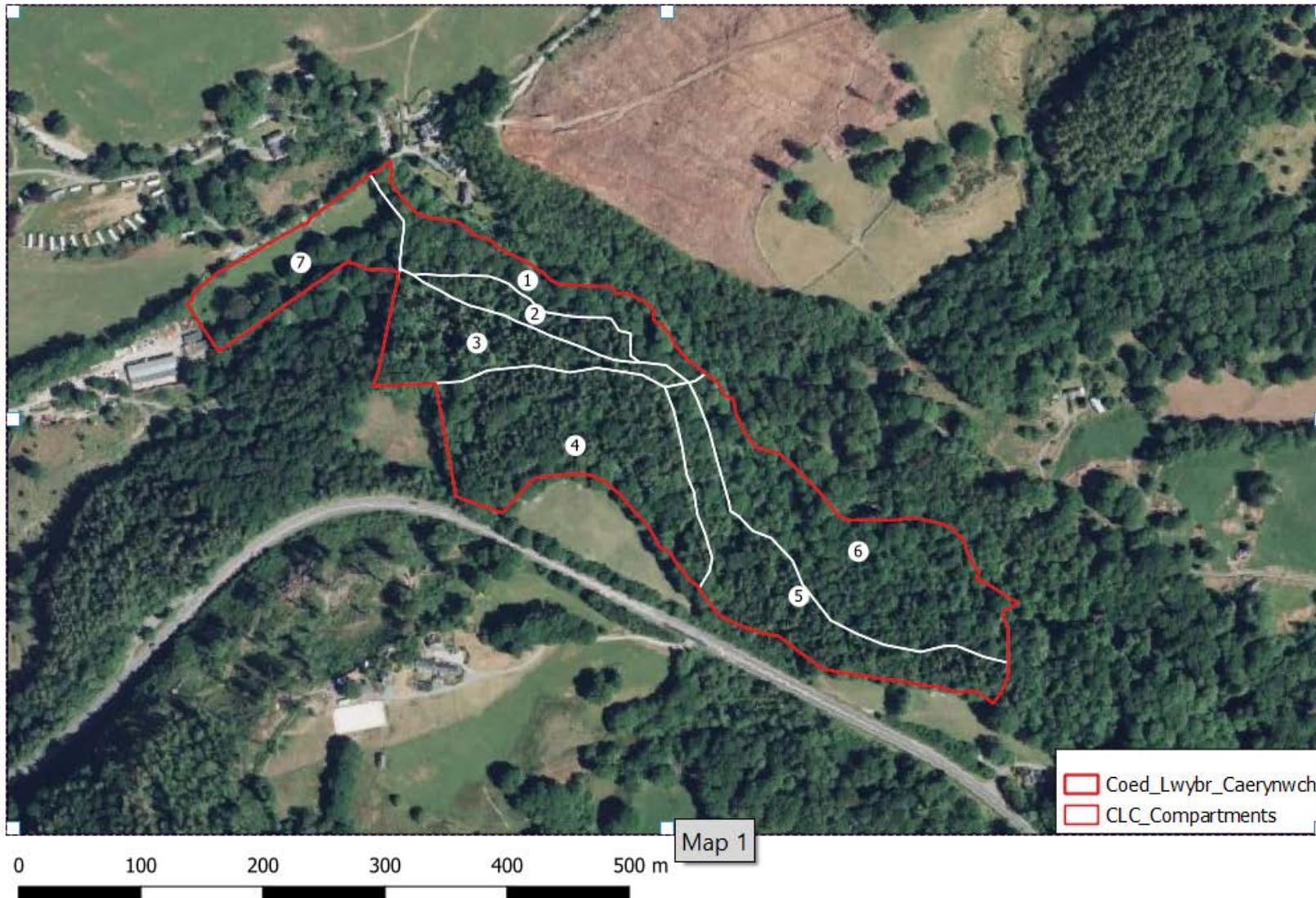
### Coed Llwybr Caerynwch - Dalen Dyfynbris

Cydran	Cyfanswm (noder os yw'r pris yn cynnwys TAW plis)
2	
4	
5	

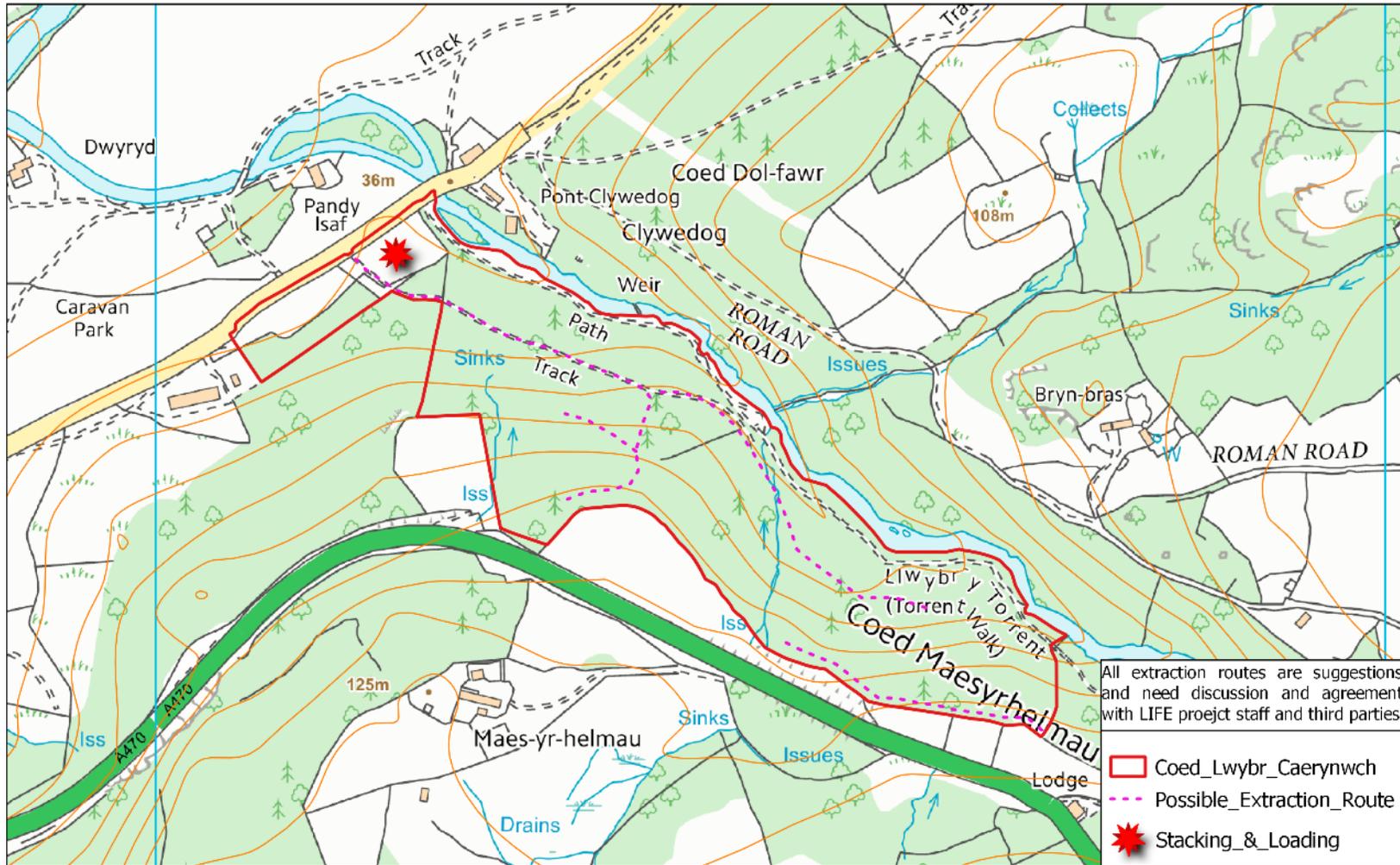
Enw:

Llofnodwyd:

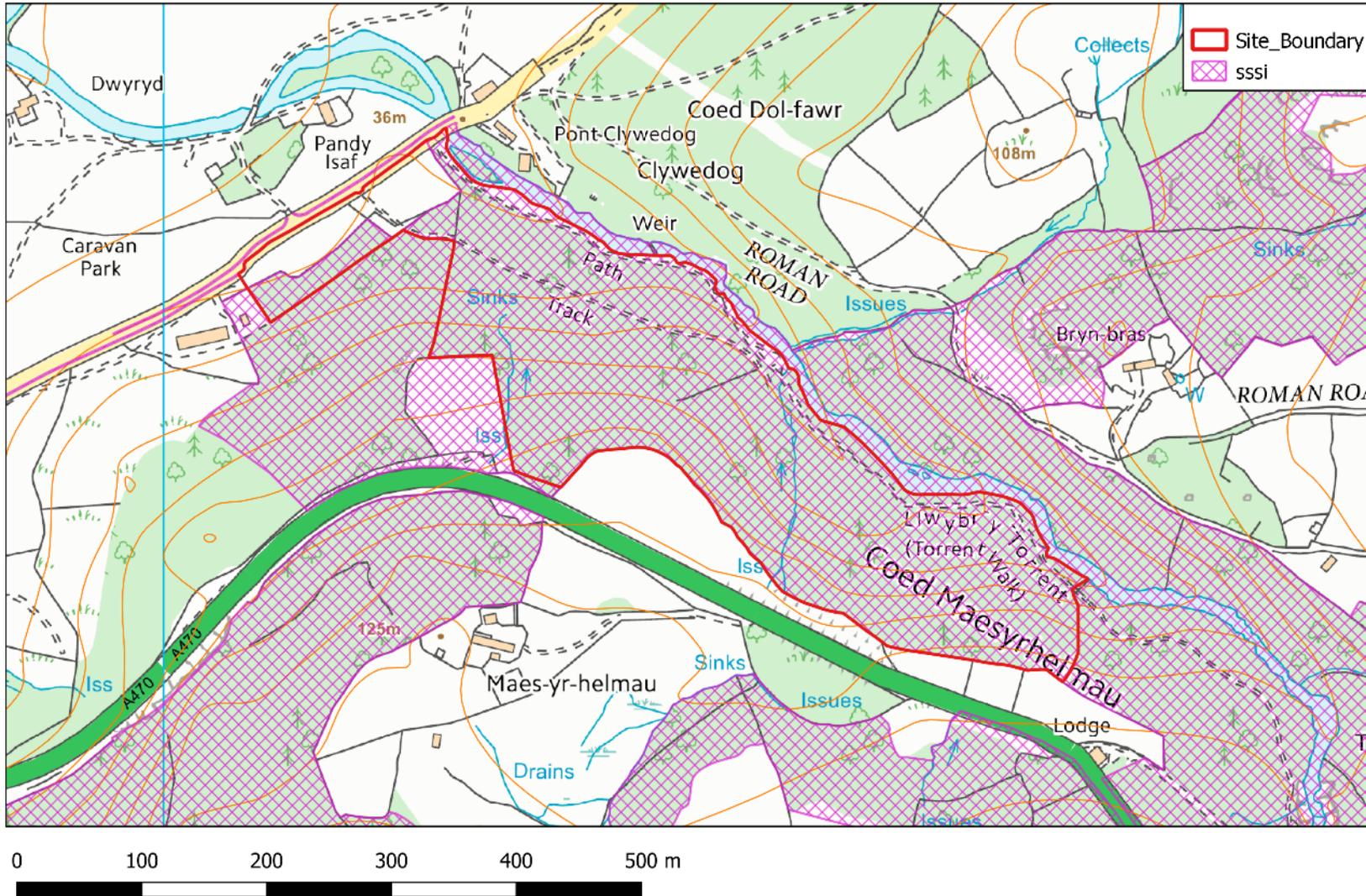
Coed Lwybr Caerynwch Compartments - felling licence is for cmpts 2,4 & 5



# Coed Lwybr Caerynwch Extraction and Loading



Coed Lwybr Caernwch - Coedydd Dyffryn Wnion SSSI



Mr John Needle  
Flumina House  
Foundry Lane  
Milford  
Derbyshire  
DE56 0RN  
Cc: Adam Thorogood, Woodland Trust

Our ref: SH71.3  
Consent Ref No: C001694/1  
16/11/2021

Dear Sir

## **CONSENT UNDER SECTION 28E OF THE WILDLIFE AND COUNTRYSIDE ACT 1981**

Site(s) of Special Scientific Interest:  
**Coedydd Dyffryn Wnion**

Please see attached a consent to carry out notifiable operations on the above site(s) for which you submitted a notice to us dated 22/07/2021.

This consent allows you to carry out the work(s), or cause or permit them to be carried out, in the way described overleaf.

You must give written notice if you intend to carry out any work differently to the way described overleaf or if you wish to carry out any other work. We recommend discussing this with the relevant Conservation Officer first.

If you disagree with any of the conditions or the time limit you may appeal. Details of how to appeal are shown at the end of the attached consent.

This consent only relates to the above legislation; other authorisations may be required.

Yours faithfully



Mr Arfon Hughes  
Environment Team Leader – Dwyfor and Meirionnydd

Contact Officer Details:

Ffôn /Tel: 03000 654147

Ebost/Email Ifan.E.Jones@cyfoethnaturiolcymru.gov.uk

www.cyfoethnaturiolcymru.gov.uk www.naturalresourceswales.gov.uk

Government Buildings,

Arran Road  
Dolgellau, Gwynedd LL40 1LW

Croesewir gohebiaeth yn y Gymraeg a'r Saesneg  
Correspondence welcomed in Welsh and English

**CYFOETH NATURIOL CYMRU  
NATURAL RESOURCES WALES**

Consent ref no: C001694/1

**CONSENT UNDER SECTION 28E OF THE WILDLIFE AND COUNTRYSIDE ACT 1981**

Site(s) of Special Scientific Interest:  
Coedydd Dyffryn Wnion

Natural Resources Wales hereby gives consent that:

John Needle  
Flumina House  
Foundry Lane  
Milford  
Derbyshire  
DE56 0RN

As an owner/occupier of land within the above site(s), may carry out, cause or permit to be carried out the operation(s) specified below in the manner prescribed.

The plan is to carry out light thinning work in plantation conifers in compartments 2,4 and 5. Compartments 2 and 5 are Western red cedar, compartment 2 is Western hemlock. The thinning operations will halo thin around pre-plantation native broadleaves, mainly sessile oak and small-leaved lime, as well as remove a small amount of volume from the plantation. The work is intended to be light and sensitive to the SSSI habitat and to reduce the impact of conifer shading and seeding on the designated habitat. Ideally we'll be working with a contractor who can set up a high-lead or skyline system in order to extract timber down to the field at the bottom which is within the same ownership.

<b>Condition</b>	<b>Condition Reason</b>
Prior to undertaking any works ensure the work area is inspected by a competent ecologist for lichen and bryophyte; signs of whorl snails, dormice, otters, bats and Killarney fern. Follow advice given to avoid any adverse impact and disturbance and before work starts send a copy of the Inspection report to NRW.	To protect the features of the site and comply with European Protected Species legislation. To determine bryophyte and lichen distribution and to ensure felling does not adversely affect lichens and bryophytes which may be affected by reduction in humidity levels caused by canopy cover reduction. And to assist in future assessments.
Minimum 80% canopy cover to be retained to maintain high humidity levels.	80% canopy cover is the minimum to maintain essential high humidity levels for the features of the site and to comply with European Protected Species legislation. Tree cover and shade play a crucial role along with river flows in maintaining the

	humid, relatively drought- and frost-free conditions they require.
Ensure that all non target trees and Ivy remain in place. For example, if Ivy connects the wall to the target tree the tree shall be cut in a manner that preserves the ivy on the wall.	Mountain whorl snail favours stone walls with ivy and small trees providing dense vegetation. The removal of small Ash trees could directly or indirectly disturb this niche favoured by the snails, through tree removal or incidental damage.
Only extract timber if the following criteria are met. A minimum of 30m <sup>3</sup> per hectare of dead wood to remain on site, which consists of a mixture of fallen trees (minimum 1 per hectare), broken branches, dead branches on live trees, and standing dead trees (minimum 1 per hectare)	The removal of potential deadwood into the ecosystem that support Slime moulds, Bryophytes, Lichens and Invertebrates could affect the woodland features integrity.
Ensure that the light thinning work in plantation conifers does not leave the woodland in compartments 1, 3 and 6 completely open to the south-west winds.	To minimise exposure (and potentially windthrow) along the river corridor.
Minimise risk of damage to ground layer species and root plates.	To protect the features of the site and comply with European Protected Species legislation.
Work to be conducted during daylight hours.	To protect the bat features of the site and comply with European Protected Species legislation.
No fuel to be stored on SSSI or SAC. Refuelling off site only.	To protect the features of the site and comply with European Protected Species legislation.
All machinery and equipment to be cleaned before entering site.	To prevent spread or introduction of invasive non-native species.

This consent is valid until: 01/10/2026

To time limit the consent and allow opportunity to review.

This consent only relates to the above legislation. It does not release you from any obligations to obtain approval under other legislation or the General Law. If the proposed works involve development, you may also require planning permission from the Local Planning Authority. Some proposals may require the landowner's permission or other authorisations.

Date: 16/11/2021

Signed: Arfon Hughes

## SSSI Consents: Your right of appeal

If we have not consented to the proposed operations you have notified us of, or you disagree with any imposed conditions or time limits, you have the right to appeal. If we do not make a decision whether or not to give consent within 4 months you may appeal as if we had refused consent.

You also have a right of appeal if we withdraw or modify a consent we have previously issued to you.

If you are unclear as to why we have made our decision you should ask us for clarification before deciding whether to lodge an appeal.

### Submitting an appeal

Forms and further guidance are available on the Welsh Government website <http://gov.wales/topics/environmentcountryside/consmanagement/rights-of-way-and-wider-access/countryside-area/sites-of-special-scientific-interest-appeals/?lang=en>)

Appeals must be made in writing to the Planning Inspectorate who will consider it on behalf of the Welsh Ministers.

#### **The Planning Inspectorate**

**Crown Buildings**

**Cathays Park**

**Cardiff**

**CF10 3NQ**

**Tel: 029 2082 3892**

**Email : [wales@pins.gsi.gov.uk](mailto:wales@pins.gsi.gov.uk)**

You will need to state the grounds on which you are making the appeal and enclose a copy of the decision being appealed against as well as any other relevant documentation.

Your appeal must be received **within 2 months** of the date of the notice telling you about the decision you want to challenge<sup>1</sup>. You should also send a copy of the appeal to us at Natural Resources Wales.

The appeal may be dealt with by an exchange of written statements, at a hearing, or at a Local Inquiry. You will be asked to indicate which you would prefer. In any case, the appeal will be decided on the basis of the evidence put forward.

After receiving your appeal, the Planning Inspectorate will write to explain what will happen next, in more detail.

#### **Withdrawal or modification of SSSI Consents: Payment if you have suffered loss**

You may be eligible for a compensation payment if you will suffer loss as a result of the modification or withdrawal of a consent previously issued to you. If you feel you should be considered for compensation please write to us at the address shown on the covering letter.

---

<sup>1</sup> Or, where the appeal relates to the failure of a decision being made, within two months of the expiry of the four month period from the date of your notice to NRW notifying them of your intention to carry out the operation(s).

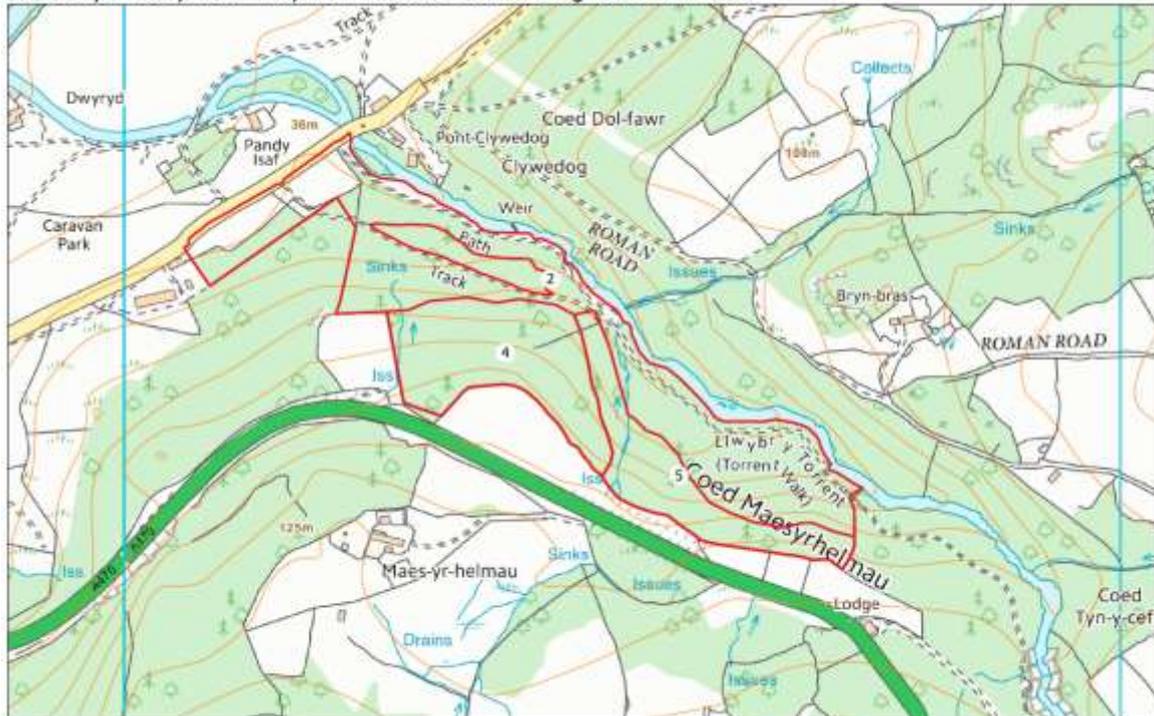
## Full proposal

### Appendix 1

Celtic Rainforest Project Ancient Woodland Survey: See attached.

## Map

Coed Lwybr Caerynwch - map for FLA 2021 - site centre grid ref SH754185



From Ancient Woodland Report Adam Thorogood (Coed Cadw) Survey date: Sept 2020:



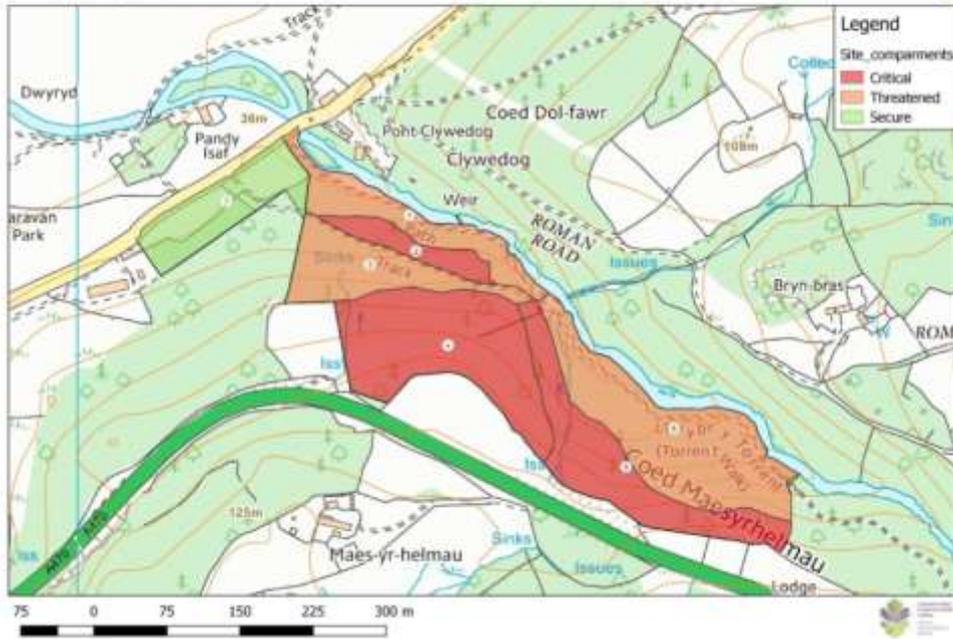
COEHWGODDO  
GLAN YS, TAIOD  
CWMNI  
CULTI  
BANGORWYD  
WALES



COED CADW  
WOODLAND  
TRUST

### Celtic Rainforest Project 2020 – Woodland Survey

Coed Llystr Caerynwch - Ancient Woodland Condition



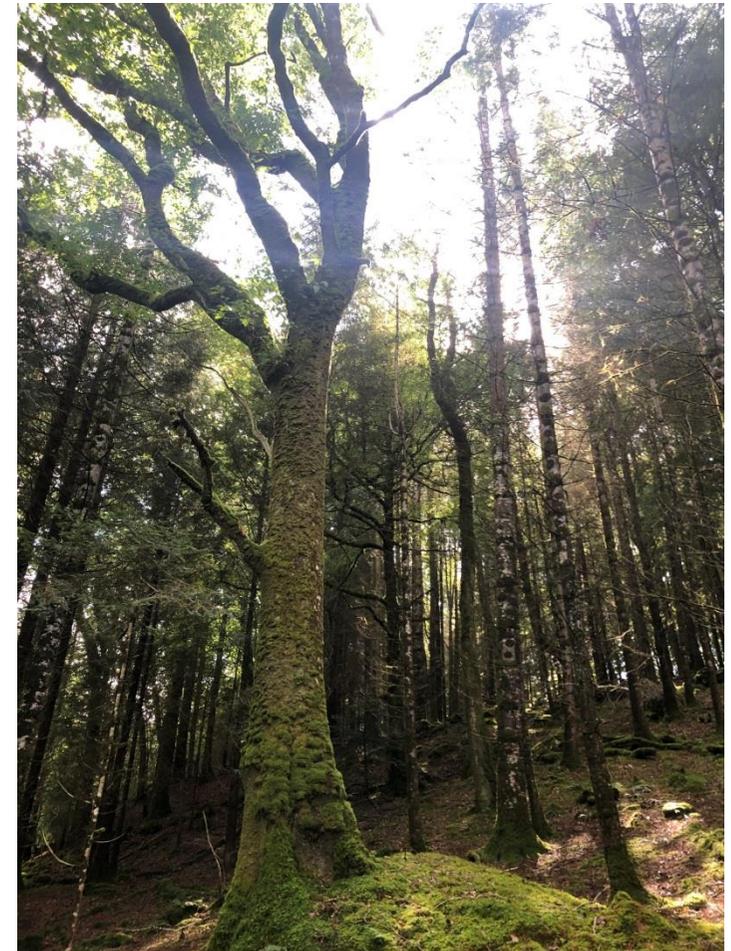
## Celtic Rainforest Project 2020 – Woodland Survey



COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



# Ancient Woodland Survey



## Coed Llwybr Caerynwch

Adam Thorogood (Coed Cadw)  
Survey date: Sept 2020





COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



## Celtic Rainforest Project 2020 – Woodland Survey

<b>Site Name:</b> Coed Llwybr Caerynwch	<b>Owner:</b> Jon Needle	<b>Woodland Size:</b> 8.82 hectares	<b>Grid ref:</b> SH754185
<b>Woodland description:</b> (AWI type, NVC category, stand types)			
<p>Coed Llwybr Caerynwch is an ancient woodland on the south-side of a steep river gorge to the east of Dolgellau in the county of Gwynedd. The entire wooded part of the site sits within the Meirionnydd Oakwoods Special Area of Conservation (SAC), also forming part of the Coedydd Dyffryn Wnion SSSI. According to the Ancient Woodland Inventory Wales (AWI), the site contains areas of plantation on ancient woodland (PAWS) and areas of restored ancient woodland (RAWS), however, the areas of RAWS are incorrectly mapped and in fact the PAWS area is much larger due to the existence of stands of Western red cedar throughout the site. The higher slopes contain stands of Western hemlock and Western red cedar and close to the river and the lower sections of the gorge, there are stands of grand fir and again Western red cedar. There are also small cohorts of Northofagus planted within the conifer blocks. The lower sections of the site contain the most intact semi-natural habitat, supporting sessile oak, ash, birch woodland with a holly and hazel understorey, however large mature beech pose a threat to these areas through over-shading, leaf litter and seeding. Where the understorey is largely intact, it is in areas of wet woodland into which feed the several spring-lines and issues which descend from the higher parts of the site. These areas support mature ash, wych elm and sycamore; most of the ash onsite show signs of chalara ash dieback. In terms of the National Vegetation Classification (NVC), the site supports fragmented remnants of types W9 (in the lower, wetter areas) grading into W10 and W11, occurring higher up. Higher elevations contain areas of exposed bed rock with presumably thin soils, it is on these slopes that the stands of hemlock and cedar have been planted. Throughout these compartments can be found large remnant broadleaf specimens, sessile oak, small-leaved lime, holly and some sycamore, all surrounded and almost over-topped by the plantation conifers. The grand fir stand in the north-west section of the site has suffered some wind throw and wind snap. Despite the several threats to the site's ecological integrity, there are lots of opportunities for sensitive restoration work, which will yield a flow of commercial soft wood timber.</p>			
<b>Access/Infrastructure:</b>			
<p>The site contains a very popular public access path which runs along the gorge formed by the flow of the Afon Clywedog, the "Torrent Walk." There are old tracks which run through the site and these could possibly be used/reinstated for timber extraction. There are two fields within the ownership boundary in the lower west of the site which could be used for forestry vehicle access, from the minor road which comes off the A470, these are currently grazed by a local farmer but could also provide some space for timber stacking.</p>			



COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



## Celtic Rainforest Project 2020 – Woodland Survey

**Specific threats:** (disease, invasive species)

Threat to semi-natural habitats and plant assemblages from excessive shading, needle litter and seeding from non-native conifer and broadleaf (beech) species.

**First steps:**

- Carry out timber inventory in conifer compartments in order to establish standing timber volume and put together felling licence for phase 1 of works.
- Apply to NRW for SSSI consent.
- Look to reinstate tracking infrastructure in order to gain access to compartments 3,4 and 5.
- Consider timber stacking area in adjacent fields within site ownership.

Cmpt. (See map below)	Compartment Description – Including Tree Canopy, Understory/Regeneration species: (Red = Considered Non-Native/impactful) (Green = any notable, pre-plantation, veteran or ancient trees)	Ground Vegetation (Green = Considered an Ancient Woodland Indicator Plant) (Red = Considered Non-Native/impactful)	Other Important Features (deadwood, archaeology, epiphytes/ other biodiversity. Green- Considered to be indicative of ancient woodland)	Threat Level (Secure / Threatened / Critical – described below)	Management Recommendations (Priority Level in Brackets – described in appendix)
1	RAWS compartment following river and its southern bank. Canopy composed of large mature sessile oak and occasional small-leave lime but dominated by mature beech with large spreading crowns. Good bryophyte diversity on broadleaf trunks. Lower canopy and shrub layer made up of beech and holly with occasional hazel and hornbeam. Lots of beech regeneration meaning that on the	Wood melic, Greater wood rush, Polypody fern, Enchanters night shade, Yellow pimpernel, Honeysuckle, Remote sedge, Wood sedge, Herb Robert, Dog violet	Lichen: <i>Thelotrema lepadinum</i> on hornbeam close to river	Threatened	The main threat to this compartment is the presence of large seeding beech which dominate parts of the canopy. Beech and conifer regeneration shade out the understorey.  Consider the phased removal of several large beech. This will have to be carried out carefully and sensitively due to the nearby dwellings, PRoW and riparian ecology. <b>Priority 3</b>  Remove conifer and beech regeneration. <b>Priority 2</b>



COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



## Celtic Rainforest Project 2020 – Woodland Survey

	whole the native ground flora is shaded out. Occasional <b>wych elm</b> and wild cherry.				
<b>2</b>	Thin strip of <b>Western red cedar</b> plantation, contains several large remnant <b>sessile oak</b> as well as mature beech and <b>hornbeam</b> . Very dense stand with dieback of suppressed cedar stems. Sparse understorey.			<b>Critical</b>	<p>Halo thin around site native mature broadleaves. <b>Priority 1</b></p> <p>Consider the phased removal of large mature beech (see above). <b>Priority 3</b></p> <p>Thin the cedar gradually to begin opening up the stand with the aim of removing all the cedar within a few thinning cycles. Carry out a low thin (i.e. remove suppressed trees, leaving dominants) in order to retain wind firmness initially. <b>Priority 3</b></p> <p>Monitor understorey for broadleaf regeneration, this should begin and increase as the thinning operations open up the stand. Monitor also for cedar regen, if this starts dominating then begin to remove coning dominants in next thin. <b>Priority 3</b></p> <p>Care must be taken with this stand as it provides a wind buffer for the large broadleaves in the adjacent compartment.</p>
<b>3</b>	<b>Grand fir</b> PAWS compartment. Has suffered wind throw and snap which leaves areas of the stand very open with lots of bramble growth in understorey. Also mature <b>ash</b> which have dying crowns due to ash dieback which add to high light levels, <b>hazel</b> is doing well in these conditions. Line of large <b>beech</b> on border with cmpt 4 have seeded on to the edge of this cmpt creating dense pole stage beech stands mixed with similar age ash which is dying. Elsewhere, grand fir is	Brambles, <b>Hart's tongue fern</b> , <b>Opposite-leaved golden-saxifrage</b> , <b>Enchanter's night shade</b> , <b>Scaly male fern</b> , <b>Broadbuckler fern</b> , <b>Wood speedwell</b> , <b>wood sorrel</b> , <b>wood avens</b> , <b>Wood sedge</b> , <b>remote sedge</b> , <b>Sweet wood ruff</b> , <b>Bluebells</b> , <b>Lords and ladies</b> , <b>Dog rose</b>	Signs of past used in charcoal platforms and possible sawpit	<b>Threatened</b>	<p>Sensitive, selective thinning of grand fir, beginning with halo thinning around mature broadleaves. Stand structure is already a lot more open than other conifer compartments and therefore thinning doesn't need to be as systematic. <b>Priority 2</b></p> <p>Cut back bramble in openings created by wind throw and possibly underplant with site native broadleaves if regeneration is not forthcoming. <b>Priority 3</b></p> <p>Consider the phased removal of large mature beech on compartment boundaries. In safe areas, consider ring barking large beech in order to create large dimension</p>



COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



## Celtic Rainforest Project 2020 – Woodland Survey

	quite open and understorey displays hotspots of ferns. Mature <i>sessile oak</i> , <i>small-leave lime</i> , <i>downey birch</i> , wild cherry and sycamore dotted throughout cmpt. Also, small cohorts of northofagus (6 trees in each). Lots of ash regeneration.				standing decaying wood. <b>Priority 3</b>
4	Dense, dark <b>Western hemlock</b> PAWS on the higher slopes of the site. Lots of areas of craggy exposed bedrock. Throughout the hemlock matrix are several very large <i>beech</i> , <i>sessile oak</i> , occasional suppressed <i>downey birch</i> and a cluster of large <i>small-leaved lime</i> in the south western corner of the site, close to the A470. One large scots pine on southern boundary.		Lichen: <i>Stenocybe septata</i> on old holly	<b>Critical</b>	<p>Sensitive halo thin to gradually release suppressed broadleaves (mainly oak, lime, holly) from surrounding hemlock matrix. <b>Priority 1</b></p> <p>On next thinning operation (i.e. 3 to 5 years later) thin the Western hemlock using graduated density thinning system. <b>Priority 4</b></p> <p>Monitor understorey for hemlock regeneration, remove if preventing advance broadleaf regeneration. <b>Priority 3</b></p> <p>Promote broadleaf regen through targeted thinning around regen hotspots. <b>Priority 4</b></p> <p>Overtime the hemlock will make up less and less of the canopy with mature broadleaves achieving windfirmness and seeding into understorey.</p>
5	<b>Western red cedar</b> PAWS compartment on steep slopes with large mature <i>beech</i> , <i>sessile oak</i> and <i>horse chestnut</i> along top southern boundary. Riparian zone contains suppressed semi-natural assemblages with small-leaved lime, ash and wych elm, over W9/10 ground flora	<i>Hard fern</i> , <i>Enchanter's nightshade</i> , <i>Scaly male fern</i> , <i>Opposite-leaved golden-saxifrage</i> , <i>Valerian</i> , <i>Remote sedge</i> , <i>Wood sedge</i> , <i>Barren strawberry</i> , <i>Wood speedwell</i>		<b>Critical</b>	<p>As for cmpt 4 above. Halo thin around mature broadleaves. Riparian edges should be treated as a feature during halo thin. <b>Priority 1</b></p> <p>...followed up by graduated density thinning across the cedar matrix. <b>Priority 4</b></p>
6	RAWS compartment following the river gorge and higher slopes above to the south. Contains the most intact semi-natural habit of all cmpts, mainly ash	<i>Alexanders</i> , <i>Tufted hair-grass</i> , <i>Wood avens</i> , <i>Dog's mercury</i> , <i>Dog rose</i> , <i>Sweet woodruff</i> , <i>Wood sorrel</i> , <i>Meadowsweet</i> ,	Lichen: <i>Sticta sp.</i> on ash trunks and branches within W9 hotspots. Lichen: <i>Thelotrema</i>	<b>Threatened</b>	Threat of shading and seeding from adjacent conifer compartments will be reduced through critical works taking place outside of this compartment.



COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



## Celtic Rainforest Project 2020 – Woodland Survey

	dominated wet woodland (W9) with <b>wych elm</b> , <b>alder</b> , <b>sessile oak</b> , <b>hazel</b> and occasional <b>small-leaved lime</b> . Large areas are dominated by huge mature <b>beech</b> and beech regeneration in understorey. Occasional <b>hornbeam</b> and large <b>horse chestnut</b> . <b>Grand fir</b> regeneration in places	Nettles, Bramble, Creeping buttercup, Woundwort, <b>Honeysuckle</b> , <b>Remote sedge</b> , <b>Hard fern</b> , <b>Greater woodrush</b> , <b>Wood sorrel</b> , <b>Wood sedge</b> , <b>Bilberry</b> , <b>Opposite-leaved golden-saxifrage</b> , <b>Wood speedwell</b>	<b>lepadinum</b> on old hornbeam.		Remove conifer regeneration. <b>Priority 3</b> Reduce the impact of seeded, pole stage beech from parts of the compartment by removing. <b>Priority 2</b>  Consider the phased removal of large mature beech on compartment, particularly the shading of riparian and wet woodland understorey. In safe areas, consider ring barking large beech in order to create large dimension standing decaying wood. <b>Priority 3</b>
<b>7</b>	Fields in the lower part of the site close to minor road. Not included as part of this survey.				Look into using fields for timber stacking. <b>Priority 1</b>

See maps below.



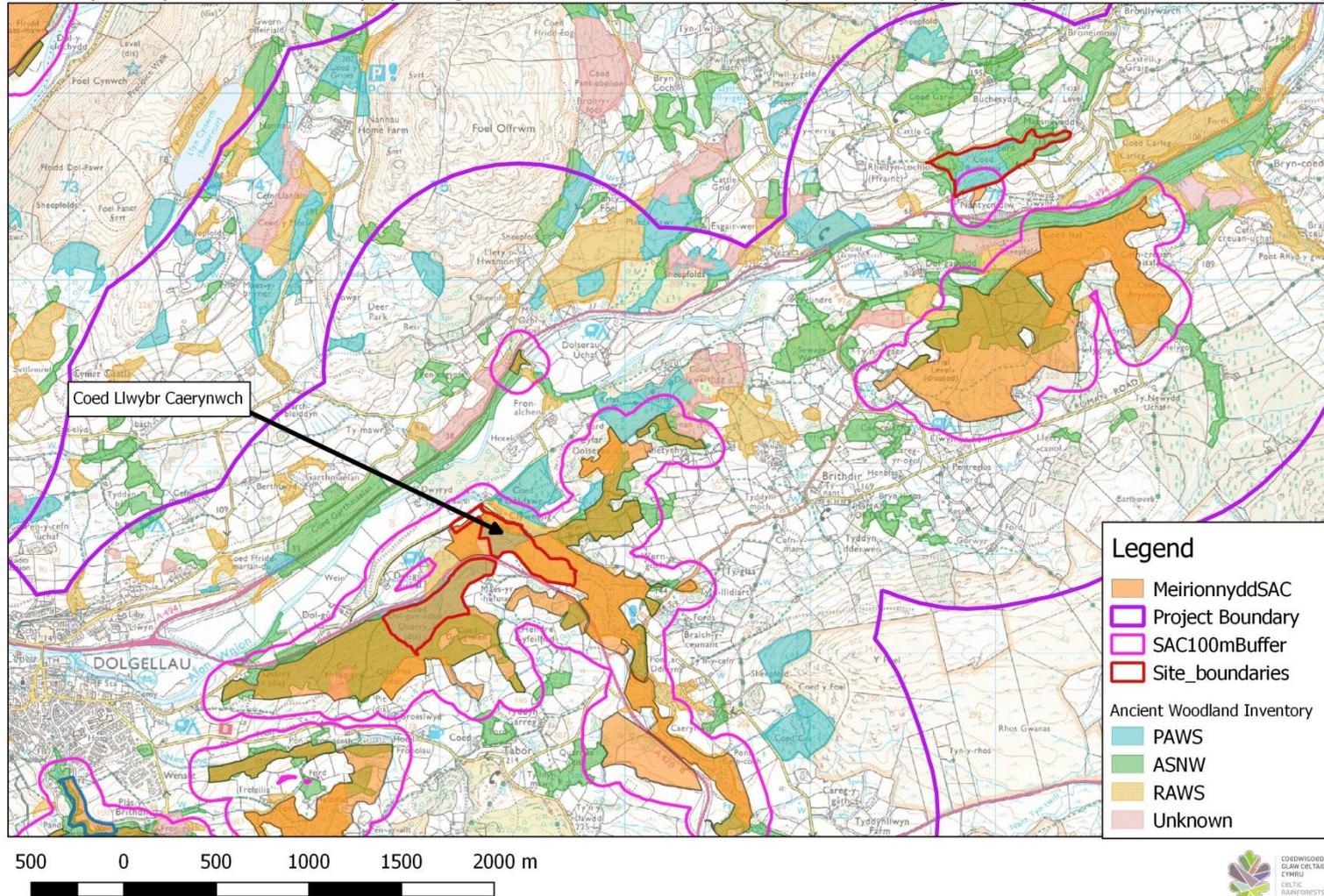
COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



COED CADW  
WOODLAND  
TRUST

## Celtic Rainforest Project 2020 – Woodland Survey

Coed Llwybr Caerynwch in wider landscape (showing two other sites that have been surveyed for the CR project locally)



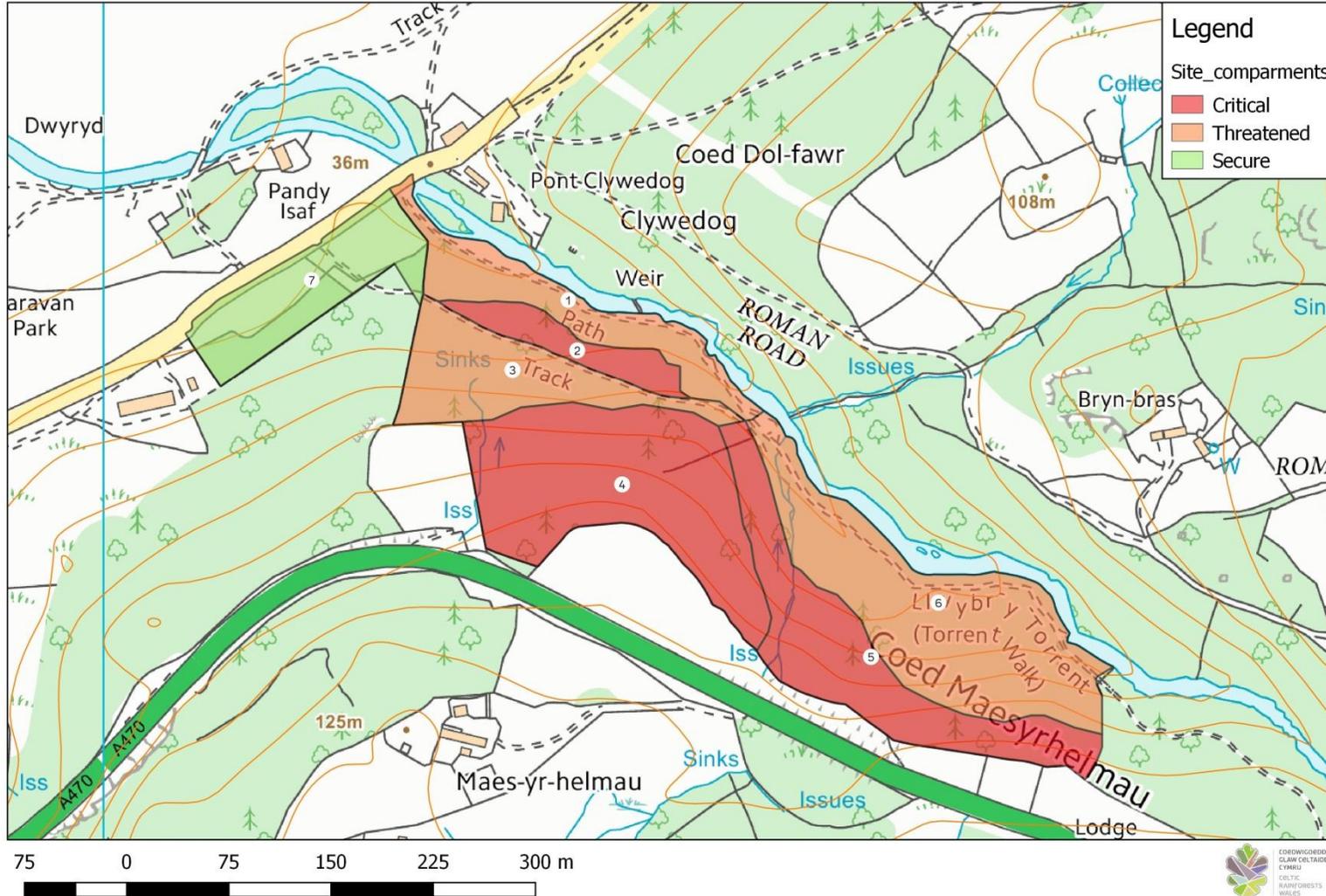


COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



# Celtic Rainforest Project 2020 – Woodland Survey

Coed Llwybr Caerynwch - Ancient Woodland Condition



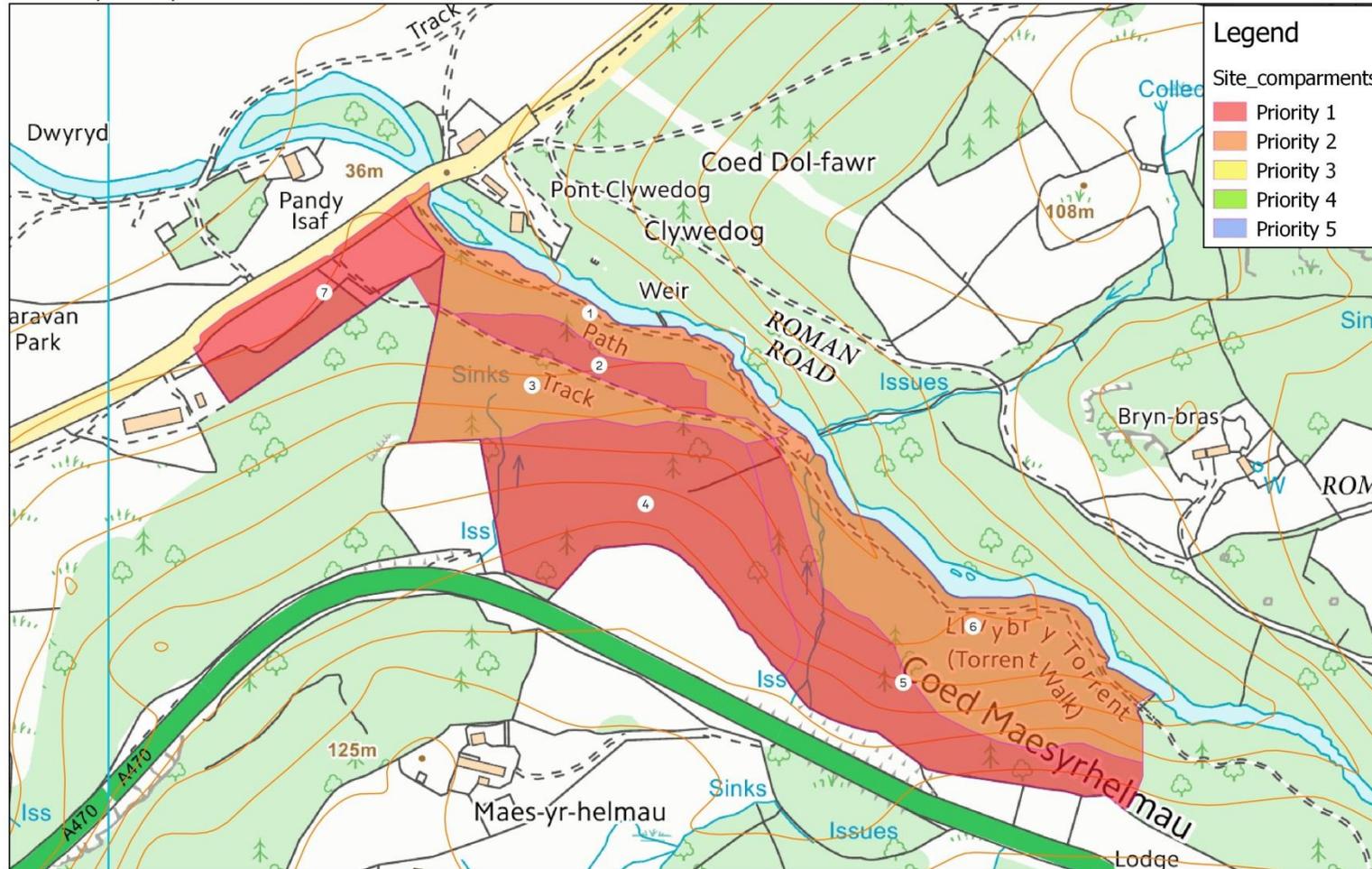


COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES

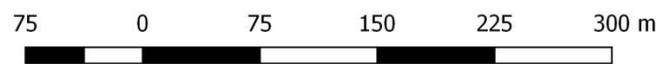


# Celtic Rainforest Project 2020 – Woodland Survey

Coed Llwybr Caerynwch - Restoration Priorities



Legend	
Site_compartments	
<span style="display:inline-block; width:15px; height:15px; background-color:red; border:1px solid black;"></span>	Priority 1
<span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span>	Priority 2
<span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span>	Priority 3
<span style="display:inline-block; width:15px; height:15px; background-color:lightgreen; border:1px solid black;"></span>	Priority 4
<span style="display:inline-block; width:15px; height:15px; background-color:lightblue; border:1px solid black;"></span>	Priority 5



# Celtic Rainforest Project 2020 – Woodland Survey



COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



Coed Llwybr Caerynwch - Aerial (taken from Bing)





COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



## Celtic Rainforest Project 2020 – Woodland Survey



Tithe map: 1 (1838-1855) Showing site in ownership of John Richards of "Dolgun Uchaf & Maesrhelme" taken from [places.library.wales](https://places.library.wales)

## Celtic Rainforest Project 2020 – Woodland Survey Ancient Woodland Remnant Features



COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



This report identifies the visible remnants of the ancient woodland still remaining on the site. Action to conserve and enhance these features is prioritised based on the level of threat, with attention being directed to those most at risk. The threat levels of the site (or compartments within the site) are considered in three categories; those being secure, threatened and most critical. The categories are colour coded for ease of identification with the document:

- **Secure:** likely to remain the same or improve given current conditions.
- **Threatened:** unlikely to be lost in the short term, given current conditions, but long term survival is doubtful without intervention.
- **Critical:** need urgent action to avoid irreversible, loss or serious deterioration.

Furthermore, a scoring system of 1 to 5 is used to help prioritise further in considering the short-term management aims (1 being highest priority), which will also take into account various operational constraints or other objectives:

- **Priority 1:** Critical works to offset an immediate risk e.g. halo thinning of dying pollards – Immediate action as is reasonably possible.
- **Priority 2:** Pressing work to threatened areas – Under take within 1 year.
- **Priority 3:** Works definitely to be completed in plan period – Undertake 1-3 years.
- **Priority 4:** More medium term work priority, might carry over into next plan period – Undertake 3-5 years.
- **Priority 5:** Longer term priorities e.g. thin to remove the last 10% of conifers on the site – Undertake 5-10 years.

Wherever possible, the approach is about gradual change, in particular the management of light levels, as most threats to remnant ancient woodland features may come from either excessive shade or light. The emphasis is not simply on replacing the plantation crop with native trees, and should seldom require rapid or complete removal of non-native conifers. Indeed, depending on the owners' objectives for the site, the report makes recommendations

## Celtic Rainforest Project 2020 – Woodland Survey



COEDWIGOEDD  
GLAW CELTAIDD  
CYMRU  
CELTIC  
RAINFORESTS  
WALES



on the potential for growing quality softwood timber through a more semi-natural system of silviculture. Sometimes, circumstances may mean that the most appropriate management is to fell and replant and where this is recommended the report will outline the reasons why.

A precautionary approach should be adopted towards all work on ancient woodland sites. This report attempts to identify as many important, and visible, features as possible. However it is not exhaustive in its scope, and there will likely be additional features found in future. Therefore it is prudent to assume that there may be vulnerable features present within any area of operations, and to therefore proceed with a degree of due caution at all times. An example of this is the importance of woodland soils, and their microbiology. Soils are particularly vital within ancient woodland, and it is crucial that they are considered during woodland management, irrespective of whether any more conspicuous features have been identified above ground.

General guidelines for best practice on ancient woodland sites are as follows:

- Avoid the sudden increase in light levels reaching large diameter deadwood and broadleaved stumps.
- Gently 'halo' thin around mature /ancient or veteran broadleaved trees and avoid excessive thinning and therefore exposure.
- Avoid harvesting machinery tracking across the rooting area of mature /ancient or veteran broadleaved trees and large diameter broadleaved deadwood /stump. Erect temporary fencing and/or hazard tape to protect such areas if at risk.
- Avoid harvesting machinery tracking over areas ancient woodland flora 'hotspots'.
- Avoid creating brash piles on ancient woodland flora 'hotspots'.
- Protect watercourses from damage and diffuse pollution through the creation of log & brash crossing points, brash mats, cut –off trenches and silt traps etc.
- Refuelling locations to be kept away from watercourses and ancient woodland features. Ensure contractor has spillage kits.