



Sefydliad Tir Gwyllt Cymru
Wales Wild Land Foundation

Coetir Anian  Cambrian
Wildwood

Cambrian Wildwood project proposal



Introduction

Cambrian Wildwood is a rewilding project run by the registered charity Wales Wild Land Foundation CIO.

The aims are:

1. To carry out habitat restoration, principally native woodland and heathland, over an area of about 3,000ha in the Cambrian Mountains of Wales.
2. To enable abundant wildlife to return to the area through habitat restoration and well researched reintroduction programmes.
3. To enable people to enjoy the wild area with trails and wild camping spaces, along with educational and adventure activities.

These will be achieved by carrying out projects on our own land and with neighbouring landowners, for example public forestry land. The charity aims to purchase around 1,200ha. An area has been identified which is ideally suited to this project, and a 140ha property in the heart of the area – Cefn Coch – is currently on the market.

The Cambrian Mountains cover roughly 2,000km², and our proposed project area represents 1.5% of this. In the long term, a reasonable target would be 5% of the Cambrian Mountains area, or 100km².

Maps are presented at the end of this proposal document.

To date, the trustees have raised around £20K towards land purchase, purely through volunteer input. At the same time, they have developed the project, run volunteer tree planting days, networked with other landowners and potential partners, and established a website.

It is recognised that a full-time paid project manager is required to continue to develop the project and raise the money for buying land. Waterloo Foundation has pledged £8K towards this on condition that we raise the rest of the funds needed, another £41K (see budget at end of document).

Significance of target area, including Cefn Coch



Panoramic view of Bwlch Corog, the hill section of Cefn Coch, mid view, from Pencarreg-Gopa

- Neighbouring state-owned forestry land.
- Neighbouring upland heathland SSSIs.
- Near to SAC and SSSI woodland sites.
- Neighbouring properties with potential for acquisition by charity.
- Within Dyfi Biosphere.

Cefn Coch neighbours state-owned forestry land on one side and private forestry on the other. We hope to work with Natural Resources Wales (NRW) to integrate part of the public land into the Wildwood. We have had some encouraging conversations with senior personnel at Welsh Government, and NRW have agreed to host Vincent Wildlife Trust's pine marten release programme in this woodland in 2016.



View of private forestry from Bwlch Corog

The 'New Wildwoods' reports of 2002 and 2003 (Land Use Policy Group) identify this model as an ideal way to approach the restoration of large areas of native woodland: with a charity acquiring land adjacent to public forestry land; and using a combination of reforesting open land and converting conifer plantation to native woodland. We aim to acquire the private forestry land in the longer term.



View of public forestry and Bwlch Corog

Neighbouring Cefn Coch and the forestry areas are two areas of upland heathland designated as Sites of Special Scientific Interest (SSSI): 'Pencarreg-Gopa a Moel Hyrddod' and 'Pencreigau'r Llan'.

Our plan for Cefn Coch is to restore the higher ground to heathland and sparse native trees, connecting the two SSSIs to create a large continuous area with greater resilience and ecosystem benefits: biodiversity, water quality and carbon storage.

There are also designated woodland sites nearby: Coed Cwm Einion Special Area of Conservation (SAC) and Cwm Llyfnant SSSI.

The plan includes restoration of native woodland at Cefn Coch and subsequently on the neighbouring land (see map on Page 12). This will ultimately provide a continuous area of woodland between the two valleys, and increase the resilience, landscape quality and wildlife benefits of the woodland habitat.

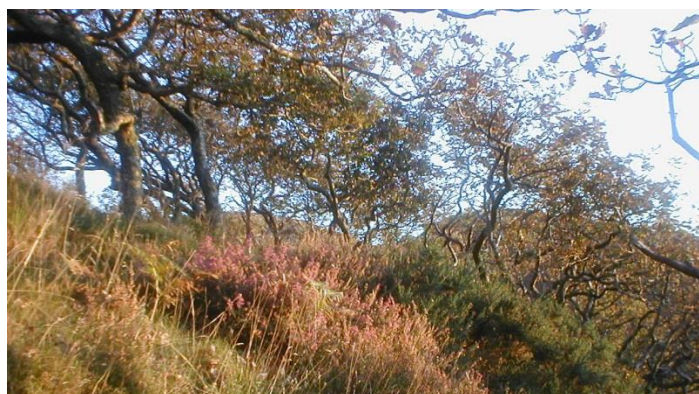
Another valuable factor in selecting this area for the project is that 5 properties neighbouring Cefn Coch are all potential acquisitions. Referring to the map on Page 12, the properties are Pemprys, Dynyn, Caerhedyn and two properties in the private forestry area, Brwyno and Maesycelin. The total area is about 1,200ha and we estimate that the sum we will need to raise for these properties is around £5 million.

Biosphere

Situated in the catchment of the Dyfi, the proposed Cambrian Wildwood area is part of the Dyfi Biosphere. Biosphere Reserves are nominated by national governments to be part of a UNESCO programme to demonstrate



Woodland colonising hillside at Craig Caerhedyn



Oak woodland and heather

sustainable development in harmony with biodiversity.

Currently, the Dyfi Biosphere area, in common with the British countryside in general, shows severe environmental degradation resulting in depleted biodiversity: see for example the 'State of Nature' Report published in 2013. The Cambrian Wildwood project will play a major role in fulfilling the aims of the Dyfi Biosphere, by restoring wildlife over a significant area of the Biosphere and by providing opportunities for people to enjoy the landscape and wildlife, contributing to the local economy in a sustainable way.

Habitat restoration

- Planting native woodland.
- Enabling natural colonisation of native trees.
- Converting conifer plantation to native woodland.
- Restoring heathland on degraded moorland.

Native woodland will be planted in suitable areas where the landscape is remote from any native tree cover. Most of Cefn Coch is remote from native woodland, and is dominated by purple moor grass. The whole area is suitable for tree planting, however the higher elevations will be left unplanted for the heathland restoration, where natural colonisation of trees will be accepted.



Cefn Coch: purple moor grass with young rowan tree

On other sites, large expanses of bracken will be the main areas targeted for planting.

Some areas will be near enough to seed sources of existing native woodland for natural colonisation to be an interesting and cost-effective way to allow woodland to return to the landscape. The photo to the right shows an area of moorland close to Cefn Coch – at Caerhedyn – where an absence of grazing has allowed heathland plant communities and sparse tree cover to return to the landscape.



Moorland regenerating with heather and trees

The experience at Knepp Castle (www.knepp.co.uk) in Sussex shows that woodland can develop in the presence of large herbivores in a lowland setting. It will be interesting to compare the development of upland areas with and without large herbivores (not including sheep or goats).



Woodland colonising bracken at Cefn Coch

Conversion of conifer plantations to native woodland will be achieved by felling conifer stands when they are mature enough to be harvested economically. Establishment of native woodland will be achieved primarily by planting to ensure that restocking conditions are fulfilled. Some areas will be suitable for natural colonisation.



Forestry near Dynyn showing harvesting

Where purple moor grass is dominating higher elevations, the landscape will be restored to an upland heathland habitat, where a richer diversity of plants will be present, including heather species, bilberry, and some tree species. This will be achieved primarily by removing sheep grazing and introducing larger herbivores, such as horses or cattle.



Heather and bilberry

Species reintroductions

- Pine marten and red squirrel.
- Large herbivores.
- Other species.

Many native animals are absent from the Cambrian Mountains due to centuries of pressure from humans, either directly through hunting or indirectly through habitat loss. Providing space dedicated to wildlife and restoring habitats over a large area will enable the return of many of the missing species, and the recovery of those with depleted populations.

Experience shows that when sheep grazing is removed from an area and native woodland is planted, many bird and insect species will readily re-colonise the area as conditions become

favourable to them. Some species are unlikely to return without deliberate reintroduction, either because they are less mobile, or because they are absent from the region.

The large carnivores – bear, wolf and lynx – are beyond the scope of Cambrian Wildwood for the foreseeable future because of the predominance of livestock farming locally. Other species will be considered on a case by case basis and appropriate studies carried out on their suitability for reintroduction.

Pine marten and red squirrel offer an interesting proposition for parallel reintroduction. In Ireland and Scotland, where pine marten has recolonised specific areas, the increase in pine martens has correlated with a decrease in grey squirrels and a subsequent increase in red squirrels. In these cases, remnant populations of pine marten and red squirrel provided sources for recolonization. The same process is likely to operate where the species are reintroduced.



Upland oak woodland

WWLF has started developing a project for parallel reintroduction of pine marten and red squirrel. Early on, we communicated with Vincent Wildlife Trust (VWT) about their Pine Marten Recovery Project and learnt that their initial region for the programme is the Cambrian Mountains. Two release zones have been chosen for 40 animals in total, with all release sites in state-owned conifer plantations. One of these zones is within the proposed Cambrian Wildwood area, with the releases scheduled for September 2016.

VWT will share information with WWLF on the development of the pine marten and grey squirrel populations over time. We will establish a captive breeding programme for red squirrel in partnership with a group of farmers. Wildwood Trust will provide consultancy input from Peter Smith and supply the first animals for the programme. Red squirrels will be released into the environment when conditions are right: data from other areas suggest this could be within 2 years of the pine marten returning, though conditions are slightly different in Wales, with a high vole population providing alternative prey for the marten.

Large herbivores are key elements in an ecosystem, providing a major influence on the development of habitats according to their population level and behaviour. A distinguishing feature of Cambrian Wildwood, as a rewilding project, is that these animals are considered as more than ‘management tools’, they are seen as wildlife themselves and a major part of the interest and excitement of a wild place. For these and other reasons, the project is unlikely to use domestic breeds as proxies, and will introduce wild or feral herbivores. True Nature Foundation is an official partner of the project and will be providing consultancy on the most appropriate species and breeds.



Exmoor horse

As an indication, horse is likely to be the first large herbivore in the project, with Exmoor the closest relative of the tarpan. Tarpan bones have been discovered at the coast near to the Cambrian Wildwood area. Roe deer are gradually colonising the region already, but are being held back by human hunting pressure. Red deer is an obvious candidate for reintroduction, with the nearest population in the Brecon

Beacons. To avoid the requirement for high fencing around an extensive enclosure, this species will depend on finding an agreement with neighbouring landowners.

Native bovine species are aurochs and wisent (European bison). Aurochs are extinct and the direct ancestor of domestic cattle. True Nature Foundation is pursuing a back breeding programme to restore the species. Wisent is the subject of a recovery programme at various locations in continental Europe. These species provide a potential challenge for public access. However, if the scale of the unfenced landscape is sufficiently large, and with intelligent access management, experience from other countries shows that conflict can be avoided. Rewilding is also about people embracing wildness and finding excitement and heightened interest in a landscape where some danger is present. WWLF aims to push at some of the boundaries in our over-safe society and help people to understand and appreciate wild nature.

Other species include a range of small and medium animals. The project will look initially at the least controversial.

There is a strong case for reintroducing water vole. It is absent from most of the Cambrian Mountains due to loss of habitat from sheep grazing along watercourses. With the removal of sheep from the project area, suitable habitat will develop almost immediately. Many successful reintroduction programmes around the UK provide valuable experience. Wildwood Trust will provide consultancy and supply animals.



European beaver

Beaver is a current hot topic, with the Knapdale trial recently completed in Scotland and wild populations established from unofficial releases in the Tay catchment in Scotland and the River Otter in England, as well as many reports of individual animals, for example on the Wye, the Severn and locally the Dyfi. Beaver can live in upland streams and the project will research the suitability of watercourses in the Cambrian Wildwood.

Mountain hare is known to have inhabited Snowdonia. Research is needed to ascertain the suitability of the Cambrian Mountains.

Wild cat is another candidate requiring further study. It is known to have existed in the Cambrians up to about 100 years ago. The question is whether a population can remain remote from domestic cats to avoid interbreeding.

Wild boar provides a controversial example due to the ground disturbance it creates and the perceived danger. Unofficial releases in southern England have established some populations, with the nearest around Ross-on-Wye. The species will take a very long time to migrate to the Cambrian Wildwood area. However, this could still be quicker than obtaining a licence for an official reintroduction to the area.

This list is not exhaustive, but it gives an indication of our strategy of returning larger species to the landscape and allowing these to create the habitats that enable all wildlife to thrive. At the same time, these species have an obvious visible presence which creates interest for people and we believe will attract new audiences to spending time in wild nature.

Access, education and culture

- Trails and wild camping zones.
- Schools programme.
- Hosting educational and cultural activities.
- Cultural connections with wildlife.

Our aim is to create a landscape as rich in wildlife as any nature reserve, and including the larger, more visible species, while enabling unrestricted public access across the area and encouraging people to stay in the wildwood by camping. This will be achieved by creating trails to make walking easier across the rugged ground. Over the long term paths will be kept clear of vegetation by volunteers. Camping zones or pitches will also be created to enable wild camping in attractive locations.

Outreach to groups such as children and young people from urban areas will aim to attract new audiences to nature and educate people about wild ecosystems.

The charity is currently developing a schools programme which will make use of a range of media including storytelling. This will be taken into schools both locally and further afield to educate and interest children in wild land and our native wildlife.

The charity will also develop activity programmes in the Cambrian Wildwood area and host groups, for example young people from urban areas. These may be carried out in partnership with specialised providers. Examples could be conservation work, bushcraft or photography.

An important element of the educational and promotional work is to draw attention to cultural connections with nature and wildlife.



Twrch Trwyth

Welsh mythology and poetry is particularly rich in such references.

In the Mabinogion, for example, there is the story of the Twrch Trwyth which features King Arthur and his entourage attempting to recover a golden comb from a notorious wild boar.

The story of Ceridwen and Gwion, who becomes the poet Taliesin during the course of the story, features metamorphosis into a series of different animals during a prolonged chase.

Storytelling provides a powerful medium for education and has a rich folk history to tap into.

Wales Wild Land Foundation

The charity was founded in 2007 to respond to opportunities for rewilding. Fundraising for land purchase started in 2013 when Cefn Coch came on the market. Prior to that we carried out tree planting in the area on behalf of other landowners and started promoting the Cambrian Wildwood.

Our Patron is George Monbiot and our President is Sue Jones-Davies. The charity is run by the Trustees on a voluntary basis. The team is extremely experienced and knowledgeable in the range of areas covered by our aims.

Dominick Spracklen – Associate Professor of Biosphere, Aerosol and Climate at Leeds University.

Lesley Hughes – Professional Accountant; Treasurer and voluntary Director of Finance for the charity.

Matthew Mitchell – Chartered Surveyor, specialising in rural property acquisition; voluntary Secretary for the charity.

Milly Hart – Environmental education professional and storyteller; voluntary Director of Education for the charity.

Nicola Charlesworth – Conservation professional, specialising in agri-environment schemes; research background in beaver ecology; voluntary Volunteer Coordinator for the charity.

Peter Taylor – Writer and environmental campaigner, one of the early proponents of rewilding, author of *Beyond Conservation: A Wildland Strategy* (2005); core group member of Wildland Network.

Rhun ap Iwan Rowlands – Forestry professional and artist; voluntary Director of Communications for the charity.

Simon Ayres – Chartered Forester, experience in large-scale tree planting projects and conversion of conifer plantations to native woodland; core group member of Wildland Network, member of Rewilding Britain's Landscape Committee; Chair and voluntary Chief Executive for the charity.

Sophie Wynne-Jones – Lecturer in Geography at Bangor University, with research specialising in rural policy; member of Rewilding Britain's Policy Committee.

The Cambrian Wildwood Project has been developed in detail, entirely by volunteer input to date. The charity is ready to take on land ownership and deliver the project. A recent grant has financed a range of exhibition materials and redevelopment of our website. Our education programme is in development. Delivery of the range of activities proposed depends on funding a full-time project manager.

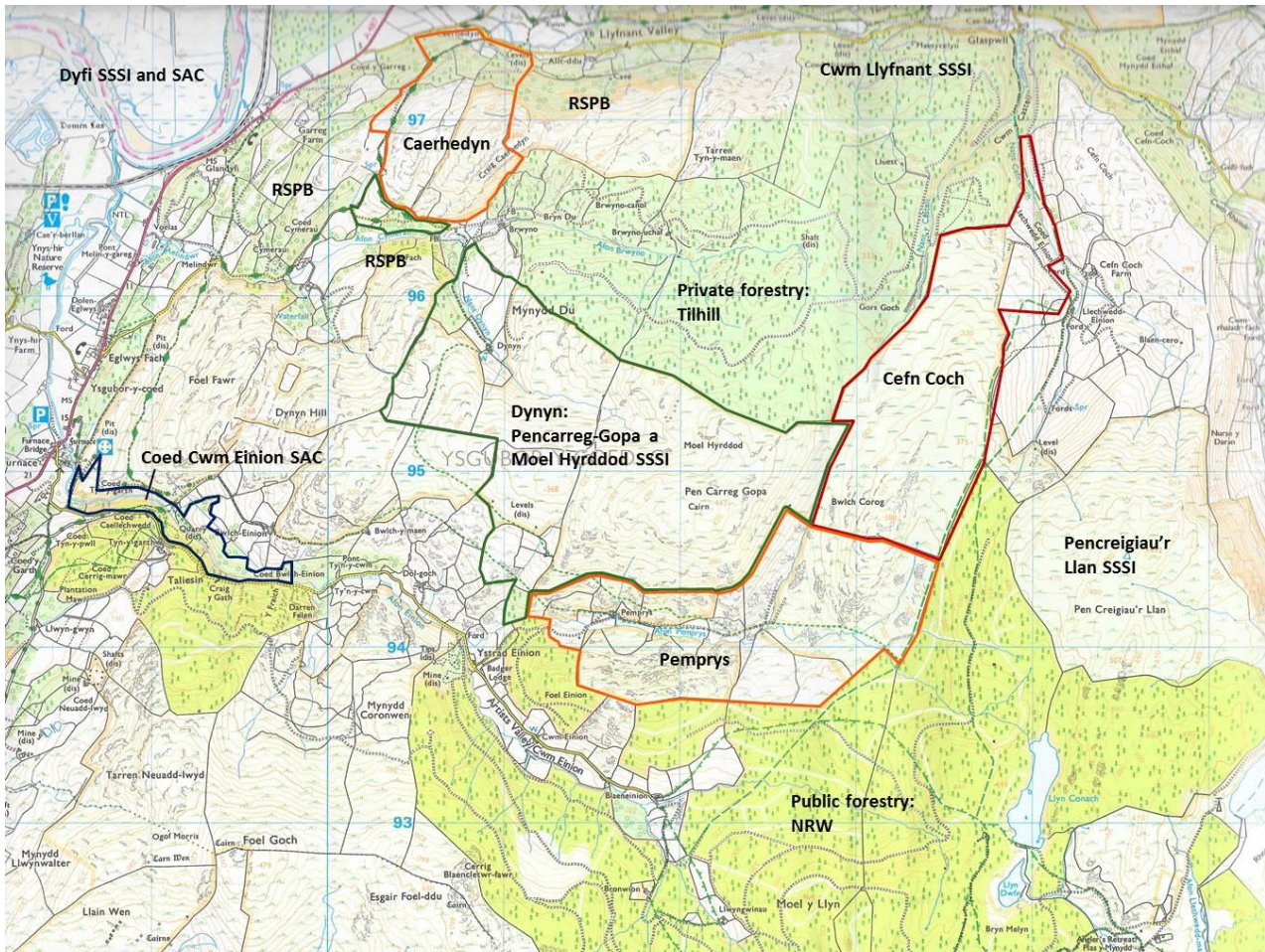
work days removing Himalayan balsam along the river, to protect native habitats from this invasive plant. We are developing a project to expand this work into all the affected parts in the catchment, and to finance contract work on balsam and Japanese knotweed. The charity is in discussion with Welsh Government about taking on ownership of land along the Rheidol on behalf of the local community, through the Community Asset Transfer mechanism.

Wales Wild Land Foundation also runs a project along the River Rheidol, just south of the Cambrian Wildwood area. We have led volunteer

Maps



Map showing location between Machynlleth and Aberystwyth, and scale of proposed Cambrian Wildwood



Map showing properties with potential for integration into Wildwood, plus designated and other sites

Mae'r Ardal Graidd yn cynnwys yr Ardaloedd Cadwraeth Arbennig canlynol:

The Core Area consists of the following SACs:

- A** Penllyn a'r Sarnau (rhan ohoni / part thereof)
- B** Cors Fochno
- C** Coed Cwm Einion

Pan fo rhan o Ardal o Ddiddordeb Gwyddonol Arbennig (SSSI) yn Ardal Cadwraeth Arbennig (SAC) yn ogystal, diffinnir yr Ardal Cadwraeth Arbennig fel Ardal Graidd a diffinnir y gweddill fel Ardal Ffiniol.

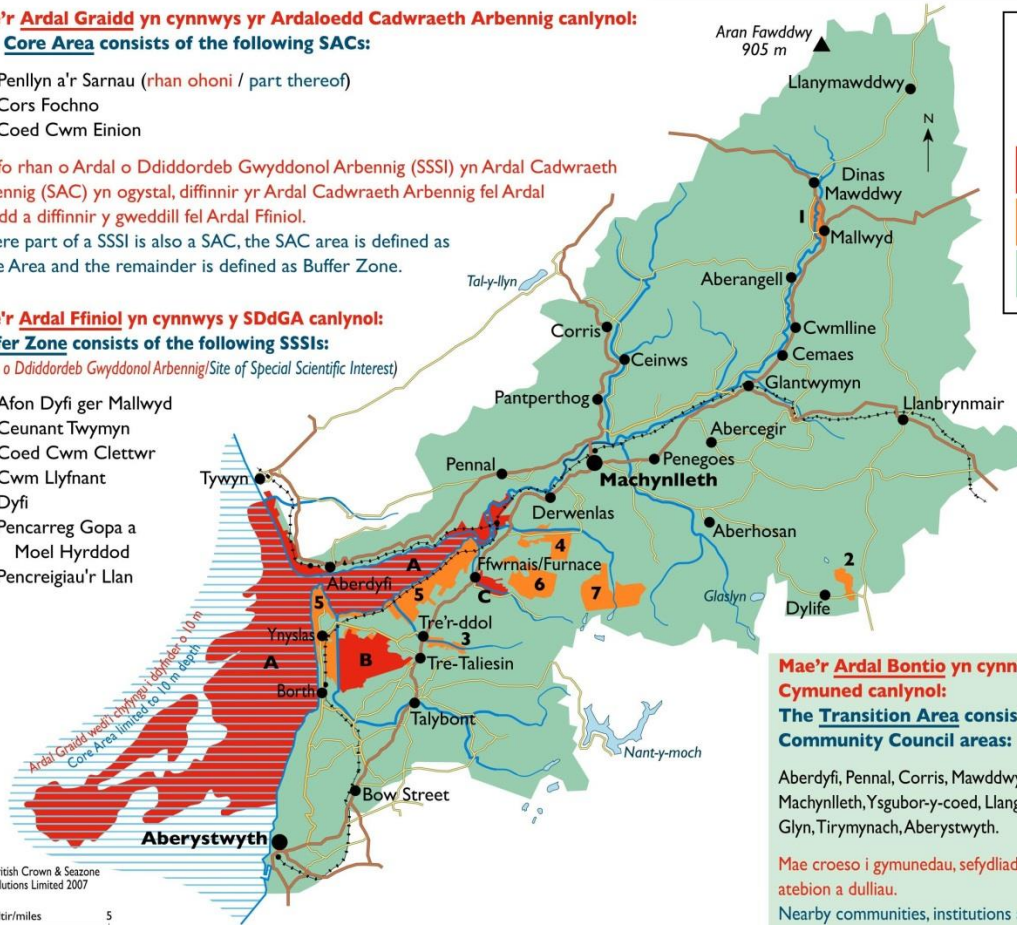
Where part of a SSSI is also a SAC, the SAC area is defined as Core Area and the remainder is defined as Buffer Zone.

Mae'r Ardal Ffiniol yn cynnwys y SDdGA canlynol:

Buffer Zone consists of the following SSSIs:

(Safle o Ddiddordeb Gwyddonol Arbennig/Site of Special Scientific Interest)

- 1** Afon Dyfi ger Mallwyd
- 2** Ceunant Twymyn
- 3** Coed Cwm Clettwr
- 4** Cwm Llyfnant
- 5** Dyfi
- 6** Pencarreg Gopa a Moel Hyrddod
- 7** Pencreigiau'r Llan



Biosffer Dyfi Biosphere map rhanbarthu dangosol indicative zonation map

Rhagfyr/December 2008

- Ardal Graidd/Core Area**
- Ardal Ffiniol/Buffer Zone**
- Ardal Bontio/Transition Area**

Mae'r Ardal Bontio yn cynnwys y Cynghorau Tref a Chynghorau Cymuned canlynol:

The Transition Area consists of the following Town and Community Council areas:

Aberdyfi, Pennal, Corris, Mawddwy, Llanbrynmair, Glantwymyn, Cadfarch, Machynlleth, Ysgubor-y-coed, Llangynfelin, Ceulanamaesmawr, Borth, Genau'r Glyn, Tirymynach, Aberystwyth.

Mae croeso i gymunedau, sefydliadau a busnesau cyfagos gydweithio trwy rannu atebion a dulliau.

Nearby communities, institutions and businesses are welcome to cooperate in sharing solutions and approaches.

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Dyfi Biosphere: note Core Area C and Buffer Zones 4, 6 & 7 in or near proposed Cambrian Wildwood area

Cambrian Wildwood Project Annual Budget: 2016

Project costs

Item	Cost	VAT	Total
Project Manager (Full-time)	£30,025	£0	£30,025
Pay on costs (Pension + NI) 26%	£7,807	£0	£7,807
Fundraiser (contractor)	£5,000	£0	£5,000
Office accommodation (£2,670/yr + VAT)	£2,670	£534	£3,204
Bills (£50 per month + VAT)	£600	£120	£720
Computer	£484	£97	£581
Printing, stationery, postage (£400/year + VAT)	£400	£80	£480
Mobile phone (£10/month + VAT)	£120	£24	£144
Training (£500/year)	£500	£0	£500
Car mileage (£667 /year + VAT)	£667	£133	£800
Total	£48,272	£988	£49,260

Project income secured

Source of income	Secured	Value
The Waterloo Foundation: grant offer	yes	£8,000
Total income secured		£8,000
Remaining funding requirement		£41,260

Simon Ayres
Chair

Sefydliad Tir Gwyllt Cymru Wales Wild Land Foundation

Di-ddofi ar waith – adfer cynefinoedd a rhywogaethau, cysylltu pobl gyda natur a mannau gwyllt
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