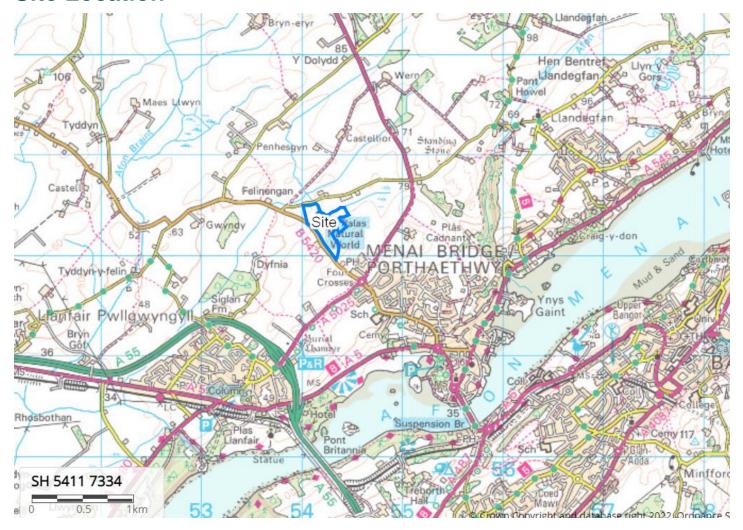
Woodland Creation at Ty'n Mynydd, Menai Bridge

Introduction

Natural Resources Wales (NRW) acquired the site at Ty'n Mynydd for the purpose of woodland creation in February 2022. This is part of NRWs programme to create new woodland, to compensate for woodland permanently lost from the Welsh Government Woodland Estate (WGWE) to meet policy commitments to maintain the woodland area of the estate and to takle the climate and nature emergencies.



Site Location





The site lies half a mile to the North East of Menai Bridge. The B5240 runs along the southern boundary and leads to Penmynydd, a few miles to the North-East. Pentraeth Forest is the nearest NRW woodland, around 5km to the north.

Site Context

Situated on the Penmynydd Road, around half a mile from Menai Bridge and opposite 'Pili Palas Nature World', the red boundary in the map below shows the extent of the site.

The area is 10.93 hectares consisting of six fields of agricultural land. This is improved grassland that has previously been used for grazing and silage. The fields are bounded by the remains of cloddiau, with a small watercourse on the Northern Boundary. The surrounding land is also agricultural, there are small areas of woodland in the surrounding area, connected by a network of hedgerows, however the overall percentage of tree cover in the area is low. The topography is gently undulating.

The closest Welsh Government Woodland Estate is the Pentraeth block, around 5km to the North of the site.

- 1. Between points one and two a small watercourse runs along the site boundary to the North-East, joining a minor river to the North of the site.
- 2. As above.
- 3. A small area of semi natural grassland (as shown on phase one mapping), showing evidence of greater species diversity than the remainder of the site, guite wet ground.
- 4. Two high voltage powerlines cross the site, meeting at point 4.
- 5. Existing mature hedgerows form the existing field boundaries
- 6. A small depression that is wet and likely to hold standing water during times of heavy rainfall.
- 7. This boundary is a stone wall, with a pile of rubble/large stones where it meets the road boundary in the south.



Ecology and Biodiversity

The site is largely improved grassland with a small area of species poor semi-improved grassland. The field boundaries are hedgerows with hedge banks.

There are no designations on or near to the site.

Overall the percentage of woodland cover on Anglesey is low, around 4%.

Anglesey is an important stronghold for red squirrel. Tree species such as large seeding broadleafs (for example hazel) and conifers such as pines provide a good food source for red squirrels. Aerial connectivity is also important so squirrels can move around the landscape.



Landscape

The landscape character area for central Anglesey provdes the following summary description:

The area forms the agricultural core of the island, the part that earned it the name of 'Môn mam Cymru', 'Anglesey mother of Wales'. Although it's a gentle lowland landscape, the south-west to north-east geological trend of fault lines influence changes in topography, with a few hills and rock outcrops. In addition there are a number of fens and extensive areas of drumlins, especially in the north and west. But for the hedgerows, 'cloddiau' hedge banks and occasional sheltered copses and areas of scrub, the area has an open, rolling and windswept character. It is the least wooded lowland landscape in Wales. The interior is rich in archaeology, as well as in tales and traditions. Strong elements of the Medieval landscape survive, in the form of remote churches and place-names, though the clearest imprint on the area's landscape occurred in the 19th century, with the construction of Thomas Telford's London to Holyhead post road, the Chester to Holyhead railway and the substantial estate-sponsored courtyard farm settlements, many of which are now falling into disrepair. Although generally rural, the county town of Llangefni has expanded with new housing and industrial estates during the C20th, which are visible from surrounding countryside. The rural area has not been subject to the level of tourism and recreation activities that affect the adjacent coastal area. However two large reservoirs have been built, and more recently a completely new dual carriageway route has opened across the area.

The area is predominantly agricultural, with strong field patterns. The site slopes gently to the South West, however the whole site is not overly prominent in the landscape due to the elevation and the hedgerows.

Historic Environment

A number of historic features are present on and around the site and within Anglesey including ancient sites. A full study of the site and surrounding area was commissioned and carried out by Gwynedd Archaeological Trust.

The research concluded that the proposed scheme was located within a local agrarian landscape, with prehistoric, Roman, medieval and post-medieval activity present in the wider area. The only known archaeological feature within the proposed scheme is the site of a standing stone, no longer present, whilst a hollow, a former field boundary and plough markings were identified as possible features.

The study provided a set of recommendations including that

- a 10m buffer is given around the hollow (shown as the yellow circle on the the photo below
- boundary walls and 'Clawdd' features are also preserved as part of the planting design.

A copy of the full report is available.





Soil

The land is moderately exposed with 'medium' soil nutrients and 'very moist' soil moisture.

The soil survey of England and Wales indicates the following regarding the soils. This is broadly confirmed by on site investigation of the soils and means the soils are suitable for a wide range of tree species.

Soilscape 6:

Freely draining slightly acid loamy soils

Texture: Loamy

Drainage: Freely draining

Fertility: Low

Habitats: Neutral and acid pastures and deciduous woodlands; acid

communities such as bracken and gorse in the uplands

Landcover: Arable and grassland

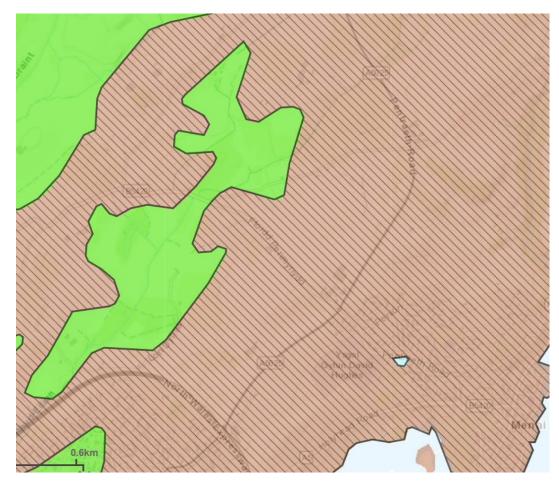
Carbon: Low

Drains to: Local groundwater and rivers

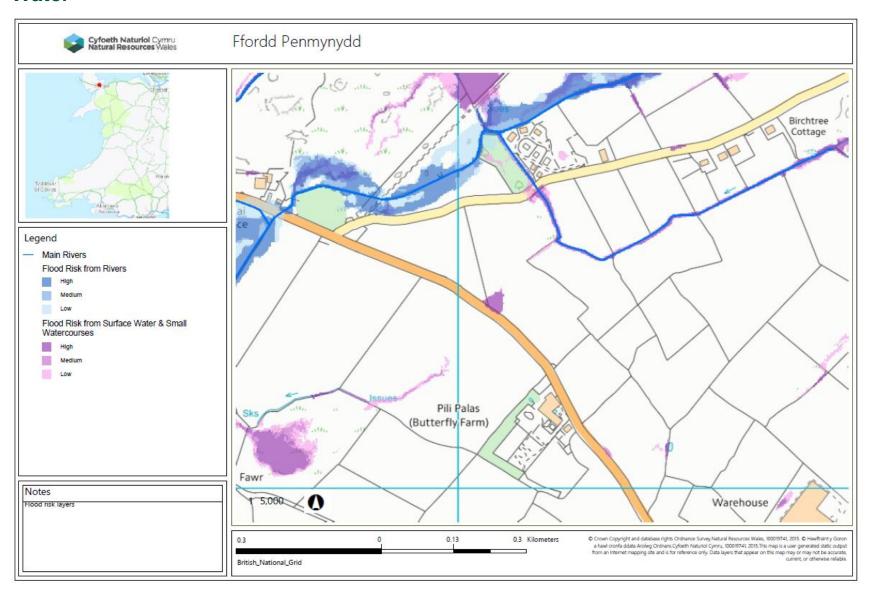
Water protection: Groundwater contamination with nitrate; siltation and nutrient enrichment of streams from soil erosion on certain of

these soils

General cropping: Suitable for range of spring and autumn sown crops; under grass the soils have a long grazing season. Free drainage reduces the risk of soil damage from grazing animals or farm machinery. Shortage of soil moisture most likely limiting factor on yields, particularly where stony or shallow



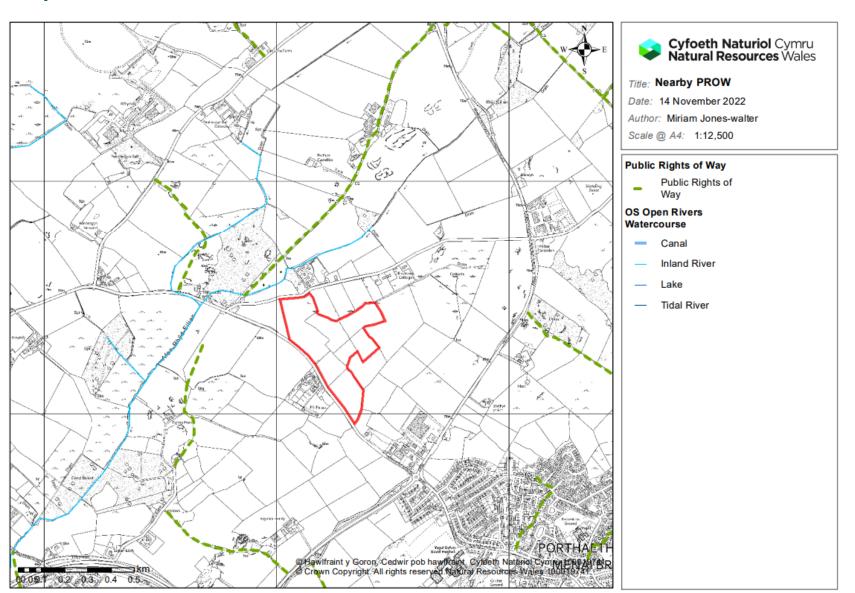
Water



There is minimal flood risk to the site or the immediate surroundings.

The introduction woodland and removal of agricultural inputs and ground disturbance has the potential to reduce some of the risks to water quality indicated by the soil type.

People



The site is overlooked by Pili Palas Nature World to the South, and some residential and holiday dwellings to the North.

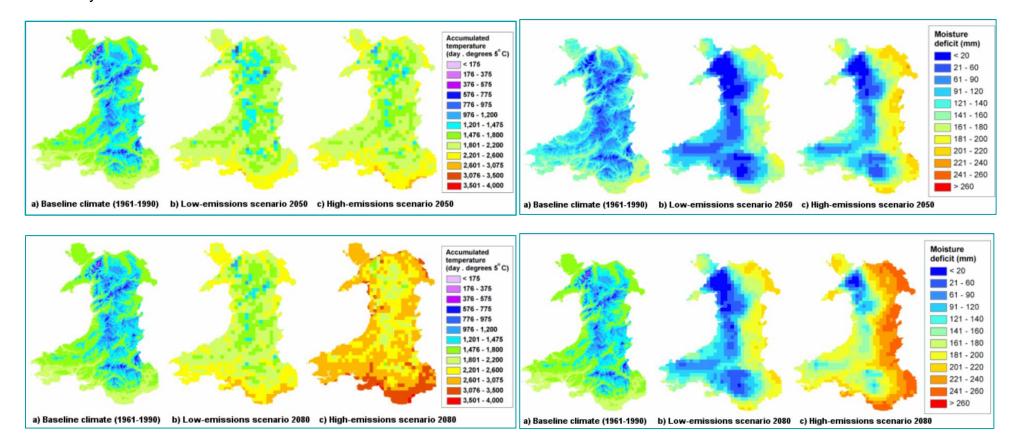
There are local populations nearby who could utilise a publicly accessible green space. Despite the fact that site is only half a mile outside of Menai Bridge, direct access is via the B5420. There is no pavement, the traffic is fast and visibility is poor, making access to Pili Palas and the site potentially dangerous on foot.

There are no existing public rights of way that cross the site, several are near to the site and have the potential to provide connectivity to the site.

Climate Change

Climate change projections show the site is likely to become warmer and drier in the future. The climatic zone for this area of Wales is currently described as 'warm and moist'. In high emissions scenarios much of lowland Wales will be dominated by a 'Warm and dry' climatic zone. This alters the types of vegetation that are likely to be supported in these areas. It is also predicted that extreme weather events will increase.

The climatic zone is 'Warm and moist' (Warm, sheltered, moist). High emissions scenarios for climate change show this area transitioning to a 'Warm dry' climate.



Public Consultation results

In June 2022 we held a consultation to inform the public about our plans and provide an opportunity for people to raise concerns, questions and ideas for the site. This was done through an online consultation on citizen space and a drop-in event at Canolfan Esceifiog, Gaerwen. We also directly contacted the neighbours to the site and other key local stakeholders such as community councils, the county council, Senedd member and MPs. The consultation was advertised via a press release and social media channels.

We received a total of 57 responses. These were a combination of online (via citizen space), at our drop in event and by email and letter. We received 49 responses to the survey which provided an opportunity to input 'free text' comments, the remainder were general comments about the plans.

Overall the responses indicated that biodiversity is perceived at the most important objective for woodland generally and specifically at this site, this was followed by 'people/access' and then climate change.

In terms of access, the greatest response regarding travel to the site was 'car/motorbike' but often this was qualified with comments regarding the current accessibility and safety of accessing the site on foot or not in a vehicle. If we are to meet our objectives, a clear priority will need to be establishing safe non-vehicular access.

Much of the interest in the comments provided are difficult to quantify. However an analysis categorises them into four key themes. Firstly we received many enthusiastic and useful contributions to a woodland design which we can incorporate as we plan the finer details. Secondly we received a substantial amount of responses that referred to the development at Penrhos Woodland which is not within scope of this project and we will pass on to the relevant authority.

Thirdly and fourthly we received comments regarding continued agricultural food production, and community and educational use of the site.

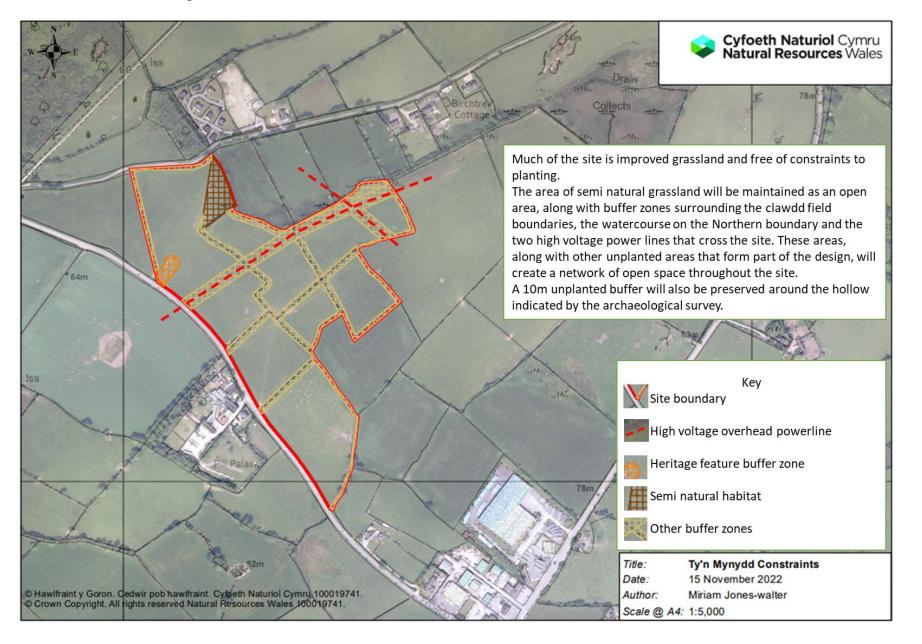
Unlike community/educational use, food/agriculture did not feature in the objectives for the site that we based the consultation and original design on. This issue has been the subject of media coverage and we understand the strong feeling attached to this therefore feel it important to consider this further. This has therefore been considered in the objectives and our approach to developing the site.

Objectives

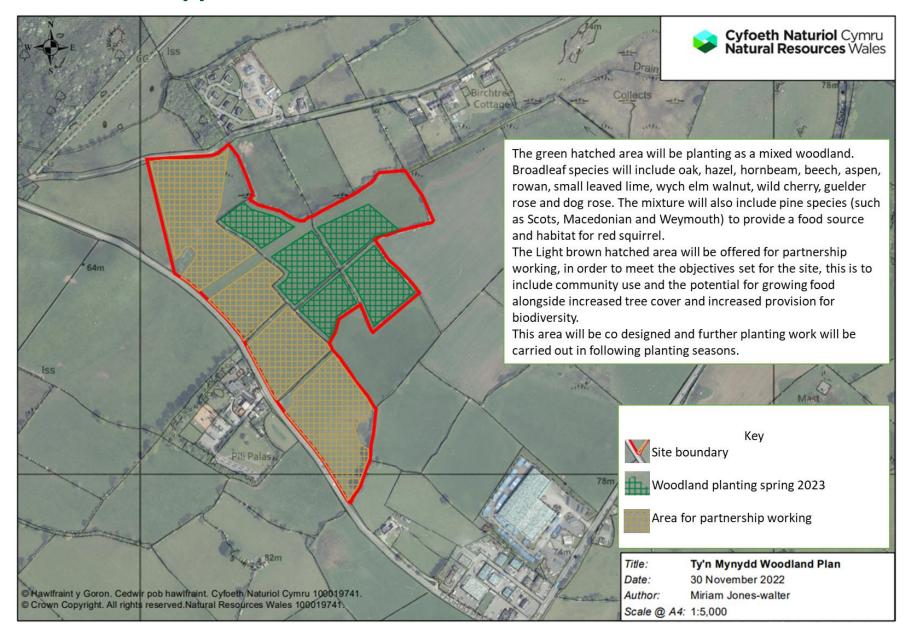
These objectives have been informed by the wider objectives for the programme, the site conditions and the feedback we have received from stakeholders on our plans for the site.

- Enhance biodiversity through creating, restoring, and connecting habitats
- Work in partnership to deliver sustainable opportunities to grow food, trees, nature.
- Maximise woodland resilience to future climate change
- Establish a safe, low-key, accessible, outdoor space for recreation
- Create a woodland that is inkeeping with the Anglesey landscape character

Woodland Plan: Key Features and constraints



Woodland Plan: Opportunities



Design Principles

The woodland will be planted as a mixed woodland using the following principles:

- The overall aim will be to achieve a Multi-storeyed stand dominated by Pedunculate Oak (POK) with Hornbeam (HBM) in middle and understorey. Minor species to include Hornbeam, Beech, Small Leaved Lime, Aspen, Rowan, Wild Cherry, Wych Elm, Walnut, Wild Service Tree.
- Shrubs to include abundant Hazel and pollinator frieldly species such as crab apple, guelder rose, damson, dog rose and others.
- Establishment: planting of 20 30 individual POK in clusters (with 0.3 1m spacing between trees) to encourage future standards with high future timber value. HBM and other minor species planted around POK clusters. Minor species at lower densities between clusters.
- The intention will be to establish a graduated edge between areas of open space and woodland, open rides will gradually blending into shrubs and the woodland canopy, using scalloped edges to create irregularity.
- Mixed pine species (to include, Scots Pine, Weymouth Pine and Macedonian pine) will be planted in small, irregular groups on the woodland fringes to provide habitat for red squirrels.
- Open space to be maintained around all the features set out on the constraints map.

Partnership working opportunity

In response to the public consultation we have decided that initially we will plant the area set out above and leave open the area marked as 'partnership opportunity'.

For this area we will create an opportunity for groups or individuals to submit ideas for this area, that will meet our objectives for the site, in particular that of 'Work in partnership to deliver sustainable opportunities to grow food, trees, nature.'.

For example, ideas might include community woodland, community agriculture or food growing, silvo pasture, orchards or any combination of ideas like this.

We will work with successful submissions to co-design the partnership opportunity and enter into an agreement with us.