



© Crown copyright and database rights 2013 Ordnance Survey 100019741

## Bae Tremadog – Disgrifiad cryno

Dyma gesail ogleddol Bae Ceredigion, tir llawr gwlad hynod ddiddorol a phrydferth. Dyma'r tir rhwng y môr a'r mynydd. I'r dwyrain o Borthmadog mae sawl aber tywodlyd gyda halwyndiroedd, ac i'r de mae milltiroedd o draethau agos-barhaus, ac weithiau anghysbell, â thwyni tywod y tu cefn iddynt. Mae'r tiroedd eang tua'r gorllewin o gymeriad mwy amaethyddol.

Mae'r fro'n gwrthgyferbynnu'n drawiadol â'i chefnidir mynyddig, Llŷn ac Eryri. Mae'r ddau Moelwyn, Y Cnicht, Y Rhinogydd, Yr Eifl a hyd yn oed yr Wyddfa oll yn amlwg iawn i'w gweld. Yn ymyl Porthmadog, mae mynydd ynysig llai, ond garw, Moel-y-gest yn codi'n ddisymwth o dir yr ardal hon. I'r de o Borthmadog mae'r môr a'r mynyddoedd yn cyfyngu ar led llawr gwlad, a dau'r ddau at ei gilydd ychydig i'r de o Friog.

Mae llawer o bentrefi yma, ac yn gyffredinol, cymeriad gwledig, amaethyddol sydd i'r fro, ac eithrio yn nhrefi Abermo, Porthmadog a Pwllheli a'u cyffiniau. Ceir eglwysi glan môr hynafol a chestyll mawrion ar hyd y glannau, i'n hatgoffa o ba mor bwysig oedd y môr ar gyfer teithio, a phwysigrwydd strategol yr ardal hon. Awgrymir hyn yn y cysylltiad a geir, yn y Mabinogi, rhwng Harlech ac Iwerddon: ac yn ddiweddarach, adfywiwyd trefi canoloesol Pwllheli, Cricieth, Harlech ac Abermo gan dwf twristiaeth yn y 19eg ganrif.

Yng nghyffiniau'r Traeth Mawr a'r Traeth Bach, lle mae Glaslyn a Dwyrdd yn llifo i'r bae, tyfodd aneddiadau hynod Tremadog a Porthmadog, a adeiladwyd yn sgîl codi morglawdd William Madocks. Daeth Porthmadog yn un o borthladdoedd llechi mawrion Cymru, yn enwog am ei "iotiau cefnfor y gorllewin", y sgwneri fu'n cludo llechi Blaenau Ffestiniog ledled y byd. Mae'n enwog, hefyd, am y rheilffordd fach a gludodd y llechi ar ran gyntaf eu taith o fwyngloddiau'r bryniau, ac a ddenodd beirianwyr o Rwsia a'r America yn y 1870au, i'w hedmygu a'i dynwared.

Ceir pentref ffantasiol, Eidalaid Porthmerion yma. Hefyd. Mae rhannau o arfordir Arduwy o fewn Parc Cenedlaethol Eryri, a Chastell Harlech yn Safle Treftadaeth y Byd. Mae'r ardal eto'n boblogaidd iawn ar gyfer twristiaeth, gyda thraethau, chwaraeon dŵr, cestyll ac adeiladau hanesyddol, y rheilffyrdd a'r mynyddoedd yn cyfuno ag etifeddiaeth ieithyddol gref i ddarparu profiad hynod Gymraeg.

## Summary description

This is the northern crook of Cardigan Bay, a lowland coastal region of exceptional interest and scenic beauty. It forms the land between the sea and the mountains. To the east of Porthmadog there are extensive sandy estuaries with salt marsh, to the south there are miles of near-continuous and sometimes remote, dune-backed sandy beaches, whilst to the west lies a notably more extensive agricultural hinterland.

The area contrasts dramatically with the adjacent and enclosing mountain backdrop of northern Llŷn and Snowdonia. The Moelwyn peaks, Cnicht, the Rhinogydd Yr Eifl and even Snowdon stand out in views. By Porthmadog, the smaller but rugged outlying peak of Moel-y-gest rises dramatically out from this area. To the south of Porthmadog, the sea and mountains constrain the width of the area, ultimately meeting just south of Fairbourne.

The area contains many villages and generally retains a rural, agricultural character, except in and around the towns of Barmouth, Porthmadog and Pwllheli. Ancient coastal churches and great castles overlook the shore, being reminders both of how important the

sea was for travel and of the strategic importance of this region. This is echoed in the link drawn in the Mabinogion tales, between Harlech and Ireland, while in later times, the Medieval settlements at Pwllheli, Criccieth, Harlech and Barmouth were all revitalised with the growth of tourism in the 19th century. Around Traeth Mawr and Traeth Bach, where the rivers Glaslyn and Dwryd flow into the bay, the remarkable settlements of Tremadoc and Porthmadog grew up, built around William Madocks's sea-defence works. Porthmadog became one of the great slate ports of Wales, famous for the 'western ocean yachts', the distinctive schooners that carried Blaenau Ffestiniog slate all over the world. It is also famous for the narrow-gauge railway that transported the slates on the first leg of their journey from the mountain mines, and which in the 1870s brought engineers from Russia and America to admire and emulate.

The fantasy Italianate village of Portmerion is also located here. Parts of the area along the Ardudwy coast are within the Snowdonia National Park, while Harlech Castle is a World Heritage Site. The area remains very popular for tourism today, with beaches, water sports, castles and built heritage, the railways, and the mountains combining with a strong linguistic heritage to provide a very distinct Welsh experience.

Key Characteristics
<b>The lowland fringes of northern Cardigan Bay.</b>
<b>Hemmed in by steeply rising uplands</b> of both Llŷn and Snowdonia.
<b>Mainly a soft coastline</b> – with only a few rocky headlands. Some substantial sections of sandy beach and dunes.
<b>West of Criccieth</b> - is a broader, pastoral, coastal landscape, backed by the Rivals.
<b>East of Criccieth</b> - east the mountains closely constrict estuaries, levels and the well developed dune systems. In places along estuaries the rugged and upland character runs down to sea level.
<b>The active Dwryd - Glaslyn Estuary</b> - considered as one of the most outstanding bar built estuaries in Britain.
<b>Coastal dunes and associated habitat</b> - such as marsh and dune grass form the backdrop to the long sandy beaches at Morfa Harlech and Morfa Dyffryn. There is significant ecological interest and diversity in the terrestrial and marine habitats associated with the Dwryd Estuary at Morfa Harlech.
<b>Lowland pastoral and hill sheep grazing</b> – more especially on Llŷn, where there is a more extensive lowland hinterland .
<b>The castles of Harlech</b> (World Heritage Site) <b>and Criccieth</b> - occupy strategically important coastal promontories and form part of a chain of castles around North Wales.
<b>Archaeology</b> - The area contains a rich diversity of smaller scale archaeological features dating from the prehistoric period onwards.
<b>Porthmadog Bar</b> - The upper Glaslyn Estuary was one of the most ambitious 19th century land reclamation schemes in Wales and included the conscious creation of new landscapes including extensive pastoral farmland.
<b>Portmerion</b> - The architecturally eclectic 1920's Italianate 'fantasy village' is a significant site and tourist attraction within the area.
<b>Settlement pattern</b> – principle settlements are along the coastline at river mouths and by castles on defensive headlands. Much smaller, inland villages and hamlets are frequently associated with Early Christian churches. Porthmadog was a slate exporting port.
<b>Tourism</b> – a very popular but still largely rural coastal landscape, including by contrast a number of very large and conspicuous caravan and chalet parks.
<b>Cultural identities</b> – a wide range of influences: nearby Llŷn and Snowdonia, coast and upland, rural and resort, agricultural and industrial heritage, functional and inspired architecture, a strong Welsh speaking tradition and a popular visitor destination.

## Visual and Sensory Profile

Sandwiched between mountain and sea and stretching around much of the northern end of Cardigan Bay, this is a predominantly rural, lowland landscape of rolling hills, coastal levels, estuaries, dunes and beaches. Access from all directions but Caernarfon and Llŷn is across the dramatic mountains of Eryri, and these provide an imposing visual backdrop. This is nowhere more so than around the two main estuaries that emerge - the Dwyryd - Glaslyn, and the Mawddach. There is a strong sense of arrival on reaching the coast, being the destination for many of the visitors who come, with memorable views across Tremadoc Bay to the mountains of Llŷn and in the opposite direction to the Rhinogydd.

There is great diversity of character within the area itself. West of Porthmadog, the landscape is broader, rolling and pastoral, with hedges, woodlands, scattered villages and a sense of quietness away from main roads and coastal tourism, for example, along the sylvan old green lane known as Lôn Goed. Along the coast, road and rail link main settlements and a number of holiday developments. The settlements closely relate to coastal features: the estuary and harbour at Pwllheli; the lowest crossing point on the Afon Dwyfor at Llanystumdwy; a fortified headland and sheltered bay at Criccieth and the popular Black Rock Sands beach near Morfa Bychan for example.

East of Porthmadog, the mountains of Eryri encircle dramatically on three sides and contrast with the flat coastal levels and sands of the Dwyryd - Glaslyn Estuary. A tongue of low rocky hills, partially wooded, divides the the estuary, upon which is the picturesque Italianate model village of Portmeirion - Clough Williams Ellis's inspiration that sensitively captures the potential of built form to enhance the natural setting and vice-versa.

South of the Dwyryd – Glaslyn Estuary and running down as far as the next major estuary, the Mawddach at Barmouth, there is a narrow, soft coastal plain, squeezed between the sea itself and the steadily rising Rhinogydd mountain sides. Characteristic for much of the length are wide, sandy beaches, backed by extensive and well-developed dune systems at Morfa Harlech and Morfa Dyffryn, that still retain some quiet expanses of sand despite some prominently visible caravan sites and popular visitor access points. Inland, a still rural agricultural landscape retains some of Wales's most impressive stone walls, though the expanding villages and holiday and leisure related developments are often in contrast. The elevated hillside landmark of Harlech Castle, with its adjacent historic village, commands views over much of Tremadoc Bay.



Llanfair looking towards Llandanwg. Note the walled fieldscape, the many C20th houses in it, and the extensive coastal dunes (Morfa Dyffryn) in the background. © John Briggs



Llanfair from Llandanwg, illustrating the well conserved stone wall fieldscape but with many new C20th houses extending from the historic village core. © John Briggs



Porthmadog Harbour, with much late C20th tourism-related redevelopment, and the vast, partially reclaimed Glaslyn Estuary beyond, backed by distinctive Snowdonian mountains such as Cnicht (above the bridge), Moelwyn Mawr and Moelwyn Bach. © John Briggs



The lowland hinterland between coast and mountains, to the east of Porthmadog. © John Briggs



The extensive Glaslyn Estuary is still prone to occasional flooding. © John Briggs



The coastal town and visitor destination of Criccieth, and its setting. The near mountain to the right is Moel-y-gest, which rises out from this character area but is clearly of a character that relates more closely with the nearby Snowdonia. © John Briggs



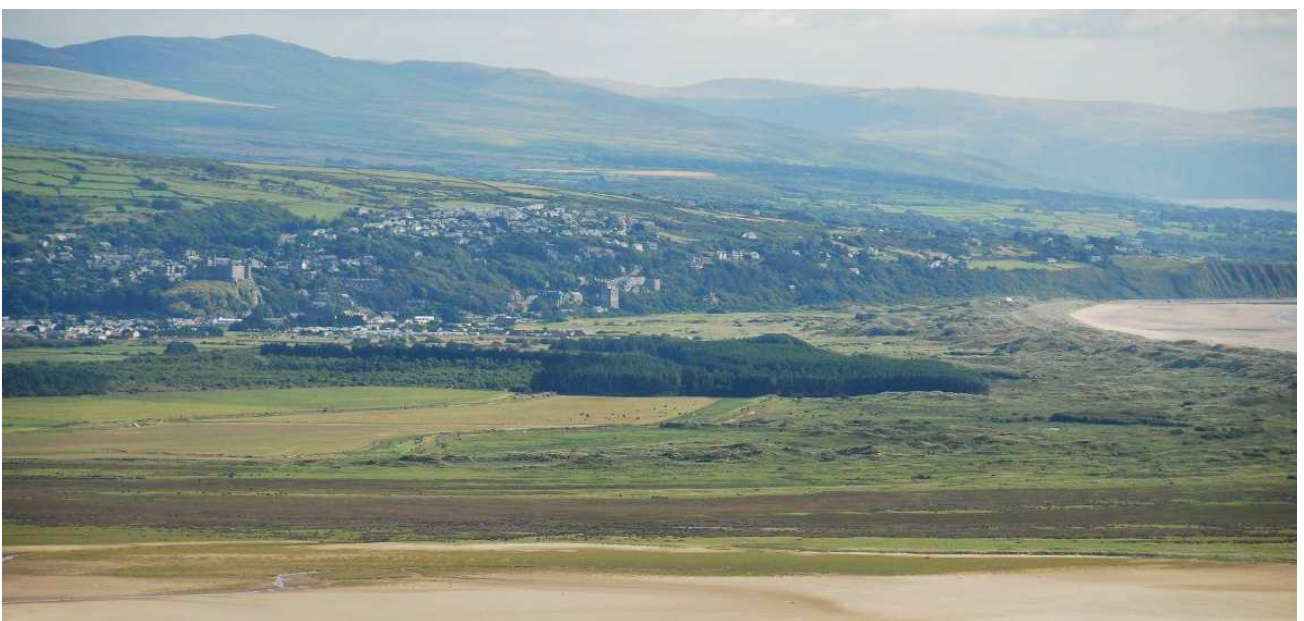
Morfa Bychan near Porthmadog, illustrating extensive dunes along a soft coast and much evidence of tourism related land use and visitor numbers. © John Briggs



Substantial undeveloped sections of soft coastline, such as at Morfa Harlech. © John Briggs



The view west from Moel-y-gest , looking across the coastal landscape of Tremadoc Bay, with Criccieth and it's castle in the foreground and the hills of Llŷn in the distance. © John Briggs



View from Moel-y-gest, looking south across the Dwyryd - Glaslyn Estuary and Morfa Harlech, towards Harlech and its castle in the distance. © John Briggs



The coastal plain near Harlech, with more wooded hills bordering the Dwyryd Eestuary in the middle distance and contrasting with the spectacular, rugged mountains of Eryri beyond © John Briggs



The Barmouth railway viaduct at the southern limit of the area. © John Briggs



## Geological Landscape influences

Set against a backdrop of much higher ground within the adjacent areas of Llŷn and Eryri, the landscape of Tremadoc Bay is by contrast dominated by low hills generally less than 200m in height, coastal plains and estuaries.

The bedrock geology composed of Cambrian, Ordovician and Silurian sedimentary and volcanic rocks. Lower and Middle Cambrian sandstones and shales occur in southern part of the area where they form the western margin of the Harlech Dome. To the west, volcanic rocks are evident. Rocks of a similar age can be traced eastwards through the Vale of Ffestiniog and northwards through the valley of the Glaslyn towards Beddgelert. The geological diversity of the area is represented by several SSSIs including Moelypenmaen and a'r Glannau at Garreg yr Imbill.

The coastline of Tremadoc Bay reflects the complex interplay between marine erosion and sedimentation, sediment input from rivers, bedrock geology and the effects of ice-sheet glaciation. The coast, for example, east and west of Pwllheli, is characterised by the development of spectacular 'fish-hook' shaped beaches that have formed in the lee of St Tudwal's Peninsula. The eastward long-shore drift of sediment has created small spits, often recurved, for example at Carreg yr Imbill and across the mouth of the Dwyfor. Farther south, Morfa Harlech consists of a series of spectacular recurved spits, topped by dunes that have developed across the mouth of the Dwyryd - Glaslyn Estuary during the last 700 years. Yet farther south, Morfa Dyffryn is a large area of dunes extending north from Llanaber to Llandanwg. South of Mochras, the beach is swash-aligned towards the south west and therefore, little sediment is transported from the south. Sediment supply to the land form is believed to come from the seabed and in this respect, the proximity of Sarn Badrig, an offshore ridge of glacial debris, is probably significant.

## Landscape Habitats influences

The area is largely dominated by relatively low-lying, undulating farm land, much of it improved pastoral grassland overlying brown earth and surface-water gley soils. Some areas of marshy grassland are of particular ecological value, most noticeably those within both Glaslyn and Tiroedd a Glannau rhwng Cricieth ac Afon Glaslyn SSSIs. Hedgerows, small woodland copses and areas of less agriculturally improved grassland provide additional ecological interest.

Larger deciduous woodland areas are relatively scarce but smaller blocks dot the landscape and some of the more significant areas follow the line of watercourses such as the Dwyfant and the Glaslyn. A small number of wetland areas are also present, and are of great ecological value. The largest and most significant is the mosaic of wetland habitat including rare fens present on the western boundary at Cors Geirch (SSSI, SAC, Ramsar).

The extensive sandy beaches are sand dune habitats, the largest and most notable being at Morfa Harlech (SSSI, SAC, NNR). Notable dune areas also occur at Morfa Bychan (SSSI, SAC) and Morfa Abererch (SSSI), however, the main focal point for this area of coast is the estuary formed where the Glaslyn and Dwyryd flow into Tremadoc Bay. There are extensive intertidal mud/sand flats together with saltmarsh habitat formed on silty soils overlaying deposits of river alluvium. This estuary is considered to be one of three outstanding bar built estuaries in Britain, however the area inland from the Cob at Porthmadog is no longer tidal.

## Historic Landscape influences

There are many diverse, small scale archaeological features dating from the prehistoric period onwards, with Mesolithic settlements and hunting sites, Neolithic chambered tombs, Bronze Age sites and several Iron Age hill forts and Early Christian sites. The former Glaslyn estuary landscape is on an entirely different scale, being one of the most ambitious 19th century reclamation schemes in Wales. The motivation was primarily economic but included the conscious creation of new pastoral farmland within the Porthmadog Cob, the long railway and road embankment straddling the formerly tidal estuary. The area also incorporates the planned Georgian town of Tremadoc and the harbour town of Porthmadog, at one time one of the busiest ports in Cardigan Bay. The architecturally eclectic fantasy village of Portmeirion, designed and built by Clough Williams Ellis from the 1920s onwards, lies on a partially wooded peninsula between the Glaslyn and Dwyrdd Estuaries. Elsewhere, traditional buildings are of stone, render, whitewash, and slate, with later styles and minor detailing reflecting the architectural tastes of landed estates.

The coastal castles at Harlech (World Heritage Site) and Criccieth and their small borough towns demonstrate the strategic importance of the area at the time of the Anglo-Norman conquest. Along with Pwllheli and Barmouth, which also have their origins in the Medieval period, they developed significantly as tourist towns with the building of the Cambrian Coast Railway in the 1860s. The area remains a popular boating and seaside holiday destination, though all the settlements have had to adapt to changes in holiday-making fashion since the 1960s, including the growth of several large caravan sites on the coast.

## Cultural Landscape influences

Tremadoc Bay is steeped in early Medieval folklore. The second branch of the Mabinogion folk tales opens with the giant-king Brân at Harlech awaiting the arrival of the ships of Matholwch, king of Ireland, as they make their way across the Irish sea. Hill-top and sea-shore churches such as Llandecwyn and Llandanwg recall the ways in which Christianity marked its presence. The castles at Harlech and Criccieth are built strategically on open rock promontories. The legend of the 'lost hundred', or Cantre'r Gwaelod, the drowned kingdom, is one of many such tales told along the western seaboard of Europe, and in 1829 was adapted as an engaging political satire by Thomas Love Peacock, taking his cue from his friendship with Shelley at Tremadoc, from the building of Madocks's great Cob and from a translation of the Hanes Taliesin.

The creation of the harbour at Porthmadog enabled slate-mining town of Blaenau Ffestiniog, via the Ffestiniog Railway and the famous locally-designed and built sailing ships, to prosper exporting slate all over the world. Madocks's strong architectural signature – a regional interpretation of the Georgian idiom – remains evident, and his tradition of architectural whimsy is perpetuated in Clough Williams-Ellis' fantasy Italianate village of Portmeirion, famous as the setting of the cult television series *The Prisoner*. The area includes the Hafan y Môr (formerly Butlin's) holiday camp at Penychain as well as caravan parks and hotels. These, and the revival of the Ffestiniog and Welsh Highland Railways from Porthmadog, have brought new people to the area but have also sustained a Welsh-language way of life by sustaining the local economy based on tourism.

The Llanystumdwy-Criccieth-Porthmadog-Ffestiniog axis was one that nurtured and radicalised the young David Lloyd George, whose experiences of landlord and church power as he grew up in this area and as he trained as a lawyer, ultimately led him to his assault on landed power in the United Kingdom.