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Dyffryn Conwy – disgrifiad cryno

Dyma ddyffryn afon lanwol hwyaf Cymru, sydd, i bob diben, yn ffin rhwng gogledd-orllewin a gogledd-ddwyrain y wlad. Y mae'n dilyn dyffryn rhewlifol, dwfn sy'n canlyn ffawt daearegol, ac y mae ganddi orlifdiroedd sylweddol ac aber helaeth. Ceir yn ei blaenau ymdeimlad cryf o gyfyngu gan dir uwch, yn enwedig llethrau coediog, serth Eryri yn y gorllewin, o ble mae sawl nant yn byrlymu i lawr ceunentydd. Erbyn ei rhan ganol, fodd bynnag, mae'n ymddolennu'n dawel heibio i ddolydd gleision, gan gynnwys ystâd enwog Bodnant, sydd a'i gerddi'n denu ymwelwyr lawer. Mae ei haber yn wahanol eto, yn brysur â chychod, gyda thref hanesyddol Conwy a'i chastell trawiadol Eingl-normanaid (Safle treftadaeth y Byd) yn y gorllewin, a thref fwy cyfoes Deganwy yn y dwyrain. Er yn cynnwys trefi Conwy a Llanrws, a sawl pentref mawr a mân, cymeriad gwledig iawn sydd i'r fro hon. Mae'r gwrychoedd trwchus y dolydd gleision a chefnidir trawiadol y mynyddoedd yn cyfuno yn ddelwedd gymharol ddiddos, ddarluniadwy.

Summary description

This is the valley of Wales' longest tidal river, whose valley effectively forms the border between the north-east and the north-west of Wales. It follows a deep, fault-guided, glacial valley and contains significant flood plain and estuary areas. The upper (southern-most) section has

a strong sense of containment by rising land, especially from the steep wooded slopes of Snowdonia to the west, from which a number of small rivers issue down tumbling gorges. By contrast the wider, meandering middle estuary runs peacefully past lush pastures, and notably past the famous Bodnant estate, whose gardens form a popular visitor destination. In contrast again, the lower estuary is very busy with boating activities and is flanked on the west by the historic town of Conwy, with its imposing Anglo-Norman castle (a World Heritage Site), and on the east by the more modern Deganwy.

Although containing the towns of Conwy and Llanwrst, and a number of large and small villages, the area retains a very rural character. The lush hedgerows, green pastures and dramatic mountain backdrop to the west, combine to reinforce a relatively sheltered and picturesque image.

Key Characteristics
A deep, major fault-guided glaciated valley - between the adjacent rugged and shapely uplands of Snowdonia to the west and gentler rolling Rhos Hills to the east.
Southern flood plain section - deep river alluvium with silty and clayey soils and seasonal flooding, whose flatness contrasts with the adjacent spectacular wooded hillside to the west. Development and road links generally keep off the flood plain.
A very abrupt, steep, wooded edge to the adjacent Snowdonia uplands, with cliffs - marking the terminal point of a bedrock geology of Silurian argillaceous rock. Dramatic, boulder-strewn, tumbling small rivers cascade down.
Hanging woodland - including beech and oak, and areas of planted conifers, to slopes.
Hilly farmed middle section with a meandering, serpentine estuary – fringed with marsh, reed beds and tidal flats, backed by pastures, hedges and deciduous woodland blocks. Strong tidal movement along estuary. Hamlets, villages, scattered farms.
Lowland pasture and hay meadow - with hill sheep grazing to the valley sides.
Busier northern section around Conwy - with strategic transport crossing points over the wide estuary and shelter for boats. Historic road and railway bridges and a modern road tunnel.
Field patterns - geometric on the flood plain, with areas of dry stone walls or reens (ditches) as boundaries. Mixed hedgerows generally, with small irregular fields on rising slopes to the west side. More improved fields and hedges to the east side slopes.
Conwy Castle with its associated walled town - a World Heritage Site, dramatically located on a promontory overlooking the estuary, and forming a landmark feature.
Settlement to lower valley sides – keeping off the flood plain, notably the linear Dolgarrog, Trefriw and Glan Conwy. Principle settlements are Conwy town and Llanwrst.
A strong sense of containment to the valley – creating a natural route for north-south road and rail links.

Visual and Sensory Profile

The area forms a strong coherent whole but can be seen to have three distinct sections.

In the southern section near Betws-y-Coed, the hills are steep-sided and wooded, and the open valley floor is broad and flat. The proximity and contrast to the steeply rising Snowdonia mountains to the western side of the valley forms a particularly abrupt contrast where the boundary is identifiable to within a few metres in places. Streams and small rivers with their sources in Eryri tumble from hanging valleys down to the Conwy valley floor. At Dolgarrog the pipelines and leats that have channelled these water flows to power the hydro-electric station, and formerly the aluminium works, form distinct features which contrast with the more traditional rural landscape elsewhere. The flood plain is active and extends across the valley floor. Here, areas of hay meadow give way to reed beds where the river gradually starts to braid and open out into an estuary as it flows northwards.

In the middle to northern section of the valley, the inter-tidal estuary extends across much of the flood plain, which meanders between rolling hills within a wider and gentler valley. At low tide, extensive areas of mud and silt are revealed, which are interspersed with ridges and channels. The river estuary forms an altogether more dominant feature than in the southern section of the valley. The rolling hills are covered in a patchwork of deciduous woodland and pasture. Amidst this there are small villages and notably, the ornamental gardens at Bodnant, situated near the mouth of a side vale near Enlwybach. To the west, Snowdonia's mass provides a constant backdrop of upland mountains, vistas of which are softened and framed from within the valley by hedgerows, trees and woods.

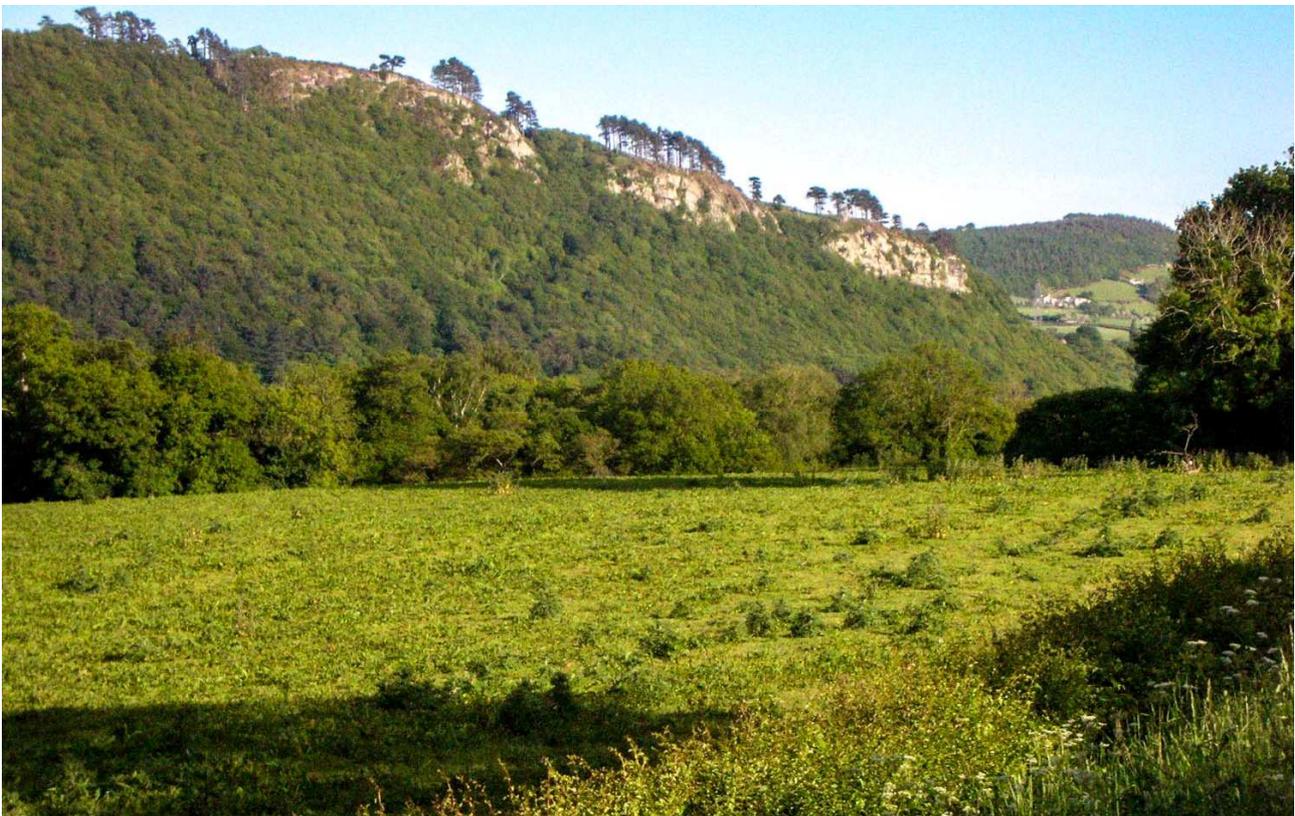
As the estuary approaches its mouth, and notably at Conwy Quay and Conwy marina, boating activity and built development increases to become a dominant characteristic. Conwy, together with Llandudno Junction and Deganwy along the area's boundaries with adjacent areas, are all linked by busy roads and the Chester to Holyhead railway line and associated Llandudno and Blaenau Ffestiniog branches. Conwy harbour and marina provide foci for boating activity within the estuary. The historic walled town of Conwy is dominated by its castle, which is seen from various vantages but most notably from across the estuary with the town, and backed by a wooded hinterland and the rising mountains of Snowdonia, as one of the most popular and iconic of Welsh vistas. By contrast, development on the east bank, within the neighbouring area is more recent and suburban in character, relating more closely to the North Wales coastal resorts, with a mix of residential, retail and light industrial estates.



In the mid to northern sections, the River Conwy broadens into an estuary and the valley widens to include a number of rolling foothills. © John Briggs



The rural character, with pastures, and woodlands on hillsides, rising up to the mountains of Snowdonia, as seen here near Rowen. © John Briggs



The flat valley bottom contrasts remarkably with the steep valley sides in the mid and southern sections of the valley. © John Briggs



The gentle gradient of the river at Llanwrst contrasts to the dramatic, rising, adjacent wooded hillsides of Snowdonia to the west. © John Briggs



From Cadair Ifan Goch, looking up the Conwy Valley, Trefriw village is on the right. Road and rail routes are seen, but roads tend to keep to the edge of the flood plain. © John Briggs



From Cadair Ifan Goch, we look across to the linear village of Dolgarrog with its former Aluminium works site. © John Briggs



Looking up the middle estuary, which meanders between rolling valley hills covered with a patchwork of woods and pastures. The gentle hills of Rhos rise beyond to the east. © John Briggs

Geological Landscape influences

The Conwy Valley is a broad, north-trending valley bordered to the west by the steep crags of Snowdonia and to the east by the gentler slopes of the Rhos Hills. The steep cliffs on the western side rise steeply to about 300m and then more gradually to 900m. The eastern side of the valley is generally less precipitous but rises in a series of steps and in places with cliffs, ultimately towards the Denbigh Moors. The topography of the valley floor is relatively flat with the River Conwy following a meandering course from about 20m above sea level at Betws y Coed towards the sea at Conwy. The river is tidal as far as Trefriw.

The Conwy Valley Fault not only separates the Ordovician rocks to the west from the Silurian to the east but it also bounds areas where the style of folding and faulting are different. Hard Ordovician volcanic rocks now form the steep cliffs on the western side of

the valley. Rocks on the eastern side are predominantly Silurian mudstones, siltstones and sandstones. Although the Conwy Valley Fault is represented by a single line on the map, it is in fact more complex, and north of Dolgarrog it branches into three structures; there is also evidence of branching to the south of Llanrwst. Faults in the bedrock are planes of weakness that are often exploited by ice and water and the Conwy, in addition to some of the valleys to the west that feed into the Afon Conwy, are fine examples of fault-guided valleys.

The main effect of glaciation in the Conwy Valley was the carving of a deep trough as ice from Snowdonia moved northwards. Although the general movement of ice in the Conwy Valley was towards the north, the main valley glacier would have been fed by smaller ice flows emanating from neighbouring Snowdonia. Several hanging valleys mark the confluence of these feeder ice streams with the main valley glacier. To the east of the Conwy Valley there is a network of irregularly spaced, often parallel channels which run along the side of the valley. These are most likely glacial melt water channels that were cut by powerful streams within or beneath the wasting Conwy glacier. One of the best developed melt water channels can be seen at Bodnant Gardens.

The character of the River Conwy is that of an upland river, with steep gradients and gorges, until it reaches the Conwy Valley character area, near Betws-y-Coed, where it develops the characteristics of a typical lowland river as the valley floor widens and the river begins to meander. In this middle section of the Conwy there are fossil river cliffs and terraces which provide evidence for the post-glacial development of the river. To the north of Dolgarrog the tidal nature of the Conwy becomes more evident as the river channel widens and sometimes becomes braided, widening generally until it emerges into the sea, but for the typical narrower 'bar' at the estuary mouth.

Landscape Habitats influences

Soils in the valley bottom are based on alluvium, which supports lowland pasture and hay meadows, with hill sheep grazing on the thinner soils of the steeper valley sides. Hanging woodlands, of both sessile oak and beech, characterise the valley sides. Below Tal-y-Cafn the river passes through a series of intertidal sand banks and salt marshes, backed by natural rock and boulder clay cliff and associated woodland. The nature reserves at the lower part of the estuary are of particular importance for the completeness and variety of inter-tidal estuarine communities, as well as rocky and sediment communities. The site supports nationally important 'piddock' communities, on a variety of substrates. There is a distinct up-channel zonation of both habitats and species through brackish water and lower salinity levels to the upstream tidal influence at Tal-y-Cafn. The tidal estuary is also important for terrestrial invertebrates such as the nationally scarce belted beauty moth, breeding on dune vegetation, and important wading birds, with large numbers of curlew, redshank and oystercatcher, and more limited numbers of other species such as black-tailed godwits.

In the upper tidal reaches of the river, the reedbed and saltmarsh communities at Morfa Uchaf SSSI support nationally scarce plant species such as the marsh pea, as well as providing an important breeding resource for numerous waders and marsh birds.

Llanrwst and the southern section of the valley suffer regularly from flooding. Wet pastures in the valley floor are bounded by stone walls, reens (ditches) or mature hedgerows with many mature trees, creating a very varied series of small habitats, enclosed within a woodland setting on the valley sides. Coed Dolgarrog is a fine example of an oak and

birch woodland on the western side of the valley, important for its invertebrate and breeding bird communities. Benarth woods is an oak, beech and sycamore woodland adjacent to the Conwy Estuary, with an important population of wild service tree, and a carpet of greater woodrush adjacent to the estuary itself.

Plas Maenan is host to a large colony of lesser horseshoe bats in the cellar tunnel complex, with an average of 170 in the summer roost. The bats forage in the surrounding mixed woodland and agricultural landscape. Bodnant Gardens hosts an important collection of exotic trees and in particular rhododendrons from around the world.

Historic Landscape influences

Historically, the landscape of the Conwy Valley was of considerable strategic importance. This is reflected in the variety of archaeological and historic sites within the area, the most impressive and iconic of which is the 13th century Edwardian castle at Conwy, which dominates the estuary and its associated walled town and bridges. Now a World Heritage Site, Conwy represents one of the best preserved and most complete examples of a Medieval 'bastide' or walled town in Europe. The 16th century town house, Plas Mawr, is another iconic structure of its period, exemplifying the confidence of the new class of Welsh gentry in the Tudor state, but also a symbol of modern conservation skills, through Cadw's work on restoring it to its Elizabethan form. Many other notable late Medieval and early modern buildings also survive in the town.

The sheltered estuary / river was a route for transport, along which cargoes were rafted. Small sea-going ships could also venture up to Trefriw on the tides to pick up lead ore and slate. The Conwy was a working river into the 20th century, with quays and wharves.

The area is also noteworthy for the remains of the Roman auxiliary fort at Caerhun, complete with its associated civilian settlement and the remains of docks sited along the adjoining banks of the Conwy. Settlement patterns elsewhere in the area further reinforce their past strategic importance, particularly at historic river crossing points, such as at Llanrwst where a compact nucleated town developed. Settlement is otherwise confined to linear valley side hamlets such as Eglwysbach and Trefriw with slate, stone and whitewashed render forming the dominant building materials. The village of Dolgarrog is a linear creation of the 20th century, associated with the now-closed aluminium works and the (still-functioning) hydro-electric power station, and is a distinctive example of a planned industrial community.

Historic parks, gardens and designed landscapes also represent an important element of the historic landscape, with notable examples being at Plas Maenan, Benarth Hall, Caer Rhun Hall and the extensive Victorian estate at Bodnant.

Cultural Landscape influences

Not only has this long north to south valley formed a boundary between east and west, but traditionally its rich growing land supported a prosperous local society. The Medieval settlement of Conwy, the site of Maenan Abbey several miles upriver, the village of Trefriw and the town of Llanrwst all reflect this importance. The influence of the powerful local Wynn family is evident in the Renaissance architecture of the bridge (said to have been designed by Inigo Jones and now known to have been constructed by masons from Cheshire), the parish church and in Gwydir Castle. William Salusbury of Llanrwst, together with another son of the area, Dr Richard Davies of Gyffin, initiated the translation of the

Bible into Welsh, a single act which more than any other has preserved the language. Historically and culturally, the valley was, with Dyffryn Clwyd, the cradle of the protestant Reformation in Wales.

The lowest bridging point from the 17th to the 19th centuries was at Llanrwst. The subsequent bridges at Conwy are cultural icons in their own right: Thomas Telford's suspension bridge is designed to look like a drawbridge to the castle, an illusion dissipated by Robert Stephenson's adjacent tubular rail bridge, the only example surviving of this once-revolutionary technology. Dolgarrog has a rare example of a cantilever bridge.

Edward I's castles in North Wales were accompanied by a defensive town wall, protection for his newly planted 'colonies'. The walls at Conwy are the most intact surviving examples and still give the impression of enclosing the town, with the wider spread of modern suburbia being set back. The walls link to the imposing landmark and World Heritage Site castle. Many old buildings survive within the town walls, where the density of building is much greater. Notable examples include the 16th century Wynn town-house, Plas Mawr, which demonstrates the aspiring Welsh gentry's taste for luxury and elegance.

The estates of the new-rich of the 19th century, such as Benarth and Bodnant, perpetuate the tradition of horticulture and ornamental landscapes which trace their origins to the renaissance gardens at Gwydir and the lost Dutch garden at Maenan Abbey.



The lower estuary is developed on both sides, including quays and boating activity. The World Heritage Site castle (above) and historic walled town (below) of Conwy. © John Briggs

