





View from Aberaeron of the coast of Cardigan Bay extending north towards Aberystwyth. P802042.



Elan Valley, Caben Cock dam in spate. P802061.



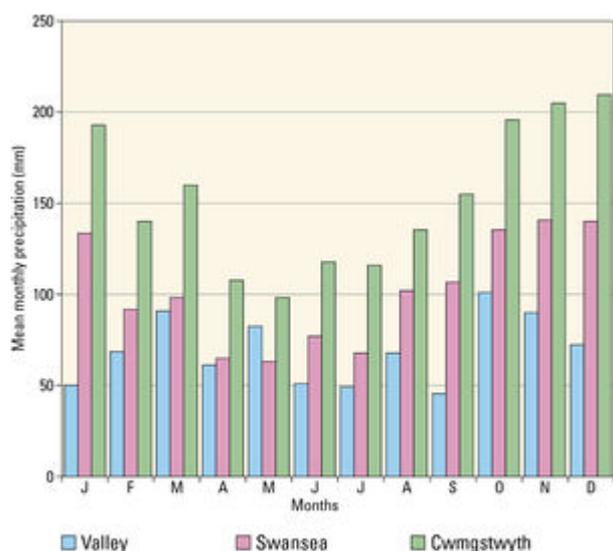
... and in drought, Pen-y-Fan, in the Brecon Beacons from wall of the Neuadd Reservoir north of Merthyr Tydfil during 1976. P802060.

With the exception of the major river estuaries in the north and south, Wales has no navigable rivers. The larger rivers such as the Taff, Teifi, Tywi, Usk and Clwyd flow from the central mountain ranges to the west coast. The Severn (the second longest river in the UK) and the Wye rise in the Cambrian Mountains and flow into the Bristol Channel. Wales has more than 400 natural lakes and more than 90 man-made reservoirs, many of which are used for water supply and some for hydroelectric power generation and power storage (**Plates P802061 and P802060**). Bala in north Wales is the largest and deepest of the natural lakes and is 6.4 km long by 1.6 km wide. Some of the upland water storage is used to supply neighbouring English metropolitan areas notably Birmingham.

The main mountain chains are the Cambrian Mountains which are situated between the head of the Tywi catchment in central and west Wales, the Brecon Beacons/Black Mountains of south Wales and Snowdonia in the north of Wales (**Figure P841815**). In the north the highest peak is Snowdon (1085 m) with Cader Idris (892 m) in the central area overlooking the Mawddach Estuary near Barmouth where other peaks are generally below 600 m. In the south, the Brecon Beacons rise to 886 m and the Black Mountains to 811 m; both are more rounded in shape than the Cambrian Mountains. Radnor Forest (660 m) and Clwydian Range in central Wales in the north comprise rolling hills. Snowdonia is characterised by deeply incised valleys, whereas the valleys of west Wales are more open. South Wales is characterised by a coastal plain which varies from 1 km width at Port Talbot to 20 km in the Vale of Glamorgan.

Northern central Wales is drained by the upper reaches of the Severn feeding into the major reservoirs of the Elan valley upstream of Rhyadry. Much of southern central Wales drains to the river Wye that flows through an interior plain centred on the town of Builth Wells. The lower course of the Wye is characterised by dissected lowlands divided by discontinuous lines of low hills. The river cuts a series of incised meanders into the Forest of Dean. The plateaux are broken up towards the north-east around the Teme Valley separating the Welsh Border hills from the uplands of central Wales. The high plateaux are strongly dissected in the south and drop to the coastal plain along the Severn Estuary.

Wales has a maritime climate, and the influence of Atlantic weather systems gives it somewhat changeable weather. Rainfall is plentiful — typically over 1000 mm a<sup>-1</sup> with the least usually recorded in May/June and the most in December/January (see <http://www.metoffice.gov.uk/wl/print.html>). The distribution of rainfall varies widely, with the highest average annual totals being recorded in the mountainous areas of Snowdonia and the Brecon Beacons (**Figure P859259**). Snowdonia is the wettest part of Wales with average annual totals exceeding 3000 mm.



Mean monthly rainfall (mm) at Valley on Anglesey, Swansea and Cwmgstwyth in Ceredigion (after <http://www.metoffice.gov.uk/wl/print.html>). P859259.

In the summer, Wales, other than the mountainous areas, has an average six hours sunshine per day, compared to between one and a half and two hours per day in winter months. July is normally the warmest month, with the highest temperatures inland away from the cooling influence of the sea. The mean temperature is 10 °C. Snow is rare at sea level, but more frequent over the hills. The average number of days each year when sleet or snow falls in Wales varies from about 10 or less in some south-western coastal areas to over 40 days in Snowdonia.

More than half of the population live in the industrial and commercial centres of south Wales, where the population density is around 500 km<sup>-2</sup>. The industrialised area around Wrexham in north-east Wales is also a significant centre of population. The population of Wales is 2.9 million; the average population density is 140 people per square kilometre, which is roughly the same as the European average but half that for the United Kingdom.

Land use is dominated by agriculture. Approximately 80 per cent of the area of Wales is devoted to agriculture with some 30 000 holdings, the majority of which are dependant on livestock production.

Grassland pasture for sheep and cows and rough grazing for sheep are the dominant agricultural features, but an additional 12 per cent of the land is forested.

Wales has numerous natural resources: coal and metal ores have been exploited from large deposits in the south, and to a lesser extent in the north. Coal remains the main mineral resource although mining has declined considerably and is now undertaken by opencast methods. Tower Colliery was the last working deep mine and this closed in January 2008. Extensive slate deposits exist in the north, and these have been exploited for roofing materials for many generations. Production continues today at a greatly reduced level. Metalliferous ores including sources of gold, silver, copper, lead and zinc were formerly mined at a large number of sites located throughout central and northern parts of Wales.

Light manufacturing forms the key industrial sector within the Welsh economy. Wales is also one of the most advanced automotive supply regions in the UK and food processing is another important industrial activity. Tourism and leisure are now increasing contributors to the economy, with Wales' popularity as a holiday destination mirroring the development of the tourist industry in the UK as a whole.

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