

Geotrail around the Penmon area



Enjoy fascinating geology and magnificent scenery on this beautiful walk on the south east coast of Anglesey. Dr John Conway (GeoMôn Geopark)

Pictures: J. Conway, unless stated otherwise

Easy going but long, about 8 miles in total, or can be split in shorter sections, or utilise the carparks along the way for a series of stops.

For greater detail, consult:
Conway, J S 2010 *Rocks and landscapes of the Anglesey Coastal Footpath*. 192pp ISBN 0-9546966-3-8

Starting point: Starting from Aberlleiniog, follow the shore passing low cliffs in reddish brown deposits left by a huge glacier originating in Scotland and passing Anglesey on its way south. Join the road at Trwyn Penrhyn, where the low headland is in fact a very small drumlin with brown earth soil profiles visible in the cliff. From here on the entire headland is composed of Carboniferous rocks, mainly limestone.

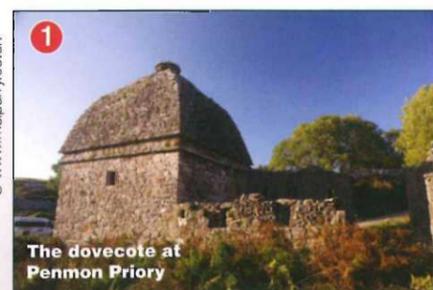
A high wall marks the boundary of the Penmon deer park. Follow the road to Penmon point passing the Priory church, monastic buildings and dovecote 1 built of local limestone. The monastery grew up around the 6th century cell of Seiriol, a Celtic



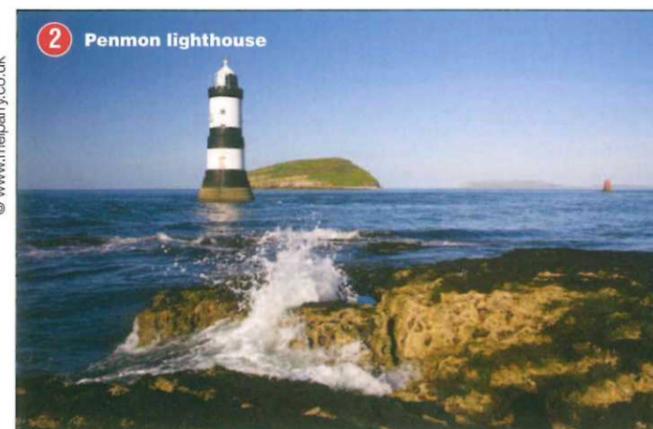
hermit living in a cave in the limestone, with a spring bubbling up from the rock and feeding the monks' fishponds. The original wooden buildings were destroyed in a Viking raid in 971; the oldest remaining part of the church dates from the 12th century and is well worth exploring for its Celtic crosses, one with Christian Viking carvings and Norman arches. Dissolved in 1537 by Henry VIII the site passed to the Bulkeley family who still own it.

Carry on to the headland by the lighthouse where the limestone is well exposed; the honey colour indicates that it is magnesium-

rich (dolomite). The lighthouse 2 stands on a reef of limestone exposed at low tide, whilst the red beacon marks the end of a similar low reef extending out from the island – the passage is very narrow with a strong tidal race. The island actually has three names; Puffin Island, Ynys Seiriol or Priestholm. To the left there is a spectacular storm beach and beyond is a partially collapsed arch 3. The headland here offers a wide range of habitats and is a favourite with birdwatchers, with many seabirds on the cliffs and the island. In the tourist season, there a small café with toilets.



The dovecote at Penmon Priory



2 Penmon lighthouse

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limestone, worn smooth and re-cemented together. The headland to the right is a sequence of thin beds of sediment that had been completely chewed up by burrowing organisms.

A path leads back up to the coastal footpath which circles round Bwrdd Arthur, a low hill capped by a slab of

would have been comparatively easy and yet still accessible from the sea. The original castle would have been a wooden structure; the stone buildings were reputedly built in the 17th century and there are various rumours about the Civil war and love affairs. The valley is shown as open water on some older maps, suggesting that the castle was served by boat, but has long since silted up, helped by the continual slow rise of the land level since the ice melted.

The path continues down the valley to the coast. Peat and waterlogged wood, or even tree stumps can be found on the shore demonstrating the rising sea levels after the



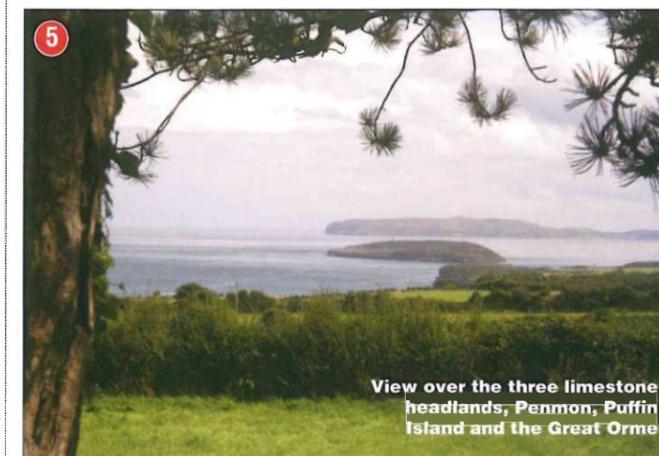
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Aerial view of the enormous quarries

Follow the coastal path toward Red Wharf Bay. There are many large coastal quarries 4 which used to export building stone directly by ship; one now houses a fish farm. Take the road to Fedw Fawr (White Beach) to see the spectacular cliffs and explore the range of rock types - coarse pebbly conglomerates, finer gritstones and sandstones and thin layers of shale. One bed is composed of large blocks of



View over the three limestone headlands, Penmon, Puffin Island and the Great Orme

limestone. Originally a limestone pavement, people in Iron Age time tipped large blocks of limestone on end to form the boundary wall of a hill fort [Din Silwy]. There is no official path to the top, but one can often find a way through the gorse and the views are both panoramic and spectacular 5

Return along the road to Glanrafon then turn to Llangoed from where a path leads to the miniature castle 6 of Aberlleiniog, built by Hugh, Earl of Chester in 1090 which sits on a mound of boulder clay – a carefully chosen location where construction of the mound

ice melted, possibly leading to the folk tales about drowned lands around the Welsh coast. Looking out across the Lavan sands, one can speculate about changing sea levels and the future of our coastal lands - to our distant ancestors, this was all fertile land!

This is a fantastic beach to examine or collect pebbles –

eroded from the cliffs of material carried by the glacier 7; there is a huge boulder of Carboniferous limestone carried by the ice from Penmon, smoothed and scratched on its journey with evidence of pre-glacial solution weathering in the form of deep hollows and channels reminiscent of limestone pavement features. There are also erratics of Ailsa Craig granite from Scotland, Shap granite from the Lake District, coal, flint and basalt from northern Ireland and many other rock types.



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Glacial deposits on coastline at Lleiniog

Penmon Priory

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