Geotrail from Wylfa Visitor Centre to Cemaes Bay

Fully illustrated PDF

Welsh version

Dr John Conway (Royal Agricultural College) and Dr Margaret Wood, GeoMôn/Anglesey Geopark

Pictures: J. Conway, unless stated otherwise

Length: 3 miles

Time: Approx 1 hr 30mins (from Wylfa to Cemaes)

Difficulty: Moderate

Parking, refreshments and facilities are available at both ends of this walk along public footpaths, mainly the Anglesey Coastal footpath, on relatively level ground. The rocks are all PreCambrian, some of the oldest in Wales, and record a massive disturbance, probably a catastrophic submarine slide, that shattered the racks and left a chaotic jumble!

From the visitor centre [1][SH 35460 93300] walk towards the power station then turn right through the trees along the waymarked trail to a rock face [2][SH 35394 93585] in schist, a metamorphic rock with fine layering and intricate folding. Go past gateposts of Carboniferous limestone, quarried near Benllech, to the view point [3][SH 35395 93953] constructed of slate, which has bands of coarser material showing the original layers of mud and sand before metamorphism compressed it to slate.

Carry on through the wood, turning left up the road to an impressive pair of gates [4][SH 35588 93814] and follow the path across the fields to the left, then along the large wall to the Power station fence [5][SH 35395 94396]. The rocks here are a jumbled mess — known as "mélange" — of rocks broken up and re-compressed. What you see along the coast as far as the lookout are irregular blocks of a white quartzite [metamorphosed from sandstone], and bluish-grey limestone set in a green matrix [metamorphosed from mudstone which "flowed" around the blocks.] with "holes" where limestone blocks have dissolved away.

The path leads around the headland, and by the Lookout [6][SH 35661 94507] one gets a good view of the swirling and racing tidal stream, stirring up nutrients for the fish, and so it's a good point for viewing gannets gliding and dive-bombing, and porpoises or dolphins fishing here. A pine tree [7][SH 35581 94268] marks a narrow path down to the shore where cliffs on the left are schist, with intricately contorted layers. There is a narrow gully through the shore, lining up with the side of the island, which used to be a dolerite dyke before it weathered away. The island is iron stained quartzite and, if you look right across the bay you can see the continuation of this rock type in the head of the bay opposite.

Follow the path towards [8][SH 36089 93894]. Across this bay the headland is a section through a drumlin, a mound of glacial boulder clay streamlined by ice flowing over it from left to right. At the kissing gate, look to your right at the large boggy depression where water collects between drumlins creating a patchwork of green pastures on the well drained soils of the drumlins with boggy areas in between. Early farmers would have seen this as useful mix of resources, grazing land interspersed with areas where they could cut reeds for thatching or bedding, and maybe even dig peat for fuel. [9][SH 36588 93804] Pause and look down into the bay — a storm beach of stones thrown up by large waves above a steeply shelving shingle shore. To the right there is an extensive platform of ice carved rock at sea level below the drumlin.

Continue along the Coastal Path towards Cemaes. The cliffs all the way now are spectacular mélange with very large blocks of white quartzite and bluish-grey limestone within a matrix of green or deep maroon schist. On the headland looking into the harbour [10][SH 36951 93826], the rocks are intruded by a swarm of dykes (vertical walls created by molten rock, magma, running into cracks in the rock), some of which have weathered away leaving deep narrow

passageways through the rock whilst others stand out like a straight vertical walls. This headland must have been torn apart to allow the magma to run into such a myriad of cracks — when the joint continent of Europe and America was splitting apart leading to the opening of the Atlantic Ocean.

Return to the path and follow it down the hill to the promenade [SH 36923 93676], then enjoy a well earned rest and drink at one of the many cafes or bars in Cemaes before retracing your steps to your vehicle.

Figures

Route map. Geotrail from Wylfa Visitor Centre to Cemaes Bay.

View towards Cemaes with drumlin deposited above wave cut platform in Precambrian schists [8].

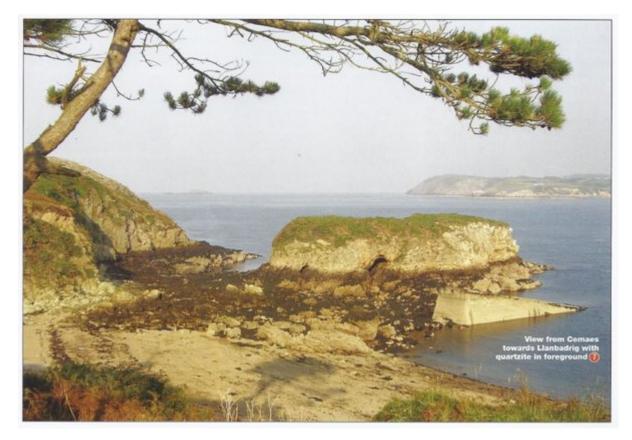
View of melange with large blocks of quartzite and limestone [5].

Tertiary dyke on headland next to Cemaes weathered away leaving "trench-like" feature [10].

View from Cemaes towards Llanbadrig with quartzite in foreground [7].



Route map. Geotrail from Wylfa Visitor Centre to Cemaes Bay.



View from Cemaes towards Llanbadrig with quartzite in foreground [7].