# **Newborough to Abermenai Point**

### **Fully illustrated PDF**

#### **Welsh version PDF**

Enjoy fascinating geology and magnificent scenery on this beautiful walk on the south west coast of Anglesey. Dr John Conway (GeoMôn Geopark). Pictures: J. Conway unless stated otherwise.

Length: 9km round trip

Time: 2-3 hours

Difficulty: easy

Parking: Llyn Rhos Ddu carpark [SH 42639 64761] at end of lane from roundabout on A4080

Bus route: 42

A geotrail with no rocks — but geology is also a live subject — what we see around us explains what has happened in the past - or another way of looking at it is that what we see around us are the rocks of the future! This round walk follows the boundary of the forest down to the shore, then turns south (left) along the shore out to Abermenai Point. From there, follow the shoreline round to the Afon Braint and make your way back following the fence up to the other lane off the roundabout, and hence back to the start.

This whole area is a National Nature Reserve, a SSSI and a Special Area of Conservation (SAC) for its varied habitats including strandline and shingle flora, dune ridges, wet and dry slacks, dune grassland and scrub development along with a dune-dammed lake, freshwater fen, saltmarsh and mudflats and enormous biodiversity (for more detail see article by John Ratcliffe, Swn y Môr 14). Whilst there are no rocks, you are crossing a huge area of wind-blown sand, reputed to have accumulated during a series of great storms in 14th century. Active geomorphological processes continue to deposit sand, shingle and mud to create all these features. Erosion causes "blowouts". The forest sands are underlain by a ridge of PreCambrian rock stretching out to Llanddwyn but this area is underlain by glacial boulder clay. Across the Strait, the Morfa Dinlle dunes are underlain by extensive shingle deposits.

Starting point: Start from the carpark [1][SH 42639 64761], noting the sculpture representing marram grass — Newborough was famed for its marram weaving industry up to the early 20th century, the grass being harvested from the dunes. Head towards the shore, keeping the forest boundary on your right. You are crossing older fixed dunes with a wide variety of plants, including dwarf willows and silver birch. Horses graze this area [2][SH 42095 64465] keeping the shrubby vegetation down.

At the shoreline [3][SH 40982 63175], the sand is extremely mobile — embryonic dunes form whenever there is a strong wind, usually bare sand but marram grass will colonise if they are stable for a while.

The main coastal dunes [4][SH 41943 62542], known as shifting or 'white' dunes may be covered by marram grass but are easily eroded by walkers and subject to 'blowouts.' On a very windy day, sand will blow up and over these dunes forming small arcuate dunes in the sand flats behind. All this moving sand mimics desert conditions — and shows how the fossil dunes in the Devonian and Triassic red sandstones were formed where the shape and internal structure of the dune is often preserved as 'cross bedding'.

Walk right out to Aber Menai point [5][SH 44285 61368] where you may be surprised to see that the long ridge of sand dunes are actually sitting on top of a shingle bank... seen all round the point to [6][SH 44137 61711] where if you look carefully there is the characteristic "hook".

From here it is safest to follow the shoreline [7][SH 43020 62238]; although it is tempting to cut across the sand flat. there are deep gullies and very soft areas.

This area [8][SH 43379 62854] is a mix of sand blown over the dune ridge and sediment accumulating in the quiet water in its shelter. A range of interesting salt marsh plants grow here, including marsh samphire. Below the low tide level sea grasses grow.

Walk around to the banks of the Afon Braint [9][SH 43598 63847] where there is usually an eroded layer of grey sediment with orange / rusty vertical tubes. The greyish-blue colour is due to the sediment being saturated with water, the orange colour where the iron is oxidised by air penetrating down the worm burrows.

Turn inland across the Warren [10][SH 43283 64061], noticing the fixed 'grey' dunes colonised by a wide variety of plants with humid dune slacks, low-lying areas between the dunes which are protected from the wind and may also be close to the water table. in places with small pools or peat bogs. Some of the bigger dunes show 'blowouts' — wind erosion where the vegetation cover is broken. Follow the footpath to the end of the lane and so back to the main road.

# **Figures**

## **See PDF**

Newborough route map.

Horses.

Embryonic dunes.

Colonizing marram grass.

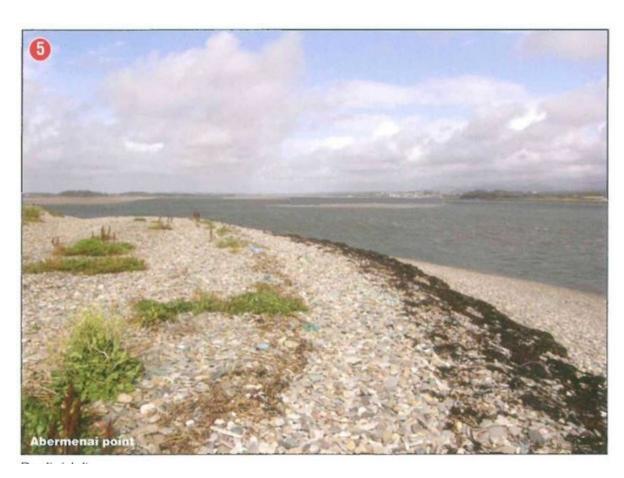
Abermenai Point.

Eroded layer of grey sediment with orange / rusty vertical tubes.

Fixed grey dunes of the Warren.



Newborough route map.



Abermenai Point