

**CYNGOR CEFN GWLAD CYMRU  
COUNTRYSIDE COUNCIL FOR WALES**

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

**VALE OF GLAMORGAN**

**MONKNASH COAST**

<b><u>Date of Notification:</u></b>	1972, 1983, 1993
<b><u>National Grid Reference:</u></b>	SS 903705 – 934676
<b><u>O.S. Maps:</u></b>	1:50,000 Sheet number: 170 1:25,000 Sheet number: SS 96, SS 97
<b><u>Site Area:</u></b>	130.6 ha

**Description:**

This 4½ km stretch of coastline lies west of Llantwit Major, on the northern shore of the Bristol Channel. The Liassic Limestone cliffs and wave-cut platforms here are important for coastal geomorphology. Cwm Nash is one of the very few sites in South Wales where tufa deposits (limestone precipitates) contain a rich variety of fossil snails. These have been used to reconstruct the environmental and climatic history of the last 12,000 years. Tufa is still forming at the site. The cliffs and valleys support a diverse range of coastal vegetation types which are notable in the county context for the occurrence of several rare plant species.

The whole length of the cliffline and foreshore, together with the mouth of Cwm Marcross, is important for coastal geomorphology. It demonstrates an assemblage of shore platforms and near-vertical cliffs that have developed within both a macrotidal environment and a high wave energy environment. The micro-relief of the platforms is largely controlled by the relative strengths of the limestones and argillaceous beds across which they are cut. However, variations in cliff form do not always accord with variations in rock type, nor coastal plan form with terrestrial landforms.

Cwm Nash is important for interpreting Devensian late-glacial and Flandrian environmental changes in South Wales. The common occurrence of land snails in a sequence of slope deposits comprising 1) head, 2) buried soil, 3) tufa and several intercalated buried soils, 4) buried soil and 5) hillwash sediments, has allowed a particularly detailed reconstruction of palaeoenvironmental changes. The head deposits contain a fauna indicative of a late-glacial age and demonstrate an open-ground, periglacial-type of environment. Land snails from the overlying tufa indicate a range of environmental conditions, varying from marsh and open woodland to closed woodland, and record detailed changes marking the Boreal/Atlantic transition. Land clearance, probably during the Iron Age, is indicated by the fauna in the hillwash deposits. Deposits of the latter type occur widely throughout South Wales and Cwm Nash provides the strongest evidence to suggest a Flandrian age for their formation. Cwm Nash is one of the very few sites in South Wales where Quaternary molluscan faunas have provided a detailed record of environmental history. It is also significant in setting archaeological interests into a palaeoenvironmental context.

Seepage zones on the cliff face support the nationally scarce maidenhair fern *Adiantum capillus-veneris*. The ungrazed limestone grassland of the cliff edge supports a community which includes wild cabbage *Brassica oleracea*, greater knapweed *Centaurea scabiosa*, woolly thistle *Cirsium eriothorum*, common restharrow *Ononis repens* and knotted hedge-parsley *Torilis nodosa*. Both valleys demonstrate a transition from grassland to scrub of gorse and blackthorn to wind-pruned ash woodland. Among the species present in the short turf of the valley mouths are the common rockrose *Helianthemum nummularium* and occasional clustered bellflower *Campanula glomerata* and horseshoe vetch *Hippocrepis comosa*.

The rare tuberous thistle *Cirsium tuberosum* occurs at several locations within the site. Two other nationally rare species, nit-grass *Gastridium ventricosum* and hoary stock *Matthiola incana* have a very restricted distribution here. House martins, ravens and jackdaws nest on the cliff face.

**Remarks:**

This site lies entirely within the Glamorgan Heritage Coast and adjoins Nash Lighthouse Meadow SSSI.

*This document is **NOT** a definitive legal version and has been formatted, updated and partially edited for use on the CCW Web site. This document should not be used in any legal proceedings, public enquiry or any other hearing or appeal. If you require a full legal copy of the document please contact CCW in writing.*