

Figure 2.5: The 60m wave cut platform, south Gower

There is little or no surface drainage across the limestone, and karstic features include dry valleys, caves, dolines, sink holes and resurgences. Short, steep-sided, ravine-like dry valleys along the southern Gower coast are known locally as 'slades'. Coastal caves of limited extent are well-known for their Pleistocene faunas and archaeological interest. Longer cave systems have developed in association with streams flowing northwards off the Old Red Sandstone of Cefn Bryn, and southwards off the Upper Carboniferous of Welsh Moor and Fairwood Common, and karstic features are well-developed in the dry parts of the Bishopston and Llethryd valleys (Ede and Bull, 1989; Waltham *et al.* 1997). The Oxwich Head Limestone Formation seems particularly favourable to cave development (Lowe, 1989).

Port Eynon and Oxwich bays in southern Gower have been formed by erosion of rocks belonging to the Bishopston Mudstone Formation (part of the Marros Group) in the cores of major synclines. Though more complex, the Loughor Estuary and Swansea Bay are of similar origin, corresponding to the outcrop of the mudstone-rich South Wales Coal Measures Group. In southwestern Gower, Worms Head is a steeply-inclined dissected remnant of the 60m platform separated from the mainland by erosion of the core of an anticline, exposing less resistant units near the base of the limestone succession. Erosion along cross-faults is responsible for many of the other bays and slades of the southern Gower coast, such as Mewslade, Foxhole Slade (the site of Paviland Cave), Slade, Three Cliffs Bay, Pwlldu Bay and the lower Bishopston Valley, Caswell Bay, Langland Bay, Limeslade Bay and the channels separating the tidal islands at Mumbles Head.