

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

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

SWANSEA

MINCHIN HOLE

Date of Notification: 1958, 1986

National Grid Reference: SS 555869

O.S. Maps: 1:50,000 Sheet number: 159
1:25,000 Sheet number: SS 58

Site area: 2.4 ha

Description:

Minchin Hole is a large, coastal fissure cave containing vital evidence for the Pleistocene history of South Wales. It has been studied for over a century and is famous for diverse faunal remains of Ipswichian Interglacial and older ages contained within a complex sequence of marine and terrestrial sediments. This sequence of fossiliferous sediments now dated by amino acid and uranium series methods is critical in providing a rare opportunity to compare and correlate inferred climatic changes with changes in sea-level and local terrestrial environments as reflected in the biostratigraphy and lithostratigraphy. Minchin Hole is regarded as the type site for the "Patella" raised beach which has been commonly used as a stratigraphic marker horizon throughout south-west Britain. Also, it is unique in South Wales in demonstrating two raised beaches of demonstrably different ages superimposed in a single section. Recent investigations suggest that these beaches represent two separate interglacials. Minchin Hole is therefore a site of the highest importance for Pleistocene studies in Britain.

The sequence of deposits in this large coastal cave provides a succession of faunas from more than one phase on an interglacial, almost certainly the Ipswichian. The faunas, which are therefore of considerable interest and importance include lion, spotted hyaena, an extinct rhino *Dicerorhinus hemitoechus*, horse, wild boar, fallow deer and many small mammals.

Remarks:

Within Gower AONB.