

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

SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

MONMOUTHSHIRE

CWM MILL SECTION, MARDY

Date of Notification: 1993

National Grid Reference: SO 311156

O.S. Maps: 1:50,000 Sheet number: 161
1:25,000 Sheet number: SO 31

Site Area: 0.61 ha

Description:

Cwm Mill Section is situated on gently undulating land on the edge of the village of Mardy to the North of Abergavenny. The stream flows from the east where it emerges from under the A465, the main road between Abergavenny and Hereford, and the adjacent railway line to join the River Gavenny in the west. The rock outcrops form part of the bed and banks of the stream.

An important death assemblage of *Dittonian ostracoderms* occurs in a thin horizon in this section. Complete, but compressed, *cephalaspids* were found in a lens; all but three specimens belong to a single species, *Cephalaspis cradleensis*, the other three species described are unique to this site, these are *Cephalaspis cwmmillensis*, *Cephalaspis abergavenniensis* and *Cephalaspis (Cwmaspis) billcrofti*. *Cephalaspis cradleensis* shows apparent incomplete ossification of the exoskeleton suggesting that *cephalaspids* became ossified evenly throughout the animal once full size was achieved. The associated sediments contain disarticulated but well preserved pieces of *Cephalaspis* and a mass of specimens of *Rhinopteraspis crouchi*, made up of various sized dorsal and ventral discs of young animals plus the only known completely articulated specimens of body armour of this species. This assemblage allows the study of the growth stages of the individual armour plates, including examples of the youngest stages of development, and shows the probable existence of sexual dimorphism in *R crouchi*. *R crouchi* is used biostratigraphically as a zone fossil through northern Europe, and it occurs in Britain, France, Belgium, Germany and the Ukraine.

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