

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

**SITE OF SPECIAL SCIENTIFIC INTEREST CITATION**

**POWYS**

**HOWEY BROOK STREAM SECTION**

**Date of notification:** 1981, 1983

**National grid reference:** SO 087591 - 095589

**O.S. Maps:** 1:50,000 Sheet number: 147  
1:25,000 Sheet number: SO 05

**Site area:** 7 ha

**Description:**

This stream section is a classic geological locality for its Llanvirn-age rocks. Originally described by Murchison, the section exposed shows a series of shales and mudstones spanning the *Didymograptus bifidus* and *D. murchisoni* Zones, with mixed shelly and graptolitic faunas. These shales are associated with substantial volcanic ash developments. Besides its considerable regional stratigraphic significance the site is of great interest as the probable type locality of *Didymograptus murchisoni*, the Llanvirn zonal index.

In layman's terms, the interest of this site may be expressed more simply, and such a statement is provided below. This should not be taken as definitive and further information as to details of the interest can be obtained from the Countryside Council for Wales.

Howey Brook has long been regarded as a site of prime geological importance. The stream section provides exposures of a sequence of mudstones which were laid down beneath the sea some 460 million years ago, when much of Wales lay beneath the sea. The fossilised remains of animals known as graptolites have been described from this section and one form, *Didymograptus murchisoni*, is of particular importance since Howey Brook is thought to be the locality at which this species was first discovered. Associated with the mudstones are sequences of volcanic ash, which indicate that volcanic activity was taking place in the area around the time that the mudstones were being deposited. This evidence accords with that collected in the Builth Wells area, where volcanoes are known to have been active during this part of geological time.

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