

**CYFOETH NATURIOL CYMRU
NATURAL RESOURCES WALES**

SITE OF SPECIAL SCIENTIFIC INTEREST: CITATION

WREXHAM

COEDWIG FFOSIL BRYMBO FOSSIL FOREST

Date of Notification: 14 July 2015

National Grid Reference: SJ 2958 5345

OS Maps: 1:50,000 Sheet number: 117
1:10,000 Sheet number: SJ 25SE

Site Area: 0.52 ha

Description

Exposures at Brymbo comprise approximately 14 m of Upper Carboniferous Duckmantian Coal Measures that contain an internationally important plant fossil assemblage. Of particular importance is the presence of large numbers of sediment-filled casts of *Calamites* stems, 1.5 m long and 10 cm in diameter, that are preserved in growth position. Such *in situ* *Calamites* stems have never before been found in such quantities in the UK. Also present are over twenty *in situ* arborescent lycophyte bases preserved as casts in either sandstone or less durable mudstone, with the largest found to date being about 2.5 m long and 1.5 m in diameter. Associated is a varied and scientifically important adpression flora including lycophyte stems (*Lepidodendron*, *Lepidophloios* and *Sigillaria*, and others with large Ulodendroid scars), cones (*Flemingites*), sporophylls (*Lepidostrobophyllum*) and dispersed megaspores (*Lagenicula* and *Lagenoisporites*), sphenophyte leaves (*Annularia* and *Asterophyllites*) and cones (*Calamostachys* and *Palaeostachya*). There are also many pteridosperms, including *Karinopteris* and *Paripteris*, and the fern *Sydneia* (previously only known from the Asturian of Cape Breton, Canada). Brymbo has significant potential for future research into Upper Carboniferous palaeobotany and, together with the arthropods and trace fossils found on this site, will provide a greater understanding of the palaeoecology of the Coal Measures.

Remarks

The site is an addition to the former Nature Conservancy Council's Geological Conservation Review, a national survey and evaluation of sites of geological and geomorphological interest.