
Chapter 9 Sites with rocks of possible Lower Palaeozoic age

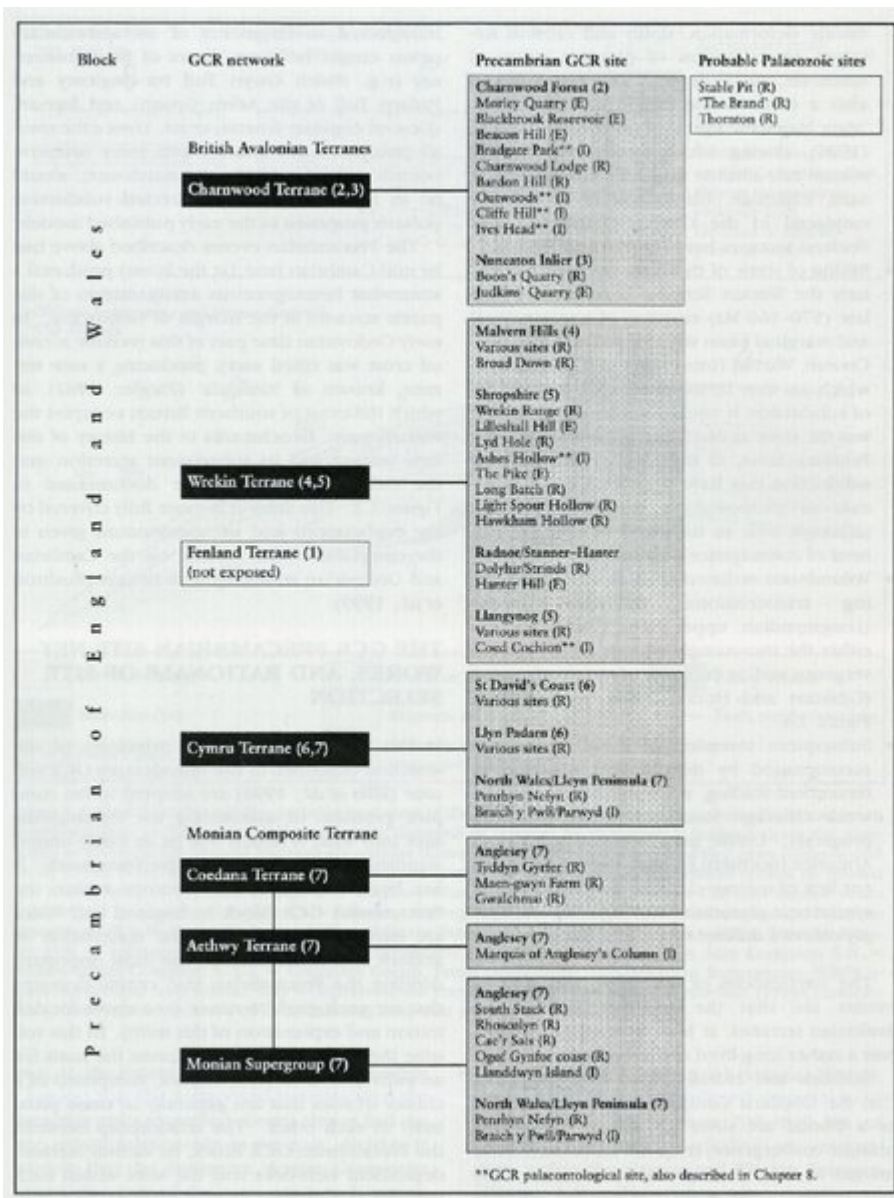
Introduction

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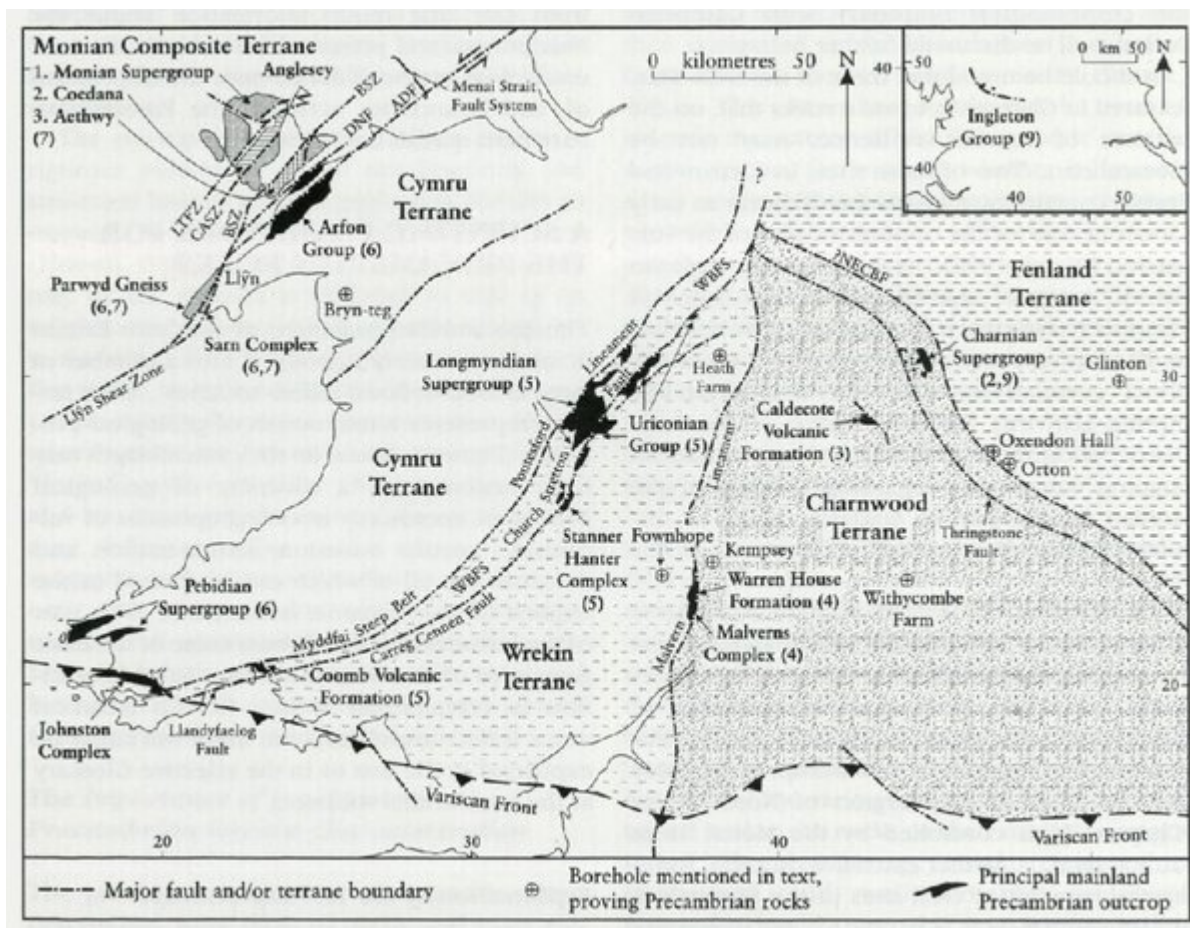
This chapter features three GCR sites that include rock sequences previously thought to be Precambrian, but may be now referred to the Palaeozoic. The two Charnwood Forest sites have only recently been reclassified as probably Palaeozoic, and many users of this volume may still regard these rocks as part of the local Precambrian sequence. Describing these sites in a separate chapter, outwith the Precambrian GCR Block (Figure 1.5), emphasizes their distinction from the rest of the Charnian Supergroup and highlights a controversy that is still continuing. For the other site that has been included, at Thornton in Ribblesdale, a Palaeozoic age is strongly suggested even though the evidence is so far indirect, being based on a nearby borehole.

It should be noted that the Monian Supergroup of Anglesey is regarded by some to be Cambrian rather than Precambrian in age, as discussed in the introduction to Chapter 7, but the evidence again is indirect, being based on doubtful palaeontological identifications and correlations with rock sequences in south-east Ireland. One of the problems when considering the stratigraphical position of the Monian is that it occurs within an imbricated system of juxtaposed terranes (Figure 1.1), each representing a sliver of Precambrian crust that may be considerably removed from its original position. The Monian is therefore part of the highly complex structural fabric of Anglesey and for that reason it is better described, together with the adjacent rocks of definite Precambrian age, in Chapter 7.

[References](#)



(Figure 1.5) Diagram showing the relationship between Precambrian terranes, GCR networks and site clusters. Figures in brackets refer to the relevant chapters in which the descriptions occur. Letters in brackets indicate the JNCC scientific 'ranking' of each site (see text for explanation). Note that sites with probable Palaeozoic rocks are treated outwith the main GCR site networks.



(Figure 1.1) Sketch map showing the distribution of Precambrian outcrop, and boreholes proving Precambrian rocks, in southern Britain. Note that the outcrops are labelled with the names of the principal geological units, followed by numbers (in brackets) of the chapters for the relevant GCR sites. Terrane boundaries are slightly modified after British Geological Survey (1996); Myddfai Steep Belt after Woodcock (1984a); Monian Composite Terrane after Gibbons and Horák (1990). Key: ADF, Aber-Dinlle Fault; BSZ, Berw Shear Zone; CASZ, Central Anglesey Shear Zone; DNF, Dinorwic Fault; LTFZ, Llyn Traffwll Fault Zone; ?NECBF, postulated NE Charnwood Boundary Fault. The boundary of the Midlands Microcraton basement domain is outlined by the NECBF and Pontesford-Myddfai lineament systems; WBFS, Welsh Borderland Fault System.