

# **Marine Devonian (MAR-DEV)**

## **Block Description**

Visit <a href="https://jncc.gov.uk/gcr-site-list">https://jncc.gov.uk/gcr-site-list</a>, for more information on GCR blocks and sites For Palaeozoic Stratigraphy GCR block descriptions and GCR site lists, visit <a href="https://jncc.gov.uk/gcr-blocks-palaeozoic-stratigraphy">https://jncc.gov.uk/gcr-blocks-palaeozoic-stratigraphy</a>

#### Introduction

The GCR sites selected for this GCR Block represent the British geological record of Earth history from about 417 to 354 million years ago (Ma) as represented by marine rocks of Devonian Age. Non-marine Devonian 'Old Red Sandstone' strata are afforded their own GCR Block (see Non-Marine Devonian (NMAR-DEV)). Strata laid down in the Devonian Period (the fourth Period of the Palaeozoic Era, 540–251 Ma) constitute the Devonian System.

## Palaeogeography and palaeoenvironment

See Non-Marine Devonian (NMAR-DEV).

### **GCR** site selection

Although the relatively common invertebrate fossils do not have a separate selection category in the GCR in their own right, the scientific importance of many stratigraphy sites lies in their fossil content. Therefore, some of the GCR sites are selected specifically for their fossil fauna, which facilitates stratal correlation and enables the interpretation of the environments in which the animals lived. Moreover, some sites have international significance because they have yielded fossils that are the 'type' material for a taxonomic group.

In contrast to the manner in which most invertebrate fossils are represented in the GCR, fossils of vertebrates, arthropods (except trilobites) and terrestrial plants do have their own dedicated selection categories, owing to the relative rarity of the fossil material.

See Arthropoda (APD); Silurian - Devonian Chordata (SIL-DEV-CH); Palaeozoic Palaeobotany (PAZ-PALBOT); Palaeoentomology (PALENT).

### Palaeontology, fauna and flora

In the Devonian Period there are biostratigraphical zonal schemes for graptolites, ammonoids, brachiopods, fish, conodonts, microvertebrates and miospores.

The fossils that are present indicate that the Devonian Period saw profound changes in the evolutionary record, with the first significant colonisation of terrestrial habitats by vascular plants, the rapid expansion of the first aquatic vertebrates, and their emergence onto land.