



Wealden (WDN)

Block Description

Visit <https://jncc.gov.uk/gcr-site-list>, for more information on GCR blocks and sites
For Mesozoic-Tertiary Stratigraphy GCR block descriptions and GCR site lists,
visit <https://jncc.gov.uk/gcr-blocks-mesozoic-tertiary-stratigraphy>

Introduction

The GCR sites selected for this GCR Block represent the British geological record of Earth history from about 142 to 121 million years ago (Ma) as represented by the sandy, non-marine rocks of the Weald district of south-east England that developed widely over north-west Europe as a result of late Jurassic to early Cretaceous earth movements.

Marine rocks of this age are afforded their own GCR Blocks (see **Berriasian, Valanginian, Hauterivian, Barremian (BER-BAR)** and **Portlandian - Berriasian (PTL-BER)**). This interval is the first part of the Early Cretaceous Epoch, which spans from 142 to 99 Ma. Rocks that formed during the Early Cretaceous Epoch (part of the Cretaceous Period) constitute the Lower Cretaceous Series (part of the Cretaceous System).

The Berriasian (142–137 Ma) Valanginian (137–132 Ma), Hauterivian (132–127 Ma) and Barremian (127–121 Ma) strata of marine origin, which constitute the Neocomian Series, are included in one GCR Block together because they are commonly closely associated in general lithology and palaeontology distinct from the non-marine Wealden strata (the Hastings Sands and Weald Clay); these four stratigraphical stages precede the deposition of Aprian-Albian strata, rocks formed during the second part of the Early Cretaceous Epoch.

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); Jurassic - Cretaceous Reptilia (JUR-CRE-RP); Mesozoic Mammalia (MES-MAM); Mesozoic Palaeobotany (MES-PALBOT); Mesozoic - Tertiary Fish/Amphibia (MZ-TR-FI-A); Palaeoentomology (PALENT).

Palaeontology, fauna and flora

See Berriasian, Valanginian, Hauterivian, Barremian (BER-BAR)