



## Tertiary Reptilia (TER-REP)

### Block Description

Visit <https://jncc.gov.uk/gcr-site-list>, for more information on GCR blocks and sites  
For Palaeontology GCR block descriptions and GCR site lists,  
visit <https://jncc.gov.uk/gcr-blocks-palaeontology>

## Introduction

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 GCR Blocks, because of the relative rarity of the fossil material. The GCR sites selected for the Tertiary Reptilia GCR Block represent the British fossil record of terrestrial and aquatic reptiles of the Tertiary sub-Era (which spanned from 65 to 2 million years ago (Ma), and which was preceded by the Mesozoic Era). At the end of the Cretaceous Period (the last Period of the Mesozoic era) there was a major, global mass-extinction event (the 'K-T' event [Cretaceous-Tertiary]), and this had a significant effect on the faunas of the time, with approximately 85% of species becoming extinct. The end of the Tertiary sub-Era is marked by the onset of the 'Great Ice Age' (Quaternary Period), thus enabling this 'unit' of the fossil record to have a developing, but characteristic, faunal distinctiveness.

Earlier fossil reptiles are afforded their own GCR Blocks, 'Permian-Triassic Reptilia' and 'Jurassic- Cretaceous Reptilia'. **See Permian - Triassic Reptilia (PER-TRI-RP) and Jurassic - Cretaceous Reptilia (JUR-CRE-RP).**

## Palaeontological characteristics

The reptiles evolved from their amphibian forebears over 300 million years ago. The oldest postulated fossil reptile is known from the Carboniferous of Scotland. Reptiles radiated extensively during the Permian Period and the Mesozoic Era, a span of time often referred to as the 'Age of Reptiles'. Britain's 500 hundred or more fossil reptile sites provide abundant information on reptiles of this time, including key Triassic sites that document the pre-dinosaur times, and unique dinosaurian faunas of Mid Jurassic and Early Cretaceous age. Marine reptiles (plesiosaurs, ichthyosaurs, crocodylians) are richly represented in the Early and Late Jurassic in particular. A number of Tertiary localities have yielded rich faunas of turtles, crocodylians and squamates.

## Palaeogeography

The palaeogeography of each relevant geological period of the Tertiary sub-Era can be found elsewhere on the pages of this website. See **Tertiary Igneous (TER-IGN)**, **Palaeogene (PGN)**, **Neogene (NEO)**

## GCR site selection

Owing to the rarity of fossil reptile material, this GCR Block represents something of a special case with regard to including all of the sites yielding, or that have yielded, significant types and quantities of scientifically important material that help elucidate the evolution, diversification and extinction of the main reptile groups.

The sites selected for this Block aim to represent distinct reptile assemblages showing diversification and extinction associated with the Tertiary sub-Era.