

The ENCI-HeidelbergCement Group quarry at Maastricht, the Netherlands – a latest Cretaceous mosasaur park from 2018 onwards?

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The still active ENCI-HeidelbergCement Group quarry at Sint-Pietersberg, south of the city of Maastricht, is currently undergoing marked changes that have been agreed upon in a so-called 'Plan of Transformation'. Quarrying will come to a halt by July 1, 2018, after which date the quarry will be turned into a multi-purpose recreation/nature/arts and sciences area. In fact, the foundation 'Stichting Ontwikkelingsmaatschappij ENCI-gebied' is already well underway in seeing these plans through.

Exposed at the quarry, which is adjacent to the type section of the Maastrichtian Stage of André H. DUMONT (first described and named in 1849), are various units of biocalcarenes assigned to the Gulpen and Maastricht formations of late Maastrichtian (c. 69–66 Ma) age. Of special note are the flint cyclicity in the Lixhe and Lanaye members (Gulpen Formation), the four partial mosasaur skeletons that have been unearthed here between 1998 and 2015 and the overall increase in fossil biodiversity towards the top of the sequence that illustrates deposition in a shallow, warm-water (subtropical) setting. Primarily the mosasaurs, nicknamed Bèr (1998), Kristine (2009), Carlo (2012) and Lars (2015) appeal to the general public and are instrumental in getting the palaeontological message across, so to speak. The quarry grounds make for ideal open-air museum exhibits that are complementary to the ones at the Natuurhistorisch Museum Maastricht/Centre Céramique in the city of Maastricht and present visitors with an unsurpassed 'hands-on' experience. The local branch ('afdeling Limburg') of the Dutch Geological Society, in conjunction with staff members of the Natuurhistorisch Museum Maastricht, contribute the necessary know how. The biocalcarenes at the quarry are covered by uppermost Eocene/lowermost Oligocene mostly decalcified sands (that have yielded isolated bones of an archaeocete whale) and Pleistocene (c. 700 ka) gravels of the River Maas (Meuse) and aeolian sands (loess). This sequence is ideal for illustrating large-scale geological processes (transgressions/regressions, erosion, sedimentation) and evolutionary turnovers in fauna and flora that have occurred in the past 70 million years.

<http://www.enci-gebied.nl/>

<https://www.natuurmonumenten.nl/enci-groeve-maastricht>