

## LATE CRETACEOUS AMMONITE FAUNAS OF THE MAASTRICHTIAN TYPE AREA

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Although Kennedy's (1987) revision of ammonites from the type Maastrichtian has greatly improved our knowledge of these faunas, the stratigraphic ranges of most taxa are still comparatively poorly known. This is particularly unfortunate since we do now have a very detailed lithostratigraphy and well-correlatable ecozonal subdivisions based on bioclasts, benthic forams and ostracods. Moreover, we have a much better understanding of K/T boundary phenomena, as well as a sequence stratigraphic interpretation and a preliminary strontium isotope stratigraphy for the type Maastrichtian.

New ammonite material collected during recent fieldwork and recognised in private collections, comprises quite a number of taxa not previously recorded from the area. Notable recent additions include *Hauericeras* cf. *rembda* (Forbes 1846), *Pachydiscus haldemsi* (Schlüter 1867), *P. subrobustus* (Seunes 1892), *Memites terminus* (Ward & Kennedy 1993), *Patagiosites* sp., *Placenticeras* cf. *bidorsatum* (Roemer 1841), *Neancyloceras?* *phaleratum* (Griepenkerl 1889), *Baculites vaalsensis* Kennedy & Jagt 1995, *B. knorrianus* Desmarest 1817, *Trachybaculites columna* (Morton 1834), *Scaphites gibbus* Schlüter 1872, *Hoploscaphtes* n. sp. (aff. *waagei/angmartussutensis*) and *Jeletzkytes dorfi* Landman & Waage 1993.

Concerning ammonite preservation in the Maastricht Formation, it may be noted that: 1 - generally speaking, ammonites are rare, with the exception of local acmes in baculitid and scaphitid distribution; 2 - ammonites are either absent from, or (extremely) poorly preserved in, the non-indurated portions in the sequence. Only under special conditions (e.g. silicification, rapid burial) have ammonites been preserved in these strata; naturally, such occurrences influence the species' range considerably. In combined lithostratigraphic sections, one illustrating the Haccourt/Maastricht/Geulhem area, the other the Heerlen/Vijlen/Aachen area, all ammonite taxa known to date are listed. Their stratigraphic ranges are calibrated against belemnite zones, and palaeobiogeographic implications of these faunas are briefly discussed.

In addition, the proposed ammonite index for the base of the Maastrichtian, *Pachydiscus neubergicus* (von Hauer 1858), is recorded for the first time from subunit 6 of the Vijlen Member (Gulpen Formation), as exposed in the Haccourt-Lixhe area (NE Belgium). Correlations with northern Germany using belemnites suggest these specimens to be of *cimbrica* Zone age (= late Early Maastrichtian).

**Kennedy, W.J. 1987.** The ammonite fauna of the type Maastrichtian with a revision of *Ammonites colligatus* Binkhorst, 1861. *Bull. Inst. r. Sci. nat. Belg., Sci. Terre*, 56 (1986): 151-267.