Ammonite faunal dynamics across bio-events during the mid- and Late Cretaceous along the Russian Pacific coast

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The present paper focuses on the evolutionary dynamics of ammonites from sections along the Russian Pacific coast during the mid- and Late Cretaceous. Changes in ammonite diversity (i.e., disappearance [extinction or emigration], appearance [origination or immigration], and total number of species present) constitute the basis for the identification of the main bio-events. The regional diversity curve reflects all global mass extinctions, faunal turnovers, and radiations. In the case of the Pacific coastal regions, such bio-events (which are comparatively easily recognised and have been described in detail), rather than first or last appearance datums of index species, should be used for global correlation. This is because of the high degree of endemism and provinciality of Cretaceous macrofaunas from the Pacific region in general and of ammonites in particular.

Key words: Ammonoidea, evolution, bio-events, Cretaceous, Far East Russia, Pacific.

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