

Remarks on the Mid-Cretaceous Bioevents of Europe and Western Kazakhstan

MARCINOWSKI, RYSZARD. Institute of Geology of the University of Warsaw, Al. Żwirki i Wigury 93, PL 02-089 Warszawa, Poland.

In some intervals of the Mangyshlak Cretaceous some species appear gregariously. Their occurrence makes biohorizons that exactly correspond to the definition of bioevents. The recognised bioevents, that is the *plenus-Event* (Late Cenomanian), the *waltersdorfensis-Event*, and the *brongniarti-Event* (both Early Coniacian), are very well correlable with those from Poland, NW Germany, and England where they are synchronous with the transgressive pulses. This inspires a further approach that of the many species associated with the bioevent horizons, only some are able to produce the mass occurrence typifying the panregional bioevents. To conclude, the mass appearance, synchronous over vast areas, of the species featured by their benthic mode of life (inoceramids, heteromorph ammonites, etc.) had to be connected with planktic behaviour of their larval and/or juvenile stages. Only the species of relatively the longest planktic stages featured by the greatest tolerance and considerable resistance to environmental changes (stresses) when settling after that stage, were able to domicile and flourish on such vast areas in a surprisingly short timespan that corresponded to a recognised bioevent.

To summarise, the discussed synchronous bioevents are thought to have resulted from pelagic blooms of the larval (and/or juvenile) stages of some species, the widespread geographic distribution of which was controlled by the stabilisation of sedimentary conditions (onlap of the carbonate facies) and successive transgressive pulses.