

EGU22-9536, updated on 10 Aug 2022

<https://doi.org/10.5194/egusphere-egu22-9536>

EGU General Assembly 2022

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## Deep-Water Agglutinated Foraminifera from the Contessa Highway Section, Umbria-Marche Basin, Italy: Assemblage turnover at the Cretaceous/Paleogene Boundary

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Deep-water agglutinated foraminifera (DWAF) are investigated from the lower Paleocene of the Contessa Highway section in the Umbria-Marche Basin in Italy. In the lowermost meter of the Paleocene, corresponding the P0, Pa, and lowermost P1 planktonic foraminifera zones, a total of 46 species of DWAF are observed. A comparison with the uppermost Maastrichtian DWAF assemblages documented by Cetean (2009) yields a combined total of 94 DWAF species over the Cretaceous/Paleogene boundary interval at Contessa Highway. Of these, 49 species are listed as extinction taxa, nine are survivor taxa, 19 are Lazarus taxa, and 17 taxa display first occurrences in the Paleocene.

The record of DWAF in the Contessa Highway section displays a moderate decrease in diversity across the K/Pg boundary, followed by a gradual recovery in the first meter of the Paleocene. The lower Paleocene record is characterized by blooms of opportunistic species belonging to the genera *Reophax*, *Subreophax*, *Repmanina*, and *Spiroplectinella*. The K/Pg boundary interval records a major change in the proportions of DWAF morphogroups, from a suspension-feeding community in the Maastrichtian to one dominated by epifaunal detritivores in the lower Paleocene, reflecting a fundamental change in the nature of marine primary productivity following the bolide impact.