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Shallow-water benthic foraminifera across the Cretaceous-Paleogene boundary (Kambühel Limestone, Lower Austria): preliminary results

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A variety of papers deal with the turn-over of planktic foraminifera across the Cretaceous-Palaeogene (C-Pg) boundary in pelagic depositional settings, but only little is known about the impact on benthic, shallow-water fauna. A succession of late Maastrichtian mixed siliciclastic-carbonates with orbitoidids and Siderolites, followed by Danian-Selandian carbonates is reported from Mount Kambühel in Lower Austria. In the Kambühel Limestone (KL), besides the disappearance of orbitoid foraminifera (and Siderolites), the most important biotic change across the preliminary fixed C-Pg boundary is expressed by a blooming of bryozoans and withdrawal of corallinaceans. The early Danian notably records an impoverished microfauna with an assemblage including Cibicidoides succedens-Stomatorbina? *binkhorsti-Planorbulina? uva* and associated nodosariids and polymorphinids. Agglutinating taxa only constitute minor faunal elements. In some parts of the succession, encrusting Solenomeris abounds. Along with the successful recovery of corallinaceans, debris of corals, dasycladaleans and representatives of Peneroplis? sp., and Rotaliida (Rotorbinella hensoni-detrecta, Pararotalia gr. tuberculifera) occur. Higher in the section, large thick-walled Gyroidinoides, Cocoarota orali and fragments of encrusting Haddonia praeheissigi are common. The latter two species become more significant in the following micritic mostly bioclastic coral limestones together with large-sized dasycladaleans (Neomeris deloffrei, Dactylopora bystricki). In the same levels, tiny euendolithic foraminifera are also frequently observed. Our tentative biostratigraphy is largely based on planktic foraminifera, which occur in some parts of the section, since larger benthic foraminifera providing the base for the Shallow Benthic Zones (SBZ) are almost absent. The Selandian age of the coral limestones, making up the top of the KL can be assigned to the P3 Zone (Morozovella angulata, Globanomalina chapmani group). Thanetian shallow-water carbonates are only known from olistolites, as reported from various localities in the Northern Calcareous Alps.