

Cenozoic mass occurrences of larger benthic Foraminifera in the Mediterranean region: What can we learn from the current range expansion of *Amphistegina lobifera*?

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There are several records of Cenozoic mass occurrences of Larger Benthic Foraminifera (LBF) from the Mediterranean region. The nearly monospecific Nummulites facies of the Paleocene/Eocene or the Amphistegina-Limestones of the Miocene and Pliocene are generally associated with times of warm ocean temperatures, e.g., the PETM. During the Pleistocene, many taxa of LBF have been very restricted or disappeared entirely from the Mediterranean. However, since the opening of the Suez Canal and the ongoing ocean warming, extensive range expansions of relict and newly introduced LBF and other warmwater-associated foraminifera have been observed. Among those, *Amphistegina lobifera* is the most prominent example and it already exhibits the potential to form mass occurrences again. We have analyzed sediment samples from Corfu Island in the central Mediterranean and compared them with data from Pleistocene deposits from the same area. We found that the fossil assemblages are dominated by small miliolid and epiphytic foraminifera and LBF are virtually absent. However, the arrival of *Amphistegina lobifera* appears to have initiated a faunal turnover represented by a significant decrease in small miliolids and epiphytes in samples where *A. lobifera* is particularly abundant. At the same time, several LBF and other warmwater taxa show increasing abundances. These observations shed light on the structure and time frames of community changes associated with LBF invasions and might serve as modern analogues for the development of mass occurrences in the past.