Marginal marine foraminifera

Principle investigators:
J. Schönfeld (GEOMAR)
W. Kuhnt (IFG Kiel)

Cooperation partners:
LKN Schleswig-Holstein
Kreis Plön - Amt für Umwelt
I. Mendes (Univ. Algarve, Faro, Portugal)

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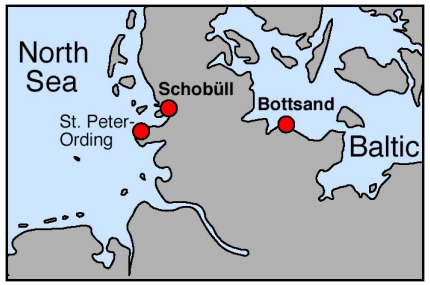
Education: Applied Palaeobiology, mageoMaCEAP-01a,
(M.Sc. Marine Geosciences, Kiel University)

In this long-term project, we investigate changes in assemblage composition and population density of benthic foraminiferal faunas along transects from the upper saltmarsh to mud flats in relation to environmental parameters and floral associations. Periannial to decadal time series will allow to assess the influences of current climatic change and sealevel rise. The study focuses on Bottsand-Lagoon at Marina Wentorf, Plön district, the salt-marsh at Schobüll, Nordfriesland district, and St. Peter-Ording. Comparative studies are pursued at Ria Formosa coastal lagoon, Faro, Portugal.



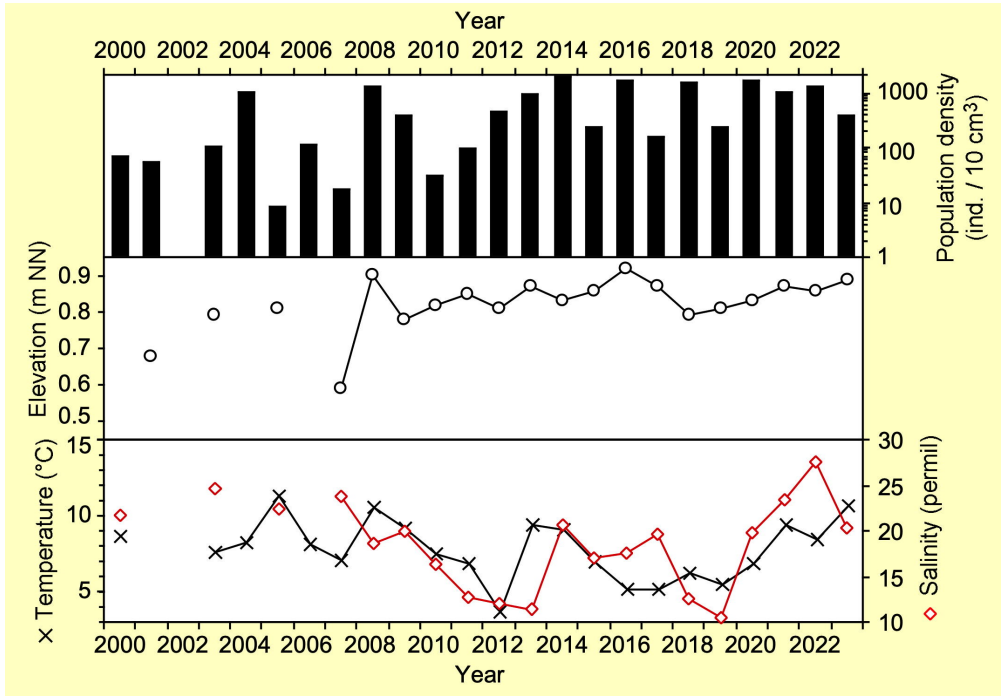


Fig. 1 (upper left). Rose Bengal stained benthic foraminifera that were living at the time of sampling from Bottsand Lagoon and the saltmarsh at Schobüll (not to scale).
Fig. 2 (upper right). Study areas at North Sea and Baltic Sea coasts.
Fig. 3 (lower right). Population density of living benthic foraminifera in November or Dezember on the mud flat off Schobüll from 2000 to 2022. A series of strong gales in winter 2006/2007 have lead to an erosion of the tidal flats by ca. 20 cm. Strong precipitation in late summer and fall induced a successive salinity decrease during the years 2009 to 2013.