

Mediterranean Marine Science

Vol 26, No 1 (2025)

Mediterranean Marine Science



Diatom distribution and long-term survival in a heavily polluted sediment core from the Bay of Bagnoli (Tyrrhenian Sea, Italy)

ANGELA PELUSI, MARÍA LORENA ROMERO MARTÍNEZ, APURVA MULE, ELEONORA SCALCO, INES BARRENECHEA ANGELES, ROBERTA PIREDDA, WIEBE KOOISTRA H.C.F. , MARINA MONTRESOR, DIANA SARNO

doi: [10.12681/mms.37946](https://doi.org/10.12681/mms.37946)

To cite this article:

PELUSI, A., ROMERO MARTÍNEZ, M. L., MULE, A., SCALCO, E., BARRENECHEA ANGELES, I., PIREDDA, R., KOOISTRA H.C.F. , W., MONTRESOR, M., & SARNO, D. (2025). Diatom distribution and long-term survival in a heavily polluted sediment core from the Bay of Bagnoli (Tyrrhenian Sea, Italy). *Mediterranean Marine Science*, 26(1), 40–54. <https://doi.org/10.12681/mms.37946>

Diatom distribution and long-term survival in a heavily polluted sediment core from the Bay of Bagnoli (Tyrrhenian Sea, Italy)

Angela PELUSI, María Lorena ROMERO MARTÍNEZ, Apurva MULE, Eleonora SCALCO, Ines BARRENECHEA ANGELES, Roberta PIREDDA, Wiebe H.C.F. KOOISTRA, Marina MONTRESOR and Diana SARNO

Mediterranean Marine Science, 26 (1) 2025

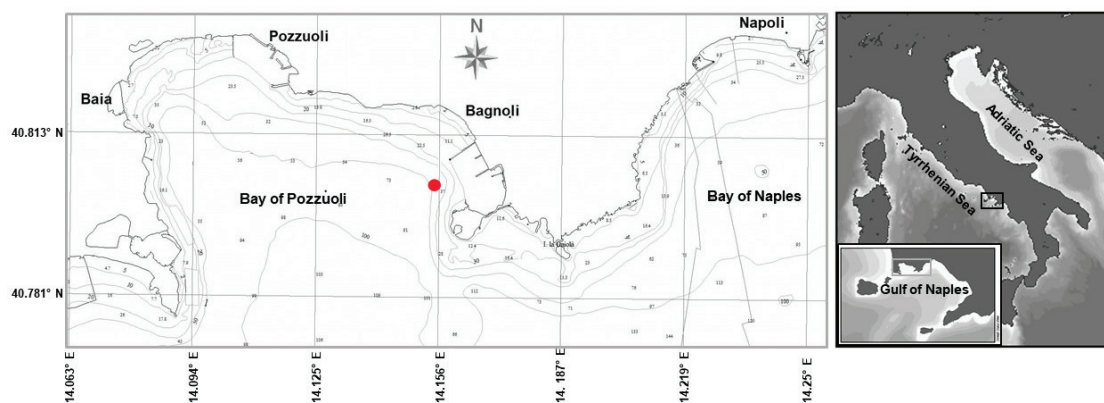


Fig. S1: Map of the Bay of Pozzuoli (Tyrrhenian Sea, Mediterranean Sea) with the location of the site at which core AB1 was collected (red dot).

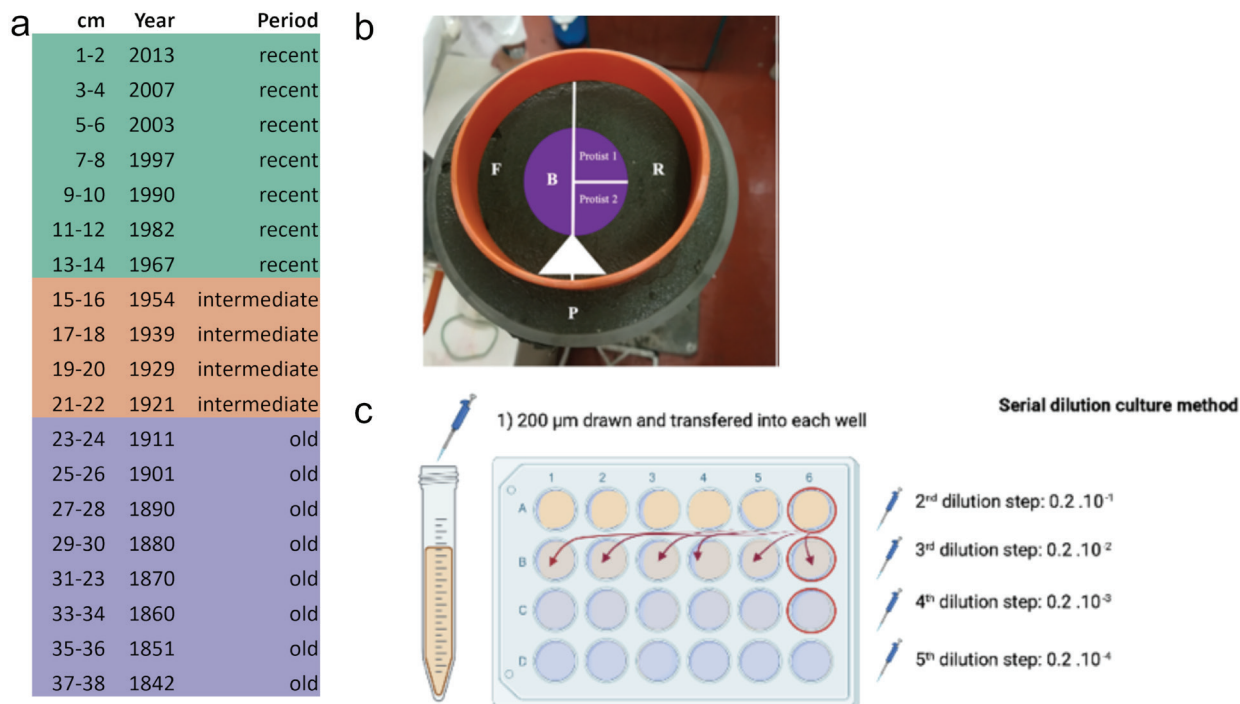


Fig. S2: a) Sediment layers of core AB01 on which sedDNA barcoding analysis was carried out. For each layer are indicated: the year (²¹⁰Pb and ²²⁶Ra dating, see (Barrenechea Angeles *et al.*, 2023) and the three periods identified by Multidimensional Scaling analysis (Fig. 1). b) Partition of the individual 1-cm sediment layers into subsamples for different biological analyses: Protist 1 and Protist 2 for eukaryotic metabarcoding, R for SDC analyses. c) Schematic representation of the Serial Dilution Culture (SDC) setup.

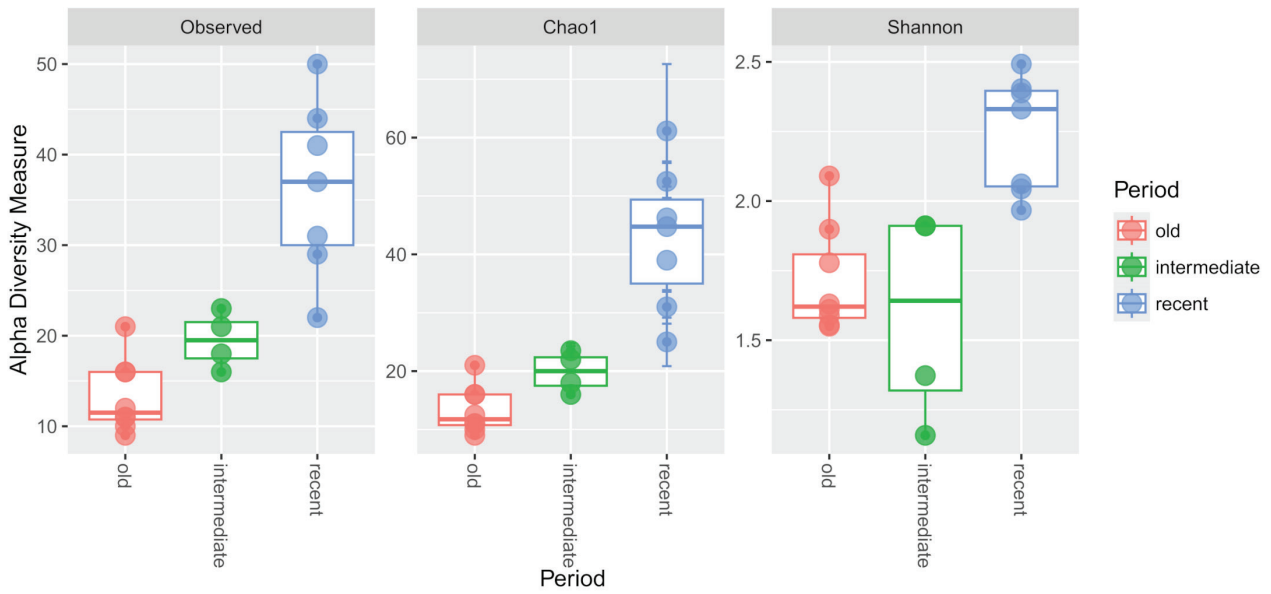


Fig. S3: Estimates of alpha diversity: Richness (Observed ASVs), Chao1 and Shannon index.

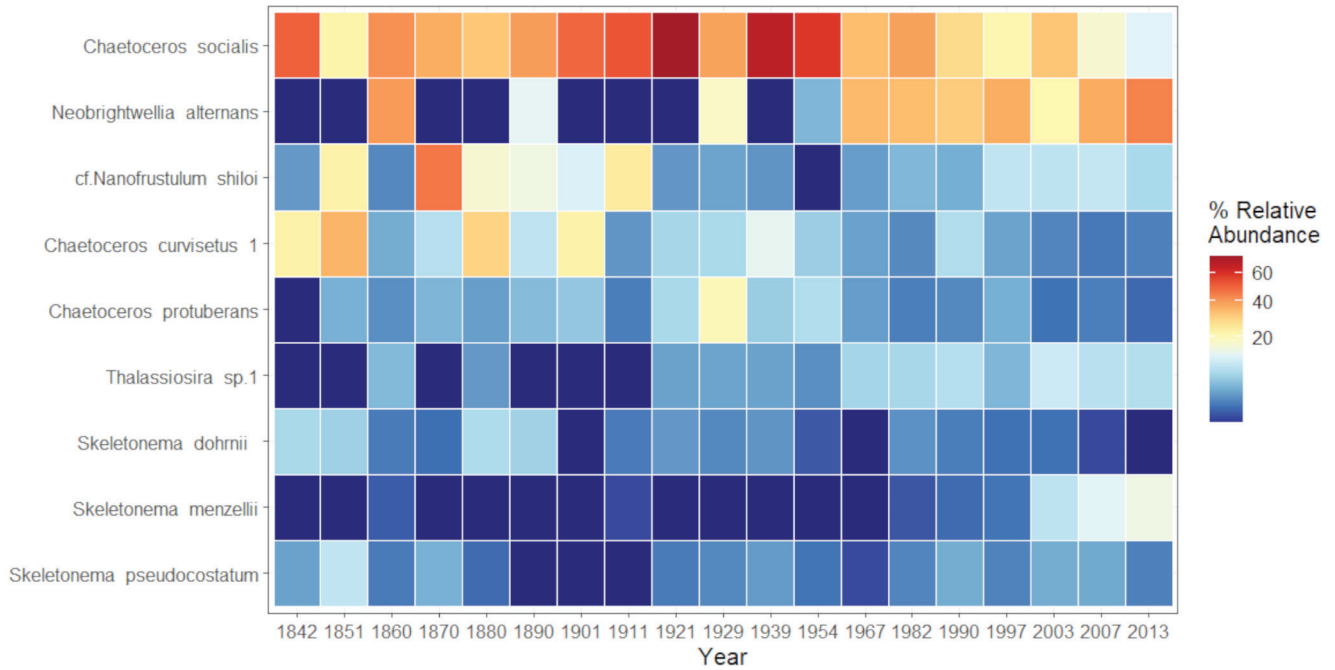


Fig. S4: Heat-map illustrating relative abundance of the most abundant diatom ASVs assigned to the species level.