**Supplementary material captions**

**Suppl. 1:** Detailed list of taxa collected with the grab, the dredge, or the corer (mean abundance per m²) at the three investigated sites (Bernet channel, Pyla channel and Pyla beach) from 2003 to 2023. Taxa shared by all three sites are in bold, and taxa occurring only in one site are in red. Years with works are in yellow. Abundance is also expressed by zoological group and the percentage of individuals per zoological group is provided in the last column.

**Suppl. 2:** Sediment characteristics (median grain size in µm and organic matter content in %) at the three investigated sites (Bernet channel, Pyla channel and Pyla beach) from 2003 to 2023.