Marine molluscs from KwaZulu-Natal

Baseline knowledge in the form of accurately identified occurrence records, supported by a sound taxonomic backbone, underpins robust multidisciplinary research programmes. Such research programmes which inform evidence-based policy and management advice ultimately sustain the effective utilisation of our bio-economies. However, for South Africa's marine benthic invertebrates there is a lack of baseline or foundational knowledge, mostly due to the difficulty of sampling offshore habitats. Traditionally, marine molluscs, South Africa's most specious marine taxa, have been relatively well documented, due to the efforts of the Natal Museum Dredging Programme (NMDP) in the 1980s and 90s. However, much of the expertise on the taxonomy of our marine molluscs will soon be lost. In addition, this programme was conducted before the genome revolution, meaning that critical genomic data was not collected and curated. To ensure that these skills remain within South Africa's marine biodiversity expertise, this project aims to return to the NMDP sampling sites in the KwaZulu-Natal region and in doing so fulfil other missing foundational biodiversity information needs. In addition to contributing to the sediment database of the South African Marine Research and Exploration Forum, through this project, we aim to produce new occurrence records, new DNA barcodes, and new photoquadrats, and at the same time collect data which will allow us to investigate benthic community change over time, giving insight into global change research. Finally, through engagement with current specialists in marine molluscs' taxonomy, we aim to ensure timeous knowledge transfer and continued research on South Africa's mollusc species.