

## **Project Update June 2024**

Regular monitoring informs management decisions – it tells us when coral reefs are under pressure, and when our interventions are making a difference. This project will pilot a citizen science approach to improve long-term monitoring of coral reefs in South Africa, which will not only fill knowledge gaps on the status and trends of important and threatened species (including corals and fishes), but it will increase capacity for sustained ocean observations, improve education and awareness for conservation and foster ocean stewardship by applying a community-driven approach to monitoring and conserving marine protected areas. Evidence-based decision making underpins effective conservation.

### **Activities:**

To address the first objective of the project, a detailed literature review took place to identify other marine citizen science initiatives from around, and to identify the different methods and protocols applied in each one. We also engaged with the directors of some of the successful programs, specifically Reef Life Survey from Australia and REEF from America. An online training

Two meetings were held with the local Marine Protected Area (MPA) management authority, Ezemvelo KZN Wildlife, to discuss monitoring needs and priorities in the province. Discussions were had regarding the many gaps that still need to be filled to carry out effective monitoring and management the local MPAs. Some of the challenges include a lack of capacity the resources (including funding) to carry out the relevant activities. A possible solution for this is for Ezemvelo to partner with other research organisations and non-profits that operate in KZN to assist with data collection and analysis.

An online questionnaire was then sent out to the SCUBA diving community to gauge interest in a possible marine citizen science project. People responded to the survey, with an overwhelming majority very interested in this initiative.

Some initial reef surveys were conducted in Durban and Sodwana Bay, which consisted of some training dives and REEF fish surveys. Students, early career professionals and citizens have been trained so far, and surveys have been completed. Furthermore, during the fieldtrip in Sodwana Bay, some rocky shore monitoring methods were tested with the Sharklife group, and we attached a permanent intertidal temperature logger at one of the sites. We took photo quadrats along a transect, perpendicular to the shore

### **Milestones and deliverables:**

#### **Questionnaire**

Stakeholder engagement: Meetings with Ezemvelo, Clansthal Conservancy, Sharklife (Sodwana Bay), Sharkwise (Aliwal Shoal), Durban Undersea Club (DUC), local SCUBA divers

#### **Methods identified**

Most training materials developed

Training sessions and dives

Initial surveys completed

Outcomes/impacts:

Impacts will be realised at the end of the project and in future years. Current outcomes include improved capacity to conduct fish surveys in KZN.

More reefs surveys conducted

Challenges:

Time and resources to conduct training and fish surveys, including considering all stakeholders and the weather and sea conditions. (Logistics).

Next steps:

Data workflow and knowledge mobilisation

Stakeholder engagements:	8 meetings and workshops
Training sessions:	3 training events
People trained	11 in Dbn/ 15 Sodwana Bay (26 total)
Dives/surveys	16 dives/43 surveys
Hours underwater	
Species identified (& counted)	
Most common species observed	
Rare/unique fish observed	