

In recent years an increasing emphasis has been placed on the importance of understanding the dynamics of the marine sector through the implementation of minimally destructive scientific research. Scientific



research is invaluable in an area such as the iSimangaliso Wetland Park as it allows for the implementation of Long Term Monitoring Programs (LTMPs), an understanding of anthropogenic (human) impacts, and educated management. In short, scientific research will provide the baseline information required to ensure the area remains pristine while still allowing responsible and sustainable fishing and SCUBA diving.

Reece Wartenberg (MSc Cand, BSc. (Hons)) is focussing on the fish species that occur on Two-Mile Reef. Reece is using specifically designed SCUBA video methods to relate which species occur at which depths, while relating significant trends to habitat type and availability. The dynamics of the relationship between fish size and depth are also being investigated. Pioneering investigation into the fish communities occurring at depths beyond those considered suitable for commercial diving, i.e. greater than 30 m, will be conducted with the use of a remote operated vehicle (ROV). The results of this work will provide a long term monitoring program for the fish species of the iSimangaliso Wetland Park while providing information valuable towards the development of scientific SCUBA surveys of fishes worldwide.

Denham Parker (MSc Cand, BSc. (Hons)) is conducting research towards understanding the biology and life history of the commonly occurring largespot pompano (*Trachinotus botla*), also known as wave garrick. No biological information on this indo-pacific species is currently available in Africa, with only one similar study having been conducted in Queensland, Australia. Denham's research will provide information on the age, growth, maturity, reproduction, movement and genetics of the species. Further investigation into the occurrence of the conspicuous oral isopod parasite, an invertebrate much like a sand lice in appearance, prevalent in the species is also being conducted. The study will culminate with a set of

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management guidelines to ensure the sustainability of the species while still allowing resource users suitable access rights.

Matthew Parkinson (MSc Cand, BSc. (Hons)) will be investigating the trophic (primary production and feeding) dynamics of the marine environment from the intertidal zone to the heads of the submarine canyons, situated only a few kilometres offshore. Focus will be more specifically placed on determining what the major sources of primary production (by plants and algae) at the different regions are and how organisms higher up the food web, including the coelacanth, fit into the ecosystem. Additionally the occurrence of canyon upwelling events will be investigated as well as their effects on the nearby organisms.

For more information on the scientific work being carried out by the Rhodes University Department of Ichthyology and Fisheries Science or ACEP in the iSimangaliso Wetland Park, contact Triton Diving for details.

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