

# CRITICALLY IMPORTANT LONG TERM STUDY OF WHALES & DOLPHINS

## AIM OF THE STUDY

Distribution, habitat use and behaviour of whales and dolphins in the area from Danger Point to Quoin Point, Western Cape



## BACKGROUND

The area from **Danger Point to Quoin Point in South Africa** is a **Marine hotspot**, hosting a variety of different marine life such as Great white sharks (*Carcharodon carcharias*), African Penguins (*Spheniscus demersus*), Cape fur seals (*Arctocephalus pusillus*) to whales and dolphins of various species.

- **The Southern Right Whale (*Eubalaena australis*) (SRW)** and the coastal species **Indo-pacific Humpback dolphin (*Sousa chinensis*)** are common in the area. Humpback whales (*Megaptera novaeangliae*), Brydes whales (*Balaenoptera edeni*)

To date there has been no long term baseline study of the ecology of the cetaceans in this area. The area is exposed to a variety of potentially detrimental human impacts and collecting data now is essential. **ESKOM holdings**, the main power suppliers in South Africa, are considering building a **Nuclear Power Station (NPS)** at Bantamskip (Pearly Beach), Western Cape. This location is between Walker Bay and De Hoop, which are known as important mating and nursing grounds for the SRW. **The potential impact** of a NPS on the cetaceans are unknown and it is **important to monitor** the current behaviour and habitat use of the cetaceans prior to the establishment of a NPS.

## METHODS

The micro scale movements and individual behaviour of the cetaceans in the area will be monitored by; **boat based ID-Catalogue, Passive Acoustic Monitoring (PAM), GIS and Theodolite tracking.**

**PAM** enables the researchers to monitor an area acoustically, even when the weather is rough and during the night, when it is impossible to observe the whales from a boat. Four specialized acoustics devices known as "**Loggerheads**" will be mounted on the sea floor to record the underwater sounds.

**Theodolite tracking** will be carried out from land based stations, which ensures that silent whales are included as well.

**ID Photos** will be taken from the whale watching boat of Dyer Island Cruises.



## BUDGET

3 EAR x 2 years	104400 ZAR
1 Theodolite	30000 ZAR
1 Car	25000 ZAR
Petrol car x 3 years	40000 ZAR
Living cost 14400 x 3 years	432000 ZAR
<b>Total</b>	<b>631400 ZAR</b>



## RESEARCH TEAM

Ph.D. Student Katja Vinding Petersen. University of Pretoria  
Supervisor:  
Prof. Marthan Bester. University of Pretoria. Dep. of Zoology&Entomology  
Co-supervisors:  
Ph.D. Simon Elwen. University of Pretoria. Mammal Research Institute  
Ph.D. Steve Kirkman. University of Pretoria and Ocean & Coast  
**Cooperation:**  
Dyer Island Conservation Trust. Wilfred Chivell

