

PELAGIC GOBY, THE MAIN PREY FOR SEABIRDS IN THE NORTHERN BENGUELA: WHAT WE LEARN ABOUT FISH AND THEIR ROLE IN THE ECOSYSTEM FROM SEABIRD DIET

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The northern Benguela ecosystem is currently undergoing a regime shift due to a combination of overfishing and unfavourable environmental conditions. Changes in the food web show strong effects on top predators in the system; several seabird species show large population declines and are nowadays listed as 'Endangered'.

Their diet composition used to consist of mainly small pelagic fish species, such as anchovy and sardine which are nowadays almost absent from the system. Seabirds have to rely on other prey organisms and one of their main prey items is Pelagic Goby (*Sufflogobius bibarbatus*).

Limited information about the biology of this fish species exists because it is not commercially used and little studied so far. A combination of diet sampling and data logger work at several breeding sites along the Namibian coast is used in order to amplify this knowledge.

We demonstrate how seabird diet analyses can provide valuable information on spatial distribution and age class distribution of this species. Data logger work on the diving behaviour of penguins and cormorants feeding almost exclusively on Pelagic Goby provides information on vertical movements and age distributions of goby within the water column.

This information will lead to an improved understanding of the nature and scale of food web changes in the northern Benguela ecosystem and will be crucial for the evaluation of their effects on seabird populations.