

# Connectivity of Island Ecosystems from a Management and Ecological Perspective

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## Motivation

Global biodiversity loss has accelerated, particularly in diversity hotspots such as island ecosystems

Island Managers are tasked with managing these precious ecosystems for the future but with limited resources, especially those within small island states.

Research aim: to improve the conservation management effectiveness of island ecosystems by addressing factors currently affecting management success in the Western Indian Ocean.

## Methods



**Assessment of island ecosystem management:**  
Interviews and Questionnaires with Island Management practitioners from small island states



**Mapping coral population connectivity to inform management of the Seychelles coral reef system:**  
Collecting samples from across Seychelles, using a genomic approach to determine source-sink dynamics



**Managing the threat of plastic pollution to island ecosystems:**  
Surveys of accumulation rate, quantity, composition, attached biota and clean-up effort were carried out on Aldabra Atoll.

## Results from section 3: Managing plastic pollution in island ecosystems



Estimated 514 Tons on Aldabra



On average one person collected 27.65 kg of trash in one hour



It cost £150,000 to remove 25 tonnes of trash that's £6000 per tonne



52% of trash is fishing gear, 22% is flip-flops!



Estimated accumulation rates for Aldabra is 6.5 tonnes annually\*



On average, 75% of all trash arriving had attached biota

The future of biodiversity-rich islands within Small Island States like Seychelles depends on the effectiveness of their management... so lets improve it!



Are you involved in management or monitoring of island ecosystems?

I would love to interview you so please come and say hi or email me:

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