

# Coral Reef Monitoring in Rodrigues

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# Monitoring Sites

- 7 sites & 11 stations
- Stations:
  - Reef flat (1m)
  - Reef slope (6-12m)
- 4 sites (6 stations) inside Marine Reserves; 3 sites (5 stations) outside
- 2 southern sites now monitored by South East MPA.



# Monitoring Methodology

- Coral Reef Monitoring
  - Benthos (% cover)
  - Macro-invertebrates (abundance)
  - Fish (abundance)
  - Fish length (12 indicator species)
- Annual surveys (summer)
- Other monitoring:
  - Water quality (occasional)
  - Lagoon habitats (annual)
  - Fish & octopus catches
  - Socio-economics



# Monitoring Partnerships

- Coral Reef Monitoring undertaken by Shoals Rodrigues (local NGO).
- Partnership being developed with the South East MPA to carry out monitoring in the south.
- Octopus fishery monitoring carried out by local fishers trained in catch assessment techniques.
- A participatory monitoring programme being developed to assess the management effectiveness of the Marine Reserves .



# Engagement in International Efforts

- Members of the Réseau Récif
- ReCoMaP – octopus resource management (comparison of genetic variation between Rodrigues and Madagascar)
- SocMon-WIO – socio-economic monitoring



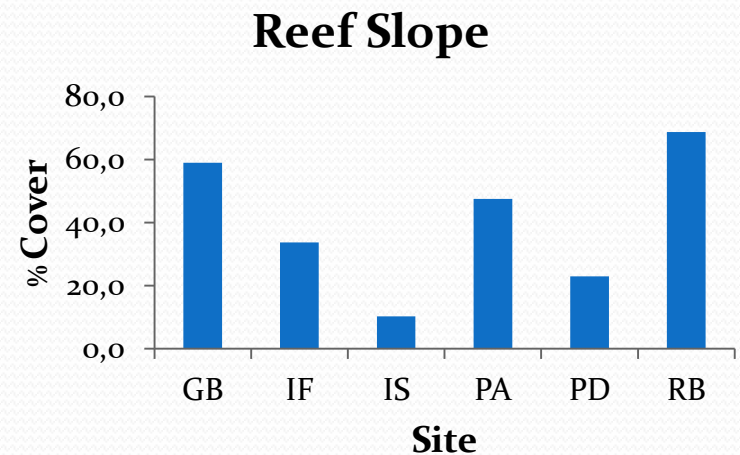
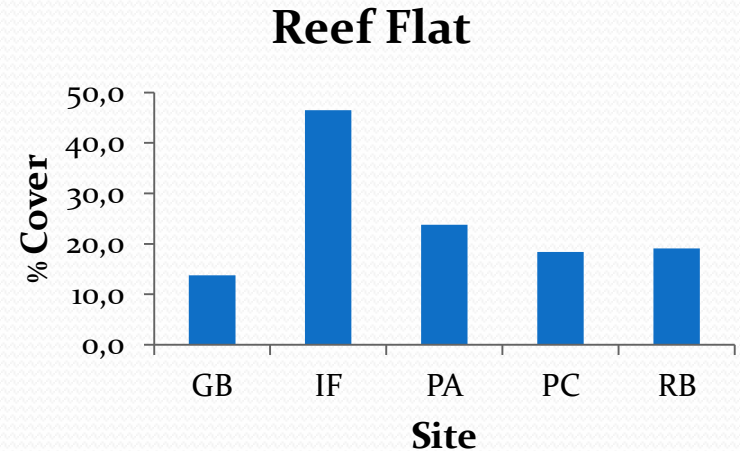
# Monitoring Outputs

- Annual Coral Reef Monitoring Report → local and national government departments, NGOs , funders and public library.
- Monitoring results included in the Northern Marine Reserves Management Plan (baseline for monitoring management effectiveness).
- Results submitted to GCRMN bi-annual report (as part of the Réseau Récif).



# Recent Key Findings

- In 2010, live coral cover was >45% at 3 reef slope stations and 1 reef flat station.
- Coral cover was 69% at Rivière Banane.
- Coral cover at Ile aux Fous reef flat & Passe Armand reef slope increased significantly between 2005 and 2010 – recovery from bleaching.

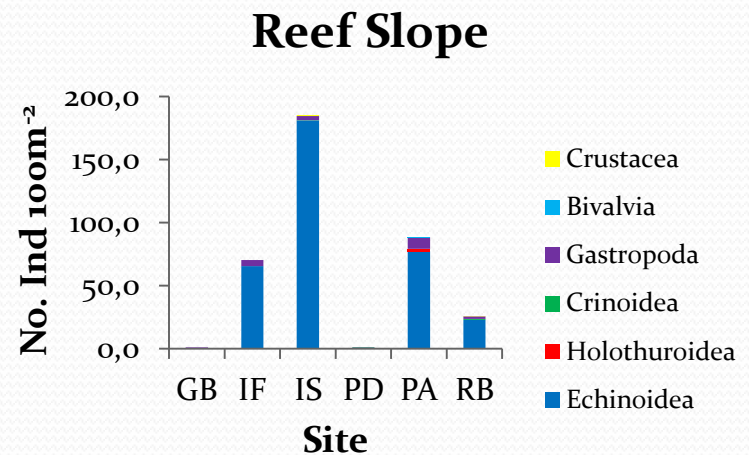
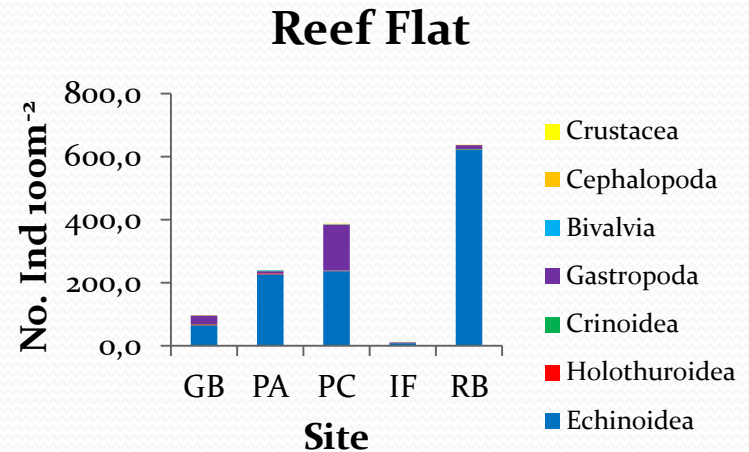






# Recent Key Findings

- On the reef flat, the most abundant invertebrate is *Echinometra mathaei*.
- Macro-invertebrates are rare on the reef slopes.
- Commercially-important species such as *Tridacna maxima*, *Pleuroploca trapezium*, sea cucumbers and crustaceans are rare or absent.



# Successes and Challenges

- Successes:
  - Monitoring carried out annually since 2002 (8 years data).
  - Monitoring carried out by local staff (consistent)
  - Provides good baseline to assess future changes (e.g. management effectiveness of the MPAs).
- Challenges:
  - Logistical (weather conditions, loss of pegs, staff availability)
  - Obtaining funding to support long-term monitoring.



# Thank You!



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