



# Pilbara Marine Conservation Partnership

#### On benchmarks and thresholds

Mat Vanderklift, Russ Babcock, Damian Thomson, Mick Haywood, Rich Pillans, Cindy Bessey, Margaret Miller

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## Detecting and measuring change



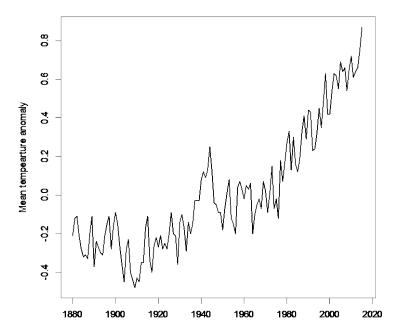
Benchmark: a standard or point of reference against which things may be compared

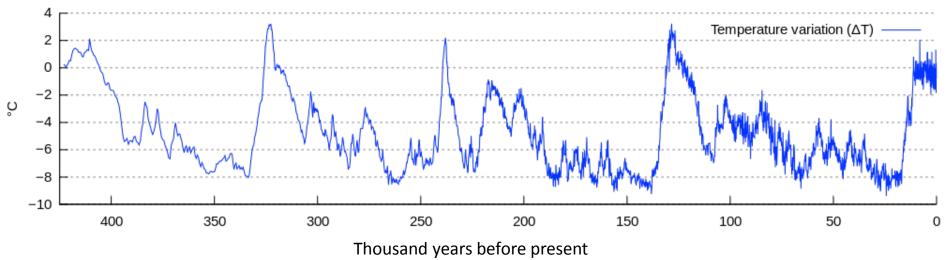


Threshold: the magnitude or intensity that must be exceeded for a certain reaction



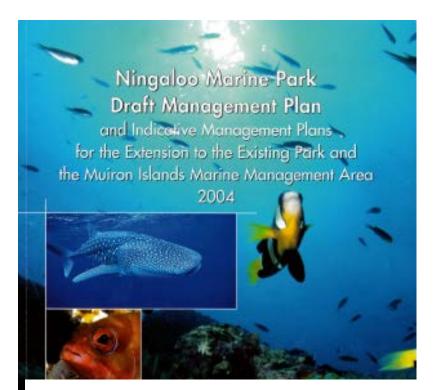












Management Plan for the Montebello/Barrow Islands **Marine Conservation Reserves** 2007-2017 Management Plan No 55

**Performance measure:** No loss of finfish species abundance in the sanctuary zones ... as a result of human activity within the reserves.

**Long term KPI:** Abundance and size composition of finfish species in sanctuary zones ... to be at natural levels.

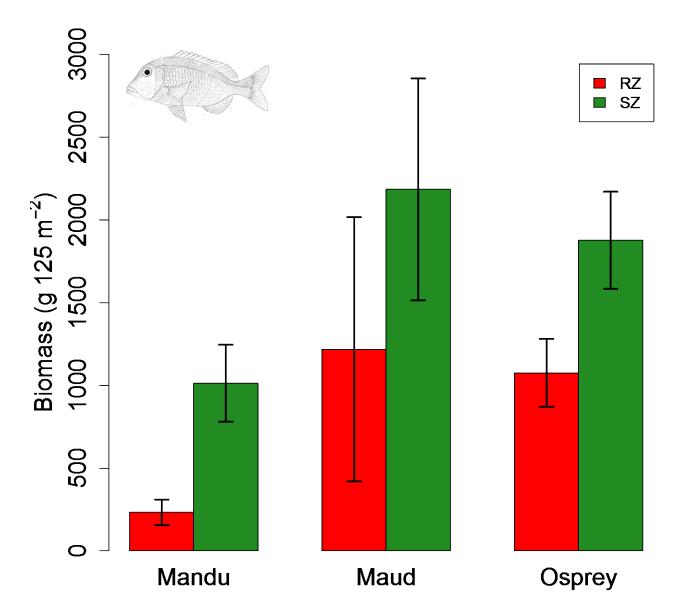






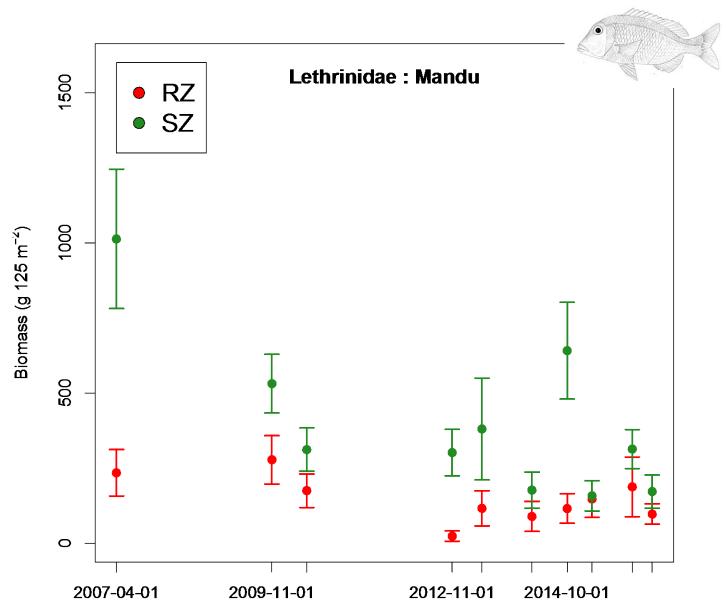
### Our first surveys: 2007





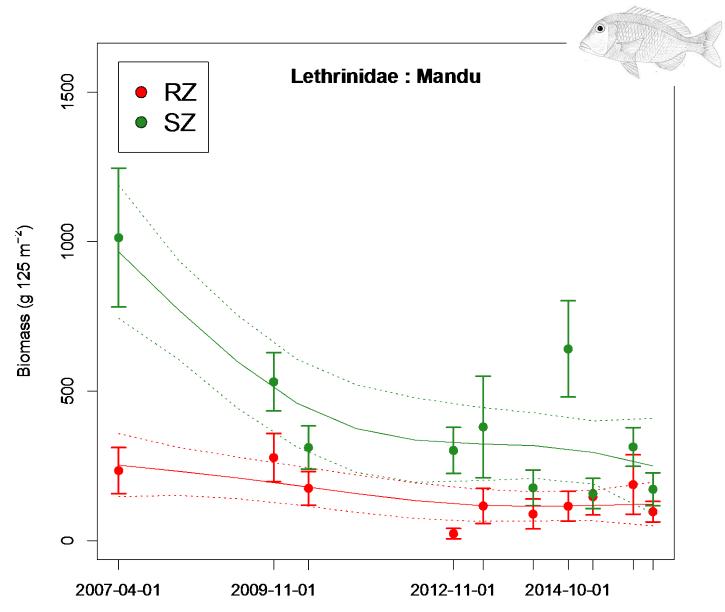






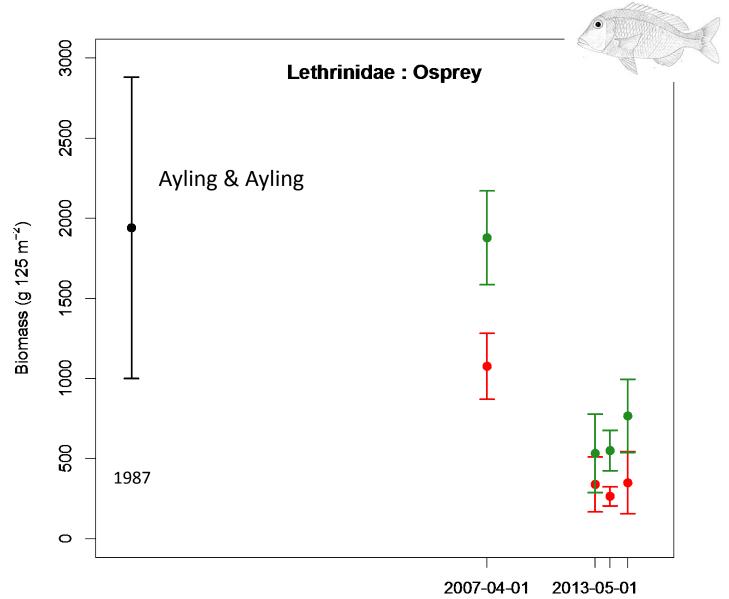






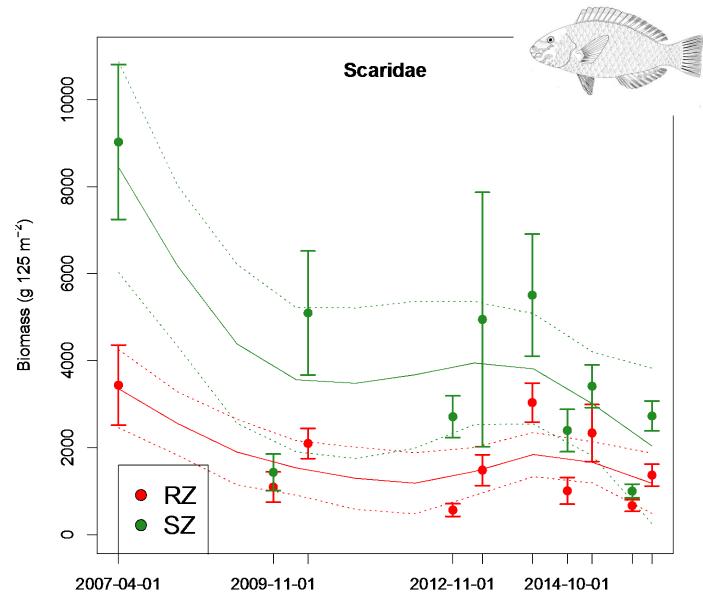








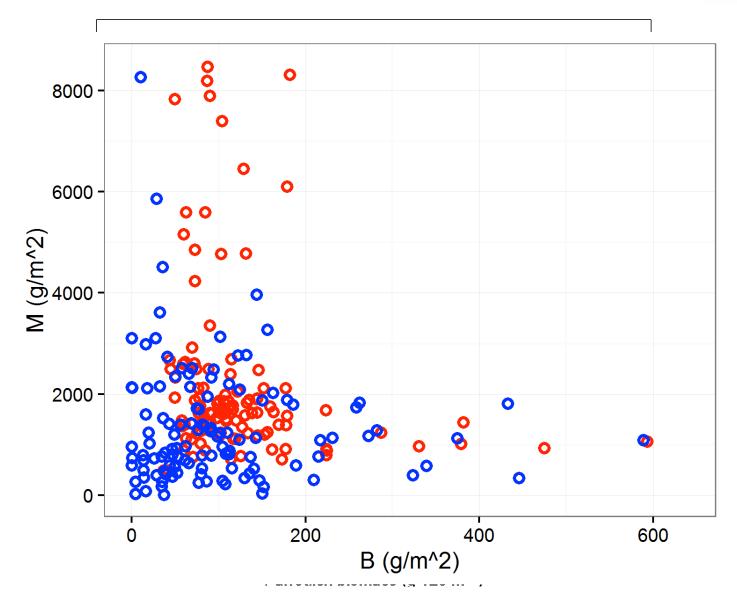






## Thinking about thresholds







#### On benchmarks and thresholds





- Long-term datasets are essential to understand change
- There is evidence of long-term decline in abundance of some fish taxa



 Using field observations and models to get insights into thresholds





#### Acknowledgements

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