

Implementing the Ecosystem Approach in SIOFA

Advancing Sustainable Fisheries Management

Symposium

Applying the Ecosystem Approach to Fisheries Management in ABNJ

11-13 March 2025 – FAO HQ, Rome

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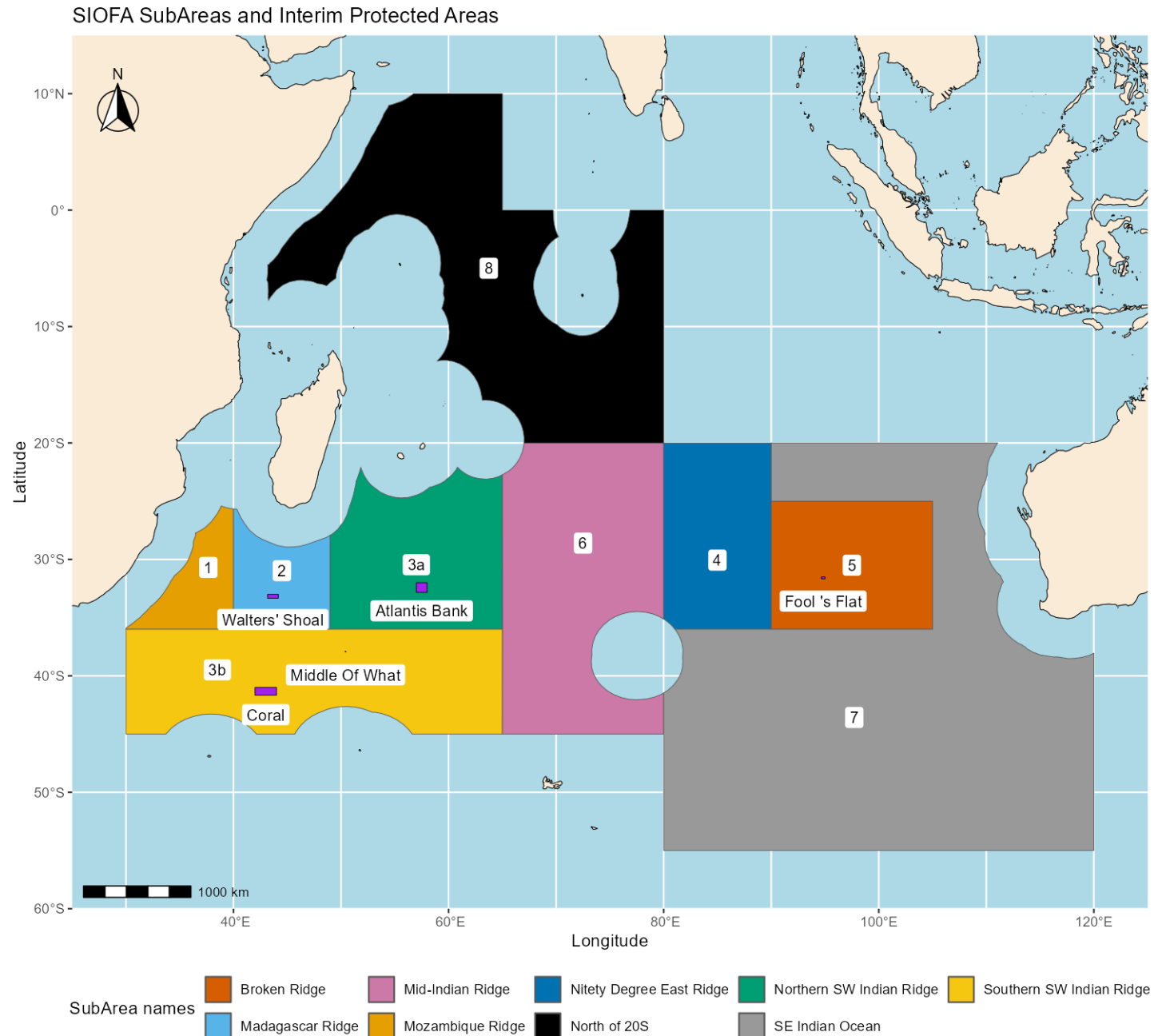
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Southern Indian Ocean Fisheries Agreement
Accord relatif aux Pêches dans le Sud de l'Océan Indien



Introduction to SIOFA

- Southern Indian Ocean RFMO
- 10 Contracting Parties, 1 Participating Fishing Entity and 2 Cooperating Non-Contracting Parties
- SIOFA objectives:
 - ensure the long-term conservation and sustainable use of the fishery resources
 - promote the sustainable development of fisheries





Understanding the Ecosystem Approach to Fisheries Management (EAFM)

- Holistic strategy
- Considers the entire ecosystem rather than focusing solely on individual species or fisheries
- Balancing ecological, economic, and social goals for sustainable marine resource use

SIOFA's Integration of EAFM

- Article 4a of the SIOFA Agreement
- Steps taken to incorporate EAFM in CMMs
- Projects supporting this integration and providing necessary information



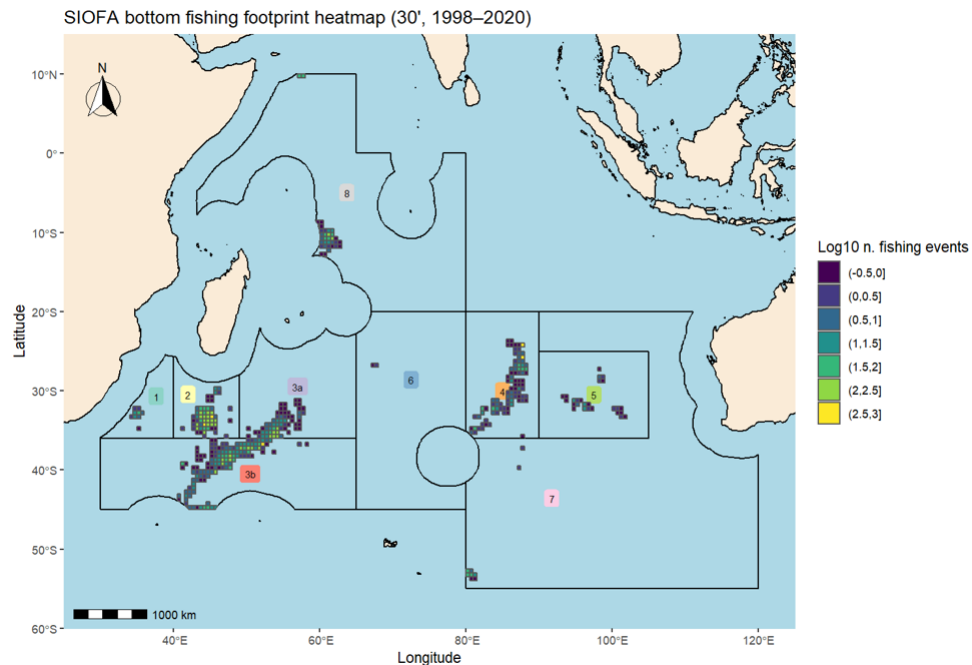
Development of the SIOFA Ecosystem Summary

- Main gap: the SIOFA Scientific Committee cannot easily access the SIOFA fisheries data
- Solution: have the Secretariat produce a summary of this data tailored to the SC needs
- Key findings on ecological interactions and species distributions
- Role in informing the Scientific Committee's recommendations



Development of the SIOFA Ecosystem Summary

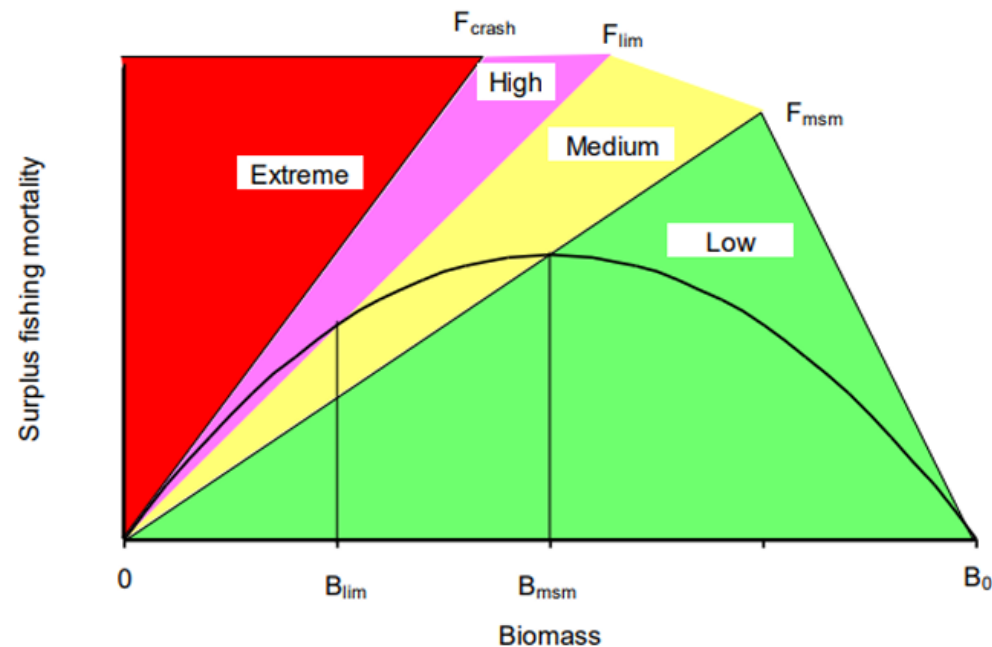
- Ongoing refinement of the SIOFA Ecosystem Summary
- Processes for synthesizing ecological data



Observer coverage in SIOFA fisheries (2018-2023)					
Gear	Year	Observed events	CatchEffort events	Observed events (ratio)	Observed events (%)
Bottom trawls (nei)	2018	356	0		
	2020	201	252	0.8	79.8
	2021	0	262	0.0	0.0
	2022	127	197	0.6	64.5
	2023	695	653	1.1	106.4
Demersal longlines	2018	17	18	0.9	94.4
	2019	54	54	1.0	100.0
	2022	20	20	1.0	100.0
Drifting longlines	2021	405	5 067	0.1	8.0
	2022	274	4 196	0.1	6.5
	2023	15	0		
Dropline	2018	46	32	1.4	143.8
	2019	0	8	0.0	0.0
	2020	0	8	0.0	0.0
Handlines and hand-operated pole-and-lines	2019	0	378	0.0	0.0
	2020	134	332	0.4	40.4
	2021	52	100	0.5	52.0
	2022	49	236	0.2	20.8
	2023	83	353	0.2	23.5
Longlines (nei)	2018	0	5 000	0.0	0.0
	2019	40	6 021	0.0	0.7
	2020	0	4 632	0.0	0.0
	2023	372	5 763	0.1	6.5
Mechanized lines and pole-and-lines	2019	0	150	0.0	0.0
	2020	0	57	0.0	0.0
	2021	0	26	0.0	0.0
	2023	5	2	2.5	250.0
Midwater trawls (nei)	2018	910	251	3.6	362.5
	2019	540	379	1.4	142.5
	2020	377	1 066	0.4	35.4
	2021	287	1 044	0.3	27.5
	2022	579	743	0.8	77.9
2023	1 403	1 225	1.1	114.5	
Pots	2021	19	4	4.8	475.0
Set longlines	2018	15	588	0.0	2.6
	2019	338	356	0.9	94.9
	2020	470	592	0.8	79.4
	2021	330	565	0.6	58.4
	2022	269	379	0.7	71.0
2023	288	320	0.9	90.0	
Single boat bottom otter trawls	2019	144	161	0.9	89.4
	2020	464	462	1.0	100.4
	2021	1 017	1 003	1.0	101.4
	2022	982	982	1.0	100.0
2023	1	0			
Traps (nei)	2018	0	4	0.0	0.0
Trawls (nei)	2018	2	1 749	0.0	0.1
	2019	1 279	1 537	0.8	83.2
	2020	655	376	1.7	174.2
	2022	61	0		
	2023	29	0		
Vertical lines	2018	0	30	0.0	0.0
	2020	8	0		

Mitigating Ecosystem Impacts: Focus on Sharks

- Spatial based risk assessments conducted for deepwater sharks
- Conservation measures implemented (SIOFA CMM 12)
- Monitoring and evaluation strategies

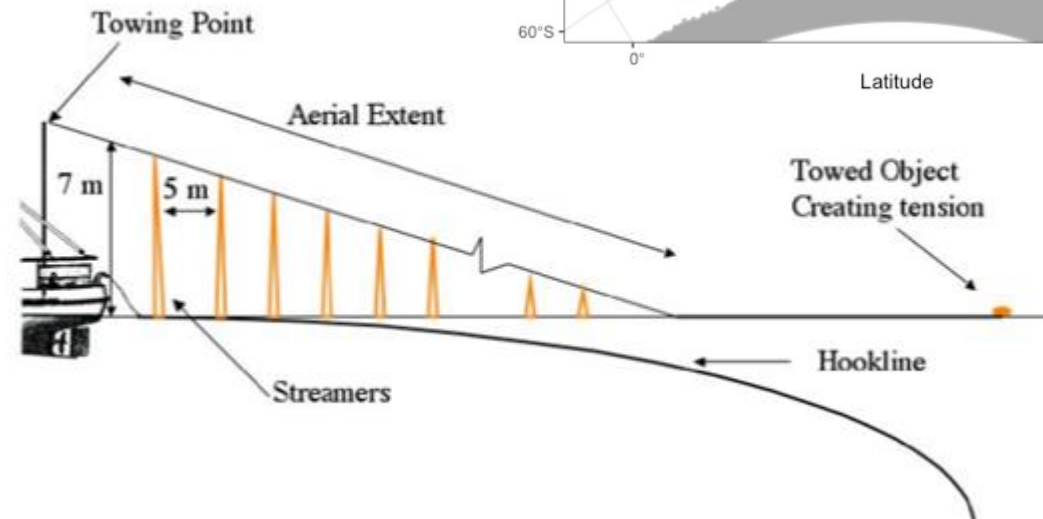
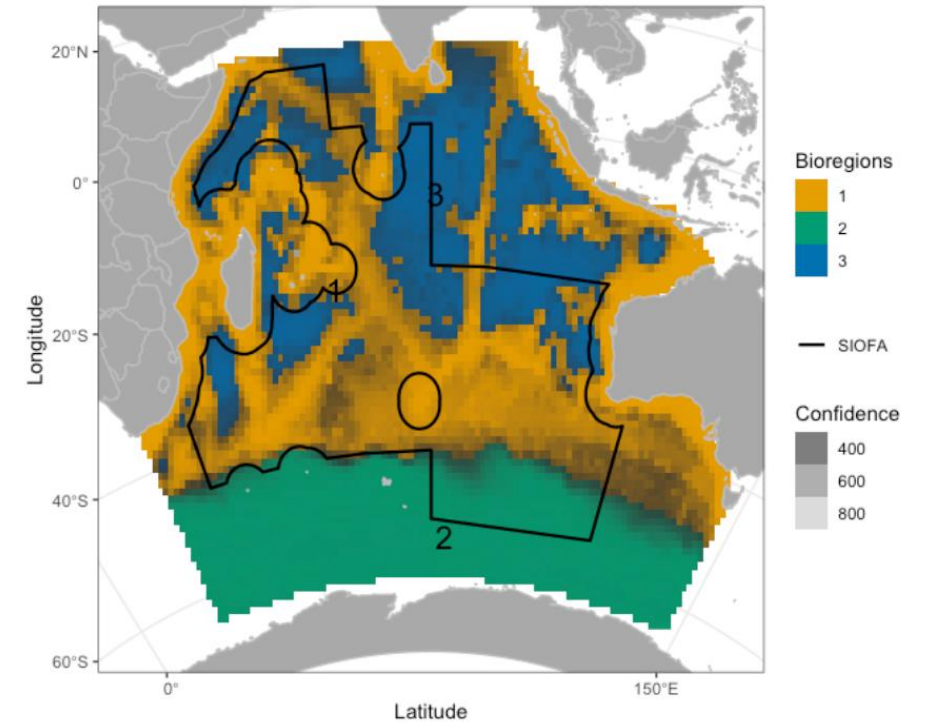
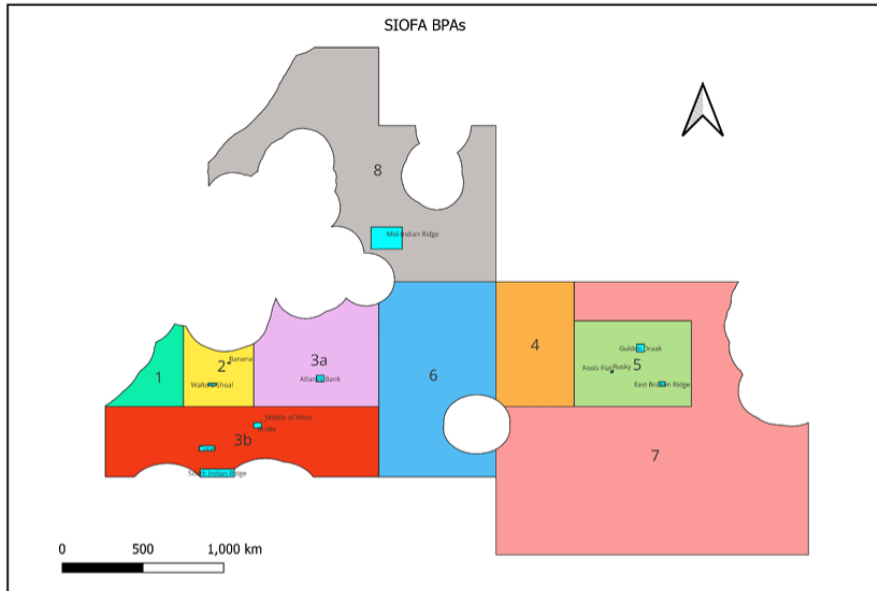


Zhou et al., 2011, 2012



Protecting Seabirds and Vulnerable Marine Ecosystems (VMEs)


- Bycatch mitigation measures for seabirds
- Identification and protection of VMEs
- Adoption of spatial management and precautionary measures



Challenges and Future Directions

- Balancing conservation efforts with sustainable resource use
- Addressing data limitations and uncertainties (research cruises)
- Future plans for enhancing EAFM implementation





*Earth provides enough
to satisfy every man's
needs, but not every
man's greed. —
Gandhi*

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