

8th Southern African Shark and Ray Symposium: ABSTRACT GUIDELINES

Delete text in blue prior to submission

Please save file in MS Word with the filename "Abstract Surname First Name", e.g. "Abstract Soap, Joe"

Presenter name: Surname, First name (e.g. Soap, Joe)

Affiliation(s) of presenting author: Note affiliation in full, including where you are based geographically (e.g. South African Institute for Aquatic Biodiversity, Makhanda, South Africa)

Authors in order including presenting author: (Surname, First Name; e.g. Soap, Joe; with author names separated by a semicolon):

Title: (clear, appropriate title, max 15 words)

Abstract body: (only critical information, max 300 words):

- Simple rationale and objective
- Simple overview of methods and materials
- Main findings
- Conclusions/implications of findings with a particular emphasis on management

Take home message: Present the main management recommendations based on the findings, as a standalone sentence or two (abstracts without the management recommendation will not be accepted): what are the main recommendations, for whom to implement/undertake, where, when.

Keywords: 4-5 keywords (avoid those in title)

Primary symposium theme (see list at end):

Secondary symposium theme (see list at end):

Student/professional:

Are you interested in submitting a paper linked to your talk, for a special issue (journal submission deadline would be December 31st 2025)? Yes/No

Foreign delegate requiring letter of invitation? Yes/No

If yes to above, please provide name exactly as it appears in passport, passport number, copy of passport you will use to enter South Africa, home address.

Conference themes to select from:

- Movement ecology (includes dart tagging, any form of telemetry, movement based on visual ID, etc.)
- Biology, physiology and ecology
- Fisheries and trade
- Sharks and humans
- Genetics and taxonomy
- Conservation and management
- Other

8th Southern African Shark and Ray Symposium

Presenter name: Elston, Chantel

Affiliation(s) of presenting author: South African Institute for Aquatic Biodiversity, Makhanda, South Africa; Department of Ichthyology and Fisheries Science, Rhodes University, Makhanda, South Africa

Authors in order including presenting author: Murray, Taryn; Elston, Chantel; Mann, Bruce; Daly, Ryan; Parkinson, Matthew; Bennett, Rhett; Rogers, Toby; Dunlop, Stewart; Kyle, Robert; Cowley, Paul

Title: Dangerous detours: international movements of a Critically Endangered wedgefish species increases risk of fishing mortality

Abstract body: Wedgefishes are one of the most threatened but least studied elasmobranch families. They have powerful, large fins and have been assumed capable of large-scale migrations, but are also capable of buccal pumping and can be resident to small areas. With only a handful of studies globally investigating wedgefish spatial ecology, the scales at which they move remain unresolved. This knowledge will have significant conservation ramifications, especially in places like the Western Indian Ocean, where wedgefishes are highly protected in certain countries like South Africa, but are highly exploited in fisheries of the neighboring country, Mozambique. Forty whitespotted wedgefish *Rhynchobatus djiddensis* were acoustically tagged along the northeast coast of South Africa and their movements monitored for up to 7 years using the Acoustic Tracking Array Platform along the South African and Mozambique coastline. While rates of detections were low overall, network analyses highlighted restricted movements and site fidelity (with most detections for individuals occurring within delineated 10 km sections of the coastline). However, some individuals displayed large-scale movements (up to ~ 800 km), which had seasonal trends in frequency but not directionality (with both north and south movements peaking in spring), suggesting these movements do not necessarily constitute traditional migrations. Eight individuals were detected in neighboring Mozambican waters, where detections ceased for five of them, suggesting possible mortality. This study confirms for the first time that whitespotted wedgefish undertake transboundary movements between South Africa and Mozambique, and that this genetically homogenous population displays intra-specific variability in large-scale movements, changing their level of risk of fishing mortality, highlighting the need for international cooperation in the conservation of this Critically Endangered species.

Take home message: Whitespotted wedgefish make transboundary movements between South Africa, where they experience high levels of spatial protection, and Mozambique, where they experience high levels of fishing exploitation. The governments of both nations are recommended to set up a transboundary conservation plan, where spatial protection is expanded into southern Mozambique, potentially using the Important Shark and Ray Areas (ISRAs) as a guideline, to ensure this Critically Endangered species is protected across its movement range.

Keywords: *Rhynchobatus djiddensis*, acoustic telemetry, South Africa, Mozambique, Acoustic Tracking Array Platform

Primary symposium theme: Movement ecology

Secondary symposium theme: Conservation and management

Student/professional: Professional

Are you interested in submitting a paper linked to your talk, for a special issue (journal submission deadline would be December 31st 2025)? No

Foreign delegate requiring letter of invitation? No

If yes to above, please provide name exactly as it appears in passport, passport number, copy of passport you will use to enter South Africa, home address.