

Blue lines indicate the area meeting the ISRA Criteria; dashed lines indicate the suggested buffer for use in the development of appropriate place-based conservation measures

## **TEUAUA AND HEMENI ISRA**

#### New Zealand & Pacific Islands Region

#### SUMMARY

Teuaua and Hemeni is located in the southwest of Ua Huka Island in the Marquesas Archipelago of French Polynesia. This area incorporates two small islets, Teuaua and Hemeni, which support large nesting colonies of seabirds and turbulent surface conditions to provide plankton-rich waters. This area overlaps with the Marquesas Marin Key Biodiversity Area. Within this area there are: **threatened species** and **feeding areas** (Reef Manta Ray *Mobula alfredi*).

# FRENCH POLYNESIA

# – – – 0-50 metres

#### CRITERIA

Criterion A - Vulnerability; Sub-criterion C2 - Feeding Areas

sharkrayareas.org



# DESCRIPTION OF HABITAT

Teuaua and Hemeni is located on the southwest coast of Ua Huka Island in the Marquesas Archipelago of French Polynesia. The area encompasses the two small islets of Teuaua and Hemeni. An additional small islet, included in the area, to the west of Hemeni is covered at high tide, creating a turbulent and productive seamount environment (M Santangelo pers. obs. 2023). The area is influenced by high concentrations of zooplankton, owing to the position of the islands and exposure to turbulent surface conditions, and the large breeding colonies of Sooty Terns *Onychoprion fuscatus* (Agence des Aires Marines Protégées 2016). The area is characterised by a steep bathymetry falling to 25 m deep close to Ua Huka Island and in between Teuaua and Hemeni, while descending deeper northwest in the ocean side of these islets.

This area overlaps with the Marquesas Marin Key Biodiversity Area (KBA 2024).

This Important Shark and Ray Area is benthopelagic and is delineated from inshore and surface waters (O m) to 50 m based on the bathymetry of the area.

# **ISRA CRITERIA**

#### CRITERION A - VULNERABILITY

One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occurs in the area. This is the Vulnerable Reef Manta Ray (Marshall et al. 2022).

# SUB-CRITERION C2 - FEEDING AREAS

Teuaua and Hemeni is an important feeding area for one ray species.

Between 2018–2023, snorkelling and dive surveys using photo-identification (n = 13), as well as citizen science observations in the area, resulted in a total of 141 sightings of 117 individual Reef Manta Rays (Carpentier et al. 2019; M Santangelo pers. obs. 2023; French Polynesia Manta Project unpubl. data 2024). A total of 12 different feeding aggregations (up to >20 individuals at a time) of Reef Manta Rays have been recorded during the following months and years: June and August 2018, May 2019, 2021, 2022, and February, May and July 2023 (M Santangelo pers. obs. 2023; A Carpentier pers. obs. 2023; French Polynesia Manta Project unpubl. data 2024). No surveys were conducted during the other months of the year (French Polynesia Manta Project unpubl. data 2024). Feeding behaviour was observed in 97% (n = 137) of the observations of Reef Manta Rays in the area (Carpentier 2023; French Polynesia Manta Project unpubl. data 2024).

Additionally, a maximum of 80 individuals within the area have been photo-identified in a single day, highlighting the importance of the area for Reef Manta Rays (M Santangelo pers. obs. 2023; A Carpentier pers. obs. 2023; French Polynesia Manta Project unpubl. data 2024). Reef Manta Rays observed feeding in this area represent 85% (n = 138) of animals identified in Ua Huka Island, and 21% of individuals have been resighted feeding in this area (French Polynesia Manta Project unpubl. data 2024). Further, local ecological knowledge collected from residents from Ua Huka confirm this area as an important site for feeding Reef Manta Rays, with feeding aggregations seen regularly, ranging in size from 15 to >100 individuals (A Carpentier pers. obs. 2023). Reef Manta Rays regularly aggregate in this area, and predictably feed on the high concentrations of zooplankton (A Carpentier pers. obs. 2023; M Santangelo pers. obs. 2023; French Polynesia Manta Project unpubl. data 2023; M Santangelo pers. obs. 2023; French Polynesia Manta Project unpubl. data 2023). The unique

positioning of the islands and the turbulent surface conditions contribute to this abundance, while large breeding colonies of seabirds and their depositions may further enhance productivity in the surrounding waters as demonstrate in other regions (McCauley et al. 2012).

#### Acknowledgments

Maya Santangelo (Manta Trust), Alice Carpentier (Manta Trust; Observatoire des Requins de Polynésie), Fanny Martre (Direction de l'environnement de Polynésie Française), and Marta D Palacios (IUCN SSC Shark Specialist Group – ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2024 ISRA Region 10 – New Zealand and Pacific Islands workshop for their contributions to this process.

This factsheet has undergone review by the ISRA Independent Review Panel prior to its publication.

This project was funded by the Shark Conservation Fund, a philanthropic collaborative pooling expertise and resources to meet the threats facing the world's sharks and rays. The Shark Conservation Fund is a project of Rockefeller Philanthropy Advisors.

#### Suggested citation

IUCN SSC Shark Specialist Group. 2024. Teuaua and Hemeni ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

# QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				Α	В	Cı	C2	C3	C4	C5	Dı	D2
RAYS												
Mobula alfredi	Reef Manta Ray	VU	0-711	Х			Х					



# SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category						
SHARKS								
Carcharhinus amblyrhynchos	Grey Reef Shark	EN						
RAYS								
Taeniura meyeni	Blotched Fantail Ray	VU						

IUCN Red List of Threatened Species Categories are available by searching species names at <u>www.iucnredlist.org</u> Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.





## REFERENCES

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