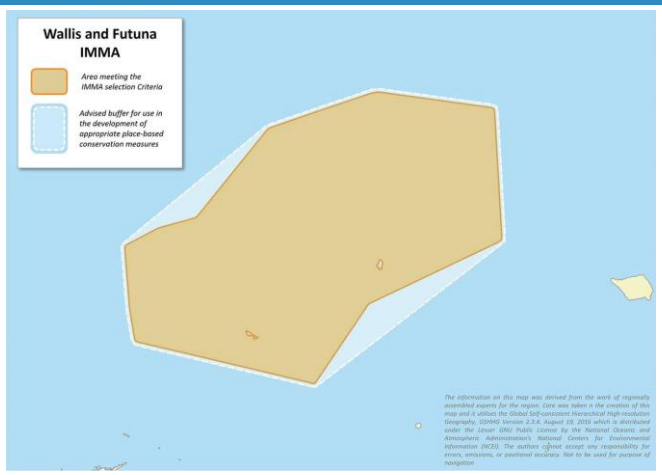

Area Size

177 463 km²

Qualifying Species and Criteria

Sperm whale – *Physeter macrocephalus*

Criterion A

Longman's beaked whale – *Indopacetus pacificus*

Criterion B(2)

Melon-headed whale – *Peponocephala electra*

Criterion B(2)

Spinner dolphin – *Stenella longirostris*

Criterion B(2)

Pantropical spotted dolphin – *Stenella attenuata*

Criterion B(2)

Marine Mammal Diversity

Megaptera novaeangliae, Tursiops truncatus, Steno bredanensis, Grampus griseus, Globicephala macrorhynchus, Pseudorca crassidens, Mesoplodon densirostris, Orcinus orca, Kogia spp.

Summary

The Wallis and Futuna IMMA is located around the Wallis and Futuna Islands, and extends near to the limits of the 3000 m depth contour. Little was known about the marine mammals in this remote area until the large aerial survey (REMMOA) that was conducted between the end of 2014 and beginning of 2015 covering almost all

Wallis and Futuna IMMA

Summary, continued.

all of the EEZ of this region. Cetaceans were evenly distributed throughout the area, with a high diversity of 15 species recorded. Small *Delphininae* (*Stenella* spp.) and large groups of melon-headed whales were particularly abundant. Several sightings of Longman's beaked whales (*Indopacetus pacificus*) were also recorded during this survey, in addition to *Kogia* spp. Risso's (*Grampus griseus*), and common bottlenose dolphins (*Tursiops truncatus*). Southern hemisphere humpback whales (*Megaptera novaeangliae*) are also encountered in the area.

Description:

The IMMA is located within the EEZ of Wallis and Futuna. The Area extends from 15°S in the south to 11°S in the north and from 180° to 174°W longitude. It includes the volcanic islands of Wallis, Futuna and Alofi. North of the EEZ it includes the seamount of Rotuma, Cook's dome and Waterwhich sandbank, and deep offshore areas south-east of Wallis. The closest other islands are Tuvalu, Fiji and Samoa.

Little was known about the marine mammals of Wallis and Futuna until the large-scale aerial survey REMMOA, was conducted between November 2014 and January 2015. Although there have been limited numbers of surveys in the area, a high diversity of cetacean species is now known with sixteen species (or genus) described in the area (Laran et al., 2023). Cetaceans were homogenously distributed throughout the Wallis and Futuna EEZ. Relative abundance was estimated from REMMOA aerial survey for several species.

Despite the aerial survey being conducted during the austral summer, five baleen whales (unidentified species) were observed during the survey from three separate sightings, in addition to a pod of two humpback whales. Despite the diversity of habitats including the abyssal plain in the eastern part, bank and seamount in the north-western part and the two group of islands, cetacean distribution seems relatively homogeneous making it difficult to identify patterns even if sightings tended to be more frequent on the slope northwest of Wallis (Dorémus et al., 2016). The diversity and encounter rate of cetaceans over the seamount area in the north-western strata was higher than around the islands of Wallis or Futuna-Alofi.

Criterion A: Species or Population Vulnerability

Sperm whale occurrence in the waters of Wallis and Futuna seems ancient, and there is a probable passage of whalers. The lack of effort, the small size of the islands among this large area of open waters could explain the small amount of evidence of their occurrence, with only two individuals observed during the REMMOA survey (Van Canneyt et al., 2015) and one stranding in 2015 (Service de environment Wallis and Futuna, pers.com). Sperm whales are classified as Vulnerable on the IUCN red list.

The sighting of humpback whales denotes the use of these waters by individuals belonging to the Oceania subpopulation (classified as Endangered by IUCN, Childerhouse et al., 2009).

Criterion B: Distribution and Abundance Sub-criterion B2: Aggregations

Important species recorded in relatively high numbers in this IMMA include Longman's beaked whales (*Indopacetus pacificus*) one of the world's most poorly known whales. During surveys six groups were encountered on effort, widely distributed in the area, totalling 21 individuals, plus four individuals encountered during off effort transit. Cuvier's beaked whale (*Ziphius cavirostris*) was previously reported from boat surveys in the area (Doremus et al., 2010) and identified from a stranding in December 2012 (Figure 1), and a Blainville's beaked whale (*Mesoplodon densirostris*) was stranded in 2019 (Service de environment Wallis and Futuna, pers.com).

Melon-headed whales or possible pygmy killer whales (identification not confirmed) were encountered in large groups up to 200 individuals (Laran et al., 2016). Conventional Distance Sampling (only corrected for availability bias) estimated relative abundance of different groups over the almost entire EEZ (Laran et al. ,2023). The total abundance of Globicephalinae, including mainly melon-headed whales (or possible pygmy killer whales) and Risso's dophin, but also short-finned pilot whale, false killer whale, and killer whales, was estimated to 15,700 individuals (95%CI: 4000 – 62,400). Pantropical spotted dolphins and spinner dolphins were estimated at 11,200 individuals (95%CI: 4500-28,900) and mainly distributed in the north of the IMMA (Van Canneyt et al., 2015). Common bottlenose dolphins and possible unidentified rough-toothed (only identified once) or Fraser's dolphins (not identified) were estimated at 3,350 individuals (1000- 10,500) and mainly distributed west of Futuna Island in the shallowest waters. The abundance estimated for beaked whales (mainly Longman's) was 3700 individuals (95%CI: 1100 – 12,700). Pygmy or dwarf sperm whales were encountered between 12°S and 14°S of latitude, with a relative abundance estimated at 2900 individuals (95%CI: 1000-8700).

Figure 1: Skeleton of a Cuvier's beaked whale (*Ziphius cavirostris*) stranded in Wallis in December 2012 and reassembled by the Remmoa team. Photo credit: G. Dorémus / Pelagis-OFB

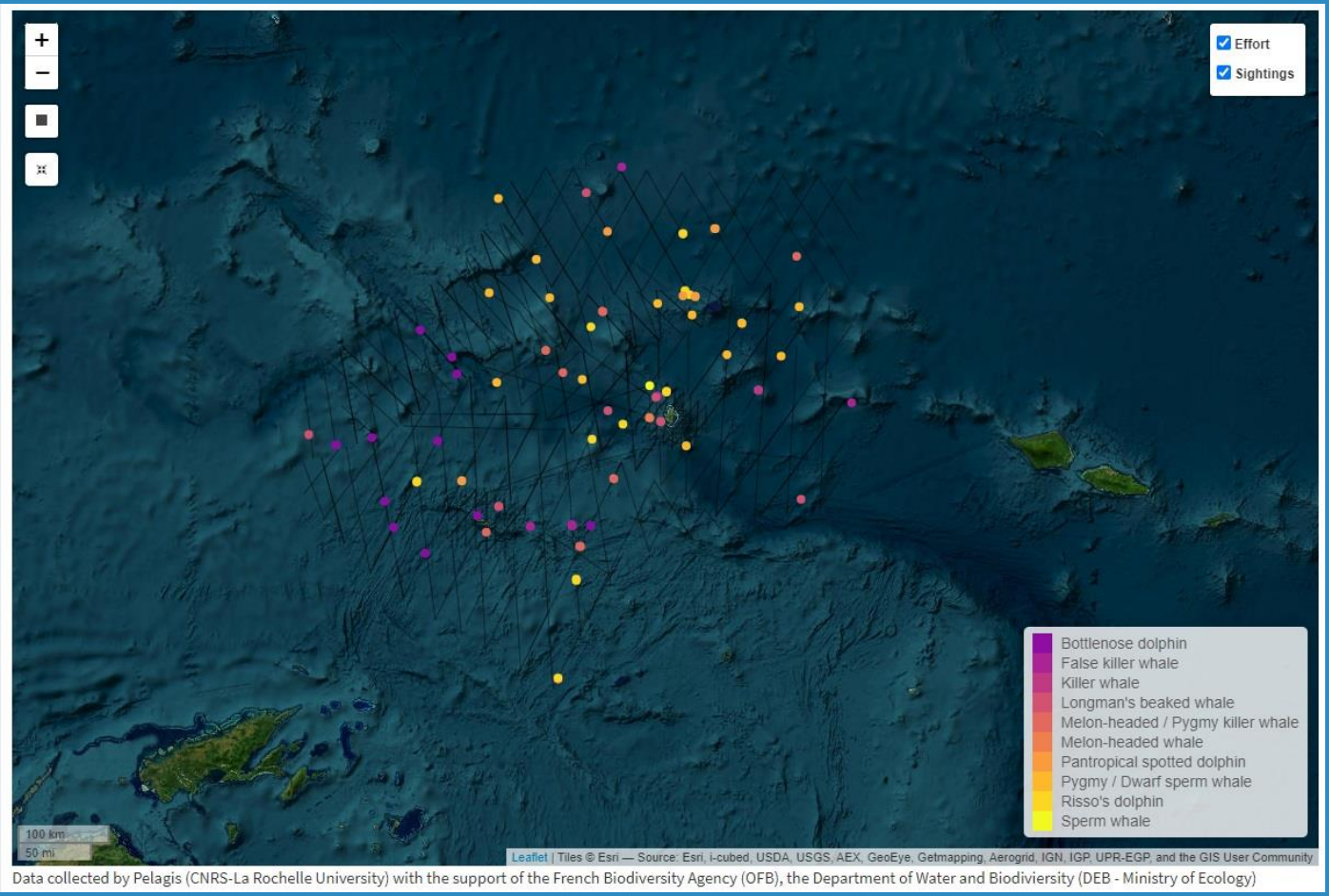

Figure 2: Selection of species encountered during Remmoa aerial survey (November 2014 to January 2015), taken from Pelaobs https://pelabox.univ-lr.fr/pelagis/PelaObs/

Criterion D: Special Attributes
Sub-criterion D2: Diversity

The Wallis and Futuna waters contains a remarkable diversity of cetaceans (Figure 2). A total of sixteen species have been confirmed in the area (Laran et al., 2023), with a quite broad distribution throughout the EEZ. Relative abundance was estimated for several species from the REMMOA survey and corrected for availability bias with cetacean abundance estimated to 0.16 individuals per km^2 and a good representation of small *Delphininae* (*Stenella* spp.), *Globicephalinae* subfamilies a (Laran et al., 2023).

Supporting Information

Childerhouse, S., Jackson, J., Baker, C.S., Gales, N., Clapham, P.J., and Brownell, Jr. R.L. 2009. *Megaptera novaeangliae* (Oceania subpopulation). In: IUCN 2009. IUCN Red List of Threatened Species. Version 2009.2. www.iucnredlist.org.

Dorémus, G., Perri, M., Van Canneyt, O., and Ridoux, V. 2010. "Echantillonnage visuel des mammifères et oiseaux marins dans la ZEE de Wallis & Futuna sur la campagne FUTUNA", in: Rapport de campagne de l'Observatoire PELAGIS pour l'Agence des Aires Marines Protégées). https://www.observatoire-pelagis.cnrs.fr/wp-content/uploads/2023/11/RAPPORT_CampagneFUTUNA2010.pdf

Dorémus, G., Laran, S., Van Canneyt, O., Bosserelle, P., Watremez, P., and Ridoux, V. 2016. New insight on Marine Mammals of the Southwest Pacific ocean: Part II – Large aerial survey (REMMOA) over the Wallis & Futuna EEZ. 30th Annual Conference of the European Cetacean Society, Funchal, Portugal.

Laran, S., Hamani, V., Authier, M., Dorémus, G., Van Canneyt, O., Ridoux, V. and Watremez, P. 2016. Distribution et abondance de la mégafaune marine dans le sud-ouest du Pacifique. Campagne REMMOA – Nouvelle-Calédonie et Wallis et Futuna. Rapport final pour l'Agence des aires marines protégées. 105 pp. https://www.observatoire-pelagis.cnrs.fr/pelagis-2/les-programmes/remmoa/

Laran, S., Van Canneyt, O., Dorémus, G., Garrigue, C., Berr, T., Bourgogne, H., Genu, M., Spitz, J., and Ridoux, V. 2023. Who lives in the open sea? Distribution and densities of surfacing marine megafauna in three territories from the southwestern Pacific region (New Caledonia, Wallis-Futuna and French Polynesia). Pacific Conservation Biology. https://doi.org/10.1071/PC23023

Miller, C. 2009. "Current state of knowledge of cetacean threats, diversity and habitats in the pacific islands region 2009 revision." in: A report by the Whale and Dolphin Conservation Society for the second meeting of the signatories to the memorandum of understanding for the conservation of cetaceans and their habitats in the Pacific Islands region.

Van Canneyt, O., Dorémus, G., Laran, S., Ridoux, V., and Watremez, P. 2015. REMMOA Nouvelle-Calédonie Wallis et Futuna: Rapport de campagne Rapport intermédiaire pour l'Agence des Aires Marines Protégées, p. 65 pp. https://www.observatoire-pelagis.cnrs.fr/pelagis-2/les-programmes/remmoa/

Acknowledgements

We would like to thank the participants of the 2017 IMMA Regional Expert Workshop held in Apia, Samoa for the identification of IMMAs in the Pacific Islands Region. Funding for the identification of this IMMA was provided to the Global Ocean Biodiversity Initiative by the International Climate Initiative (IKI). The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) supports this initiative on the basis of a decision adopted by the German Bundestag. Support was also provided by SPREP, the French Biodiversity Agency, Whale and Dolphin Conservation and the Tethys Research Institute.

Suggested Citation: IUCN-MMPATF (2024) Wallis and Futuna IMMA Factsheet. IUCN Joint SSC/WCPA Marine Mammal Protected Areas Task Force, 2024.

PDF made available for download at ***https://www.marinemammalhabitat.org/factsheets/wallis-and-futuna-imma/***