

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

## LEMON BAY ISRA

### New Zealand & Pacific Islands Region

## SUMMARY

Lemon Bay is located on the southeastern side of Grande Terre Island in New Caledonia. The area is a small bay sheltered from prevailing winds. It is characterised by reef flats and a reef slope bordering both ends and by sandy and rocky substrates in the central and outer parts. The area overlaps with the Grand Lagon Sud Marin Key Biodiversity Area and the Ouen Toro Territorial Park. Within this area there are: **threatened species** and **reproductive areas** (Indo-Pacific Leopard Shark *Stegostoma tigrinum*).

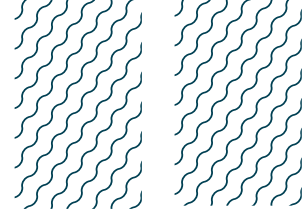
## CRITERIA

### Criterion A - Vulnerability; Sub-criterion C1 - Reproductive Areas

NEW  
CALEDONIA

0-20 metres

0.86 km<sup>2</sup>



## DESCRIPTION OF HABITAT

Lemon Bay is located on the southeastern side of Grande Terre Island in New Caledonia. It is situated next to Nouméa City and is a small bay sheltered from prevailing winds that extends ~1 km along a sandy beach (Shine et al. 2003). The area is characterised by reef flats and a reef slope bordering both ends and by sandy and rocky substrates in the central and outer parts (Lukoschek & Shine 2012; Snorkelling Report 2024). The area is dominated by semi-diurnal tides that range from 0.6-1.4 m (Chupin et al. 2023).

The area overlaps with the Grand Lagon Sud Marin Key Biodiversity Area (KBA 2024) and the Ouen Toro Territorial Park (UNEP-WCMC & IUCN 2024).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to 20 m based on the bathymetry of the area.

## ISRA CRITERIA

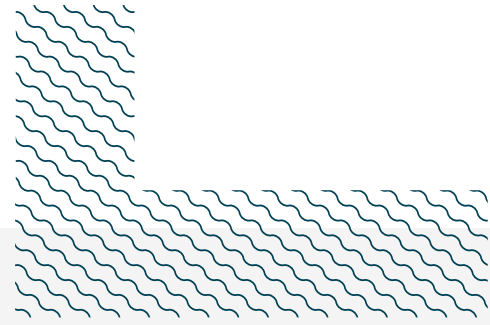
### CRITERION A – VULNERABILITY

One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occurs in the area. This is the Endangered Indo-Pacific Leopard Shark (Rigby et al. 2024).

### SUB-CRITERION C<sub>1</sub> – REPRODUCTIVE AREAS

Lemon Bay is an important reproductive area for one shark species.

Since 2019, eggs (n = 108) of Indo-Pacific Leopard Sharks have been regularly observed in the area by scientists (H Lassaue unpubl. data 2024). Annually, between 20-30 eggs have been recorded between October-December in the area. Some of these eggs are collected and taken to the Aquarium Des Lagons where eggs hatch and neonates and young-of-the-year sharks are kept for 4-6 months before they are tagged and released back to Lemon Bay (H Lassaue unpubl. data 2024). Prior to 2019, citizen science programs with snorkellers led by the aquarium showed the regular presence of eggs in the area that occasionally were collected and hatched for exhibition (ReShark unpubl. data 2024; H Lassaue unpubl. data 2024). This area is one of the few locations in New Caledonia where Indo-Pacific Leopard Shark eggs are regularly seen and the number of eggs observed annually is the joint-largest reported in the country along with Sainte-Marie Bay (H Lassaue unpubl. data 2024).



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Hugo Lassauce (University of the Sunshine Coast) and Emiliano García-Rodríguez (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.

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### **Suggested citation**

**IUCN SSC Shark Specialist Group. 2024.** Lemon Bay ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

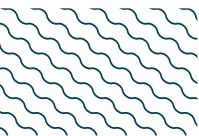
## QUALIFYING SPECIES

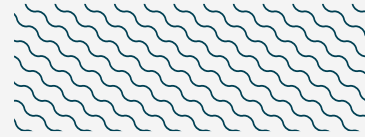
Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				A	B	C1	C2	C3	C4	C5	D1	D2
SHARKS												
<i>Stegostoma tigrinum</i>	Indo-Pacific Leopard Shark	EN	0-90	X		X						

## SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
<b>SHARKS</b>		
<i>Carcharhinus amblyrhynchos</i>	Grey Reef Shark	EN

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





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