

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

BAIE LARAIE ISRA

Western Indian Ocean Region

SUMMARY

Baie Laraie is located on the southeastern side of Curieuse Island, Republic of Seychelles. It is a sheltered shallow lagoon with a fringing mangrove forest, seagrass beds, coral reefs, and sandy substrates. This area sits within a marine national park and the Mahe, Alphonse and Amirantes Plateau Ecologically or Biologically Significant Marine Area. Within this area there are: **threatened species** and **reproductive areas** (Sharptooth Lemon Shark *Negaprion acutidens*).

CRITERIA

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

SEYCHELLES

0-3 metres

0.19 km²





DESCRIPTION OF HABITAT

Baie Laraie is located on the southeastern side of Curieuse Island, Republic of Seychelles. It is a unique sheltered shallow lagoon and hosts one of the largest and most diverse fringing mangrove forests of the Inner Islands of Seychelles (Hodgkiss et al. 2017). The seaward edge of the mangrove forest comprises predominantly True Mangrove *Rhizophora mucronata*, inundated to a depth of 1.2 m during spring tides (Global Vision International 2019). At low tide, sand flats become exposed in the northwestern section of the lagoon. Seagrass beds located in the centre of the lagoon are only partially exposed at the lowest tides. There are several deeper sections of sand and sporadic patches of coral adjacent to the causeway (Global Vision International 2019). The southern section of the lagoon has a maximum depth of 1.5 m at high tide. At tides below 0.7 m, the fork at the southern end of the causeway forms a pool.

This area sits within the Curieuse Marine National Park and the Mahe, Alphonse, and Amirantes Plateau Ecologically or Biologically Significant Marine Area (CBD 2023).

This Important Shark and Ray Area is benthopelagic and is delineated from inshore and surface waters (0 m) to 3 m based on the bathymetry of the area.

ISRA CRITERIA

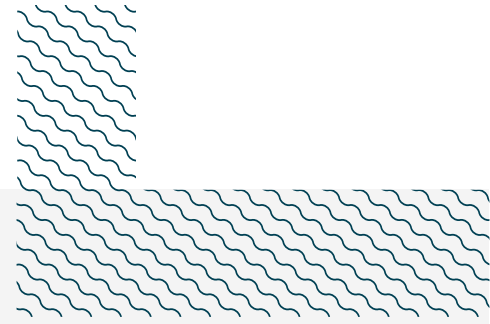
CRITERION A – VULNERABILITY

The one Qualifying Species within the area is considered threatened with extinction according to the IUCN Red List of Threatened Species™. The Sharptooth Lemon Shark is assessed as Endangered (Simpfendorfer et al. 2021).

SUB-CRITERION C₁ – REPRODUCTIVE AREAS

Baie Laraie is an important reproductive area for one shark species.

A mark-recapture passive integrated transponder (PIT) tagging study of Sharptooth Lemon Sharks at Baie Laraie was conducted from October 2014 to October 2016 (Hodgkiss et al. 2017). Of the 189 individuals caught, 187 were classified as neonates, based on open or recently closed umbilical scars and body size, relative to size-at-birth data for the species (Hodgkiss et al. 2017). The remaining two individuals were classed as young-of-the-year, based on closed and healed umbilical scars (Hodgkiss et al. 2017). The size-at-birth for this species is 60 cm total length (TL; Ebert et al. 2021). The mean size of neonate individuals (n = 187) was 65 cm TL (range: 59–80 cm TL).



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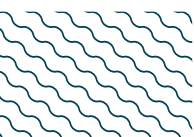
QUALIFYING SPECIES

| 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>Negaprion acutidens</i> | Sharptooth Lemon Shark | EN | 0-90 | X | | X | | | | | | | |

SUPPORTING SPECIES

| Scientific Name | Common Name | IUCN Red List Category |
|-----------------------------------|----------------------|------------------------|
| SHARKS | | |
| <i>Carcharhinus amblyrhynchos</i> | Grey Reef Shark | EN |
| <i>Carcharhinus limbatus</i> | Blacktip Shark | VU |
| <i>Carcharhinus melanopterus</i> | Blacktip Reef Shark | VU |
| <i>Hemipristis elongata</i> | Snaggletooth Shark | VU |
| <i>Nebrius ferrugineus</i> | Tawny Nurse Shark | VU |
| <i>Triaenodon obesus</i> | Whitetip Reef Shark | VU |
| <i>Sphyrna lewini</i> | Scalloped Hammerhead | CR |
| RAYS | | |
| <i>Aetobatus ocellatus</i> | Spotted Eagle Ray | EN |
| <i>Pastinachus sephen</i> | Cowtail Ray | NT |
| <i>Rhynchobatus australiae</i> | Bottlenose Wedgefish | CR |
| <i>Taeniurops meyeri</i> | Blotched Fantail Ray | VU |
| <i>Urogymnus asperrimus</i> | Porcupine Ray | EN |

IUCN Red List of Threatened Species Categories are available by searching species names at 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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Simpfendorfer C, Derrick D, Yuneni RR, Maung A, Utzurum JAT, Seyha L, Haque AB, Fahmi, Bin Ali A, D, et al. 2021. *Negaprion acutidens*. *The IUCN Red List of Threatened Species* 2021: e.T41836A173435545. <https://dx.doi.org/10.2305/IUCN.UK.2021-2.RLTS.T41836A173435545.en>