APPENDIX XIV
EXECUTIVE SUMMARY: PORBEAGLE SHARK (2025)

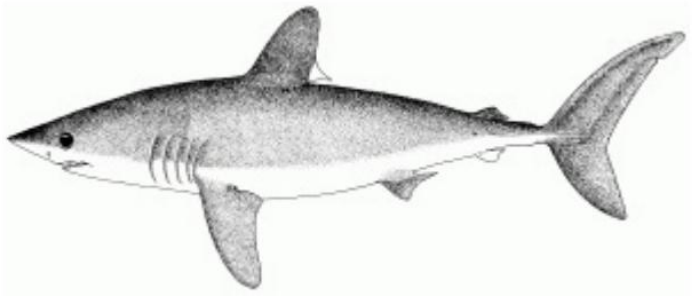

Table 1. Status of porbeagle shark (*Lamna nasus*) in the Indian Ocean

Area	Indicators		2024 stock status determination
Indian Ocean	Reported catch 20234(t)[4]	<1t	**Unknown**
	Not elsewhere included (nei) sharks[1] 2024 (t)	15,559t	
	Average reported catch 2020-24 (t)	<1t	
	Avg. not elsewhere included (nei) sharks[1] 2020-24 (t)	24,593t	
	MSY (1,000 t) (80% CI)[2]		
	F_{MSY} (80% CI) [2]		
	SB_{MSY} (1,000 t) (80% CI) [2,3]		
	F_{2019}/F_{MSY} (80% CI) [2]		
	SB_{2019}/SB_{MSY} (80% CI) [2,3]		
	SB_{2019}/SB_0 (80% CI) [2,3]		

Boundaries for the Indian Ocean are defined as the IOTC area of competence

[1]Includes all other shark catches reported to the IOTC Secretariat, which may contain this species (i.e., SKH: Various sharks nei; MSK: Mackerel sharks, porbeagles nei, AG21: Sharks nei other than oceanic whitetip shark and blue shark)

Colour key	Stock overfished ($SB_{2019}/SB_{MSY}< 1$)	Stock not overfished ($SB_{2019}/SB_{MSY}\geq 1$)
Stock subject to overfishing($F/F_{MSY}> 1$)		
Stock not subject to overfishing ($F/F_{MSY}\leq 1$)		
Not assessed/Uncertain		

Table 2. Porbeagle shark: IUCN threat status of porbeagle shark (*Lamna nasus*) in the Indian Ocean.

Common name	Scientific name	IUCN threat status[3]
		Global status
Porbeagle shark	*Lamna nasus*	Vulnerable

IUCN = International Union for Conservation of Nature; WIO = Western Indian Ocean; EIO = Eastern Indian Ocean

[3]The process of the threat assessment from IUCN is independent from the IOTC and is presented for information purpose only

Sources: IUCN Red List 2024

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Stock status. No stock assessment was carried out for porbeagle sharks in 2024. There remains considerable uncertainty in the stock status due to lack of information necessary for assessment or for the development of other indicators of the stock (Error! Reference source not found.**1**). The ecological r isk assessment (ERA) conducted for the Indian Ocean by the WPEB and SC in 2018 consisted of a semi-quantitative risk assessment analysis to evaluate the resilience of shark species to the impact of a given fishery, by combining the biological productivity of the species and its susceptibility to each fishing gear type (Murua *et al.* 2018). Porbeagle shark received a high vulnerability ranking (No. 3) in the ERA rank for longline gear because it was characterised as one of the least productive shark species, and highly susceptible to longline gear. Despite its low productivity, porbeagle shark has a low vulnerability ranking to purse seine gear due to its low susceptibility to this particular gear. The current IUCN threat status of 'Vulnerable' applies to porbeagle shark globally (Error! Reference source not found.**2**). There is a paucity o f information available on this species and this situation is not expected to improve in the short to medium term. Porbeagle sharks are commonly taken by a range of fisheries in the Indian Ocean. Because of their life history characteristics – they are relatively long lived (+30 years), mature at around 15 years, and have few offspring (around 4 pups every one or two years), the porbeagle shark is vulnerable to overfishing. There has been no quantitative stock assessment and limited basic fishery indicators are available for porbeagle shark in the Indian Ocean. Therefore, the stock status is **unknown**.

Outlook. Current longline fishing effort is directed at other species, however, porbeagle sharks are taken as bycatch in these fisheries but it may be released by some fleets. Maintaining or increasing effort can result in declines in biomass, productivity and CPUE. However, there are few data to estimate CPUE trends and a reluctance of fishing fleets to report information on discards/non-retained catch. Preliminary analysis of IOTC catch and effort data from the Japanese and Korean fleets found catchability to have declined from 2009 through 2018 (IOTC-2023-WPEB19-20). The Japanese fleet releases porbeagle sharks caught by longline vessels which may be a reason for the decline in catches of this species.

Management advice.

While mechanisms exist for encouraging CPCs to comply with their recording and reporting requirements (Resolution 18/07), these need to be further implemented by the Commission so as to better inform scientific advice. This is considered to be a vulnerable species

The following key points should also be noted:

- **Maximum Sustainable Yield (MSY)**: Unknown
- **Reference points**: The Commission has not adopted reference points or harvest control rules for any shark species.
- **Main fishing gear** (2019–23): coastal longline; Longline (deep-freezing),
- **Main fleets** (2019–23): IDN (96%), JPN, Catches by JPN are discarded.

LITERATURE CITED

Rigby, C.L., Barreto, R., Carlson, J., Fernando, D., Fordham, S., Francis, M.P., Herman, K., Jabado, R.W., Liu, K.M., Marshall, A., Pacoureau, N., Romanov, E., Sherley, R.B. & Winker, H. 2019. *Lamna nasus*. *The IUCN Red List of Threatened Species* 2019: e.T11200A500969. https://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T11200A500969.en. Accessed on 20 June 2024.