

Whitetip Reef Shark, *Triaenodon obesus*

Report Card assessment	Recovering		
IUCN Red List Australian Assessment	Near Threatened	IUCN Red List Global Assessment	Near Threatened
Assessors	Heupel, M.R.		
Report Card Remarks	Historic declines, but protected through marine reserves in Australia and population recovering		

Summary

The Whitetip Reef Shark is a medium sized shark distributed throughout tropical and subtropical waters of the Indian and Pacific Oceans. It is commonly associated with shallow coral reef habitats. Formerly it was abundant over coral reefs, but population numbers are at lower levels than those found prior to widespread expansion of fishing in the past 20 years. There is mounting evidence of localized depletion in several



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locations inferred from underwater visual census data. Therefore, globally it is assessed as Vulnerable (IUCN). In Australia there have been some declines recorded in the GBR region, but it is now protected through a network of marine reserves and fishing regulations. Therefore, in Australia it is assessed as Near Threatened (IUCN) and Transitional Recovering (SAFS).

Distribution

The Whitetip Reef Shark is distributed throughout tropical waters of the Indo-Pacific. It is found from South Africa to the Red Sea, across the Indian Ocean to Australia and throughout the Pacific Islands. It is also found in the eastern Pacific, Cocos Islands, Galapagos and Panama to Costa Rica (Compagno 1984). In Australia, it is found from Point Quobba (Western Australia) through the Northern Territory and to Gladstone (Queensland) (Last and Stevens 2009).

Stock structure and status

In Australia, visual surveys revealed variable results. Population declines of up to 80% were estimated in fished areas of the Great Barrier Reef in comparison to no-take and no-entry zones (Robbins 2006). Recent visual surveys in the Great Barrier Reef (GBR) however, have indicated an elevation in the abundance of reef sharks in all zones when compared to Robbins (2006), except for no-entry zones where numbers of the species remained the same (Bruckner 2014). The nocturnal nature of this shark and variation in depth use during day and night may complicate the interpretation of daytime visual count data. In contrast, catch per unit effort data from fishery surveys in the Great Barrier Reef data has remained stable (Heupel et al. 2009, Espinoza et al. 2014). However, there were 50% higher

abundances of Whitetip Reef Sharks in no-take zones compared to fished zone suggesting localised depletion can occur fishery (Espinoza et al. 2014). No data exist on the status of this species in Australian waters outside of the Great Barrier Reef Marine Park.

Fisheries

The primary threat to the Whitetip Reef Shark is fishing pressure. It is taken in commercial, recreational and artisanal fisheries operating on coral reefs. Its life history suggests it is moderately resilient to fishing pressure (Smith et al. 1998). However, heavy fishing pressure and limited movement and dispersal could lead to localised depletion (Robbins 2006, Heupel et al. 2009, Graham et al. 2010, Nadon et al. 2012). In Australian waters it is mostly caught by the Queensland Coral Reef Finfish Fishery as a minor bycatch. Regulations introduced in 2009 restrict the retention of this species, and rezoning of the Great Barrier Reef in 2004 protected approximately 33% of the reef area providing significant refuge for this species.

Habitat and biology

Whitetip Reef Sharks are found in shallow tropical waters from 1-330 m, but is commonly found in depths of 10-40 m. It is mainly nocturnal and individuals are thought to be highly site-attached (Whitney et al. 2012). Maximum size is at least 170 cm total length (TL) and maximum age is estimated to be 19 years for females and 14 years for males (Robbins 2006).

Longevity and maximum size	Longevity: estimated males 19 years, females 14 years Max size: at least 170 cm TL
Age and/or size at maturity (50%)	Males: 7 years, 112-116 cm TL Females: 8 years, 114-122 cm TL

Link to IUCN Page: <http://www.iucnredlist.org/details/39384/0>

Link to page at Shark References: <http://shark-references.com/species/view/Triaenodon-obesus>

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