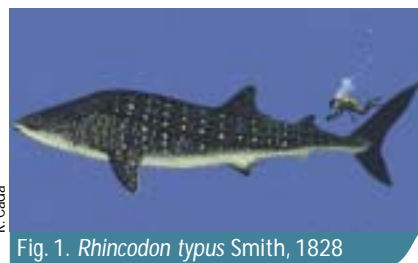


# FishBase species profile: *Rhincodon typus* (Smith, 1828)<sup>1</sup> Whale shark

Prepared by the FishBase team

**Common names:** Whale shark (FAO English); Requin baleine (FAO French); Tiburón ballena (FAO Spanish); 79 names in 29 languages from 39 countries are listed in FishBase. **Importance:** fisheries, commercial. Utilized fresh, frozen and dried salted for human consumption, liver processed for oil, fins used as soup base, offal probably for fish meal, cartilage for health supplements and skin for leather products. Highly valued commodity in ecotourism operations. **Distribution:** cosmopolitan in tropical and warm temperate seas, except in the Mediterranean. **Ecology:** world's largest fish, highly migratory, often seen offshore but coming close inshore, sometimes entering lagoons or coral atolls; solitary or forms aggregations of over 100 individuals; often associated with groups of pelagic fish, especially scombrids. **Environment:** pelagic; marine; surface water temperature 18-30°C; salinity 34-35 ppt. **Food:** feeds on planktonic and nektonic prey, such as fish (sardines, anchovies, mackerel, small tunas and albacore), small crustaceans and squids. **Trophic level:** 3.6. **Predators:** sharks, blue marlin and killer whale. **Reproduction:** ovoviviparous, litter size is over 300 pups; mean length at maturity 922-1 000 cm TL. **Growth/mortality parameters:** max. size: 20 m TL (male/unsexed); 34 tonnes; L infinity = 20 m TL; K = 0.02/yr;  $t_0 = -2.9$  yrs.; Phi prime = 4.99; Natural Mortality (M) = 0.03/yr;  $L_m$



R. Cada

Fig. 1. *Rhincodon typus* Smith, 1828

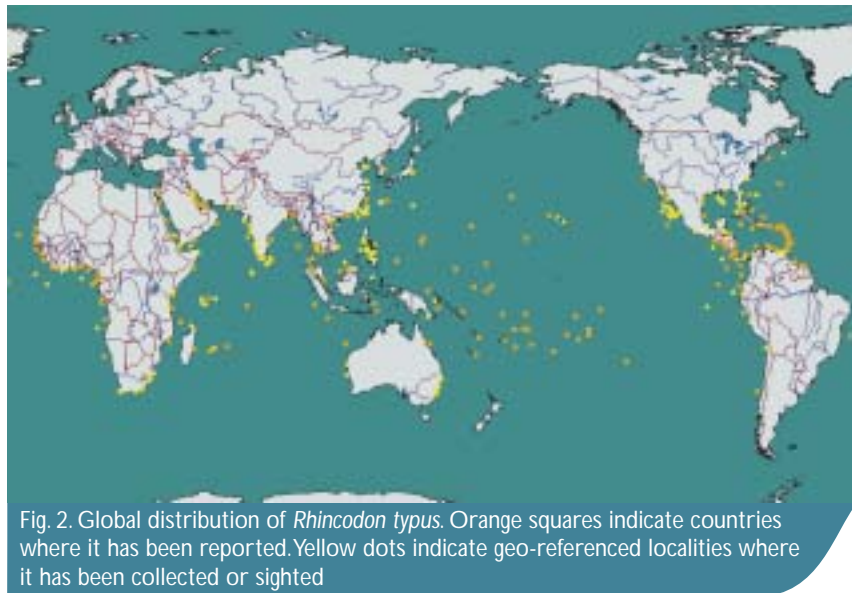


Fig. 2. Global distribution of *Rhincodon typus*. Orange squares indicate countries where it has been reported. Yellow dots indicate geo-referenced localities where it has been collected or sighted

= ca. 10 m TL. **L/W relationship:**  $W = 0.0043 * L^{3.0}$ . **Resilience:** very low, minimum population doubling time more than 14 years ( $K = 0.02/\text{yr}$ ; **Fecundity** = 16-300;  $T_m = \text{ca. } 20-30$  yrs. **IUCN Red List status**<sup>1</sup>: vulnerable A1bd+2d. The life history of this relatively scarce but cosmopolitan tropical and warm temperate species is poorly understood, but it may be relatively fecund and migrates extremely large distances. Catches have declined and populations apparently been depleted by harpoon fisheries in several countries targeting localized concentrations of this huge, slow-moving and behaviorally-vulnerable species, and there is incidental capture in other fisheries. Directed fisheries, high value in international trade, a K-selected life history, highly migratory nature, and low abundance make this species vulnerable to exploitation. In recent years dive tourism involving this species has developed in a number of locations around the world. **Conservation and management measures:**

this species is included in the following: Appendix II of the Bonn Convention for the Conservation of Migratory Species of Wild Animals in 1999; Annex I of the 1982 United Nations Convention on the Law of the Sea (UNCLOS) which called for "coordinated management and assessment to better understand cumulative impacts of fishing effort on the status of the shared populations" of these sharks; Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) since May 2003 which regulates international trade of this species; FAO International Plan of Action for the Conservation and Management of Sharks (IPOA-Sharks); however, international trade still exists. Protected in Australia, Belize, Honduras, India, the Maldives, Mexico, the Philippines, South Africa, Thailand and USA.

For further information: contact the WorldFish Center FishBase Project Team, Los Baños, Philippines (fishbase@cgiar.org).

FishBase online sources used in producing the above species profile:

<sup>1</sup> <http://www.fishbase.org/Summary/SpeciesSummary.cfm?ID=2081&genusname=Rhincodon&speciesname=typus>

<sup>2</sup> <http://www.redlist.org/search/details.php?species=19488>