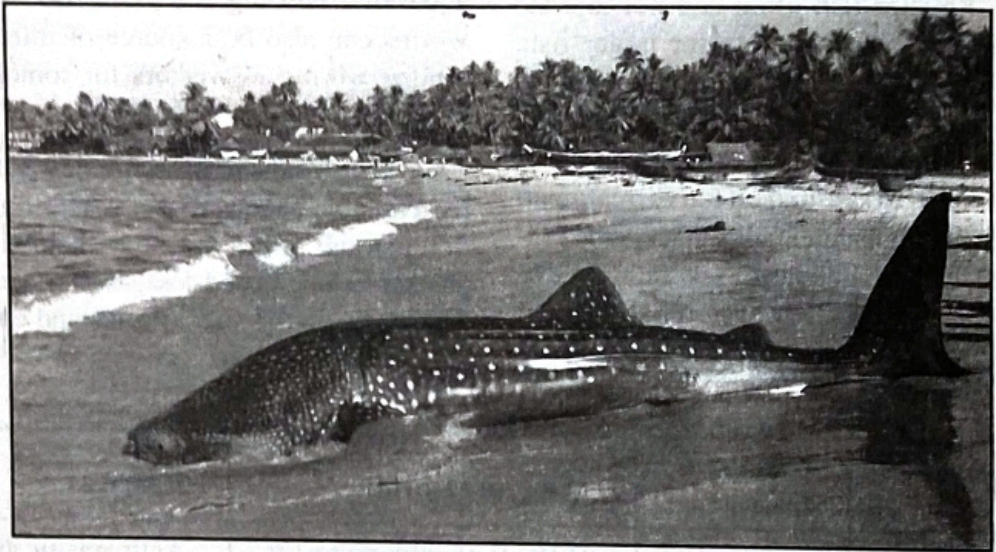


A WHALE NO, A SHARK

N.G.K. Pillai

As its name indicates the whale shark is enormous and can grow upto 50 feet (15 m) in length and weigh 20,400 kg (12 m specimen). Its scientific name is *Rhincodon typus*. It has nothing in common with whales except for the size and the fact that it only eats minute plankton. It is

ist filter feeder on plankton, uses a special straining mechanism to strain copepods, fish larvae and other nutritious components from the planktonic soup. They are often seen with schools of small pelagic fish such as anchovies, sardines, trevally



the largest fish on the earth with dark grey to a reddish or greenish brown on back and sides, including upper surface of the pectorals. The body is spotted with roundish white or yellowish series of spots, smallest on the head where they are less frequent variable number of narrow white or yellow transverse stripes. Belly and lower parts are of whitish or white yellow. They are very docile and gentle.

Habitat: It can be found in tropical and warm temperate waters (30- 40° latitude) of the Atlantic, Pacific and Indian Oceans. It is said to prefer waters of surface temperature 21-26°C, in areas where there are upwellings of nutrient rich cold water. These conditions favour blooms of plankton on which the whale sharks feed.

Feeding habits: Whale shark is a special-

and small squids. It normally feeds on or just below the surface. It is remarkable that the sharks are able to filter prey that are only 1 mm in diameter.

Reproduction: Whale sharks are viviparous animals, that is they are born live and do not hatch from eggs after they leave the uteri. In Taiwan a pregnant whale shark was harpooned and she contained 300 embryos in her uteri. The pups that were free from the yolk sac were upto 64 cm. It is believed that maturity is reached between 25-30 years of age (9 to 10 m length). This maturity ages gives the conclusion that they may live well over 100 years.

Whale shark still a mystery

The whale shark is one of the surviving gi-

ants of the ocean that has remained a mystery to fishermen, divers and scientists alike until recently. It is not known how far they migrate. Recent studies have shown that whale sharks migration can take them hundreds and even thousands of miles. One report showed that a single whale shark, equipped with a satellite tag, travelled 14,000 miles in 40 months.

Why are whale shark so valuable?

Whale sharks are valuable because of their fins used for shark fin soup. A spurt in fin soup demand in the west in star hotels has led to overexploitation of sharks. Almost every part of the whale shark — be it its leather, liver, bones, fins, meat has some value or other. The price depends on the size. A 25 foot whale shark can fetch upto Rs. 1.30 lakhs (US \$ 3,020). The whale shark is a delicacy in Taiwan, where it is referred to as the *tofu* shark because of its soft, white flesh. The Taiwanese are the greatest consumers of whale shark meat.

Whale shark fishery in India

There is no directed fishing for whale shark in India except in the Gujarat coast where it is fished indiscriminately by harpooning. Until early 1980's whale sharks landings in India were mainly due to incidental catches and were mostly discarded. Since mid 1980's however, the whale

shark fishery became a regular one along the Sourashtra coast. They are commercially exploited for their meat, fins, liver and skin. In the 1990's whale sharks were being targetted off Gujarat coast and that 1000 whale sharks were exploited in 1998 alone and a substantive portion of this catch comprises of specimens less than 9 m length.

Why are whale shark vulnerable to overfishing?

Whale shark is extremely vulnerable to overfishing by virtue of slow growth and high longevity; slow to reach sexual maturity; long reproductive cycle; produce low numbers of young ones; specific mating and nursery areas; and highly migratory. Hence it lack the ability to withstand long-term, sustained fishing pressure.

Whale shark stock in the wild is not estimated so far. Their migratory nature makes the estimation of the population size quite difficult. Whale shark needs to be protected by all mean and hence it is enlisted under the CITES and also included in the Schedule I of the Wildlife Protection Act of 1972. According to this Act, hunting or capturing of all wildlife specified in Schedule I, II, III and IV of the Act is prohibited to protect our flora and fauna from mindless exploitation.

Marine parks

The first Marine National Park in India came into existence in the Gulf of Kutch (Piroton area) in 1980 followed by the Gulf of Mannar and the Wandoor Marine National Park in the South Andaman. A marine park is a reserve and should be managed along several ecological principles and should serve many relevant purposes such as habitat and species preservation, scientific research, recreation and financial gains. Though these three marine habitats have been declared as protected areas, delineation of the core areas and the park limits and the regulations on various human activities in the protected areas remain to be implemented. Proposals have been initiated to establish marine parks and preserves in Malvan-Vengurla (coast of Maharashtra), Minicoy, Kavaratti, Chetlat, Kadamat and Kalpeni (in Lakshadweep).