MINT ON SUNDAY

Home » Mint on Sunday » Big story

Whale sharks: Saving the gentle giants of Gujarat

Vijaysree Venkatraman

"My first memory of whale sharks is when I was 10 years old, traveling from Mombasa to Bombay via Porbandar on a ship," recalls Mike Pandey, an Indian wildlife filmmaker who was born in Kenya. He had seen these majestic creatures—the world's largest fish—swim alongside his ship during the weeklong journey in the Indian Ocean.

Decades after, when a middle-aged Pandey drove along the Gujarat coastline asking people about the "big fish", which did not have a local name, no one knew what he was talking about. Then, in 1996, a builder of fibre glass boats in Bhavnagar described the beautifully patterned fish accurately and said that in some villages, people hunted it on occasion. Locals did not eat the fish, but they used oil from the liver to waterproof wooden boats.

Perhaps the boat-builder was unaware of more recent developments: From 1991 onwards, whale sharks had been killed in large numbers in Gujarat, fuelled by the demand for their fins and meat in South-east Asia and Europe.

In any case, after the chat with the builder, the quest began in earnest. In 1998, Pandey sighted his first whale shark in the murky waters of the Veraval harbour. As large as a trawler, it lay cut open. Two men who had clambered on were hacking at its insides. As life ebbed out of the hapless fish, Pandey remembers making a silent pledge: he would save the gentle giants of the Gujarat coast.

That would take some doing.

Like the blue whale, the migratory whale shark, or Rhincodon typus, which inhabits tropical and warm, temperate seas worldwide, feeds largely on plankton. It does not attack humans, but people eat its meat. In China, for instance, it has been dubbed "tofu shark"; shark fin soup is a prized delicacy in Chinese cuisine. The fish can live up to a 100 years but produces offspring only once every few years. Overfishing, which can push populations of this species to ruinous lows, remains the biggest threat to its existence.



A whale shark campaign at a school in Anand, Gujarat in July 2005. Photo: Vidyanagar Nature Club/WTI

By the turn of the 20th century, there was an international market for different parts of the whale shark—a set of fins alone could fetch close to \$1,000. In Gujarat, the middlemen had moved in for the kill. The fish did have a local name, "barrel"—after the plastic drum used to haul it ashore. Yet scientists Pandey spoke to maintained that whale sharks did not visit these shores, so the slaughter could not be happening.

Pandey's crew went about filming the hunting of the whale shark. In 2000, the resulting documentary "Shores of Silence" won the Wildscreen Panda Award,

the equivalent of the Oscar for natural history films (watch it <u>here</u>) One year later, after intense lobbying, the Indian government banned the killing of whale sharks.

That was not all. In 2002, at a gathering of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), even as the conference was winding down, the panel agreed to a re-vote on whale sharks. After watching Pandey's documentary, an overwhelming majority voted to put the fish on a list of species not in immediate danger of extinction, but in need of trade restrictions in order to ensure their survival.

In India, the whale shark was already on a par with the charismatic tiger, as far as legal protection goes. But three years into the ban, a survey along the Gujarat coast showed that even in Veraval, the hub of the whale shark fisheries, few knew of its status.

A "Save the Whale Sharks" movement was launched in Gujarat in 2004, to change attitudes towards the fish that visits its shores from September to May. The campaign was a joint venture of the Wildlife Trust of India-International Fund for Animal Welfare (WTI-IFAW), Tata Chemicals Ltd and the Gujarat forest department.



Whale shark, the largest known fish species. Photo: Venkat Charloo Morari Bapu, a spiritual leader revered by many in Gujarat, became a campaign ambassador. At the launch, he spoke about the tradition of non-violence and the idea of honouring guests. Warming to the theme, he equated the visits of whale shark to a beloved daughter coming home to give birth to her child.

This metaphor became the theme for a street play which featured a fisherman, a potential hunter of whale sharks, whose pregnant daughter comes home to deliver her baby. The plot linked the fate of the fish and that of the daughter, so ultimately the fisherman resolves to save and protect both.

With the play becoming a hit in the fishing villages, the fish known as "barrel" became vhali, meaning "dear one", which was the name of the daughter in the play. A 4oft inflatable whale shark, which served as the backdrop, drew in the crowds. Inland, too, kids loved the life-sized model of vhali. They touched it and wanted to know more about the fish.

Porbandar, the birthplace of Mahatma Gandhi, was the first to adopt the whale shark as its mascot. Other coastal towns, including Veraval, followed the lead.

In September 2004, a whale shark accidentally caught in the nets of a trawler off the coast of Dwarka was the first beneficiary of the awareness drive. The owner of the trawler, Kamlesh Chamadia, knew what he had to do. "It is such a gentle fish that it remained still even when it was entangled in the nets," he had said in an interview with the campaign coordinator, Rupa Gandhi, "our crew had to climb over it to cut some parts of the nets to release it."

Freeing vhali came at a cost to fishermen. The obvious one was the price of the fishing nets, which was close to Rs25,000. Then there were incidentals: the massive fish displaced the catch of the day, and the rescue was intricate, time-consuming work involving the labour of many.

Despite all this, most fishermen did the right thing. In 2006, the government came up with a scheme to compensate them for the damage to the fishing nets. But a forest official would have to be summoned to the scene of the rescue to inspect the evidence.

Waiting for the official would increase the trauma of the trapped animal and lower its chances of survival. So, in 2012, the conservationists began distributing tamper-proof cameras to fishermen. They could self-document the event and make claims.

After the compensation scheme kicked in, fishermen in Gujarat have rescued close to 700 whale sharks, some of which were <u>newborn pups</u>. The WTI research team, which presented the data at a prestigious whale shark conference last year, believes that nearly all rescued fish survived the trauma. They lived, if you will, happily ever after.

"India is most likely the world leader in releasing whale sharks caught accidentally," says <u>Simon J. Pierce</u>, a marine biologist who is also cofounder of the Marine Megafauna Foundation, a research and conservation organization formed with the goal of saving whale sharks from extinction.

"Scientific efforts from Wildlife Trust of India to monitor the movements of whale sharks after they are freed are hugely important," he says over email.

Unlike whales, which are mammals, whale sharks, which are fish, don't have to come up for air periodically. As they dive deep, their journeys are largely invisible to humans. Feeding mobs, consisting mostly of male whale sharks, do gather along certain coasts annually, but where do the males and females meet? Where are the favoured breeding grounds?

With a better understanding of the creature's movements and its life stages, conservationists can come up with better strategies to save this species migratory across national boundaries.

Rescue operations offer researchers a chance to pin satellite tags onto the fish's fins. The devices track and transmit data about the depths to which the fish dive, the distances they cover. Right now, a whale shark tagged by the WTI team is **making its way** towards Africa.

Sajan John, head of the marine division at WTI, says his field team also conducts off-shore surveys of free-swimming whale sharks. They scrape tissue samples from the entangled fish for genetic testing.

Every bit of data helps. Last year, Pierce led the team whose efforts saw the recognition of the whale shark as a globally endangered species. Since then, he says, all available scientific data on the sharks' movements and biology have been collated to support a nomination to list the species on Appendix I on the Convention of Migratory Species.

If that nomination is approved this October, it could lead to enhanced protection for whale sharks in a number of countries in the Indian Ocean where no conservation plans are in place.

Passing a law to halt whale shark fishery, however, is only the first step.

The species, for instance, is protected under Chinese law, but there is, Pierce says, a large unmonitored catch of whale sharks—estimated to be hundreds of

sharks per year—in the South China Sea. This is a major threat to whale sharks in that region and potentially further afield.

In Gujarat, the killing of whale sharks may have stopped, attitudes and behaviours changed. But clearly, much more remains to be done elsewhere to make the oceans safe for its gentle giants.

Vijaysree Venkatraman is a freelance science journalist based in Boston.