



Sharks and people

Background reading for teachers

This reading gives you the background to each slide and fact sheet, with sources you can check. The facts on the fact sheets are simplified for students. Here are the details behind them.

How many sharks, and why

A 2024 study tracked the fate of an estimated 1.1 billion sharks caught by fisheries. Total fishing mortality rose from about 76 million to 80 million sharks a year between 2012 and 2019, with roughly 25 million from threatened species, and up to 101 million in 2019 once sharks not identified to species were counted. Coastal fisheries account for 95% of the total. Nearly 70% of maritime jurisdictions have introduced measures against finning, but these did not reduce overall mortality. Regional bans on catching or keeping sharks had some success.¹ Finning is now less common, since most sharks are landed whole, but demand for shark meat and fins keeps catches high.²

Trade controls

At the 2022 CITES meeting in Panama, governments listed all 54 requiem shark species, six more hammerheads and 37 guitarfish on Appendix II, which means international trade needs permits showing it is legal and sustainable.³ Requiem sharks and hammerheads make up well over half of the fins traded each year.⁴

Bycatch and reef sharks

The Global FinPrint survey of 371 reefs linked the loss of reef sharks mainly to overfishing, with longlines and gillnets the single largest contributor. Reefs with healthy sharks were in well-governed places that banned shark fishing or had strong, science-based limits.⁵ In the Philippines, Fisheries Administrative Order 193 of 1998 makes it illegal to catch, sell, buy, possess, transport or export whale sharks and manta rays, and requires any caught by accident to be released unharmed.⁶

Manta rays

Mantas usually have a single pup every two to three years, among the lowest breeding rates of any shark or ray.⁷ Demand for their gill plates, sold as a tonic in some Asian markets, drove fisheries that caused local declines of over 85% in some regions. There is no scientific evidence that gill plates work, and several studies have found harmful levels of heavy metals in mobulid gill plates and meat.⁸ The reef manta is listed as Vulnerable and the giant manta as Endangered.

Oslob and Donsol

Whale sharks at Oslob have been fed daily since 2011. More than 500,000 tourists visit each year. In-water studies from 2015 to 2017 found that sharks with more previous visits were less likely to show avoidance behaviour, and that in 93% of surveys people were less than 2 metres from a shark.⁹ Photo-identification showed some individuals became year-round residents, a clear response to feeding.¹⁰ Researchers from LAMAVE have also reported more injuries and scars on Oslob sharks than at non-

feeding sites. Supporters of the feeding point out that it supports 177 fishers, who fund sea wardens and police patrols and help protect five marine reserves.¹¹ Donsol's whale shark tourism began after the 1998 discovery of a large aggregation there, which led directly to Fisheries Administrative Order 193. Before that, whale sharks were poached in parts of the Visayas for export.¹² Donsol protected its waters by municipal ordinance in 1998 and runs a community-based, no-feeding program with trained Butanding Interaction Officers. TIME named it the best place for an animal encounter in 2004.¹³

Monad Shoal

In 2015, Daanbantayan's mayor signed an executive order making Monad Shoal and Gato Island a shark and ray sanctuary, banning the catching and trading of all sharks and rays there. The Thresher Shark Research and Conservation Project estimated that about 80% of the municipal economy depends on scuba diving.¹⁴ Local enforcement is supported by the deputised group Migo sa Iho, and Monad Shoal is described as the only place in the world where thresher sharks can be seen with near certainty every day.¹⁵ The pelagic thresher was reassessed as Endangered in 2019.¹⁶

Worth more alive?

A 2013 study estimated that about 590,000 shark watchers spend more than US\$314 million a year, directly supporting 10,000 jobs, compared with a landed value for global shark fisheries of about US\$630 million that had been falling. Shark watching was projected to more than double within 20 years.¹⁷ These figures are now over ten years old, so use them to make the point, not as current numbers. It is also worth discussing that tourism money does not reach every fishing community.

Sources

1. Worm, B. and others (2024). Global shark fishing mortality still rising despite widespread regulatory change. Science. Summary: dal.ca/news/2024/01/11/shark-fishing-finning-study.html
2. National Geographic (2024). Sharks are still being killed at high rates, despite bans on finning. nationalgeographic.com/animals/article/sharks-killed-at-high-rates-despite-bans-on-finning
3. IFAW (2022). Groundbreaking vote to control unsustainable global trade in shark fins. ifaw.org/press-releases/groundbreaking-vote-control-unsustainable-global-trade-shark-fins
4. Wildlife Conservation Society (2022). CoP19 parties vote to protect requiem sharks and hammerheads. newsroom.wcs.org
5. MacNeil, M.A. and others (2020). Global status and conservation potential of reef sharks. Nature. Summary: icriforum.org/first-of-its-kind-global-survey-reveals-sharks-are-functionally-extinct-from-many-reefs/
6. BFAR Fisheries Administrative Order No. 193, s. 1998. elibrary.judiciary.gov.ph/thebookshelf/showdocs/10/37983
7. Pew Charitable Trusts (2013). CITES 2013: manta rays. pew.org/en/research-and-analysis/fact-sheets/2013/01/18/cites-2013-manta-rays
8. James Cook University research on mobulid gill plates and heavy metals. researchonline.jcu.edu.au/88202/
9. Legaspi, C. and others (2020). In-water observations highlight the effects of provisioning on whale shark behaviour. Royal Society Open Science. doi.org/10.1098/rsos.200392
10. Feeding the world's largest fish: whale shark residency at a provisioning site in the Philippines (2017). Royal Society Open Science. ncbi.nlm.nih.gov/pmc/articles/PMC5627090/
11. Lowe, J. and Tejada, J.F. (2019). Tourism Management. Discussed on Coral-List: coral.aoml.noaa.gov/pipermail/coral-list/2019-March/020224.html
12. Vera Files. Lessons from Donsol: what other towns can learn about whale sharks. verafil.es.org/articles/lessons-from-donsol-what-other-towns-can-learn-about-whale-sharks
13. House of Representatives, Philippines (2025). House Bill declaring Donsol the capital for butanding interaction. docs.congress.hrep.online/legisdoks/basic_20/HB09233.pdf
14. Greenpeace Philippines (2015). Landmark ordinance in Cebu sets to establish the country's first shark and ray sanctuary. greenpeace.org/philippines
15. Eco-Business. Cebuanos call for global protection of thresher sharks. eco-business.com/press-releases/cebuanos-call-for-global-protection-of-thresher-sharks
16. Divernet (2019). Oceanic whitetips on the brink of extinction (IUCN Red List update). divernet.com/scuba-news/oceanic-whitetips-on-the-brink/
17. Cisneros-Montemayor, A. and others (2013). Global economic value of shark ecotourism. Oryx. Summary: science.ubc.ca/news/sharks-worth-more-ocean-menu

Free to use and share for education. Made by Marine Conservation Philippines. More free lessons: marineconservationphilippines.org/resources/teachers-resources/ Updated September 2026.