

Testimony of Linda Mays McCaul
[Oceanographer]

before the

Subcommittee on Water, Oceans, and Wildlife
House Natural Resources Committee

on

Legislative Hearing on H.R. 737
March 26, 2019

Introduction

Good morning, Mr. Chairman and members of the subcommittee. Thank you for giving me the opportunity to testify before you today on the Shark Fin Sales Elimination Act (H.R. 737). I would also like to take the time to thank the many Republican and Democratic legislators who support the Shark Fin Sales Elimination Act. I'm gratified to see the impressive bipartisan support that this legislation has enjoyed.

My name is Linda Mays McCaul. My interest of the ocean began when I was a young child in Florida. I have a master's degree in oceanography and geology with a minor in chemistry. I worked for the Ocean Drilling Program. I also worked for Naval Intelligence tracking Soviet submarines and predicting the next generation of Soviet sonars. I wrote environmental permits for the Army, so they could incinerate their chemical weapons stockpiled in Anniston and Tooele and I developed a course for the Central Intelligence Agency in biological warfare. I am an avid scuba diver and have chased sharks all around the world to study them: Great Whites in Guadalupe and South Africa, scalloped hammerheads, whale sharks, tiger sharks and Galapagos sharks in Cocos island and the great hammerhead in Bimini.

This Bill is important to me because it will protect sharks in the ocean and will stop the import and export of shark fins in the U.S. I am passionate about sharks and their conservation.

Thankfully, these species now enjoy a better view in the public eye than they used to. And rightfully so. They occupy the upper tier of many food chains and provide important functions such as keeping coral reefs healthy,¹ serving as the sole predators of certain species,² and helping maintain vital seagrass beds that serve as fish nurseries.^{3,4}

Unfortunately, due to human activity, some shark populations have suffered severe declines.² Some studies have predicted that a decrease in shark populations is not only potentially damaging to the ocean ecosystem, but also could hurt commercial fishers, as their target species become depleted due to unchecked growth of mid-level predators.²

The demand for shark fins, used for shark fin soup, is a main driver of the declines in shark populations around the world. Every year, up to 73 million sharks end up in the global fin trade.⁵ The high demand for these fins fuels shark finning – the act of slicing the fins off a shark and dumping its body back at sea where it will drown, bleed to death, or be eaten alive by other fish. Below you will find a heartbreaking picture of the result of finning.



Photo credit: Nancy Boucha

Fortunately, Congress has already banned the act of shark finning. However, the United States can do more to protect sharks both here and around the world, starting with banning the domestic trade of shark fins.

While Hong Kong has been the historic center of the shark fin trade, the United States also participates in this trade. According to the National Marine Fisheries Service, since 2010, the United States has imported shark fins from New Zealand, Hong Kong, Brazil, Burma, China, Ukraine, the Netherlands, India, Australia, Spain, Japan, Indonesia, South Africa, and Italy.⁶ Many of these countries have inadequate or nonexistent conservation measures to protect sharks from the brutal act of finning. To put a finer point on it, not only is it likely that there are fins from finned sharks in our marketplace, the United States is also providing economic incentive for other countries to fish for sharks in a way that is illegal and unacceptable in U.S. waters.

Additionally, once a fin enters the market, it is impossible to tell whether the fin was harvested via finning. New research has indicated that only 8.7 percent of the fins in the global fin trade are from sustainable sources, and even those fins are not yet traceable or labeled.⁷ My friend, Dr. Demian Chapman, is an expert on the international trade of shark fins. I had an opportunity to assist Dr. Chapman tagging sharks in Belize to study migration patterns of sharks, additionally, he is at the

forefront of conservation work globally. His research has indicated that one-third of the identified species in the Hong Kong fin trade are threatened with extinction, and that fewer than 10 of the species in the trade are sustainably managed anywhere in their range.⁸

Due to the difficulty in identifying shark species from processed fins at points of entry into international markets, it is easy for threatened species to end up in the shark fin trade. Indeed, genetic tests of fins confiscated by the National Oceanic and Atmospheric Administration, as well as shark fin soup samples from the United States, identified prohibited, endangered or protected species such as the great white shark, the basking shark, and the scalloped hammerhead.⁹⁻¹¹ The United States has deemed these species in need of protection, yet the fin trade enables these species to continue to be bought and sold within our borders.



Photo Credit: Oceana

Additionally, finning, while illegal, is still occurring in U.S. waters. Between 2010 and 2017, NOAA investigated 85 incidents of alleged shark finning. While only 26 of those investigations have resulted in charges, just one of those incidents involved more than 2,000 fins found in a hidden compartment on a boat. A shark fin trade ban would remove the incentive for people to continue this act. Plus, there's evidence that these types of bans work. Late last year, 10 fishermen were caught attempting to smuggle nearly 1,000 shark fins to Indonesia out of Hawaii, the first state to impose a fin trade ban. Worse yet, prosecutors stated that those fins came from sharks that had been finned.¹² Without the state fin trade ban, these unsustainable shark fins would have ended up in the international trade, and even perhaps in a bowl of soup for sale in the United States.



Photo Credit: Ricardo Roberto Fernández Martínez

Banning the trade of shark fins would not only keep this from happening, but it makes economic sense. A report found that shark-related dives in Florida alone generated more than \$221 million in revenue and fueled over 3,700 jobs in 2016.¹³ I, myself, can attest to the majesty of seeing sharks alive and in the water. I have traveled in search of understanding shark populations and migration patterns. Great White sharks are majestic creatures very docile in their natural habitat. In Guadalupe Island I was on a boat that Peter Benchley had been on many years ago before he died. Mr. Benchley told our captain that his single biggest regret in his life was writing *Jaws* because after seeing the majestic animals in their natural environment he wished he had not villainized them. Additionally, I have traveled to Cocos Island to see scallop hammerheads, whale sharks, tiger sharks, and Galapagos sharks. My travels took me to Mexico when whale sharks migrated and to Bimini to observe the great hammerheads.

This \$221 million number stands in stark contrast to the shark fin industry in the United States, which exported less than \$1 million worth of fins in the same year.⁶ In fact, the entire shark fishery in the United States is incredibly small. In 2017, shark landings made up **0.1 percent** of the value of all fisheries in the United States.¹⁴ This is a pittance compared to how valuable these sharks are to the tourism industry. However, it's important to note that H.R. 737 will not shut down any commercial shark fisheries. Shark fishermen will still be able to sell the meat; the bill simply ends the sale and trade of the fins, which I might add, account for only 2-5 percent of the body mass. Additionally, according to NOAA the value of shark meat exports in 2017 was 14.5 times more

than the value of exported shark fins.⁶ In response to the critique I've heard that it's wasteful not to use the entire shark once caught -- to me, what's wasteful is targeting a shark primarily for the value of the fin. That is the practice that would be ended by this bill.

Already 12 states and all three Pacific territories have ended the trade of shark fins. And in fact, total fisheries landings increased in seven out of the 10 coastal states with shark fin bans during the first year each ban took effect. In my home state of Texas, the total landings for the state increased from about \$180 million to \$237 million after the fin ban was implemented.

However, according to the NOAA database, there is a new troubling trend: shark fins are being imported into and exported out of states with fin trade bans. For example, my home state of Texas ended the trade of shark fins in 2016 with a state-wide ban, becoming the first state in the Gulf of Mexico region to enact such a law. The law makes it illegal to buy, sell, or transport fins, with the intent to sell. However, the National Marine Fisheries Service's Fisheries Statistics and Economics Division database on foreign trade indicates that in 2017 and 2018, \$200,000 worth of fins have been exported out of Texas to Mexico, China and Hong Kong. Likewise, imports of shark fins are on record coming in through California and New York, both states that have passed laws with the express intention of banning the shark fin trade within their borders.⁶ This phenomenon is only occurring because of federal interstate commerce rules and regulations that allow fins to pass through states as long as the final destination is a state without a ban. A federal fin ban, H.R. 737, can fix this loophole, and would ease the burden on law enforcement officials who are currently required to carry out a patchwork of laws regarding shark fins.

These 12 states and three territories aren't alone in their desire to end their participation in the international shark fin trade. Already 40 airlines, 20 shipping companies, 11 major corporations including Amazon and Disney, and over 635 United States businesses and organizations support a ban on shark fins. Fifty-one percent of international airlines have now banned shark fins, based on seat capacity. Worldwide, 17 of the 19 biggest shipping lines measured by container capacity have banned shark fins, impacting 71 percent of the global market.¹⁵ Over 150 scientists, 85 surfers, surf businesses and surf publications, and over 150 chefs have signed letters in support of a shark fin trade ban. Plus, polling has indicated that eight in 10 Americans support removing the United States from the international fin trade.

And, as I think all the members of this committee know, when the United States leads, other countries follow. Just as the United States has led the world in fisheries management and in halting the trade of other trafficked products like ivory and rhino horns, so too, should we reclaim our role as a leader and show the world that we will not contribute to the demand for fins. The world is already ready. Surveys conducted in Hong Kong, the historic center of the shark fin trade, have shown that nearly 70 percent of Hong Kong residents have reduced or stopped eating shark fin soup, and over 80 percent of surveyed respondents say that environmental concerns are the reason they are consuming less.¹⁶ We have a chance to show the world that we will no longer participate in the trade of a product that incentivizes a brutal practice that is driving declines in populations of these beautiful and important fish. And the cherry on top? Last session the Congressional Budget

Offices reported that this bill does not score, making it a cost-effective way of accomplishing shark conservation. Let's not let this opportunity slip away.

Thank you for your time.

Sources

1. Roff G, Doropoulos C, Rogers A, *et al.* (2016) The Ecological Role of Sharks on Coral Reefs. *Trends in ecology & evolution* 31: 395–407.
2. Ferretti F, Worm B, Britten GL, Heithaus MR and Lotze HK (2010) Patterns and ecosystem consequences of shark declines in the ocean: Ecosystem consequences of shark declines. *Ecology Letters* : no-no. doi: 10.1111/j.1461-0248.2010.01489.x
3. Atwood TB, Connolly RM, Ritchie EG, *et al.* (2015) Predators help protect carbon stocks in blue carbon ecosystems. *Nature Climate Change* 5: 1038–1045. doi: 10.1038/nclimate2763
4. Wirsing AJ, Heithaus MR and Dill LM (2007) Living on the edge: dugongs prefer to forage in microhabitats that allow escape from rather than avoidance of predators. *Animal Behaviour* 74: 93–101.
5. Clarke SC, McAllister MK, Milner-Gulland EJ, *et al.* (2006) Global estimates of shark catches using trade records from commercial markets: Shark catches from trade records. *Ecology Letters* 9: 1115–1126. doi: 10.1111/j.1461-0248.2006.00968.x
6. NOAA Annual Trade Through All U.S. Customs Districts. In: *commercial-sub level*. Available: <https://ST/commercial-fisheries/foreign-trade/applications/annual-trade-through-all-us-customs-districts>. Accessed Oct 3, 2017.
7. Simpfendorfer CA and Dulvy NK (2017) Bright spots of sustainable shark fishing. *Current Biology* 27: R97–R98.
8. Fields AT, Fischer GA, Shea SK, *et al.* (2018) Species composition of the international shark fin trade assessed through a retail-market survey in Hong Kong. *Conservation biology* 32: 376–389.
9. Magnussen JE, Pikitch EK, Clarke SC, *et al.* (2007) Genetic tracking of basking shark products in international trade. *Animal Conservation* 10: 199–207. doi: 10.1111/j.1469-1795.2006.00088.x
10. Shivji MS, Chapman DD, Pikitch EK and Raymond PW (2006) Genetic profiling reveals illegal international trade in fins of the great white shark, *Carcharodon carcharias*. *Conservation Genetics* 6: 1035–1039. doi: 10.1007/s10592-005-9082-9
11. Fields AT, Abercrombie DL, Eng R, Feldheim K and Chapman DD (2015) A Novel Mini-DNA Barcoding Assay to Identify Processed Fins from Internationally Protected Shark Species. Stow A, editor *PLOS ONE* 10: e0114844. doi: 10.1371/journal.pone.0114844
12. -- (2018) Japanese boat owners charged with helping smuggle shark fins. In: *The Seattle Times*. Available: <https://www.seattletimes.com/business/japanese-boat-owners-charged-with-helping-smuggle-shark-fins/>. Accessed Mar 13, 2019.
13. Tony Fedler (2017) *The Economic Impact of Shark Diving in Florida*. Gainesville, FL: Human Dimensions Consulting.
14. -- Annual Landings. In: *commercial-sub level*. Available: <https://ST/commercial-fisheries/commercial-landings/annual-landings/index>. Accessed Mar 5, 2019.
15. -- China's biggest airline bans shark fin cargo | South China Morning Post. Available: <https://www.scmp.com/news/hong-kong/economy/article/2089229/chinas-biggest-airline-bans-shark-fin-cargo>. Accessed Mar 13, 2019.
16. -- Bloom Association » BLOOM HONG KONG : Sympathy for the Misunderstood Shark.