EXAMINING THE REGULATION OF SHARK FINNING IN THE UNITED STATES

HEARING

BEFORE THE

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THE INTERIOR, ENERGY, AND ENVIRONMENT

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EXAMINING THE REGULATION OF SHARK FINNING IN THE UNITED STATES

Thursday, November 2, 2017

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON THE INTERIOR, ENERGY, AND ENVIRONMENT
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM,
Washington, D.C.

The subcommittee met, pursuant to call, at 2:04 p.m., in Room 2154, Rayburn House Office Building, Hon. Blake Farenthold [chairman of the subcommittee] presiding.

Present: Representatives Farenthold, Palmer, Comer, and Plaskett.

Mr. FARENTHOLD. The Subcommittee on the Interior, Energy, and the Environment will come to order.

Without objection, the chair is authorized to declare a recess at any time. We are expecting votes on the floor of the House around 2:30. We'd like to get as far as we can, at least through the opening statements, and perhaps our witnesses' initial testimony, and then we have a couple of votes. We take the House picture, which actually is very fast, and we'll get back here as soon as we can to finish that up. I apologize, but there probably will be about a half hour or so recess in the middle of this to allow us to do our voting.

So good afternoon. Today, the Subcommittee on Interior, Energy, and the Environment will examine the regulation of shark finning in the United States. Despite the fact that shark finning is illegal in U.S. waters, many coastal states continue to face issues with shark finning enforcement. Today, we'll explore opportunities to combat the terrible practice of shark finning through discussing issues of enforcement, possible benefits of a ban, and the importance of sharks in the global ocean ecosystem.

The United States has made great efforts to protect sharks in our territorial waters by passing the Shark Finning Prohibition Act of 2000, and the Shark Conservation Act of 2010. The 2000 law prohibited the importation of shark fins without the corresponding carcasses and the finning of sharks in U.S. water. The 2010 law went a step further, prohibiting U.S. vessels in international waters, and all vessels in U.S. waters, from transporting shark fins without the corresponding carcass or from removing any shark fin while at sea.

My home State of Texas recently joined the effort to end this inhumane treatment of sharks. On June 10, 2015, Texas became the 10th State to ban the trade of shark fins when Governor Abbott signed H.B. 1579 into law. Prior to this, Texas had emerged as a

hub for shark fins with the State fin trade growing by 240 percent since 2010, after the passage of fin trade bans in California, Delaware, Hawaii, Illinois, Massachusetts, Maryland, New York, Oregon, and Washington. With the passage of H.B. 1579, Texas is the first Gulf State to pass the shark fin trade ban, and I'm proud of the effort Texas has made to eliminate the fin trade.

Now is the time for the U.S. to prohibit the trade of shark fins completely as well. That's why I've cosponsored Chairman Royce's bill, the Shark Fin Sales Elimination Act of 2017, which prohibits processing, selling, and purchasing of shark fins at the Federal level. In addition to this important piece of legislation, I have also introduced the Justice Attributed to Wounded Sharks Act, or the JAWS act. This bill would end the United States importation of seafood products from countries that do not prohibit the practice of shark finning.

Sharks are a necessary component to a healthy ocean, yet millions of sharks are traded annually for their fins, leaving certain species increasingly vulnerable, if not endangered. Without sharks, the ocean's ecosystems would be unbalanced. Sharks maintain equilibrium and order by ensuring population control and habitat boundaries, which is a critical component for ocean life. It is my hope that this hearing today will allow us to pinpoint solutions that will protect sharks and put an end to the inhumane practice of shark finning.

I'll now recognize the ranking member of the subcommittee, Ms. Plaskett from the Virgin Islands, for her opening statement. Ms. Plaskett, you're recognized for 5 minutes.

Ms. PLASKETT. Thank you, Mr. Chairman, for holding this hearing. We can all agree that sharks play an invaluable role in our ecosystem. I believe we can also agree that this is concerning that the shark population continues to decline. We, as Americans and citizens of this world, can do more to stop this decline.

However, what I cannot agree on is the need for a hearing on shark finning today instead of a hearing on the ongoing humanitarian crisis in the U.S. Virgin Islands. Mr. Chairman, most of my constituents remain in the dark because utility service has not been reestablished since Hurricanes Irma and Maria. According to reporting by The Miami Herald, 2 months after Hurricane Irma, and 1 month after Hurricane Maria, and I quote: Less than a third of the St. Thomas residents, 16 percent of the St. Croix's customers—which is where I live—and hardly anyone on St. John has power. Unlike Florida and Texas, normal life has not resumed in the U.S. Virgin Islands.

There are children who still do not have a school to go to. According to The Miami Herald, many schools are still too damaged to reopen. Others are destroyed, are still in use as shelters. Limited curfews are still in effect. The curfew was lifted a day ago. But the schools are still closed in many instances.

I am very concerned about the likelihood of many Virgin Islands' residents who depend on tourism for their income.

On September 29, Ranking Member Cummings and I requested that Chairman Gowdy hold an emergency hearing on the humanitarian crisis caused by the hurricanes in the U.S. Virgin Islands and Puerto Rico. Chairman Gowdy declined this request and held

member-only briefings with FEMA, the Department of Defense, the Department of Homeland Security, and the Department of Health and Human Services. I'm grateful for those briefings, but that is not a hearing, and it would have been nice if I had been consulting as to the time of those briefings since in more than one instance, I was traveling back to the ravaged Virgin Islands. Although the daily experiences of my constituents would have been highly relevant, two of these briefings were scheduled at times when I was traveling.

It is long past the time for the Committee on Oversight and Government Reform to conduct oversight hearings on the slow and ineffective response to the devastation. I know that our President has said that it's a 10 out of 10. But living on the islands, I do not feel that, caused by the hurricanes in the U.S. territories of Puerto Rico and the U.S. Virgin Islands. With all due respect to this chairman, Chairman Farenthold, the witnesses, and the many people who, like me, care deeply about the survival of sharks in our ecosystem—we have many in the Caribbean and throughout our island—it is offensive that we are holding a hearing on this subject at a time when the U.S. Virgin Islands does not have one fully functioning hospital.

Mr. Chairman, there is no better time to reach across the aisle than this. American citizens in the U.S. Virgin Islands are suffering and questioning if their government is concerned about them, or has forgotten about them. Let's answer these questions and resolve their fears with a resounding: No, we're here for you, we're looking out for you, and then let's prove it by conducting hearings on the slow and ineffective Federal response to the hurricanes in the U.S. Virgin Islands and Puerto Rico. Thank you.

Mr. FARENTHOLD. If the gentlelady will yield for a second. I have had conversations with the chairman of the full committee on this issue. There is some concern that our doing oversight at this time might further slow the recovery efforts. No one is more sympathetic than I am, because we went through something very similar in the district I represent. Many of the towns I represent were devastated. We had the advantage, of course, of not being an island, and the necessary relief and repair efforts were much easier to get to our physical location.

But you can, please, accept my promise that this will be looked into, because not only do I have friends in the Virgin Islands, I also fully understand what it is like to—I mean, it was tough for me going a week without electricity. I can't imagine going a month without electricity. I did learn pretty much everything I like to do and everything I like to eat requires electricity.

So you have my assurance that we're going to do our best to do oversight into this matter, and do everything that we can to make sure that we are better prepared to deal with disasters both on the mainland and on the islands like Puerto Rico and the Virgin Islands. And, in fact, I'm planning on speaking again to the chairman about it today, because I do think it is time to get moving on this.

And, I agree, he does have a tendency to schedule things on fly-in days when those of us who are further away have trouble getting here. So rest assured, we will work on it.

Ms. PLASKETT. Thank you.

Mr. FARENTHOLD. And this hearing has been in the planning stages for several months.

Ms. PLASKETT. Thank you.

Mr. FARENTHOLD. So thank you very much.

With that, I'd like to take a moment to introduce our witnesses.

Ms. Lora Snyder is a Campaign Director for Oceana International Headquarters. Welcome.

We have assistant commander game warden Brandi L. Reeder. She is a Fisheries Law Administrator for the Texas Parks and Wildlife Department, Law Enforcement Division. And I'm happy to be talking to somebody about fisheries enforcement on something other than Red Snapper.

And then we have Dr. D.M. Dove. He is the Vice President of Research and Conservation for the Georgia Aquarium. I was tempted to invite someone from the Texas State Aquarium, but we didn't want to be too Texas heavy. And we really do appreciate your coming up from Georgia to visit with you.

So welcome to all of you.

Pursuant to committee rules, we ask that you rise and be sworn in before you testify.

Would you please stand and raise your right hand. Do you solemnly swear or affirm that the testimony you're about to give is the truth, the whole truth, and nothing but the truth, so help you God?

Let the record reflect that all witnesses answered in the affirmative.

You all may be seated.

All right. Well, in order to allow time for discussion, and so we can hopefully get the initial statements done before votes, we ask that you limit your testimony to 5 minutes. Your entire written statement will be made part of the record. You've got a clock in front of you that will count down from 5 minutes. A green light means you're good to go. A yellow light means speed up, you've only got a minute left. And red light means please wrap it up.

Also, please remember to turn your microphones on. Since we're budget conscious here in Washington, we don't buy the most expensive fancy microphones. So it will help everyone here, the closer you are to the microphone, the better chance we have of hearing you well.

So at this point, we'll start with Ms. Snyder. You're recognized for 5 minutes.

WITNESS STATEMENTS

STATEMENT OF LORA SNYDER

Ms. SNYDER. Good afternoon, Mr. Chairman and members of the committee. Thank you for giving me the opportunity to testify before you today on the issue of current shark finning laws, and the global shark fin trade.

My name is Lora Snyder. I'm the Director of Oceana's Sharks and Responsible Fishing Campaigns. Oceana is supportive of efforts in Congress to conserve shark populations, including the

Shark Fin Sales Elimination Act, which would prohibit the sale and possession of shark fins in the United States.

As predators, sharks play vital roles in ecosystems all over the world. However, some species are now in serious trouble. Some populations have declined by more than 90 percent. And if more action is not taken, other populations could share a similar fate. This could be damaging to the ocean ecosystem and to commercial fishers as their target species become depleted due to the unchecked growth of mid-level predators.

These declines are disturbing for those in the diving and tourism industry as well. A recent report found that shark-related dives in Florida generated more than $221 million in direct expenditures, and fueled over 3,700 jobs in 2016. This stands in stark contrast to the entire shark fin industry in the United States which exported less than $1 million of fins last year.

The demand for shark fins is one of the main reasons for declines in shark populations. Every year, up to 73 million sharks ends up in the global shark fin trade. The 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 even be eaten alive by other fish. As you mentioned, this practice is illegal in U.S. waters.

Congress has already passed two bills to ban shark finning, which have increased protections for sharks, but more needs to be done as these laws do not get to the root of the problem. Too many sharks are being killed to fulfill the demand for shark fin soup. New studies have revealed that 91 percent of the fins in the global trade are from unsustainable sources. The U.S. continues to import shark fins from countries that do not have bans on finning, and cases of finning are still being uncovered.

To help ensure that they aren't participating in this damaging trade, 12 States and three territories have already banned the trade of shark fins. Private corporations are also refusing to ship or sell shark fin products, including Amazon and Grubhub. Over 50 percent of international airlines have now banned shark fins, as have 17 of the 19 biggest shipping lines. However, as companies and States close the door on the fin trade, other doors remain open and the market shifts accordingly. For example, after a number of States enacted their bans, trade activity in the United States shifted primarily to Texas. Texas then passed the ban, and now we've seen that the trade has moved to Georgia. We are engaging in a game of Whack-a-mole. As one State closes its door, activity pops up elsewhere.

On a national scale, the United States is actively importing fins from countries such as China, that do not have comparable finning regulations as the United States. In addition, it's unclear how many fins are coming into this country. According to a report by the Food and Agricultural Organization, other countries report sending seven times as many shark fins as the U.S. reported receiving. Even more disturbing, according to NOAA'S database, fins are still being imported and exported from some States that have bans on buying, and selling, and transporting, and possession of shark fins.

Congress has made its stance clear on this issue, and yet, we still are creating economic incentive for the Act to continue. Fins from fin sharks, even likely including fins from sharks that are threatened or endangered, are being bought and sold in the United States. Additionally, previous laws did not address the main problem: Too many sharks are being killed, in large part, due to the demand for their fins.

But this is a solvable problem. A national ban, like the Shark Fins Sales Elimination Act, would solve many of these issues. As the U.S. has led the world in fisheries management, and in halting the trade of other trafficked wildlife 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. We shall not participate in the trade of a product that hurts shark populations, especially given the fact that sharks are critical to maintaining healthy and abundant oceans.

Thank you.

[Prepared statement of Ms. Snyder follows:]

Testimony of Lora Snyder
Director, Sharks and Responsible Fishing Campaigns
Oceana

before the

Subcommittee on Interior, Energy, & Environment
House Committee on Oversight and Government Reform

on

EXAMINING THE REGULATION OF SHARK FINNING IN THE UNITED STATES
November 2, 2017

Introduction

Good morning, Mr. Chairman and members of the committee. Thank you for giving me the opportunity to testify before you today on the issue of shark fin trade enforcement.

My name is Lora Snyder. I'm the director of Oceana's Sharks and Responsible Fishing Campaigns. Oceana is the largest international advocacy organization dedicated solely to ocean conservation. We advocate for science-based policies that will restore the ocean's abundance and biodiversity. I appreciate the committee holding a hearing on shark conservation and the role the United States is playing in the global shark fin trade.

Oceana is supportive of efforts in Congress to conserve shark populations, including the Shark Fin Sales Elimination Act (SFSEA) which would prohibit the sale and possession of shark fins in the United States. The SFSEA will remove the United States from the global fin trade, prohibit imports of fins from countries that have no anti-finning regulations in place, improve enforcement of the current finning ban in the United States, and reinforce the status of the United States as a leader in shark conservation.

Background

As predators, sharks play vital roles in ecosystems all around the world. They occupy the upper tiers of many food chains and are often the sole predators of certain marine reptiles, marine mammals, seabirds and even other sharks.[1] Some species also help keep coral reefs healthy by

[1] 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. doi: 10.1111/j.1461-0248.2010.01489.x

cycling nutrients via their waste, removing invasive species, and cleaning up the reef by scavenging.[2]

Although sharks play critical roles in the ocean ecosystem, some species are now in serious trouble. Some shark populations have declined by more than 90 percent,[3] and if more action is not taken, other populations could share a similar fate. Using models, 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 the unchecked growth of mid-level predators.[4]

These declines are disturbing for those in the diving and tourism industry. A recent report found that shark-related dives in Florida generated more than $221 million in revenue and fueled over 3,700 jobs in 2016.[5] This stands in stark contrast to the shark fin industry in the United States which exported less than $1 million worth of fins in 2016.[6]

This demand for shark fins is one of the main reasons for declines in shark populations around the world. Every year up to 73 million sharks end up in the global fin trade.[7] The 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. This shark fin trade is devastating. New studies have revealed that 91.3% of the fins in the global fin trade are from unsustainable sources[8] and fewer than 10 species in the Hong Kong fin trade have sustainably managed fisheries anywhere in their range.[9]

Congress took a major step to protect sharks from finning by enacting the Shark Finning Prohibition Act (SFPA) in 2000. This law banned shark finning and discarding the carcass at sea; barred the custody, control or possession of shark fins aboard fishing vessels without the

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[2] Roff G, Doropoulos C, Rogers A, et al. (2016) The Ecological Role of Sharks on Coral Reefs. Trends in ecology & evolution 31: 395–407.
[3] 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. doi: 10.1111/j.1461-0248.2010.01489.x
[4] 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. doi: 10.1111/j.1461-0248.2010.01489.x; Okey T (2004) A trophic model of a Galápagos subtidal rocky reef for evaluating fisheries and conservation strategies. Ecological Modelling 172: 383–401. doi: 10.1016/j.ecolmodel.2003.09.019; Stevens J (2000) The effects of fishing on sharks, rays, and chimaeras (chondrichthyans), and the implications for marine ecosystems. ICES Journal of Marine Science 57: 476–494. doi: 10.1006/jmsc.2000.0724
[5] http://usa.oceana.org/press-releases/new-report-finds-shark-related-diving-generated-over-221-million-florida-2016
[6] https://www.st.nmfs.noaa.gov/commercial-fisheries/commercial-landings/index
[7] 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
[8] Simpfendorfer CA and Dulvy NK (2017) Bright spots of sustainable shark fishing. Current Biology 27: R97–R98.
[9] http://onlinelibrary.wiley.com/doi/10.1111/cobi.13043/abstract

corresponding carcass; and barred landing any shark fins without the corresponding carcass. The act also imposed a fin-to-carcass ratio standard that prohibited any fishing vessel from landing at a US port with shark fins whose weight exceeded 5 percent of the total weight of shark carcasses landed or on board.

To close loopholes and try to address the difficulty in enforcing the ineffective fin-to-carcass ratio in the Shark Finning Prohibition Act, Congress next enacted the Shark Conservation Act in 2010.

This law made the following activities illegal:

- To remove any of the fins of a shark (including the tail) at sea;
- To have custody, control or possession of any such fin aboard a fishing vessel unless it is naturally attached to the corresponding carcass;
- To transfer any such fin from one vessel to another vessel at sea, or to receive any such fin in such transfer, without the fin naturally attached to the corresponding carcass; or
- To land any such fin that is not naturally attached to the corresponding carcass, or to land any shark carcass without such fins naturally attached

However, the law did include an exemption for commercial fishing of smooth dogfish.

These two laws have increased protections for sharks in U.S. waters, but more needs to be done. Unfortunately, the law still contains loopholes, the United States continues to buy shark fins from countries without finning bans, and cases of finning are still being uncovered. Because of this, 12 states and 3 territories have passed laws banning the buying and selling of shark fins. In addition, several companies including airlines, shipping companies, and hotels have put policies in place against the selling and shipping of shark fins.

Imports and Exports

According to the National Marine Fisheries Service, the United States imported $687,538 worth of shark fins and exported $849,725 worth of shark fins in 2016.[10] However, there are discrepancies between what the United States says it imports and exports as compared to what other countries are saying they are sending and receiving.

According to the report by the Food and Agriculture Organization (FAO) on the State of the Global Market for Shark Products, U. S. customs data is inconsistent with FAO import and export numbers. Major importers (Canada, China, Hong Kong SAR, Indonesia, Malaysia,

[10] https://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/applications/annual-trade-through-all-us-customs-districts

Singapore and Taiwan Province of China) reported importing from the U.S. an average 71 percent higher volume of shark fins and 186 percent higher value of shark fins than what the U.S. reported it was exporting.[11]

Similarly, the report found that major exporters (China, Hong Kong SAR, India, Indonesia, Malaysia, Singapore, Taiwan Province of China and Thailand) reported exporting more than seven times more shark fins by volume and three times higher by value than what the U.S. reported that it received from those countries.[12]

A major factor behind these discrepancies may be the incompatibility of commodity codes between countries. For instance, the U.S. used to only record trade in shark fins under one commodity code – "shark fins dried whether or not salted not smoked," despite the fact that shark fins can be shipped frozen, raw, dried, or even pre-packaged. Just this year shark fins have been recorded as fresh, frozen or preserved.

The United States is actively importing fins from countries such as China that do not have comparable finning regulations to those in the United States. According to the National Marine Fisheries Service the United States has imported shark fins from 12 countries since 2010. They are Australia, Burma/Myanmar, China, Hong Kong, India, Indonesia, Italy, Japan, Netherlands, New Zealand, South Africa, and Spain. About 54 percent of these fins are from countries that do not have any finning bans. An additional 39 percent come from countries that only have species specific finning bans or fin-to-carcass ratios which are unenforceable. Together this means that about 93 percent of the fins we have imported since 2010 may be fished in a way that is illegal and unacceptable in U.S. waters.[13]

The problem only increases when you think about the disparities between the FAO statistics and the US customs information. It's possible that more fins may be coming from unsustainable sources and are not being recorded by US customs.

The United States has stated that shark finning is abhorrent and against the law, yet we still import fins from countries that are actively finning, thereby creating economic incentives for the act to continue. Fins entering the United States have quite possibly been removed in a manner that is illegal in U.S. waters. Once a fin is in the United States, it is nearly impossible to tell if it came from an illegal or legal source.

Also, due to the difficulty in identifying shark species based on detached and processed fins, it is easy for threatened species to end up in the shark fin market. Indeed, genetic tests of fins

[11] Dent F and Clarke S (2015) State of the global market for shark products. Rome.Report No.: 590.
[12] Dent F and Clarke S (2015) State of the global market for shark products. Rome.Report No.: 590.
[13] https://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/applications/annual-trade-through-all-us-customs-districts

confiscated by the National Oceanic and Atmospheric Administration identified prohibited, endangered or protected species such as the great white shark and the basking shark.[14] The United States has deemed these species in need of protection, yet the fin trade provides a way for these species to continue to be bought and sold within United States borders.

A recent news story revealed that Chinese fishermen had been illegally fishing for sharks in the Galapagos, leading to the largest seizure of sharks, estimates of numbers in the thousands, in the history of the island.[15] If the Chinese vessel had not been caught, it's possible that those fins could have entered the Chinese fin market and ultimately found their way to the United States.

State and Corporate Bans

To help make sure that no fins from finned sharks are being sold within their borders, 12 states (Hawaii, Oregon, Washington, California, Illinois, Maryland Delaware, New York, Massachusetts, Texas, Rhode Island, Nevada) and all three Pacific territories have banned the sale and trade of shark fins.

Private companies are also refusing to ship or sell shark fin products, including Amazon, GrubHub, many hotels and major airlines, Hong Kong Disneyland and multiple shipping companies. 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 fin, impacting 71 percent of the global market.[16] However, as companies and states close the door on the shark fin trade, other doors remain open, and the market shifts accordingly.

For example, after California and Illinois enacted their bans, shark fin trade activity in the United States shifted primarily to Texas. Now that Texas has implemented its own shark fin trade ban, the trade in shark fins has begun to move to Georgia.[17] The United States is engaging in a game of whack-a-mole, as the shark fin trade shifts in response to a growing patchwork of fin trade bans.

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, in a potential violation of state laws.

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[14] 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; 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

[15] https://news.nationalgeographic.com/2017/08/wildlife-watch-galapagos-illegal-shark-fishing/; http://blog.globalfishingwatch.org/2017/08/transhippment-involved-in-reefer-sentenced-for-carrying-illegal-sharks/

[16] http://www.scmp.com/news/hong-kong/economy/article/2089229/chinas-biggest-airline-bans-shark-fin-cargo

[17] https://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/applications/annual-trade-through-all-us-customs-districts

The 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 with the intent to sell shark fins. However, the National Marine Fisheries Service's Fisheries Statistics and Economics Division database on foreign trade indicates that through August 2017, $476,698 worth of shark fins have been exported from Texas to Mexico.[18]

Likewise, $6,636 worth of shark fins have been exported from the state of California to Costa Rica since January 1, 2017 The state law passed in 2011. In addition, $408,000.00 worth of fins have entered the state of California from New Zealand this year.[19]

The state of New York passed a ban in 2013, but $14,681 worth of shark fins have been exported from the state and $39,046 worth have been imported from January 1, 2017 to August 2017.

The state of Washington passed a ban in 2011, but $40,000 worth of fins have been exported over the same period.[20]

The New York law has some exemptions which may account for the imports and exports in that state. However, since there is a lack of species-specific trade information, it is not clear which species are being exported and imported, and whether they are the exempted species.

Enforcement of Finning Regulations

An inquiry from Senator Booker's office has revealed that since January 1, 2010, NOAA has investigated 85 incidents involving alleged shark finning. Only 26 of those investigations have resulted in charges. Originally, Senator Booker's office was provided with information from NOAA that indicated that there were over 500 finning investigations in the United States since 2010, however, it was revealed that this information was a mistake on behalf of NOAA.[21] Although the number is now 85 investigations of alleged shark finning, this is still 85 incidents too many – in just one of those incidents, more than 2000 fins were found in a hidden compartment on a boat.

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[18] https://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/applications/annual-trade-through-all-us-customs-districts

[19] https://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/applications/annual-trade-through-specific-us-customs-districts

[20] https://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/applications/annual-trade-through-specific-us-customs-districts

[21] https://apnews.com/1533c05f342746679075915b5f7c998c8?utm_campaign=SocialFlow&utm_source=Twitter&utm_medium=APEastRegion

In 2012 the Louisiana Department of Wildlife and Fisheries caught two men with 11 whole sharks and 2,073 shark fins, taken from another 518 fish. They were ordered to pay a $45,000 fine to NOAA.[22]

In Florida, wildlife officers found dozens of dismembered shark fins aboard a Key West shrimp boat in March 2017.[23]

In January 2017, divers in West Palm Beach encountered dead sharks missing fins on one of their dives.[24]

Any finning case is troubling because once a fin enters the market, it is impossible to tell if it came from a shark legally or illegally.

Conclusion

With previous legislation, the U.S. Congress has made its stance clear on the cruel and wasteful practice of shark finning. And yet, fins from finned sharks, even likely including fins from sharks that are threatened or endangered, are being bought and sold in the United States. Additionally, previous laws did not address the main problem: too many sharks are being killed, and one of the main factors for this is the demand for their fins – whether they are finned or taken to shore with their fins naturally attached. But this is a solvable problem. A national ban like the Shark Fin Sales Elimination Act (H.R. 1456) would solve many of the issues

As the U.S. 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. We should not participate in the trade of a product that incentivizes a brutal practice that is driving declines in populations of these beautiful and important fish.

[22] http://www.nola.com/outdoors/index.ssf/2016/02/fishermen_plead_guilty_after_f.html
[23] http://www.miamiherald.com/news/local/environment/article142029049.html
[24] https://www.youtube.com/watch?v=vcYJRUsR7jw

Mr. FARENTHOLD. Thank you.
Assistant Commander Reeder, you're recognized for 5 minutes.

STATEMENT OF BRANDI REEDER

Ms. REEDER. Good afternoon, Chairman Farenthold, members of the subcommittee. My name is Brandi Reeder, and I'm an assistant commander game warden, and the Fisheries Law Administrator for the Texas Parks and Wildlife Law Enforcement Division. I want to thank you for the opportunity to speak with you today about this very important topic. I'm hopeful that my testimony will provide you with useful information to help you in your examination of Federal regulations prohibiting shark finning.

The Texas Parks and Wildlife Department is the State agency primarily responsible for management of native species and enforcement of statutes and regulations promulgated to ensure protection of the State's natural resources. We work closely with the U.S. Coast Guard, NOAA, Office of Law Enforcement, U.S. Fish and Wildlife and Border Patrol to ensure State and Federal fishery priorities are addressed.

Texas has 376 miles of coastline, and approximately 4 million surface acres of saltwater that we're responsible for managing. Coastal fisheries creel surveys, and the commercial trip ticket data program, supplied in my written testimony, it is evident that the shark fishery in Texas is minimal. The commercial shark trade in Texas has been almost nonexistent for many years. While recreational fishing pressure remains high, there appears to be a slight decline in harvest. Recreational catch-and-release of sharks appears to be increasing. The practice of shark finning has only been observed in limited instances over the course of the last 10 years.

As you are obviously aware of the passage of Representative Lucio, III's House Bill 1579, I won't go too far into how that was built. However, I will say that it was a comprehensive piece of legislation that was proactively put in place to combat shark finning in Texas. The bill came into statute in July of 2017, and it provided an offense to buy, sell, offer for sale, possess for purpose of sale, transport, or shipment for the purpose of sale, barter or exchange of shark fins. It provides a class B misdemeanor with enhanced penalties to a class A misdemeanor, which puts in place potentially up to a $4,000 fine and up to 1 year of jail. This is a very aggressive penalty, and will help serve as a deterrent to the behavior.

In the first year of the implementation of the statute, we made sure to inform the public through press release, and we have found, overall, that through education and through this statute, it's been very easy to enforce as mere possession of a shark carcass, without fins, or possession of shark fins themselves, for any commercial purpose, is a violation.

We have had a few instances to where we've observed shark fin cases. We had two back in 2012. And the most recent is in September of this year, in which we had the Animal Welfare Institute had notified us of possible violations in certain restaurants. So following up on that, two of our game wardens found shark fins in a restaurant, and then were directed over to a local retail shop and

found 38 more shark fins—well, with incomplete shark carcasses. And 44 cases were filed. During that case, it was obvious that both parties knew that the possession of the shark fins were illegal.

Moving on. Illegal Mexican lancha incursions in Texas State waters is still a problem. The illegal fishing activities continue in Texas State waters. Unfortunately, it is difficult to estimate the impact of this illegal fishing on shark populations off of Texas. Since 2011, Texas game wardens have seized over 25,000 miles of illegal gill net and over 20 miles of illegal longline from the Gulf of Mexico. Sharks are commonly caught in this gear.

The United States Coast Guard estimated 800,000 pounds of red snapper have been illegally harvested annually during incursions of Mexican lanchas between 2013 and 2014. U.S. Coast Guard and Texas Parks and Wildlife game wardens have seen a reduction in sharks retained in lancha encounters as the market for red snapper has increased dramatically. Fewer sharks are being observed in confiscated gill nets and longline gear. Anecdotally, recent shark encounters have been only a quarter of the numbers observed in previous years.

Let me see here. The United States Coast Guard continues to site and intercept a large number of lanchas each year. The problem does not appear to have decreased even with focused enforcement efforts.

In summary, shark fishing is not a large fishery in Texas, commercially or recreationally, resulting in few observed cases of shark finning during patrols in State waters. Sharks offered for sale in Texas typically come from either interstate or foreign imports. The recent encounter of shark fins in a restaurant in the Dallas-Fort Worth area were imported from another State, offered as an off-menu item. This suggests that there may be an underground market for this product. While in the retail establishment it was clear the manager knew possession of the shark carcasses without fins was illegal and the individual tried to remove the remaining carcasses from the freezer where they were found.

The proactive statute developed by Texas Representative Lucio III, and passed in 2015, provided penalties which were strong enough that repeated violation is not anticipated. Law enforcement experience demonstrates that regulations or statutes must provide penalties sufficient to deter the behavior on the first violation as subsequent offenses become more difficult to detect as future sales will be conducted more covertly. Cooperative, targeted enforcement efforts between State and Federal law enforcement are critical to discontinue shark finning across the United States.

This concludes my testimony, and I'll be happy to answer any questions.

[Prepared statement of Ms. Reeder follows:]

Testimony: Examining the Regulation of Shark Finning in Texas
Witness: Brandi L. Reeder, Assistant Commander – Fisheries Law Administrator of the Texas Parks and Wildlife Department - Law Enforcement Division
Hearing: 02 November 2017, House Committee on Oversight and Government Reform, Subcommittee on the Interior, Energy, and Environment

Introduction

Good morning Chairman Farenthold, and members of the Subcommittee. My name is Brandi Reeder and I am an Assistant Commander Game Warden and the Fisheries Law Administrator for the Texas Parks and Wildlife Department (TPWD) Law Enforcement (LE) Division. I spent 12, of my 18 years with the Law Enforcement Division patrolling the mid-coast of Texas enforcing saltwater regulations. I have served in my current capacity as Fisheries Law Administrator for just over 5 years. The role of the Fisheries Law Administrator is to work with TPWD resource divisions, game warden field personnel, other governmental agencies, and non-governmental agencies to assist development of statutes and regulations that are enforceable and sufficient to deter violation. The TPWD Law Enforcement Division works cooperatively with the U.S. Coast Guard, National Oceanic Atmospheric Administration Office of Law Enforcement, U.S. Fish and Wildlife, and Border Patrol to ensure state and federal fisheries priorities are addressed.

Overview

The Texas Parks and Wildlife Department is the state agency primarily responsible for the management of native species and enforcement of statutes and regulations promulgated to ensure protection of the state's natural resources. Texas has 376 miles of coastline and approximately 4 million surface acres of saltwater. Through TPWD Coastal Fisheries creel surveys and the commercial trip ticket program it is evident the shark fishery in Texas is minimal. The commercial shark trade in Texas has been almost non-existent for many years; and while the recreational fishing pressure remains high, there appears to be a slight decline in harvest. Recreational catch-and-release of sharks appears to be increasing. The practice of shark finning has only been observed in limited instances over the course of the last ten years.

Background of State Shark Fin Legislation

Texas Representative Lucio III filed HB 852 in 2013 during the 83rd Texas Legislative Session to proactively combat shark finning in Texas. The Bill proposed to provide an offense to buy, sell, offer for sale, possess for the purpose of sale, transport, or shipment for the purpose of sale, barter, or exchange a shark fin. The offense provided a Class B Parks and Wildlife misdemeanor penalty, fine of $200- $2000 and up to 180 days in jail, for the first offense but increased to a Class A Parks and Wildlife Misdemeanor, $500 - $4000 fine and up to one year in jail, upon the second conviction within five years. However, HB 852 did not pass. Representative Lucio III filed HB 1579 during the 84th Texas Legislative Session in 2015. The Bill not only made it unlawful to possess shark fins or sharks without fins naturally attached to the carcass but also made it illegal to transport shark fins through the state of Texas by a commercial carrier for delivery outside the state, even if fins were taken lawfully in another. A shark carcass could only be processed, beyond removing the head, once at the individual's final destination or delivered to a wholesale or retail fish dealer. Both versions of the Bill authorized TPWD LE to confiscate any form of shark fins to include cooked product and mandated destruction of shark fins. HB 1579 passed in the 84th Legislative session with an effective date of July 1, 2016. As with any new statute or regulation, TPWD informed the public of the new law through a press release while LE focused on education of individuals known to be in violation of the statute prior to the effective date.

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Prohibited and Allowable Shark Species

Allowable Shark Species (15) – Atlantic sharpnose, Blacktip, Bonnethead, Bull, Finetooth, Spinner, Hammerhead, Lemon, Blacknose, Thresher, Tiger, Blue, Shortfin Mako, Nurse, and Oceanic whitetip.

Prohibited Shark Species (21) – Atlantic angel, Basking, Bigeye sand tiger, Bigeye sixgill, Bigeye thresher, Bignose, Caribbean reef, Caribbean sharpnose, Dusky, Galapagos, Longfin mako, Narrowtooth, Night, Sandbar, Sand tiger, Sevengill, Silky, Sixgill, Smalltail, Whale, and White.

Coastal Fisheries Landings Data:

Commercial Shark Landings in Texas		
Year	Total_Weight_lbs	Estimated # Landed
2012	0	0
2013	1587.99	11
2014	2620.76	6
2015	159	3
2016	446.59	3
2017	141	7
Total	4955.34	30

Recreational Sharks Landed in Texas	
Year	Total Sharks Intercepted
2012	207
2013	260
2014	170
2015	188
2016	144
2017	10
Total	979

**Coastal Fisheries data, in the charts above, is based on calendar year and is complete through May of 2017.*

Game Warden Citation Information

Note: Case numbers relayed are recorded per year by citations/warnings License Year (LY): August 31 - September 1					
Violation Code	Charge Title	LY2013-14	LY2014-15	LY2015-16	LY2016 -17
1110	Exceeding the *Bag* Limit of Sharks	2/0	2/3	4/1	9/3
1117	Exceeding *Possession* Limit of Sharks	3/1	1/1	1/1	2/1
1129	Possess Undersized Shark	9/18	12/4	8/12	6/12
1165	Possess for sale, purchase, transport of Shark Fins (Class B)				44/0

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Incidents where Shark Fins were observed

In 2012, Texas Game Wardens in the Galveston filed two shark fin cases; one involved 47 shark fins on a Commercial Gulf Shrimp Boat, the other incident involving a Commercial Individual Fishing Quota (IFQ) Vessel in possession of coral and shark fins.

On September 16, 2017 Collin County and Dallas County Game Wardens visited several restaurants after receiving specific information from the Animal Welfare Institute in Washington D.C. in regards to possible violation concerning illegal possession and/or sale of shark fins. Several restaurants in the Dallas/Fort Worth area (DFW) advertised shark fin soup on their menus. Upon arrival at the first establishment both wardens looked at the house menu and did not notice the sale of shark fin soup, but after asking for the dish from the hostess, they were provided a different menu. On this menu they found that the restaurant did in fact serve the dish and both wardens requested to speak with the manager. The manager did confirm they served the dish and escorted the wardens to the walk in freezer where six one-gallon sized bags of shark fin soup were frozen and hidden behind several other items in the back of the freezer. During the investigation, the restaurant manager notified the wardens that the supermarket next door also sold shark fins in their fresh sea food department. Upon arrival at the supermarket, wardens discovered six incomplete shark carcasses, missing tail fins, in the display case for sale and immediately asked for the department manager. Upon request of a manager, a male individual turned around and walked away, so both wardens quickly followed him. He was later found in the walk in freezer trying to remove a box containing several other shark carcasses missing tail fins, another box was discovered totaling 38 incomplete shark carcasses. Cases are pending. Published in a recent TPWD press release https://tpwd.texas.gov/newsmedia/releases/?req=20171027a .

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Illegal Mexican Lancha Incursions in Texas State Waters

Mexican fishermen continue to fish illegally in Texas waters. Unfortunately, it is difficult to estimate the impact of this illegal fishing on shark populations off Texas. Since 2011, Texas Game Wardens have seized over 25 miles (132,810 feet) of illegal gill net and over 20 miles (106,000 feet) of illegal longline from the Gulf of Mexico. Sharks are commonly caught in these gear. The United States Coast Guard estimated that 800,000 pounds of Red Snapper have been illegal harvested annually during incursions of Mexican lanchas in 2013 and 2014. U.S. Coast Guard and TPWD game wardens have seen a reduction in sharks retained in lancha encounters as the market for red snapper has increased dramatically. Fewer sharks are being observed in confiscated gill nets and longline gear. Anecdotally, recent shark encounters have been only a quarter of the numbers observed in previous years. When illegal Mexican fishermen are intercepted in state waters, Texas Game Wardens seize the vessel and gear and take the Captain and crew directly before a magistrate before they are turned over to Border Patrol for deportation.

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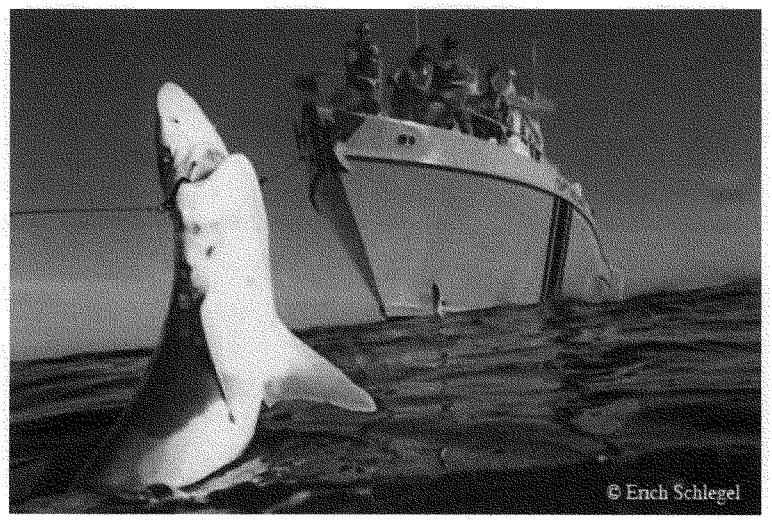

United States Coast Guard Encountered Lancha Incursions

USCG Reported Numbers					
Lanchas	**2012**	**2013**	**2014**	**2015**	**2016**
Seized	22	35	33	40	45
Sighted	108	124	160	160	141

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Summary

Shark fishing is not a large fishery in Texas, commercially or recreationally, resulting in few observed cases of shark finning during patrols in state waters. Sharks offered for sale in Texas will come from either interstate or foreign imports. The recent encounter of shark fins in a restaurant in the Dallas-Fort Worth area, imported from another state, as an "off-menu" item, suggests there may be an underground market for this product. While in the retail establishment, it was clear the manager knew possession of the shark carcass with fins removed was illegal as the individual tried to remove the remaining carcasses from the freezer. The proactive statute developed by Texas Representative Lucio III, and passed 2015, provided penalties which are strong enough that repeated violation is not anticipated. Law enforcement experience demonstrates that regulations or statutes must provide penalties sufficient to deter the behavior on the first violation as subsequent offenses become more difficult to detect as future sales will be conducted more covertly.

Testimony: Examining the Regulation of Shark Finning in Texas
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PARKS AND WILDLIFE CODE
TITLE 5. WILDLIFE AND PLANT CONSERVATION
SUBTITLE B. HUNTING AND FISHING
CHAPTER 66. FISH AND AQUATIC PLANTS
SUBCHAPTER C. SALTWATER FISHING

Sec. 66.216. POSSESSION OF HEADED OR TAILED FISH. (a) No person may possess a finfish of any species taken from coastal water, except broadbill swordfish, shark, or king mackerel, that has the head removed unless the fish has been finally processed and delivered to the final destination or to a certified wholesale or retail dealer.

(b) No person may possess a finfish of any species taken from coastal water, except broadbill swordfish or king mackerel, that has the tail removed unless the fish has been finally processed and delivered to the final destination or to a certified wholesale or retail dealer. *Added by Acts 1981, 67th Leg., p. 376, ch. 153, Sec. 6, eff. Sept. 1, 1981. Amended by Acts 1985, 69th Leg., ch. 267, art. 3, Sec. 73, eff. Sept. 1, 1985. Amended by: Acts 2015, 84th Leg., R.S., Ch. 1254 (H.B. 1579), Sec. 1, eff. July 1, 2016.*

Sec. 66.2161. SALE OR PURCHASE OF SHARK FINS. (a) In this section:

(1) "Shark" means any species of the subclass Elasmobranchii.

(2) "Shark fin" means the fresh and uncooked, or cooked, frozen, dried, or otherwise processed, detached fin or tail of a shark.

(b) A person may not buy or offer to buy, sell or offer to sell, possess for the purpose of sale, transport, or ship for the purpose of sale, barter, or exchange a shark fin regardless of where the shark was taken or caught.

(c) A person may buy or offer to buy, sell or offer to sell, possess for the purpose of sale, transport, or ship for the purpose of sale, barter, or exchange a shark carcass that retains all of its fins naturally attached to the carcass through some portion of uncut skin.

(d) Notwithstanding Subsection (b), the department may issue a permit for the possession, transport, sale, or purchase of shark fins for a bona fide scientific research purpose.

(e) When a person is charged with violating this section, the warden or other peace officer shall seize and hold the shark fin as evidence. Notwithstanding Section 12.109, on a final court ruling, the department shall destroy the shark fin.

(f) A person may possess a shark fin if:

(1) the person holds the appropriate state or federal license or permit authorizing the taking or landing of a shark for recreational or commercial purposes;

(2) the shark fin is taken from a shark that the person has taken or landed; and

(3) the shark fin is taken in a manner consistent with the person's license. *Added by Acts 2015, 84th Leg., R.S., Ch. 1254 (H.B. 1579), Sec. 2, eff. July 1, 2016.*

Mr. FARENTHOLD. Thank you very much.
Dr. Dove, you're recognized for 5 minutes.

STATEMENT OF ALISTAIR D.M. DOVE

Mr. DOVE. Good afternoon, committee members, and thank you for the opportunity to testify today. My name is Dr. Alistair Dove, and I'm the Vice President of Research and Conservation Programs at the Georgia Aquarium in Atlanta, which is a nonprofit organization inspiring awareness and preservation of our oceans and aquatic animals worldwide. I'm a broadly trained marine biologist with a current focus on the biology and conservation of whale sharks and manta rays, which I've been studying around the world for the last 10 years.

U.S. shark fisheries are better managed than those of most countries, and for some species, at least, may even meet the definition of being sustainable over the long term. But in relative terms, it's not an especially high-value fishery. Sharks make up just 0.12 percent of the value of all U.S. fisheries, and shark fins make up less than a quarter of that tiny fraction. In fact, sharks are more valuable alive for the ecosystem services they provide, or as the targets for wildlife tourism. A recent analysis from Oceana showed that one in five scuba diving trips in Florida was specifically targeted at sharks, and together, these provided $126 million worth of value to the economy and supported over 3,800 jobs in Florida alone. That's 19 times more than the combined value of all commercial shark landings in the United States.

But given the expertise of some of my fellow witnesses, I think I'd like to focus my comments more on the importance of sharks for a healthy marine ecosystem.

We need a healthy ocean because it provides half of the oxygen we breathe. Literally, every second breath you're taking today was provided by the ocean, protein for billions of people every day, a buffer against climate change, and the greatest repository of undiscovered medicines on the planet, as well as a means to conduct more than 90 percent of international commerce through shipping. And a healthy ocean needs healthy shark populations.

There are nearly 500 species of sharks. So it's important not to overgeneralize their biology or to imagine that every shark looks like a great white, a tiger, or a hammerhead. There are sharks that are as small as 6 inches when they're fully grown. And the two largest species, the basking shark and the whale shark, are not toothy predators but peaceful, filter-feeding giants, ostensibly more similar to whales than their toothier relatives. Many, many species of sharks are drab deep sea species that feed on small invertebrates near the bottom, and many of these species are poorly known to science.

It's important to recognize that new species of sharks are still being discovered on a regular basis. But with regard to the more familiar types, an ocean without large predatory sharks is like a sky without eagles or the Serengeti without lions. Science has repeatedly shown us that removal of these top-level sharks can cause a domino effect with significant impacts on the rest of the food web in a process that scientists call a trophic cascade. This appears especially to be the case on coral reefs, where sharks are often the

top-level predators, but also, the second-tier predators like the smaller gray reef sharks, black tip sharks, white tip sharks, and things like that.

Many marine biologists will tell you a handy rule of thumb about the health of ocean ecosystems is that if you go scuba diving and you don't see a shark, there is a problem. And, conversely, the richest and most productive ecosystems the world over are those with vibrant shark populations. I've been lucky enough to witness this firsthand in the Galapagos Marine Reserve at a place called Darwin's Arch, which is home to enormous schools of tuna, and jack, and other pelagic and reef fishes. But it's also home to healthy populations of Galapagos sharks, silky sharks, black tip sharks, the largest whale sharks in the world, and schools of scalloped hammerhead sharks too numerous to count. According to one published study, Darwin's Arch may have the highest shark density anywhere in the world, and, yet, it's overflowing with other types of marine life as well. It seems counterintuitive in some way, but, nonetheless, it's true.

Sharks have been fulfilling their key roles in the ocean for nearly 400 million years, which is millions of years before dinosaurs, or, indeed, any other land vertebrates. But, unfortunately, their life history has a critical flaw, that they tend to be long-lived, late to mature, and have relatively few well-developed offspring. It's actually a reproductive strategy that's quite similar to our own. But, unfortunately, this means that they're very sensitive to disturbance, and it can take a very long time for shark populations to recover if they get knocked back. This makes them a poor target for fisheries, certainly compared to a bony fish like a herring, for example, whose life cycle is done in just a couple of years, and can lay millions of eggs during that period. And this is, perhaps, why so few shark fisheries have achieved certification for long-term sustainability.

In summary, the market demand for shark fins and meat has historically provided powerful incentives for overharvesting of shark populations internationally and here in the U.S. Science shows us that some U.S. species may be able to support sustainable fisheries. But the life history of most shark species makes them population-sensitive to disturbance and slow to recover. It's essential that we effectively regulate shark fisheries and restore those species that are already depleted because the healthy shark populations are needed if we want the ocean to continue to provide us with new medicines, food, and the very air that we breathe. Thank you.

[Prepared statement of Mr. Dove follows:]

Testimony to Congressional House Oversight Committee regarding HR.1456 "Shark Fin Trade Elimination Act"

Dr. Alistair D.M. Dove, Vice President of Research and Conservation, Georgia Aquarium, 225 Baker Street, Atlanta GA 30313.

Good morning committee members, thank you for the opportunity to give testimony on HR.1456. My name is Dr. Alistair Dove and I am the Vice President of Research and Conservation at Georgia Aquarium in Atlanta, a non-profit organization inspiring awareness and preservation aquatic animals worldwide. I am a broadly experienced marine biologist with a current focus on the biology and conservation of whale sharks and manta rays, which I have been studying around the world for the last ten years.

US shark fisheries are better managed than those of most countries and, for some species at least, even meet the definition of being sustainable over the long term. In relative terms, though, it is not an especially high value fishery. In 2015 US shark landings were worth 6.6 million dollars, over 4.2 million of which was from spiny dogfish, a small and sustainably fished coastal shark species of little interest in the shark fin trade. Compare that to $460M dollars annually for salmon, or $678M for crabs. Sharks make up just 0.12% of the value of all US fisheries (NOAA Fisheries data) and the fins make up less than a quarter of that tiny fraction (Hueter & Shiffman). I imagine more money may be spent publicly debating and legislating this bill than the annual value of the fishery to which it relates, which is roughly 1 million dollars.

The issues of shark fins and shark finning are surprisingly complex, with aspects of biology, conservation, economics, fisheries management and culture that are both domestic and international. The barbaric practice of "finning" sharks at sea and returning their carcasses to the ocean has rightly been outlawed in the US since the 1990's, as it is in many countries, but not all. The Shark Conservation Act of 2010 sought to close loopholes in the earlier legislation, while the bill currently before the house seeks to outlaw the trade of shark fins in the US altogether and I support this proposal.

We need healthy oceans because they provide half the oxygen we breathe, protein for billions of people daily, a buffer against climate change and a means to conduct more than 90% of international commerce. And a healthy ocean needs healthy shark populations. An ocean without sharks is like a sky without eagles or the Serengeti without lions. Many of the nearly 500 species of sharks qualify as top level predators and have important roles to play in maintaining diversity in the marine ecosystem. Science has repeatedly shown that removal of sharks can cause a domino effect with significant impacts on the rest of the food web. In addition to their ecosystem roles, there is a growing and vibrant social movement to regard sharks as *bona fide* charismatic species, worthy of every bit as much of our concern and protection as elephants, pandas or the California condor.

If finning is already illegal, why then do we need a blanket ban on trade in shark fins? There are three key reasons. First, because in practical terms, it is impossible to determine the origins of a fin once it has been removed from a shark. Shark fins are both exported and imported in the US, and without complete traceability, you cannot know whether a given fin was harvested in the US from one of our handful of sustainable fisheries, or imported from another country which does not have restrictions on finning at sea. Second, because it can be very difficult to know the species from which a given shark fin was removed. So, even if we

have sustainably fished sharks that can supply fins into the trade, it would be possible to launder the fins of other unsustainable species into the mix. And at up to $500 a pound, the incentive to cheat the system is significant. Third and most importantly, because we should set an example by discouraging practices that perpetuate the market demand for shark fins in the first place. Groups like WildAid have had some success in public awareness campaigns in China about shark conservation, and even the Chinese central government has forbidden the serving of shark fin soup at official functions nationwide, although that was as much about government austerity as anything else. Regardless, these efforts have resulted in a drop in consumption of over 80% since 2014 (Jeffries). So even if US fisheries can provide a sustainable shark fins, doing so encourages a practice that is certainly not sustainable elsewhere and is in decline anyway.

Sharks are more valuable alive for the ecosystem services they provide, or as the target of wildlife tourism. A recent analysis published by Oceana showed that 1 in 5 SCUBA diving trips in Florida was specifically targeted at sharks, contributing 126 million dollars to the economy and supporting 3,800 jobs in that state alone – nineteen times more than the commercial value of all US shark landings. Aspiring to sustainable shark fin fisheries doesn't make economic sense compared to the recurring value these species have for tourism. You can only cut the fins off a dead shark once, but you can sell the chance to see a live one over and over as long as it lives, and sharks can live a long time.

In summary, market demand for shark fins has historically provided powerful incentive for overharvesting. Even if some US species could theoretically support sustainable shark fin fisheries, doing so perpetuates a practice that is losing popularity in China, and these species would have more ecological and economic value if they were left in the ocean. My 5 year old daughter put it succinctly that "People shouldn't cut sharks fins off; they should leave sharks in the ocean so everyone can see how awesome they are".

Mr. FARENTHOLD. Thank you.

And seeing as how we've not yet called votes, we'll get started with some questioning. We'll start with the gentleman from Kentucky.

Mr. COMER. Thank you, Mr. Chairman.

Ms. Snyder, good to see you again. In your experience, can you elaborate on the response of restaurateurs in States that have banned shark finning.

Ms. SNYDER. Yes. Thank you. So in California—California was one of the first States to pass a ban. And during that, there was some pushback from some of the restaurant community. But as more and more States pass bans, we saw that—we didn't see it as much. And, you know, there's been a lot of really amazing efforts done by groups like WildAid and Yao Ming of raising awareness of these issues. So I would say back, you know, a few years ago, that we saw response, but we haven't been hearing anything lately.

Mr. COMER. Okay. Ms. Reeder, there have been reported issues with Mexican fishermen illegally sharking in Texas waters. What has Texas law enforcement done to attempt to combat this practice?

Ms. REEDER. Thank you. We work in cooperation with the U.S. Coast Guard. We've made targeted enforcement through our border operations, and we put focused effort on the border to try and limit and deter these incursions.

Mr. COMER. Great.

Dr. Dove, do you feel that sustainable shark fisheries is a potential solution to the problem? Why or why not?

Mr. DOVE. So it's important that we separate the issues of sustainable shark fisheries for meat and fisheries that are related specifically to the fin trade. I think it's important that we probably discourage the fin trade in any form. But it is possible, according to fishery scientists, that some shark species can be fished sustainably, species like the spiny dogfish on the East Coast of the United States. So it's always important when we talk about this question to separate the issues of fishing for fins and fishing for meat. And I think in the case of fins, it's losing popularity. In China, the consumption is down about 80 percent since 2014. So I think it's time to let this practice go, and for the United States to take a lead role in setting an example to not encourage that behavior to persist anymore.

Mr. COMER. Thank you, Mr. Chairman. I'll yield my time back.

Mr. FARENTHOLD. Thank you very much. We'll now recognize the ranking member, the gentlelady from the U.S. Virgin Islands, for 5 minutes.

Ms. PLASKETT. Thank you, Mr. Chairman.

Dr. Dove and Ms. Snyder, I wanted to ask you, with regard to climate change. Do you agree that climate change—or do you believe that climate change has caused the warming of our oceans?

Ms. SNYDER. Yes. And as the Director of Responsible Fishing at Oceana, so the shellfish industry in the United States is worth about $3 billion. And we know with ocean acidification, that there could be negative impacts for that industry that we're already seeing in the Pacific northwest for some of the oyster farms.

Ms. PLASKETT. And the warming is causing—how does that affect the shellfish?

Ms. SNYDER. So with any change in the chemistry of the water, the shells, which are hard, it can impact their ability to be strong, essentially.

Ms. PLASKETT. Got it. Thank you.

Dr. Dove?

Mr. DOVE. Yes. We know since the beginning of the Industrial Revolution that the ocean has absorbed more than 25 percent of the additional carbon dioxide emissions, and almost 90 percent of the heat. So the ocean has been doing us a huge favor for a very long time in absorbing a lot of these emissions. The scientific consensus is clear that climate change is the real thing. I think most scientists have moved on these days to addressing what is the severity of the impact going to be, and what steps can we take to ameliorate those impacts to minimize the effect on society.

Ms. PLASKETT. So in the amelioration of that and what can be done, you talked about healthy oceans as a buffer. Could you elaborate on that?

Mr. DOVE. So healthy oceans have a number of different perspectives. We would love to see oceans that are abundant, producing, you know, plenty of food, and medicines, and other ecosystem services like that. But they provide other intangible services, too, including the protection of coastlines from storms that would—which I don't need to tell you anything about that.

Ms. PLASKETT. Sure.

Mr. DOVE. And so that's a very important service that we get from the ocean. And it's directly and intimately tied to the relationship between carbon pollution and the warming and acidification of oceans.

Ms. PLASKETT. When you talk about that, I know in the Virgin Islands, in particular, our coral reefs are really important to keeping sharks and as well as, you know, regulating the amount of waves that come into the general vicinity of our beaches. And the coral's health really has a lot to do with the warming of the ocean.

Again, Dr. Dove and Ms. Snyder, could you each briefly describe for us the effects of climate change and as a form of warming on sharks and other aquatic life besides shellfish?

Mr. DOVE. So we know in the case of sharks, they are cold-blooded animals, and their metabolism is driven by the prevailing temperature. So the more things warm up, the more their metabolic demands increase. And with respected to acidification, which is the flip side of carbon pollution in the ocean, more acidic oceans make it hard for sharks to smell their way around. Which, they live in an olfactory world. They smell their way around. And acidification has been demonstrated to change the way sharks sense their environment and impact the way they can smell their food. And that's a problem for them.

Ms. PLASKETT. Would it help them not just smell their food, but maybe smell prey or those that are—an attack against them?

Mr. DOVE. Exactly. So it may affect them in both in their roles—especially if they're lower-level sharks, these are predator sharks, we would call them. They have to be able to smell prey, but they

also have to be able to smell predators that might be after them as well.

Ms. PLASKETT. Okay. Thank you.

Ms. Snyder.

Ms. SNYDER. Yes. I'll just add that in some of the studies they did show that the sharks were more lethargic. And then there was also a study that looked at the taking away of so many sharks, and how that could potentially impact populations that eat sea grass. And seagrass is, you know, very good at capturing carbon. And so when you remove too many sharks and that next level booms, that there are impacts on the amounts of CO2 released from that. In fact, I think the study said that it was equal to all the cars in Australia.

Ms. PLASKETT. Great. And could you tell us, what could we be doing as legislators to combat this and to assist?

Ms. SNYDER. Well, again, from the fisheries' perspective, we do know that with changing ocean temperatures, that some fish stocks are shifting. So I think as we are thinking about how to manage our fishery stocks, we need to be taking that into account and dedicating science to seeing where are the fish moving and how can we better manage those populations.

Ms. PLASKETT. Okay. Dr. Dove?

Mr. DOVE. I think it's important as we go forward that we fill some of the knowledge gaps that we have about the impact of climate change. It's one of the most active areas of research right now.

Ms. PLASKETT. So how would we, as legislators, facilitate that for you?

Mr. DOVE. So through support of basic science research through the National Science Foundation, and NOAA, and other agencies that provide funding for basic research across the country that can help answer some of those questions.

Ms. PLASKETT. Thank you. Perfect. My time is up. I yield back.

Mr. FARENTHOLD. You hit that right on the mark. I should be so lucky. We may finish this before the votes. So we appreciate it.

But I do have—I do have a couple of questions. And we'll start with Dr. Dove. And we'll let Ms. Snyder weigh in on this. The shark finning trade is—basically takes the fin because it's the most valuable piece of the shark for whatever properties it—people believe it has. The shark finning legislation typically prevents finning the shark and just taking the fin. And I think Ms. Reeder testified that they did have the whole shark in the restaurant that they busted in the Dallas-Fort Worth area. Is shark meat a desirable fish for serving at a restaurant or for human consumption? And why yes? Why no?

Mr. DOVE. The values of the U.S. fishery landings in total would argue not. I mean, you can look at the total value of shark fisheries in the United States at about $6.6 million in 2015, and compare that to crab, which is $678 million, more than 100 times more than the shark fishery. So I think people vote with their taste buds a little bit, and those relative values will tell you about what are the most valued fisheries. It's not to say there isn't a place for shark or even a place for sustainably harvested shark. It's just so difficult

to thread the needle and make that worth doing as the market value simply isn't there, if you ask me.

Mr. FARENTHOLD. Ms. Snyder, did you want to weigh in on that?

Ms. SNYDER. Yeah. I just think it is important to note, when you look at the most popular species in the Hong Kong fin trade, you look at those specific 14 species, and over 70 percent of them are at high risk or very high risk of extinction. So, as Dr. Dove mentioned, there are around 500 species of sharks. So, when you look at the ones that are the most popular, a number of them are in serious trouble.

Mr. FARENTHOLD. So, as a sportsman, you know, I have always been taught that you eat what you shoot, you eat what you catch. And so, in Hong Kong, they are only selling the fins; they are not selling the rest of the shark, because they consider there to be little economic value there. Is that correct?

Ms. SNYDER. I don't know that you could say that there is no shark meat there, but a bowl of shark-fin soup can go for over $100. And so, you know——

Mr. FARENTHOLD. That is higher than Washington, D.C., prices for food.

Ms. SNYDER. Yes, it is.

But you also can look—like, for the hammerheads. So a number of hammerhead species, you know, face serious declines and are listed under international agreements of needing additional protection. And you look at the price, even in the Gulf of Mexico, a price per pound for the meat compared to the price per pound for the fin. So the meat goes for 25 cents, and then the fin can go for over $16 per pound.

Mr. FARENTHOLD. All right.

And, Ms. Reeder, you do enforcement in Texas. Do you see a lot of recreational fishermen actually keeping their shark, or is it more of a catch-and-release sport? Do you have any numbers on that?

Ms. REEDER. We don't have numbers on whether they are retained or whether they are done in caught-and-release. The thing is that, overall, the fishery itself is not very large on the recreational end. We do have plenty of recreational fishermen who really love that sport and are avid about it, which is why I believe that we have seen more catch and release of sharks.

I do want to make one small correction, though, is that on the case that we had in Dallas——

Mr. FARENTHOLD. Right.

Ms. REEDER. —some of those carcasses were actually cut in a way that the fillets were not available. They were actually harvested or cut and processed in a manner in which it was really just the back meat, just a very limited amount of back meat, and the anal and caudal fins were left.

Mr. FARENTHOLD. All right. Thank you very much. I appreciate that clarification.

What is your biggest challenge in dealing with the shark-fin trade as a law enforcement person?

Ms. REEDER. I would say that, in the end, it is that if it goes covert, it becomes so much more difficult to detect.

Our officers—so, to give you an example, we have 551 sworn game wardens in the State of Texas. We have a handful of dedi-

cated investigators. So whenever you take those numbers and you put it to a covert operation to where you are having to involve your investigators, you reduce your capabilities. So you reduce your effectiveness.

So, as we deploy more efforts to detect and deter this behavior, if it goes to a more covert and underground market, itis going to be more difficult to combat.

Mr. FARENTHOLD. And that is why you are an advocate of strong penalties for a first offense. Is that correct?

Ms. REEDER. Absolutely.

Mr. FARENTHOLD. All right.

Finally, Ms. Snyder, you mentioned that—I believe it was you—the panel did mention that the demand for shark fin in China, which is kind of a hub for that, is going down. Do we know why that is going down? And is that something we can help perhaps deal with on the demand side?

Ms. SNYDER. It was actually Dr. Dove who mentioned that, but I can speak to it a little bit.

And then you can jump in there.

Mr. FARENTHOLD. So I am out of time. I will let you finish, then Dr. Dove, and I will technically be within the rule because I have quit talking.

Ms. SNYDER. Okay.

So I would say, you know, that there have been—I mentioned WildAid and Yao Ming and a lot of really positive efforts in China. In addition, the Chinese Government made it illegal to serve shark-fin soup at government functions.

And then you also saw the three state-owned Chinese airlines have also put bans on shipping shark fins, and Chinese shipping companies have as well, and that there has been a lot of activism within China of raising awareness for this. So that could be in large part why.

But I will also let Dr. Dove speak to that.

Mr. DOVE. So I understand that there are three main reasons why ithas declined in China.

The first is the aforementioned campaigns from WildAid and WWF and Yao Ming and others. It is the "When the buying stops, the killing can too" campaign.

But there is also a group of pro-environment business leaders in China who have been advocating for better actions on shark and shark fins.

But I understand that one of the biggest impacts was an austerity measure from Xi Jinping that essentially instructed all state party officials to limit expensive activities, not just shark-fin soup but cigarettes and alcohol and other activities too. So it was sort of a case of, you know, a type of environmentalism that came from a central authority.

Mr. FARENTHOLD. All right. Thank you very much.

Ms. Plaskett, unless you have something else?

All right. I want to say thanks again for you guys coming up.

Ms. PLASKETT. And thank them for all the work.

Mr. FARENTHOLD. Absolutely. Thank you for all the work you are doing. Sometimes it is thankless, doing what you do, but we certainly appreciate it.

And, as you can see by some of the legislation that we have discussed today, it is something that we are aware of here in Washington, D.C., and hopefully can continue to move forward on this.

So I want to thank you again for appearing.

The hearing record will remain open for 2 weeks for any member to submit written opening statements or questions for the record. If we do get any questions, we will get in touch with you and see if you could answer those in writing, and we will include those in the record.

If there is no further business, without objection, the subcommittee will stand adjourned.

[Whereupon, at 2:47 p.m., the subcommittee was adjourned.]