

H.R. 4528, TO MAKE TECHNICAL AMENDMENTS TO CERTAIN MARINE FISH CONSERVATION STATUTES, AND FOR OTHER PURPOSES; H.R. 5248, “SUSTAINABLE SHARK FISHERIES AND TRADE ACT”; AND H.R. 1456, “SHARK FIN SALES ELIMINATION ACT OF 2017”

LEGISLATIVE HEARING

BEFORE THE
SUBCOMMITTEE ON WATER, POWER AND OCEANS
OF THE
COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTEENTH CONGRESS

SECOND SESSION

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LEGISLATIVE HEARING ON H.R. 4528, TO MAKE TECHNICAL AMENDMENTS TO CERTAIN MARINE FISH CONSERVATION STATUTES, AND FOR OTHER PURPOSES; H.R. 5248, TO AMEND AND ENHANCE THE HIGH SEAS DRIFTNET FISHING MORATORIUM PROTECTION ACT TO IMPROVE THE CONSERVATION OF SHARKS, “SUSTAINABLE SHARK FISHERIES AND TRADE ACT”; AND H.R. 1456, TO PROHIBIT THE SALE OF SHARK FINS, AND FOR OTHER PURPOSES, “SHARK FIN SALES ELIMINATION ACT OF 2017”

**Tuesday, April 17, 2018
U.S. House of Representatives
Subcommittee on Water, Power and Oceans
Committee on Natural Resources
Washington, DC**

The Subcommittee met, pursuant to call, at 1:02 p.m., in room 1324, Longworth House Office Building, Hon. Doug Lamborn [Chairman of the Subcommittee] presiding.

Present: Representatives Lamborn, McClintock, LaMalfa, Webster, Bishop (ex officio), Huffman, Beyer, Barragan, Bordallo, and Sablan.

Also Present: Representative Soto.

Mr. BISHOP [presiding]. This Subcommittee will come to order. We appreciate your willingness to be here today. Mr. Lamborn is not here, there are only four of us here. I can talk. I will just talk quietly to you guys. Mr. Lamborn is being detained, is actually flying back here today, his plane is landing. I am usurping the authority of this Subcommittee for a particular reason, because the Vice Chairman is one of those who has a bill before us, so it will give him more flexibility in talking about that.

Under Committee Rule 4(f), oral opening statements are limited to the Chairman, in this case me, and the Ranking Member, who showed up in time, as well as the Vice Chair, so therefore, I am asking unanimous consent that all of the Members' opening statements be made part of the hearing record if submitted to the Subcommittee Clerk by 5:00 p.m. today.

Also, I am going ask unanimous consent that the gentleman from Florida, Mr. Soto, when he arrives, and the gentleman from North Carolina, Mr. Jones, if he arrives, be allowed to sit with the Subcommittee and participate in the hearing. Let's add the same thing for Mr. Royce. If he wishes to stay, he can sit with us and

participate in the hearing, as well. If there are any objections, if not, that will be so ordered.

Let me give my opening statement here to all of you and then I will turn to Mr. Huffman if he has an opening statement he wants to make.

**STATEMENT OF THE HON. ROB BISHOP, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF UTAH**

Mr. BISHOP. We are dealing with three bills that I consider significant, all dealing with fish. And this is really cool because it is the first time we are going to have a hearing on fish and red snapper is not going to be part of it. In fact, we will add red snapper, we don't have a bill, but we will just do it so tradition maintains itself.

The first two that we are going to consider take different approaches to address a really heinous practice of shark finning. Shark finning was made illegal in the United States by U.S. actors both in 2000, and once again in 2010. These two laws, I think, have had an effect, and they have done something that is very positive.

Today, we are going to talk about the practice that is done by foreign nations. We have two different proposals that are in front of us. The first bill we are going to consider will be the Shark Fin Sales Elimination Act by Congressman Royce, who is here, that looks upon ways of expanding on our other bases with regulations to also attack bad foreign actors who are involved in this practice.

The other proposal to be considered by us is the Sustainable Shark Fisheries and Trade Act, which is Congressman Webster's, which is why I am putting you in this position instead of right here so he can participate in the discussion easier, which starts a traceability program that is modeled after what we do with the shrimp import traceability program.

So, I want to thank both my colleagues here, Mr. Royce, who is not part of this Committee, but I appreciate him being here. I appreciate the efforts Mr. Webster has put in the legislation, as well as Mr. Soto when he arrives, dealing with a correction to the Billfish Conservation Act. He will be going forward.

I hope that we can use these hearings to discuss all of these efforts and that perhaps we can bring some kind of consensus to the way we move forward because this is truly a product that we need to deal with, a discussion we need to have, and elimination of foreign actors who are bad, that we need to find a good approach to it without making negative impacts on the fishing industry here in the United States.

With that, I will submit a cleaner, nicer version of what I just said to the record and return to Mr. Huffman if he has an opening statement.

**STATEMENT OF THE HON. JARED HUFFMAN, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF CALIFORNIA**

Mr. HUFFMAN. Thanks Mr. Chairman. I agree, this is an important subject, and I am glad to see we are having the hearing on these bills today. Starting with H.R. 4528, Representative Soto's bill, this is a bill that will make technical amendments to the Billfish Conservation Act and the Shark Conservation Act. The

background on this is that in 2012, Congress passed the Billfish Conservation Act to conserve depleted billfish populations by prohibiting foreign imports and sales of these fish into the United States, but there was an exemption for traditional fisheries and markets so that billfish caught in Hawaii and the Pacific Insular Areas could still be sold and consumed locally.

This bill makes an important clarification that the Act never intended to allow billfish landed in Hawaii and Pacific Insular Areas to then be sent to other states. Unfortunately, the ambiguity in the original language has caused NOAA to delay implementation of this Act, so I think this is an important bill, and I intend to support it going forward.

Then we come to the two shark conservation bills, a very important subject I think for this Subcommittee because stronger shark conservation measures are needed. The shark populations of the world are declining at an alarming rate. They face a higher extinction risk than most any other group of mammals, birds, reptiles, amphibians, or other fish because on average sharks are being caught and killed 30 percent faster than they can reproduce. This is largely due to the demand for their fins, which fuels the global shark fin trade, and I am proud that a few years ago when I was a California State Assembly member, I led the effort to pass that state's ban on the possession and trade of shark fins. It was a great example of bipartisanship.

Party labels fell away, and Republicans and Democrats together looked at this practice as wasteful, as morally repugnant, and also realized together that unless we tackled the trade, not just the Act but the trade, we weren't going to be able to stop it.

So, I am thankful that 11 other states and 3 territories have now done the same thing as we did in California, as well as corporate America, 40 airlines, 20 major international shipping companies, and other corporations have stepped up and refused to partake in the shark fin trade.

The bill before us today from Chairman Royce, H.R. 1456, is a great example of continued leadership in this area, and I want to applaud him for his good bipartisan work on this. It would make it illegal to buy and sell shark fins in the United States, and as an original co-sponsor of the bill, I appreciate Mr. Royce and Mr. Sablan for bringing this forward. It is a strong, I mentioned, bipartisan bill with over 230 co-sponsors, including every Democrat on this Committee and many of the Republicans on this Committee. It is also widely supported by recreational fishing interests, aquariums, over 150 scientists, 150 chefs, dive businesses, and the list goes on.

Nevertheless, I do know that we will hear some testimony today opposed to the merits of this bill. I believe those arguments cannot at the end of the day ignore the facts. Sharks continue to be finned, and shark fins continue to be bought and sold in the United States. The Federal Government is still allowing fins to be imported and exported out of states that have passed bans. A recent report revealed that only 4 percent of the global shark catch is managed sustainably.

So, we have a lot of work to do, and this bill is timely and important and makes environmental and economic sense as we will hear

from some of our other witnesses. Sharks are important not just to the ecosystem but to tourism for numerous coastal communities. I look forward to supporting this bill, and again, commend the bipartisan authors.

Finally, we will deal with Representative Webster's bill. I believe this bill is well intended. There are elements of it that I certainly would support, but I think it is important to note that there are key differences between the shrimp import legislation for sea turtle conservation and what this bill is proposing to do for shark fisheries. In the case of the shrimp import, it is a huge market. Our ability to leverage it is much greater, and the one reform that we could leverage, a turtle exclusion device, is very discrete. It is much more complicated with these marginally managed shark fisheries.

So, I hope we can continue working together on that. Again, there are certainly good elements to the bill, but I do want to be clear that it should not be seen as a replacement or as a substitute for the more comprehensive approach to ending the shark fin trade, which we see in Mr. Royce's bill.

With that, Mr. Chairman, I yield back.

[The prepared statement of Mr. Huffman follows:]

PREPARED STATEMENT OF THE HON. JARED HUFFMAN, RANKING MEMBER,
SUBCOMMITTEE ON WATER, POWER AND OCEANS

Thank you, Mr. Chairman, for holding this hearing and thank you to the witnesses for being here today. Shark conservation and ending the global shark fin trade have long been top priorities of mine.

Today, we will be discussing three bills before our Subcommittee.

H.R. 4528, Representative Soto's bill, would make technical amendments to the Billfish Conservation Act and the Shark Conservation Act. In 2012, Congress passed the Billfish Conservation Act to conserve depleted billfish populations by prohibiting foreign imports and sales of billfish in the United States. The Act provided an exemption for traditional fisheries and markets so that billfish caught in Hawaii and the Pacific Insular Areas could still be sold and consumed locally.

The Act never intended to allow the billfish landed in Hawaii and Pacific Insular Areas to then be sent to other states, but NOAA has delayed implementation of the Act because of its ambiguous language. Mr. Soto's bill would fix this problem. The Senate companion bill has already passed the Senate by unanimous consent. I hope the Committee will move this bill expeditiously.

Next on the agenda are two shark conservation bills. It is especially important for our Subcommittee to address the need for stronger shark conservation measures because so many populations are declining at an alarming rate. Sharks are facing a higher extinction risk than most groups of mammals, birds, reptiles, amphibians, or other fish. On average, sharks are being caught and killed 30 percent faster than they can reproduce. This is largely due to the demand for their fins, which fuels the global shark fin trade.

I am proud that while I was a California assemblyman, I led the effort to ban the buying and selling of shark fins in the state of California. Eleven other states and three territories have done the same. In addition, over 40 airlines, 20 major international shipping companies, and other corporations have all refused to partake in a trade that devastates shark populations and impacts ocean ecosystems around the world.

H.R. 1456, The Shark Fin Sales Elimination Act, would build on the leadership of these states and companies to make it illegal to buy and sell shark fins in the United States. As an original co-sponsor of the bill, I appreciate that Chairman Royce and Mr. Sablan have taken on this important issue.

The Shark Fin Sales Elimination Act is a strong, bipartisan piece of legislation with over 230 co-sponsors, including every Democrat and a number of Republicans on this Committee.

It is also widely supported by recreational fishing interests, aquariums, over 150 scientists, 150 chefs, over 300 dive businesses, and over 130 non-profits. I know that we will hear arguments today against the merits of the bill despite this widespread support, but those arguments can't ignore the facts.

Shark fins continue to be bought and sold in the United States, and the Federal Government is allowing fins to be imported and exported out of states with bans. A recent report revealed that only 4 percent of global shark catch is managed sustainably, yet it is unclear how many shark fins are even coming into our country. The bill also makes environmental and economic sense: sharks are important to the ecosystem and to tourism for numerous coastal communities. Addressing the global shark fin trade is vital to shark conservation and the United States should be a leader in tackling this issue.

Finally, we will discuss Representative Webster's bill, H.R. 5248, which would develop a complicated certification scheme to require foreign countries to demonstrate that they have shark, ray, and skate fishery management regulations comparable to the United States in order to access our markets. Mr. Webster's bill is modeled after the Shrimp Import Legislation for Sea Turtle Conservation, which allows the United States to reject shrimp imports from countries that do not have sea turtle protection programs comparable to that of the United States.

The bill is well-intentioned and looks good on paper, but there are some key differences between it and the sea turtle conservation program. The United States does not import nearly as many shark products as compared to shrimp, so our ability to influence other countries through access to our markets would be very limited. If the Committee decides to move forward with the bill, we will need to ensure that every shark fishery in the United States would meet the standards brought forward in the bill. This would require the United States to do much more to manage its own sharks and shark data, or otherwise risk a potential WTO challenge and add shark products to the growing list of trade fights under this Administration.

Thank you to the witnesses and Chairman Royce for being here today, and I look forward to hearing from you.

I yield back.

Mr. BISHOP. Thank you. All right. Let's begin our testimony today. We will first start with Mr. Royce. You will have 5 minutes to introduce your bill, and once again, if you would like to stay with us for the rest of the testimony, you are welcome to do that.

STATEMENT OF THE HON. EDWARD R. ROYCE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. ROYCE. Mr. Chairman, thank you very much and I thank Ranking Member Huffman, as well. I am grateful that we have this little dialogue here. Quite coincidentally, today at lunch I was with an old friend of mine, David Marinoff. He was telling me his wife June and he were on Galapagos Island, and they were on the beach. Washing up are these dead sharks who have been finned, and therefore, died, and you would ask yourself, well, there is an irony here, the Galapagos Island is sort of a case study of ecological balance, and here you have the beach filled with these dead sharks. How common can that be?

Well, the facts are that 73 million sharks are finned that we know of every year and they end up in the global shark fin trade. This is putting multiple species of sharks at risk for extinction. Shark fins are considered a delicacy in parts of the world. They are sold for high prices the same way that ivory was sold for high prices a few years ago. They drive a trade that is not only inhumane due to the practice of shark finning, but increasingly detrimental to the oceans due to the size of this trade. Sharks play an integral role in the ecosystem of the planet, and if populations continue to decline at the current rate, because they are being killed faster than they can reproduce, our oceans as we know them, are going to be adversely affected.

This bill, which has over 230 bipartisan co-sponsors, including the majority of this Committee and Subcommittee's members, would make it illegal to buy, sell, or possess shark fins in the United States. To be very clear, the bill does not prohibit shark fishing. The proposal builds on previous congressional action targeting the shark fin trade and it mirrors similar state-level bans, such as the one that our Ranking Member authored when he was in California legislature.

Additionally, I have conferred on this with the Congressional Budget Office. They have told me that the bill will not cost the government. And while protecting wildlife from extinction is, from my perspective, the right thing to do, it makes an awful lot of sense economically. As apex predators, sharks ensure balance below them in the food chain. Their preying, or lack thereof, on species directly below them in the food chain has a compounding effect on the availability of fish that many people rely on as a food source and that the fishing industry depends on for income.

For example, a decrease in the population of tiger sharks can lead to an increase in prey species such as monk seals, reef sharks, turtles, and so forth, which in turn can cause a decline in tuna populations.

Shark survival also contributes to an ever-growing shark ecotourism trade, as I think many of you know. My state of California is home to 134 dive shops that focus on shark dives. Florida is home to 185, the most in the Nation, where direct expenditures for shark encounters brought in \$221 million and fueled 3,700 jobs in 2016. That market dwarfs that of the domestic shark fin market, which in 2016 was worth \$850,000 in exports. That is a difference of 250 to 1 in terms of the bottom line of what it generates.

I am a firm believer in the principle that when the United States leads, other countries follow. I am going to give you a quick example—the ivory trade. We knocked out the ability to take down elephants for their tusks. The consequences when we put that bill into law, which would also put pressure internationally, the Chinese moved, just as the Europeans, to shut down their ivory trade market. They acquiesced to the pressure, and they shut that down at the end of 2017. When we lead, other countries do follow. And I am pleased to say that we are starting to see this now with the shark fin trade.

Last year, in response to the pressure associated with this bill, Air China and China's Southern Air announced they would no longer allow shark fin cargo. With the strong support for this bill and today's hearing, we have laid the foundation to move the bill. I can only imagine what impact signing this bill into law would have, not just here in the United States, but importantly, around the world and to the health of our oceans. Thank you for your consideration. Mr. Chairman.

[The prepared statement of Mr. Royce follows:]

PREPARED STATEMENT OF THE HON. EDWARD R. ROYCE, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF CALIFORNIA

Thank you, Chairman Lamborn and Ranking Member Huffman, for agreeing to hold this timely hearing on ocean conservation. I'm very grateful that my bill, the Shark Fin Sales Elimination Act, was included. I'd also like to thank the other witnesses today for taking time out of their schedules to come to Capitol Hill and speak on this important issue.

Each year, the fins from as many as 73 million sharks end up in the global shark fin trade, putting multiple species of sharks at risk for extinction. Shark fins, as many of you know, are considered a delicacy in parts of the world. Sold for high prices, they drive a trade that is not only inhumane due to the practice of shark finning, but increasingly detrimental to our oceans due to its size. Sharks play an integral role in our oceans' ecosystems and if populations continue to decline at the current rate, our oceans, as we know them, will cease to exist.

My bill, which has over 230 bipartisan co-sponsors, including a majority of this Committee and Subcommittee's members, would make it illegal to buy, sell, or possess shark fins in the United States. To be clear, the bill does not prohibit shark fishing. The proposal builds on previous congressional action targeting the shark fin trade and mirrors similar state-level bans. Additionally, I've conferred with the Congressional Budget Office, and they have told me that the bill will not cost the government.

While protecting wildlife from extinction is, from my perspective, the right thing to do, it also makes sense economically. As apex predators, sharks ensure balance below them in the food chain. Their preying, or lack thereof, on species directly below them in the food chain has a compounding effect on the availability of fish that many people rely on as a food source and that the fishing industry depends on for income. For example, a decrease in the population of tiger sharks could lead to an increase in prey species, such as turtles, monk seals, and reef sharks, which in turn could cause a decline in tuna populations.

Shark survival also contributes to the ever-growing shark eco-tourism industry. My home state, California, is home to 134 dive shops. In Florida, which is home to 185 dive shops (the most in the nation), direct expenditures for shark encounters brought in \$221 million and fueled over 3,700 jobs in 2016. This market dwarfs that of the domestic shark fin market, which, in 2016, was only worth \$850,000 in exports.

I'm a firm believer in the principle that when the United States leads, other countries follow. We've seen this with the ivory trade. After the United States took action to eliminate its own ivory trade, China acquiesced to pressure and shut down its ivory trade at the end of 2017.

I'm pleased to say that we're starting to see this now with the shark fin trade. Last year, in response to pressure associated with this bill, both Air China and China Southern Air announced that they would no longer allow shark fin cargo. With the strong support for this bill and today's hearing, we have laid the foundation to move this bill. I can only imagine what impact signing the bill into law will have in the United States and around the world.

Thank you for your consideration.

Mr. LAMBORN [presiding]. Thank you for being here. Thank you for your testimony, Chairman Royce. Your passion on this issue is very clear. You are welcome to join us for the remainder of the hearing, but if you need to meet other obligations you are free to be excused.

I now want to call forward our second panel of witnesses. I will introduce the panel as they come forward and take their seats.

Our first witness is Mr. Alan Risenhoover, Director of the Office of Sustainable Fisheries for NOAA Fisheries from Silver Spring, Maryland; our second witness is Mr. John Polston, owner of King's Seafood from Port Orange, Florida; our third witness is Mr. Vance Kondon, Assistant Manager and scuba diver trainer for Rainbow Reef Dive Center from Key Largo, Florida; our fourth witness is Dr. Glenn Parsons, Director of the University of Mississippi, Center for Biodiversity and Conservation Research from Oxford,

Mississippi; and our final witness is Dr. Robert Hueter, Senior Scientist and Director for Shark Research at the Mote Marine Laboratory from Sarasota, Florida.

Please have a seat, get situated, and make yourselves comfortable. Thank you all for taking the time to be here.

Each witness' written testimony will appear in full in the hearing record, so I ask that witnesses keep their oral statements to 5 minutes as outlined in our invitation letter to you and under Committee Rule 4(a).

I want to explain also how our timing lights work. When you are recognized, press the talk button to activate your microphone. Once you begin your testimony, the Clerk will start the timer and a green light will appear. After 4 minutes, a yellow light will appear, and at that time you should begin to conclude your statement. At 5 minutes, the red light will come on. You may complete your sentence, but I would ask that you stop at that point.

We will now hear testimony from our panel on H.R. 1456. And again, if your testimony is broader than just this bill we will still hear the entire statement but we will ask you to remain for questions on other measures that we will have later in this hearing.

Mr. Risenhoover, you are now recognized for 5 minutes.

STATEMENT OF ALAN RISENHOOVER, DIRECTOR, OFFICE OF SUSTAINABLE FISHERIES, NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE, SILVER SPRING, MARYLAND

Mr. RISENHOOVER. Good afternoon, Chairman Lamborn, Ranking Member Huffman, and members of the Subcommittee. I appreciate the opportunity to speak with you today about shark and billfish conservation and their contribution to the Nation's valuable commercial and recreational fisheries.

My name is Alan Risenhoover. I am the Director of the Office of Sustainable Fisheries in NOAA Fisheries within the Department of Commerce. Today, I will briefly describe the Agency's work to conserve and manage sharks and billfish and offer some initial reactions to the bills being discussed today.

Sharks are vital to the marine ecosystem, and due to their biology many shark species are at risk of overfishing. To protect these important species, the United States has some of the strongest shark conservation management measures in the world.

Almost two decades ago, Congress prohibited shark finning in the United States, that is the practice of removing shark fins at sea and discarding the carcass. In 2008, NOAA implemented even more stringent regulations to require all Atlantic sharks be landed with fins naturally attached.

In 2010, Congress extended this fins attached requirement to almost all sharks in the United States. Currently, only 4 of 36 U.S. shark stocks or stock complexes are listed as subject to overfishing. Strict measures are currently in place to rebuild overfished stocks and prevent future overfishing.

In the United States, both shark fins and shark meat are an important source of revenue. In the Atlantic, for example, about 26 percent of the landing's value came from the sale of fins. The

United States is also a global leader in promoting the conservation of sharks. We work with numerous international bodies to promote a fins naturally attached policy and sustainable shark management globally.

Overall, the United States is a relatively small player in the global shark trade. In 2015, only 24 metric tons of shark fins were imported into the United States. This compares with the global shark fin imports estimated at 13,000 metric tons. While we strongly support the intention of reducing the illegal trade of shark fins, we cannot support these bills in their current form.

Regarding H.R. 1456, we believe the bill's negative impact on the U.S. fisherman would outweigh its benefit to shark conservation. Prohibiting the possession and sale of shark fins in effect hurts U.S. fishermen who harvest sharks under strict sustainable focused management.

Regarding H.R. 5248, we strongly support its recognition of the sustainable shark management in the United States, however, the breadth of shark products covered by the legislation goes beyond the jurisdiction of NOAA fisheries. Implementation of such a program would entail significant costs and challenges.

Finally, the rule of construction section in H.R. 4528 does not affect the statutorily created smooth dogfish exemption or provide the Secretary any additional authority under the Magnuson-Stevens Act.

Similar to sharks, the United States carefully regulates its domestic billfish fisheries and participates in international fishery management bodies that regulate billfish. The commercial harvest of billfish in the Atlantic has been prohibited since 1988 to protect overfished stocks. In the Pacific and Western Pacific, with the exception of striped marlin, billfish populations are not overfished or subject to overfishing and are sustainably managed.

In 2014, U.S. fisheries represented approximately 1 percent of billfish captured. The Billfish Conservation Act of 2012 effectively ended the importation of billfish to the United States, stopping the importation of over 8 million pounds since enactment. It also provided two exemptions that cover a small amount of billfish trade sold mainly in Hawaii and the Pacific Insular Areas.

We believe the amendment in H.R. 4528 limiting sale to only Hawaii and the Pacific Insular Areas would not advance conservation of billfish significantly and would block a small amount of sustainably harvested domestic product from entering commerce in the U.S. mainland.

Thank you for the opportunity to discuss the conservation and management of sharks and billfish. I look forward to any questions and working with the Subcommittee in the future on these very important topics. Thank you.

[The prepared statement of Mr. Risenhoover follows:]

PREPARED STATEMENT OF ALAN RISENHOOVER, DIRECTOR OF THE OFFICE OF SUSTAINABLE FISHERIES, NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE ON H.R. 4528, H.R. 5248, AND H.R. 1456

INTRODUCTION

Good afternoon, Chairman Lamborn, Ranking Member Huffman, and members of the Subcommittee. My name is Alan Risenhoover and I am the Director of the Office of Sustainable Fisheries within the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) in the Department of Commerce. Shark and billfish species are important contributors to the Nation's valuable commercial and recreational fisheries as well as serving an important role in our ocean ecosystem. I appreciate the opportunity to speak with you today about the work by NMFS to conserve and manage sharks and billfish and to provide our perspective on the main bills being discussed.

SHARK CONSERVATION AND MANAGEMENT

Almost two decades ago Congress prohibited shark finning—which is removing shark fins at sea and discarding the rest of the shark—when it amended the Magnuson-Stevens Fishery Conservation and Management Act by enacting the Shark Finning Prohibition Act of 2000. The law prohibits any person under U.S. jurisdiction from engaging in the finning of sharks, possessing shark fins aboard a fishing vessel without the corresponding carcass, and landing shark fins without the corresponding carcass.

In 2008, NOAA implemented even more stringent regulations to require all Atlantic sharks to be landed with all fins naturally attached to facilitate species identification and reporting and improve the enforceability of existing shark management measures, including the finning ban. Today, Atlantic sharks are primarily managed through NOAA's Atlantic Highly Migratory Species program.

The Shark Conservation Act of 2010 amended the High Seas Driftnet Fishing Moratorium Protection Act and the Magnuson-Stevens Act to further strengthen rules against shark finning. Among other things, the Shark Conservation Act extended the fins-attached requirement to all sharks in the United States, with an exception for commercial fishing of smooth dogfish sharks.

Sharks are among the ocean's top predators and are vital to the natural balance of marine ecosystems. Due to their biological characteristics, many shark species are vulnerable to overfishing. To help protect these important marine species, the United States has some of the strongest shark conservation and management measures in the world. By conducting research, assessing stocks, working with U.S. fishermen, and implementing restrictions on shark harvests as called for in the Magnuson-Stevens Act, we have made significant progress toward ending overfishing and rebuilding overfished stocks for long-term sustainability. As of the end of 2016, only 3 out of 36 U.S. shark stocks or stock complexes were listed as subject to overfishing and just 5 shark stocks were listed as overfished.¹ Strict management measures are currently in place to rebuild overfished shark stocks and to end overfishing when it occurs. We expect continued progress in this regard.

In partnership with regional fisheries management organizations and other international bodies, the United States continues to be a leader in promoting the global conservation and management of sharks. NMFS works internationally to promote our "fins naturally attached" policy overseas and provide technical support for other countries' shark conservation and management efforts. We collaborate with other countries on research aimed at achieving science-based management measures and conservation of sharks in our global ocean.

Shark fisheries are valuable contributors to the U.S. economy. In 2015, U.S. fisherman landed approximately 25 million pounds of sharks, valued at nearly \$7 million.² Fins remain an important source of revenue for our shark fisheries. In the Atlantic, commercial landings of the primary shark species, other than spiny dogfish, were worth approximately \$2.5 million in 2016, of which approximately 26 percent came from the sale of fins.³

¹ See Status of the Stocks 2016. NMFS Office of Sustainable Fisheries, available at: <https://www.fisheries.noaa.gov/national/2016-report-congress-status-us-fisheries>.

² See NOAA Annual Commercial Fisheries Landings Data base, available at <http://www.st.nmfs.noaa.gov/commercial-fisheries/commercial-landings/annual-landings/index>.

³ 2017 Stock Assessment and Fishery Evaluation (SAFE) Report for Atlantic Highly Migratory Species.

The United States is a relatively small player in the global trade in sharks, but we work with other countries on the trade of shark species internationally. According to 2015 data from the Food and Agriculture Organization of the United Nations, global imports of shark fins were approximately 13,000 metric tons. Only a small portion of that volume was imported into the United States. In 2015, 24 metric tons of shark fins valued at \$288,000 entered U.S. Customs districts from outside the United States. These shark fins were imported through the U.S. Customs and Border Protection districts of Houston-Galveston; Los Angeles; Miami; New York; Portland, Maine; and Seattle and all came from New Zealand or Hong Kong. Due to the complexity of the shark fin trade, fins are not necessarily harvested by or produced in the same country from which they are exported. In 2015, the United States exported 18 metric tons of shark fins valued at a little over \$1 million.⁴

BILLFISH CONSERVATION AND MANAGEMENT

The United States carefully regulates its domestic billfish fisheries and participates in international fishery management bodies that regulate billfish in both the Atlantic and Pacific. The United States has successfully implemented measures aimed at ending overfishing and rebuilding all overfished billfish stocks.

In the Pacific and Western Pacific, with the exception of striped marlin, billfish populations are not overfished or subject to overfishing and are being sustainably managed under the Magnuson-Stevens Act. The U.S. catch of billfish has been below established limits set by international bodies for Pacific striped marlin stocks.

Commercial harvest of billfish in the Atlantic has been prohibited by regulation under the Magnuson-Stevens Act since 1988 due to conservation concerns. Under existing regulations, seafood dealers and processors are required to use the Billfish Certificate of Eligibility (COE) to document that billfish possessed or offered for sale were not harvested from the Atlantic Ocean. The certificate must document the harvest event and accompany the billfish to any dealer or processor who subsequently receives or possesses the billfish. The COE certifies that the accompanying billfish was not harvested from the Atlantic Ocean, and identifies the vessel landing the billfish, the vessel's homeport, the port of offloading, and the date of offloading. This COE, along with existing requirements for documentation of landings of domestic catch contained in Federal fishery management plans provides adequate documentation to distinguish billfish legitimately in U.S. commerce from those that are prohibited.

Despite careful management of billfish in the United States, global billfish populations have declined significantly due to overfishing by non-U.S. fishing fleets. According to the Food and Agriculture Organization of the United Nations, U.S. fisheries represented approximately 1 percent of the estimated 124,000 metric tons of billfish captured globally in 2014. The decline in billfish populations are primarily from retention of billfish caught as bycatch in other fisheries.

With the Billfish Conservation Act of 2012, Congress recognized the continued global conservation challenges that billfish populations continue to face. While it does not explicitly ban the import or export of billfish into or from the United States, it does prohibit selling billfish or billfish products as well as having custody, control or possession of billfish for purposes of selling them or offering them for sale. This effectively banned commercial trade in billfish, thereby eliminating demand for imports. The Billfish Conservation Act has stopped importation of well over 8 million pounds since its enactment. The Act provides for two exceptions that cover a small amount of billfish trade, sold mainly in Hawaii and the Pacific Insular Areas.

PERSPECTIVES ON PENDING BILLS

With respect to the Billfish Conservation Act amendments (H.R. 4528), we believe the legislation would not advance the conservation of billfish significantly, and would block a small amount of sustainably harvested domestic product from entering commerce on the U.S. mainland. Further, the bill's amendments to the Shark Conservation Act of 2010 (SCA) are unnecessary for the conservation of sharks, including smooth dogfish. The rule of construction in section 2 of the bill provides that nothing in the SCA shall be construed to alter the Secretary of Commerce's authority to manage certain highly migratory species under the Magnuson-Stevens Act. It is our understanding that this rule of construction is intended to provide the Secretary authority to over-ride the exception in the SCA that allows the finning

⁴ See 2016 Shark Finning Report to Congress, available at: <https://repository.library.noaa.gov/view/noaa/17060>.

of smooth dogfish under certain circumstances. As written, however, the rule of construction does not affect the statutorily-created smooth dogfish exception, nor does it provide the Secretary any additional authority that he does not currently retain under the Magnuson-Stevens Act.

We cannot support the Shark Fin Sale Elimination Act (H.R. 1456) because the bill's negative impact on U.S. fishermen would outweigh its minimal benefit to shark conservation. The United States currently has effective laws and associated regulations that prevent shark finning and sustainably manages its fisheries. As written, this bill does not meet its intent to improve the conservation and management of domestically harvested sharks. It prohibits the possession and sale of shark fins. This would hurt U.S. fishermen who currently harvest and sell sharks and shark fins in a sustainable manner under strict Federal management. Furthermore, the bill does not significantly curb international trade in shark fins where the majority of trade in shark fins occurs.

While we support the intent of reducing the illegal trade of shark fins in a manner that does not harm our domestic fishermen, we cannot support the Sustainable Shark Fisheries and Trade Act (H.R. 5248) in its current form. In particular, we do not support the proposed certification program. The breadth of shark products covered in the legislation (e.g. cosmetics, supplements, footwear, etc.) goes beyond the jurisdiction of NMFS and the agency could not trace source material for such highly-processed products. Implementing such a certification program, even one focused on specific shark species and shark products of concern, would entail significant costs. In addition, available data for shark fin imports indicates the U.S. imports a relatively small amount of shark fins compared to other countries. Therefore, the impact of the bill on global conservation and trade would be relatively small.

CONCLUSION

NOAA Fisheries appreciates the opportunity to discuss shark and billfish conservation and management and highlight the importance of these fisheries to our coastal economies. We look forward to working with Congress on these issues. I am available to answer any questions you may have.

QUESTIONS SUBMITTED FOR THE RECORD BY REP. SABLAN TO MR. ALAN RISENHOOVER, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DIRECTOR, OFFICE OF SUSTAINABLE FISHERIES

Question 1. In your testimony you said that NOAA opposes H.R. 1456 because the bill would have a negative impact on commercial fisherman and their need to drive revenue from shark fins and that the restriction would not have a major impact since there is limited U.S. trade in shark fins. Can you explain and is NOAA's determination simply based on revenue numbers?

Answer. Domestically, H.R. 1456 would require fishermen to destroy the fins of sustainably harvested sharks. The United States has some of the strongest fishery conservation and management laws and regulations in the world, including for sharks. Retaining a shark fin while discarding the shark carcass (shark finning) has been prohibited in the United States since the enactment in 2000 of the Shark Finning Prohibition Act. However, it is lawful under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and the Shark Finning Prohibition Act for U.S. fishermen to use all parts of a sustainably harvested shark for commercial revenue. The fin is one of the most valuable parts of the shark and it comprises a substantial portion of shark revenue. For example, commercial landings of the primary shark species in the Atlantic, other than spiny dogfish, were worth approximately \$2.5 million in 2016, of which approximately 26 percent came from shark fin sales. Prohibiting fishermen from using the fins of sustainably harvested sharks would unfairly penalize U.S. fishermen who already operate under some of the strongest conservation and management standards in the world. Furthermore, the impact of H.R. 1456 on other countries' shark fishing and finning practices would be limited because the United States is a small player in the global trade of shark fins.

Question 2. Is it possible to tell if a shark fin came from a legally-landed, well-managed, sustainable, non-finned shark once it is in the market?

Answer. It is possible to determine the legality and sustainability of a shark fin once it enters the market as long as there is a sufficient chain of custody for the

shark product in trade from the point of harvest to the point of entry into commerce. NOAA's National Marine Fisheries Service (NMFS) administers several programs that collect information regarding the chain of custody for shark products, including the Seafood Import Monitoring Program (SIMP). NMFS can provide additional information regarding the programs upon request.

Question 3. As you know, shark species are especially vulnerable to over-exploitation. Sharks are caught and killed, on average, 30 percent faster than they can reproduce. We know that stock assessments—the basis for any sustainably managed fishery—are critical in revealing how a shark species is doing. To effectively manage sharks, stock assessments would need to be administered regularly for individual species, correct? Do all of the shark species that can legally be fished in the United States have stock assessments?

Answer. NMFS supports the management of over 40 shark species and stocks caught in U.S. state and Federal fisheries. Stock assessments are fundamental to sustainable fishery management, but they are resource intensive, and thus are prioritized for stocks with the greatest need.

Stock assessments of shark species that are primarily caught in international waters are coordinated via international Regional Fishery Management Organizations (RFMOs), including the International Commission for the Conservation of Atlantic Tunas (ICCAT) and the Western and Central Pacific Fisheries Commission (WCPFC). The United States negotiates with other countries that participate in these RFMOs to determine which stocks are highest priority for stock assessments. Currently, ICCAT coordinates stock assessments for three shark stocks while the WCPFC oversees assessments for five shark stocks. These eight shark stocks have all been assessed within the last 10 years.

NMFS conducts stock assessments for shark stocks caught primarily within the U.S. exclusive economic zone (EEZ) or within the EEZ and neighboring countries such as Canada and Mexico. NMFS does not have the capacity to assess all federally managed shark species annually, but strives to optimize its use of available resources, giving priority to shark stocks with the greatest fishing importance or conservation need. Of the 31 shark species that are legally fished and assessed domestically, 17 have been assessed in the last 10 years. A current description of completed and planned stock assessments for U.S. managed sharks and shark complexes is included as a table for reference (Table 1).

Table 1: Completed and planned stock assessments of all federally-managed shark stocks and stock complexes.

Stock	Harvest	Management	Last Assessment	Assessment Age	Next Assessment ¹
Atlantic sharpnose shark – Atlantic	Allowed	NOAA Fisheries	FY14	4 Years	Unknown
Atlantic sharpnose shark – Gulf of Mexico	Allowed	NOAA Fisheries	FY14	4 Years	Unknown
Bering Sea / Aleutian Islands Shark Complex ²	Allowed	NOAA Fisheries	FY11	7 Years	NA
Bigeye thresher – North Pacific	Allowed	WCPFC	FY18	0 Years	Unknown
Blacknose shark - Atlantic	Allowed	NOAA Fisheries	FY11	7 Years	Unknown
Blacknose shark - Gulf of Mexico	Limited ³	NOAA Fisheries	FY11 ⁴	7 years	Unknown
Blacktip shark - Atlantic	Allowed	NOAA Fisheries	FY06 ⁴	12 years	FY19
Blacktip shark - Gulf of Mexico	Allowed	NOAA Fisheries	FY12	6 Years	FY18
Blue shark - North Atlantic	Allowed	ICCAT	FY16	2 Years	FY21
Blue shark - North Pacific	Allowed	ICCAT	FY17	1 Year	FY21
Bonnethead - Atlantic ⁵	Allowed	NOAA Fisheries	FY14 ⁴	4 years	Unknown
Bonnethead - Gulf of Mexico ⁵	Allowed	NOAA Fisheries	FY14 ⁴	4 years	Unknown
Bull shark – Atlantic and Gulf of Mexico	Allowed	NOAA Fisheries	Never assessed	NA	Unknown
Finetooth shark - Atlantic and Gulf of Mexico	Allowed	NOAA Fisheries	FY08	10 Years	Unknown
Gulf of Alaska Shark Complex	Allowed	NOAA Fisheries	FY17	1 Year	FY19
Gulf Smoothhound Complex ⁶	Allowed	NOAA Fisheries	FY15	3 Years	Unknown

¹ Currently, domestic assessments are not usually planned more than one year out. NOAA Fisheries is currently working to develop longer-term planning schedules.

² In FY12 the management of Bering Sea / Aleutian Islands Sharks transitioned from using an index-based approach to relying upon a historical average of catch to determine annual catch limits for the complex. This analysis does not constitute a stock assessment and occurs biennially.

³ Only allowed to land recreationally.

⁴ Stock assessments results can be rejected for use in management for a variety of reasons. In many cases, some of the data used in the assessment had issues that rendered the assessment results unreliable, though other data collected for the assessment was still used for management. This is true of GOM blacknose, Atlantic blacktip, and Atlantic and GOM bonnethead.

⁵ Stocks were combined in the FY14 stock assessment that was ultimately rejected. The last combined assessment conducted in FY08 was successful.

⁶ Gulf complex includes smooth dogfish, Florida smoothhound and Gulf smoothhound.

Stock	Harvest	Management	Last Assessment	Assessment Age	Next Assessment ¹
Lemon shark – Atlantic and Gulf of Mexico	Allowed	NOAA Fisheries	Never assessed	NA	Unknown
Longfin mako - North Pacific	Allowed	NOAA Fisheries	Never assessed	NA	Unknown
Nurse – Atlantic and Gulf of Mexico	Allowed	NOAA Fisheries	Never assessed	NA	Unknown
Oceanic whitetip shark – North Atlantic	Allowed	NOAA Fisheries	Never assessed	NA	Unknown
Oceanic whitetip shark - Western and Central Pacific	Limited ⁷	WCPFC	FY12	6 Years	Unknown
Pelagic thresher - North Pacific	Allowed	WCPFC	FY18	0 years	Unknown
Porbeagle - Northwestern Atlantic	Allowed	ICCAT	FY10	8 Years	FY19
Salmon shark - North Pacific	Allowed	NOAA Fisheries	Never assessed	NA	Unknown
Sandbar shark - Atlantic and Gulf of Mexico	Limited ⁸	NOAA Fisheries	FY18	0 years	Unknown
Smooth hammerhead – Atlantic and Gulf of Mexico	Allowed	NOAA Fisheries	Never assessed	NA	Unknown
Great hammerhead – Atlantic and Gulf of Mexico	Allowed	NOAA Fisheries	Never assessed	NA	Unknown
Scalloped hammerhead - Atlantic	Allowed	NOAA Fisheries	FY10	8 Years	Unknown
Shortfin mako - North Atlantic	Allowed	NOAA Fisheries	FY18	0 Years	Unknown
Shortfin mako - North Pacific	Allowed	WCPFC	FY15	3 Years	FY18
Silky shark – Atlantic and Gulf of Mexico	Limited ⁹	NOAA Fisheries	Never assessed	NA	Unknown
Silky shark - Western and Central Pacific	Allowed	WCPFC	FY13	5 Years	FY18
Smooth dogfish - Atlantic	Allowed	NOAA Fisheries	FY15	3 Years	Unknown
Spinner shark – Atlantic and Gulf of Mexico	Allowed	NOAA Fisheries	Never assessed	NA	Unknown
Spiny dogfish - Atlantic Coast	Allowed	NOAA Fisheries	FY15	3 Years	Unknown

⁷ Stock can only be harvested as a bycatch species in non-longline fisheries.

⁸ Research harvest only.

⁹ Commercial harvest only

Stock	Harvest	Management	Last Assessment	Assessment Age	Next Assessment ¹
Spiny dogfish - Pacific Coast	Allowed	NOAA Fisheries	FY11	7 Years	Unknown
Common thresher – North Atlantic	Allowed	NOAA Fisheries	Never assessed	NA	Unknown
Thresher shark - North Pacific	Allowed	NOAA Fisheries	Never assessed	NA	Unknown
Tiger shark – Atlantic and Gulf of Mexico	Allowed	NOAA Fisheries	Never assessed	NA	Unknown

Question 4. How many stock assessments did NOAA do for sharks in 2017? How many is NOAA planning to do in 2018?

Answer. In FY2017, NMFS completed two stock assessments of shark stocks. In FY2018, NMFS has completed six stock assessments of shark stocks.

Question 5. In 2016, the year with the most recent landings data, non-dogfish shark landings were valued at less than \$2.5 million. According to the NOAA Commercial landings database, over half of the landings by value and volume were listed just as “sharks” and are not species specific. Why is that?

Answer. A number of factors can prevent the identification of shark landings data at the species level. For example, different shark species may be co-mingled and sold together as a lot. Another factor is the need to preserve the confidentiality of business information. If fewer than three fishermen or dealers contribute to a number, we will roll up the landings data into a higher-level aggregation.

Question 6. Bycatch is another huge threat facing sharks globally. Why is it that in the NOAA National Bycatch Report, the bycatch data for sharks is not consistent? For example, in some fisheries, sharks are counted by individuals and in others by pounds? Why are some counted at the species level and others are counted in groups? Don't these inconsistencies make it difficult to have a clear picture of the rate of shark bycatch in the United States?

Answer. Thanks to its fishery dependent and independent data collection programs, the United States has robust data on shark bycatch. However, bycatch data in the U.S. National Bycatch Report can vary because the various fisheries-dependent monitoring programs around the country (including observer programs) can report data in different ways. Differences in data collection and reporting can be attributed to fishery logistics and other science and management priorities.

For example, shark bycatch typically has been counted as individuals as opposed to pounds because sharks that are caught as bycatch are usually released in the water and not brought on the fishing vessel to minimize any harm to the animal. Despite these challenges, NMFS continues to work to improve its estimates of shark bycatch. For instance, Update 3 to the U.S. National Bycatch Report First Edition,

which should be published online by the end of 2018, includes more consistent bycatch data for sharks due to the publication of a recent NOAA Technical Memorandum that provided individual-to-weight conversion factors for sharks and other species captured in fisheries off the southeastern United States and in the Gulf of Mexico.

NMFS notes that the National Bycatch Report is not a requirement under the MSA or other law. The National Bycatch Report and its Updates provide a compilation of bycatch information and national and regional overviews to document bycatch in fisheries over time. They are not, however, used for day-to-day management of fisheries.

Question 7. According to NOAA's own commercial fisheries trade data, in 2017, over \$500,000 worth of fins were imported into California—a state that has a ban. Similarly, over \$450,000 worth of fins were exported out of Texas; over \$6,000 exported out of California; over \$14,000 out of New York; and over \$40,000 out of Washington. All of these states have a ban. How is the shark fin trade avoiding state legal prohibitions?

Answer. NMFS does not enforce state shark fin laws. We cannot speak to the states' efforts to enforce their laws. NOAA's Office of Law Enforcement does work with state law enforcement agencies and alerts them to state violation when they are discovered.

Question 8. What is the status of the alleged shark finning case that took place in March, 2017 in which wildlife officers found dozens of dismembered shark fins aboard a Key West shrimp boat? Are there any other outstanding finning cases under review?

Answer. In this incident, approximately 70 shark fins were detected onboard a commercial shrimp vessel without corresponding shark carcasses in violation of Federal shark finning regulations. The investigation has been completed and the case package was referred to the NOAA Office of General Counsel Enforcement Section for prosecution in May 2018 and is still open.

In addition to the May 2017 incident, the NMFS' Office of Law Enforcement has a small number of other incidents of alleged shark finning or landing sharks without fins naturally attached under investigation or review.

Question 9. How many fins does the United States import and export? Is the data reliable? Why are there discrepancies between what the U.S. reports and what the United Nation FAO reports? According to the U.N. FAO, more countries reporting shark exports to the United States than what NOAA reports? Please explain.

Answer. In 2017, the United States imported 245,718 kilograms (245.7 metric tons) of shark fins worth \$1,132,060 and exported 156,819 kilograms (156.8 metric tons) worth \$1,216,074. This number includes fresh, frozen, preserved, and canned products and is a finer level estimate than we have had in previous years. The data on foreign trade is from the U.S. Bureau of the Census. Thus, the United States has good estimates of sharks and shark products imported into the United States, but it is difficult to estimate the volume of products that transit through the United States and do not remain here.

When we were first made aware of the discrepancy between the data of the United States and FAO, we investigated with FAO and found there was an error in a 2003 figure that the FAO has since corrected. Second, data contained in the FAO report are from trading partners for an ad hoc exercise and not from FAO official statistics. These two methodologies are not comparable. One methodology combines import data to derive export estimates. The other contains export data reported directly to the FAO database. The incompatibility of the trading partners' statistics, in terms of shark fin commodity categories and descriptions, could be a major factor behind these observed discrepancies. Given these data complexities, to assess the U.S.' relative contribution to the global shark fin trade, the United States compares U.S. reported import of shark fins with other countries' shark fin import numbers (rather than estimating exports based on imports).

Question 10. Who enforces the anti-finning regulations and how many agent are engaging in shark fin enforcement? The Trump administration FY2019 Budget Request proposed to reduce funding for law enforcement? How would NOAA adequately perform the fins naturally attached requirement with a substantially reduced resources?

Answer. NMFS' Office of Law Enforcement (OLE) is the primary agency responsible for enforcement of regulations which prohibit shark finning. While none of our law enforcement personnel are exclusively dedicated to shark fin enforcement, we

do prioritize enforcement of regulations related to protected species such as shark species listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). In the past, OLE's efforts have been augmented by our state and territorial enforcement partners through our Cooperative Enforcement Program (CEP).

The Administration's 2019 Budget prioritizes rebuilding the military and making critical investments in the Nation's security. It also identifies the savings and efficiencies needed to keep the Nation on a responsible fiscal path. To prioritize fiscal responsibility and efficiency, difficult decisions, including the reduction in CEP funding, needed to be made. NOAA will continue its dedication to Federal fisheries enforcement, including enforcement of laws related to shark finning, through use of OLE's Federal agents and officers to conduct investigations and patrols, technological tools such as Vessel Monitoring Systems, and outreach and education strategies designed to increase and enhance voluntary compliance laws and regulations.

Mr. LAMBORN. All right. Thank you for your testimony. Mr. Polston, you are now recognized for 5 minutes.

**STATEMENT OF JOHN POLSTON, OWNER, KING'S SEAFOOD,
PORT ORANGE, FLORIDA**

Mr. POLSTON. Chairman Lamborn, Ranking Member Huffman, and members of the Subcommittee, my name is John Polston, and I am the owner of King's Seafood and several shark fishing vessels in Port Orange, Florida.

The Shark Trade Elimination Act, H.R. 1456, punishes me and other law abiding fishermen. It would put the final nail in the coffin of the domestic shark fishery. Decades of quota cuts have reduced this fishery to a fraction of what it once was. Now that shark populations are growing, I would say exploding, there is some hope that all this sacrifice might be rewarded. I cannot express how demoralizing it would be if Congress were to take away our needed shark fin income. We simply cannot afford to throw away money.

Fishing vessels and dealers all have high fixed and overhead costs like insurance, fuel, mortgages, maintenance, labor, and so on. Operating margins in this industry are razor thin, and cuts in allowable shark landings have all but eliminated full time shark fishing. Today, most fishermen are like me, piecing together a living from different fisheries, sharks, shrimp, snapper, grouper, king mackerel, and others. All are tightly controlled by NMFS. It is like a house of cards. You take away one part of it, and the whole thing could come crashing down. And for many fishermen, the fins count for up to half the total landed value of their catch. Take that income source away, and it would cost money to go shark fishing.

There are two important facts about our industry. One, is that it has been proven that we can have a sustainable shark fishery. There are plenty of sharks in the water to fulfill the ecosystem role and to support a booming shark tourism industry. The other is that American fishermen oppose shark finning and unsustainable fishing by other countries. We are hurt by these cruel and wasteful practices. Our well managed products must compete with those from unethical and unmanaged fisheries in the global market.

Shark finning, not to mention shark overfishing, is just not a problem here. It has been illegal to land shark fins without the carcass since 1993. It must be landed with their fins attached, given

that the Shark Fin Trade Elimination Act has no impact on the United States other than to make American fishermen and their communities poorer. It is really just designed to send a message to foreign nations when these things occur, but I believe it would make the problem worse because our sustainable shark products are off the global market, and they will be replaced by those from countries where finning and overfishing are occurring. I hope you see how wrong that is.

We all agree that shark finning is cruel and wasteful. The only real question is how it is best to end it. In my view, the best approach is to attack it where it exists. King Seafood is a member of the Southeastern Fisheries Association East Coast Fishery Section and a contributor to the Southern Shark Alliance, the SSA. It was formed to oppose a Federal shark fin ban and to develop the effective alternatives to stop finning and overfishing.

These groups work with Representatives Webster and Lieu, the Wildlife Conservation Society, other Members of Congress, and fishery groups. The result of these discussions is the Sustainable Shark Fisheries and Trade Act, H.R. 5248. This bill is modeled on successful laws that make the privilege of access to the U.S. market contingent on foreign fishermen meeting the same standards as we do to protect sea turtles and marine mammals.

If nations want to export shark products to America, including skates and rays, they would have to show they have effectively ended finning and are actively managing their fisheries just as we do. As such, this bill makes positive contribution to shark conservation and recognizes and rewards the U.S. fishing industry for its conservation sacrifices.

It is a fair and sensible approach. I cannot urge you strongly enough to support the SSFTA and oppose the fin ban. I would be happy to answer any questions you may have.

[The prepared statement of Mr. Polston follows:]

PREPARED STATEMENT OF JOHN POLSTON, OWNER, KING'S SEAFOOD,
PORT ORANGE, FLORIDA ON H.R. 5248 AND H.R. 1456

My name is John Polston, owner of King's Seafood in Port Orange, Florida. King's Seafood, with which I have been associated since it was incorporated in 1988, is a buyer, retailer, and wholesale distributor of sharks and other fish products to domestic and foreign markets. I also have ownership interest in 10 fishing vessels, 5 of which actively participate in the domestic shark fishery. I am a participant in both the Sustainable Shark Alliance ("SSA") and the Southeastern Fisheries Association, both of which support H.R. 5248 and strongly oppose H.R. 1456. My testimony is based on my personal knowledge and deep involvement with this and other South Atlantic fisheries for over 33 years.

I am honored to come before the Water, Power and Oceans Subcommittee to testify in support of H.R. 5248, the Sustainable Shark Fisheries and Trade Act ("SSFTA"), and to personally thank Congressmen Webster and Lieu for introducing this proactive bill that levels the playing field for American fishermen. My testimony will also address the deep concerns I and others in the domestic shark fishery have with Chairman Royce's well-intentioned, but ultimately harmful, bill, H.R. 1456, the Shark Fin Sales Elimination Act.

Both bills share a common goal—eliminating the cruel, wasteful, and unsustainable practice of shark finning. Only the SSFTA, however, creates an incentive for other nations to end shark finning and meet the same high standards for marine conservation to which the United States holds its fishermen. This bill recognizes the sacrifices our fishermen have made, and continue to make, to rebuild domestic shark populations by leveling the playing field with our foreign competitors. Under the SSFTA, access to U.S. markets by other nations is contingent on their

adoption of strong anti-finning measures and actively conserving shark, skate, and ray stocks.

By contrast, the Shark Fin Sales Elimination Act punishes me and others by denying us an important income source—revenue from the sale of the fins—merely to send a “message.” It has no direct impact on fisheries in other nations. In fact, this bill allows imports of other shark, skate, and ray products from unsustainable fisheries to continue. It rewards bad actors by taking sustainable U.S. shark fins out of the global market, creating a vacuum to be filled by those from unmanaged and unsustainable fisheries. From a more personal perspective, this bill punishes me and others in the shark fishery by taking away an important income source, undoubtedly pushing some small businesses into unprofitability. It is an insult to American fishermen who have been required to give so much for decades to create a sustainable fishery.

In short, the SSFTA improves conservation of vulnerable populations of elasmobranchs on a global basis, while the Shark Fin Sales Elimination Act degrades these efforts and penalizes hard-working, rule-abiding Americans.

I want to emphasize that the American fishing industry is deeply opposed to the practice of shark finning, or harvesting sharks solely for their fins and discarding the carcass at sea. It is a wasteful and potentially cruel practice. It has been outlawed by regulation on the Atlantic and Gulf coasts, where most shark fishing occurs, since 1993, and by law since 2000. In 2010, Congress acted to strengthen this prohibition by requiring that most sharks¹ be landed with their fins naturally attached. The ease of enforcement of these regulations, along with the steep penalties for violating these laws, has led to near universal compliance, particularly by federally licensed shark fishermen.

We also operate under what are likely the world’s most precautionary and strict shark conservation rules. In aggregate, total allowable landings for sharks have been reduced by more than 80 percent since the fishery’s peak in the late 1980s and early 1990s. Catches of many sharks, including the most commercially important stock, Sandbars,² are prohibited. Annual catch limits are set on a very conservative basis, taking into account the life history of these animals. Frequently, fisheries for very abundant shark stocks close before annual catch limits are caught to facilitate rebuilding of less abundant species. Also, the National Marine Fisheries Service (“NMFS”) closes the fishery when only 80 percent of the catch limit is harvested.

In terms of rebuilding shark populations, NMFS management has been undeniably successful. The last published results from the primary Federal shark survey found the most sharks in its 29-year history.³ The most recent survey was recently concluded and we are optimistic that these trends will continue. Independent research by the Virginia Institute of Marine Science also confirms the sharply increasing trends for nearly every category and type of shark.⁴ Our industry accounts for \$20 million export, with Louisiana and Florida leading the way in terms of landings and permitted fishermen.

As a Floridian, I can also say that the “shark tourism” industry has been thriving alongside our shark fishery. The growth in this relatively new—and dangerous—tourism sector has not been impacted by our fishery. Sustainable management ensures there are ample numbers of sharks in our waters to both be experienced by those who wish to view them in their natural habitat and to serve their role in the marine ecosystem.

At the same time, growing shark populations increase the chances for interactions between sharks and those who come to Florida and other coastal states to spend time at the beach. Florida, in general, and Volusia County, in particular, is the *world’s* leading site for unprovoked shark attacks. Those will certainly increase growing shark and human populations interact. Even the perception of increasing numbers of shark attacks can have a negative impact on coastal tourism.

There also has been an increase in interactions between sharks and recreational and commercial fisheries. “Bite-offs,” where sharks take part or all of a fish off a line, are being increasingly reported. My vessels and other in commercial hood-and-line fisheries frequently cannot get bait past large schools of sharks and there have even been reports of sharks attacking shrimp nets. A well-controlled fishery plays

¹The sole exception is for smooth dogfish, a small and abundant shark harvested off the East Coast. This species is most valuable for the meat, the quality of which quickly degrades if the fish is not quickly and fully dressed.

²A small research fishery for sandbars is allowed in order to collect data for the stock assessment. Currently, an assessment for this species is underway.

³NMFS, “2015 Coastal Shark Survey Reveals Shark Populations Improving off U.S. East Coast,” https://www.nefsc.noaa.gov/press_release/pr2015/scispot/ss1509/.

⁴VIMS, “Study finds preliminary recovery of coastal sharks in southeast U.S.” http://www.vims.edu/newsandevents/topstories/2017/shark_recovery.php.

a role in keeping these predators in check and maintaining some balance in a system where many stocks upon which sharks prey are also subject to recreational and commercial fishing.

THE BILLS AT ISSUE

As to the bills that are the subject of this hearing, I am joined in supporting H.R. 5248 by a host of commercial fishing groups. In addition to those mentioned, this legislation is also endorsed by the Garden State Seafood Association, North Carolina Fisheries Association, Louisiana Shrimp Association, Blue Waters Fishermen's Association, and scores of fishermen and fish houses that rely on the shark fishery, in whole or part, for their livelihoods. I am attaching a letter identifying these supporters.

The SSA, Garden State, and Southeastern Fisheries are proud to have worked with the Wildlife Conservation Society, their partners in the environmental and zoological communities, and Congressmen Webster and Lieu to craft a bill that makes an important contribution to the global conservation of sharks. The SSFTA is modeled on other successful legislation designed to protect sea turtles in foreign shrimp fisheries and to ensure foreign fishermen meet the same standards for marine mammal protection that U.S. fishermen must observe.

In order to minimize the administrative burden on NMFS, the SSFTA requires nations seeking to export shark products to the United States to demonstrate that they have enforceable shark finning prohibitions and science-based shark conservation measures similar to those under which we work. It expands the definition of "shark" to include likewise vulnerable stocks of other elasmobranchs, specifically skates and rays. While those animals can be processed at sea, just as here in the United States, nations would have to show that these stocks are managed sustainably. Finally, the SSFTA adds skates and rays to NMFS Seafood Important Monitoring Program to ensure traceability of supply. (Sharks are already included.)

H.R. 5248's purpose is to ensure that the U.S. market is not contributing to either shark finning or unsustainable fishing practices. While the United States is not a major market for shark products, the SSFTA assures American consumers that any imported shark, skate, and ray products they consume are sustainably sourced and cruelty-free.

As to Shark Fin Trade Elimination Act, the fact that the United States is a small market means that its impact on other nations will be minimal, if it has any effect at all. For one, we import only a small amount of fins, some of which are re-imports of processed domestic fins. Other instances of trade bans having some positive effect on foreign behavior, such as with ivory, succeeded because the United States was a fairly substantial market participant. Moreover, under this bill, nations with uncontrolled fisheries can still export shark meat and other shark products to the United States. Finally, the small amount of fins now imported to the United States will simply be diverted to other nations, filling the void left by removing sustainably caught American fins from international trade. This is why a fin ban is likely to have a net negative effect on shark conservation.

Furthermore, requiring waste of shark fins runs counter to the positive trend of fully utilizing food and natural resources. "Reverse" shark finning—keeping the carcass and discarding the fins—shares with shark finning the sin of wasting a valuable and important food source. I believe Congress should encourage full utilization of the limited, scientifically-determined catch levels of all marine resources. Our nation is richer if we maximize the value of each fish we catch. Unfortunately, H.R. 1456 has the opposite effect, draining economic resources from our struggling coastal communities.

Speaking personally, I can assure you that under current fisheries management, every dollar counts. Both harvesters and the fish houses that buy their catch operate under the thinnest of margins and face high fixed costs for things such as fuel, insurance, mortgages, and labor. Particularly here in Florida, we piece together a living by engaging in a variety of fisheries—shrimp, snapper-grouper, sharks and other highly migratory species, and others. NMFS determines the catch levels, seasons, and other conditions we operate under. Few people can make a living focusing on just one fishery. Losing access to even one fishery or, in this case, a significant revenue source, can tip a small business from profitability into bankruptcy.

I cannot express how disheartening it would be to me and others in the commercial fishing industry if Congress were to penalize us by banning fin sales just to send a message to the world. Our whole fisheries management system is premised on the idea that sacrifices deemed necessary to conserve a fish stock today will be rewarded by increased opportunities to fish in the future. That promise already seems hollow, as we have seen exploding populations of things such as sharks and

red snapper, but very slow growth in fishing opportunities. Shark fishermen have sacrificed more than most. Please do not punish that sacrifice by taking away an important source of our income.

Thank you very much for your time and attention to my testimony. I am happy to answer any questions members of this Subcommittee may have.

ATTACHMENT

U.S. Shark Fishermen and Dealers Support H.R. 5248, the Sustainable Shark Fisheries and Trade Act of 2018

As commercial shark fishermen and fish houses participating in sustainable U.S. shark fisheries we are very pleased that Representatives Daniel Webster (R-FL) and Ted Lieu (D-CA) have introduced H.R. 5248, the Sustainable Shark Fisheries and Trade Act of 2018.

We believe H.R. 5248 or “SSFTA” is a meaningful and effective alternative to harmful legislation proposed by CA Representative Ed Royce and NJ Senator Cory Booker titled the “Shark Fin Trade Elimination Act” (H.R. 1456/S. 793). Our livelihoods are directly threatened by H.R. 1456/S. 793 which requires us to waste part of a natural resource by throwing away fins from our sustainably harvested sharks without benefiting global shark conservation. The Booker/Royce bills unfairly punish highly regulated American fishermen by taking away the income we can receive from fully utilizing our limited shark harvest.

By contrast, Reps. Webster’s and Lieu’s bill holds other nations to the same conservation and management standards we have adopted in our U.S. fisheries. Under H.R. 5248, any nation seeking to export shark products to the American market must receive certification from the Secretary of Commerce that it has an effective ban on the practice of “shark finning,” and that it has a similar conservation and management program for sharks, skates, and rays. The bill also increases traceability of imported shark products.

While Booker/Royce rewards bad actors in other nations by taking sustainably sourced U.S. shark fins out of the global market, Webster/Lieu create incentives for exporting nations to end cruel fishing practices and establish meaningful shark conservation measures, including programs to manage populations of skates and rays.

We oppose the practice of shark finning and have long supported the laws passed by Congress to ensure the practice does not occur in U.S. shark fisheries. Shark finning—retaining shark fins while discarding the rest of the carcass at sea—is both cruel and wasteful. Our industry has been harmed by illegal shark fins that compete unfairly with our legal, sustainably harvested product. The Sustainable Shark Fisheries and Trade Act (H.R. 5248) builds on and strengthens these past efforts.

We also support efforts to maintain a well-managed and sustainable shark fishery in the U.S. and globally. Successful U.S. management has resulted in a tremendous growth in domestic shark populations. The last published federal fishery survey (NOAA) found an astonishing **65 percent more sharks** than the one prior. The index of **shark abundance in 2015 was the highest in its 29-year history**. As a result of all this, the National Marine Fisheries Service just increased the retention limit on large coastal sharks.

This resurgence of sharks was achieved in part on our sacrifices over the past twenty-plus years, with the industry weathering past **quota reductions of nearly 85 percent** to build today’s healthy fishery. The Booker/Royce approach would undermine these years of work by American fishermen should it ever become law. That is part of the reason groups like the Sustainable Shark Alliance, Garden State Seafood Association, North Carolina Fisheries Association, Southeastern Fisheries Association, Blue Water Fishermen’s Association, and Louisiana Shrimpers Association—represent more than shark fishermen—also oppose the fin ban and proudly support Representatives Webster’s and Lieu’s proactive bill.

We are very pleased to join these organizations in supporting Congressmen Webster’s and Lieu’s bill H.R. 5248 and urge others in Congress to join them in this proactive and conservation-minded measure. Attached is a fact

sheet regarding the domestic shark fishery. You may contact our representative, Mr. Shaun Gehan, at (202) 412-2508 for more information.

Sincerely,

Safe Harbour Seafood,
Bon Secour, AL

Madeira Beach Seafood,
Madeira Beach, FL

Seafood Atlantic,
Port Canaveral, FL

AP Bell Seafood,
Madeira Beach, FL

Kings Seafood,
Port Orange, FL

Omni Shrimp Company,
Madeira Beach, FL

Phoenix Fisheries,
Southport, FL

Hull's Seafood Markets, Inc.,
Ormond Beach, FL

Ocean Fresh Seafood,
New Orleans, LA

Southern Seafood Connect'n,
Crisfield, MD

Seatrade International,
Topsfield, MA

Avon Seafood,
Avon, NC

O'Neal's Sea Harvest,
Wanchese, NC

Willie R. Etheridge Seafood,
Wanchese, NC

Crystal Coast Dayboat Seafood,
Morehead Cy, NC

Viking Village Seafood,
Barnegat Light, NJ

Carolina Seafood,
Rutledge Leeland, SC

Bryant Products,
Bayou La Batre, AL

Save On Seafood,
St. Petersburg, FL

Greg Abrams Seafood,
Panama City, FL

Fishermen's Ice & Bait,
Madeira Beach, FL

Wild Ocean Market Seafood,
Titusville, FL

Day Boat Seafood,
Lake Park, FL

DSF, Inc.,
Daytona Bch., FL

Phillips Seafood,
Townsend, GA

Venice Fish and Shrimp,
Venice, LA

Marder Trawling Inc,
New Bedford, MA

Crystal Coast Fisheries,
Morehead City, NC

Wanchese Fisheries,
Wanchese, NC

B & J Seafood,
New Bern, NC

Jeffery's Seafood,
Hatteras, NC

Lund's Fisheries,
Cape May, NJ

Agger Fish Corp,
Brooklyn, NY

F/V Angelina

F/V Chase

F/V Honey Bee

F/V Miss Brianna

F/V Rachaelle Nicole

F/V Taurus

F/V Miss Alexis

F/V Reel of Fortune

F/V Butter

F/V Blake

F/V Coupe de Grille

F/V Juma

F/V Miss Maggie

F/V Right Stuff

F/V Tobo

F/V Miss Jessica

F/V B.C.

F/V Sharon G

F/V Blue Water

F/V Fishhawk

F/V Michelle Marie

F/V Miss Rita

F/V Sword Fish

F/V Boss Lady

F/V J. O'Neal

F/V Bobalou

F/V Watersport

F/V Little Clam	F/V Windy Gale	F/V Logan's Luck
F/V M B	F/V Miss Megan	F/V Shannon D
F/V Sundog	F/V Bout Time	F/V Raven
F/V Sarah Brent	F/V Miss Kaleigh	F/V Miss Madeline
F/V Salvation	F/V Wahoo	F/V Miss Stevie
F/V Shannon Dun	F/V Miss Everett	F/V Blue Fin
F/V Body Count	F/V Little Jo	F/V Gail Mist II
F/V Haley Rose	F/V Black Jack	F/V No Limit
F/V Toucan	F/V Jodie Lynn III	F/V Lady Martiza
F/V Out of Hand	F/V Islander	F/V Top Tuna
F/V Fish Hound	F/V Captain Lynn	F/V Miss Shell
F/V Lisa Ann	F/V Daytona	F/V Miss Haley II
F/V Right on Time	F/V Crosswinds IV	F/V Miss Brenda Louise
F/V Leo B.	F/V Endeavor	F/V Jean Marie
F/V Miss Ann	F/V Capt. Gorman III	F/V Denise Ann
F/V Hull's Sea Lover	F/V 2nd Wind	F/V Pancake
F/V Elizabeth	F/V Emily's Weigh	F/V Albi
F/V Big Eye	F/V Chances R III	F/V Christopher Joe
F/V Day Boat III	F/V Day Boat One	F/V Day Boat Too
F/V Die Trying	F/V Dusty Boy	F/V Erica Lynn
F/V High Voltage	F/V Janice Ann	F/V JC 31
F/V Joshua Nicole	F/V Kelly Ann	F/V Knotty Girl
F/V Lady Linda	F/V Miss Jane	F/V Miss Sierra
F/V My Girl	F/V Osprey	F/V Parker
F/V Provider	F/V Right On Time	F/V Sea Hawk
F/V Shooting Star	F/V Standin' Up	F/V Stella Maris
F/V Straight Flush	F/V Susie Two	F/V Swordfin
F/V T&Sea	F/V Theresa C	F/V Two Can
F/V Two Sons	F/V Vicki Ann	F/V Virgin Hooker
F/V Vitamin Sea	F/V White Water	F/V Whitewater II
F/V Yellowfin	F/V Dana Christine II	F/V Eagle Eye
F/V Eyelander	F/V Eagle Eye 2	Tar Baby
F/V Denise Ann		

ATTACHMENT

FACTS REGARDING THE DOMESTIC COMMERCIAL SHARK FISHERY AND OUR CONCERNS WITH THE SHARK FIN TRADE ELIMINATION ACT (H.R. 1456/S. 793)

- The U.S. is a global leader in shark conservation and management. It is a chief opponent of the wasteful practice of “shark finning”—discarding shark meat and landing only the fins. Finning has been federally prohibited since 1993, while the shark population has been growing since 2000. In 2015, the National Marine Fisheries Service’s shark survey found the most sharks in its 29-year history, 65% more than the prior survey.
- The industry opposes finning, but the Shark Fin Trade Elimination Act also hurts fishermen that are harvesting sharks the right way. Fins account for 50% of a shark’s landed value. Without income from these, revenue from sharks would not cover fuel costs and our fishery will cease. **This Act will destroy a successful fishery and harm small fishing communities.**
- The government should not deny American people access to this product or deny fishing communities important income from a sustainable fishery.
- Virtually all fins are exported, overwhelmingly to China. This trade plays a small, but important role in improving our balance of trade.
- The bills provide **no conservation benefit** and will likely **harm international shark conservation**. Destroying fins is as wasteful as

discarding shark meat. The small portion of fins taken off the international market will be replaced, likely by fins from unsustainable and unregulated fisheries.

- Demand for shark fins, culturally important in Asia, will not abate soon. The U.S. can help foster responsible shark fishing practices globally through participation in international forums. Our authority will be weakened if the U.S. abandons its own model shark fishery and instead promotes the extreme, wasteful, and uneconomic policy of fin destruction.
- **These bills reward bad actors and harm those who play by the rules.** Congress should urge NMFS to finalize its list of shark finning nations under the High Seas Driftnet Fishing Moratorium Act and impose an import moratorium on those that fail to stop the practice. Congress should also support America's law-abiding shark fishermen and their communities by ensuring that they can obtain the full value of their highly limited catch no matter where they live.

Mr. LAMBORN. Thank you for your testimony. Mr. Kondon, you are now recognized for 5 minutes.

**STATEMENT OF VANCE KONDON, ASSISTANT MANAGER,
RAINBOW REEF DIVE CENTER, KEY LARGO, FLORIDA**

Mr. KONDON. Good afternoon, Chairman Lamborn, Ranking Member Huffman, and members of the Committee. Thank you for giving me the opportunity to testify before you today on H.R. 1456, the Shark Fin Sales Elimination Act.

My name is Vance Kondon, and I am originally from San Diego, California where I grew up just several blocks from the ocean where I spent much of my free time surfing, skin diving, and fishing. After high school, I joined the military and served our great Nation for 30 years. After retiring from the Air Force in 2016, I completed my scuba instructor certification and have since been serving in a management role and as an instructor at Rainbow Reef Dive Center in Key Largo, Florida, which is the largest dive operator in the Florida Keys and one of the busiest dive training centers in the Western Hemisphere.

Science has proven time and again that sharks play important roles in ocean ecosystems around the world, but it may not be as well known that sharks play important roles in ocean-based tourism economies, including here in the United States. There have been a number of scientific studies that show shark watchers spend hundreds of millions of dollars on shark ecotourism every year around the world, and that number is growing.

In 2017, an independent study commissioned by Oceana found that direct expenditures for shark encounters in the diving industry totaled over \$221 million and fueled over 3,700 jobs in Florida, mine included. I can tell you from firsthand experience that people in Florida and our customers from around the world love to see sharks. During the peak summer season, we will take up to a thousand customers out to Key Largo's reefs each week, who are coming with an expectation that the reef life, including sharks, will be in abundance.

Unfortunately, we have to let guests know that we only occasionally see sharks. One reason for this is because the dive tourism industry is being threatened by the demand for shark fins, one of the greatest threats to sharks around the world. In Key Largo, it

has become rare to sight the Caribbean reef sharks that we used to see more in the past. When we are really lucky, we see a few hammerhead sharks each year.

Hammerhead sharks have suffered immensely from the fin trade and currently fetch some of the highest prices for their fins. Scalloped hammerheads in the Atlantic are considered overfished and are experiencing overfishing while smooth and great hammerheads do not have species specific stock assessments, the basis of any sustainably managed fishery.

While finning is illegal in the United States, it still occurs. In fact, almost exactly 1 year ago, Florida Fish and Wildlife officers stopped a Key West shrimp boat that had been illegally finning in U.S. waters a mere 20 miles north of the island. Inquiry from Senator Booker's office revealed that since January 1, 2010, NOAA has investigated 85 incidents involving alleged shark finning in our waters, 29 of which brought charges.

I, myself, have seen evidence of this horrible act. Just a little over a year ago, in one of our deep shipwreck sights in Key Largo, we were horrified to find several sharks that were finned and dumped to die in the Florida Keys National Marine Sanctuary. It is impossible to tell whether a fin has been cut off of a shark legally or illegally once it has been detached from the body. It is not impossible that the fins from the sharks I saw that day may have ended up in a bowl of soup somewhere here in the United States.

Things get even more complicated when shark fin imports are brought into the mix. Although the United States has deemed finning illegal, I was shocked to learn that we are actively importing fins from countries that do not have the same protections in place. Miami, a city close in proximity to some of the dive businesses that are thriving due to sharks, has been the Number one importer of shark fins from Hong Kong since 2015.

A recent study has shown that fewer than 10 species in Hong Kong fin trade have sustainably managed fisheries anywhere in their range, and nearly one-third were considered vulnerable or endangered by the International Union for Conservation of Nature. A news report from the *South China Morning Post* published just a few days ago reported that Indonesian authorities intercepted an illegal shipment of 20 metric tons of shark fin bound for Hong Kong. The fins were labeled as frozen fish and included hammerhead fins. If they had reached their destination, it could have been mixed with other fins and re-exported to the United States.

We cannot continue to participate in this trade that is decimating shark populations around the world. There is a simple solution to this problem to end the demand for shark fins in the United States and to ensure that any fin, especially if illegally obtained, cannot be sold here.

The Shark Fin Sales Elimination Act, H.R. 1456, would do exactly that. Already, 12 states have banned the sale and trade of shark fins, and they are not alone. They joined 40 airlines, 20 major shipping companies, and 7 large corporations. Support for this act is overwhelming—8 in 10 Americans support a fin ban as do 9 aquariums, multiple recreational fishing interests, over 150 chefs, 150 scientists, 85 surfers, surf businesses and publications,

237 Members of the House, and over 500 businesses and organizations, including mine. The world is moving toward ending the shark fin trade, and the United States has an opportunity to be the leader. This opportunity should not be wasted.

Thank you very much.

[The prepared statement of Mr. Kondon follows:]

PREPARED STATEMENT OF VANCE KONDON, ASSISTANT MANAGER, RAINBOW REEF
DIVE CENTER, KEY LARGO, FLORIDA ON H.R. 1456

INTRODUCTION

Good morning, Mr. Chairman and members of the Committee. Thank you for giving me the opportunity to testify before you today on H.R. 1456—the Shark Fin Sales Elimination Act.

My name is Vance Kondon, and I am originally from San Diego, California, where I grew up just several blocks from the ocean, and where I spent much of my free time surfing, skin diving and fishing. It was in this time in my youth that I came to love and appreciate the wonder of the ocean and its inhabitants. After high school, I joined the military and served our great nation for 30 years, with my final assignment at Joint Base Andrews, Maryland, just a short distance from the Capital, before retiring just coming up on about 2 years ago. During my years of service, I had the opportunity to travel and live in parts of the world where I was able to spend time in the ocean and pursue training in scuba diving, beginning in 1987 in Guam. I completed training as a divemaster in 1999 and assisted in training other divers while stationed in Honduras from 2004 to 2008. After retiring from the Air Force in 2016, I completed my scuba instructor certification and have since been serving in a management role and instructor at Rainbow Reef Dive Center in Key Largo, Florida, which is the largest dive operator in the Florida Keys and one of the busiest diving training centers in the Western Hemisphere.

SHARKS AND TOURISM

Science has proven time and time again that sharks play important roles in ocean ecosystems around the world. But it may not be as well known that sharks play important roles in ocean-based tourism economies, including here in the United States. There have been a number of scientific studies that show shark-watchers spend hundreds of millions of dollars on shark ecotourism every year around the world, and that number is growing.¹

In 2017, an independent study commissioned by Oceana found that direct expenditures for shark encounters in the diving industry totaled over \$221 million and fueled over 3,700 jobs in Florida, mine included.²

These numbers may seem large, but I can tell you from firsthand experience that people in Florida love to see sharks. Though there is never truly a slow dive season for us in Key Largo, during the peak summer season, from the end of May through October, at Rainbow Reef alone, we will take anywhere from 750 to 1,000 customers out to Key Largo's reefs each week. Most of those customers want to see the bigger aquatic life when we take them out: turtles, rays, and most importantly, sharks. Our guests come from all over the world because Key Largo has an incredible reputation of being "The Dive Capital of the World," so they come with an expectation that the reefs and reef life, including sharks, will be in abundance. Unfortunately, we have to let guests know that we only occasionally see sharks, and that we'll do our best to take them to locations where they may see them, because it is not something that happens as often as we would like.

SHARKS IN TROUBLE

One reason this happens is because the dive tourism industry is being threatened by the demand for shark fins—one of the greatest threats to sharks around the world. This demand has driven some populations of sharks to ever lower numbers, which hurts dive businesses across the United States.

¹ Cisneros-Montemayor, Andres M., Michele Barnes-Mauthe, Dalal Al-Abdulrazzak, Estrella Navarro-Holm, and U. Rashid Sumaila. "Global Economic Value of Shark Ecotourism: Implications for Conservation." *Oryx* 47, no. 3 (July 2013): 381–88. doi:10.1017/S0030605312001718.

² <http://usa.oceana.org/press-releases/new-report-finds-shark-related-diving-generated-over-221-million-florida-2016>.

In Key Largo, we see nurse sharks most often, but not on every dive trip. Sadly, it has become much more rare to sight the Caribbean reef sharks that we used to see more of in the past. When we are really lucky, which is only a few times a year, we see one or two hammerhead sharks on our reefs. Hammerhead sharks have suffered immensely from the fin trade and, currently fetch some of the highest prices for their fins. In the eastern Gulf of Mexico, the average price for a hammerhead fin is \$15.95 per pound. This stands in stark contrast with the meat from this same shark, which only is worth about \$0.25 per pound.³ Additionally, scalloped hammerheads in the Atlantic are considered overfished and are experiencing overfishing, while the smooth and great hammerheads do not have species-specific stock assessments—the basis of any sustainably managed fishery.⁴ As dive professionals, it is hard for us to see shark populations suffer due to the fin trade because we love to see the sharks alive and swimming in our reefs. This also means we are not able to share that experience with our guests as often as we'd like, which would be on every dive trip if it were possible!

Shark finning, the act of slicing the fin off a shark and dumping the body back into the ocean, is a gruesome result of the demand for shark fins. While finning is illegal in the United States, it still occurs. In fact, almost exactly 1 year ago, Florida Fish and Wildlife Conservation Commission officers stopped a Key West shrimp boat that had been illegally finning in U.S. waters—a mere 20 miles north of the island.⁵

This is not the only time this has happened in recent years. An inquiry from Senator Booker's office revealed that since January 1, 2010, NOAA has investigated 85 incidents involving alleged shark finning; 26 of those investigations have resulted in charges.

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.⁶

In January 2017, divers in West Palm Beach encountered dead sharks missing fins on one of their dives.⁷

I, myself, have seen evidence of this horrible act in U.S. waters. Just last year, on one of our deep wreck sites in Key Largo, we were horrified to find several sharks that were finned and dumped to die in the Florida Keys National Marine Sanctuary. Unfortunately, we arrived likely long after the sharks were finned and dumped, as there were no other boats in the area of the dive site and the sharks were already deceased.

It is impossible to tell whether a fin has been cut off of a shark legally or illegally once it is detached from the body. It's not impossible that the fins from the sharks I saw that day may have ended up in a bowl of soup served here in the United States.

SHARK FIN IMPORTS

Things get even more complicated when shark fin imports are brought into the mix. The United States has deemed finning illegal due to the cruel and wasteful nature of the practice. However, I was shocked to learn that we are actively importing shark fins from countries that do not have the same protections in place.

Miami, a city close in proximity to the dive businesses that are thriving due to sharks, is importing shark fins from Hong Kong yearly. In fact, Miami has been the #1 importer of shark fins from Hong Kong since 2015.⁸

This is a problem because a recent study showed that fewer than 10 species in the Hong Kong fin trade have sustainably managed fisheries anywhere in their range, and nearly one-third were considered vulnerable or endangered by the International Union for Conservation of Nature.⁹

We cannot continue to participate in this trade that is decimating shark populations around the world.

³ <https://www.federalregister.gov/documents/2017/11/22/2017-25203/atlantic-highly-migratory-species-2018-atlantic-shark-commercial-fishing-season>.

⁴ <https://www.fisheries.noaa.gov/national/population-assessments/fishery-stock-status-updates>.

⁵ <http://www.miamiherald.com/news/local/environment/article142029049.html>.

⁶ http://www.nola.com/outdoors/index.ssf/2016/02/fishermen_plead_guilty_after_f.html.

⁷ <https://www.youtube.com/watch?v=vcYJRUsR7jw>.

⁸ https://www.st.nmfs.noaa.gov/pls/webpls/trade_alldstrect_byproduct.results?qttype=IMP&qyearfrom=2010&qyearto=2018&qproduct=SHARK&qsort=DISTRICT&qoutput=TABLE.

⁹ Fields, A.T., Fischer, G.A., Shea, S.K., Zhang, H., Abercrombie, D.L., Feldheim, K.A., . . . & Chapman, D.D. (2017). Species composition of the international shark fin trade assessed through a retail-market survey in Hong Kong. *Conservation Biology*.

SHARK FIN SALES ELIMINATION ACT

There is a simple solution to this problem—to end the demand for shark fins in the United States, and to ensure that any fin, even if illegally obtained, cannot be sold here.

The Shark Fin Sales Elimination Act (H.R. 1456) would do exactly that.

Already, 12 states have banned the sale and trade of shark fins and they are not alone. They join 40 airlines, 20 major shipping companies, and 7 large corporations. Fifty-one percent of international airlines now have 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.¹⁰ Support for this act is overwhelming—8 in 10 Americans support a fin ban, as do 9 aquariums, multiple recreational fishing interests, over 150 chefs, 150 scientists, 85 surfers, surf businesses and surf publications, and over 500 U.S. businesses and organizations, including mine.

The world is moving toward ending the shark fin trade, and the United States has an opportunity to be a leader. This opportunity should not be wasted.

Mr. LAMBORN. Thank you. Dr. Parsons, you are now recognized for 5 minutes.

STATEMENT OF DR. GLENN R. PARSONS, PROFESSOR OF BIOLOGY AND DIRECTOR OF THE CENTER FOR BIODIVERSITY AND CONSERVATION RESEARCH, DEPARTMENT OF BIOLOGY, UNIVERSITY OF MISSISSIPPI, OXFORD, MISSISSIPPI

Mr. PARSONS. Thank you, Chairman Bishop and Subcommittee members. I would like to express my deepest appreciation to the many Republican and Democratic legislators supporting the Shark Fin Sales Elimination Act. It is very gratifying to see the overwhelming bipartisan support that this legislation enjoys. I am honored to be given the opportunity to provide my point of view.

I am Dr. Glenn Parsons, Professor of Biology at the University of Mississippi and Director of our Biodiversity and Conservation Biology Research Group. As director, I represent many scientists who support this legislation.

My credentials for testifying here include millions of dollars in grant funding and awards for conservation research from several top conservation organizations in the world, as well as several government agencies, including the EPA and NOAA and my conservation work has also been endorsed by two different governors of Mississippi, one Democratic and one Republican. However, my most important credential is my 40 years of personal hands-on experiences with sharks.

You see before you a man that has been slapped, slashed, and bitten by sharks, a scientist that was the first to film sharks being born, a researcher that has spent long hours in the laboratory and at sea on board research and commercial vessels trying to solve the shark bycatch problem, an educator that has taught hundreds of students the wonders of shark biology, and an author of many papers and books on sharks. I am affectionately referred to as Sharkman by my friends and family, whereas I actually prefer Dr. Sharkman. It is clear that sharks are an important part of my psyche and career.

¹⁰<http://www.scmp.com/news/hong-kong/economy/article/2089229/chinas-biggest-airline-bans-shark-fin-cargo>.

Distinguished Committee members, there are those that will argue that this bill will have an insignificant effect on shark conservation. When the United States sets the example, other countries will likely follow suit in exactly the same way that U.S. states and various businesses have banned the fin trade.

For example, a recent article by the *South China Post* noted that shark fin imports to Hong Kong have been cut by half since 2007, owing to shipping bans and tighter international regulations. They say it will be a loss of income to U.S. fishers. I am sympathetic to the plight of commercial fishers. I have worked closely with the commercial industry for years, however, this bill does not stop commercial shark fishing. Over 70 percent of the value of the shark fishery will still be retained. Therefore, I ask you, would it inspire you to support this legislation by describing the feeling of wonder that scientists such as myself, divers, surfers, tourists, aquarium goers, and others receive from working with and observing this public natural resource.

Would it inspire you to describe the important role sharks play in ocean ecosystems as keystone species and their amazing sensory abilities. These are animals that can detect the faintest electric fields, a sensory modality that we cannot even begin to appreciate. Can I kindle in you a sense of outrage to tell you that I have personally witnessed declines in the populations of sharks in the Gulf of Mexico. Unless we make changes, we will likely see the extinctions of many charismatic organisms, sharks included, in the near future.

NOAA's latest status of stocks update lists the number of shark stocks that do not even have stock assessments. These include silky sharks, tiger sharks, smooth and great hammerheads, and many more. These sharks I just listed are among the most popular in the fin trade. Could I appeal to your sense of right and wrong by describing shark finning, the cruel and wasteful removal of a shark's fin while the body is discarded, that is going on even as we speak, how those tainted fins end up in U.S. markets, and how some of those fins are from threatened or endangered shark species speeding them toward extinction.

A final few comments. The foundations of the field of conservation biology began with the religious idea of man as a faithful steward of creation. Many of the religions of the world believe there is a connection between the natural and spiritual world. Extinction breaks that connection and diminishes the earth.

Extinction of an organism is like discovering ancient text written in a language that we cannot yet decipher and then destroying them all. Who knows what mysteries would have been solved, what questions could have been answered by the words written there?

So, I ask you—will we look back and say we should have been better stewards? This is our moment to send a message to the world that the United States will no longer participate in the shark fin trade. I hope that we will not miss our moment.

Thank you.

[The prepared statement of Mr. Parsons follows:]

PREPARED STATEMENT OF DR. GLENN R. PARSONS, PROFESSOR OF BIOLOGY AND DIRECTOR OF THE CENTER FOR BIODIVERSITY AND CONSERVATION RESEARCH; DEPARTMENT OF BIOLOGY; THE UNIVERSITY OF MISSISSIPPI ON H.R. 1456

INTRODUCTION

Thank you Chairman Lamborn and Subcommittee members. First, I would like to express my deep appreciation to the many Republican and Democratic legislators for supporting the Shark Fin Sales Elimination Act (H.R. 1456). It is very gratifying to see the bipartisan support that this legislation has enjoyed. I am honored and excited to be given the opportunity to provide my point of view. In this testimony, I hope to convey to you a sense of how important this legislation is to me personally and, no doubt, to many of your constituents.

My name is Glenn Parsons, a Professor of Biology at the University of Mississippi, where I teach, among other things, Conservation Biology and The Biology of Sharks. I am also Director of the University of Mississippi Center for Biodiversity and Conservation Biology. As director, I represent some 30 scientists who are committed to investigating means to help maintain the biodiversity of the planet, and all of whom support the Shark Fin Sales Elimination Act.

BRIEF CREDENTIALS

Regarding my academic credentials: my undergraduate degree is from the University of Alabama, Birmingham, my master's degree is from the University of South Alabama, and my doctoral degree is from the University of South Florida, School of Marine Science. I have been recognized and received awards for my marine and freshwater conservation research by the World Wildlife Fund, the Rolex Corporation, the Walton Foundation for Marine Research, the National Fish and Wildlife Foundation, two different governors of Mississippi (one a Democrat and the other a Republican), the National Marine Fisheries Service, The U.S. Army Corps of Engineers, the Mississippi Department of Wildlife and Fisheries, and various other organizations. I have directed to completion 18 master's and doctoral graduate students, many of them shark biologists. I have studied sharks for the past 40 years, published over 100 scientific papers, reports, books and popular articles on sharks and other fishes, and received millions of dollars of grant funds to investigate shark and fish biology.

RESEARCH EFFORTS

Approximately 15 years ago, my research focus turned to the problem of bycatch in commercial and recreational fisheries. Bycatch refers to the unintended, unwanted capture of non-target species. An example of this is the non-target sharks captured during commercial tuna fishing. Unfortunately, the vast majority of those sharks do not survive the stress of capture. Bycatch is an enormous problem in many fisheries around the world, and new technology to reduce or eliminate bycatch is sorely needed. As a matter of fact, I received an award from the World Wildlife Fund for my work on bycatch. I have worked very closely with the National Marine Fisheries Service and with many members of the commercial fishing industry in the Gulf of Mexico and Atlantic to address the bycatch issue. Recently, we received research funding to investigate novel methods to allow sharks to escape after being hooked by fishers and to help sharks survive the rigors of capture. This work on shark bycatch has been some of the most rewarding and perhaps the most important of my professional career!

SHARKS: A PERSONAL VIEW

When I was invited to submit testimony in support of this legislation, I asked myself "What are my credentials for doing this?" My credentials for delivering this testimony are not my degrees, titles and scientific accomplishments. Not the classes I teach, the graduate students of shark biology I have directed, nor the amounts of grant money and awards I have received. My most important credential is my 40 years of personal experiences with sharks.

I have been slapped, slashed, and bitten by sharks. I've assisted with shark birth and was the first to document sharks being born on film. I have walked sharks around in shallow, tropical water for hours, trying to help them recover from capture stress. I have spent long hours in the laboratory, and countless hours at sea, investigating methods that might help sharks to survive the stress of capture. I have taught many students the wonders of shark biology. I have even written and recorded a song about sharks. For what it is worth, my friends and family affection-

ately refer to me as “Sharkman.” To say sharks occupy an important place in my psyche is clearly an understatement.

SHARKS AS KEYSTONE SPECIES, SHARK FISHERIES

Sharks likewise occupy an important place in oceanic ecosystems. As a top predator, they play an important role in regulating the populations of their prey species. Reducing or eliminating these “keystone species” may result in unpredictable, deleterious, and potentially irreversible changes in marine community structure. A “cascade” of effects caused by declining large shark populations has already been scientifically documented. The decline in shark populations has been the result primarily of commercial and recreational fisheries and the demand for the most prized parts of their bodies—the fins.

In general, shark species are terrible candidates for supporting a fishery. Consider their biology: female sharks produce relatively few “pups,” some may require many years to mature, and some have a long life span that is necessary to produce the number of offspring to maintain their populations against natural rates of attrition. Superimpose the added burden of many millions of sharks removed from the oceans by fishing and you have a recipe for disaster:

- 70 to 100 million sharks killed by commercial and recreational fishers each year, and some estimates have been as high as 270 million.
- Shark populations reduced by 50 to 90 percent over the last 10 years.
- Troubling declines in the “great” species of sharks in the world’s oceans.
- Sixty-eight of the approximate 500 species of sharks listed by the IUCN are Vulnerable, Endangered, or Critically Endangered.
- Sixty species listed as Data Deficient.
- Cascading ecosystem effects due to shark removal.

A 2013 study in the journal *Marine Policy* found that sharks continue to be captured at rates that far exceed their ability to replace themselves. This paints a very disturbing picture for a fishery and for attempts to manage that fishery. Management is possible for some of the smaller species, but for large species, carefully collected biological data is required, a difficult task in the face of limited management personnel and limited resources. Despite herculean efforts on the part of Federal and state managers, we still lack critical data necessary for management of the vast majority of shark species. Compiling shark data for population modeling is difficult and complicated by the fact that different populations of the same shark species could have very different management needs depending on where they’re located. Mortality rates (and other biological data) estimated for the southern populations of a particular shark species may not be the same as in northern populations of the exact same species. This begs the question, how many shark populations are there in the world? We have no idea.

The message is clear; our understanding of shark population dynamics for most species is rudimentary at best and non-existent at worst, making the idea of a sustainable fishery for most shark species farcical at this point in time. To exemplify the above problem, when I first became involved in shark research in the late 1970s, there were only two reasonably sound estimates of shark natural mortality. Fast forward to 2018, over 40 years later, and there are maybe 5 species (out of 500!) whose natural mortality has been estimated with some reliability. It’s taken over 40 years and we don’t have much more information than we did when we started—and this is only one example of the lack of data for many shark stocks both in the United States and abroad.

SHARKS AND THE DEVASTATING FIN TRADE

The 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. 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 percent of the fins in the global fin trade are from unsustainable sources, and fewer than 10 species in the Hong Kong fin trade have sustainably managed fisheries anywhere in their range.

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 come from countries that have no regulations against finning, and those fins could 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.

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, and Nevada) and all three Pacific territories have banned the sale and trade of shark fins.

In addition to states taking action, 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. Over 51 percent of international airlines, by seat capacity, have now banned shark fins. Worldwide, 17 of the 19 biggest shipping lines measured by container capacity have banned shark fins, impacting 71 percent of the global market. However, as companies and states close the door to 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. 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. Additionally, even states that have bans, like California, are still importing fins because of enforcement issues with interstate commerce.

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 these issues. To be clear, H.R. 1456 does not prohibit *shark fishing*, it merely prohibits the sale and trade of the shark's fins.

SHARKS AS LIVING TREASURES

The frequency at which sharks appear in literature, film, and television attests to their popularity among vast numbers of people in the United States. It seems that folks have an almost unlimited capacity for anything shark-related. Go to any public aquarium and you will see patrons standing in rapt attention, absolutely captivated by the power and grace of sharks as they pass before them. I can describe the feeling of fascination that myself and many of your constituents receive from being in wild places, experiencing sharks in their natural habitat, and feeling that I am, at least for a time, connected to the natural world. The sensory biology of sharks, and the fact that they are capable of detecting the faintest electric fields, a sensory modality that we as humans cannot begin to appreciate, is awe-inspiring. Not only are sharks valuable in an aesthetic sense, they represent a treasure-trove of valuable biological information. For example, recent findings indicate that compounds discovered in sharks have great potential as pharmaceuticals to treat various human diseases. The drug discoveries that shark biology is presently providing will no doubt alleviate much human suffering.

CONCLUSIONS

We are losing wild places in the world and the species that inhabit them at an alarming rate. The species remaining are compressed into smaller and smaller areas, a serious problem called *habitat fragmentation*. Unless we start being smarter about how we treat the environment and the organisms found there, most biologists predict that we will see many extinctions in the very near future. While I have always been skeptical of gloom-and-doom predictions, I have seen the numbers and they do not look good. Habitat fragmentation and loss of biodiversity are the two biggest problems faced by conservation biologists today.

I have personally witnessed declines in populations of large sharks in the Gulf of Mexico. It is clear that a major factor driving shark population declines is the demand for shark fin soup. The fear among many scientists is that we will soon lose many of the largest shark species to extinction. Extinction is permanent. You do not get a do-over with extinction.

Finally, the foundations of the field of conservation biology began with the religious idea of man as a faithful steward of creation. Many of the religions of the world believe there is a connection between the natural and the spiritual world.

Extinction breaks that connection and diminishes the earth. A short quote from my book "Sharks, Skates and Rays of the Gulf of Mexico":

"Extinction of an organism is like discovering ancient texts written in a language that we cannot yet decipher, and then destroying them all. Who knows what mysteries would have been solved, what questions could have been answered by the words written there?"

Will we look back on this day and regret that we should have been better stewards? This is our moment to send a message to the world that the United States will no longer participate in the trade in shark fins. I hope that we will not miss our moment.

QUESTIONS SUBMITTED FOR THE RECORD TO DR. GLENN R. PARSONS, PROFESSOR,
THE UNIVERSITY OF MISSISSIPPI

Questions Submitted by Rep. Barragán

Question 1. A study by the University of Miami has found that shark fins contain high concentrations of BMAA, a neurotoxin linked to neurodegenerative diseases in humans, including Alzheimer's and Lou Gehrig's disease (ALS), and suggests that consumption of shark fin soup may pose a significant health risk for degenerative brain diseases.

1a. In addition, the Food and Drug Administration and EPA recommend that women who might become pregnant, women who are pregnant, nursing mothers, and young children should not eat shark because it contains high levels of mercury.

1b. Given this information, do you think shark fin and meat consumption is wise?

Answer. Long-lived marine animals, such as many shark species, may potentially bio-accumulate toxins. Bio-accumulation refers to the fact that over time, very small quantities of toxins that may be normally found in the sharks' prey, will concentrate in the flesh of the predator. This can become a significant problem when animals live to be 50, 60, 70 years old or more. Each year that passes results in additional toxin accumulating in the flesh. When we consume the flesh of these long-lived animals, we may be putting ourselves at significant health risk.

The situation with BMAA is an interesting one. BMAA is found naturally in many plants and animals. One of the first indications of a toxic effect was discovered on the island of Guam. An unusually large percentage of people on Guam were afflicted with ALS-parkinsonism at a rate that was 50 to 100 times greater than the rest of the world. A particularly popular dish for the Gumanian people were large bats called Flying Foxes. Consumption of these bats was infrequent prior to the introduction of firearms following World War II. Afterwards, islanders were able to harvest bats with great efficiency. The appearance of ALS-parkinsonism in the population closely followed the increased consumption of Flying Foxes. The bats were shown to have bio-accumulated BMAA to very high levels and every time Guamanians feasted on bats they dosed themselves with the toxin. The connection between neurological disease and BMAA was bolstered when brain tissues of Guamanians that died of ALS were found to have high levels of the toxin and bats found in museum specimens from that time period had incredibly high levels of the toxin in their tissues. Additionally, BMAA has been detected in the brain tissues of North American patients who died of Alzheimers.

BMAA has recently been identified in shark flesh and fins. The compound may pose a health risk in and of itself. However, sharks are also known to bio-accumulate mercury and this creates an additional health hazard. The important question, that we cannot as yet answer, is how do these two compounds interact in the human body when they are consumed. Both BMAA and methyl mercury may cause neurological damage leading to Alzheimer's, Lou Gehrig and Parkinsons. The recommended limits on consumption of shark flesh set forth by the FDA and EPA specifically reference the high mercury content. As it turns out, the two toxins may have a synergistic effect. A synergism occurs when the effects of two factors combine together to create an effect greater than the sum of their individual effects. It is like drinking a cup of hot coffee or eating a habanero pepper. They are both hot. But if you consume the two of them together, it may feel much, much hotter. Their individual effects may work together synergistically, to have a much larger total effect. This is the concern regarding BMAA and mercury in shark flesh and fins. If they act synergistically, there may be an elevated risk for neurological damage in those consuming the flesh and fins.

I apologize for a long-winded answer to a simple question: I certainly agree with the FDA and EPA limits on consumption. It is possible that healthy adults can consume shark flesh with no problems. However, I personally do not consume the flesh (and certainly not the fins) and would not recommend it to others. It is not worth the risk in my opinion.

Question 2. Why can't we just ban imported shark fins?

Answer. My understanding of the issue with a simple ban on imported fins concerns World Trade Organization principles of non-discrimination in trade. WTO member countries cannot treat imported products differently than domestic products and countries cannot discriminate between their trading partners. If either of these principles are violated, a country could sue the United States before a WTO tribunal. That country could also retaliate against the United States by raising the prices of certain exports, and U.S. consumers could end up paying for the violation.

A parallel situation involved the U.S. attempt to prohibit the import of shrimp originating from countries that did not require Turtle Excluder Devices (TEDs) in their shrimp trawls. TEDs obviously were (and are today) required in the United States to prevent the capture and subsequent death, of protected sea turtles in shrimp trawls. However, the ban on imported shrimp did not survive WTO scrutiny. To achieve WTO compliance, the United States modified the regulation, negotiated international agreements, and provided technical assistance with TEDs to any government that requested it. This took years and cost taxpayers significant amounts of money to defend 10 Federal court cases and 4 WTO panels.

H.R. 1456, The Shark Fin Sales Elimination Act of 2017, avoids all of the troubles that would result from attempting to ban imported shark fins. H.R. 1546, unlike H.R. 5248, is simple, has few moving parts, directly addresses the problem of shark finning, and will clearly achieve what it says it will achieve.

Question 3. Where is the majority of the shark fin trade located?

Answer. The majority of the global shark fin trade was historically located in Hong Kong. While Hong Kong remains an important center of the fin trade, recently the shark fin trade has shifted to Guangzho, a city north of Hong Kong.

In this regard, it is important to note that shark fin imports to Hong Kong have been reduced by 50 percent since 2007 largely due to shipping bans and tighter international regulations. The World Wildlife Fund stated that the declining market for shark fins in mainland China is "promising" and an indicator that environmental campaigns, including mounting pressure on shipping companies to stop carrying the fins, as well as improved monitoring of shipping documents, were paying off.

The above observations provide additional support for H.R. 1456 and suggest that the bill will place additional pressure on individuals, companies, and governments to stop the trade in shark fins.

Questions Submitted by Rep. Sablan

Question 1. How easy is it to get new technologies that are proven to reduce shark bycatch implemented in U.S. fisheries?

Question 2. Is there a process for getting these new technologies implemented once they are proven?

Answer. My experience with implementing new bycatch technologies in U.S. fisheries is that it is a very long-term undertaking. Clearly, the first step is to conduct the research needed to verify that the new technology or change in fishing method will accomplish a reduction in bycatch. That can be the lengthiest step. The research must be thorough and may require years of study to complete. Unfortunately, ideas that sound great on paper often do not work in actual application. Various methods have been tried but, to my knowledge, none has been particularly successful.

Through work in my lab at The University of Mississippi, I have developed a new type of leader that has been shown, in preliminary testing, to reduce shark bycatch by 86 percent. Funded by the National Marine Fisheries Service, through the National Bycatch Reduction Program, the new leader, called the entangling leader, encourages sharks to "bite off" the line after the hook has been taken. The leader has loops of line that entangle in the sharks teeth (but not in typical fish teeth), the teeth cut the line, and the shark swims away unharmed. While we only have limited field-testing, the initial results were promising. However, we do not know if the leader will result in a reduction in target fish (tuna/swordfish) catch.

Additionally, the leader design will necessitate a change in the manner in which commercial fishers deploy their gear.

I do not have a good understanding of the administrative machinations required to make changes to fishing policies. In discussions with my colleagues, introducing or requiring new technology in a particular fishery would be different depending upon the circumstances. For example, if the species in question is endangered (like sea turtles), the responsibility for requiring the new technology (for example TEDs) would fall under the Endangered Species Act. In the case of weak hook requirements in U.S. fisheries, that rule change came about through the NOAA, NMFS Office of Highly Migratory Species. A change, for instance, involving bycatch reduction in the shrimp trawl fishery, might go through one of Fisheries Management Councils (i.e. Gulf of Mexico Fisheries Management Council). To an outsider looking in it appears far too complicated to me.

Question 3. In order to be considered a sustainable fishery, is it important for fisheries to minimize its bycatch, especially for sharks?

Answer. Bycatch, the incidental capture of non-targeted species, is the most pressing problem faced by fisheries managers today. All fisheries around the world suffer from some form of bycatch. Some are very “clean” fisheries with little bycatch. Others, like various longline fisheries (miles of line with many hooks) have significant amounts of bycatch including sea turtles, birds, marine mammals and elasmobranchs (sharks, skates, rays).

Maintaining healthy shark populations is very much dependent upon the survival of older individuals (sub-adults and adults). Many shark species are particularly sensitive to reductions in numbers of the mature and maturing members of the population. Unfortunately, these individuals are the targets of most fisheries and are often the individuals taken as bycatch. Information from a report by the Pew Charitable Trust on shark bycatch in tuna fisheries underscores the bycatch problem:

- In the 1980s and 1990s it was estimated that 300,000 metric tons of sharks, nearly a third of the global total, were the result of unregulated bycatch.
- Annual average of more than 20,000 tons of dead blue sharks are discarded in the North Atlantic tuna fishery alone.
- In pelagic longlines, sharks often make up more than a quarter of the total catch (target and bycatch).

Clearly, attempts to manage a fishery become considerably more difficult when unregulated removal of individuals from the population occurs due to bycatch in other fisheries. All indications are that shark bycatch is exceedingly high and, for some fisheries, the estimates seem to be fairly accurate. However, for many fisheries we have either a very poor estimate of bycatch or none at all.

The bottom line: successfully managing any shark fishery requires reliable values on the catch of sharks taken in the direct fishery and reliable values of sharks taken as bycatch in other fisheries.

One additional point I would like to make that is germane to the above discussion. As long as shark fins command such a high price (\$500/pound, perhaps more?) there will be an issue with unregulated take and shark finning by outlaw fishers around the world. Some shark species are very sensitive to declines in their populations. Take for example, the Dusky Shark, that was seriously over-fished to the point where it will require 100 years(!) to rebuild stocks to 50 percent of its original size. I am unconvinced that species, like the Dusky shark and others with similar population characteristics, could ever be managed to make the fishery both economically viable and sustainable.

Question 4. Can the United States do more to minimize shark bycatch in its fisheries?

Answer. Quoting the Pew Charitable Trust report from 2010 mentioned above: “the problem of bycatch has been largely ignored, and no meaningful or effective action has been taken to adequately address the issue.”

Some recommendations for reducing shark bycatch:

1. **Require a change from high tensile strength monofilament line (the line typically used by longline fishers in the tuna/swordfish fishery in the United States) or wire leader to high tensile strength “Spectra”.** One of the aspects of my research on shark bycatch was to examine the differences in monofilament versus Spectra fishing line. The idea was that if we can identify a line that encourages shark “bite offs,” but still retains the

target species (tuna/swordfish), then this line could be used to allow sharks to more easily escape after taking the hook. We found that when 300 pound tensile strength Spectra is placed under load and subjected to a blade (similar to a shark's tooth) the line failed at a rate 500,000 times greater than monofilament. Spectra has very good tensile strength but when compromised by a shark's tooth, it fails very rapidly. In my report regarding that research submitted to the National Marine Fisheries Service I stated that "if commercial fishers made the simple change from high tensile strength monofilament to Spectra there would be many additional shark "bite-offs" and shark bycatch would be reduced.

If you would like to see a demonstration of the above described effect, visit my Youtube video <https://www.youtube.com/watch?v=ybul0pCqqho>. Please note that I stated in the video that the line was 300 kg tensile strength but it was actually 300 pound tensile strength.

2. **Further develop the entangling leader.** It is possible that the entangling leader (mentioned above) might be developed to reduce shark bycatch. The leader's design encourages bite-offs and the fact that it employs Spectra fishing line increases its effectiveness.
Note: Some of the following are not issues in U.S. fisheries but are needed in shark fisheries worldwide.
3. **Ban wire leaders in pelagic longlines.** This is similar to the above recommendation from my research. However, wire leaders are used in some longline fisheries and they retain sharks very effectively.
4. **Require circle hooks.** Circle hooks will eliminate bycatch but the survival rate of sharks released after capture is much higher than that of sharks captured on "J" hooks. Circle hooks are less likely to result in sharks being hooked in the gut or throat and thus enjoy greater survivorship after capture.
5. **Change bait type.** There is evidence that suggests that sharks are more likely to be captured on squid as opposed to fish bait. Eliminate squid as bait to reduce shark bycatch.
6. **Require TEDs in trawl fisheries.** Turtle excluder devices in bottom trawls effectively reduce sea turtle capture but also significantly reduces the capture of many sharks.
7. **Invest in additional research** to develop new bycatch reduction methods and to further investigate those that show promise.

Question 5. In what way would you say the United States is lacking most in its management of shark fisheries?

Answer.

1. **More basic research is needed.** Despite Herculean effort on the part of the National Marine Fisheries Service (they are not magicians!), we still lack vital basic information regarding most shark species. For wise management, fecundity, age at maturity, longevity, and rates of natural mortality (and fishing mortality) are required for any fishery. Since sharks are typically poor candidates for supporting a fishery, the above values become critically important. An extremely valuable piece of information for managing a fishery is the population's rate of natural mortality, i.e. how many individuals in the population die each year. Clearly, if we plan on harvesting a portion of that population, knowing how many die from natural causes is important. In the absence of that information, we run the risk of inadvertently reducing the population to levels from which it may not be able to recover (extinction then becomes a possibility). When I began studying shark back in the late 1970s we had one maybe two estimates of natural mortality for sharks (there are some 500 species of sharks). Fast-forward 40 years to today and discussions with my colleagues/friends who study shark population dynamics revealed that we have maybe 5 to 10 natural mortality estimates. Additionally, the consensus is that none of them are reliable estimates!! That is not a very good track record after 40 years.
2. **Stop managing groups of sharks instead of individual species.** At present we lump species together and create management plans for groups of shark species. We need to do the basic biological research, gather the needed information, and establish management plans for individual shark species and stocks.

3. **Conduct stock assessments on a more regular basis.** The revelation that only two (perhaps only one) stock assessment was conducted last year for U.S. shark stocks suggests that more effort in this area is needed.
4. **Do not allow retention of shark species that are at risk.** I will assume that U.S. fishers do not retain at-risk species but there is the very real possibility that these species are still being retained due to misidentification. This would of course require:
5. **Better education of fishers regarding identification of at-risk species.**
6. **Obtain better estimates of bycatch.** See the discussion above.

Mr. LAMBORN. Thank you. Dr. Hueter, you are now recognized for 5 minutes.

**STATEMENT OF ROBERT E. HUETER, PH.D., DIRECTOR,
CENTER FOR SHARK RESEARCH, MOTE MARINE LABORATORY,
SARASOTA, FLORIDA**

Mr. HUETER. Thank you, Mr. Chairman, and good afternoon. My name is Dr. Bob Hueter, and I am a senior scientist at Mote Marine Laboratory, an independent and non-profit marine science institution based in Sarasota, Florida with a 63-year history of world class research on sharks. I am Director of Mote Center for Shark Research, which was actually established by the U.S. Congress in 1991 in recognition of Mote's leadership in shark research and conservation. My statements today represent both my own professional findings and the official position of Mote Marine Laboratory.

My career studying sharks extends over more than 40 years, and my service on many advisory committees is detailed in my written testimony and resume. These include 21 years on NOAA's advisory panel for highly migratory species, the sharks, tunas, and swordfish. I am also a past president of the American Elasmobranch Society, the world's largest professional organization of experts studying sharks and rays. I have studied more than 100 species of sharks in the lab and at sea, have swam with many species in the wild, have tagged more than 10,000 of the animals. This work has resulted in more than 200 scientific publications. It is fair to say that I really love sharks.

My personal journey as a shark conservationist began in 1988 when I first learned of the previously unknown practice we now call shark finning. I brought this horrendous practice to the attention of the major media at that time beginning a 30-year career as an advocate for science-based shark conservation in state, Federal and international arenas. I have appeared many times on CNN, Fox News, the Discovery Channel, and other forums to spread the word on the importance of sharks and the need to conserve them.

Sharks and rays have been depleted worldwide through overfishing. That is the bad news. The good news is that after 25 years of dedicated work by scientists, conservationists, NOAA, state agencies, and the fishing industry, U.S. shark fisheries have become some of the best managed in the world. And many of our shark fisheries today are healthy or rebounding from past over exploitation.

Eighteen U.S. shark and ray fisheries are identified as bright spots of sustainable fishing. Clearly, the United States is doing

something right with respect to shark conservation and responsible fisheries management, but for a number of other nations things are not so good.

Global shark fisheries are conservatively valued at about a billion dollars. The meat is a major source of protein in some nations and shark fins are used in shark fin soup, a culinary delicacy in Asian cultures. None of these uses are in themselves unethical as long as the animals from which they came were fished sustainably. That has been the problem. Unsustainable fishing, as well as finning.

It is vital that we understand the distinction between shark finning and the shark fin trade. Finning is the act of cutting off a shark's fins and discarding the rest of the animal, often alive, at sea. It is done through a total disregard for the future of the resource or for humane treatment of the animals and is fueled by economic greed.

On the other hand, taking fins from sharks landed onshore in regulated, legal, and sustainable fisheries is not shark finning. It provides a legal commodity for trade that encourages the full use of every shark, rather than throwing part of the resource away. Finning is banned in the United States and does not occur here, except rarely by lawbreakers subject to Federal and state prosecution. It has also been banned by at least 40 other countries and some regional fishery management organizations. So, how can the United States incentivize other nations to replicate our success while continuing to promote rule-following fishing and science-based management here at home?

H.R. 5248, the Sustainable Shark Fisheries and Trade Act, introduced by Representatives Webster and Lieu provides a bipartisan, sensible solution. The Act would require that shark and ray products imported in the United States be permitted only from foreign fisheries certified as having and enforcing management and conservation policies comparable to the United States. Nothing from finned sharks would be permitted.

We have done an analysis of the effect of H.R. 1456, the Shark Fin Sales Elimination Act, and although the people, the proponents of this Act need to be congratulated for getting our conversation to this point, we found that it actually would punish the people who are doing things right, the American fishers who are fishing legally and sustainably, and potentially reward nations who are doing things wrong and causing the actual declines in shark and ray populations, and we don't want that.

For these various reasons, I, and my institution Mote Marine Laboratory, support the Sustainable Shark Fisheries and Trade Act, H.R. 5248.

Thank you.

[The prepared statement of Mr. Hueter follows:]

PREPARED STATEMENT OF ROBERT E. HUETER, PH.D., DIRECTOR, CENTER FOR SHARK RESEARCH, MOTE MARINE LABORATORY, SARASOTA, FLORIDA ON H.R. 5248 AND H.R. 1456

INTRODUCTION

My name is Dr. Robert Hueter and I am a Senior Scientist at Mote Marine Laboratory, an independent, non-profit research and education institution based in Sarasota, Florida. Over its 63-year history, Mote has grown from a one-room

laboratory to a world-class marine research and science education enterprise that now has five campuses stretching from Sarasota Bay to the Florida Keys, 24 research programs, 200 staff, 35 Ph.D.-level researchers, 1,658 volunteers and more than 11,000 members. Our research has evolved from a primary focus on sharks to now conducting diverse studies of our oceans, with an emphasis on conservation, sustainable use and environmental health of marine and coastal biodiversity, habitats and resources. We also have significant education, public outreach and public policy programs that are integrated with our research.

I am the Director of Mote's Center for Shark Research, which was established by the U.S. Congress in 1991, in recognition of Mote's leadership in research and conservation of sharks and their relatives, the skates and rays (hereafter simply called the sharks and rays). My statements here represent both my own professional findings and the official position of Mote Marine Laboratory.

For 27 years, Mote's Center for Shark Research has worked as a completely independent research entity to provide NOAA much of the information the agency requires to understand and sustainably manage sharks as a marine resource. My personal experience with shark fisheries spans more than 40 years, including fisheries research on sharks of the Atlantic Ocean, Gulf of Mexico, Caribbean Sea and Pacific Ocean. For the past 21 years, I have served as one of only four academic members of NOAA'S Advisory Panel for Highly Migratory Species (sharks, tunas, swordfish, billfish), and have served on the Shark Specialist Group of the United Nations' International Union for the Conservation of Nature (IUCN) for about 20 years. I also am a Past-President and currently serve on the Board of Directors of the American Elasmobranch Society (AES), the largest professional organization in the world comprising scientists, students, and other experts studying sharks and rays, collectively known as the elasmobranch fishes.

My experience as a shark conservationist began in 1988, when I was made aware of the previously unknown practice we now call "shark finning." I brought this wasteful and inhumane practice to the attention of the major media, beginning a 30-year career as an advocate for science-based shark conservation. For decades I have translated scientific discoveries to inform public policy that benefits shark populations and the communities and nations who value sharks as a marine resource. In 1991, I presented my data and concerns about an expanding, unregulated U.S. shark fishery to the Florida Marine Fisheries Commission, which took my recommendations and enacted the first management plan for sharks in Florida state waters. Florida has been a state leader in shark conservation ever since.

I then championed shark research and science-based fisheries management and conservation on the Federal level beginning in 1993, by organizing an international conference that drew 150 scientists, policy makers, fishers and other stakeholders. At that meeting held at Mote, NOAA acted on this group's incredible momentum and announced its first Federal Fisheries Management Plan (FMP) for sharks. Since then I have remained actively engaged as a shark scientist and conservationist on many domestic fronts, including giving testimony to the House Subcommittee on Fisheries Conservation, Wildlife and Oceans in 1999, as Congress worked to close loopholes in Federal anti-finning laws.

Knowing that many sharks migrate between the United States and other nations, I also have led efforts to improve shark fisheries sustainability and conservation measures abroad, particularly in Mexico and Cuba. One of our most exciting successes has been Cuba's National Plan of Action (NPOA) for sharks and rays, released in 2015. I participated in the plan's development, drawing upon my years of collaborative research with Cuban scientists in their home waters. I knew then, and know now, that conservation and management of sharks and rays must become more consistent internationally. Simply managing these stocks for sustainability in U.S. waters doesn't work, because these animals do not recognize political boundaries.

The good news is that after 25 years of dedicated work by shark researchers, conservationists, NOAA and various state agencies, and the fishing industry, U.S. shark fisheries have become some of the best managed in the world, and many of our shark fisheries are healthy or rebounding from past over-exploitation. A 2017 paper by two renowned experts in global shark fisheries (attached) identified 18 U.S. shark and ray fisheries as being "bright spots" of sustainable fishing. This comprises about two-thirds of all the sustainable shark and ray fisheries in the world. Clearly, the United States is doing something right with respect to shark conservation and responsible fisheries management. How can the United States incentivize other nations to replicate our success, while continuing to encourage rule-following fishers and promote science-based management at home?

I am here today to answer that question. I deeply thank the members and staff of the Subcommittee on Water, Power and Oceans for this opportunity.

SCOPE OF THE PROBLEM

Last month, H.R. 5248, the Sustainable Shark Fisheries and Trade Act, was introduced in the U.S. House. It utilizes a science-based approach to discourage overfishing and unsustainable trade of sharks and rays around the world and disincentivizes shark finning by foreign nations.

Why is this necessary?

Of the more than 1,250 species of sharks and rays in the world's oceans today, as many as one-quarter are estimated to be threatened with extinction. The conservation status of nearly half is poorly known. These fishes are particularly vulnerable to over-exploitation—most grow slowly, mature late and produce few young. Overfishing, through targeted fisheries and incidental bycatch, is the primary threat to sharks and their relatives, which are harvested for their meat, fins, oil, cartilage and other products. Shark and ray meat is a major source of protein in some nations, and shark fins are used to make shark fin soup, a culinary delicacy in many Asian cultures. None of these uses of shark and ray products are in themselves unethical, as long as the animals from which they came were fished sustainably. That has been the problem—unsustainable fishing mortality of sharks—in addition to the cruelty and wastefulness of shark finning.

It is important to understand the distinction between shark finning and the shark fin trade: *finning* is the act of cutting off a shark's fins and discarding the rest of the animal, often still alive, at sea. Without its fins, sharks will slowly die, as the fins do not grow back. It is a practice fueled by total disregard for the future of the resource, any consideration for humane treatment of the animals, and economic greed. On the other hand, taking fins from sharks landed onshore in regulated, legal and sustainable fisheries is *not* shark "finning." It provides a legal commodity for trade that encourages the full utilization of every shark, rather than throwing part of the resource away. Full utilization of landed sharks and rays is consistent with guidelines in the International Plan of Action (IPOA) of the Food and Agriculture Organization (FAO). Finning is banned in the United States and does not occur in our domestic fisheries, except rarely by lawbreakers subject to Federal and state prosecution. It also has been banned by at least 40 other countries to date, as well as by regional fishery management organizations such as ICCAT, the International Commission for the Conservation of Atlantic Tunas.

Losing the sharks and rays from the marine environment would have dire consequences for marine ecology and the balance of life in the sea. Research has shown that removal of sharks from ocean communities such as coral reefs creates a "trophic cascade" of ecological effects down to the lowest levels of the food web, and can lead to the general degradation of the entire community. Losing sharks and rays also would lead to the loss of income and quality of life for fishing communities and seafood consumers, threatening food security in some developing nations that depend on these fishes as important sources of protein for human consumption. According to a recent, comprehensive FAO report by economist Felix Dent and shark specialist Dr. Shelley Clarke, global shark fisheries are conservatively valued at about \$1 billion, with much of these fisheries under-reported. In 2011, total trade in shark products was valued at \$438.6 million for the fins and \$379.8 million for the meat. These figures apply only to international trade and do not include domestic use of shark products, which drives much of the global consumption for the around 2 million metric tons of sharks caught each year. The value of the shark tourism industry, which includes activities such as diving with sharks, is also estimated to be around \$314 million annually.

Because of the scope and complexity of shark and ray fisheries around the world, even our best efforts to manage these fishes in domestic waters cannot guarantee similar protections abroad. We can, however, create incentives for other nations to adopt standards of shark fishing similar to our own. This past January, the United States implemented the Seafood Import Monitoring Program (SIMP) to end imports into the United States of shark products from illegal, unreported and unregulated (IUU) fisheries, but the third U—unsustainable—is missing from these regulations, representing a critical loophole. For instance, a foreign shark fishery could be legalized and reported but deficient in law enforcement or scientific monitoring, leading to the same result of shark depletion by overfishing as in IUU fisheries. SIMP also does not currently include ray products in its monitoring program.

A SCIENCE-BASED POLICY THAT BENEFITS BOTH SHARKS AND PEOPLE

H.R. 5248, the Sustainable Shark Fisheries and Trade Act introduced by Reps. Webster and Lieu, with the co-sponsorship of Reps. Posey, Jones, Clay, Soto and Bilirakis, provides a bipartisan, sensible solution to the need for U.S. domestic action in global shark and ray conservation. The Sustainable Shark Fisheries and

Trade Act would require that shark and ray parts and products imported into the United States be permitted only from countries certified by NOAA as having in place and enforcing management and conservation policies for these species comparable to the United States, including science-based measures to prevent overfishing and provide for recovery of shark and ray stocks. Prohibitions on shark finning comparable to the U.S. ban also would be required.

The predecessor bill, H.R. 1456, the Shark Fin Sales Elimination Act of 2017, sought to ban all shark fin trade within the United States, including fins obtained legally and sustainably by American fishers permitted in U.S. shark fisheries. This earlier bill catalyzed an important and productive public conversation about the threats to sharks worldwide in directed and bycatch fisheries. The proponents of H.R. 1456 are to be congratulated for their dedicated work on this issue and for moving the conversation toward finding real solutions for shark conservation. The bill did not cover threats to rays and focused solely on shark fins, not all shark products. In a peer-reviewed paper published late last year (attached), shark expert Dr. David Shiffman and I analyzed the consequences of a Federal domestic fin ban as proposed by H.R. 1456. We found this approach would fall short of providing the type of U.S. leadership that is needed for effective shark conservation around the world.

H.R. 5248, the Sustainable Shark Fisheries and Trade Act, builds upon the progress made by H.R. 1456, by broadening protection for both sharks and rays, and also including restrictions on the trade of all shark and ray products, not just the fins. The bill creates incentives for change in fisheries management by nations seeking to export shark or ray products to the United States, rather than placing burdensome and unnecessary penalties on law-abiding American fishers.

Passage of the Sustainable Shark Fisheries and Trade Act by Congress would help ensure that shark and ray products in U.S. markets are from fisheries managed under similar high standards that U.S. fisheries are already held to—a positive for the U.S. fishing industry. It also will give the U.S. Government leverage in working with other nations to establish an international system to conserve shark and ray populations, by rewarding sustainable fisheries management through permitted trade—a big win for the conservation of these vulnerable species.

Most importantly, the Sustainable Shark Fisheries and Trade Act gives the American public a sensible answer to a reasonable question they often ask: How can we as U.S. citizens contribute to the cause of global shark conservation? We tell our fellow citizens to support international efforts to rein in IUU shark fisheries. We tell them to help with the effort to get all fishing nations to ban the practice of finning. We ask them to support the work of shark conservation NGOs and the research of shark scientists. But they want to know how they can promote U.S. legislation that will advance the cause of global shark conservation. H.R. 5248, the Sustainable Shark Fisheries and Trade Act, will give the American people an effective tool to say, “No longer will we allow the import and consumption of unsustainably fished shark and ray products on American soil. Our participation as consumers in this practice ends now.” The bill does this without punishing American fishers who are conducting legal and sustainable shark fishing, providing a model of responsible management and conservation for the rest of the world.

SUPPORT FOR H.R. 5248

As a leading shark scientist as well as a proactive advocate for shark conservation for the past 30 years, I support the Sustainable Shark Fisheries and Trade Act. It identifies the source of the problem, incentivizes foreign fisheries to adopt U.S. standards of sustainability, and rewards U.S. fishers for the gains that have been made in domestic shark fisheries management. Many of my fellow scientists have joined me in supporting H.R. 5248. The Wildlife Conservation Society (WCS) is submitting a scientists’ letter of support for H.R. 5248 that includes approximately 60 (as of this writing) of the world’s leading experts in shark science and fisheries. These signatories are all active marine science professionals with Ph.D. or Master’s degrees. Included in the list are 12 Past-Presidents of the American Elasmobranch Society. These 12 scientists represent the best and brightest leaders in shark research and conservation over the past 25 years.

RECOMMENDATIONS TO CONGRESS

In my capacity as an expert scientist specializing in the study and conservation of sharks and rays, and on behalf of Mote Marine Laboratory, I recommend that Congress take the following measures:

- Pass the Sustainable Shark Fisheries and Trade Act, H.R. 5248, to significantly benefit shark and ray conservation globally and law-abiding fishers domestically.
- Provide the support to NOAA needed to carry out the provisions of H.R. 5248, continue the collection of research data to monitor and manage our shark and ray fisheries, and assist other nations with implementing science-based management of their shark and ray fisheries.
- Increase the Federal penalties for shark finning, which the Florida state legislature has recently done to punish lawbreaking shark fishers and fin dealers.
- Assist in the education of the public about the real problems sharks and rays face, and empower American citizens to support effective measures for shark and ray conservation, in the United States and abroad.

The following documents were submitted as supplements to Mr. Hueter's testimony. These documents are part of the hearing record and are being retained in the Committee's official files:

- “A United States shark fin ban would undermine sustainable shark fisheries,” by D.S. Shiffman and R.E. Hueter, *Marine Policy* 85 (2017) 138–140.
- “Bright spots of sustainable shark fishing,” by C.A. Simpfendorfer and N.K. Dulvy, *Current Biology* 27, R97–R98, February 6, 2017.

Supplemental Testimony from Robert E. Hueter, Ph.D., Director, Center for Shark Research, Mote Marine Laboratory, Sarasota, Florida on H.R. 5248 and H.R. 1456

MOTE MARINE LABORATORY & AQUARIUM,
SARASOTA, FLORIDA

April 23, 2018

Hon. DON BEYER,
U.S. House of Representatives,
Washington, DC 20515.

Dear Congressman Beyer:

It was a pleasure to testify before the House Subcommittee on Water, Power and Oceans on the shark issue last Tuesday. I truly appreciated your consideration and probing questions and respect your opinions on this important topic in marine conservation and your desire to understand more about the facts. I do, however, feel that some of the information that has been passed to you on this topic is slanted and just plain wrong. Please consider the following:

- The statement that 73 million sharks are *finned* each year is absolutely false. Once again, “finning” is being confused with legitimate, sustainable shark fishing. The reference to 73 million sharks arises from a careful study of the Hong Kong fin market by renowned fin trade expert Dr. Shelley Clarke about ten years ago. Her estimates were that the fins of approx. 38 million sharks—with 73 million being the *highest* estimate in her confidence interval—passed through the Hong Kong market every year. Never mind that her numerical estimate was half of what is being constantly quoted, and the fin trade has actually declined in the past decade since Dr. Clarke did her study. The most important fact is that *these fins are not all from “finned” sharks*. As I explained in my testimony, *finning* is not the same as taking the fins from sharks landed onshore by non-finishing fishermen. A huge portion of those 38 million sharks were harvested without finning, where the nations doing the

fishing were utilizing the whole animal. Most developing nations do not fin sharks, as they need the meat protein for human consumption. But they do send their fins to the Hong Kong market so their fishermen can realize revenue from the fins. There is nothing wrong with this. The proper way to express this, then, is that Dr. Clarke estimated that “*the fins of approx. 38 million sharks pass through the Hong Kong market every year,*” back when she did her study. Not that 38 million, or 73 million, or 100 million (as I’ve often heard) sharks are *finned* every year. The difference is extremely important.

- Shark finning is not legal in the United States. It has been federally prohibited for nearly 20 years, and in some states like Florida even longer than that. Any insinuation that finning is commonly occurring in U.S. waters is a deliberate attempt to misguide people. U.S. commercial shark fishermen despise the practice and take matters into their own hands if they hear of one of their fellow fishermen doing this. Those lawbreakers are prosecuted. As I stated in my written testimony, I recommend the penalties for finning in U.S. waters be increased substantially, to ensure that this is taken very seriously. But let’s get it straight: Finning is not a problem within the U.S. The problem exists with other nations operating primarily on the high seas. American fishermen should not be punished for the sins of foreign fishermen.
- Any analogy between the shark fin situation and elephant ivory is without merit. First, elephants are almost never killed for their meat, whereas tens of millions of sharks are fished for their meat as well as their fins. Most importantly, the U.S. is only a 1% player in the shark fin market, whereas we were the major consumers of elephant ivory before it was banned in the U.S. Thus our banning of ivory collapsed that industry, but a similar ban on shark fins won’t have nearly the same kind of direct impact on world trade. And finally, consider that too many elephants are still being killed for their ivory, by poachers, so it’s not as if the ivory ban fixed the problem. In fact it drove the practice underground and we’ve lost any kind of accounting of how many elephants are being killed. We don’t want to do that with the shark fishing industry.
- Traceability of the origin of fins is possible, we just haven’t committed to doing it yet. That is something the Webster-Lieu bill will address, and it’s clear that NOAA is eager to discuss modifications to the bill that would best allow for that. A proposal is under review by NOAA to study the fin industry and develop a business model whereby all U.S.-landed fins are tagged and fully traceable and trackable to their source. If that project moves forward, that will allow us to tell whether or not shark fins were “made in the U.S.A.”
- It is absolutely reasonable to be totally against finning but not against the trade and use of the fins, and still be a shark conservationist. I don’t think a single person in the hearing chamber last Tuesday was for finning—that is not the issue. The issue is how we keep out the fins from finned sharks without penalizing the fishermen who are not finning. H.R. 4258 accomplishes that objective, H.R. 1456 does not.
- The fact is that many, I daresay most, of the proponents of the domestic fin ban are actually committed to eliminating all shark fishing in the U.S., sustainable or not. This is where conservationism crosses the line over to preservationism. These groups see the domestic fin ban as the easiest and cheapest way to end the U.S. commercial shark fishery. And that it will do, because without the revenue for the fins, that fishery becomes untenable, except perhaps for the dogfish fishery in the northeast U.S.—which, by the way, has an exception and actually allows removal of dogfish fins at sea. The conservation groups who are pushing for the adoption of H.R. 1456 should stop being disingenuous with the public and state that their ultimate goal is the elimination of all fishing for sharks, period. These factions have no faith in the American system of fisheries management to achieve sustainability in our shark fisheries. As a fellow shark conservationist, I do not share this opinion of our institutions with them.
- As noted at the hearing, 12 states have banned the trade of shark fins: Hawaii, California, Oregon, Washington, Illinois, Delaware, New York, Massachusetts, Maryland, Texas, Rhode Island and Nevada. What do these 12 states have in common? None had a commercial shark fishery of any size—except Massachusetts, which made sure it got the exception for its dogfish, its major shark fishery. I note that your state of Virginia has not banned shark fins—is that because Virginia has a commercial fishery for sharks?

Let's be honest, the banning by the 12 states was completely symbolic and did not affect its citizens, except the Asian cultures living in those states. That will not be the same for states such as Florida, North Carolina and Louisiana, where much of the legal shark fishery is based. As for the effect on Asian cultures, this brings up another question: Is it the American way to take away an ethnic group's right to consume a product if that product is safe and has been produced legally, ethically and sustainably?

- Finally, less than 10 of the approximately 150 "scientists" who signed on to the Oceana letter of support for H.R. 1456 are actually scientists with leading expertise in sharks or shark fisheries. In contrast, all 62 of the Ph.D. and Master's-level scientists who signed on to the Wildlife Conservation Society (WCS) letter of support for H.R. 5248 are recognized, active professional shark researchers, experts in the field of sharks and shark fisheries. The WCS letter signatories include 12 Past-Presidents of the American Elasmobranch Society, the world's largest professional organization of shark scientists. Which letter's group is better informed on this issue? Clearly it's the group who signed the WCS letter.

Congressman Beyer, I welcome the opportunity to discuss these points with you and your staff at your convenience. I myself feel largely responsible for the difficulties in this debate, because I was one of the very first scientists to begin this public conversation on the vital need to conserve sharks, 30 years ago. I have worked tirelessly since then to bring the science of sharks to the public and to policymakers. And I've been hugely successful—now, I feel, almost too successful, because the pendulum has swung unnecessarily from no conservation, past a new movement in shark conservation, over now to preservationism of sharks. I'd like to see reason and the facts stay within this debate as we bring this discussion back into balance.

Thank you for your consideration of my views and I would be happy to provide further information on this matter at your request.

Best regards,

ROBERT E. HUETER, PH.D.,
Senior Scientist and Director, Center for Shark Research.

QUESTIONS SUBMITTED FOR THE RECORD TO DR. ROBERT HUETER, DIRECTOR OF THE
CENTER FOR SHARK RESEARCH, MOTE MARINE LABORATORY

Question Submitted by Rep. Lamborn

Question 1. Supporters of H.R. 1456 have argued that such a ban on shark fin sales would send a message to other countries. What message do you think this ban would send?

Answer. The supporters of H.R. 1456 are hoping the message the United States will send to other nations with a domestic fin ban is that shark fins should no longer be tolerated as a consumable product. This U.S. leadership, they hope, would end the global fin market, eliminate all shark finning, and recover shark populations worldwide. Analogies are made to past U.S. leadership in the elephant ivory trade and in commercial whaling. But as explained in Dr. David Shiffman's and my 2017 peer-reviewed paper in the journal *Marine Policy*,¹ this approach is flawed and will not work, for several reasons. Unlike in the case of elephant ivory where the United States was the world's major consumer, we are only a 1 percent player in the world shark fin market, and thus our withdrawal from that market will not have the same type of direct effect on world trade of fins as happened with the ivory trade. In fact, it's reasonable to conclude that the small market share of shark fins that U.S. fishers currently supply will be taken up by nations fishing sharks unsustainably, probably even finning the sharks. Recall that U.S. fishers do not *fin* their sharks—that is, they do not remove the fins and discard the rest of the animals at sea, because American fishers are required to land all their sharks with the fins still "naturally attached" (with the exception of the northeast dogfish fishery, which is allowed to remove the fins at sea to begin processing the meat and fins on the fishing boat). So the consequences of this action will be to punish the

¹Shiffman, D. and R. Hueter. 2017. A United States shark fin ban would undermine sustainable shark fisheries. *Marine Policy* 85:138–140.

fishers doing it right—U.S. shark fisheries—and reward the foreign fisheries doing it wrong. That is a terrible message to send the world.

Furthermore, our position at the international negotiating table where shark conservation issues are discussed will be compromised if we withdraw from the fin market. The message we will be carrying to that forum is, no matter what other nations do to create sustainability in their shark fisheries, it will never be enough to allow them to harvest the fins, in our view. This loss of leverage will backfire for U.S. attempts to advance shark conservation around the world. In addition, consider today's realities with elephants and whales: elephants are still being poached as the ivory trade has been driven underground, meaning we can no longer track this commodity through world trade routes, and elephants are still declining. And whales are still being hunted commercially by those nations who do not share our preservationist beliefs about marine mammals. Along these lines, a domestic fin ban also sends a message to Asian cultures that even if they are using the entire shark, even if the sharks are not being finned and the level of fishing for them is sustainable, their use of fins to make soup is unethical. This creates a clash of cultural values, both internationally and domestically, and our moral position will be difficult to defend.

Finally, by focusing our legislative efforts solely on the fin trade in the United States, we send a message to American citizens that we are solving the worldwide problem in shark depletion by banning the fins here. Conservation groups then declare victory to their supporters, Congress moves on to other issues, and the U.S. public thinks the problem has been solved. Nothing could be further from the truth, as sharks will continue to be caught by other nations for their meat and fins and suffer unsustainable levels of bycatch mortality in foreign fisheries. This is where H.R. 5248 represents an evolution of thinking in how to address the issue, by not simply focusing on the fins and also including the rays, which are in as serious trouble as the sharks worldwide.

Therefore, in my view the message we will be sending the world if we implement a nationwide, domestic ban of the shark fin trade is this: The United States does not believe in sustainable fishing for sharks, we do not subscribe to the full use doctrine for marine resources as laid out by the Food and Agriculture Organization (FAO) of the United Nations, we condemn Asian cultures for their consumption of shark fins even from sustainable shark fisheries, and we are okay with damaging our own domestic fisheries to construct a purely symbolic but misguided and ineffective message for shark conservation.

Questions Submitted by Rep. Sablan

Question 1. Do you believe that the United States does an adequate job at conducting regular stock assessments for shark species in U.S. waters?

Answer. Stock assessments, the quantitative analysis of the status of a fish stock, are complicated and costly procedures. The average national cost of each stock assessment by NOAA has been estimated to be approximately \$1.7 million.¹ Factors limiting the number of stock assessments that can be conducted include adequate funding, adequate staffing, and adequate data. For sharks, data was a major problem when species identification was poorly done and a number of species were lumped into broad categories, which was not conducive to conducting species-specific stock assessments. This is less of a problem today with the evolution of data collection from shark fisheries and the commitment of Federal and state management to shark conservation. However, adequate fisheries-dependent and fisheries-independent data can still be problematic, although a number of new quantitative approaches have emerged that allow assessments for data-poor cases.

On the Federal level, NOAA conducts an average of perhaps one or two stock assessments for sharks each year. Given the number of shark species being managed (23 authorized species for commercial fishing, 19 prohibited species, 42 total species in the Atlantic and Gulf commercial shark fishery), this pace of assessments has a hard time keeping up with the needs for effective management. Priority of stock assessments has been placed on critical species such as sandbar and dusky sharks undergoing rebuilding, as well as important species to commercial and recreational fisheries such as the blacktip shark and several small coastal species. For pelagic sharks, ICCAT has recently assessed the shortfin mako in the Atlantic. But some species such as the great hammerhead have been inadequately assessed, raising the level of concern for these sharks. Stock assessments must be repeated on

¹Merrick, R. and R. Methot. 2016. NOAA's cost of fish stock assessments. https://www.npfc.org/wp-content/PDFdocuments/CM/2016/102016/NOAA_FisheriesCostofStockAssessments.pdf.

a regular basis, furthermore, to monitor changes in stock status. Ideally, all shark stocks should be assessed at least every 5 years, but this goal is probably impractical.

The challenge for NOAA is balancing the cost of these stock assessments with the value of the shark fishery. On a pure economic level, it is difficult to reconcile the relatively low value of U.S. shark fisheries with the relatively high cost of stock assessments. But on a conservation and environmental level, these stock assessments are critical to understanding the status of sharks in U.S. waters. NOAA has dedicated a large portion of its budget to increasing the pace of stock assessments for all federally managed fisheries, including sharks, and we conduct more assessments of sharks than any other nation. This has helped make us the leader in shark conservation and management that we are today.

Question 2. Do you think the United States should prohibit the fishing of additional shark species? If so, which species should be prohibited?

Answer. Placing species on the prohibited list should only be done with data-based justification. At present there are 19 species of sharks on the prohibited list for commercial fishing and 21 species prohibited for recreational fishing. The two sharks that concern me and are not on the completely prohibited list are the oceanic whitetip shark and the hammerheads (a complex of three species). These sharks are prohibited to be landed by boats possessing pelagic fishing gear or other pelagic fishes (such as tunas and swordfish), but in my view, complete prohibition of retention of these sharks is called for. The oceanic whitetip shark is a relatively clear-cut case, in my opinion, of a severely depleted species, now listed as Threatened under the U.S. Endangered Species Act (ESA), which should always be released. The problem with the hammerheads is their post-release survivorship can be very poor, especially with the great hammerhead because of its physiological sensitivity to struggling while on fishing gear. Thus releases of that shark species might not provide as much benefit as hoped. In this case, other measures might be needed to minimize bycatch in addition to requiring all caught animals be released. Note that the state of Florida has made hammerheads a prohibited species group in state waters.

Question 3. In what way would you say the United States is lacking most in its management of shark fisheries?

Answer. At one time not too long ago, there were almost no regulations on shark fishing in the United States. Now, after 25 years of dedicated work by scientists, conservationists, NOAA, state agencies, and the fishing industry, U.S. shark fisheries have become some of the best managed in the world, and many of our shark fisheries today are healthy or rebounding from past over-exploitation. Eighteen U.S. shark and ray fisheries have been identified as “bright spots” of sustainable fishing by independent international experts.² Clearly, the United States is doing something right with respect to shark conservation and responsible fisheries management.

Even so, improvements can be made to U.S. shark fisheries management, to make it more visionary. Management tends to be reactive and crisis-responding, rather than proactive with incentives to move the fishery toward 100 percent sustainability. Defined targets for stock size, other than “not overfished,” are often lacking. I have advocated that we direct the fishery away from some of the more vulnerable large coastal species and toward targeting the faster-growing, high-yield species like the blacktip shark, which exists as healthy stocks in the U.S. Atlantic and Gulf. This recommendation for more proactive management has largely fallen on deaf ears, with managers choosing to follow the lead of the fishery and then reactively deal with the problems that crop up. This does not have to be the case, but is symptomatic of U.S. fisheries management in general. With more proactive management in collaboration with the commercial and recreational fishing sectors, research and stock assessments could be better focused on target and bycatch species, and the fisheries could become even more economically viable for long-term sustainability.

Mr. LAMBORN. Thank you.

I want to thank the entire panel for being here today and for giving us your helpful testimony.

² Simpfendorfer, C.A. and N.K. Dulvy. 2017. Bright spots of sustainable shark fishing. *Current Biology* 27:R97–R98.

We will now move into questions on H.R. 1456 only. We have two additional bills up for consideration, and I would ask people to reserve their questions on those two bills after each of those later two bills have been introduced by the bill sponsors.

I would like to remind Members that Committee Rule 3(d) imposes a 5-minute limit on questions. I will begin with myself and then recognize the Ranking Member, but before I do that I would ask unanimous consent that we receive into the record five letters in opposition to H.R. 1456. Hearing no objection, so ordered.

[The information follows:]

Florida wildlife officials won't support federal shark fin ban

POLITICO Florida

Bruce Ritchie

July 10, 2017

<https://www.politico.com/states/florida/story/2017/07/10/florida-wildlife-officials-wont-support-federal-shark-fin-ban-113289>



In May, more than 100 Florida dive shops sent a letter to the state's congressional delegation asking it to support a ban on the shark fin trade.

State wildlife officials said Monday they are not supporting federal legislation that would ban the trade of shark fins.

Shark fins are valuable in Asian countries for a soup that is believed to increase sexual potency. Environmental groups support eliminating the trade to prevent shark finning, the illegal practice of cutting off fins and leaving sharks to die. Shark fins can be sold legally along with other shark meat.

In May, more than 100 Florida dive shops sent a letter to the state's congressional delegation asking it to support a ban on the shark fin trade. H.R. 1456, which has eight Florida co-sponsors, would prohibit the possession or sale of shark fins.

But state officials told the Florida Fish and Wildlife Conservation Commission meeting in Orlando on Monday they don't support the bill because of the impact it would have on commercial fisherman and because shark finning is illegal now.

"We don't believe it will improve the sustainability of the shark fishery," Brian McManus, the commission's representative in Washington, said of the federal legislation.

In the recent state legislative session, S.B. 884 would have established a similar ban in state law.

Facing opposition from commercial fishermen, the bill was watered down by the Legislature to only increase fines for illegal shark finning. The bill was signed into law by Gov. Rick Scott on May 23.

Robert Hueter of Mote Marine Laboratory in Sarasota told the commission to listen to its staff and not support a ban on the trade. He said a ban would not affect the international market in countries that do not promote sustainable shark fishing.

“In short, we’ll be punishing the good guys and rewarding the bad ones,” he said.

But Lora Snyder with the Oceana environmental group said shark fins still are being imported into Florida from countries, such as China, without finning bans.

And she said tourists spend \$221 million a year on diving trips in Florida to see sharks and that a survey showed 88 percent of Floridians support a ban on the trade. She said 12 states have adopted bans on the shark fin trade.

And she compared the issue to the U.S. ban on ivory typically harvested through elephant poaching.

“In the United States we said no more ivory,” Snyder said. “That’s what we want to see done [with shark fins] here in the United States as well.”

Commissioner Ron Bergeron said Florida represents only 1 percent of the global shark fin trade. He also said he was taught “to use every part” of the animals and fish he killed.

“To discard the fins onshore just seems like a waste to me,” Bergeron said. “It impacts our fishermen. I really don’t think it [shark finning] will stop.”

Commissioner Robert A. Spottswood questioned why the state allows shark fins to be imported from countries that haven’t banned finning. Agency executive director Nick Wiley said the responsibility for regulating imports may fall on the federal government rather than the state.

“This is definitely something we could look into,” said Jessica McCawley, director of the agency’s Division of Marine Fisheries Management.

Florida co-sponsors of H.R. 1456 are Republicans Carlos Curbelo, Vern Buchanan, Matt Gaetz and Ted Yoho and Democrats Charlie Crist, Ted Deutch, Darren Soto and Debbie Wasserman Schultz.

MOTE MARINE LABORATORY & AQUARIUM,
SARASOTA, FLORIDA

April 21, 2017

Hon. DAN WEBSTER,
U.S. House of Representatives,
Washington, DC 20515.

Dear Congressman Webster:

I am writing to express my opposition to H.R. 1456, the “Shark Fin Sales Elimination Act of 2017,” which has been referred to the House Natural Resources Committee, on which you serve. I am a senior scientist at Mote Marine Laboratory in Sarasota, Florida. Mote is an independent, not-for-profit research and education organization dedicated to science-based marine conservation. Mote’s international reputation in shark expertise goes back more than 60 years to our laboratory’s founding in 1955, by Dr. Eugenie Clark, our famous “Shark Lady.”

As the Director of Mote’s Center for Shark Research, which was established by the U.S. Congress in 1991 as the nation’s designated research center for studies of sharks, I have more than 40 years of experience with the issues addressed by H.R. 1456. This includes scientific research, advising federal and state resource agencies, collaborating with commercial and recreational fishing industries, conservation education, and domestic and international policy work. I have been a leading, outspoken advocate for shark conservation worldwide, often appearing in national and international media to convey the message of the value, importance and vulnerability of sharks.

There is no question that in many parts of the world, sharks have been severely depleted through overfishing. Credible studies of shark fishery landings over the past ten years estimate that on the order of 100 million individual sharks were caught and killed in world fisheries each year. Most of this fishing pressure is no doubt unsustainable and urgent action is needed to decrease shark mortality. Many of these sharks have been “finned” at sea, that is, their fins were cut off for the sharkfin soup trade and the rest of the animal, dead or alive, was discarded. This

is an inhumane, wasteful and reprehensible practice that should be declared illegal worldwide.

Within the U.S., however, things are different. Federal management of the U.S. shark fishery has been in place since 1993, and state management of shark fishing in Florida has been in place since 1992. Today we have one of the most effective systems in the world for shark fisheries management and conservation. Commercial shark fishermen with federal and state permits rely on the sale of the fins, in addition to the meat and other products, to support their industry. The fins these American fishermen are selling come from legally caught, sustainably managed sharks.

They are not from “finned” sharks—that practice is already illegal in this country. To prevent finning, all sharks must be landed with fins still attached. Anti-finning laws are in place, both federally and in a number of coastal states including Florida, and if a commercial fisherman is caught finning at sea, he is guilty of a crime and is prosecuted. In fact in Florida right now, a bill is working its way through the state legislature that will dramatically increase the penalties for anyone caught finning sharks.

H.R. 1456 is not about ending finning, therefore, but instead will cause the demise of a legal domestic industry (which is active and present in Florida) that is showing the rest of the world how to utilize sharks in a responsible, sustainable way. This bill will do nothing to effectively combat the practice of finning on the high seas and in other countries, where the real problem lies, and it will not significantly reduce mortality of the sharks killed in global fisheries every year. This is because the U.S. supply of shark fins to Asia, the major consumer of fins, comprises less than 3% of the global total. Shutting down the U.S. supply, therefore, will have no real impact on this market. In fact, by prohibiting American commercial fishermen from participating in the legal shark fin trade, H.R. 1456 actually creates more market share for those countries not practicing legal and sustainable shark fishing. It will therefore punish the good people—American fishermen—and reward the bad people, the foreign fleets practicing finning and illegal, unreported and/or unsustainable (IUU) fishing. This effect will be particularly hard-felt in Florida, where we have about 120 commercial boats with directed shark permits and 130 boats with incidental shark permits, plus 30 licensed dealers for shark products. That is a significant number of jobs and impact for the Florida economy that H.R. 1456 will eliminate.

So although it is well-intentioned to benefit the cause of shark conservation, H.R. 1456 will be ineffective in making a dent in the global problem of shark overfishing and will, instead, create unnecessary hardship back at home. Please understand, I believe the conservation of sharks is of paramount importance to the health of our oceans and the economies of our coastal states and fisheries. I also recognize that federal and state bills such as H.R. 1456 are promoted by well-meaning individuals and organizations who think they are doing the right thing for shark conservation. Unfortunately these actions ignore the details, are at best symbolic, and are at worst counterproductive. They are a distraction from the real need to certify imports of seafood products into the U.S. and forge international agreements to end overfishing of sharks worldwide.

Some think that if we Americans make a sacrifice and outlaw the consumption of shark fins here, it will motivate other countries to do the same. The problem with this approach is we are dealing with both a fundamental cultural difference as well as a trade imbalance. An analogy is often made between shark fins and elephant ivory. When the sale of ivory was prohibited in the U.S., it supposedly ended the practice of taking ivory from elephants in Africa, so why shouldn't this work with shark fins? The problem is this is a false analogy, because it fails to take into account that for ivory, the U.S. was the major consumer. That is not the case for shark fins and so a domestic ban here does little to impact global demand and consumption. And this example also ignores the fact that elephant poaching continues in Africa, where the ban has actually driven that trade underground where it cannot be documented and regulated. We don't want the same unintended consequences to happen with the shark fin trade.

What can we do instead on the domestic front to effectively advance the cause of shark conservation? First, we can increase the penalties for fishermen caught finning in U.S. waters, as Florida is now doing for its state waters. Next, the federal government should get serious about certifying fishing nations as either compliant or non-compliant with the standards set in the Shark Conservation Act of 2010. Imports of shark products from the non-compliant nations should then be prohibited, using GATT standards of environmental sustainability. Finally, we should incentivize our own American fishermen to supply the demand for shark fins in the Asian communities of our cities in the U.S. This is a common sense approach that

would punish the bad guys and reward American fishermen for complying with heavy regulation and doing the right thing. I believe this is the best example we can set for the rest of the world on this issue.

Thank you for your consideration of my views. I am happy to answer any questions or provide any additional information you may require.

Sincerely,

ROBERT E. HUETER, PH.D.,
Associate Vice President for Research,
Directorate of Marine Biology and Conservation
Perry W. Gilbert Chair in Shark Research
Director of the Center for Shark Research

STATE OF LOUISIANA,
DEPARTMENT OF WILDLIFE AND FISHERIES

July 7, 2017

Mr. Acy Cooper, President
Louisiana Shrimp Association
P.O. Box 1088
Grand Isle, Louisiana 70358

Re: Shark Fin Trade Elimination Act of 2017, S. 793 , H.R. 1456

Acy:

As requested by you on June 7, 2017, the department has reviewed the text of Senate bill 793 and House Resolution 1456, also known as the “Shark Fin Trade Elimination Act of 2017” and the “Shark Fin Sales Elimination Act of 2017,” respectively. The bills, in their current form, would place unnecessary economic burdens on Louisiana shark fishermen. As long as responsible management is in place, which is currently the case for sharks in the Gulf of Mexico, there is no need for this legislation.

The purpose of these bills as stated by the authors is to “curtail the act of ‘finning’ sharks while reducing the U.S. contribution to the global shark fin market.” The practice of shark finning is already illegal in the United States and Louisiana and has been since the 2000s. All sharks landed in Louisiana must have their fins naturally attached until landed. Once a shark is landed in Louisiana, these fins may then be removed and processed separately.

Information available on NOAA’s National Marine Fisheries Service commercial statistics website shows that in 2015, 17,059 kilograms (37,530 pounds) of shark fins were exported from the United States to other countries while 24,016 kilograms (52,835 pounds) of shark fins were imported from other countries. The total estimated global shark fin trade, was an estimated 17,500 metric tons (according to a 2015 F.A.O. report on the state of the global market for shark products). These U.S. total imports and exports amount to less than 1% of shark fins traded globally. This bill will likely have little impact on the global trade in shark fins, especially the illegal trade of shark fins. The majority of shark fin exports do not move through the United States. The majority of fins exported from the United States, in the past, moved through California to the Hong Kong Market. However, since the California ban on shark fins in 2015, the shark fin trade now mainly flows through Mexico and Canada in North America. These bills will do little to reduce global trade or curtail illegal practices on the high seas, but will economically impact responsible U.S. fishermen. Data for 2016 were not yet available.

Sharks are indeed a vital part of the marine ecosystem, however those sharks harvested in the United States, along with their fins, are sustainably harvested in accordance with regulations and quotas established by the NOAA Fisheries Highly Migratory Species Division and the State of Louisiana. By eliminating a domestic market for legally harvested fins, this legislation will only have adverse impacts on Louisiana fishermen who legally harvest sharks and their fins as well as the coastal fishing communities where they live. These bills will create unnecessary regulatory waste of legally harvested shark parts by not allowing fishermen to sell fins from a legally harvestable shark species. These bills ban one part, the most valuable part, of an otherwise legally harvestable animal creating a situation in which an entire fishery would effectively be shut down. They will either not affect global shark fin

markets, or at worst, will encourage further development of unregulated harvest to replace the regulated U.S. landings.

The shark fishery is an important winter fishery in Louisiana as it provides a critical seasonal source of income to a number of commercial fishermen until other fisheries open later in the year.

Possible alternative measures to allow the legal shark fishery of the U.S. to continue to harvest and sell legally obtained fins while working to reduce illegal finning practices:

- 1) Legislation mandating tracking and traceability of legally harvested fins as opposed to an outright ban.
- 2) Provide for tracking and traceability measures of imported and exported fins to determine legal origin of those fins originating from or entering into the U.S.
- 3) Prohibit the importation or exportation of shark fins that can't be verified to have come from legally landed sharks.

If you have any further questions regarding this issue, please feel free to contact Jason Adriance at jadriance@wlf.la.gov or at 504.284.2032.

Sincerely,

JACK MONTOU CET,
Secretary.

The Shark Scientists Opposed to a U.S. Ban on the Shark Fin Trade

NewsDeeply

Sophie Yeo

September 26, 2017

<https://www.newsdeeply.com/oceans/articles/2017/09/26/the-shark-scientists-opposed-to-a-u-s-ban-on-the-shark-fin-trade>

The United States Congress is considering legislation to impose a national ban on the shark fin trade in a rare bipartisan move to stop the slaughter of a top ocean predator whose body parts are used to make soup.

Conservationists are cheering, right?

Not quite.

Some scientists argue such a law is a misguided effort that could set shark conservation back decades. Banning all trade in shark fins would damage sustainable shark fisheries in the U.S., create unnecessary waste and have little impact on the global market for shark fins, say marine biologists David Shiffman of Simon Fraser University in British Columbia and Robert Hueter, a senior scientist at the Mote Marine Laboratory in Sarasota, Florida. The two shark specialists outlined their views in a paper published recently in the journal *Marine Policy*.

“Many environmental activists want a solution that can fit on a bumper sticker, when really it’s a complicated, worldwide trade involving many different types of species in over 100 countries, and the solution is going to be complicated,” said Shiffman.

Shark finning—the practice of removing the fins of a living shark and discarding the body at sea—is already banned in the U.S. But fishers can still legally catch a certain quota of sharks and sell both the meat and the fins.

A 2013 study estimated that humans kill as many as 100 million sharks each year.

The bill pending in the Senate, called the Shark Fin Trade Elimination Act of 2017, would prohibit the sale of shark fins across the U.S., with violators facing a fine of up to \$100,000. A companion bill is also progressing through the House of Representatives.

A similar bill died in Congress last year. But this time, its supporters are optimistic. They have two years to pass the legislation and have gained the support of Democrats and Republicans, including Arizona Republican John McCain.

Supporters say that a ban would hurt the global market for shark fins and contribute to the decline in the industry worldwide.

But the number of fins that the U.S. imports each year is tiny, according to Shiffman and Hueter.

At just 0.2 percent of the global trade, a ban would barely make a dent in the global market. Some of these imports come from sustainable fisheries abroad, they say, while others are imports of sustainably caught U.S. fins that have been exported for processing.

“The U.S. is a relatively small contributor to the global shark fin trade,” says Shiffman. “Removing our fins from the market is not going to have an impact on the global market directly, in terms of the numbers of sharks killed.”

In fact, a ban could have the opposite effect, Shiffman and Hueter write in their paper, by causing a rise in shark mortality. Shark meat sales bring in around \$3.3 million each year in the U.S., while shark fins are valued at around \$1 million.

Supporters of the ban have suggested that the legislation could indirectly target the global trade, causing the price of shark meat to fall by removing the most valuable part. That could prompt fishers to switch to other species.

But Shiffman and Hueter write that a ban could easily have the opposite effect: forcing fishers to catch more sharks to make up the financial shortfall from the loss of fin sales.

They also say the legislation could also hamper efforts to create sustainable fisheries around the world by eliminating a model of successful management and compromising U.S. efforts to persuade other countries to follow its lead.

The space left by the U.S. could end up being filled by countries that practice inhumane and unsustainable shark fishing practices, according to Shiffman and Hueter.

Ultimately, they note, a shark fin ban fails to tackle the main threat facing sharks: overfishing. While the global trade in shark fins is declining, the trade in shark meat is rising. According to the most recent reliable figures from the United Nations, the trade in shark fins declined by around 18 percent between 2003 and 2011, while the trade in shark meat increased by 42 percent during that time.

“Shark fin soup is not the enemy,” Hueter said. “The enemy is overfishing and killing too many sharks, and this ban will not in itself directly reduce the numbers of sharks that are killed every year by fishermen.”

He and Shiffman say they would support some form of amended legislation, such as a sustainability certification program for shark fin imports.

But other scientists believe the only option for shark conservation is an outright ban on the shark fin trade.

Steve Palumbi, professor of biology at Stanford University, says one problem is that a legal market for fins could allow smuggled imports from unregulated fisheries. “This danger to sharks everywhere would be so that a few U.S. fishermen would reap the benefit of taking large fins from sharks killed on swordfish lines.”

Neil Hammerschlag, a research assistant professor and shark expert at the University of Miami, emphasized that given the conservation challenges facing sharks, doing something was still better than doing nothing.

“It might have a cascading effect to other nations that want to do the same thing,” he said. “You have to be the first person in the pond to drop a pebble if you want to see a ripple effect. This could be a Band-Aid solution until shark populations are recovered.”

**Participants in the Sustainable and Conservatively-Managed
U.S. Commercial Shark Fishery Respectfully Urge Congress to Oppose
the Shark Fin Trade Elimination Act, S. 793 & H.R. 1456**

We are commercial shark fishermen and fish houses that deal in sharks. As such, we are directly impacted by the Shark Fin Trade Elimination Act (“SFTEA”), S. 793 & H.R. 1456, introduced in the Senate and House by Senator Booker and Representative Royce, respectively. **We strongly urge you to oppose SFTEA, which will destroy U.S. jobs and harm coastal economies while providing no environment benefits.**

SFTEA requires fishermen to discard a valuable food product, the shark fin. It deprives hardworking fishermen of income and struggling fishing communities of much needed economic activity. It would have a small but negative impact on the United States' balance of trade with China. Perhaps worse of all, it would mean more sharks are caught in an unsustainable way.

To be clear, SFTEA would spell the end to virtually all legal and sustainable commercial shark fishing in the United States. On average, roughly **half the value of an adult coastal shark is in its fins**. Accounting for fuel, bait, crew, and equipment costs incurred in a fishing trip, loss of fin revenue would make directed shark fishing unprofitable. This fishery contributes a significant—and for some of us, the overwhelming majority—of our income. Given that fishermen face significant fixed costs, such as vessel mortgages and insurance, **these bills threaten our continued ability to maintain our businesses and provide for our families**.

We oppose the practice of shark finning. The industry supported Congress' past efforts to end the practice here and abroad. Shark finning wastes healthful protein that can feed a hungry world. Moreover, our industry has been harmed by illegal shark fins that compete unfairly with our legal product. Ironically, banning trade in domestic shark fins only **opens the international market for more unsustainably harvested shark fins** from nations unbound by U.S. law.

To be clear, **the only beneficiaries of these bills will be the unregulated international fleets engaging in the very practice these bills seek to end**. While the amount of fins the U.S. exports are relatively minor, recently on the order of three percent, that share of the market will go to fishermen in other countries for whom shark finning provides a cost advantage.

We also support efforts to maintain a well-managed and sustainable shark fishery in the U.S. and globally. While we believe some sharks' abundance justifies higher catch quotas, there is no dispute that U.S. management has resulted in a tremendous growth in domestic shark populations. Last year's survey found an astonishing **65 percent more sharks** than the one prior. The index of **shark abundance in 2015 was the highest in its 29-year history**. As a result, the National Marine Fisheries Service just increased the retention limit on large coastal sharks.

This resurgence of sharks was built on our sacrifices over the past twenty-plus years. Those of us that remain in business have weathered **quota reductions of more than fifty percent**. That has meant many lean years. All that sacrifice will be for naught, however, should S. 3095 and H.R. 5584 become law.

These bills are inconsistent with the Magnuson-Stevens Fishery Conservation and Management Act. Its primary objective is to maximize food production, economic returns, and recreational opportunities in a manner consistent with maintaining healthy marine resources and environments. **The United States has demonstrated that it is possible to conduct a responsible and profitable shark fishery, one that serves as a model for other nations**. Mandating waste of a valuable and renewable marine product, as does the SFTEA, is not consistent with our management principles. It is also not consistent with the Magnuson-Stevens Act to render a sustainable fishery uneconomic. **There is no reason to expect other nations would follow this wasteful example**.

SFTEA is of concern to all commercial fishermen. If Congress were to eliminate a responsible fishery without regard to science, economics, management principles, or practical effect to satisfy narrow special interest groups, all fisheries are at risk. That is part of the reason groups like the Sustainable Shark Alliance, Garden State Seafood Association, North Carolina Fisheries Association, Southeastern Fisheries Association, Blue Water Fishermen's Association, and Louisiana Shrimpers Association—represent more than shark fishermen—also oppose these bills.

Attached is brief fact sheet on the domestic shark fishery that details these and other concerns we have with the Act. We are happy to answer any questions you have or provide any further information you may find helpful. You may contact our representative, Mr. Shaun Gehan, at (202) 412-2508 for more information.

Sincerely,

Safe Harbour Seafood, Bon Secour, AL	Bryant Products, Bayou La Batre, AL
Madeira Beach Seafood, Madeira Beach, FL	Save On Seafood, St. Petersburg, FL
Seafood Atlantic, Port Canaveral, FL	Greg Abrams Seafood, Panama City, FL
AP Bell Seafood, Madeira Beach, FL	Fishermen's Ice & Bait, Madeira Beach, FL
Kings Seafood, Port Orange, FL	Wild Ocean Market Seafood, Titusville, FL
Omni Shrimp Company, Madeira Beach, FL	Day Boat Seafood, Lake Park, FL
Phoenix Fisheries, Southport, FL	DSF, Inc., Daytona Bch., FL
Hull's Seafood Markets, Inc., Ormond Beach, FL	Phillips Seafood, Townsend, GA
Ocean Fresh Seafood, New Orleans, LA	Venice Fish and Shrimp, Venice, LA
Southern Seafood Connect'n, Crisfield, MD	Crystal Coast Fisheries, Morehead City, NC
Avon Seafood, Avon, NC	Wanchese Fisheries, Wanchese, NC
O'Neal's Sea Harvest, Wanchese, NC	Jeffery's Seafood, Hatteras, NC
B & J Seafood, New Bern, NC	Willie R. Etheridge Seafood, Wanchese, NC
Crystal Coast Dayboat Seafood, Morehead Cy, NC	Viking Village Seafood, Barnegat Light, NJ
Carolina Seafood, Rutledge Leeland, SC	

F/V Angelina	F/V Blake	F/V Blue Water
F/V Chase	F/V Coupe de Grille	F/V Fishhawk
F/V Honey Bee	F/V Juma	F/V Michelle Marie
F/V Miss Brianna	F/V Miss Maggie	F/V Miss Rita
F/V Rachaelle Nicole	F/V Right Stuff	F/V Sword Fish
F/V Taurus	F/V Tobo	F/V Boss Lady
F/V Miss Alexis	F/V Miss Jessica	F/V J. O'Neal
F/V Reel of Fortune	F/V B.C.	F/V Bobalou
F/V Butter	F/V Sharon G	F/V Watersport
F/V Little Clam	F/V Windy Gale	F/V Logan's Luck
F/V M B	F/V Miss Megan	F/V Shannon D
F/V Sundog	F/V Bout Time	F/V Raven

F/V Sarah Brent	F/V Miss Kaleigh	F/V Miss Madeline
F/V Salvation	F/V Wahoo	F/V Miss Stevie
F/V Shannon Dun	F/V Miss Everett	F/V Blue Fin
F/V Body Count	F/V Little Jo	F/V Gail Mist II
F/V Haley Rose	F/V Black Jack	F/V No Limit
F/V Toucan	F/V Jodie Lynn III	F/V Lady Martiza
F/V Out of Hand	F/V Islander	F/V Top Tuna
F/V Fish Hound	F/V Captain Lynn	F/V Miss Shell
F/V Lisa Ann	F/V Daytona	F/V Miss Haley II
F/V Right on Time	F/V Crosswinds IV	F/V Miss Brenda Louise
F/V Leo B.	F/V Endeavor	F/V Jean Marie
F/V Miss Ann	F/V Capt. Gorman III	F/V Denise Ann
F/V Hull's Sea Lover	F/V 2nd Wind	F/V Pancake
F/V Elizabeth	F/V Emily's Weigh	F/V Albi
F/V Big Eye	F/V Chances R III	F/V Christopher Joe
F/V Day Boat III	F/V Day Boat One	F/V Day Boat Too
F/V Die Trying	F/V Dusty Boy	F/V Erica Lynn
F/V High Voltage	F/V Janice Ann	F/V JC 31
F/V Joshua Nicole	F/V Kelly Ann	F/V Knotty Girl
F/V Lady Linda	F/V Miss Jane	F/V Miss Sierra
F/V My Girl	F/V Osprey	F/V Parker
F/V Provider	F/V Right On Time	F/V Sea Hawk
F/V Shooting Star	F/V Standin' Up	F/V Stella Maris
F/V Straight Flush	F/V Susie Two	F/V Swordfin
F/V T&Sea	F/V Theresa C	F/V Two Can
F/V Two Sons	F/V Vicki Ann	F/V Virgin Hooker
F/V Vitamin Sea	F/V White Water	F/V Whitewater II
F/V Yellowfin	F/V Dana Christine II	F/V Eagle Eye
F/V Eyelander	F/V Eagle Eye 2	

ATTACHMENT

FACTS REGARDING THE DOMESTIC COMMERCIAL SHARK FISHERY AND THE SHARK FIN TRADE ELIMINATION ACT

- The U.S. is a global leader in conservation and management of sharks, and chief opponent of the wasteful practice of “shark finning”—discarding shark meat and landing only the fins. Finning has been federally prohibited since 1993, while the shark population has been growing since 2000. In 2015, the National Marine Fisheries Service’s shark survey found the most in its 29-year history, 65% more than the prior survey.
- The industry opposes finning, but the Shark Fin Trade Elimination Act goes too far. Fins account for 50% of a shark’s landed value. Without income from these, revenue from sharks would not cover fuel costs and our fishery will cease. **This Act will destroy a successful fishery and harm small fishing communities.**
- The government should not deny American people access to this healthful product or fishing communities important income from a sustainable fishery.
- Virtually all fins are exported, overwhelmingly to China. This trade plays a small, but important role in improving our balance of trade.
- The bills provide **no conservation benefit** and will likely **harm international shark conservation**. Destruction of fins is equally as wasteful as discarding shark meat. Moreover, the small portion of fins taken off the international market will be replaced, likely by fins from unsustainable and unregulated fisheries where finning provides a cost advantage.
- Demand for shark fins, culturally important in Asia, will not abate soon. The U.S. can help foster responsible shark fishing practices globally through

participation in international forums. Our authority will be weakened if the U.S. abandons its own model shark fishery and instead promotes the extreme, wasteful, and uneconomic policy of fin destruction.

- Analogies to trade bans on ivory and rhino horns are misplaced:
 - Unlike these large land animals, sharks are more protected by their marine habitat and highly migratory behavior. Shark fishing can be conducted sustainably.
 - Also, unlike ivory, the U.S. is not a major market for fins. Its absence from the marketplace will do nothing to effect demand.
 - These bans have been far from successful. Trade has been forced underground where it cannot be regulated. The shark fin trade is even less amenable to policing as sharks occur globally in all oceans and seas.
 - Most importantly, unlike rhinos and elephants, sharks are fully utilized for food, as well as for their skin, cartilage, livers, teeth, and jaws, providing multiple economic benefits. They are a renewable resource for a hungry world.

These bills reward bad actors and harm those who play by the rules. Congress should urge NMFS to finalize its list of shark finning nations under the High Seas Driftnet Fishing Moratorium Act and impose an import moratorium on those that fail to stop the practice.

Congress should also support America's law-abiding shark fishermen and their communities by ensuring that they can obtain the full value of their highly limited catch no matter where they live.

Mr. LAMBORN. Dr. Risenhoover, you stated in your testimony that NOAA, "cannot support H.R. 1456 because the bill's negative impact on U.S. fishermen would outweigh its minimal benefit to shark conservation." Can you expand more fully what you mean by that?

Mr. RISENHOOVER. Yes, thank you, Mr. Chairman. We see what a number of folks have raised here as an issue in that the United States has very strong shark conservation and management programs in place. The bill, by not allowing them to use the fin as part of their revenue stream would hurt the domestic fishermen.

Alternatively, that the United States is not a major player in the shark fin trade around the world, and that by ending the trade of shark fins or fins transited through the United States would not have a major impact on those other nations elsewhere where the fin trade would go either perhaps around the United States or any deficit of fins would be filled by illegal harvest elsewhere.

So, our bottom line is we have strong measures in place, and we believe the fishermen are following those, and that they should be allowed to continue their current businesses.

Mr. LAMBORN. OK. Thank you. And I am going to break my little rule that I just said a minute ago because unavoidably I have to address the next bill. So, I guess it is a free-for-all for everybody, and I will be the first to do that.

My understanding, Mr. Risenhoover, is that Mr. Webster's bill was modeled on existing traceability and the shrimp import certification programs. Can you expand on NOAA's concern with this bill as drafted?

Mr. RISENHOOVER. Yes, thank you, Mr. Chairman. It is based broadly on the shrimp import trade where we do look at other countries to see if they have similar programs in place for the conservation of sea turtles during the shrimp trade, so that is a very

narrowly focused program. The legislation under consideration here, H.R. 5248, has a very broad definition of both shark products and the certification process that would ensue.

We believe that that would be very difficult for us to implement, and, again, we all have the same intent here of ending the illegal trade of shark fins, but we need the program that is implementable and something we can do to make sure that works, and we would be happy to work with Mr. Webster and the Committee on that legislation.

Mr. LAMBORN. Could you amplify on what can be done to reconcile the two bills to create a final product that NOAA would be able to support that addresses the concerns of unsustainable foreign shark finning?

Mr. RISENHOOVER. Thank you, Mr. Chairman. I don't know that I can hypothesize on that right now. Again, I think the intent of both of the shark bills is to end the shark finning and the illegal trade. So, we all agree on what the goal is. It is how do we get there, and I think we need to work on that a little bit more.

Somewhere between banning it so that domestic fishermen cannot sell their fins and a more complex system that may not be effective or implementable, and we would be happy to work with the Committee on that.

Mr. LAMBORN. OK. Thank you.

Dr. Hueter, before my time elapses, I would like to send a question your way. Can you describe the health of shark species globally compared to the health of these same shark species in U.S. waters and under U.S. management?

Mr. HEUTER. Thank you, Mr. Chairman. That is very complicated. We are dealing with 1,250 different species of animals between the sharks and the rays. It depends on where you look. In some of the places, especially in the Pacific and Indian Oceans, sharks have been very, very heavily overfished, and we have seen declines greater than 50 percent, even approaching higher numbers than that.

In the United States, when you look back at before management started in this country, we did have very serious declines of greater than 75 percent in a lot of our stocks. But because of the last 25 years of concerted effort to reverse that and because of a great reduction in our shark fishing fleet in the United States to get it into a sustainable state, we are seeing the return of many of these stocks way beyond just simple sustainability. It goes as far as things like great white sharks even increasing in numbers off the U.S. coast at this point.

So, by and large, here the stocks are healthy, are getting healthy and healthier than the rest of the world, and it is these foreign, especially the high seas fleets, that we really have to focus our attention on.

Mr. LAMBORN. Thank you very much. I now recognize the Ranking Member for 5 minutes.

Mr. HUFFMAN. I was going to allow Ms. Bordallo to be recognized.

Mr. LAMBORN. OK. Representative Bordallo, you are now recognized for 5 minutes.

Ms. BORDALLO. Thank you, Mr. Chairman. I am very pleased that the Subcommittee is hearing testimony on H.R. 1456, which is the Shark Fin Sales Elimination Act, sponsored by Congressman Royce who testified earlier.

I also want to acknowledge the bill's Democratic co-lead, Congressman Sablan, who is in his district as we meet today and unable to join us. He was also the bill's sponsor in the 114th Congress.

For decades, Congress worked to enact laws against shark finning, but was frustrated by lawsuits and many court decisions. After years of legal uncertainty, the Shark Conservation Act, which I sponsored in the House, was signed into law in January 2011. The Shark Conservation Act definitively banned the brutal practice of shark finning in all U.S. waters and the possession abroad of illegally taken shark fins at sea.

My Shark Conservation Act also provided for improved shark conservation, better NOAA fisheries enforcement, and economic incentives for our Nation's trading partners to conserve sharks, including the ability to restrict imports from bad actor countries.

Currently, 12 U.S. states and three territories have enacted laws against shark finning and sales of illegally sharked fins, including Guam and the Northern Marianas. H.R. 1456 closes the last legal loophole making it illegal under Federal law to sell, import, or possess shark fins on U.S. soil across all jurisdictions.

H.R. 4528, sponsored by our fellow Committee member, Congressman Soto, amends my Shark Conservation Act to clarify further that NOAA shall enforce Federal regulations against shark finning for all shark species, including the smooth dogfish.

The science is very clear. We are facing a startling decline in shark species and populations worldwide. Sharks are among the planet's oldest life forms, having outlived the dinosaurs and even predated them by millions of years. But sharks may not last much longer if we do not take action now.

According to the International Union for Conservation of Nature, the IUCN, more than half of shark species are facing extinction. So, Mr. Chairman, I hope that we will take action to stave off the preventable loss of our sharks, and I do have some questions here. My first is for Director Risenhoover. Can you speak to why the United States continues to import shark fins from countries that do not have regulations against shark finning?

Mr. RISENHOOVER. Thank you. And the answer to that is there is no prohibition right now. I do think H.R. 1456 would create such a certification process that is similar to other broader certification processes we have. The concern we have with it is the broad scope of those products we would have to trace and the complexity of doing so.

Ms. BORDALLO. My second part of this question is how can the U.S. leadership prompt other countries to crack down on harmful shark finning, particularly Hong Kong and mainland China where it is a delicacy to eat shark fin soup?

Mr. RISENHOOVER. Thank you for that. Let me summarize a couple other things the government is doing, and NOAA fisheries in particular, to address shark finning and shark conservation management around the country. We recently implemented a

seafood import monitoring program that will help us trace products coming into the United States to make sure they were harvested in their country of origin properly.

Sharks are one of the few species included in that at this time. We also work under some other legislation where we can certify other countries positively or negatively for their trade associated with sharks.

And finally, we work with a number of regional fishery management organizations around the world in an effort to get them to improve their shark management, and most importantly, have all sharks landed with their fins naturally attached.

So, I believe we have a number of efforts ongoing in the international arena to meet this goal.

Ms. BORDALLO. Thank you. Mr. Chairman, I have just one quick question, if you would allow it.

OK. I have a question for Professor Parsons. Professor, I am alarmed by the large discrepancy in shark fin import-export data collected by NOAA versus the United Nations Food and Agriculture Organization, FAO. Can you please speak to this, where can we come by more up-to-date data.

Mr. PARSONS. Trade is not actually my area. I am more of a scientist, but I am aware of the fact that there is a large discrepancy between the number of fins that are recorded imported into this country versus the number that are reported exported to the country. My understanding of it is that there are different labeling requirements, and, again, I have to say that I am not actually a trade expert.

Ms. BORDALLO. Is there anybody on the panel that could further elaborate on that? Yes, go ahead.

Mr. RISENHOOVER. Yes, just quickly, I think he raises some issues about some of the compatibility of data. Some of the estimates I understand may have since been corrected, so we would be happy to provide the Committee with a written statement that goes beyond my personal knowledge of how those differences may be highlighted and hopefully at some point resolved.

Ms. BORDALLO. Thank you. Thank you very much, and, Mr. Chairman, I am sure you would like that report.

Mr. LAMBORN. OK, thank you. Please provide that to the Committee.

And I am glad as an aside there haven't been any lawyer jokes yet, although I am tempted. Mr. Webster you are now recognized for 5 minutes.

Mr. WEBSTER. Thank you, Mr. Chair. Mr. Polston, Dr. Parsons said that H.R. 1456 would not impact the ability to fish. Do you feel the same way?

Mr. POLSTON. Absolutely not. If you can't go out and harvest what you need when you are shark fishing, it is necessary to have the shark fin with the meat to make it to where it is economically feasible to do it. There is no way you can do it, just like I had stated before, without being able to sell the fin, and you can't get the meat price of the shark to go up high enough to sustain it. So, it is economically not feasible. No, sir, I do not agree.

Mr. WEBSTER. Thank you very much. I yield back.

Mr. LAMBORN. OK. Representative Beyer, you are recognized for 5 minutes.

Mr. BEYER. Thank you, Mr. Chairman, very much. Thank you all very much for being here.

Mr. Polston, to follow up, you talked about how H.R. 1456, Congressman Royce's bill, would punish fishermen, and you talked about reverse finning where you would basically use the whole fish and throw away the fins. But in Mr. Parsons' memo, he talks about the 12 states, as Ms. Bordallo talked about the 3 Pacific territories, Amazon, Grubhub, 51 percent of international airlines, 17 of the 19 biggest shipping firms. Where do you have to sell the fins in the United States if state after state after state is banning the purchase and the use of these fins?

Mr. POLSTON. Where do we sell them, you said?

Mr. BEYER. Yes.

Mr. POLSTON. I sell mine in the state of Florida.

Mr. BEYER. So, you are finding an ever-shrinking U.S. market for them as the states are banning shark fins?

Mr. POLSTON. Yes.

Mr. BEYER. I think that perhaps suggests something.

Mr. Hueter, it says banned by 40 countries. Who are the offenders? I mean, in whales it used to be Norway and Japan. Who are the countries that are out there, the fisheries that are finning these sharks?

Mr. HUETER. Primarily, we are talking about fisheries on the high seas, and a lot of the countries we are talking about may have a finning ban but they are not enforcing it, which is just as bad.

But when we look at what H.R. 5248 would affect in terms of certifying nations, we are looking at countries like Taiwan, China, Mexico, even Canada, some of these countries do have shark conservation measures, but not all of them enforce it properly. So, I think it is important.

Mr. BEYER. Because it is happening on the high seas?

Mr. HUETER. Because it is happening on the high seas, that is correct. Even our neighbor Mexico, which has a huge artisanal fleet for shark fishing, has some measures in place, but enforcement is a problem in Mexico. That is a conversation that we will need to have with them once H.R. 5248 is passed.

Mr. BEYER. OK. Thank you.

Mr. Risenhoover, you said that NOAA has effective laws. How do you reconcile your claim that it has effective laws if 73 million plus sharks were finned last year?

Mr. RISENHOOVER. Congressman, we have effective domestic laws. I believe that number and the number of sharks, the 73 million killed a year, is globally, so our domestic laws are very effective and control the harvest of sharks in a sustainable manner.

Mr. BEYER. Also, a number of the testimonies have talked about that the U.S. market for the consumption of shark fins is relatively small.

How do you counter Chairman Royce's assertion that when America leads, the world pays attention and the world follows? Why do you suggest that that is not true with respect to shark fins, when it was arguably true with respect to almost everything else?

Mr. RISENHOOVER. Congressman, thank you.

I believe the United States is leading in shark conservation and management. Under the Magnuson Act, we have a very strict requirement that we have annual catch limits that prevent the overfishing of sharks on an annual basis.

And as we have heard testimony today, we see that sharks are increasing in numbers. We still have a few that are subject to overfishing and some that are overfished, but we have very robust management programs in place to rebuild those shark populations.

Mr. BEYER. Let me restate it. Don't you think it would be an incredibly powerful symbol to the other countries of the world if the United States actually banned shark fins—the sale, importation, consumption of? And do you see any other way to get the many other countries of the world to begin to ban this practice without U.S. leadership?

Mr. RISENHOOVER. The United States has banned shark finning, that act of cutting off the fins and dumping the carcass over the side. We have already taken that step.

We have, as I mentioned, these robust domestic programs. And we are working in the international arena with other nations to improve their shark management programs and track the trade of the sharks that they harvest.

Mr. BEYER. Also, if we don't do H.R. 1456, I understand it is now legal in the United States, in at least 38 states, to import and to consume shark fins. Again, without that, aren't we sending a very mixed message to the rest of the world, that we have banned shark finning but it is OK for other nations to shark fin and then sell them to us?

Mr. RISENHOOVER. I don't believe there is a high level of shark fin consumption in the United States. Some of those fins are likely just trans-shipped through the United States to other destinations.

Mr. BEYER. Mr. Chairman, my time is up, but thank you very much.

Mr. LAMBORN. Representative LaMalfa, you are now recognized for 5 minutes.

Mr. LAMALFA. Thank you, Mr. Chairman.

This is certainly a sticky issue to sort out here, because, as a sportsman, when you hunt, when you fish, when you harvest, you are taught to respect, and when you respect nature, you use the whole animal. So, as Mr. Beyer mentioned, the term "reverse finning," it is hard for me to make much sense of that, when you are throwing that away. And you get into the whole issue of trophy hunting, African animals, whatever you might have.

If you are taking the animal, it sure seems like you should be using the whole thing. I was very strongly opposed to the action of finning when we had legislation in California back in the day on AB 376, which I joined in on because I just found that abhorrent, finning a shark and throwing the rest of it away.

So, I guess it begs the bigger question, should we shark fish at all? As these folks on the panel have mentioned, the primary value of fishing the shark is heavily weighted toward the value of the fin, not necessarily the rest of it. And I am not here to say, oh, we should ban that. I should say, what do we find is the ultimate compromise in this? I like what I am hearing in Mr. Webster's bill. I also was, early on, looking at Mr. Royce's bill as a possible solution.

Would you just comment on that a little more? I am really torn on this. Three ways to go: You reverse fin; you don't fish sharks at all; or you find a way somewhere down the middle to have legally harvested, permitted, under a type of sustainable amount of fish that can be taken, and you use the whole thing.

So, how about Mr. Risenhoover and Mr. Polston, please both comment on that. And maybe Mr. Hueter too.

Mr. RISENHOOVER. Right. Thank you, Representative.

I think you have hit on the exact issue here, that everybody agrees shark finning—that is, discarding the carcass—is something we do not support.

Per my testimony and per the Agency's position, ours is that we are sustainably managing our sharks, and, as part of that sustainable management program, deriving revenue from the fins is acceptable.

Mr. LAMALFA. I would not look at the deriving-revenue issue as the paramount purpose. I mean, yes, of course, the fishing industry is revenue-oriented. But are we doing the right thing across the board here with the shark fishing we are talking about and then the uses of the fin in the proper, permitted situation?

Mr. POLSTON. I think so, because by the Magnuson-Stevens Act, we are supposed to catch all fisheries at the maximum sustainable yield. And as long as we are not exceeding the maximum sustainable yield of the shark fisheries and we are not finning and we are using all the animal, I don't see where anything is being done wrong, I mean, where that is different than any other fishery. Why would you stop shark fishing when no other fishery is being talked about?

Mr. LAMALFA. Then the concept here is that, by banning the entire use of fin at all, it sends the message to the other countries that are doing it wrong how to—I guess I have a hard time deciding that our action is going to make China or somebody else follow what we do. I mean, the importation is something we can certainly control, but their own use, how do you really stop that?

Mr. RISENHOOVER. Again, I think that is the question—do we need to focus on limiting our domestic harvesting opportunities? Or I would suggest that we focus on some of these other international items I mentioned where we are working with other countries to improve their shark management and conservation so that we don't have this illegal fin-driven trade around the country.

Mr. LAMALFA. All right. Again, for the panelists—yes, sir, please.

Mr. HUETER. Yes, thank you.

You asked the question, should we be fishing for sharks, and it depends, of course, on the species, it depends on which nation.

In the United States, for example, we have more than 20 species of sharks that are prohibited to be fished for, so those are clearly species and stocks that we should not be fishing on. On the other hand, we have, as I mentioned in my remarks, 18 shark and ray fisheries that have been independently judged by an international group of experts to be fully sustainable.

So, we have to separate out the domestic situation, where we have a sustainable fishery, where the fishermen are reporting their catch, they are not finning, and they are legally fishing and landing

this catch. And we don't want them to throw part of that resource away if they are certified to do that.

The other point I would like to make is this idea of sending a message. That worked with elephants because the United States was the major consumer of elephant ivory, so when we shut it down, that put the brakes on the whole industry.

In the case of shark fins, we are, like, a 1-percent consumer in global trade. It is not going to change China at all. And, in fact, that little 1 percent will probably be taken up by a country that is actually finning sharks. So, it is punishing our fishermen by not allowing them to sell the fins and rewarding—

Mr. LAMALFA. I am going to have to wrap up super fast, sir. Thank you.

Mr. LAMBORN. OK. We will have to wrap this up.

Mr. LAMALFA. I would invite anybody on the panel or others listening who are part of this, if you wish, to submit arguments directly to my office on this. I am still wide open on the question here.

Thank you, Mr. Chairman, for your indulgence.

Mr. LAMBORN. OK.

We now recognize the Ranking Member for 5 minutes for questions he might have.

Mr. HUFFMAN. Thank you, Mr. Chairman.

I think if anyone doubts that American leadership on this issue does not have an effect on the rest of the world, including China, just look at what the Chinese airlines are doing in response to the leadership that we have started through our states and here in the United States.

But we are having a debate because, once shark fins are out into the stream of commerce, I think everybody agrees that you can't tell the ones that have been sustainably caught from the ones that have been horrifically finned. It is just not possible; you can't unscramble the eggs.

And that is why so many conservation leaders and organizations and advocates who have worked on elephant ivory and these other examples of illegal trade have concluded, that you have to confront the trade, the possession and trade of the fins. That is what the states have done. That is what the bill before us is proposing to do.

But I am hearing an argument from some of our witnesses and from, disappointingly, our own leader at NOAA that, because American shark fisheries are sustainable—I am hearing words like “sharks populations are increasing.” Mr. Risenhoover, you have pronounced the American shark fisheries sustainable. We are patting ourselves on the back, and there is this sense of great confidence that we are doing everything right on shark management here in the United States, and so, therefore, we should not punish this, we should nevertheless allow a continuation of this trade, even though most experts agree that that is going to hurt shark conservation globally.

I want to challenge the premise of some of the things that I am hearing here.

So, Mr. Risenhoover, I am told that over 60 percent of shark stocks listed in the NMFS status of stocks do not even have stock assessments. Is that correct?

Mr. RISENHOOVER. I am not familiar with the exact number, but I know that a large portion of them do not have stock—

Mr. HUFFMAN. And yet you have pronounced this a sustainable fishery, and you have said shark populations are increasing.

How many stock assessments did NOAA do for shark species last year?

Mr. RISENHOOVER. I believe it would be on the order of two. I can get you the exact number of that. We do a couple assessments a year.

Mr. HUFFMAN. We had a witness from NOAA before us a few days ago about the Trump administration budget, which seeks to slash funding for things like surveys and stock assessments.

We know that the shark fishery landings are a tiny fraction, way less than 1 percent, of the commercial landings from all our fisheries in the United States. So, it is hard to believe that this dwindling pool of money your agency will have to do surveys and stock assessments is going to be prioritized for shark populations going forward.

In other words, it is only going to get worse, when it comes to the grossly inadequate visibility we have on shark populations. Wouldn't you agree?

Mr. RISENHOOVER. I would say, Representative, that we will do as much as we can with the budget we receive from Congress.

Mr. HUFFMAN. That is inspiring testimony.

I am also troubled by the data that you do have. In 2016, the year with the most recent landings data, non-dogfish shark landings were valued at less than \$2.5 million. So, it is a tiny fraction. Over half of those landings by value and volume were just listed as sharks, with no species. Isn't that correct?

Mr. RISENHOOVER. That is correct.

Mr. HUFFMAN. That doesn't tell you much in terms of whether a given species of shark is, as you have so confidently proclaimed, increasing, for example.

And how about bycatch data? I am told that at some fisheries sharks are counted by individuals, at others they are counted by pounds, some are counted at the species level, others are counted in groups. Can you say that we have a clear picture on the rate of shark bycatch in the United States?

Mr. RISENHOOVER. That would depend, Congressman, on the fishery involved and the information we get. But we do have good data in some areas, less so in others.

Mr. HUFFMAN. And then I guess the other question I have for you, Mr. Risenhoover, is we have these states that have enacted bans on the shark fin trade, and yet we keep getting information that suggests that shark fins continue to be imported and exported from those states.

What are NOAA and other Federal agencies doing to coordinate with these states to try to make sure that that does not happen?

Mr. RISENHOOVER. As you know, Congressman, we have an enforcement arm within NOAA. I am sure they are working with Customs to look at those. And anytime we see an incident of what may be an illegal import or an import into an area that is not approved, we would look into that.

Mr. HUFFMAN. I yield the balance of my time.

Mr. LAMBORN. Thank you.

And, without any objection, I would like to introduce into the record a report from NOAA dated September 8, 2015, on the shark populations off the U.S. East Coast.

With no objection, so ordered.

We have now finished our consideration of H.R. 1456. We will now move into discussion on our second and third bills of the day, H.R. 5248 and H.R. 4528, by Representative Soto.

You all are welcome to stay, if you able to, to answer questions. I know some of you came prepared for the first bill, so you are free to go now if you needed to, but if you want to stay and answer questions that might come your way on the next two bills, please feel free to stay.

We will first recognize the sponsor of H.R. 5248, who is also the Vice Chairman of the Subcommittee, Representative Webster, for a statement on his bill.

Mr. Webster, you are now recognized for 5 minutes.

STATEMENT OF THE HON. DANIEL WEBSTER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. WEBSTER. Thank you, Mr. Chair.

H.R. 5248, the Sustainable Shark Fisheries and Trade Act, seeks to balance the concerns we have just heard about shark finning with a recognition that the United States is a world leader in sustainable shark fishing.

While I fully support all efforts to stop the horrific practice of shark finning, I have some questions about whether this is a serious issue in U.S. waters and, therefore, whether the heavy-handed approach of the previous bill is warranted.

Some fishermen, incidentally, land sharks in efforts to fish for other species. The United States is a small player in the overall market for the trade of shark fins. I believe we can do more good by incentivizing other countries to follow our sustainable management practices rather than by just withdrawing from the market altogether, which would hurt worldwide shark conservation. We would have no leverage if we did that.

My legislation, which will soon have a Senate companion sponsored by Senator Rubio, will leverage access to the U.S. market by requiring foreign nations and foreign fisheries to follow our sustainable fisheries regulations.

The bill creates an import certification program modeled after the existing shrimp import certification program. It would require NOAA to assess a nation's fisheries laws and regulations for sharks, skates, and rays and certify whether that nation's shark products are harvested using scientific-based and sustainable resource management.

Conservation and humane fishing regulations co-exist in U.S. fisheries. This bill would incentivize our trade partners to do the same.

We developed this legislation in consultation with NOAA, fishing industry stakeholders, and environmental groups. I want to thank all those who helped provide input on this legislation, and the Chair for holding this hearing, and bipartisan co-sponsors on H.R. 5248.

Thank you, also, to the witnesses that have come today.

I would like to enter into the record, Mr. Chairman, a set of communications from Representative Walter Jones, who couldn't be here today, along with several environmental groups and other stakeholders. If you could enter that into the record.

Mr. LAMBORN. Seeing no objection, so ordered.

[The information follows:]

April 17, 2018

Dear Member of Congress:

As professional marine scientists, many with expertise in the biology and fisheries of sharks and their relatives the skates and rays, we write in support of H.R. 5248, the Sustainable Shark Fisheries and Trade Act of 2018. This legislation promotes responsible, science-based shark, skate, and ray fishery management around the world without economically harming U.S. law-abiding fishermen. It will help ensure that any products from these animals that enter U.S. markets are sourced only from countries where shark and ray fisheries are subject to comparable management measures as for U.S. shark, skate, and ray fisheries.

The more than 1,250 species of sharks and their relatives play important ecological roles in the many marine and freshwater habitats where they occur. Some species are also culturally and economically important. Yet 24 percent of chondrichthyan species are estimated to be threatened with extinction, according to the International Union for Conservation of Nature (IUCN), making them one of the most threatened groups of animals on the planet. Overfishing—to feed the global demand for meat, fins, oil, gills, and other products—is the primary driver of these declines. Globally, many tens of millions of sharks and rays are caught and killed each year in directed fisheries or as incidental catch.

The U.S. has become a global leader in shark fishery management and conservation. Over the past 25 years, many of us have worked with the National Marine Fisheries Service, the fishing industry, conservation groups, and the public to raise awareness about the impact global fishing is having on these vulnerable species, and have pushed for science-based management. In accordance with strong regulatory standards under the Magnuson-Stevens Act, the U.S. commercial fishing industry, to their credit, has adopted critical management measures for many shark and ray fisheries. This includes a domestic ban on the practice of shark finning (removing the fin and dumping the carcass), the implementation of catch quotas and other fishery regulations since the 1990s, and leadership in promoting similar measures in international fisheries fora. Recreational fisheries are also subject to management, and catch-and-release of sharks is becoming more common among anglers. As a result of this and effective rebuilding plans, the U.S. has some of the most sustainable shark fisheries in the world.

We are now seeing the benefits of these efforts, as some depleted shark populations in U.S. waters begin to rebuild. This provides evidence that fisheries, at least for some species, can be sustainable *if* carefully managed. The Sustainable Shark Fisheries and Trade Act of 2018 will require that any import of shark, skate, and ray products into U.S. markets be sourced from a country that has been certified to have shark, skate, and ray management and conservation measures comparable to those in the U.S., including science-based measures to prevent overfishing and comparable prohibitions on shark finning. In addition to promoting sustainable fishery management by other fishing countries, this bill would also help level the playing field in international markets for U.S. fishermen, who have already taken the necessary steps to support responsible domestic shark, skate, and ray fisheries.

Although it is not the largest importer of shark products, the U.S. is a major shark and skate fishing and exporting country and therefore can lead in both modeling and promoting sustainable shark fisheries management and responsible trade for these species. Continuing to exercise this leadership can help to reverse the declining trend in many shark, skate, and ray populations around the world. We heartily endorse the Sustainable Shark Fisheries and Trade Act of 2018 and strongly urge its prompt passage by Congress.

Sincerely,

A. Peter Klimley, PhD	Alejo Fabian Bonifacio, PhD
Brendan Talwar, MS/MA	Bryan R. Franks, PhD
Carl Luer, PhD	Cathy Walsh, PhD
Charles Bangley, PhD	Claudio Campagna, PhD
Daniel C. Abel, PhD	Daniel Huber, PhD
David Kerstetter, PhD	David Shiffman, PhD
Demian Chapman, PhD	Drew Cronin, PhD
Elizabeth Alter, PhD	Eric B. Hovland, MS/MA
Florencia Cerutti, PhD	Francesco Ferretti, PhD
Gene S. Helfmanb, PhD	George H. Burgess, MS/MA
Gregor M. Cailliet, PhD	Harold L. Pratt, Jr., MS/MA
Howard Rosenbaum, PhD	Isabel Marques da Silva, PhD
Ivy Baremore, MS/MA	J. Marcus Drymon, PhD
Jake LaBelle, MS/MA	Jeffrey C. Carrier, PhD
John A. Musick, PhD	John F. Morrissey, PhD
John Tyminski, MS/MA	John Waldman, PhD
Joshua Stewart, MS/MA	Juan Martin Cuevas, PhD
Kara Yopak, PhD	Katherine Holmes, MS/MA
Kevin Feldheim, PhD	Lara Ferry, PhD
Linda Planthof, MS/MA	Maria Laura Ballesteros, PhD
Mariano Sironi, PhD	Melinda Rekdahl, PhD
Merry Camhi, PhD	Michael B. Bennett, PhD
Michael R. Heithaus, PhD	Mikki Mccomb-Kobza, PhD
Neil Hammerschlag, PhD	Philip Motta, PhD
Rebeka Merson, PhD	Renato Hajenius Aché Freitas, PhD
Rob Moir, PhD	Robert E. Hueter, PhD
Robert Nowicki, PhD	Sabine Wintner, MS/MA
Salome Buglass, MS/MA	Samuel H. Gruber, PhD
Simon J. Pierce, PhD	Steven Kessel, PhD
Susan Lieberman, PhD	Valentina Di Santo, PhD
Valeria Falabella, MS/MA	Yannis Papastamatiou, PhD



March 13, 2018

Dear Member of Congress:

We write in support of the Sustainable Shark Fisheries and Trade Act of 2018. The U.S. already has strong laws and regulations governing the management of commercially traded shark, skate and ray fisheries. This legislation would help promote the sustainable management of shark fisheries globally by ensuring that all shark, ray and skate products entering U.S. markets come from fisheries with comparable conservation and management practices. This approach serves a valuable dual purpose—improving the global management of these fisheries while leveling the playing field for U.S. commercial fishermen.

There are more than 1,250 species of cartilaginous fishes—sharks and their relatives, which include skates and rays—and while the conservation status of nearly half these species is poorly known, one-quarter are estimated to be threatened with extinction. As species that grow slowly, mature late, and have few young, they are particularly vulnerable to overexploitation. Overfishing is the primary threat to many of these species.

Although a large number of shark, skate, and ray species are struggling, evidence suggests that with effective fishery management, many species can be sustainably fished and commercially traded while maintaining healthy populations. Markets for shark fins and meat are important drivers of fisheries for these products, and other products like liver oil, cartilage, and skin are also valued and traded for, forming the basis of livelihoods for people and communities both in the U.S. and around the world.

We support the Sustainable Shark Fisheries and Trade Act's approach of requiring that shark, skate and ray products imported to the U.S. come from fisheries managed under strong standards, similar to those already required by U.S. law. This includes science-based management of related fisheries that prevents overfishing and rebuilds overfished stocks. By holding imported products to the same standards as U.S. fisheries, the U.S. can promote sustainable shark, skate and ray fisheries globally while also supporting the market for well-managed U.S. fisheries. I urge you to support this legislation.

As a significant shark, ray and skate fishing and trading country and a global leader in the conservation of these species, the U.S. has an important role to play in promoting sustainable shark, skate and ray fishery management in the U.S. and abroad. We endorse the Sustainable Shark Fisheries and Trade Act of 2018 and urge its prompt passage by Congress.

PREPARED TESTIMONY OF THE WILDLIFE CONSERVATION SOCIETY

Chairman Lamborn, Ranking Member Huffman, and members of the Subcommittee, WCS is grateful for the opportunity to submit testimony in support of H.R. 5248, the Sustainable Shark Fisheries and Trade Act (SSFTA).

Founded in 1895 by Theodore Roosevelt and other conservationists, WCS saves wildlife and wild places worldwide through science, conservation action, education, and inspiring people to value nature. To achieve our mission, WCS, based at the Bronx Zoo, harnesses the power of its Global Conservation Program in nearly 60 nations and in all the world's oceans, the New York Aquarium in Brooklyn, and its four other wildlife parks in New York City, visited by more than 4 million people annually. WCS combines this expertise in the field, zoos, and aquarium to achieve its conservation mission.

As part of its work on marine conservation, WCS works to conserve sharks, rays, and skates through field research, marine protected areas establishment and management, threat mitigation, the promotion of effective fisheries management and trade policies, capacity-building, local community engagement, international policy, and public education.

WCS has been directly engaged in domestic and international shark conservation and fishery management since the late 1990s. Past and current staff scientists actively participated in U.S. and international shark fishery stock assessments and authored seminal studies on the shark fin trade,¹ fisheries, and conservation status.² They have served on the IUCN Shark Specialist Group since 1993, as Past President of the American Elasmobranch Society, organized international conferences on sharks, and successfully promoted shark listings under CITES, the Convention on International Trade in Endangered Species of Wild Flora and Fauna. WCS was a strong proponent of the Shark Finning Prohibition Act (2000), and worked to ensure that sharks were included in recent seafood traceability regulations that took effect January 1, 2018.³

Today, WCS supports marine programs in 23 countries around the world and undertakes shark field research and policy initiatives in Argentina, Indonesia, Myanmar, Madagascar, Gabon, Bangladesh, and Belize, among others. In these locations, we work on all aspects of shark conservation, collecting data to better understand shark fisheries and populations, and then working closely with scientists, governments and local communities to put in place and enforce laws and regulations that will protect or sustainably manage their sharks and rays and secure these species' survival as part of healthy, productive oceans.

In 2010, WCS established the New York Seascape Program based at our New York Aquarium that works to address local conservation of the region's forty species of sharks, skates, and rays. Aquarium scientists have also been tagging and conducting health assessments on sand tiger, blue, shortfin mako, white sharks, and other species in New York waters to improve our understanding of shark movements, migrations, and habitat needs.

This June, WCS is poised to open a new state-of-the-art exhibit at our New York Aquarium on Coney Island dedicated to celebrating the biology, ecology, and diversity of sharks and rays, and inspiring their conservation locally and globally. *Ocean Wonders: Sharks!*, with 57,000 sq. feet of new exhibits and over 100 species, will introduce New York City to some of its most remarkable residents, inspiring visitors to join us in protecting the local waters that are so crucial to wildlife and humans alike.

There are more than 1,250 species of elasmobranchs—sharks, skates, and rays. These cartilaginous fish play important ecological roles in the freshwater and marine habitats in which they occur, and many species are culturally and economically important to the countries where they range.⁴ Many species are highly migratory, moving within and between domestic EEZs and international waters, which complicates effective management of their fisheries.

Global shark and ray fisheries have expanded greatly over the past 50 years and their products are among the most valuable seafood commodities in trade. Based on official statistics, global trade in parts and products is approaching \$1 billion in value.⁵ These statistics are widely believed to under-report actual levels. In 2011, total global trade in shark parts and products was valued at \$438.6 million in fins and \$379.8 million in meat.⁶ The value of the shark tourism industry is also estimated to be around \$314 million annually.⁷ Major shark fishing countries beyond the U.S. include Indonesia, India, Spain, Taiwan ROC, Mexico, and Argentina.⁸ The

¹ Shelley C. Clarke et al., Letter, *Global Estimates of Shark Catches Using Trade Records from Commercial Markets*, 9 *Ecology Letters* 1115–1126 (2006).

² *Sharks of the Open Ocean: Biology, Fisheries & Conservation* (Merry D. Camhi, Ellen K. Pikitch & Elizabeth A. Babcock eds., 2008); *The Conservation Status of Pelagic Sharks and Rays: Report of the IUCN Shark Specialist Group, Pelagic Shark Red List Workshop* (Merry D. Camhi et al., eds. 2009), available at http://cmsdata.iucn.org/downloads/ssg_pelagic_report_final.pdf.

³ 50 C.F.R. § 300.324.

⁴ *Sharks, Rays and Chimaeras: The Status of the Chondrichthyan Fishes* (Sarah K. Fowler et al., eds., 2005), available at <https://portals.iucn.org/library/efiles/documents/2005-029.pdf>.

⁵ See Nicholas K. Dulvy et al., *Challenges and Priorities in Shark and Ray Conservation*, 23 *Current Biology* R565, R566 (2017).

⁶ *Id.*

⁷ *Id.*

⁸ *Id.* at tbl. S3.

U.S. imports shark, skate and ray parts and products from a variety of countries, including New Zealand, Canada, China including Hong Kong, and Mexico.

While the conservation status of nearly half of these species is poorly known, one-quarter are estimated to be threatened with extinction.⁹ As a group, cartilaginous fishes are biologically vulnerable to overexploitation because they grow slowly, mature late, and produce few young. For example, manta rays only give birth to a live pup every 2 or 3 years, and female North Pacific spiny dogfish can take 35 years to reach sexual maturity.¹⁰ Because of these common characteristics, overfishing is the primary threat to these species. This is exacerbated by the fact that, across the world's oceans, many shark, ray, and skate fisheries are subject to very little management, and generally not managed for sustainability. As a result, they are among the most threatened vertebrates on the planet.¹¹

There is a common misconception that the demand for one shark product—shark fins—is the only driver of overfishing of sharks and rays. While demand for shark fins in U.S. and Asian markets is certainly a large part of the economic value of the global shark trade, demand for meat, such as in Europe and South Korea, grew by 42 percent (by volume) between 2000 and 2011,¹² and demands for liver and oils for pharmaceuticals, cartilage, leather, and other products are also significant. It is also important to note that among the most valuable so-called “shark” fins are those that are actually from rays, such as sawfishes and guitarfishes.¹³ In fact, skates and rays are being fished more heavily and, as a group, are more threatened than sharks, yet their fisheries are less managed. Sharks, rays, and skates are often caught as bycatch in fisheries targeting other species, such as tunas and swordfish, but this mortality is often poorly recorded.

Although many shark, skate, and ray populations are significantly depleted, evidence suggests that with effective fishery management, some species can be sustainably fished and commercially traded. Current U.S. law provides a strong framework for improved conservation worldwide, including requirements for science-based management of these fisheries to prevent overfishing and rebuild overfished stocks. A recent scientific analysis of global shark catches identified several U.S. shark fisheries as meeting that study's criteria for biological sustainability and science-based management.¹⁴

Recognizing that science-based management of sharks can result in sustainable fisheries for some species, and that globally appropriate management for these species is absent or lacking, WCS worked with Representatives Webster and Lieu and partners in the commercial fishing industry, with zoos and aquariums, and members of the scientific community to draft the Sustainable Shark Fisheries and Trade Act, which sets U.S. fisheries laws and regulations as a standard for other shark-fishing nations.

The bill would require a nation seeking to export shark, ray, and skate products to the U.S. to receive certification from NOAA determining that it has management and conservation policies in place for these species comparable to those in the U.S., including science-based management to prevent overfishing. Those comparable conservation policies must also include a prohibition on practice of shark finning, which has been prohibited in the U.S. since 2000. This would be a substantial improvement in the standards by which many nations currently operate their shark fisheries. And by holding imports of all shark, skate, and ray products to the same standards that U.S. domestic fisheries already meet, this bill would help keep products from unmanaged or poorly managed fisheries out of U.S. markets, leveling the playing field for U.S. fisheries that already do meet these requirements. The bill contains a clause that ensures that this legislation does not preempt federal or state laws with additional or more stringent requirements, including bans on the trade of shark fins that have been enacted in several U.S. states. This legislation would also build on the existing U.S. Seafood Import Monitoring Program, which

⁹Nicholas K. Dulvy et al., *Extinction Risk and Conservation of the World's Sharks and Rays*, eLife 2014;3:e00590 DOI: 10.7554/eLife.00590 (2014).

¹⁰J.S. Bigman et al., *Squalus suckleyi*, The IUCN Red List of Threatened Species 2016:e.T195488A2382480 (2016), available at <http://www.iucnredlist.org/details/195488/0>; COSEWIC Assessment and Status Report on the North Pacific Spiny Dogfish *Squalus suckleyi* in Canada (2011), available at https://www.sararegistry.gc.ca/virtual_sara/files/cosewic/sr_anguillat_commun_nor_pac_spiny_dogfish_0912_e.pdf.

¹¹Dulvy et al., *supra* note 9.

¹²Felix Dent & Shelley Clarke, State of the Global Market for Shark Products, FAO Fisheries and Aquaculture Technical Paper No. 590. Rome, FAO (2015).

¹³Dulvy et al., *supra* note 9; Dent & Clarke, *supra* note 12.

¹⁴Colin A. Simpfendorfer & Nicholas K. Dulvy, *Bright Spots of Sustainable Shark Fishing*, 27 Current Biology R83–R102 (2017).

established traceability requirements for certain seafood products entering U.S. commerce, including sharks, to also include rays and skates.

WCS has built a broad coalition in support of the bill. We're joined in the environmental community by groups like the International Fund for Animal Welfare; in the zoo and aquarium community by the Association of Zoos and Aquariums, including the National Aquarium, Shedd Aquarium, and more than 40 member institutions; and in the scientific community by Mote Marine Laboratory, OCEARCH, and more than 60 scientists, most of whom have an expertise on shark, skate, and ray biology and fisheries, and support stronger international conservation measures for these vulnerable species.

Thank you, again, for the opportunity to provide testimony in support of this legislation. WCS urges the Committee to mark up and pass this bipartisan legislation.

Mr. WEBSTER. I yield back.
[The prepared statement of Mr. Webster follows:]

PREPARED STATEMENT OF THE HON. DANIEL WEBSTER, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF FLORIDA

Thank you Mr. Chairman.

H.R. 5248, the Sustainable Shark Fisheries and Trade Act, seeks to balance the concerns we've just heard about shark finning with a recognition that the United States is a world leader in sustainable shark fishing.

While I fully support all efforts to stop the horrific practice of shark finning, I have some questions about whether this is a serious issue in U.S. waters, and therefore, whether the heavy-handed approach of the previous bill is warranted.

While some fishermen set out to intentionally catch sharks, others land them incidentally to their efforts to fish for other species.

I am concerned that Mr. Royce's bill will have unintended, but detrimental effects on Florida fishermen.

Though the United States is a small player in the overall market for the trade of shark fins, I believe we can do more good by incentivizing other countries to follow our sustainable management practices than by withdrawing from the market altogether, which would hurt worldwide shark conservation and U.S. fishermen.

My legislation, which will soon have a Senate companion sponsored by Senator Rubio, will leverage access to the U.S. market by requiring foreign nations and foreign fisheries to follow our sustainable fisheries regulations.

The bill creates an import certification program modeled on the existing shrimp import certification program.

It would require NOAA to assess a nation's fisheries laws and regulations for sharks, skates and rays and certify whether that nation's shark products are harvested using science-based and sustainable resource management.

Conservation and humane fishing regulations co-exist in U.S. fisheries; this bill would incentivize our trading partners to do the same.

We developed this legislation in consultation with NOAA, fishing industry stakeholders, and environmental groups.

I want to thank all those who helped provide input on this legislation, I'd like to thank the Chairman for holding this hearing and I'd like to thank Representative Lieu and the other co-sponsors of H.R. 5248.

Thank you to all the witnesses for coming today and for your flexibility with the scheduling issues that we've encountered.

Mr. LAMBORN. Thank you.
Representative Soto, you are now recognized for 5 minutes on
H.R. 4528.

**STATEMENT OF THE HON. DARREN SOTO, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF FLORIDA**

Mr. SOTO. Thank you, Chairman Lamborn and Ranking Member Huffman, for holding this hearing today. I appreciate you giving me the opportunity to present H.R. 4528, which makes technical

amendments to two marine fish conservation statutes, the Shark Conservation Act of 2010 and the Billfish Conservation Act of 2012.

The bill clarifies under the Shark Conservation Act of 2010 that there is no language in the Act that alters existing authority of the Secretary of Commerce to manage Atlantic highly migratory species under the Magnuson-Stevens Act, such as sharks. It also cleans up language in the SCA by removing an expired offset.

The main goal of this fix is to ensure protection against shark finning, much like the other bills that you have here today. And I applaud you for hosting this hearing.

H.R. 4528 will also fix agency confusion with NOAA to allow rulemaking to go forward for the Atlantic smooth dogfish, a type of shark.

The second major part of H.R. 4528 amends the Billfish Conservation Act of 2012. It clarifies that the exemption for marlin and billfish fishing in Hawaii and Pacific Insular Areas, which is a tradition there, can only be sold locally. More specifically, it clarifies these fish cannot be sold to the other 49 states. This strikes a balance between preserving traditional cultural fishing in these areas and the overall intent to prevent large-scale commercial fishing of these billfish.

The Florida Fish and Wildlife Department is supportive of it, as are various sports fishermen groups and various boating groups.

I wanted to welcome three Floridians that we have here today: Dr. Hueter, Mr. Polston, and Mr. Kondon. I have the honor of representing central Florida up here. And I also applaud my colleague from Florida, Congressman Webster, for his work on this issue as well.

[The prepared statement of Mr. Soto follows:]

PREPARED STATEMENT OF THE HON. DARREN SOTO, A REPRESENTATIVE IN CONGRESS
FROM THE STATE OF FLORIDA

Thank you Chairman Lamborn and Ranking Member Huffman for holding this hearing today. H.R. 4528 makes technical amendments to two marine fish conservation statutes, the Shark Conservation Act of 2010 and the Billfish Conservation Act of 2012.

The bill clarifies under the Shark Conservation Act (SCA) of 2010 that there is no language in the Act that alters existing authority of the Secretary of Commerce to manage Atlantic highly migratory species under the Magnuson-Stevens Act. It also cleans up language in the SCA by removing an expired offset.

The main goal of this fix is to ensure protection against shark finning.

H.R. 4528 will fix agency confusion with NOAA to allow rulemaking to go forward for the Atlantic smooth dogfish (a type of shark).

The second major part of H.R. 4528 amends the Billfish Conservation Act (BCA) of 2012. It clarifies that the exemption for Marlin and Billfish fishing in Hawaii and Pacific Insular Areas (as is tradition) can *only* be sold locally. More specifically, it clarifies these fish cannot be sold to the other 49 states.

This strikes a balance between preserving traditional cultural fishing in these areas and the overall intent to prevent large scale commercial fishing of these billfish.

The Florida Fish and Wildlife, the Sports Fisherman, and various boating groups support this bill.

Again, thank you for holding this hearing.

Mr. SOTO. I wanted to ask a question to you all briefly.

Mr. Kondon, how important is the preservation of sharks and billfish to your role in providing scuba opportunities?

Mr. KONDON. Thank you, sir.

As far as the scuba diving community is concerned, obviously, it is critical to us.

We are down in the Florida Keys National Marine Sanctuary, so every dive trip that we go out on, we are seeing nature in its present state. We don't do anything to entice anything. It is just purely what we are fortunate enough to see when we go out on the reefs in the Florida Keys.

The overwhelming majority of our customers that come to us are asking about seeing the bigger fish life. They want to see sharks. And, unfortunately, we don't see near the sharks that we would love to be able to see out there. It is very rare that we do see sharks. But the customers still come. They want to get out on the reefs, and they want to spend time on those reefs and learn about them.

The divers that we train very often have concerns about sharks, just because of what they have seen and heard in the media and movies and such, that then when they get out there and if they do have the opportunity to actually see a shark in nature, to see their eyes just open wide in awe. They are just blown away, and they are hooked, and they become conservationists almost instantly and want to protect the reefs and want to protect sharks.

So, it is very important to us down in the Keys, especially, because without those sharks we do lose various things that the sharks provide to the ecosystem there—removing ill or other weak animals. And, of course, it all just interacts together with the reefs, the sharks, and all the fish together.

We need those sharks to sustain that and, obviously, to keep us definitely gainfully employed as dive instructors, dive guides, or dive captains. There are nearly 3,800 jobs out there impacted that Oceana was able to show in their most recent report.

Mr. SOTO. Thank you.

Dr. Hueter, how is our shark population doing on the East Coast in general?

Mr. HUETER. Thank you, Congressman. And, by the way, thank you for your leadership as a Floridian for marine conservation. We really appreciate it.

Again, some of the stocks still need to be rebuilt, but we have species such as the blacktip shark, which you can see often in video during the wintertime in numbers of tens of thousands massing off the east coast of Florida very close to the beaches. This is a stock that is a faster-growing species that has come back and is very fishable, is very sustainable.

So, it depends on which shark you are talking about. There are many different species. And some are able to bounce back; others cannot so readily do so.

Mr. SOTO. I yield back.

Mr. LAMBORN. OK. Thank you.

I would also like to introduce, with unanimous consent, two articles from the news media highlighting NOAA's enforcement of current shark finning laws.

Without objection, so ordered.

[The information follows:]

A United States shark fin ban would undermine sustainable shark fisheries

Marine Policy 85 (2017) 138–140

D.S. Shiffman, R.E. Hueter

The United States Congress is currently considering a nationwide ban on buying or selling shark fins [1], which are consumed as part of shark fin soup, a traditional Asian delicacy. Such a nationwide ban would build on a movement that began in a few states including California, New York, and Texas, and now includes a total of 12 states. These state-level shark fin bans are not identical, as some include exceptions for certain shark species, which demonstrates an inconsistency of anti-fin trade arguments. While the proposed federal, nationwide ban's stated goal of conserving threatened shark populations is laudable and necessary, such a policy is misguided because it would A) undermine decades of progress made toward ensuring sustainable shark fisheries in the United States and around the world, B) likely have a negligible direct effect on global shark mortality, and C) contribute to the misconception that demand for shark fin soup is the only threat facing shark populations worldwide.

Sharks are some of the most threatened (i.e., assessed as Vulnerable, Endangered, or Critically Endangered by the IUCN Red List) vertebrates on Earth [2], and their population declines have been almost entirely driven by overfishing (including targeted catch and bycatch, and including but not limited to fishing associated with the shark fin trade) [3]. Solutions to this problem have been broadly categorized into those aiming for sustainable exploitation and those that ban exploitation and sale entirely, such as bans on the sale of shark fins [4]. Some conservation advocates argue these blanket bans may be appropriate when sustainable fishing and trade are impossible, such as in nations with inadequate fisheries management or enforcement resources, though it is worth noting that a nation with inadequate resources to enforce fisheries regulations likely has inadequate resources to enforce a ban. In nations such as the United States, however, sustainable shark fisheries are not only possible and largely currently in place [5], but are preferred as a strategy by 90% of 102 surveyed members of scientific research societies focusing on sharks and rays when compared with a total ban on the sale of shark products [6].

The debate surrounding shark fishing and the shark fin trade is complex and easily misunderstood. Key terms are often misused, adding to confusion and putting the focus for reform on less effective policy solutions. Under United States law, the term "shark finning" refers exclusively to removing the fins of a shark and discarding that shark's carcass at sea. If a shark's carcass is landed (i.e., brought back to port) with fins still attached, that shark has not been finned under United States law, even if that shark's fins are later removed and sold. Shark finning is inhumane, wasteful and makes it difficult for fisheries managers to identify the species of sharks being landed [7], and for these reasons shark finning has been illegal in United States waters since the 1990s [8]. Unfortunately, "shark finning" is frequently misused as a synonym for shark fishing, or even for the trade in shark fins taken from sharks caught primarily for their meat.

The United States ranks among the top ten shark fishing nations in the world [9], and these fisheries are comparatively well managed [10] with several identified as sustainable by consumer seafood guides (Fig. 1). This management includes catch quotas based on scientific estimates of population status for some species, closed areas and closed seasons, and stricter protections for more threatened species [4]. Of 16 global shark fisheries identified as biologically sustainable and well managed, 9 involve United States shark fishermen, accounting for 76.4% of total landings from these 16 fisheries [5]. According to 2014 data from the National Marine Fisheries Service [11], the total value of shark meat sales is approximately \$3.3 million USD, while the total value of shark fin sales is approximately \$1 million USD. The proposed fin ban would therefore eliminate about 23% of the ex-vessel value of legally caught sharks, causing economic harm to rule-following fishermen and undermining decades of progress toward sustainable shark fisheries management in the United States.



Species	NOAA FishWatch	MSC	Seafood Watch
Atlantic sharpnose	✓		
Blacktip	✓		
Blue (Atlantic)			✓
Blue (Pacific)			✓
Spiny dogfish (Atlantic)	✓	✓	
Spiny dogfish (Pacific)	✓		✓
Shortfin mako (Atlantic)	✓		✓
Shortfin mako (Pacific)	✓		✓
Common thresher (Atlantic)	✓		
Common thresher (Pacific)	✓		✓

Fig. 1. United States shark fisheries that have been identified as sustainable by NOAA FishWatch (“smart seafood choice”), the Marine Stewardship Council (“certified”), or Seafood Watch (“best choice” or “good alternative”).

The United States has played a leadership role in promoting sustainable shark fisheries around the world, but a domestic ban on the sales of shark fins could seriously compromise the United States position at the international negotiating table. A ban on the trade of shark parts from a sustainable fishery would not only eliminate a model of successful management from the global marketplace, but would also remove an important incentive for other nations to adopt that model. A nationwide ban on buying or selling fins would tell international trading partners that the United States will not support their shark conservation efforts regardless of future improvements to their fisheries sustainability.

Furthermore, banning the sale of shark fins in the United States would likely not result in a significant direct reduction in global shark mortality, because the United States exports approximately one percent of all the shark fins traded globally, and imports an even smaller percentage of the global fin trade [10]. Therefore, even if the shark fin trade in the United States were completely eliminated, the direct impact on reducing global shark mortality would likely be insignificant. In addition, the elimination of United States-supplied fins in world markets would open the door to increased market share for IUU (illegal, unreported, and unregulated fishing) nations not practicing sustainable shark fishing, including those that have not yet prohibited finning.

It has been argued that a fin ban would indirectly reduce shark mortality by reducing the value of shark fisheries and causing fishermen to switch their target species. However, this argument does not consider the effects of increased post-release mortality of shark discards, and it also ignores the probability that a reduced value per shark may also cause fishermen to simply catch more sharks to obtain the same income as prior to a ban (in fisheries where the quotas are unfilled) [4]. In any case, the conservation objectives of a shark fin ban in the United States are questionable, as the reduction of fishing mortality associated with a non-overfished stock that is not experiencing overfishing is not normally considered a conservation priority.

Moreover, banning the sale of shark fins would not make it illegal to continue to catch and kill sharks in the United States. It would only regulate how the parts of dead sharks can be used. Forcing fishermen to discard fins from sharks caught in sustainably managed fisheries would contribute to wastefulness in fisheries and undermine the “full use” doctrine that is a component of the U.N. FAO International Plan of Action for Sharks [12], without reducing shark mortality. Additionally, while the United States does import some shark fins, the total quantity is only approximately 0.2% of the global trade in shark fins [10]. These few imports include fins from nations where finning is already banned, as well as fins legally taken by United States fishermen, exported overseas for processing, and

imported back into the United States as dried shark fin product. Imports of fins of many species whose populations have significantly declined are already regulated under the Convention on International Trade in Endangered Species (CITES) [4].

The global trade in shark fins has been declining (total world imports and exports combined were worth approximately \$300 million USD in 2011, an 18% decline in trade volume from 2003 to 2011), whereas the global trade in shark meat—which would not be directly affected by a ban on selling fins—has been rising (total world imports and exports combined were worth approximately \$550 million USD in 2011, a 42% increase vs. 2000) [10]. A policy that focuses only on shark fins ignores a key component of the problem and risks diverting scarce management and enforcement resources away from the heart of the issue. A focus on fins also oversimplifies the threats facing sharks, which can reduce political support for sustainable management [13]. Such a focus also targets Asia (where fins are primarily consumed, but not where meat is primarily consumed), leading to potentially problematic cultural clashes that have already been the focus of lawsuits against state-level shark fin trade bans in the United States [4].

Halting the population declines of shark species of conservation concern are an important global conservation policy priority [2,14–16]. However, we conclude that banning the trade in fins from sharks legally caught in well-managed, sustainable fisheries in the United States will not improve or stop poorly managed fisheries in other nations. By making a commercially valuable and sustainable product illegal, a United States shark fin ban would likely not significantly and directly reduce shark mortality and would ignore the growing global trade in shark meat. Instead of a domestic ban on the shark fin trade, the United States Congress should support more effective policies that encourage progress toward making all shark fisheries sustainable in the United States and around the world.

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Bright spots of sustainable shark fishing

Current Biology Magazine

Correspondence

Colin A. Simpfendorfer and Nicholas K. Dulvy

Sharks, rays and chimeras (class Chondrichthyes; herein ‘sharks’) today face possibly the largest crisis of their 420 million year history. Tens of millions of sharks are caught and traded internationally each year, many populations are overfished to the point where global catch peaked in 2003, and a quarter of species have an elevated risk of extinction [1–3]. To some, the solution is to simply stop taking them from our oceans, or prohibit carriage, sale or trade in shark fins [4]. Approaches such as bans and alternative livelihoods for fishers (e.g. ecotourism) may play some role in controlling fishing mortality but will not solve this crisis because sharks are mostly taken as incidental catch and play an important role in food security [5–7]. Here, we show that moving to sustainable fishing is a feasible solution. In fact, approximately 9% of the current global catch of sharks, from at least 33 species with a wide range of life histories, is biologically sustainable, although not necessarily sufficiently managed.

Stock assessments were available for a total of 65 populations (Supplemental information). A subset of 39 populations (of 33 species) met criteria for biological sustainability, including 27 (of 22) sharks, nine (of nine) rays, and three (of two) chimeras, representing a very small fraction (~2.6%) of global shark diversity ($n = 1,188$). Of the populations that met biological sustainability criteria, eight populations of five species did not have science-based management plans. Stocks that met some or all of the sustainability criteria mostly occur in the Exclusive Economic Zones (EEZs) of developed countries that have well-developed fisheries management systems (e.g. USA, Australia, New Zealand and Canada; Figure 1). However, there are some developed nations with good fisheries management capacity (e.g. European Union) that have not yet translated this into sustainable outcomes for shark populations.

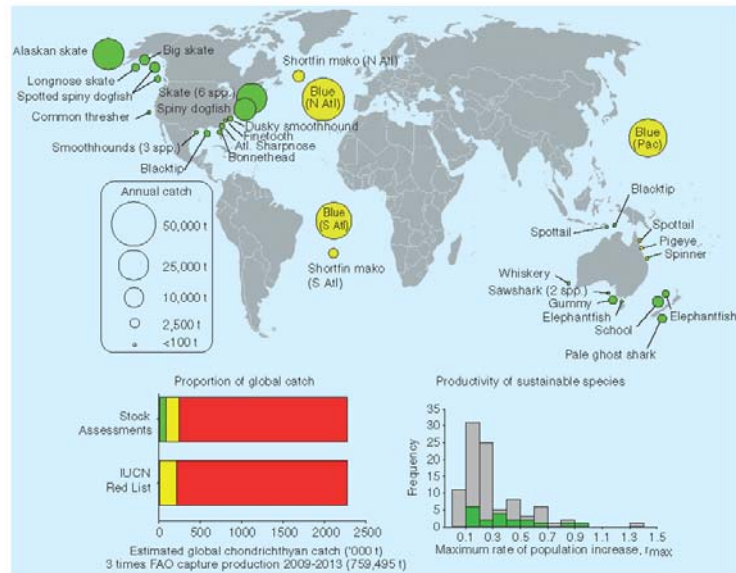


Figure 1. Location and magnitude of sustainable shark, ray and chimaera catches.

Top panel: Location of sustainable and managed (green circles) and sustainable but not managed (yellow circles) shark, ray and chimaera populations. Populations assessed as unsustainable or lacking evidence of sustainability (Supplemental information) are not shown. Sustainability is defined as current biomass being greater than that required to achieve Maximum Sustainable Yield ($B_{current} > B_{MSY}$), or current fishing mortality being less than that which will yield MSY ($F_{current} < F_{MSY}$) if current biomass is not available. Managed stocks were those with a science-based management plan in place. Bottom left panel: Proportion of estimated global catch that is sustainable and managed (green), sustainable but not managed (yellow) and lacking evidence for sustainability (red) based on stock assessments and assuming species IUCN-listed as Least Concern and Near Threatened are sustainable but not managed. Bottom right panel: Maximum rate of population increase (r_{max}) of 19 sustainably fished species (green) compared to all other available estimates ($n = 75$; grey).

The total annual landed catch of the biologically sustainable populations was approximately 204,945 tonnes live weight, approximately 27.0% of the average annual catch of sharks, rays and chimeras reported to the United Nations Food and Agriculture Organization (FAO) over the past five years (2009–2013) of 759,495 tonnes [7]. However, this figure drops to 12.0% (91,460 t) for populations that are both biologically sustainable and have a science-based management plan in place. FAO capture production statistics underestimate true global take of sharks by a factor of 3 or 4 [1]; hence the proportion of biologically sustainable take is closer to 9%, and 4% of global shark catch is managed for sustainability (Figure 1).

An alternative method of estimating the current annual catch of sharks that is biologically sustainable is to sum the FAO capture production figures for species that are categorized as ‘Least Concern’ or ‘Near Threatened’ on the IUCN Red List of Threatened Species. Assuming these species meet the biological sustainability criterion, the average FAO capture production over the last five years of Least Concern and Near Threatened species was 212,691 t (~28% of FAO capture production; Figure 1). Again rescaling to account for underreporting of FAO capture production, this figure reduces to ~7% of total shark catch, similar to the results of stock assessments.

The prevalent view has been that only the most productive species with fast life histories can be managed sustainably [4]. We found that some species with relatively low productivity—with the most common r_{max} values between 0.1 and 0.2—can support sustainable fisheries (Figure 1). No species with a maximum rate of population increase ($r_{max} < 0.1$) were identified as sustainable and species capable of achieving sustainability were proportionally more common at $r_{max} > 0.3$. These data suggest that with strong science-based management, most shark species have the potential to support sustainable fisheries.

We highlight five lessons that can help progress sustainability across shark fisheries: first, protect those species with the lowest biological productivity. Sustainable outcomes have been achieved only for species with $r_{max} > 0.1$. Species with very low r_{max} include some deep water species (e.g. gulper sharks) and species with very small litter sizes (e.g. Cownose Ray, Bigeye Thresher Shark) [8].

Second, tuna Regional Fisheries Management Organizations (tRFMOs) should implement precautionary science-based catch limits on the more biologically sustainable high-seas sharks. Some of the largest shark catches come under the remit of tRFMOs. While tRFMOs conduct stock assessments and have some shark-specific rules, they have yet to implement catch limits for blue shark (Atlantic and Pacific Oceans) and shortfin mako shark (Atlantic Ocean) despite repeated scientific advice that catch levels should be capped.

Third, international treaties can contribute to sustainable international fisheries and trade and prompt fisheries management improvements. The Convention on Migratory Species and Convention on International Trade in Endangered Species (CITES) are increasingly being seen as possible drivers of improved shark management [9]. For example, the listing of commercially important shark species on CITES in 2013 and 2016 requires that nations demonstrate that products in international trade do not threaten the survival of the species in the wild. This has required many countries (and tRFMOs) to undertake sustainability assessments (i.e. produce Non-Detriment Findings) and develop product identification and traceability systems that all contribute to improved outcomes for these species.

Fourth, developed countries have a responsibility to support the transition to sustainability in developing countries. Many developed countries import, consume or re-export shark products [6]. Hence, as developed nations bring their fisheries into sustainability and import more fish, they should translate their successes into lessons and capacity building for other nations to ensure that they are able to move toward sustainability.

Finally, responsible, traceable shark fisheries can provide consumers with the ability to choose and purchase sustainable seafood. Traceability has repeatedly and reliably driven sustainability across numerous natural resource supply chains [10]. All products from sustainably caught sharks and rays could be sold as sustainable, including shark fins. At present, the notion of sustainable shark fins is unthinkable to many. Yet, today's sustainable (but not necessarily managed) shark fisheries yield about 4,406 t of dried fins (Supplemental information). This suggests that approximately 8.7% of the fins in the global fin trade are from sustainable sources, but not yet traceable or labeled. Without labeling fins from sustainable sources cannot yet command the price premium that would in-turn feedback to drive sustainability back through supply chains.

Achieving sustainable outcomes for most or all shark populations will require tailored diagnosis and management depending on species and context, rather than simplified solutions such as outright bans. The successes demonstrated here provide a template to guide the expansion of fisheries sustainability. The benefits of such change, for both biodiversity conservation and human food security, argue for tackling the challenge without further delay.

SUPPLEMENTAL INFORMATION

Supplemental Information including experimental procedures and two tables can be found with this article online at <http://dx.doi.org/10.1016/j.cub.2016.12.017>.

AUTHOR CONTRIBUTIONS

C.A.S. and N.K.D. devised the study, gathered data and wrote the paper.

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Mr. LAMBORN. We will now try to conclude as soon as possible. I want to respect all the witnesses who came here, and I appreciate your testimony. We do have a 2:30 classified hearing on the recent events in Syria. Secretary Mattis will be there and members of the intelligence community, and I know many Members want to be at that hearing.

So, on the Republican side, I am going to see if anyone has any questions. I don't.

Representative Webster, would you like to be recognized for questions?

Mr. WEBSTER. I will condense it down; how about that?

Mr. LAMBORN. You are recognized.

Mr. WEBSTER. Dr. Hueter, shark tourism in Federal waters off Florida appears to be doing well, increasing. At the same time, Florida fishermen account for the second-highest commercial catch of sharks in any state.

Is it reasonable to conclude that both recreational diving for sharks and commercial fishing can co-exist?

Mr. HUETER. Thank you, Congressman. Absolutely. Yes. Not only those two sectors, but also recreational fishing for sharks as well. And the recreational fisherman has to do his part in terms of helping with sustainability, and that means a lot of catch and release with some of these shark fisheries.

So, yes, a properly managed and balanced system of commercial, recreational, and tourism for sharks is actually the best thing for the economy.

Mr. WEBSTER. Great.

I would like to add, Mote Marine is one of my favorite places. I have six kids. During their growing-up years, we made many trips there. They especially loved going on the waterway and having them scoop up just a bunch of fish and then tell us what they all were. But, anyway, thank you for what you do there, the many aspects of Mote Marine.

I yield back.

Mr. LAMBORN. On the Democratic side, Representative Beyer is recognized for 5 minutes.

Mr. BEYER. Mr. Chairman, thank you very much. I just have two quick questions, if possible.

First off, will the Congressman from Florida yield for a question?

Mr. SOTO. Yes.

Mr. BEYER. In your bill, I noticed that Section 1 clarifies the Billfish Conservation Act to ensure the exemption provided that traditional markets in Hawaii and the Pacific Insular Islands would not allow the sale of billfish from these areas to mainland United States.

Doesn't that sync with the fact that those territories and Hawaii have already banned the sale of shark fins?

Mr. SOTO. Yes, of course. It would be consistent with preventing shark finning. It is just traditional shark and billfish fishing that they do and have done for generations in their culture.

Mr. BEYER. But it is completely consistent?

Mr. SOTO. Absolutely.

Mr. BEYER. That is great. Well, thank you very much.

And if the Ranking Member would yield for a question?

Mr. HUFFMAN. I would be honored.

Mr. BEYER. I understand you were recently on a mission to Yellowstone Park to observe keystone predators in their natural environment and the impact on the trophic ecological environment. It is fair to say that sharks are the gray wolves of the ocean?

Mr. HUFFMAN. They are the gray wolves, the lions, and tigers of the sea, and also very slow to reproduce, unlike the gray wolf, which is a keystone predator that reproduced, we learned on this trip, very quickly. So, sharks are even more complicated in that regard.

Mr. BEYER. Great. Thank you very much.

Mr. Chairman, I would just offer one more thing. The most interesting book I read last year was called "Why We Sleep," by a guy named Matthew Walker at Berkeley, who pointed out that sharks do, in fact, sleep, unlike the myth, but they sleep one-half of their brain at a time. One half stays awake, the other half sleeps. Because if they totally went to sleep, they would stop swimming and they would die, but they have to sleep.

With that, I yield back, Mr. Chairman.

Mr. LAMBORN. Not that anyone up here is sleeping with half their brain and one eye open.

I want to thank all the witnesses for being here and for your valuable testimony. Members of the Subcommittee may have additional questions for you, and we would ask that you respond to these in writing if you receive them.

Under Committee Rule 3(o), members of the Committee must submit questions to the Clerk within 3 business days following the hearing for this purpose, and the hearing record will be open for 10 business days for these responses.

If there is no further business, without objection, the Subcommittee stands adjourned.

[Whereupon, at 2:28 p.m., the Subcommittee was adjourned.]

[ADDITIONAL MATERIALS SUBMITTED FOR THE RECORD]

PREPARED STATEMENT OF THE HON. DOUG LAMBORN, CHAIRMAN, SUBCOMMITTEE ON WATER, POWER AND OCEANS

Today, the Subcommittee meets to consider three fisheries bills. First, we will consider, H.R. 1456, the Shark Fin Sales Elimination Act of 2017, introduced by our colleague Ed Royce of California; followed by H.R. 5248, the Sustainable Shark Fisheries and Trade Act, introduced by the Subcommittee Vice Chair Daniel Webster; and finally, we will consider H.R. 4528, introduced by our colleague Darren Soto.

The first two bills we will consider today take very different approaches to addressing the heinous practice of shark finning. The act of shark finning has been illegal in the United States since the passage of the Shark Finning Prohibition Act of 2000, which was further strengthened by Congress in 2010 with the passage of the Shark Conservation Act.

These two laws have made the United States a leader in shark conservation and management. NOAA's 2015 Coastal Shark Survey saw the most tagged sharks in the Survey's 29-year history. Furthermore, while stocks seem to be soaring, the United States ranks as one of the top-10 shark fishing nations. These numbers directly speak to the success of U.S. fisheries management and conservation.

The signing of the 2000 and 2010 laws made it crystal clear where Congress and this nation stands on the practice of catching a shark, cutting off its fins, and throwing the carcass overboard to die. However, while 102 nations have joined us in banning the act of shark finning; the practice continues overseas.

To address the practice of shark finning in foreign nations, we have two proposals in front of us today that take very different approaches. The first bill we will consider today, the Shark Fin Sales Elimination Act, introduced by Congressman Royce, looks to impose additional regulations on U.S. fishermen to stem the tide of foreign trade of inhumanely obtained shark fins. The other proposal we will consider today, the Sustainable Shark Fisheries and Trade Act, introduced by Congressman Webster, establishes a traceability program modeled after the shrimp import traceability program and seeks to leverage access to the U.S. market to encourage foreign nations to adopt strong shark conservation measures.

I want to thank both of our colleagues for their work on this noble cause. It is our hope that the two bill sponsors can come together and build consensus around a proposal that effectively addresses foreign bad actors while preserving our sustainable U.S. industry.

Finally, we will consider H.R. 4528, introduced by Congressman Soto, which makes a technical correction to the Billfish Conservation Act of 2012. The Act of 2012 prohibited the sale of billfish, but provides an exemption for traditional fisheries markets in Hawaii and Pacific Insular Areas. H.R. 4528 clarifies that the exemption for these areas allows the sale of billfish caught by U.S. fishing vessels only within Hawaii and Pacific Insular Areas.

I want to thank the bill sponsors that aren't on our Subcommittee for being with us today as well as our witnesses. This is an important debate and I am glad we are having it here today.

 [LIST OF DOCUMENTS SUBMITTED FOR THE RECORD RETAINED IN THE COMMITTEE'S OFFICIAL FILES]
Rep. Lamborn Submission

- NOAA Fisheries, Northeast Fisheries Science Center, Report titled "2015 Coastal Shark Survey Reveals Shark Populations Improving off U.S. East Coast," dated September 8, 2015.