

FROM SHARK FINNING TO SHARK FISHING: A STRATEGY FOR THE U.S. & EU TO COMBAT SHARK FINNING IN CHINA & HONG KONG

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ABSTRACT

Globally, the shark population is under extreme stress, primarily due to the rise of China and a growing middle class with a taste for a cultural dish: shark fin soup.¹ Sharks play an important ecologic role and can be extremely beneficial to the local economy. They can also be an important food source for people if harvested sustainably and not in a manner that challenges the morality of humans' relationship with the ocean; something the current shark finning practices do. Approaches to sustainable shark fishing at the international and domestic level have met some success. Even so, China and Hong Kong have become major markets for shark fins. Because of economic prowess and experience in shark finning regulatory schemes, the U.S. and EU are in a unique position to induce China to draft a similar set of rules and policies through a series of incentives. These rules would look similar to the ones in the U.S. and EU and would ban shark finning, only allowing the landings of fully intact sharks. This strategy could provide much needed relief to global shark populations. While challenges to implement this may arise from Hong Kong, the WTO and Japan, there are still pathways to successful implementation.

I. BACKGROUND

The problems of shark finning are deeply rooted within humanity's complex relationship with sharks. It is hard to think of a

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1. Caty Fairclough, *Shark Finning: Sharks Turn Prey*, SMITHSONIAN NAT'L MUSEUM OF NAT. HIST., <http://ocean.si.edu/ocean-news/shark-finning-sharks-turned-prey> (last visited Nov. 29, 2016).

shark without imagining a fin moving above the water and hearing the music from *Jaws*.² Younger generations may associate sharks with a video of a dare defying breach from the water during Discovery Channel's Shark Week³ or a made-for-TV movie about a "shark-tornado."⁴ Even though these animals inspire terror,⁵ the shark population should fear humans, not the other way around. Shark finning carried out by humans is the primary reason for the death of up to 273 million sharks per year.⁶

Shark fishing is not a new phenomenon⁷ and sharks have been killed as a result of fishing by-catch for decades.⁸ The problem at hand is the uptick in shark finning globally due to the rise of China.⁹ Shark finning occurs when a fisherman catches a shark and slices off the shark's fin, taking the fin back to the market to sell and dumping the shark's body in the ocean, often when the shark is still alive.¹⁰ The main economic incentive for shark finning comes from China where shark fins are used predominately in the popular "shark fin soup."¹¹ Shark fin soup is considered a delicacy in Chinese culture.¹² Chinese Emperors used to favor it in their dishes, creating the sense of luxury that surrounds the dish.¹³ Now it is commonly found at "weddings, corporate celebrations and high-falutin' business lunches to demonstrate a host's good fortune."¹⁴

2. *Jaws*, INTERNET MOVIE DATABASE, http://www.imdb.com/title/tt0073195/?ref_=nv_sr_1 (last visited Nov. 29, 2016).

3. *Air Jaws Apocalypse*, INTERNET MOVIE DATABASE, <http://www.imdb.com/title/tt2334250/> (last visited Nov. 29, 2016).

4. *Sharknado*, INTERNET MOVIE DATABASE, http://www.imdb.com/title/tt2724064/?ref_=nv_sr_2 (last visited Nov. 29, 2016).

5. Chris Jackson, *Sharks: Half (51%) of Americans are Absolutely Terrified of Them and Many (38%) Scared to Swim in the Ocean Because of Them . . .*, IPSOS (Jul. 7, 2015), <https://www.ipsos-na.com/news-polls/pressrelease.aspx?id=6911>.

6. Boris Worm, *Global catches, exploitation rates, and rebuilding options for sharks*, 40 MARINE POL'Y 194, 197 (2013). Even though shark fin soup is reducing in popularity, the sheer number of sharks being consumed is still a problem even if the number is reduced.

7. Jessica Spiegel, *Even Jaws Deserves to Keep His Fins: Outlawing Shark Finning Throughout Global Waters*, 24 B.C. INT'L & COMP L. REV. 409, 411 (2001).

8. David Shiffman, *Sharks*, Smithsonian National Museum of Natural History, <http://ocean.si.edu/sharks> (last visited Nov. 29, 2016).

9. Fairclough, *supra* note 1.

10. *Id.*

11. Krista Mahr, *Shark-Fin Soup and the Conservation Challenge*, TIME (Aug. 9, 2010), <http://content.time.com/time/magazine/article/0,9171,2021071,00.html>.

12. *Id.*

13. *Id.*

14. *Id.*

A. Shark Economics: Benefits to People

The destruction of the global shark populations is an economic, ecologic, medical and moral issue. To begin, shark finning is an inefficient economic use of sharks. From a food perspective, shark finning is an enormous waste. Over 95% of the actual shark meat is wasted with shark finning because only the fins are kept due to their status as a delicacy and the rest of the shark is thrown back into the ocean.¹⁵ To put that in perspective, for each one person fed by a shark fin, nineteen additional people could be fed. For a country like China with 1.37 billion people, that is a massive waste of a valuable product.¹⁶

Additionally, sharks in recent years have been a large source of eco-tourism. Shark diving and shark watching have become popular activities for travelers. South Africa boasts of its opportunity to cage dive with great white sharks¹⁷ and Mexico encourages tourists to snorkel with whale sharks.¹⁸ A recent study looked at 83 different shark related tourism activities in 29 countries and examined the economic benefits.¹⁹ In some locations, like a small area of the Maldives, shark ecotourism provided \$2.3 million in economic benefits to the local community.²⁰ The economic figures are also deceptively low because it is limited to a very small location.²¹ Adding together the smaller geographic locations, the total economic benefit is quite substantial for an entire country, like the Bahamas, which had \$78 million in benefits.²² Furthermore, the loss of sharks hurts the ecotourism sector in countries that need the most economic help. A 2011 report identified 84 different locations as having shark ecotourism economies and 67% of those locations were in developing countries.²³ Globally there is about \$314

15. Matthew Schonfeld, *Everything You Need To Know About Eating Shark*, FIRST WE FEAST (Aug. 5, 2013), <http://firstwefeast.com/eat/everything-you-need-to-know-about-eating-shark/>.

16. *The World Factbook: CHINA*, CENTRAL INTELLIGENCE AGENCY, <https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html> (last visited Jan. 12, 2017).

17. Brian McFarlane, *Great White Shark Tours*, SHARK CAGE DIVING, <http://www.sharkcagediving.net/> (last visited Nov. 29, 2016).

18. *Whale Shark Safari*, PRO DIVE MEXICO, <https://prodivemex.com/excursion/whale-shark-safari/> (last visited May 9, 2017).

19. *Ecotourism: Dollars and Sense*, SHARK SAVERS, <http://www.sharksavers.org/en/education/the-value-of-sharks/sharks-and-ecotourism/> (last visited May 9, 2017).

20. Austin J. Gallagher & Neil Hammerschlag, *Global Shark Currency: The Distribution, Frequency, and Economic Value of Shark Ecotourism*, 14.8 *Current Issues in Tourism* 1, 11–12 (2011).

21. *See id.* at 11.

22. *Id.* at 12.

23. *Id.* at 4–5.

million dollars generated worldwide by shark ecotourism, a figure, expected to double within the next twenty years.²⁴ This is a substantial amount of revenue and it could help economic development in countries that need it most.

Sharks largest economic impact is their status as an apex predator and the ecological role that they fill. Sharks are apex predators in the ecosystems they inhabit.²⁵ Apex predators are the animals at the top of the food chain and indirectly control the ecological balance of the food web.²⁶ Sharks will consume mid-level predators such as rays and thus prevent over predation of smaller fish or shellfish by the mid-level predators.²⁷ Since the diets of sharks vary drastically, they will not pick a specific species to exclusively prey on, thus keeping populations even across all species one level lower on the food chain and ensuring diversity.²⁸ An example of this ecological harmony is in the North Atlantic. When blacktip shark populations were strong, so were North Carolina scallops because the sharks kept the population of the scallops' predator, the cownose ray, in check.²⁹ Yet, once blacktip shark populations plummeted, cownose ray populations surged and the scallop fishery almost collapsed.³⁰ A similar situation occurred in Alaska when the seal population the sharks used to feed on ate much of the herring.³¹ Regardless of which ecosystem sharks inhabit, they are a keystone species that regulates the fishery populations. Without them, fisheries could be damaged and cause global food security issues.³²

There is also a serious medical issue with eating shark and shark fin soup. Being at the top of the food chain, sharks have high levels of mercury that accumulate through bioaccumulation. Plankton or plants may have only a small amount of mercury within them, but if a small fish eats 100 pieces of plankton and then a medium size fish eats 100 small fish, a shark would consume 10,000 pieces of mercury every time

24. Denise Chow, *Why Sharks Generate More Money Alive Than Dead*, LIVE SCIENCE (May 31, 2013), <http://www.livescience.com/37048-shark-economic-value.html>.

25. ELIZABETH GRIFFIN ET AL., OCEANA, PREDATORS AS PREY: WHY HEALTHY OCEANS NEED SHARKS, 1 (Jul. 2008), http://oceana.org/sites/default/files/reports/Predators_as_Prey_FINAL_FINAL1.pdf.

26. *Id.*

27. *Id.*

28. *Id.*

29. *Id.* at 5-6.

30. *Id.*

31. *Id.* at 10.

32. *Id.* at 5-6

it eats a medium sized fish.³³ Assuming sharks eat one medium sized fish every day that is 3,650,000 pieces of mercury within the shark. Because of this process, sharks contain such a high degree of mercury in their system that the Environmental Protection Agency (EPA) has warned women who are pregnant or breastfeeding to avoid eating shark for health reasons.³⁴ While the EPA does not list any specific warnings about consuming shark on its own, shark is still marked as a high mercury food.³⁵ This is not the ideal food source people should be trying to eat.

Finally, the morality of shark finning is questionable at best. To continue a practice that leads to the death of up to 100 million sharks every year³⁶ and pushes the sharks to the brink of extinction goes against many of the basic fundamental views that humans take of the environment. It is hard to imagine, after 420 million years and five mass extinction events, an ocean without sharks.³⁷ To make matters worse, the actual method of shark finning is an extremely brutal. People saw off the shark's fins while the shark is still alive, putting the fins aside before dumping the live and immobile shark back into the ocean.³⁸ The shark then either drowns without their fins (sharks need to constantly swim to have oxygen flow through their gills) or bleeds out in what is assumed to be a painful death.³⁹ These actions bring to light many difficult moral questions about human-animal interactions. Because of the importance of sharks in economies and ecosystems and the moral imperative to protect these iconic species, governments and international bodies attempted different regulatory approaches that found some success.

33. See *Food Webs and Bioaccumulation*, NAT'L WILDLIFE FED'N, <http://www.nwf.org/wildlife/wildlife-conservation/food-webs.aspx> (last visited May 9, 2017) ("magnifying up the food web," and engaging in basic food chain calculations).

34. See *EPA-FDA Advice about Eating Fish and Shellfish*, ENVIRONMENTAL PROTECTION AGENCY (Feb. 1, 2017), <https://www.epa.gov/fish-tech/epa-fda-advice-about-eating-fish-and-shellfish> (advising pregnant and breastfeeding women to limit their fish and shellfish intake which includes, by implication, eating shark).

35. See *EPA-FDA Fish Advice: Technical Information*, ENVIRONMENTAL PROTECTION AGENCY, <https://www.epa.gov/fish-tech/epa-fda-fish-advice-technical-information> (last visited May 9, 2017) (labeling sharks as "Avoid" because of mercury concentration).

36. Fairclough, *supra* note 1.

37. Shiffman, *supra* note 8.

38. Fairclough, *supra* note 1.

39. *Id.*

II. INTERNATIONAL REGULATORY APPROACHES

Shark finning demands a collaborative international approach to solve the problem. Most of the global shark fin trade goes through either Hong Kong or the nearby city of Guangzhou.⁴⁰ It logically follows that most of the global trade goes through Chinese cities since it is the Chinese shark fin soup dish that is driving the demand. However, China and its special administrative territories like Hong Kong are not the only markets for shark fins. Other markets with significant Chinese communities such as New York City have a high demand.⁴¹ The communities that demand the shark fin soup are usually not the location of the shark finning itself. India and Indonesia combined accounted for 20% of the shark catch in 2011 with another 25% of the shark catch in Argentina, Mexico, Malaysia, Pakistan, Brazil, Thailand, Nigeria, Iran, Sri Lanka and Yemen.⁴² The shark finning industry touches all corners of the globe. An international problem requires an international solution. Without addressing this problem in multiple countries or using international forums, it becomes difficult, if not impossible, to adequately tackle it.

A. The Convention on International Trade in Endangered Species of Wild Flora and Fauna

The international community addressed shark finning in the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES).⁴³ Since 1975, CITES is the main international convention that regulates the transfer of animals or animal products between countries.⁴⁴ Currently, eleven different shark or ray species are listed as appendix II species, a designation that limits the trade of those species between countries, and seven are listed as appendix I species, a designation that bans the trade of those species.

40. Samantha Whitcraft et al., *Evidence of Declines in Shark Fin Demand: China*, WILDAID (Aug. 7, 2014), https://wildaid.org/sites/default/files/SharkReport_spread_final_08.07.14.pdf.

41. Matthew Kassel, *Here's What Happens When You Order A \$65 Bowl Of Shark Fin Soup*, BUSINESS INSIDER (Mar. 19, 2012), www.businessinsider.com/new-york-could-ban-shark-fin-trade-2012-3.

42. Victoria Mundy-Taylor & Vicki Crook, *Into the Deep: Implementing CITES Measures for Commercially-Valuable Sharks and Manta Rays*, European Commission (Jun. 2013), http://ec.europa.eu/environment/cites/pdf/reports/traffic_pub_fisheries15.pdf.

43. Convention on International Trade in Endangered Species of Wild Fauna and Flora appendix I, II, III, *opened for signature* Mar. 3, 1973, 933 U.N.T.S. 244 (entered into force July 1, 1975).

44. *What Is CITES?*, Convention on Int'l Trade in Endangered Species of Wild Fauna and Flora, <https://www.cites.org/eng/disc/what.php> (last visited Nov. 29, 2016).

These limitations and bans do not apply only to the live animal but to any parts from the animal including shark fins.⁴⁵ Although, CITES has both benefits and problems.

The key benefit of CITES is its widespread global support. Currently 183 countries are party to CITES.⁴⁶ Almost every single country has joined CITES, including China, the U.S., Indonesia, and Japan amongst others.⁴⁷ The remaining non-parties are smaller developing countries that have limited or no interaction with shark populations (examples being North Korea and Turkmenistan).⁴⁸ This provides a strong basis for tackling the problem of shark finning. Since CITES only applies to the international trade of shark fins and not the domestic consumption, it would not affect any activities within a country. Nevertheless, given that most of the shark fins are sent to China or Hong Kong from another country, limiting or banning the international trade of sharks or their fins would shut down most of the market and give a substantial boost to shark populations. Shark finning may occur in individual countries, but the fins would only have access to that domestic market. In addition, since most countries do not have a large local demand for shark fins there would be less incentive to for people to shark fin, at least compared to current international trends.

However, CITES has a host of issues that complicates and possibly negates any benefits that CITES provides. First, for political reasons, CITES is slow to move and act. In discussion it is easy to say all or many shark species should be included on the CITES listings for limited trade but to get any species on the list is very difficult. To place a new species on the list a two-thirds majority of parties in attendance at the annual conference.⁴⁹ This high burden is made equally difficult because most countries do not like to use CITES to regulate fish or fish products and leave that regulation to other means.⁵⁰ The best example of this are the shark and ray species listed in CITES. While CITES does list eighteen

45. *History of CITES Listing of Sharks (Elasmobranchii)*, Convention on Int'l Trade in Endangered Species of Wild Fauna and Flora, <https://www.cites.org/eng/prog/shark/history.php> (last visited Nov. 29, 2016).

46. Convention on Int'l Trade in Endangered Species of Wild Fauna and Flora, *supra* note 43.

47. *Id.*

48. *Id.*

49. ARTICLE XV: AMENDMENTS TO APPENDICES I AND II, Convention on Int'l Trade in Endangered Species of Wild Flora and Fauna, <https://www.cites.org/eng/disc/text.php#XV> (last visited Nov. 29, 2016).

50. MARGARET A. YOUNG, *TRADING FISH, SAVING FISH: THE INTERACTION BETWEEN REGIMES IN INTERNATIONAL LAW* 7 (2011).

species of sharks and rays, the first species was only listed in 2003 with the majority of species listed in 2007 and 2014 even though the shark finning trade has been a serious issue since the 1980s. With only recent listings, it is hard to determine if the new listings are having a positive effect on shark populations. Generally, this slow moving mechanism emphasizes that CITES is more a reactive system, not a proactive one.

Second, CITES is a self-regulating system, creating opportunities for corruption throughout the trade. When a country joins CITES, it takes on the duties to enforce the CITES regulations within its own country.⁵¹ If a country decides that the specific animal or animal product within their borders adheres to the CITES regulations, then the other countries must accept this declaration.⁵² This system is effective in countries with advanced environmental enforcement systems or anti-criminal infrastructure such as the United States or the European Union. It becomes significantly more difficult to implement in countries prone to corruption. If one country such as Indonesia or Vietnam faces corruption and approves an animal product, the United States or European Union must accept this, regardless of how strong its regulatory systems are. Criminal networks can then focus on one or two countries that have limited means to combat corruption and avoid the entire CITES regulatory system. Essentially, the system is only as strong as the weakest link. So, without clear regulatory enforcement from all 183-member states, shark finning can still occur. Between the difficulty of putting a new species on the CITES list and then the ineffective regulation of that species, CITES is not the best system for protecting shark fins.

B. Regional Fishery Management Organizations

One of the main objections to CITES is that countries prefer to regulate fisheries with the Regional Fishery Management Organizations (RFMOs) as specified in the United Nations Fish Stocks Agreement (UNFSA).⁵³ RFMOs are comprised of different countries

51. ARTICLE VIII: MEASURES TO BE TAKEN BY THE PARTIES, Convention on Int'l Trade in Endangered Species of Wild Flora and Fauna, <https://www.cites.org/eng/disc/text.php#VIII> (last visited Nov. 29, 2016).

52. *Id.*

53. The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, U.N. Div. for Ocean Affairs & the Law of the Sea, *opened for signature* Dec. 4, 1995, 34 I.L.M. 1542 (entered into force Dec. 11, 2001) http://www.un.org/depts/los/convention_agreements/convention_overview_fish_stocks.htm.

and have the legal authority to assign each of those countries a quota of specific types of fish.⁵⁴ RFMOs base their jurisdiction on geography but can base its jurisdiction own specific species too.⁵⁵ Sharks are included as one of the species within some of the RFMOs. Currently, RFMOs regulate shark finning specifically by creating a “fin-to-carcass” ratio.⁵⁶ Instead of outright banning the practice of finning, the “fin to carcass” ratio requires countries to accept shark fins detached from the shark’s body when the vessel lands if the fishermen bring a certain percentage of the shark carcass with it.⁵⁷ While this solution does not remove all of the problems associated with shark finning, it does absolve a substantial portion of them. This lets the shark body serve a more efficiently use and feed more people. It also limits the number of sharks killed because the body of the shark takes up more space in the boat, limiting the number of sharks killed during a fishing expedition.

However, the RFMOs “fin-to-carcass” ratio is not without its problems. In May 2016 at the update conference for the UNFSA, a forum for the global community to discuss the work of the RFMOs and other fish stock related issues, a substantial number of countries expressed concerns about the current ratio, arguing it was inadequate and that it should require “full[er] utilization of [shark meat]” .⁵⁸ Given that the update conference requires unanimity from member-states to make a strong recommendation and some countries thought the ratio was adequate on its own, nothing changed this past year.⁵⁹ Additionally, the update conference called upon RFMOs to implement a set of shark management guidelines created by technical, economic and scientific efforts at the Food and Agricultural Organization

54. Food & Agric. Org. of the U.N., Fisheries & Aquaculture Dep’t, Regional fisheries management organizations and deep-sea fisheries (2017), <http://www.fao.org/fishery/topic/166304/en>.

55. *Id.*

56. U.N. Secretary-General, *Report of the resumed Review Conference on the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of straddling Fish Stocks and Highly Migratory Fish Stocks*, ¶79, U.N. Doc. A/CONF.210/2016/5 (August 1, 2016) (hereinafter U.N. Secretary-General Report).

57. Currently, the market for shark carcasses is significantly lower than the market for shark fins, making shark fins much more valuable and more worthwhile to carry on the boats. SARAH FOWLER & BERNARD SÉRET, SHARKS FINS IN EUROPE: IMPLICATIONS FOR REFORMING THE EU FINNING BAN 3, 2010.

58. U.N. Secretary General Report ¶79.

59. *Id.* at Annex, ¶¶14–16.

(FAO).⁶⁰ According to the review conference, the RFMOs have not adequately followed the guidelines, known as the International Plan of Action for the Conservation and Management of Sharks, which provide a series of protocols and mechanisms for managing sharks sustainably in RFMOs. Herein lies the main problem with RFMOs. The international community has encouraged the use of guidelines developed by non-political entities RFMOs will ignore those guidelines since fish quotas have become politicized. This is a major criticism of some environmental organizations.⁶¹ Although, in total, RFMOs can be a very effective way to regulate shark finning, if the political will exists. If one country violates its RFMO quotas, the RFMO can reduce future quotas of that country, creating an pseudo-enforcement mechanism.

III. COUNTRY REGULATORY APPROACHES

Shark finning is an international problem that needs an international solution, but domestic laws can help solve the problem. Several countries and the European Union have attempted to implement regulatory frameworks to address the problem.

A. *United States of America*

The United States has a strong system in place to combat shark finning. The Magnuson-Stevens Fishery and Conservation Management Act of 1976 (Magnuson-Stevens) is the main source of fish conservation law in the United States.⁶² In December 2000 Congress amended Magnuson-Stevens with the Shark Finning Prohibition Act of 2000 (SFPA) that President Clinton signed into law.⁶³ After the U.S. Court of Appeals for the Ninth Circuit discovered a loophole⁶⁴, Congress amended the act again in 2011 with the Shark Conservation Act.⁶⁵ With the two amendments, the current U.S.

60. *Id.* at ¶ 76.

61. Wakao Hanaoka, *Japan objects to the protection of sharks- again*, GREENPEACE (June 14, 2013, 12:40 PM), <http://www.greenpeace.org/international/en/news/Blogs/makingwaves/why-japan-objects-to-the-protection-of-sharks/blog/45590/>.

62. *Magnuson-Stevens Fishery Conservation and Management Act*, NOAA FISHERIES, http://www.nmfs.noaa.gov/sfa/laws_policies/msa/ (last visited April 5, 2017).

63. *Magnuson-Stevens Fishery Conservation and Management Act*, 16 U.S.C. §§ 1801–1884 (2011).

64. The original amendment prohibited possessing shark fins only fishing vessels but a non-fishing vessel could still carry shark fins. *United States v. Approximately 64, 695 Pounds of Shark Fins*, 520 F.3d 976, 981 (2008).

65. *Magnuson-Stevens Fishery Conservation and Management Act*, 16 U.S.C. §§ 1801–1884

federal law does not allow any person within U.S. jurisdiction to:

- (i) to remove any of the fins of a shark (including the tail) at sea;
- (ii) to have custody, control, or possession of any such fin aboard a fishing vessel unless it is naturally attached to the corresponding carcass;
- (iii) to transfer any such fin from one vessel to another vessel at sea, or to receive any such fin in such transfer, without the fin naturally attached to the corresponding carcass; or (iv) to land any such fin that is not naturally attached to the corresponding carcass, or to land any shark carcass without such fins naturally attached.⁶⁶

These actions are enforceable throughout U.S. jurisdiction, which includes any U.S. flagged vessels, or vessels within U.S. waters.⁶⁷ Some environmental groups consider the Shark Conservation Act strong legislation but that has not stopped those groups from promoting an out-right ban of shark fins.⁶⁸ Overall, the current U.S. laws make it so no shark finning can take place at sea, limiting the number of sharks caught and creating an incentive to use the entire shark carcass.

B. The European Union

The European Union has a similar style of regulation to the United States. In 2003, a ban on shark finning was enacted, but contained exceptions.⁶⁹ Unfortunately, some of these exceptions turned into loopholes for further shark finning practices. One of the most infamous loopholes was the “best use” one. Essentially, the regulation allows an exception for shark finning if 1) the vessel with the shark carcass could find a better use for the entire shark and 2) it had a special permit that approved this work.⁷⁰ After ten years of allowing many vessels to get around the shark fin ban, a new regulation passed in the EU to remove this exception.⁷¹ Now, the EU policy is a “fins-naturally attached” policy.⁷² Like the U.S., it applies to EU flagged

(2011); *Bill to Protect Sharks Introduced in the Senate*, THE HUMANE SOCIETY OF THE UNITED STATES, (April 23, 2009), http://www.humanesociety.org/news/press_releases/2009/04/bill_to_protect_sharks_introduced_in_senate_042309.html.

66. Shark Conservation Act of 2010, 16 U.S.C. § 1857(1)(P) (2010).

67. Green, *supra* note 59, at 12.

68. OCEANA (2016), <http://oceana.org/press-center/press-releases/congress-introduces-legislation-ban-trade-shark-fins-us> (Shark Fin Trade Elimination Act of 2016).

69. Council Regulation 1185/2003, 2003 O.J. (L 167) (EC).

70. Green, *supra* note 59, at 716.

71. Council Regulation 605/2013, 2013 (EU) Amending Council Regulation (EC) No. 1185/2003 on the removal of fins of sharks on board vessels (L 181), 1 (EU).

72. *HSI Applauds Final Step in Agreement to Close Loopholes in EU Shark Finning Ban*, HUMANE SOCIETY INT’L, http://www.hsi.org/news/press_releases/2013/06/eu_shark_finning_060613.html (last visited Apr. 15, 2017).

vessels or vessels within EU waters.⁷³ These robust measures have a similar effect to the U.S. ones and defacto limit the number of sharks caught in one setting while encouraging the use of the entire shark.

C. *The People's Republic of China*

Unfortunately, unlike the U.S. or EU, China and Hong Kong do not have robust shark finning bans or limitations. This is especially problematic since the vast majority of the world's shark fin trade goes through either China and Hong Kong.⁷⁴ This is likely the reason there is no ban or limit in these regions. The Chinese Government and civil society organizations have begun to take some measures to stem the spread of Shark finning. In 2012, the Chinese government banned shark fin soup at government functions and banquets as did Hong Kong.⁷⁵ The government enacted the ban after a concerted effort by civil society organizations such as WildAid and the Natural Resources Defense Council to encourage Chinese citizens to stop shark finning or to stop eating shark fin soup.⁷⁶ Celebrities have joined this cause too including Yao Ming, Richard Branson, Wolfgang Puck, and Gordon Ramsey.⁷⁷ Arguably, these public awareness campaigns have led to a 50-70% decrease in shark fin soup demand in China.⁷⁸ Businesses have responded with hotels not serving shark fin soup and airlines refusing transportation of shark fins.⁷⁹ The change in market factors is not enough though. 91% of the Chinese population believes the Chinese government should take some action and ban shark fins. The political will to do something about shark finning in China is emerging.

73. Council Regulation, 1185/2003, 2003 (EC).

74. WILDAID, EVIDENCE OF DECLINES IN SHARK FIN DEMAND: CHINA, http://wildaid.org/sites/default/files/resources/SharkReport_Evidence%20of%20Declines%20in%20Shark%20Fin%20Demand_China.pdf (last visited Nov. 29, 2016); *see also* Shark Fin Traders Re-Routing to Vietnam, THE MARITIME EXECUTIVE, (November 8, 2010, 6:24 PM), <http://www.maritime-executive.com/article/shark-fin-traders-re-routing-to-vietnam>.

75. Yenni Kwok, *Tides Are Turning for the Shark Fisherman of Indonesia and India*, TIME, (Jan. 6, 2016), <http://time.com/4168955/tides-are-turning-for-the-shark-fishermen-of-indonesia-and-india/>.

76. S. WHITCRAFT, A. HOFFORD, P. HILTON, M. O'MALLEY, V. JAITEH, & P. KNIGHTS, EVIDENCE OF DECLINES IN SHARK FIN DEMAND: CHINA (2014).

77. Beth Buczynski, *Global Celebrities Join The Fight To Ban Shark Finning*, CARE2 (Sept. 27, 2011), <http://www.care2.com/causes/global-celebrities-join-the-fight-to-ban-shark-fin-ning.html>.

78. David Shiffman, *Trade in Shark Fins Takes a Plunge*, SCI. AM. (Feb. 26, 2015), <https://www.scientificamerican.com/article/trade-in-shark-fins-takes-a-plunge/>

79. Yenni Kwok, *Tides Are Turning for the Shark Fishermen of Indonesia and India*, TIME (Jan. 6, 2016), <http://time.com/4168955/tides-are-turning-for-the-shark-fishermen-of-indonesia-and-india/>.

IV. THE SOLUTION

A coordinated effort from the United States, EU, and RFMOs could incentivize China to enact similar legislation as the U.S. and EU, and institute an analogous “fins naturally attached” policy. If the largest market for shark fins defacto limits the amount of sharks caught and this regulation is enforced, the shark finning practice will drop dramatically resulting in less pressure on shark populations. To incentivize China and Hong Kong to enact these reforms, the U.S. and EU would assist China in receiving a greater RFMO fish quota.

A. The United States and European Union Lead

To begin, the United States and the EU would coordinate the entire negotiation with the Chinese government. The United States and the EU are in a unique position to do so for two primary reasons. First, both have robust shark fin legislation.⁸⁰ These domestic laws have given each entity a sense of expertise in drafting legislation, identifying loopholes, and noting what mistakes future countries can avoid. Both the U.S. and EU can note their individual experiences with shark fin legislation and better explain some of the finer points. In essence, China could examine each entity’s examples, use them as case studies, and look for successes and failures. Another benefit from having robust domestic legislation is the legitimacy it gives the U.S. and EU in the negotiations. It would be hard for one country to tell another to take a position that the first country does not currently have. This problem played out very publically with the climate change debate.⁸¹ Many countries did not find the U.S.’s call for others to curb their carbon emissions legitimate since the U.S. did not have an established plan of its own. However, once the U.S. enacted carbon emission reduction policies, China, Brazil and India were more willing to enact their own carbon emission plans and a global deal was struck.⁸² Any environmental accord, including shark finning, likely would pose similar problems. The U.S. and EU’s domestic shark finning legislation gives unique experience, expertise and legitimacy needed to

80. SFPA and EU regulation 1185/2003

81. Darren Samuelsohn & Andrew Restuccia, *Who gets credit for climate accord? W, that's who*, POLITICO, Nov. 29, 2015, www.politico.com/story/2015/11/paris-climate-talks-george-w-bush-216214 (“[w]hen Bush came in and said we’re not going to do Kyoto, the obvious question was: What’s your alternative?”).

82. Office of the Press Secretary, *U.S.-China Joint Announcement on Climate Change*, WHITE HOUSE (Nov. 11, 2014), <https://www.whitehouse.gov/the-press-office/2014/11/11/us-china-joint-announcement-climate-change>.

successfully negotiate a strategy with China.

Second, the United States and the European Union are significant forces in the global economy with an active presence in almost every single RFMO.⁸³ Constituting the top two economies in the world respectively, the EU and U.S.'s combined economic output gives serious strength to their negotiating position, especially when drafting international trade standards. Working together, the two entities will have enough economic strength to encourage China, regardless that China is growing in economic clout. Moreover, by having an active role in most major RFMOs, both parties can influence the RFMOs strategy and efforts to allocate quotas. Having two of the stronger parties working together to influence and outcome, it makes it more likely that the U.S. and EU can fulfill its promises to China about RFMO quota reallocation.

B. What Law To Implemented?

Next, and the more difficult aspect of this strategy, is to find a way for the U.S. and the EU to convince China to adopt a “fins naturally attached” policy. Noticeably, the current policies in the U.S. and EU do not ban the outright fishing of sharks or even using their fins but instead require the entire shark to come into port with its fins attached. A full out ban on shark fishing or using shark fins may not work, especially in a place like China where the demand is much higher. Modifying this portion of the example regulations would make it less appealing to China.

The U.S. and EU should suggest to modify the legislation is so it expands jurisdiction past Chinese vessels and vessels in Chinese waters that fin sharks. It should expand to any Chinese imports of shark, regardless if caught by Chinese vessels or by vessels within Chinese waters. This would be a much better policy to promote to the Chinese than an all-out ban on shark fishing for a two main reasons.

First, by requiring the entire body to come in less food is wasted and more cheap food is available, something that is needed for a massive population. This policy will still drastically reduce the number of shark deaths in the ocean since vessels will be able to carry significantly fewer sharks because a shark carcass takes up a lot more

83. See generally VICTORIA MUNDY-TAYLOR & VICKI CROOK, INTO THE DEEP: IMPLEMENTING CITES MEASURES FOR COMMERCIALY-VALUABLE SHARKS AND MANTA RAYS (2013) (report prepared for the European Commission); *Regional Fisheries Management Organizations*, U.S. DEPT. OF STATE, <http://www.state.gov/e/oes/ocns/fish/regionalorganizations/> (last visited May 9, 2017).

room than a shark fin. The size limitation will prevent fishermen from collecting too many sharks at once. The Chinese government would need to create an enforcement, ensuring the fishermen do not dump the carcasses after the fins are cut off.

Second, this policy still respects the cultural history of the shark fin soup for those willing to pay for it and eat it. Shark fins will still be available, albeit in much smaller quantities, for Chinese consumers. The sharks will just have to be “de-finned” once on shore. Allowing for the continued use of fins will limit pushback from cultural or business groups. An outright ban of shark fin soup could result in a backlash that may be counterproductive to the cause. It is easier to conduct major policy changes in small but consistent steps that coincide with public opinion.

C. How will the U.S. and EU convince China?

To convince China the U.S. and EU will need multiple discussion points and a RFMO based incentive. As discussed prior, there are economic, environmental, medical and moral reasons to support this policy. The strongest arguments with the Chinese government will likely be the economic argument as well as the change in popular opinion. The prime economic benefits the Chinese will receive from this change in shark finning policy will be extra carcass meat (as discussed prior) and the growth of global fish stocks. Since sharks are keystone predators, protecting them within their respective ecosystems will presumably expand global fish stocks.⁸⁴ This expansion of global fish stocks will help all countries with a major fishing industry, like China, because RFMOs will have a greater quantity of fish to allocate to each country.

Furthermore, in exchange for the Chinese to implement these new rules, the U.S. and EU can use their leverage within the RFMOs to assist China in receiving a greater quota. The increase in China’s quota can correlate to the increase in fish stocks due to shark stocks returning to health. The increase in fish stocks can also help demand in China shift from shark fin products to another fish species.⁸⁵

Likewise, the drastic change in popular opinion regarding shark finning is a key indicator for how China should proceed. An estimated 91% of the Chinese populace believes that China should act and ban

84. E. GRIFFIN, K.L. MILLER, B. FREITAS, & M. HIRSHFIELD, PREDATORS AS PREY: WHY HEALTHY OCEANS NEED SHARKS 1 (2008).

85. To prevent another fish species from being overstressed, further scientific analysis is needed.

shark finning.⁸⁶ While there are not many statistics available to confirm or deny this percentage, it is unlikely to believe that these numbers would be completely off base. Even if the report was 20% off, it still shows a very large majority of the China populace wants the government to take action. Moreover, China's autocratic government can actually be helpful here. Without a real public debate on the issue, vocal critics of shark finning will only discuss concerns in private and thus will be unlikely to sway the general populace against regulations.

Looking globally, this could be a helpful for China's image. In recent years, China has received a lot of criticism over its handling of the illegal ivory and rhino horn trade.⁸⁷ China received even more criticism in response to its rejection of an arbitral body's decision about its designated exclusive economic zone in the South China Sea.⁸⁸ China's inaction on shark finning could lead to another public relations fiasco. Emphasizing the public nature of China's actions to the global community would put additional pressure on China to enact these shark fin policies.

V. POSSIBLE PROBLEMS & SOLUTIONS

A. Hong Kong's Jurisdictional Issue

The above strategy does contain some obstacles, including jurisdictional issues with Hong Kong, legal challenges at the World Trade Organization (WTO), and possibly Japan fighting the quota alignment at the RFMOs.

First, the key concern with Hong Kong is that it does not share the same legal jurisdiction as China.⁸⁹ Hong Kong is a separate administrative zone within China.⁹⁰ For the most part Hong Kong directs the domestic laws and policy within its jurisdiction but China still controls the foreign affairs and defense structures.⁹¹ If the U.S. and EU work directly with the Hong Kong government, it may prove more difficult. Hong Kong, a relatively wealthy part of China, does not face

86. WHITCRAFT, *supra* note 76, at 17..

87. Rachel Bale, *With Ivory Ban Imminent, What Will Happen to China's Legal Stockpile?*, NAT'L GEO. (Nov. 12, 2015), <http://news.nationalgeographic.com/2015/11/151112-ivory-china-elephants-poaching-wildlife-trafficking-conservation/>.

88. Jane Perlez, *Philippines v. China: Q. and A. on South China Sea Case*, N.Y. TIMES, (July 11, 2016) <http://www.nytimes.com/2016/07/11/world/asia/south-china-sea-philippines-hague.html>.

89. THE BASIC LAW OF HONG KONG SPECIAL ADMINISTRATIVE REGION OF THE PEOPLE'S REPUBLIC OF CHINA [CONSTITUTION] Apr. 4, 1990 art. 1-2.

90. *Id.*

91. *Id.* at art. 13-14, 150-157.

many of the economic and food needs that China faces. Nor does Hong Kong face China's same reputational challenges.

To avoid these hurdles, the U.S. and EU should appeal directly to China and bypass the Hong Kong government. If the two entities can tie shark finning into the foreign policy objectives, China could enforce the legislation as part of its foreign policy. By the U.S. and EU offering changes at different RFMOs in return for shark finning bans, China furthers the idea that this deal is tied to foreign affairs and not just commerce. Bypassing Hong Kong avoids negotiating with two separate entities and provides a more efficient solution for China and Hong Kong to implement the same legislation.

B. A Challenge in the World Trade Organization

Another problem shark fin legislation may encounter is at the WTO if a shark fin producing country such as Indonesia takes China or Hong Kong to the Appellate Body, the WTO defacto Supreme Court. To challenge China at the WTO Appellate Body, another country would need to assert a violation. WTO violations occur when one country discriminates against another or discriminates against imports compared to domestically made products.⁹²

Here, it is likely that any country would fail in a claim brought to the WTO. In this legislation, an equal amount of regulation is imposed upon Chinese shark fisherman and non-Chinese shark fisherman because both would be held to the same standard of keeping the fins attached to the sharks when they came into port. With no difference in regulations between Chinese and international sharks, there can be no claim of discrimination. Additionally, since the U.S. and the EU already have these regulations and no member-state has taken action against them, it is unlikely another country would find China in violation.

However, if a country did find a violation to take China to the WTO Appellate body, China can claim an exception under Article XX.⁹³ Article XX provides an exception for countries' regulations that are "necessary to protect human, animal or plant life or health."⁹⁴ A series of cases from the Appellate Body further define this exception. Appellate body in the *European Commission – Asbestos* case said that any regulation deserving an exception for environmental reasons

92. General Agreement on Tariffs and Trade, art. XI Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT].

93. *Id.* art. XX(a), (b), (d), (g).

94. *See id.* art. XX.

“needs to be ‘relating’ to the conservation of natural resources, a substantial relationship between the measure and the conservation of exhaustible natural resources needs to be established.”⁹⁵ In *United States – Gasoline*, the Appellate Body clarified that the specific measure must be “primarily aimed at” protecting the natural resource.⁹⁶ Further explaining this in *United States – Shrimp*, the regulation must be “fairly narrowly focused” but the Appellate Body still encouraged the rights of countries to protect natural resources.⁹⁷

The hypothetical Chinese shark fin regulations have a substantial relationship to shark conservation because it focuses on protecting shark stocks. In addition, it is based on other pre-existing legislation in other countries. The purpose of the legislation is to conserve sharks, further indicating any Chinese legislation’s connection to conservation. Shark protection is the primary goal, even though these new rules may have other effects. The legislation does not have reference to any other type of fishing or any other type of imports. Shark conservation is the sole focus. Finally, this is narrowly focused because it essentially only modifies a specific method of shark fishing and how to transport a shark on a vessel. It does not even modify the actual uses of the shark once it lands or the amount of sharks that can be caught. Since the measures China would instigate are directed related to conservation of shark populations and there is a clear correlation between the regulations and protecting sharks any WTO challenge would clearly fail.

C. Japan’s Global Objection and Inclusion

A final major concern, especially when implementing the RFMO strategy, is incentivizing other countries to cooperate with this program. Japan in particular is potentially problematic as a large fishing industry with a significant population consuming shark fin soup.⁹⁸ Japan has an over \$11 billion seafood industry and is the second largest seafood importer in the world; it is unlikely to agree to a change in future RFMO quotas merely because China is implementing shark-finning protections.⁹⁹ If Japan is unhappy with the situation, the U.S.

95. *WTO rules and environmental policies: GATT exceptions*, WORLD TRADE ORG., https://www.wto.org/english/tratop_e/envir_e/envt_rules_exceptions_e.htm (last visited May 9, 2017).

96. *Id.*

97. *Id.*

98. Justin McCurry, *Shark fishing in Japan – a messy, blood-spattered business*, GUARDIAN (Feb. 11, 2011), <https://www.theguardian.com/environment/2011/feb/11/shark-fishing-in-japan>.

99. Aya Takada, *Japanese Seafood Exports Rising as Nation Eats Less Fish*, Bloomberg

and EU could offer a counterproposal to induce Japan's compliance. Japan currently has no shark fin regulations that resemble the ones in the United States or the EU.¹⁰⁰ If Japan would agree to implement the same set of rules that China and Hong Kong will implement, the U.S. and EU can guarantee that Japan's RFMO quota will not decrease when China's will increase. Japan's percentage of fish stocks allocated would not increase, even though China's would, because Japan's share of the shark fin market is much smaller than China's. Japan does have an active shark finning industry¹⁰¹, but China and Hong Kong constitute the majority of the world for shark finning.¹⁰² If those countries change their rules and legislation, it will have global consequences. Japan will have some effect, but not at the same magnitude. There would not be a significant number of extra fish protected that Japan could receive an increased quota. Moreover, it would defeat the purpose to save sharks, but then overfish another species through the RFMOs. Nevertheless, there would be enough that the U.S. and EU could protect Japan's quota. Overall, Japan has a different role to play given China's market for shark fins is much greater. In turn, the solution the U.S. and EU will present to Japan will be different too. Overall, there are definite challenges to this approach, but by taking the appropriate steps such as working with the Chinese government regarding Hong Kong, crafting the legislation to prevent a WTO violation or ensuring Japan will cooperate, it is a viable option.

CONCLUSION

The resulting combination of the positive economic effects from enacting this policy, the increase in food availability, and the incentives from the RFMOs and the change of public opinion, will give the U.S. and EU enough influence to push China to adopt similar legislation to prevent shark finning. This solution will not be sufficient on its own to prevent a possible shark extinction event, but it will be a very strong start. Working with China to make changes to Hong Kong and consulting Japan will be key to any success. China and Hong Kong's markets are large enough that even a small change will have a substantial impact. However, sharks face a multitude of other

(Sept. 14, 2015, 5:00 PM), <https://www.bloomberg.com/news/articles/2015-09-14/sushi-losing-to-meat-means-japan-flying-fish-surplus-across-asia>.

100. WHITCRAFT, *supra* note 76.

101. Jonathan DeHart, *Shark Finning: Appetite for Extinction?*, DIPLOMAT (Sept. 12, 2013), <http://thediplomat.com/2013/09/shark-finning-appetite-for-extinction/>.

102. WHITCRAFT, *supra* note 76, at 17.

challenges imposed by humans from becoming fishing by-catch to estuary destruction to climate change.¹⁰³ Hopefully, the global environmental community can rally the world to protecting these iconic species from what could end 420 million years of evolutionary development.¹⁰⁴

103. David Shiffman, *Sharks*, SMITHSONIAN NAT'L MUSEUM NAT. HIST., <http://ocean.si.edu/sharks> (last visited May 9, 2017).

104. *Id.*