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A United States shark fin ban would undermine sustainable shark fisheries

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ABSTRACT

A proposed nationwide ban on the sale of shark fins within the United States would undermine sustainable shark fisheries, would have little effect on global shark mortality, and would perpetuate the misconception that the shark fin trade is the only threat facing sharks. Instead, placing a priority on policies focusing on sustainable shark fisheries management is preferred for meeting the goals of shark conservation.

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 towards 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 towards sustainable shark

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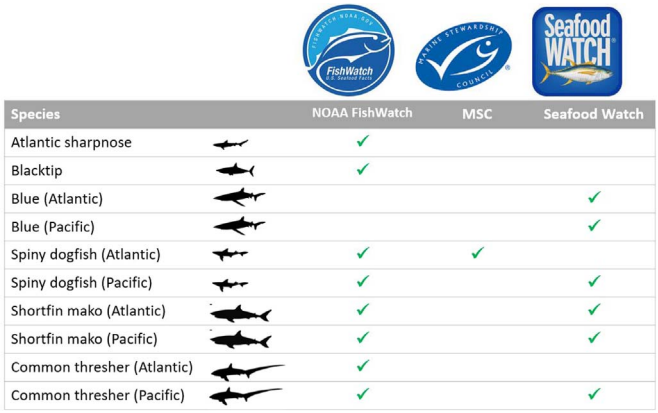

Species	NOAA FishWatch	MSC	Seafood Watch
Atlantic sharpnose	✓		
Blacktip	✓		
Blue (Atlantic)			✓
Blue (Pacific)			✓
Spiny dogfish (Atlantic)	✓	✓	
Spiny dogfish (Pacific)	✓		✓
Shortfin mako (Atlantic)	✓		✓
Shortfin mako (Pacific)	✓		✓
Common thresher (Atlantic)	✓		
Common thresher (Pacific)	✓		✓

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").

fisheries management in the United States.

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 UN 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 towards making all shark fisheries sustainable in the United States and around the world.

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