



Position Statement on Addressing Shark Interactions Approved October 2022

Shark interactions are increasingly common for fishermen, regardless of their sector, the species they target, and where they fish. These interactions can be frustrating for anglers when they result in damage to or loss of fish, bait, and/or fishing gear. There are also concerns that increasing levels of shark depredation on hooked fish and scavenging of released fish is reducing fish survival, negatively impacting fisheries, and will eventually contribute to stricter regulations intended to offset or avoid shark interactions. While the sportfishing community cares about conservation of all marine life, the escalating issue of shark interactions with recreational fishing must be addressed for the benefit of all fisheries and the fishing public.

In the United States, sharks are managed at state, interstate, and national levels and through international treaties. Historically, shark populations were significantly reduced primarily due to overfishing. Over the past few decades, management under the Magnuson-Stevens Fishery Conservation and Management Act has focused on rebuilding overfished stocks and maintaining sustainable shark fisheries. As such, the United States has achieved increases in populations of many shark species.¹ Despite this progress, several shark species are expected to be in rebuilding plans for decades because they are slow to grow and reproduce; prohibited from harvest for conservation purposes; and/or listed under the Endangered Species Act². Although this multi-layered management framework has contributed to the success in rebuilding shark stocks, it also presents constraints in how fishery managers can respond to increasing shark interactions.

Human conflicts with sharks are expected to further increase as shark populations continue to improve. This will require fishery managers and scientists to collaborate with the recreational fishing community on solutions, while considering the complexities of shark fishery management and science. The American Sportfishing Association (ASA) supports using several proactive strategies to help address undesirable shark interactions, both in the short and long-term.

Education

In the short term, ASA believes that educating anglers on how to avoid and respond to shark interactions is critical. Although future research may help uncover new effective ways to address shark interactions, anglers are currently facing these interactions without resources that provide information on how to avoid them or what to do when they experience them. Because each angler's situation will be different, such guidance should include a variety of strategies and when to use them, such as:

- Relocation
- Best practices for landing fish quickly (i.e., using heavy tackle, minimizing fight times)
- Methods for releasing
- Use of deterrents

¹ Peterson et al. 2017. Preliminary recovery of coastal sharks in the south-east United States. *Fish and Fisheries* (18):845-859.

² [NOAA HMS, 2021. 2021 Stock Assessment and Fishery Evaluation Report for Atlantic Highly Migratory Species. National Marine Fisheries Service, Atlantic Highly Migratory Species Division. 250 pp.](#)

For example, existing deterrents using magnetic technology can overwhelm a shark's electroreception and cause the shark to turn away before interacting with a nearby caught or released fish. ASA supports continued research into this technology to accelerate the effectiveness and affordability of this avoidance strategy. As we learn more about shark interactions and how to address them, educational messaging should evolve accordingly. ASA will engage with fishery managers and other organizations to help develop a comprehensive public messaging campaign on how to avoid and respond to shark interactions.

Management

NOAA Fisheries, the federal fishery management councils, and other fishery managers should also consider how shark management measures impact other fisheries and vice versa. Ecosystem-based or more holistic management approaches that better account for and balance species interactions and the needs of recreational fisheries may be warranted. For fisheries in which regulatory releases are high, strategies that allow anglers to turn discards into retained fish to limit release mortality caused by shark scavenging, while minimizing risk of overfishing, may be worth considering. Allowing retention of legal-sized fish that are damaged by sharks is another strategy that should be considered for fisheries that are impacted by depredation and could allow anglers to make the best of an otherwise negative situation.

Another possible approach to reduce shark interactions is to increase harvest of certain shark populations that are healthy and commonly contribute to negative fishing interactions. ASA believes that increasing catch limits or relaxing regulations on shark stocks that can withstand additional harvest should be considered where appropriate and supported by science. However, ASA cautions against the expansion of commercial gear that would create conservation concerns by also increasing bycatch of important recreational fisheries, sea turtles, and other protected species. Reductions in the commercial shark fishing fleet, reduced market demand for shark meat and products, and legislation that prohibits sale of shark fins from legally-harvested sharks also present practical challenges for increasing commercial harvest as a solution to address shark conflicts. Increases in harvest allowances for sharks should be carefully considered and not include use of indiscriminate fishing gear that negatively impact recreational fisheries or damage valuable fisheries habitat.

Policy

It appears that shark depredation of targeted and scavenging of released fish may not be simply opportunistic, but a learned behavior. For example, shark dive tours in which sharks are attracted to dive sites by feeding may teach sharks to associate humans and their vessels with food. The Magnuson-Stevens Fishery Conservation and Management Act (MSA) currently prohibits "shark feeding" off Hawaii and the Western Pacific because of such concerns. ASA supports amending MSA to end the practice of shark feeding nationwide.

Research

ASA has and continues to support efforts to assess and better understand the occurrence of conflicts between sharks and fishing vessels and ultimately inform strategies to reduce shark interactions. Many efforts are underway to characterize shark depredation and scavenging events, as well as fishermen's behavior and attitudes in response to these events. In the future, cooperative research partnerships and citizen science opportunities for anglers, such as using

electronic reporting to report interactions should be considered along with education on the importance of reporting shark depredation encounters.

Key research needs include:

- Identify species involved in interactions, location/regional, and seasonality
- Prioritize shark stock assessments to evaluate potential harvest opportunities
- How sharks become habituated to people and/or different environments (i.e., physiological cues)
- How angler behavior and fishery regulatory frameworks may influence shark interactions
- Additional techniques and strategies for reducing negative shark interactions (i.e., use of deterrents)

Recognizing the many levels of government and non-government entities involved in addressing this challenge, and the need for better coordination among them, ASA supports convening a multi-disciplinary task force that includes federal fishery managers, state fishery managers, fishing stakeholders, and scientists to:

- 1) encourage better coordination and communication across the fisheries management community and
- 2) identify priorities and funding opportunities for research and developing strategies to address shark interactions.

This task force should be inclusive of the diversity of anglers and fishing industry participants that are affected by increasing shark interactions, not just those who target highly migratory species and sharks in federal waters.