



**THE BILLFISH FOUNDATION**  
CONSERVATION THROUGH RESEARCH, EDUCATION AND ADVOCACY

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NOAA NMFS  
HMS Division

Federal E'Rulemaking Portal  
NOAA-NMFS-2021-0027

Dear Randy Blankenship and Karyl Brewster-Geisz,

The Billfish Foundation (TBF) appreciates this opportunity to submit comments on the 217-page reference document, NMFS Draft Atlantic Shark Fishery Review (SHARE), which recounts past and present management actions responsible for the status of today's U.S. Atlantic shark fishery. It is provided the document may be used to develop future conservation and management measures for commercial and recreational shark fisheries for the 43 currently managed. Without significant changes we at TBF are not supportive of using the document for future management actions.

**Stock Assessments**

SHARE's Executive Summary provides that shark fishery management will use the "best available science" (we understand this means what is available, not necessarily the most accurate) and consider impacts on state residents, efficiency, cost, fishing communities, bycatch and safety, goals that do not appear met.

Stocks assessments provide the primary foundation upon which management decisions are based. A clear non-technical explanation is not included to explain why a 2000 transition was made from previous assessment methodologies (benchmark, standard or update-type assessments) to the South East Data (Southeast Fishery Science Center) Assessment and Review (SEDAR) methodologies (research track or operational assessments) used for most domestic fish assessments.

The only attempt in the SHARE document at explaining differences or advantages for the transition is stated to be the research track is similar to benchmark for both are peer reviewed, allow for public input and are used to develop the tools, data and models used in the stock assessment process. Research track assessments are not used to provide management advice, but they establish the foundations for operational assessment that do provide management advice. Operations assessments, which may include procedures similar to the previous standard-type and update-type assessments,

use previously approved methods and data sources to provide management advice quickly and efficiently. This lacks of clarity and will not be grasped by most readers, including those on Capitol Hill. Do the methods used to provide advice quickly and efficiently meet peer review standards held by stock assessment scientists?

Assessments of pelagic fish (billfish, tunas, swordfish & 3 shark species) abundance are also conducted by the International Commission for the Conservation of Atlantic Tunas (ICCAT – a treaty organization) and provides the foundation for the species management. Are methodologies used by ICCAT the “previously used methodologies”?

The Share document also includes a note that NOAA “accepted student manuscript assessments in the past and in limited instances they have been used for management purposes, for hammerhead sharks in 2009.” Curious, why student manuscript assessments would be allowed to provide the bases for any management decisions, that will impact U.S. citizens’ rights to fish, to generate income and business profits.

SHARE’s TABLE 1, Current shark stock assessment and determination year, reflects results of 7 shark assessments conducted since 2013, when data was said to be less reliable. Those 7 assessments indicate that 5 of the 7 assessed shark stocks are not overfished and overfishing is not occurring. If methodologies used can withstand rigorous science review, those results represent successes for the agencies. The “best available science” does not mean the foundational science withstood such review. Each management measure generates some impact on the targeted fishery and, at times, on associated fisheries. The remaining 3 completed stock assessment, without identifying the type of assessment methodological used, indicate those species are overfished and overfishing is occurring, which will generate additional restraining management measures on the fishery. Review and the weighing of impacts vs gains could possibly indicate less regulatory restraints may prove more beneficial in some cases.

No one at TBF expects perfection in stock assessments since we have employed one of the world’s top assessment scientist for over 20 years until his retirement, we are aware of challenges. Trying to calculate the abundance of wild migrating fish, often with problems relating to data sources and inconsistency, is a major challenge. But we expect the agency charged with assessing fish populations to use the highest of standards, methodologies and expertise. The SHARE text does not give confidence that the highest standards were used.

Congressional members, staff and committee staff are due benefit of knowing the credibility of stock assessments, methodologies and data used, and the impact on the U.S. Atlantic shark fishery. These points should be made clear before giving the benefit of the doubt any longer to the agencies to continue their management strategies for the

Atlantic shark fishery. The same should be provided before species and/or critical habitat are listed under the Endangered Species Act. We anticipate more petitions will soon follow, which need greater scrutiny.

The conclusion we at TBF draw from the SHARE document is that U.S. Atlantic shark fishery is not being well managed, in part, due to uncertainty with stock assessment science and how it has been applied. We recommend greater scrutiny, explanation and transparency in the process. Managing a fishery is more than restricting fishing so species stock abundance can grow to the detriment of other species, but it also includes U.S. citizens' fishing and business rights.

### **Management History**

The Management History in the SHARE document clearly provides the chronology of federal management actions responsible for today's status of the U.S. Atlantic shark fishery.

We at TBF stringently oppose the finning of live sharks, but landing, as legally provided, of the whole shark and fins subsequently removed, we think should be allowed. The passage of the Shark Finning Prohibition Act of 2000 significantly changed the shark fishery. The Act prohibits any person under U.S. jurisdiction from finning sharks, possessing shark fins aboard a fishing vessel without the corresponding carcass, and landing shark fins without the corresponding carcass. If questioned among members of the public, most would likely respond that all finning is done on live fish, therefore is horribly cruel and should be stopped. Rather than the agency placing a priority on hosting workshop for anglers to learn how to identify hooked sharks, most of which are incidental catches, providing educational materials of the fact that legal finning on dead fish is authorized could prove more beneficial. The product should be available to meet diverse food cultures.

The Act's requirement for submission of an annual report to Congress on achievements by the federal agencies toward meeting the finning ban and the species fishery management goals rocketed sharks as "priority species." This singling out, we believe, is detrimental to the fishery, to billfish, other fisheries and species. The agency refers to the important role served in the ecosystem by sharks as apex predators, without recognizing that billfish (marlin, sailfish, spearfish), tunas and swordfish, are also apex predators serving the same important roles in ocean ecosystems while generating greater economic returns to the U.S.

The subsequent implementation of finning bans by 13 states triggered further reductions in shark meat markets, generated uncertainty among fish dealers and processors, drove shark harvesters (permit holders) from the fishery, causing landings to fall, increases in shark abundance to continue growing and depredation of other species to grow out of control. Federal shark management trumps state's management, unless state measures

are more restrictive, making state shark management primarily supportive of federal measures. The language for state finning bans are drafted completely separate by each state.

SHARE's inclusion of the 2006 U.S. Consolidated Fishery Management Plan for Highly Migratory Species reflects the federal management structure, actions and the priority given sharks. Since the Plan's implementation, seven (7) shark amendments have been made to the Plan, out of 13 amendments total. Each amendment is labor intensive and a time consuming process. A 14<sup>th</sup> amendment, already in advanced draft stage, is soon to follow, making shark amendments 8 out of 14.

The 2010 Shark Conservation Act further boosted sharks' priority by the Secretary of Commerce urging international fishery management organizations, to which the United States is a member, to adopt shark conservation measures, including prohibiting the removal any shark fins (including the tail) and discarding the carcass at sea.

### **Commercial Shark Fishery**

The majority of federal directed and incidental permits to fish in federal waters have been inactive for sharks, but are essential to fish and land other species. Directed shark permits have declined since 2014, the peak year, from 114 to 73 in 2019. The number of Incidental shark fishing permits declined by 50% from the peak year, 2014, from 66 to 34 in 2019. This trend is moving in the wrong direction.

#### Trips by gear

In 2014 gillnets landed the most sharks in the Large Coastal Group followed by bottom longline gear. Bottom longline trips decreased in 2019 down to 48 trips and gillnets became primary from 2016 through 2019 with 430 trips. Only a small number of pelagic longlines or vertical line trips were fished for sharks during this period.

#### Market and Trade

Ex-Vessel Pricing and Revenue – According the SHARE document data, in 2019 the Atlantic Shark Fishery was valued at \$2.28 million for landing 2.2 million pounds. (NOAA 2020). The legal fin trade generated the most revenue with the top price paid being \$11.10 per pound from Gulf of Mexico, second highest at \$8.11 per pound from the South Atlantic and third was \$1.87 per pound paid for fins from the Mid-Atlantic. For the sake of comparison, one offshore recreational fishing vessel can easily sell for \$2.28 million dollars and above, plus annual upkeep, crew, fuel and other essential equipment raises the investment well above the shared value of the Atlantic shark fishery of \$2.28 million.

The SHARE document provides that the implementation of state shark finning bans devalued markets for shark meat and fins, thus driving down revenues and driving away harvesters (permit holders). Fewer harvesters remain in the fishery, without which excessive abundance of sharks grew and that led to shark depredation of other species,

causing damage to gear, other species, fishing experiences and economics of other fisheries and related businesses.

The Texas finning ban further contributed to revenue declines in the shark fishery, dropping prices paid back to the 2014 prices (\$7.14 per pound) for fins. The Texas law further hampers the shark fishery for it prohibits the transporting of fins through the state, even if landed legally elsewhere. Texas had provided a corridor for the export of legal fins into Mexico, which now is closed, leaving the dealers to seek out other states for export services.

If economics were the measuring tool to determine success or not with management of the U.S. Atlantic shark fishery, we would judge it unsuccessful

Rather than watching the further demise of the U.S. Atlantic shark fishery, striving to rescue it might prove more productive to the nation, its citizens and fisheries.

Developing a plan that establishes a strategy for facilitating the sale and export of legally landed sharks, fins and meat, could be timely and very helpful. Perhaps states other than Texas may be interested in providing export services. Without assistance, the U.S. Atlantic shark fishery may collapse.

### **Recreational Shark Fishery**

Within the SHARE document it is provided that the recreational shark catch data is a “total catch” data set including landed sharks, those kept and those discarded dead and those released alive. We find this most puzzling. Why is the recreational fishing data not just included dead landed sharks? By counting caught fish that are released alive, the agency staff seem to be speculating that all recreationally caught sharks are going to die. We do not accept that speculation as the truth, nor can it be verified either way. The method should not be used against recreational shark fishery. Later in the document, it is suggested a post-release mortality number should also be calculated and included in the count of recreationally caught sharks. Recreational data is collected primarily via surveys and some electronic reporting, adding speculative post release mortality numbers would not be consistent with management of other fisheries and indicates some prejudice in the management.

Catch numbers, remember “total catch numbers include sharks kept, dead and live discards” are reported in the document to be 376,000 sharks per year between 2014 through 2019 in the Atlantic and Gulf of Mexico recreational shark fishery. However, on the subsequent page (148) the text provides that “[o]f the over 14 million sharks caught recreationally in the Atlantic region each year on average, only 9 percent were caught in federal waters with the remainder of the catch split between state inshore (41%) and ocean waters (50%).” Which number is accurate for recreational caught shark numbers per year – 376,000 or over 14 million?

An estimate of 13 million sharks are recorded in the document as released each year with only 50% identified to species. These sharks were thought to be incidentally caught. It is noted several times, that a relatively large percent of angler-hooked sharks are not identified in landing reports. If the sharks are incidental catches, the boats likely find them to be a nuisance threatening other fish that are desired for catching. Then over 30 pages follow providing staff estimates of “total shark landings” by species. Fishing tournaments are reported to account for a significant number of recreational shark trips and catches for pelagic shark species, even following restrictions in Amendment 11 that cut the annual harvest in half in 2018 and 2019. Though it follows that the recreational pelagic shark fishery is a very small portion of the overall recreational shark fishery. So are tournaments with shark categories really a problem?

Anglers not identifying caught shark species is a recurring concern repeated and repeated in the document, giving us the impression that failing to elect to identify the shark species might be driving a lot of the effort of agency staff. To that point, the document notes that unidentified sharks do complicate trends in the fishery, even though the majority are released “the estimates impact the management of shark stocks.” Many words are used to stress the importance of educating anglers on identifying sharks, handling and release techniques, concluding the agency will work with state agencies and interstate fishery commission to achieve their identification and education goals and “conserve the valuable components of the ocean ecosystems.” That is a bit dramatic. It is insulting that bureaucrats plan to tell anglers and captains how to id their hooked shark species. We do not believe this will be taken seriously by members of the recreational shark fishery. Maybe sounds good for a report to Congress, but not realistically valuable.

Next follow statements of “challenges ahead in managing the recreational shark fishery,” referencing in the already drafted Amendment 14 to the Consolidated HMS Fishery Management Plan options being considered. These possible steps to “better manage the recreational shark fishery” include establishing an active quota management system that requires a quota and a means for accountability. Next it is acknowledged in “a statement of realization” (government’s words) that the recreational shark fishery is “overwhelmingly a catch-and-release fishery,” but goes on to provide that the “proper, science-based post-release mortality estimates will be **essential** for setting and monitoring quotas that will **successfully conserve these stocks.**” More dramatic language, but might sound like great science that will solve the problem, not so.

To those of us who fish, who know the price of satellite tags and associated research, who understand incidental hooking of a fish, we think the perceived challenge of collecting data of all hooked sharks and including post-release estimates as essential

for successful conservation of the recreational shark fishery, think the dramatic words came from another universe. The pursuit of such questionable goals makes no sense in time, money or results. It comes across as making work and research to be included in the annual report to Congress. There are priorities in fishery management and this is not one we think worth the money and effort. Move on. If this is a priority, then shame on the agency staff for identifying it as such and spending citizens' money on it.

### **Shark Depredation**

Even with the lack of clarity with the agency's use of stock assessment science, the high rate of shark depredation of angler-hooked fish provides strong antidotal evidence that Atlantic shark abundance is high, maybe not for all shark species, but we think it is safe to say for a fair number of them, perhaps even a majority of them. Shark depredation is causing harm to fishing experiences, fisheries targeting a variety of other fish from all platforms, fishing businesses and related businesses. Gear is also damaged by sharks, which generates extra expenses, causing additional economic losses. Again the sharks taking angler-caught fish are a nuisance, no one paying for a fishing trip wishes to experience interaction with them nor do crew members want to take time to report and identify the nuisance by species.

In the Depredation section of the document the agency includes 3 Considered Solutions for Shark Depredation, those being (1) hosting shark identification workshops and producing educational materials to assist anglers and captains in identification of shark species. Most captains can already identify the shark species predated their vessels' catch. (2) Sharing shark avoidance methods! Many of us fear this could materialize as "don't fish." (3) Implementing a recreational fishing quota and include estimated post-release mortality numbers. Clearly, such "solutions" are thought appropriate only by those in offices, those who do not have much experience on the water.

Instead, serious effort should be devoted to developing a U.S. Atlantic Shark Marketing Plan that assists in facilitating the sale in the U.S. and as exports of legally landed sharks and fins landed by U.S. vessels. A productive shark fishery cannot exist without a market as well as without fish. Once conservation of species is successful, driving the fishery to collapse makes the conservation efforts of little value to the U.S. economy. Currently some have introduced at least one bill that proposes to prohibit the sale of any fins in the U.S., which seems arbitrary and capricious.

[HR 737 \(116 th\): Shark Fin Sales Elimination Act of 2019](#)

The practice of live finning of a shark or any fish we think is repugnant and should be prohibited, but commercial vessels that follow the shark management measures, which still allows the landing of sharks whole or in some cases with fins and tail attached, should be allowed to sell them. Otherwise no shark fishery, no economic returns and no interest or support for conserving species will follow.

The agency has achieved some shark conservation successes for which its employees should be proud, but at the same time the agency has restricted the human participation in and economic returns from the fishery. Constructive balancing is essential for the fish, the fishery and economic returns to the U.S.

**In summary**

If the goal of successful management of the Atlantic shark fisheries remains to achieve improved stability and resiliency of the fishery after considering potential impacts on residents of different states, efficiency, costs, fishing communities, bycatch, and safety at sea, as provided in the beginning of the SHARE document, we at TBF don't believe that goal has been achieved. Major changes are needed. Fishery management must include not only fish, but also the human and economic elements while striving for balance. Preservation of species and regulating a fishery to death is not productive for fisheries, commercial or recreational, nor for U.S. citizens or business interests, though members of the environmental industry likely think otherwise.

It is our hope at TBF that our comments will be taken seriously, that they will generate closer scrutiny of stock assessment science, maybe via a National Academy Review, and the NMFS management priorities and strategies for Atlantic shark fishery management will change and achieve a turn-around in the shark fishery and markets. We hope you find our comments helpful.

Respectfully,



Ellen M. Peel  
President