April 13, 2012

Peter Cooper
Highly Migratory Species Management Division
Office of Sustainable Fisheries
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910



Dear Mr. Cooper:

Shark Advocates International, a project of The Ocean Foundation, appreciates this opportunity to provide written comments on the possible shark fishery management alternatives outlined in the National Marine Fisheries Service (NMFS) Pre-Draft of Amendment 5 to the Consolidated Atlantic Highly Migratory Species (HMS) Fishery Management Plan. These comments build upon opinions expressed at the recent meeting of the NMFS HMS Advisory Panel.

In general, Shark Advocates International (SAI) strongly supports NMFS pursuing further reductions in allowable catch, additional fishing gear limitations, and expanded time/area closures to comply with obligations to prevent overfishing and rebuild depleted populations of Atlantic blacknose, scalloped hammerhead, dusky, and sandbar sharks. Our specific comments follow.

Species-Specific Measures

Hammerhead Sharks

SAI has long promoted the scalloped hammerhead as a U.S. Atlantic shark conservation priority based on the International Union for Conservation of Nature (IUCN) classification of *Globally Endangered*, findings of overfishing and 83% depletion in the Northwest Atlantic population, the species' particular sensitivity to fishing gear, and the exceptionally high value of hammerhead fins for shark fin soup. In addition, with confirmation of a new species of hammerhead off Brazil (discussed in the April issue of Marine Biology), scientists are raising new concerns that the U.S. Atlantic population of scalloped hammerheads is likely smaller than originally thought.

The scalloped hammerhead section of the Pre-Draft strikes us as one area where NMFS has not provided an adequate range of potential alternatives. As mentioned at the AP meeting, we feel strongly that NMFS should be pursuing specific conservation measures for great and smooth hammerhead sharks, as well as scalloped hammerheads, based on similarity of appearance and evidence of similar population declines (the IUCN lists both species as Threatened: great hammerheads as globally *Endangered* and smooth hammerheads as *Vulnerable*). As mentioned

in the Pre-Draft, scalloped hammerhead sharks are often confused with smooth and/or great hammerheads, and landings of these species are often reported under a general "hammerhead" category. Moreover, fins of scalloped hammerheads are traded along with those of smooth and great hammerhead sharks and often grouped together at various stages in the supply chain. Indeed, the difficulty of distinguishing the fins of scalloped hammerhead sharks from those of smooth and great hammerheads was a major factor in the U.S. decision to propose all three species (the latter two as "look alike" species) for listing under the Convention on International Trade in Endangered Species (CITES) in 2010. We urge NMFS to broaden the Pre-Draft options in an effort to protect not only scalloped hammerheads but also the other vulnerable species in the hammerhead complex.

Noting that recreational take of scalloped hammerhead sharks has likely exceeded commercial landings in recent years, and fully acknowledging the species' exceptionally high discard mortality rates, SAI continues to support adding scalloped hammerheads (as well as great and smooth hammerheads) to the NMFS HMS list of prohibited shark species (for commercial and recreational fisheries). We reiterate that we believe such action would represent a step toward comprehensive protection for these species rather than a solution, and must be complemented by measures to reduce bycatch and discard mortality.

A prohibition on all three hammerhead species could reduce mortality and level the playing field between U.S. Atlantic pelagic fishermen (already abiding by this measure through action by the International Commission for the Conservation of Atlantic Tunas that the U.S. supported) and other HMS fisheries, while also serving to highlight the species' vulnerability for stakeholders and the public. In addition, a ban on keeping all hammerhead species may well boost the chances for meeting scalloped hammerhead recovery goals by easing enforcement of rules, considering the strong demand for hammerhead fins.

It appears that the Pre-Draft analysis of options may be stressing or exaggerating the negative effects of high discard mortality for the species and pre-judging such measures as completely ineffective without adequate analysis. We find the stated threat of "adverse ecological impacts" from a hammerhead prohibition particularly unsubstantiated and questionable.

Certainly, hammerhead dead discards are a critical consideration; however, it is also clear that they will occur and may impede recovery under a scenario where a specific scalloped hammerhead quota is set and met while fishing for other shark species continues. We urge NMFS to conduct and present more extensive analyses of the hammerhead catch limit options and to consider their potential ecological benefits in light of the consistency, awareness, and enforcement considerations mentioned above.

The option of raising the recreational size limit for only scalloped hammerheads seems, at this stage, as if it will lead to much complication and need for further education for very limited potential benefits to the population.

Whereas SAI is heartened by the hope of rebuilding the scalloped hammerhead population within 10 years, we believe this and related species warrant a particularly precautionary approach for the reasons stated above.

Sandbar Sharks

SAI also urges a precautionary approach to sandbar shark management. Specifically, we appreciate the finding that reducing the current sandbar research fishery Total Allowable Catch (TAC) from 220 metric tons (mt) to 178 mt shortens the rebuilding timeframe by only four years (to 2066), under a 70% chance scenario; however, we can only assume that the long length of related projections, as well as other factors, result in considerable uncertainty around this estimate. Given that an annual directed take of more than 4,000 sandbar sharks is likely not trivial, we urge NMFS to further develop options for sandbar quota reduction and, if possible, provide stakeholders with a clearer picture of the uncertainty associated with recovery periods that span five decades.

In the meantime, it seems clear that the scheduled 2013 increase in the sandbar shark quota mentioned in the Pre-Draft should not go forward. Perhaps explanation and or additional consideration of this issue would be helpful for the next document.

We appreciate NMFS highlighting the troubling fact that, despite the 2008 general prohibition on sandbar sharks, recreational fishermen landed more than 6,000 sharks of this species in 2010. Whereas we recognize that NMFS conducts much outreach to these fishermen, we believe further discussion of this problem and specific options to address it are warranted.

Dusky sharks

We are also deeply concerned that, despite the 2000 prohibition and existing closures promulgated for dusky sharks, the population continues to suffer fishing mortality rates that are three times too high. As you are aware, long-term overfishing and dusky shark life history characteristics (particularly maturity at close to 20 years and lengthy reproductive cycles) have resulted in rebuilding periods that may span hundreds of years. We strongly support NMFS examining a host of additional measures (primarily time/area closures and gear restrictions discussed below) to enhance recovery and guard against further depletion.

Blacknose sharks

SAI strongly supports NMFS' work to establish separate yet linked TACs, commercial quotas, and perhaps additional recreational limits for the two, newly defined stocks of blacknose sharks. Specifically, we support the development of measures for the Atlantic population to ensure that total landings and discards do not exceed 7,300 sharks, in line with a 70% probability of rebuilding by 2043, as well as options to address the unknown stock status for Gulf of Mexico blacknose sharks.

We look forward to further development and analysis of options for establishing a Gulf of Mexico blacknose TAC. In the meantime, it seems that the preliminary calculations of a 17,092 Gulf TAC (resulting of an overall blacknose TAC reduction for both regions of just over 2,000 sharks) and even the 11,900 Gulf TAC (derived by simply subtracting the proposed Atlantic TAC from the current combined TAC) are not sufficiently precautionary in the face of such uncertainty.

We appreciate that the Gulf of Mexico and South Atlantic Fishery Management Councils lead in management of the shrimp trawl fisheries that are responsible for substantial amounts of blacknose shark bycatch. We note, however, that NMFS of course has a seat on these Councils, and suggest that the agency should fully exploit this influential role, in addition to collaboration through the HMS Division, to further promote observer coverage and bycatch reduction in shrimp fisheries, particularly in the Gulf. As you are aware, such improvements could benefit a host of highly migratory fish as well as protected species.

Commercial At-Vessel & Discard Mortality Reduction

SAI agrees with NMFS that both time/area closures that prevent fishing gear interactions as well as measures to minimize mortality after sharks are caught (particularly limits on gear deployment, soak time, and tending) hold promise for enhancing recovery of particularly sensitive and depleted shark species, including hammerhead, dusky, sandbar, and blacknose sharks. We commend NMFS for the analysis of a full range of these measures in the Pre-Draft and encourage continuation of the Panama City laboratory's research on the effect of bottom longline soak time on the at-vessel mortality rate of scalloped hammerheads, in order to better quantify this species' tolerance of capture stress, and in turn inform the development of options for minimizing at-vessel mortality.

Because NMFS' analysis reveals that holding soak times to under eight hours dramatically reduces mortality of the key species mentioned above, we are dismayed at the suggestion that soak time limits based on numbers of hours are not viable options because of enforcement concerns, and that only measures that prohibit fishing during the day or night will be considered. It seems as if finding ways to adequately enforce soak time limits would benefit myriad species and, as such, deserve further consideration.

We suggest NMFS investigate any potential negative effects for species identification and/or safe release associated with restricting shark fishing to the darkest hours.

We look forward to expansion of options to limit the number of hooks on board bottom longline vessels targeting sharks, given the potential benefits for prohibited and non-target species.

We share others' concerns over apparently increasing instances of fishermen leaving gear unattended for extended periods of time as they temporarily cease haul-back to land their limit of non-sandbar large coastal sharks. As demonstrated by the NMFS analyses, such practices dramatically reduce the chances of survival for prohibited and other non-target sharks and likely

increase interactions with protected species. For these reasons, SAI supports advancement of the potential option to require that bottom longline gear on permitted shark vessels remains attached to the vessel at all times, as well as the alternative that would require that these vessels remain within one nautical mile of their fishing gear.

We also support further analysis of alternatives to reduce total hook hours in the bottom longline shark fishery by limiting the number of hooks deployed per set and possessed on board, in order to reduce high-grading, dead discards, and overall fishing mortality of blacknose, dusky, sandbar, and scalloped hammerhead sharks (and other species of concern).

Time/Area Closures

Recognizing the potential for displaced fishing effort, SAI strongly supports the development of alternatives for additional time/area closures as a means of reducing fishing mortality by preventing interactions with fishing gear. We urge NMFS to further evaluate these options, and, in the meantime, offer our general support closing hotspots for bycatch of species addressed in this Pre-Draft, particularly dusky sharks.

Conclusion

SAI urges NMFS to make every effort to keep to the anticipated schedule for completing a Final Amendment 5 to the Consolidated HMS FMP and related documents by Spring 2013.

Thank you for your consideration. We look forward to the deliberations around the next phases of this important process to conserve some of the Atlantic's most vulnerable and depleted species.

Sincerely,

Sonja Fordham

President