

Atlantic States Marine Fisheries Commission

**ADDENDUM III TO THE INTERSTATE FISHERY
MANAGEMENT PLAN FOR ATLANTIC COASTAL SHARKS**



ASMFC Vision Statement:

Healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015.

Approved October 2013

1.0 Introduction

This Addendum modifies the Atlantic States Marine Fisheries Commission's (ASMFC) Interstate Fishery Management Plan for Atlantic Coastal Sharks by establishing new species groups for coastal sharks and a new recreational size limit for hammerhead sharks consistent with Amendment 5a to the 2006 Consolidated Highly Migratory Species Fishery Management Plan.

2.0 Overview

2.1 Statement of the Problem

The purpose of this addendum is to maintain consistency between federal and state coastal shark fishery management plans. The NOAA Fisheries Highly Migratory Species (HMS) Management Division has amended the 2006 Consolidated HMS Fishery Management Plan (HMS FMP) to address recent findings that scalloped hammerhead, blacknose and sandbar sharks are overfished and/or experiencing overfishing. In Amendment 5a to the HMS FMP, NOAA Fisheries changed the coastal shark species groupings and established a new commercial quota and recreational size limit to respond to the findings as required under the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act). The Board initiated this addendum to consider establishing the same species groupings and recreational size limit.

2.2 Background

A stock assessment for scalloped hammerhead sharks in 2009 estimated that a total allowable catch (TAC) of 2,853 scalloped hammerhead sharks (approximately 79.6 metric tons (mt) dressed weight (dw), calculated using an average dw of 61.5 lb per individual) would allow for a greater than 70 percent probability to rebuild the stock within 10 years (Hayes *et al.* 2009). In 2011, blacknose sharks were assessed as two separate stocks for the first time: a Gulf of Mexico and an Atlantic stock. For the Atlantic blacknose shark stock, projections of the base model indicated that the stock has a 70 percent probability to rebuild by 2043 with a TAC of 7,300 blacknose sharks.

As a result of these assessments, NOAA Fisheries established separate quotas for the Gulf of Mexico and the Atlantic Ocean stocks of hammerhead and blacknose sharks, and adjusted commercial quotas for both species.

All hammerhead sharks (i.e., great, scalloped, and smooth) will be grouped under one commercial quota because it is difficult to differentiate among hammerhead species, particularly when dressed. The commercial quota was calculated by subtracting recreational landings, commercial discards, and research set-aside from the scalloped hammerhead shark TAC of 79.6 mt dw. This methodology results in a total commercial quota for all hammerhead shark species of 52.4 mt dw (115,457 lb dw), which was then divided into the two regions (Atlantic and Gulf of Mexico) using the average percentage of total hammerhead shark landings in each region. Between 2008 and 2011, hammerhead shark landings in the Atlantic region accounted for 51.7 percent of the total hammerhead shark landings and hammerhead shark landings in the Gulf of Mexico region accounted for 48.3 percent of the total hammerhead shark landings (Table 1).

Consequently, the Atlantic hammerhead shark commercial quota will be 27.1 mt dw (59,736 lb dw) (NOAA Fisheries Amendment 5a FEIS, pp. 2-10 - 2-11).

Table 1: Landings of hammerhead sharks from the Gulf of Mexico and Atlantic, 2008-2011. Table 2.2 from NOAA Fisheries FEIS for Amendment 5a to the HMS FMP, pp. 2-11.

Year	Gulf of Mexico Hammerhead Shark Landings (lb dw)	Atlantic Hammerhead Shark Landings (lb dw)	Total (Gulf of Mexico + Atlantic)	Percentage of Total Hammerhead Shark Landings From Gulf of Mexico	Percentage of Total Hammerhead Shark Landings From Atlantic
2008	39,714	40,431	80,145	49.6%	50.4%
2009	87,839	94,129	181,967	48.3%	51.7%
2010	23,822	68,071	91,893	25.9%	74.1%
2011	63,494	27,715	91,210	69.6%	30.4%
Total	214,869	230,346	445,215	48.3%	51.7%

The commercial quota for blacknose sharks was calculated by subtracting recreational landings, commercial discards and research set-aside from the TAC of 21.2 mt dw. This results in a commercial quota for Atlantic blacknose sharks of 18.0 mt dw. Note that prior to Amendment 5a to the HMS FMP, NOAA Fisheries maintained a blacknose shark and non-blacknose small coastal sharks (SCS) quota that applied to both the Atlantic and Gulf of Mexico regions (one quota for both regions). Amendment 5a established separate Atlantic and Gulf of Mexico quotas for blacknose sharks and non-blacknose SCS.

In addition, the non-sandbar large coastal shark (LCS) group was re-grouped to adjust for the newly established hammerhead group. The Atlantic non-sandbar LCS group was renamed “aggregated LCS” and includes Atlantic blacktip, bull, lemon, nurse, silky, spinner and tiger sharks. The quota for the aggregated LCS group is 168.9 mt dw.

NOAA Fisheries also linked the quotas of the hammerhead group and the aggregated LCS group to prevent exceeding the newly established quotas. Quota linkages are a management tool that is used when two or more shark species with separate quotas are caught together on the same set or trip. If the quota for one of these species has been filled and closed, that species could still be caught in other directed shark fisheries as bycatch, possibly resulting in mortality beyond the quota for the species that is closed. Therefore, if one of the species groups quota closes, because the quotas are linked, the other species group quota would also close.

These two management groups will open at the same time and both management groups would close when landings reach, or are expected to reach, 80 percent of the quota. For example, when landings of either the Atlantic hammerhead shark or aggregated LCS reach, or are expected to reach, 80 percent of the quota, fishing for both groups would close. Similarly, when landings of either Atlantic blacknose or Atlantic non-blacknose

SCS reach, or are expected to reach, 80 percent, fishing for both groups would close. Opening and closing these two management groups concurrently strengthens the conservation benefits of either group's closure (NOAA Fisheries FEIS for Amendment 5a, pp.2-18 – 2-19).

NOAA Fisheries continues to link the blacknose quota with the non-blacknose SCS quota, however, these links are only applicable within each region. Thus, landings from the Gulf of Mexico region will not impact the Atlantic regional quota. NOAA Fisheries is also allowing in-season transfers between the hammerhead regions and the non-blacknose SCS regions to provide equal opportunity to fish for these species. These groups were separated into different regions for management purposes and not due to the results of stock assessments indicating there are different stocks in the different regions.

Finally, NOAA Fisheries changed the recreational size limit for all hammerhead sharks. A study found that female scalloped hammerhead sharks reach maturity at 78 inches fork length (FL), therefore NOAA established a new recreational size limit of 78 inches FL for all hammerhead sharks to limit the retention of scalloped hammerhead sharks to mature individuals (Hazin *et al.* 2001, NOAA Fisheries FEIS for Amendment 5a, pp. 2-19).

While NOAA Fisheries was working on Amendment 5a, the Agency also received and responded to a petition to list scalloped hammerhead sharks under the Endangered Species Act. On April 5, 2013, NOAA Fisheries released a proposed rule that determined that while two Distinct Population Segments (DPSs) warrant listing as endangered and two DPSs warrant listing as threatened, two DPSs do not warrant listing at this time, including the Northwest (NW) Atlantic and Gulf of Mexico (GOM) DPS (the DPS that overlaps the population managed by NOAA Fisheries and ASMFC) and the Central Pacific DPS (78 FR 20718). NOAA Fisheries did not propose listing the NW Atlantic & GOM DPS in part because of formalized conservation efforts, such as Amendment 5a, and the idea that these regulatory mechanisms are likely to further reduce the significant threats to this DPS (primarily overexploitation by commercial and recreational fisheries, exacerbated by the species' high fishing mortality).

The commercial measures establishing the hammerhead shark quota are expected to have short and long-term direct moderate beneficial ecological impacts for the following reasons. A separate hammerhead shark quota in each region would allow the effective monitoring of commercial landings of the species to keep mortality within the recommended TAC in the stock assessment and to rebuild within the parameters set by the rebuilding plan. Additionally, including all three of the large hammerhead species (scalloped, great, and smooth hammerhead sharks) under the same quota would prevent fishing in excess of the quota that could occur as a result of species identification problems (NOAA Fisheries Amendment 5a FEIS, pp. 4-8).

The commercial measures for establishing the Atlantic blacknose shark quota are anticipated to have short- and long-term minor, beneficial ecological impacts for blacknose sharks (NOAA Fisheries Amendment 5a FEIS, pp. 4-9). Similarly, establishing

regional non-blacknose SCS quotas is anticipated to have direct, neutral ecological impacts for Atlantic sharpnose, bonnethead, and finetooth sharks in the short and long-term as it would create regional quotas and restrict fishing mortality below the TAC established for SCS in SEDAR 13 (NOAA Fisheries Amendment 5a FEIS, pp. 4-9).

When taken as a whole, these commercial measures will likely have direct short- and long-term minor adverse socioeconomic impacts. These impacts mostly affect fishermen targeting hammerhead sharks and blacknose sharks since the quotas were established or reduced. Quota linkages may affect the socioeconomic impacts based on the fishing rate of each linked shark quota. If fishermen fill both quotas at about the same rate, there will be little or no unutilized quota. If, however, one of the linked quotas is filled at a much faster rate than others and close management groups with linked quotas, there could be left over quota available that could have been harvested and sold by fishermen (NOAA Fisheries Amendment 5a FEIS, pp. 4-29).

The recreational measure of increasing the size limit for hammerhead sharks should reduce mortality and assist the rebuilding scalloped hammerhead sharks. As such, this would have short- and long-term, direct and indirect, minor beneficial ecological impacts on scalloped hammerhead (NOAA Fisheries Amendment 5a FEIS, pp. 4-16).

3.0 Management Program

3.1 Recreational Minimum Size Limits

This modifies Section 4.2.4 Recreational Minimum Size Limits.

Sharks caught in the recreational fishery must have a minimum fork length of 4.5 feet (54 inches) with the exception of smooth hammerhead, scalloped hammerhead, great hammerhead, smoothhound, Atlantic sharpnose, blacknose, finetooth, and bonnethead.

Smooth hammerhead, scalloped hammerhead and great hammerhead must have a minimum fork length of 6.5 feet (78 inches).

Smoothhound, Atlantic sharpnose, blacknose, finetooth and bonnethead do not have recreational minimum size limits.

Table 4.4 is modified as follows:

Table 4.4. Recreational minimum size limits.

No Minimum Size	Minimum Fork Length of 4.5 Feet		Minimum Fork Length of 6.5 Feet
Smoothhound	Tiger	Shortfin mako	Scalloped hammerhead Smooth hammerhead Great hammerhead
Atlantic sharpnose	Blacktip	Porbeagle	
Finetooth	Spinner	Thresher	
Blacknose	Bull	Oceanic whitetip	
Bonnethead	Lemon	Blue	
	Nurse		

3.2 Commercial Species Groupings

This modifies Section 4.3.3 Commercial Species Groupings (and the appropriate subsections, outlined below). Two new species groups ('Blacknose' and 'Hammerhead') are created. The modified language is as follows (all other language remains the same):

This FMP establishes eight commercial 'species groups' for management (Table 4.5 and 4.6): Prohibited, Research, Smoothhound, Non-Blacknose Small Coastal, Blacknose, Aggregated Large Coastal, Hammerhead and Pelagic. These groupings apply to all commercial shark fisheries in state waters.

The eight commercial species groups are based on fisheries, biology, and stock status of the various species. Eight groups were necessary in order to set the most appropriate quotas (*Section 4.3.4*) and possession limits (*Section 4.3.6*) for species whose stock levels are high enough to allow sustainable fishing pressure, and to grant display and research permits (*Section 4.3.8.2*) for species whose stock levels can only allow for display or research catch. These species groups are designed to parallel the federal groupings established in Amendment 2 and Amendment 5a in the simplest manner possible. Note: Smoothhound sharks are not currently managed in federal waters.

Section 4.3.3.2 Smooth Dogfish, Small Coastal, Non-Sandbar Large Coastal, and Pelagic Species Groups is replaced as follows:

Commercial fishermen may harvest any sharks in the Smoothhound, Non-Blacknose Small Coastal, Blacknose, Aggregated Large Coastal, Hammerhead and Pelagic Species Groups as long as they are in compliance with all rules and regulations contained in this plan (Table 4.6)

The Smoothhound Species Group consists of Florida smoothhound sharks and smooth dogfish.

The Non-Blacknose Small Coastal Species Group consists of Atlantic sharpnose, finetooth and bonnethead sharks.

The Blacknose Species Group consists of blacknose sharks.

The Aggregated Large Coastal Sharks Species Group consists of silk, tiger, blacktip, spinner, bull, lemon and nurse sharks.

The Hammerhead Species Group consists of smooth hammerhead, great hammerhead and scalloped hammerhead sharks.

The Pelagic Species Group consists of shortfin mako, porbeagle, common thresher, oceanic whitetip and blue sharks. *Table 4.6 is modified as follows:*

Table 4.6. Sharks in the Smoothhound, Non-Blacknose Small Coastal, Blacknose, Aggregated Large Coastal, Hammerhead and Pelagic species groups. Fishermen with state commercial fishing permits (*Section 4.3.8.1*) may harvest these species according to the rules and regulations contained in this plan.

Smoothhound	
Smooth Dogfish	<i>Mustelus canis</i>
Florida smoothhound	<i>Mustelus norrisi</i>
Non-Blacknose Small Coastal	
Atlantic sharpnose	<i>Rhizoprionodon terraenovae</i>
Finetooth	<i>Carcharhinus isodon</i>
Bonnethead	<i>Sphyrna tiburo</i>
Blacknose	
Blacknose	<i>Carcharhinus acronotus</i>
Aggregated Large Coastal	
Silky	<i>Carcharhinus falciformis</i>
Tiger	<i>Galeocerdo cuvier</i>
Blacktip	<i>Carcharhinus limbatus</i>
Spinner	<i>Carcharhinus brevipinna</i>
Bull	<i>Carcharhinus leucas</i>
Lemon	<i>Negaprion brevirostris</i>
Nurse	<i>Ginglymostoma cirratum</i>
Hammerhead	
Scalloped hammerhead	<i>Sphyrna lewini</i>
Great hammerhead	<i>Sphyrna mokarran</i>
Smooth hammerhead	<i>Sphyrna zygaena</i>
Pelagic	
Shortfin mako	<i>Isurus oxyrinchus</i>
Porbeagle	<i>Lamna nasus</i>
Common thresher	<i>Alopias vulpinus</i>
Oceanic whitetip	<i>Carcharhinus longimanus</i>
Blue	<i>Prionace glauca</i>

3.3 Quota Specification

This adds the new species groups to Section 4.3.4 Quota Specifications (all other language remains the same).

The Spiny Dogfish and Coastal Sharks Board will not actively set quotas for any species contained in the Non-Blacknose Small Coastal, Blacknose, Aggregated Large Coastal,

Hammerhead or Pelagic species groups but will close the fishery for any species in these groups when NOAA Fisheries closes the fishery in federal waters.

Table 4.7 is modified as follows:

Table 4.7 Quota Specification for each species group

Species Group	Quota
<i>Prohibited</i>	Display and Research Permit holders only
<i>Research</i>	Display and Research Permit holders only
<i>Smoothhound</i>	Set by Board Action
<i>Non-Blacknose Small Coastal (SCS)</i>	Open and close with NMFS
<i>Blacknose</i>	Open and close with NMFS
<i>Aggregated Large Coastal (LCS)</i>	Open and close with NMFS
<i>Hammerhead</i>	Open and close with NMFS
<i>Pelagic</i>	Open and close with NMFS

3.4 Annual Process for Setting Fishery Specifications

This adds the new species groups to Section 4.3.7 Annual Process for Setting Fishery Specifications (all other language remains the same).

The Spiny Dogfish and Coastal Sharks Management Board may set a quota for the Smoothhound species group; and possession limits for the Non-Blacknose Small Coastal, Blacknose, Aggregated Large Coastal, Hammerhead and Pelagic species groups.

4.0 Compliance Schedule

States must implement Addendum III according to the following schedule to be in compliance with the Coastal Sharks ISFMP:

January 5, 2015: States submit proposals to meet requirements of Addendum III.

February 3 – 6, 2014: Management Board reviews and takes action on state proposals.

March 1, 2014: States implement regulations.

References

“Atlantic Highly Migratory Species; Atlantic Shark Management Measures; Amendment 5a (Final Rule)”. Federal Register 78: 128 (July 3, 2013) p. 40318.

<http://www.gpo.gov/fdsys/pkg/FR-2013-07-03/pdf/2013-15875.pdf>

“Atlantic Highly Migratory Species; Atlantic Shark Management Measures (Proposed Rule).” Federal Register 76:195 (October 7, 2011) p. 62331.

<http://www.gpo.gov/fdsys/pkg/FR-2011-10-07/pdf/2011-26021.pdf>

“Atlantic Highly Migratory Species; Atlantic Shark Management Measures; Amendment 3 (Final Rule).” Federal Register 75:104 (June 1, 2010) p. 30485.

http://www.nmfs.noaa.gov/sfa/hms/fishery_rules/2010/06-01-10_Amendment_3_Final_Rule_75_FR_30484.pdf

“Endangered and Threatened Wildlife and Plants; Proposed Endangered, Threatened, and Not Warranted Listing Determinations for Six Distinct Population Segments of Scalloped Hammerhead Sharks (Proposed Rule).” Federal Register 78: 66 (April 5, 2013) p.20718.

<http://www.gpo.gov/fdsys/pkg/FR-2013-04-05/pdf/2013-07781.pdf>

Hayes, C., Jiao, Y. & Cortes, E. 2009. Stock assessment of scalloped hammerheads in the western North Atlantic Ocean and Gulf of Mexico. *North American Journal of Fisheries Management* 29, 1406–1417.

Hazin, F., A. Fischer and M. Broadhurst. 2001. Aspects of reproductive biology of the scalloped hammerhead shark, *Sphyrna lewini*, off northeastern Brazil. *Environ. Biol. Fishes* 61:151-159.

NMFS. 2013. Final Amendment 5a to the 2006 Consolidated Atlantic Highly Migratory Species Fishery Management Plan. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Sustainable Fisheries, Highly Migratory Species Management Division, Silver Spring, MD. Public Document. Chapters 1-4.