

**FISHERY MANAGEMENT PLAN UPDATE
COASTAL SHARKS
AUGUST 2026**

STATUS OF THE FISHERY MANAGEMENT PLAN

Fishery Management Plan History

FMP Documentation:	August 2008	
	Addendum I	September 2009
	Addendum II	May 2013
	Addendum III	October 2013
	Addendum IV	August 2016
	Addendum V	October 2018
Comprehensive Review:	2023: Blue shark (ICCAT)	
	2023: Hammerhead sharks Complex (SEDAR 77)	

The Atlantic States Marine Fisheries Commission (ASMFC) adopted a fishery management plan (FMP) for coastal sharks in 2008 (ASMFC 2008) to complement federal management actions and increase protection of pregnant females and juveniles in inshore nursery areas. Prior to the ASMFC FMP, sharks were domestically managed exclusively under National Marine Fisheries Service (NMFS) FMPs (NOAA Fisheries 1993; NOAA Fisheries 1999; NOAA Fisheries 2006). Atlantic highly migratory species (HMS), which includes sharks, are also managed internationally by the International Commission for the Conservation of Atlantic Tunas (ICCAT). The ASMFC FMP regulates 40 different species of coastal sharks found on the Atlantic coast. The ASMFC does not actively set quotas for any shark species and follows NMFS openings and closures for all shark species and management groups.

Addendum I (ASMFC 2009) modified the FMP to allow limited Smooth Dogfish processing at sea (removal of fins from the carcass), removed Smooth Dogfish recreational possession limits, and removed gill net check requirements for Smooth Dogfish fishermen. The goal of Addendum I was to remove restrictive management intended for large coastal sharks (LCS) from the Smooth Dogfish fishery and to allow fishermen to continue their operations while upholding the conservation measures of the FMP.

In 2012, NOAA Fisheries created the smoothhound complex for the management of both the Florida Smoothhound and Smooth Dogfish. Addendum II (ASMFC 2013a) modified the FMP to allow year-round Smooth Dogfish processing at sea and allocated state shares of the Smooth Dogfish federal quota. The goal of Addendum II was to implement an accurate fin-to-carcass weight ratio and prevent the quota of the smoothhound shark complex from being harvested by one state.

Addendum III (ASMFC 2013b) modified the species groups for Hammerhead and Blacknose Sharks to ensure consistency with NOAA Fisheries. The addendum also increased the recreational size limit for all Hammerhead shark species to 78 in fork length (FL) and Blacknose and Finetooth Sharks to 54 in FL.

Addendum IV (ASMFC 2016) allows Smooth Dogfish carcasses to be landed with corresponding fins removed from the carcass if the total retained catch, by weight, is composed of at least 25% Smooth Dogfish, consistent with federal management measures.

Addendum V (ASMFC 2018a) allows the ASMFC to streamline the process of state implementation of federal shark regulations so that complementary measures are seamlessly and concurrently implemented at the state and federal level whenever possible. Previously, any changes, with the exception of those related to commercial quotas, possession limits and season dates, had to be accomplished through an addendum.

To ensure compliance with interstate requirements, North Carolina also manages the coastal shark complex under the North Carolina Fishery Management Plan for Interjurisdictional Fisheries (IJ FMP). The goal of

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the IJ FMP is to adopt fishery management plans consistent with North Carolina law, approved by the Mid-Atlantic Fishery Management Council, South Atlantic Fishery Management Council, or the ASMFC by reference and implement corresponding fishery regulations in North Carolina to provide compliance or compatibility with approved fishery management plans and amendments, now and in the future. The goal of these plans, established under the Magnuson-Stevens Fishery Conservation and Management Act (federal council plans) and the Atlantic Coastal Fisheries Cooperative Management Act (ASMFC plans), are like the goals of the Fisheries Reform Act of 1997 to “ensure long-term viability” of these fisheries (NCDMF 2022).

Management Unit

The management unit includes the entire coast-wide distribution of the resources from the estuaries eastward to the inshore boundary of the exclusive economic zone (EEZ). The management unit is split between the Atlantic and Gulf of Mexico regions for aggregated LCS, Hammerhead, Non-Blacknose Small Coastal Sharks (SCS), and Blacknose Sharks. The management units for Pelagic Sharks and Sandbar Sharks (Shark Research Fishery) are not split by region; the respective management units are the Atlantic and Gulf of Mexico combined.

Goal and Objectives

The Interstate FMP for Coastal Sharks (ASMFC 2008) established the following goal and objectives. The goal of the Interstate FMP for Coastal Sharks is to promote stock rebuilding and management of the coastal shark fishery in a manner that is biologically, economically, socially, and ecologically sound.

In support of this goal, the following objectives are in place for the Interstate Shark FMP:

- Reduce fishing mortality to rebuild stock biomass, prevent stock collapse, and support a sustainable fishery.
- Protect essential habitat areas such as nurseries and pupping grounds to protect sharks during particularly vulnerable stages in their life cycle.
- Coordinate management activities between state and federal waters to promote complementary regulations throughout the species’ range.
- Obtain biological and improved fishery related data to increase understanding of state water shark fisheries.
- Minimize endangered species bycatch in shark fisheries.

DESCRIPTION OF THE STOCK

Biological Profile

Sharks belong to the class Chondrichthyes (cartilaginous fish) that also includes rays and skates. Relative to other marine fish, sharks produce few young in their lifetime. The low reproductive rates are due to slow growth, late sexual maturity of females, 1 to 2-year reproductive cycles, and small litter size (Musick 1999). These biological factors leave many species of sharks vulnerable to overfishing (Stevens et al. 2000).

Sharks exhibit a number of different reproductive strategies ranging from giving birth to live pups (young) to egg laying (Dulvy and Reynolds 1997). Generally, female sharks produce a small number (2–25) of large-body pups (Simpfendorfer 1992). For some species, an increased gestation period allows for larger pups which is thought to increase juvenile survivorship (Stevens and McLoughlin 1991). Adults usually gather in specific areas to mate although little is known about shark mating behavior for most species. Sharks also exhibit a wide variety of life history traits across species. Some pelagic species such as Shortfin Mako (*Isurus oxyrinchus*) or Atlantic Thresher (*Alopias vulpinus*), generally remain in offshore ocean environments their whole lives (Casey and Kohler 1992; Smith et al. 2008). Other shark species have an

estuarine-dependent component to their life cycle. For example, mature female Atlantic Sharpnose Sharks (*Rhizoprionodon terraenovae*) and Sandbars (*Carcharhinus plumbeus*) travel from near-shore coastal areas into estuarine habitats to pup (Grubbs et al. 2007; Carlson et al. 2008). Coastal shark nursery areas, such as bays and estuaries, are discrete, productive, and highly structured habitats that provide juveniles ample nutrients and refuge from predators (Heupel et al. 2007). North Carolina estuaries including Back, Core, and Pamlico sounds function as nursery habitats for multiple coastal shark species (Bangley and Rulifson 2017, Bangley et al. 2018). Once mature, these shark species will emigrate into coastal ocean environments to continue their life cycle. The variability of life history traits (growth rate, age-at-maturity, reproduction rate, etc.) and highly mobile nature of sharks makes fisheries management across multiple species difficult (Cortés 2002).

Stock Status

Stock status is assessed by individual species when sufficient data is available (Table 1). For species that are data-limited, they are either assessed at the species complex level or have not been assessed. NOAA Fisheries produces an annual Stock Assessment and Fisheries Evaluation (SAFE) Report that reviews the status of Atlantic HMS fish stocks (tunas, swordfish, billfish, and sharks; NOAA Fisheries 2022). These reports are required under the Magnuson-Stevens Fishery Conservation and Management Act and provide the public with information on the latest updates in Atlantic HMS management.

Stock Assessment

Stock status varies between species and species group (Table 1). Most species that have been assessed, and those that have not been assessed, require a benchmark stock assessment due to new data, changing information on stocks, and improved assessment methodologies.

The 2007 SEDAR 13 assessed the SCS complex, Finetooth (*Carcharhinus isodon*), Atlantic Sharpnose (*Rhizoprionodon terraenovae*), and Bonnethead (*Sphyrna tiburo*) sharks (SEDAR 2007). The SEDAR 13 peer reviewers considered the data to be the ‘best available at the time’ and determined the status of the SCS complex to be adequate. Finetooth, Atlantic Sharpnose, and Bonnethead were all considered to be not overfished and not experiencing overfishing. Atlantic Sharpnose and Bonnethead were more recently assessed by SEDAR 34 (SEDAR 2013). Atlantic Sharpnose status remained as not overfished or undergoing overfishing. Based on SEDAR 34, Bonnethead were not overfished or undergoing overfishing. However, the assessment combined the Gulf of Mexico stock and the Atlantic stock for the assessment. Because data shows that they are in fact two separate stocks, the results of the assessment were rejected and the status of the Atlantic stock is officially considered unknown.

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Table 1. Stock status designations for coastal sharks species groups.

Species or Complex Name	Stock overfished?	Stock undergoing overfishing?	Stock assessment year and comments
<i>Pelagic</i>			
Porbeagle	Yes	No	2020: Rebuilding ends in 2108
Blue (North Atlantic)	No	No	2023
Blue (South Atlantic)	No	Yes	2023
Shortfin Mako	Yes	Yes	2017
All other pelagic species	Unknown	Unknown	
<i>Large Coastal Sharks</i>			
Blacktip	No	No	2020
Aggregated Large Coastal Sharks-Atlantic Region	Unknown	Unknown	2006: Difficult to assess as a species complex due to various life history characteristics/lack of available data
<i>Non-blacknose Small Coastal Sharks</i>			
Atlantic Sharpnose	No	No	2013
Bonnethead	Unknown	Unknown	2013
Finetooth	No	No	2007
<i>Hammerhead</i>			
Scalloped	No	No	2024
Smooth	Unknown	No	2024: Stock assessment suggests rebuilding has been occurring since 2000
Great	Yes	No	2024
<i>Blacknose</i>			
Blacknose	Yes	Yes	2010: Rebuilding ends in 2043
<i>Smoothhound</i>			
Smooth Dogfish	No	No	2015
<i>Research</i>			
Sandbar	Yes	No	2017: Rebuilding ends 2070
<i>Prohibited</i>			
Dusky	Yes	Yes	2016: Rebuilding ends in 2107
All other prohibited species	Unknown	Unknown	

SEDAR 11 (2006) assessed the LCS complex and Blacktip Sharks (*Carcharhinus limbatus*). The LCS assessment suggested that it was inappropriate to assess the LCS complex as a whole due to the variation in life history parameters, different intrinsic rates of increase, and different catch and abundance data for all species included in the LCS complex. Based on these results, NOAA Fisheries changed the status of the LCS complex from overfished to unknown. As part of SEDAR 11, Blacktip Sharks were assessed for the first time as two separate populations: Gulf of Mexico and Atlantic. The results indicated that the Gulf of Mexico stock was not overfished and overfishing was not occurring, while the status of Blacktip Sharks in the Atlantic region was unknown. A new stock assessment for Atlantic Blacktip Sharks was completed in December 2020 (SEDAR 65) and the stock assessment concluded that the stock is not overfished and

overfishing is not occurring. A benchmark assessment for Porbeagle Sharks was also completed in 2020 and determined that the northwest Atlantic stock is still overfished but overfishing is not occurring.

In 2017, ICCAT updated a 2012 stock assessment for Shortfin Mako Sharks (*Isurus oxyrinchus*). This assessment used another modeling approach which incorporated more abundance indices, sex-specific life history data, and tagging information. Based on model results, the population was considered overfished with overfishing occurring (ICCAT 2017). The next stock assessment is scheduled for 2024.

The most recent Blue Shark stock assessment was completed in 2023 ICCAT (ICCAT 2023). The assessment found that domestically, the north Atlantic stock is not overfished and overfishing is not occurring. The international north Atlantic stock is not likely overfished and overfishing is likely occurring. The next stock assessment is not currently scheduled.

A 2009 stock assessment for the northwest Atlantic and Gulf of Mexico populations of Scalloped Hammerhead Sharks (*Sphyrna lewini*) indicated the stock is overfished and experiencing overfishing (Hayes et al. 2009). This assessment was reviewed by NOAA Fisheries and deemed appropriate to serve as the basis for U.S. management decisions (SEFSC 2010). In response to the assessment findings, NOAA Fisheries established a Scalloped Hammerhead rebuilding plan that would end in 2023. Since the assessment, research has determined that a portion of animals considered Scalloped Hammerheads in the US Atlantic are actually a cryptic species, recently named the Carolina Hammerhead (*Sphyrna gilberti*; Quattro et al. 2013). Little to no species-specific information exists regarding the distribution, abundance, and life history of the two species. Therefore, both species are currently managed under the name Scalloped Hammerhead. A research track assessment of the Hammerhead complex (SEDAR 2024) was completed in 2024. The assessment indicates that the Scalloped Hammerhead Shark was not overfished and overfishing was not occurring in the terminal year (2019). For Smooth Hammerheads it suggests overfishing most likely is not occurring and the stock has been rebuilding since 2000. The assessment found that for the Great Hammerhead Shark the stock is overfished, and no overfishing is occurring in the terminal year.

Two prohibited species associated with the large coastal shark fishery have had recent stock assessments. An update to SEDAR 21 (SEDAR 2016) assessed the stock of Dusky Sharks (*Carcharhinus obscurus*) as overfished with overfishing occurring and an expected rebuilding period ending in 2107. Though Dusky Sharks have been a prohibited species since 1999, the update cited continued bycatch and post release mortality of juveniles as factors slowing recovery (SEDAR 2016). In 2017 SEDAR 54 (SEDAR 2017) assessed the stock status of Sandbar Sharks (*Carcharhinus plumbeus*) and designated the stock as overfished but with overfishing no longer occurring. While Sandbar Sharks are prohibited in the Large Coastal Shark commercial and recreational fisheries, they are allowed to be landed in the limited-access Research fishery. A new Sandbar Shark stock assessment (SEDAR 101) is currently in development and expected to be completed in April 2027.

DESCRIPTION OF THE FISHERY

Current Regulations

All non-prohibited shark management groups opened in North Carolina on January 1, 2025, (Table 2) reflecting NOAA Fisheries openings. Commercial fishing shark management groups are outlined in Table 3. NOAA Fisheries closes the management groups' fisheries when 80% of their quota is reached. When the fishery closes in federal waters, the Interstate FMP dictates that the fishery also closes in state waters. No harvest or size restrictions are in place for LCS, but there is a retention limit that is set and changed by NOAA fisheries based on available quota.

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Table 2. 2025 coast-wide Atlantic coastal shark commercial fishery landings (Atlantic Coastal Cooperative Statistics Program, ACCSP) and annual quota.

Management Group	Region	2025 Quota (lb dw)	2025 Landings (lb dw)
Aggregated LCS	Atlantic	372,552	136,208
Hammerhead		59,736	45,162
Non-Blacknose SCS		582,333	70,352
Blacknose (south of 34° N. latitude only)		37,921	6,471
Smoothhound		3,973,902	556,196
Aggregated LCS (shark research fishery)	No Regional Quotas	110,230	<28,660
Sandbar (shark research fishery)		199,943	<123,458
Blue		601,856	0
Porbeagle		3,748	2,205
Other pelagics ^{1,2}		1,075,856	39,887

¹ As of July 5, 2022, the Shortfin Mako shark retention limit in all commercial and recreational Atlantic HMS fisheries is zero ([87 FR 39373, July 1, 2022](#)).

² As of February 2, 2024 the oceanic whitetip shark retention limit in all commercial and recreational Atlantic HMS fisheries is zero ([89 FR 278, February 2, 2024](#))

It is unlawful to possess any shark (with the exception of Smooth Dogfish) without tail and fins naturally attached to the carcass through offloading. Commercial fishermen may completely remove the fins of Smooth Dogfish, if the total retained catch, by weight, is composed of at least 25% Smooth Dogfish. If fins are removed, the total wet weight of the shark fins may not exceed 12% of the total dressed weight (dw) of Smooth Dogfish carcasses landed or found onboard a vessel. It is unlawful for a vessel to retain, transport, land, store, or sell Scalloped Hammerhead, Great Hammerhead, or Smooth Hammerhead sharks with pelagic longline gear onboard. It is unlawful for a vessel to retain Sandbar Sharks unless the vessel is selected to participate in the shark research fishery, subject to retention limits established by NOAA Fisheries and only when a NOAA Fisheries approved observer is onboard. It is unlawful to use gears other than rod and reel, handlines, large and small mesh gill nets, shortlines (maximum of two shortlines, 500 yd each with 50 hooks or less, hooks shall not be corrosion resistant and must be designated by the manufacturer as circle hooks), pound nets/fish traps, and trawl nets. It is unlawful to use a large mesh (stretched mesh size greater than or equal to 5 in) gill net more than 2,734 yd in length to capture sharks. It is unlawful to sell sharks to anyone who is not a federally permitted shark dealer. NOAA Fisheries sets quotas for coastal sharks through their 2006 Consolidated Highly Migratory Species Fishery Management Plan (HMS FMP; NOAA Fisheries 2006). As indicated above, the states follow NOAA Fisheries openings and closings, which are based on available quotas (Table 2). In March 2019, NOAA HMS implemented final measures to address the overfishing and overfished condition of Atlantic Shortfin Mako under Amendment 11 to the HMS FMP (NOAA Fisheries 2019). The rules respond to the determination by ICCAT that all member countries need to reduce Shortfin Mako landings by 72–79% to prevent further population decline. The final commercial rule as implemented allows for Atlantic Shortfin Mako commercial retention only by properly permitted operations using pelagic longline and gillnet gear and only if the shark is dead at haul back. Additionally, retention by pelagic longline gear is only allowed if a functional electronic monitoring system is on board the vessel. Recreational measures included an increase in the minimum size limit from 54 to 71 in FL for males and to 83 in FL for females. In April of 2019, the ASMFC Coastal Shark Board adopted complementary size limit measures for the recreational fishery in state waters to provide consistency with size limits in federal waters. In May 2022, the Board approved a

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zero-retention limit in state waters for Atlantic Shortfin Mako sharks for both recreational and commercial fisheries. These measures are consistent with those implemented by NOAA Fisheries for federal highly migratory species (HMS) permit holders based on the International Commission for the Conservation of Atlantic Tunas (ICCAT) recommendation. This action was taken in response to the 2019 Atlantic Shortfin Mako stock assessment data update that indicates the resource is overfished and experiencing overfishing, with a rebuild date of 2070. This rule took effect federally on July 5, 2022, and at the state level on July 11, 2022. Additionally, in 2019 the Board moved to require non-offset circle hooks for the recreational shark fishery in state waters with an implementation date of July 1, 2020. The Board chose to do so after NOAA Fisheries requested that the states implement a circle hook requirement for the recreational fishery consistent with the measures approved in HMS Amendment 11. Species authorized for recreational harvest are listed in Table 4 based on management group and recreational size and bag limits are described in Table 5.

Table 3. List of commercial shark management groups.

Management Group	Species Within Group
Prohibited	Sand Tiger, Bigeye Sand Tiger, Whale, Basking, White, Dusky, Bignose, Galapagos, Night, Reef, Narrowtooth, Caribbean Sharpnose, Smalltail, Atlantic Angel, Longfin Mako, Bigeye Thresher, Sharpnose Sevengill, Bluntnose Sixgill, and Bigeye Sixgill
Research	Sandbar
Non-Blacknose Small Coastal	Atlantic Sharpnose, Finetooth, and Bonnethead
Blacknose	Blacknose
Aggregated Large Coastal	Silky, Tiger, Blacktip, Spinner, Bull, Lemon, and Nurse
Hammerhead	Scalloped Hammerhead, Great Hammerhead, and Smooth Hammerhead
Pelagic	Shortfin Mako ¹ , Common Thresher, Oceanic Whitetip ³ , Porbeagle ² , and Blue ²
Smoothhound	Smooth Dogfish (referred to as smoothhound throughout this report)

¹As of July 5, 2022, the Shortfin Mako shark retention limit in all commercial and recreational Atlantic HMS fisheries is zero ([87 FR 39373, July 1, 2022](#)).

²Although Porbeagle and Blue sharks are in the Pelagic Management Group, they each have their own quota.

³As of February 2, 2024 the Oceanic Whitetip shark retention limit in all commercial and recreational Atlantic HMS fisheries is zero ([89 FR 278, February 2, 2024](#))

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Table 4. Recreationally permitted species list (as of January 1, 2024).

SPECIES AUTHORIZED FOR RECREATIONAL HARVEST			
Large Coastal Sharks (LCS) (non-ridgeback LCS & Tiger)	Small Coastal Sharks (SCS)	Pelagic Sharks	Other
Blacktip Bull Hammerhead, Great Hammerhead, Scalloped Hammerhead, Smooth Lemon Nurse Spinner Tiger	Atlantic Sharpnose Blacknose Bonnethead Finetooth	Blue Oceanic Whitetip ¹ Porbeagle Thresher	Smoothhound shark (Smooth Dogfish) Spiny Dogfish

¹ As of February 2, 2024 the Oceanic Whitetip shark retention limit in all commercial and recreational Atlantic HMS fisheries is zero ([89 FR 278, February 2, 2024](#))

Table 5. Recreational size and bag limits (as of January 1, 2025). Non-listed species are prohibited.

RECREATIONAL SIZE / BAG LIMITS and SEASONS			
Species*	Minimum Size (FL, in)	Trip Bag Limit/Calendar Day	Season
Atlantic Sharpnose	None	1 per person of each species	Jan. 1 – Dec. 31
Bonnethead	None		
Smooth Dogfish	None	None	
Spiny Dogfish	None	None	
Hammerheads (Great, Smooth and Scalloped)	78”	1 per vessel <u>OR</u> 1 per person for shore-anglers	
Non-Hammerhead LCS, Tiger, Pelagic, Blacknose, and Finetooth Sharks	54”		

*Check [DMF proclamations](#) for most current regulations

Commercial Fishery

Table 2 summarizes coast-wide Atlantic commercial landings data from 2025 as of December 31st. Shark management groups with Atlantic region quotas are LCS, Hammerhead, Non-Blacknose SCS, Blacknose, and Smoothhound. Commercial landings of LCS totaled 136,208 lb, dressed weight (lb, dw) in 2025, which was a decrease from 185,731 lb, dw from 2024. Total commercial landings of Hammerhead sharks were 45,162 lb, dw in 2025, which was an increase from 39,191 lb, dw reported in 2024. Commercial landings of Non-Blacknose SCS shark species in 2024 totaled 70,352 lb, dw, less than half of the 171,377 lb, dw landed in 2024. The commercial landings total of Blacknose Sharks south of 34° N latitude (Kure Beach, North Carolina) in 2024 was 6,471 lb, dw a considerable decrease from 11,852 lb,dw from 2024. Commercial retention of Blacknose Sharks is prohibited north of 34° N latitude, but regulatory changes are in development that may remove this boundary. Commercial landings of Smoothhound sharks in 2025 were 556,196 lb, dw, which decreased from the 735,890 lb dw landed in 2024. Shark management groups with no regional quotas are Sandbar (Research fishery), Blue, Porbeagle, and other pelagics. Commercial landings in 2025 of Porbeagle Sharks were 2,205 lb, dw. No commercial landings of Blue Sharks were reported in 2025. Other Pelagic shark landings were 39,887 lb, dw. The shark research fishery landed 123,458 lb, dw of Sandbar Sharks and <28,660 lb, dw of LCS.

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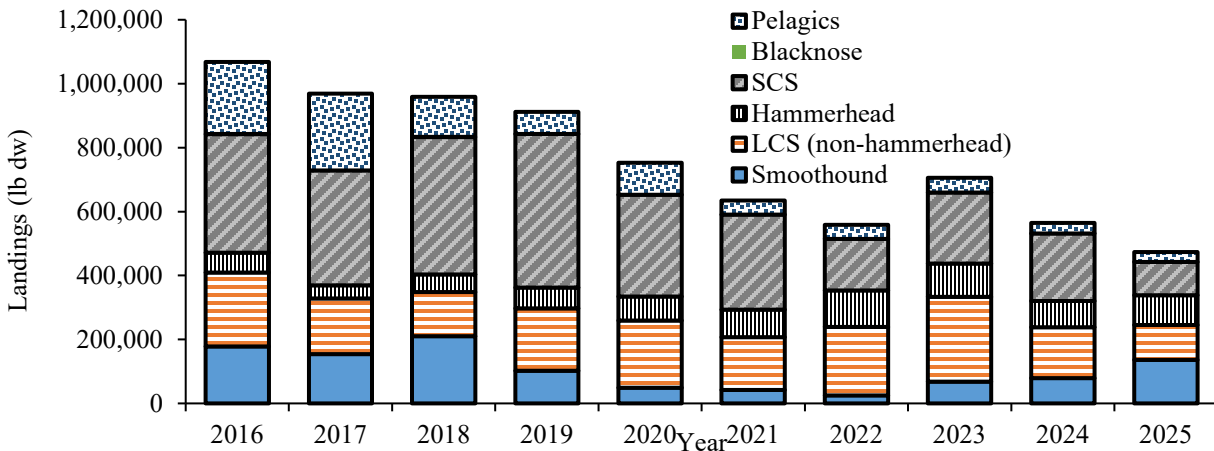


Figure 1. North Carolina commercial shark landings by management group, 2016–2025. In this figure, Sandbar Shark landings are included with the LCS and SCS includes Blacknose landings.

In North Carolina, total shark commercial landings have steadily decreased since 2016, but have slightly increased for some species groups in 2025 (Figure 1; Table 6). Smoothhound shark landings have steadily decreased from 178,694 lb, dw in 2016 and to a low of 25,074 lb, dw in 2022, but have increased to 136,356 lb in 2025. Peak harvest of Pelagic sharks was highest in 2017 (240,128 lb, dw) and there has been an overall decreasing trend to 31,018 lb in 2025. Similarly, peak harvest of SCS was highest in 2019 (479,484 lb, dw) and has decreased since. While total shark landings have decreased, landings of Hammerheads have generally increased. LCS (non-Hammerhead) harvest has fluctuated annually but has been consistent over the last 10 years.

Table 6. Summary of North Carolina commercial landings (lb) for Large Coastal Sharks (LCS), Small Coastal Sharks (SCS), Hammerheads, Smoothhound, and Pelagics, 2016–2025. In this table, Sandbar shark landings are included with the LCS and SCS includes blacknose landings.

Year	LCS (non-hammerhead)	SCS	Blacknose	Hammerhead	Smoothhound	Pelagics	Total
2016	230,855	369,948	1,192	62,135	178,694	224,746	1,067,570
2017	173,758	359,486	0	40,743	154,440	240,128	968,555
2018	138,238	430,274	108	55,004	209,760	125,993	959,377
2019	195,173	479,484	0	65,104	102,592	69,182	911,535
2020	209,939	318,170	98	75,339	49,286	99,468	752,300
2021	165,005	297,193	0	85,966	42,169	44,648	634,981
2022	213,172	160,464	350	114,848	25,074	44,298	558,746
2023	265,935	222,144	0	104,056	67,795	45,940	705,870
2024	159,075	210,602	282	82,267	79,376	32,596	564,198
2025	108,966	103,846	506	92,972	136,356	31,018	473,664

Recreational Fishery

Recreational harvest estimates for SCS in North Carolina has fluctuated in the past 10 years from a low of 2,545 lb in 2016 to 106,765 lb in 2019 (Table 7). The 2025 landings (18,787 lb) were less than the 10-year average (22,408 lb). Recreational harvest for LCS in North Carolina tends to be much smaller than for SCS. In 2025, there were 0 lb harvested of LCS, though 295,198 were released (Table 7), the most since reporting began in 1981 when 575,155 sharks were released. From 2016 to 2025, average annual harvest was 3,375 lb, dw. The recreational harvest of pelagic sharks in North Carolina is highly variable. Harvest was 0 lb in 2025 and has ranged from 0 to 479,443 lb from 2016 to 2025 (Table 7). Recreational harvest of Smooth Dogfish in North Carolina is also variable and often low, although releases are common. However, no

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releases were reported for 2025. Harvest for Smoothhound ranged from 0 to 186,261 from 2016 to 2025, though harvest was not reported for all years (Table 7). Recreational landing estimates for all shark species across all years have been updated and are now based on the Marine Recreational Information Program (MRIP) new Fishing Effort Survey-based calibrated estimates. Due to small sample sizes and the relatively rare occurrence of landings, the percent standard errors (PSE) is high for many years of recreational shark landings. See [NOAA MRIP](#) for more information on methodology.

Table 7. North Carolina small coastal sharks (including blacknose), large coastal sharks, pelagics, and smoothhound recreational harvest, discards, and percent standard error (PSE), 2015–2025. Years with blank entries represent an estimated harvest of zero.

Species Group	Year	Number Harvested	PSE	Weight (lb)	PSE	Number Released	PSE
SCS(including Blacknose)	2016	514	66.6	2,545	63.4	133,214	57.0
	2017	5,768	56.5	19,256	42.3	58,440	60.5
	2018	1,678	38.9	9,097	40.9	4,496	39.5
	2019	13,736	70.8	106,765	75.8	34,952	36.1
	2020	5,074	70.2	21,114	56.0	16,563	50.9
	2021	3,556	57.7	24,241	53.9	21,045	44.9
	2022	1,698	49.1	16,909	51.1	30,202	57.1
	2023	3,771	44.5	25,172	50.4	65,203	14.2
	2024	745	61.5	4,683	59.5	40,566	45.6
	2025	3,061	57.3	18,787	58	121,139	53.2
LCS	2016	12	101.0	1,100	101.0	27,885	54.3
	2017	910	79.6	27,367	83.4	43,041	43.7
	2018	39	84.5	235	95.8	4,916	59.3
	2019	60	72.1	3,745	72.1	30,032	40.5
	2020	26	74.6	551	100.8	8,567	36.0
	2021	6	100.8	594	100.8	22,576	97.5
	2022					18,735	98.4
	2023	19	97.9	62	97.9	46,662	2.4
	2024	13	70.7	100	70.7	707	70.7
	2025	0		0		295,198	66.1
Pelagics	2016					3,512	79.0
	2017	66	64.1	4,917	62.2	33	86.2
	2018	2,043	73.1	160,155	73.1	38	63.0
	2019					888	65.7
	2020						
	2021	111	98.1			20	96.9
	2022						
	2023						
	2024						
	2025						
Smoothhound	2016	10,879	92.6	186,261	97.0	97,256	44.9
	2017					34,722	36.2
	2018					29,524	49.3
	2019	2,856	95.6	6,926	95.6	15,301	73.6
	2020	1,289	98.9	3,125	98.9	479,933	49.4
	2021					10,815	89.9
	2022	1,310	99.8	2,166	99.8	1,560	79.9
	2023	2,808	77.4	11,671	78.7	295,556	85.0
	2024	402	104.1	1,064	104.1	34,399	48.9
	2025	1,506	100.9	2,158	100.9		

*PSE higher than 50 indicates a very imprecise estimate

MONITORING PROGRAM DATA

Fishery-Dependent Monitoring

North Carolina does not collect individual lengths for sharks other than Spiny Dogfish; sharks arrive at the dock dressed (i.e., gutted with head and tail removed). Landings in pounds dw are recorded by the Trip Ticket Program.

Fishery-Independent Monitoring

The North Carolina Division of Marine Fisheries (DMF) established a fishery-independent adult Red Drum longline survey in 2007 (P365) that operates in Pamlico Sound from July to October. Atlantic coastal shark species captured in the survey are measured, tagged, and released. In total, 13 coastal sharks were sampled in 2025: one Atlantic Sharpnose, four Blacktip Sharks, one Spinner Shark, and seven Sandbar Sharks.

DMF has conducted a fishery-independent gill net survey (P915) which has been conducted in Pamlico Sound since 2001. Sampling was expanded to the Pamlico, Pungo, and Neuse Rivers in 2003 and to the Cape Fear and New Rivers in 2008. Coverage was further expanded to Bogue, Back, and Core sounds in 2018. The objective of this project is to provide annual indices of relative abundance for key estuarine species in North Carolina estuaries that can be incorporated into stock assessments. Data from this survey are used to improve bycatch estimates, evaluate management measures, and evaluate habitat usage. Results from this project are used by the DMF and other Atlantic coast fishery management agencies to evaluate the effectiveness of current management measures and to identify additional measures that may be necessary to conserve marine and estuarine stocks. Developing fishery independent indices of abundance for target species allows the DMF to assess the status of these stocks without relying solely on commercial and recreational fishery dependent data. The survey employs a stratified random sampling design and utilizes multiple mesh gill nets (3.0- to 6.5-in stretched mesh, by 0.5-in increments).

In 2025, a total of 785 individual coastal sharks were captured in P915 (Table 8), which is much more than the project's annual average of 333 individual sharks. Relative abundance indices are plotted for coastal shark species present in P915 sampling during at least 50% of years from 2003-2025 (Figures 2 and 3). Relative abundance for species in the Small Coastal Shark (Atlantic Sharpnose Shark, Bonnethead) and Smoothhound groups has been variable, with Bonnethead and Atlantic Sharpnose Sharks increasing and Smoothhound Sharks decreasing after the 2020 survey gap (Figure 2). Species in the Large Coastal Shark group (Blacktip, Bull, Sandbar) have generally increased since 2013 (Figure 3).

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Table 8. Shark species captured in the DMF 2025 statewide Independent Gill Net Survey (P915) with number captured (measured in parentheses if fewer than captured), and mean, minimum, and maximum TL.

Species	Number Captured (Measured)	Mean Length (in)	Minimum Length (in)	Maximum Length (in)
Atlantic Angel	3	37.43	34.76	39.96
Atlantic Sharpnose	456 (452)	20.93	10.71	40.16
Blacknose	2	30.22	20.55	39.88
Blacktip	31	49.05	25.94	57.48
Bonnethead	166	36.73	17.24	47.05
Bull	25 (16)	35.07	29.21	37.44
Dusky	3	32.22	29.13	38.03
Finetooth	15	49.45	24.02	58.70
Sandbar	75 (73)	38.11	26.10	53.15
Scalloped Hammerhead	4	26.26	21.65	29.84
Smoothhound	3	26.47	24.29	28.74
Spinner	2	37.50	37.01	37.99

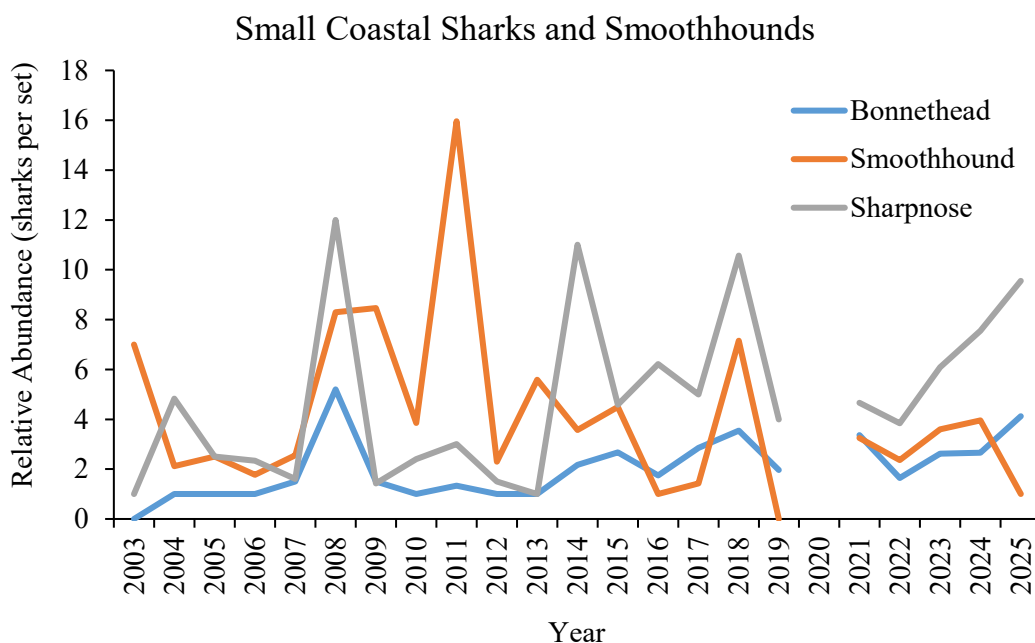


Figure 2. Relative abundance indices for P915 gillnet catches of Bonnethead, Smoothhound, and Atlantic Sharpnose Sharks.

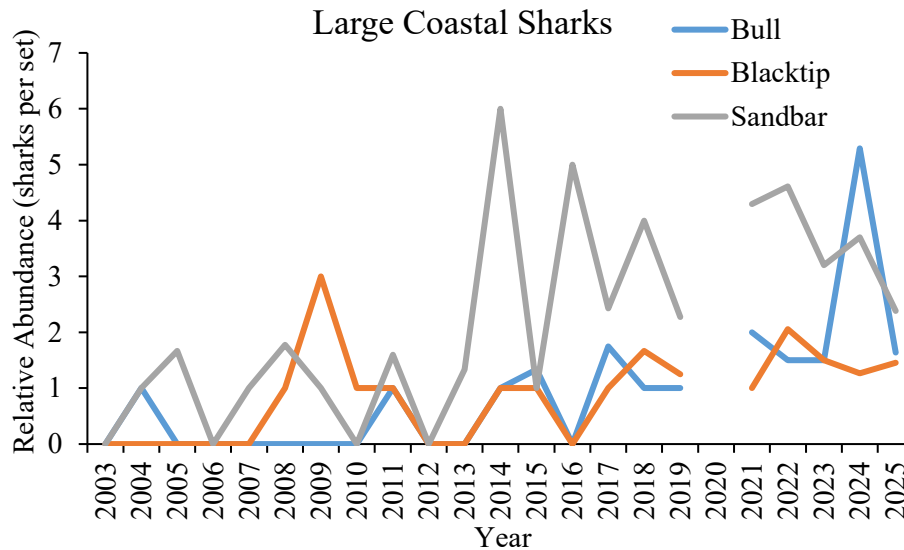


Figure 3. Relative abundance indices from P915 gillnet catches of Bull, Blacktip, and Sandbar Sharks.

RESEARCH NEEDS

- Initiate or expand dockside sampling for sharks to verify landings information and species composition and continue to acquire better species-specific landings information on number of species, by weight, from dealers. Conduct additional length sampling and age composition collection to improve information for developing selectivity.
- Investigate the appropriateness of using vertebrae for ageing adult sharks and investigate alternatives such as bomb radiocarbon dating. If appropriate, implement a systematic sampling program that gathers vertebral samples from entire size range for annual ageing to allow tracking the age distribution of the catch as well as updating of age-length keys.
- Develop a stock wide fishery-independent monitoring program in state coastal waters.
- Continue life history studies for all species of the shark complex to allow for additional species specific assessments. Particularly, natural mortality, age, fecundity, and reproductive frequency.
- Population level genetic studies are needed that could lend support to arguments for stock discriminations using new loci and/or methodology that has increased levels of sensitivity.

MANAGEMENT

Most Atlantic shark species are highly mobile and the NOAA Fisheries' HMS Management Division is responsible for managing them under the Magnuson-Stevens Fishery Conservation and Management Act. In cooperation with an advisory panel, the Division develops and implements FMPs for these species and management groups. The ASMFC adopts NOAA Fisheries regulations in state waters.

Commercial shark fisheries are generally in decline in North Carolina. A noteworthy exception is the Smoothhound group, which has seen increasing landings since 2022. Recreational landings are largely driven by the Small Coastal and Smoothhound groups, though harvest has not approached historical levels. Small Coastal Sharks were released in relatively high numbers and no Smoothhound releases were recorded in recreational fisheries, suggesting increased retention of Smoothhound sharks. The lack of reported recreational landings for Large Coastal Sharks in 2025 combined with the second-highest number of released sharks since monitoring began suggests either a rapid expansion of the recreational catch-and-

release fishery or an increase in interactions with other recreational fisheries, possibly both. However, PSE values for recreational landings and releases are near or above 50% in most years, so these results need to be interpreted with caution.

Fishery independent data from the P915 survey suggest recent shifts in the coastal shark community of North Carolina. Small Coastal Sharks and Smoothhounds have been variable over the time series of the survey with Smoothhounds making up the largest component of the shark catch in this survey during the early 2010s. Smoothhound relative abundance has declined since a peak in 2011 and was the second lowest in the time series in 2025. This combined with increasing commercial landings and a lack of recreational releases may suggest fishery effects on local Smoothhound populations, though abundance of shark species in North Carolina waters has been associated with changing environmental conditions as well (Bangley et al. 2018). The most commonly occurring Large Coastal Shark species have all shown increases in relative abundance since 2012, with Sandbar Sharks showing a particularly sharp rise. The majority of Large Coastal Sharks caught in the P915 survey are juveniles, so these increases may signal the success of conservative shark fishery management in increasing the numbers of juveniles and may lead to increased adult populations as they mature. This may also be a result of shifting populations tracking increasing water temperatures; survey data and genetic analyses have provided evidence that increasing juvenile Bull Shark numbers represent a shift northward from former nursery habitats on Florida's east coast (Barry et al. 2026). Though not intended as target species for NCDMF surveys, coastal shark populations in North Carolina estuaries should continue to be monitored using P915 data. These data are being shared with the NOAA Atlantic High Migratory Species office to contribute to coastwide monitoring and assessment.

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