

**Large and Small Coastal Sharks Collected Under the Exempted Fishing Program
Managed by the Highly Migratory Species Management Division**

Jackie Wilson

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Abstract

The National Marine Fisheries Service (NMFS) may grant individuals exemptions from fishing regulations in Federal waters, consistent with provisions of the Magnuson-Stevens Fishery Conservation and Management Act, such as exemptions from species size limits, closed seasons, and prohibited species, for activities like limited testing of fishing gear, collection of specimens for public display, scientific data collection, investigating bycatch, and methods to improve safety at sea. The Highly Migratory Species (HMS) Management Division monitors the take of sharks in the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea under the exempted fishing program. This working document describes the number of sandbar, dusky, and blacknose sharks taken under the exempted fishing program from 2000 to 2009 and includes descriptive statistics (*e.g.*, mean and median length) by gear type of these takes.

Background

The National Marine Fisheries Service (NMFS) may grant individuals exemptions from fishing regulations in Federal waters, such as exemptions from species size limits, closed seasons, and prohibited species. These activities may include: limited testing of fishing gear, collection of specimens for public display, scientific data collection, investigating bycatch, and methods to improve safety at sea. These exemptions are consistent with provisions of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). Several types of permits are issued under this exempted fishing program, including: Exempted Fishing Permits (EFPs), Scientific Research Permits (SRPs), Display Permits, and Letters of Acknowledgement (LOAs). The type of permit depends on the statutory authority, target species, the fishing platform (*e.g.*, fishing vessel versus research vessel), and the intent of the collection. Regulatory exemptions typically include, but are not limited to, permitting requirements, fishing seasons, prohibited species, minimum sizes, time and area closures, authorized gear, and reporting requirements.

In 1999, NMFS established an annual quota of 60 metric tons whole weight (mt ww) for public display and scientific research of sharks. In 2008, due to the 2005/2006 sandbar and 2006 dusky shark stock assessments, which indicated that that both species are overfished with overfishing occurring, NMFS further refined this set-aside such that only 1.39 mt ww of sandbar sharks can be taken under Display permits and EFPs, for a total of 2.38 mt ww (or 2 mt dw) of sandbar sharks being taken under the exempted fishing program. In addition, NMFS prohibited the collection of dusky sharks under Display permits. These additional restrictions were implemented to limit mortality of these species under the exempted fishing program due to their stock status.

To monitor the quantity of sharks taken under the program, the Highly Migratory Species (HMS) Management Division requires interim and annual reporting of all species harvested, collected, tagged, or caught as bycatch. Since 2000, this information has been entered into an Access database, which tracks the number of HMS authorized and caught (kept, discarded alive, discarded dead, tagged and released). The database primarily contains HMS caught in Federal waters as permittees rarely report interactions in state waters and are not required to report state interactions.

Sharks Collected Under the EFP Program

A query of the database was performed to extract relevant information related to interactions with sandbar, dusky, and blacknose sharks from 2000-2009 to provide additional data for the upcoming sandbar, dusky, and blacknose shark stock assessments. Table 1 outlines the total number of sandbar, dusky, and blacknose sharks that have been collected (kept, discarded dead, or condition not otherwise specified) under EFPs, SRPs, and LOAs for research between 2000 and 2009 as well as descriptive statistics on total length by gear (if available). Most of these takes are probably included within fisheries independent surveys.

Table 2 outlines the total number of sandbar, dusky, and blacknose sharks that have been

collected (kept, discarded dead, or condition not otherwise specified) under Display Permits between 2000 and 2009 as well as descriptive statistics on total length by gear (if available). These takes would not be included in fisheries independent surveys or any other data collection efforts. Total length is usually reported in inches but has been converted to centimeters for the Data Workshop. Sharks with missing length values or estimated length values were excluded from the length analyses, but included in the total counts.

Table 1 Summary of the total number and total length (cm) of small coastal sharks taken (kept, discarded dead, or condition not otherwise specified) by gear under EFPs, SRPs, and LOAs for research between 2000-2009. These takes are probably included within fishery independent survey data. '-' indicates a missing value.

| Year | Gear | Species | Total Number of Animals Taken/Discarded | Sample Size for Measured Individuals | Average Total Length (SE) | Median Total Length | Minimum Size | Maximum Size |
|------|------------------|-----------|---|--------------------------------------|---------------------------|---------------------|--------------|--------------|
| 2003 | Bottom Longline | Sandbar | 2 | - | - | - | - | - |
| 2004 | Bottom Longline | Sandbar | 93 | 89 | 164.8 (5.6) | 179.8 | 58.0 | 461.0 |
| | | Dusky | 5 | 4 | 115.5 (6.9) | 119.5 | 97.0 | 126.0 |
| | | Blacknose | 101 | 82 | 105.6 (0.90) | 106.0 | 74.9 | 135.0 |
| | Trawl | Sandbar | 6 | 6 | 74.5 (4.6) | 70.6 | 66.0 | 97.0 |
| | | Dusky | 1 | 1 | 100.1 | 100.1 | 100.1 | 100.1 |
| | | Blacknose | 10 | 10 | 108.0 (9.6) | 116.8 | 51.6 | 137.9 |
| 2005 | Bottom Longline | Sandbar | 27 | 25 | 153.8 (10.9) | 184.0 | 58.5 | 213.1 |
| | | Dusky | 9 | 9 | 141.5 (21.5) | 132.1 | 101.6 | 310.0 |
| | | Blacknose | 77 | 71 | 100.0 (1.5) | 101.6 | 70.6 | 126.0 |
| | Pelagic Longline | Sandbar | 2 | 2 | 492.4 (1.5) | 492.4 | 490.9 | 494.0 |
| 2006 | Bottom Longline | Sandbar | 70 | 65 | 194.3 (3.7) | 197.0 | 75.9 | 308.0 |
| | | Dusky | 1 | 1 | 317.5 | 317.5 | 317.5 | 317.5 |

| Year | Gear | Species | Total Number of Animals Taken/Discarded | Sample Size for Measured Individuals | Average Total Length (SE) | Median Total Length | Minimum Size | Maximum Size |
|------|-----------------|-----------|---|--------------------------------------|---------------------------|---------------------|--------------|--------------|
| | | Blacknose | 45 | 36 | 104.4 (1.6) | 105.8 | 75.2 | 124.8 |
| 2007 | Bottom Longline | Sandbar | 59 | 57 | 165.7 (3.2) | 156.0 | 132.8 | 233.9 |
| | | Dusky | 9 | 9 | 183.9 (11.5) | 188.6 | 108.5 | 221.3 |
| | | Blacknose | 32 | 31 | 104.8 (2.3) | 105.9 | 78.0 | 128.0 |
| 2008 | Bottom Longline | Blacknose | 11 | 10 | 140.0 (16.5) | 117.5 | 99.0 | 250.0 |
| 2009 | Bottom Longline | Sandbar | 17 | 15 | 130.5 (10.0) | 149.0 | 64.0 | 190.7 |
| | | Dusky | 94 | 91 | 166.4 (3.9) | 158.6 | 93.2 | 306.3 |
| | | Blacknose | 27 | 21 | 105.0 (4.0) | 110.0 | 47.5 | 130.0 |

Table 2 Summary of the total number and total length (cm) of small coastal sharks taken (kept, discarded dead, or condition not otherwise specified) by gear under Display Permits between 2000-2009. These takes are not included in fishery independent survey data or any other data collections. '-' indicates a missing value.

| Year | Gear | Species | Total Number of Animals Taken/Discarded | Sample Size for Measured Individuals | Average Total Length (SE) | Median Total Length | Minimum Size | Maximum Size |
|------|-----------------|---------|---|--------------------------------------|---------------------------|---------------------|--------------|--------------|
| 2000 | Bottom Longline | Sandbar | 15 | 15 | 190.1 (6.1) | 198.1 | 137.2 | 231.8 |
| 2001 | Bottom Longline | Sandbar | 19 | 18 | 189.8 (2.0) | 188.0 | 175.3 | 213.4 |

| Year | Gear | Species | Total Number of Animals Taken/Discarded | Sample Size for Measured Individuals | Average Total Length (SE) | Median Total Length | Minimum Size | Maximum Size |
|------|-----------------|-----------|---|--------------------------------------|---------------------------|---------------------|--------------|--------------|
| 2002 | Unknown | Sandbar | 13 | 13 | 111.4 (6.6) | 121.9 | 76.2 | 139.7 |
| 2003 | Bottom Longline | Blacknose | 1 | 1 | 101.6 | 101.6 | 101.6 | 101.6 |
| 2004 | Bottom Longline | Sandbar | 6 | - | - | - | - | - |
| | | Dusky | 3 | 1 | 182.9 | 182.9 | 182.9 | 182.9 |
| | | Blacknose | 4 | 1 | 106.7 | 106.7 | 106.7 | 106.7 |
| 2005 | Bottom Longline | Sandbar | 19 | 19 | 140.0 (8.9) | 152.4 | 76.2 | 195.6 |
| | | Dusky | 4 | 1 | 91.44 | 91.44 | 91.44 | 91.44 |
| | Handline | Sandbar | 9 | 9 | 84.3 (6.3) | 82.3 | 61.5 | 114.9 |
| 2006 | Handline | Sandbar | 2 | 2 | 116.8 (7.6) | 116.8 | 109.2 | 124.5 |
| 2007 | Bottom Longline | Sandbar | 15 | 15 | 181.4 (4.2) | 182.9 | 149.9 | 220.6 |
| | Handline | Sandbar | 2 | 2 | 78.7 (12.7) | 78.7 | 66.0 | 91.4 |
| 2009 | Bottom Longline | Sandbar | 4 | 4 | 208.3 (41.1) | 175.3 | 152.4 | 330.2 |
| | Handline | Sandbar | 19 | 4 | 72.1 (6.6) | 67.3 | 62.2 | 91.4 |