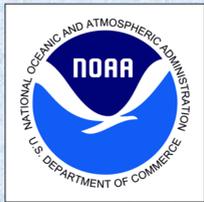


Atlantic Shark Fisheries: Catch Share Workshop

Trends



Highly Migratory Species (HMS) Management Division



I. Number of Active Vessels

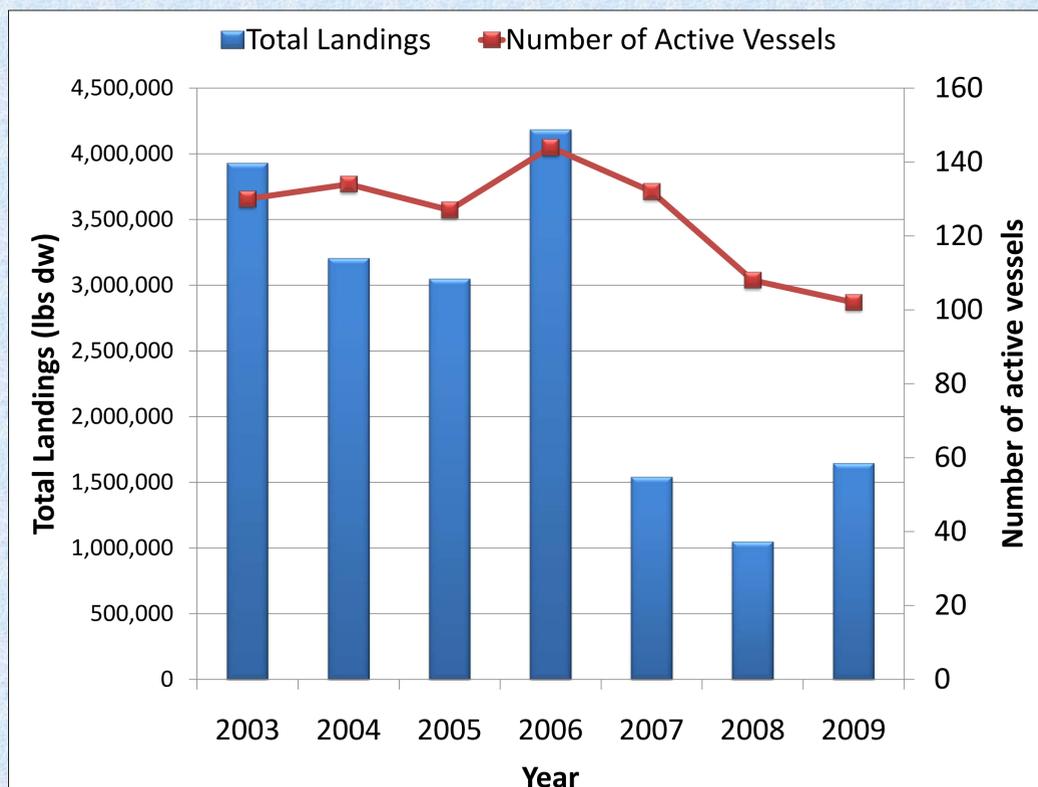


Figure 1: Number of active vessels and total landings (in pounds (lbs) dressed weight (dw)) for all regions over time (2003-2009). (Data Source: Coastal Fisheries and HMS Logbooks)

II. Years Fishing

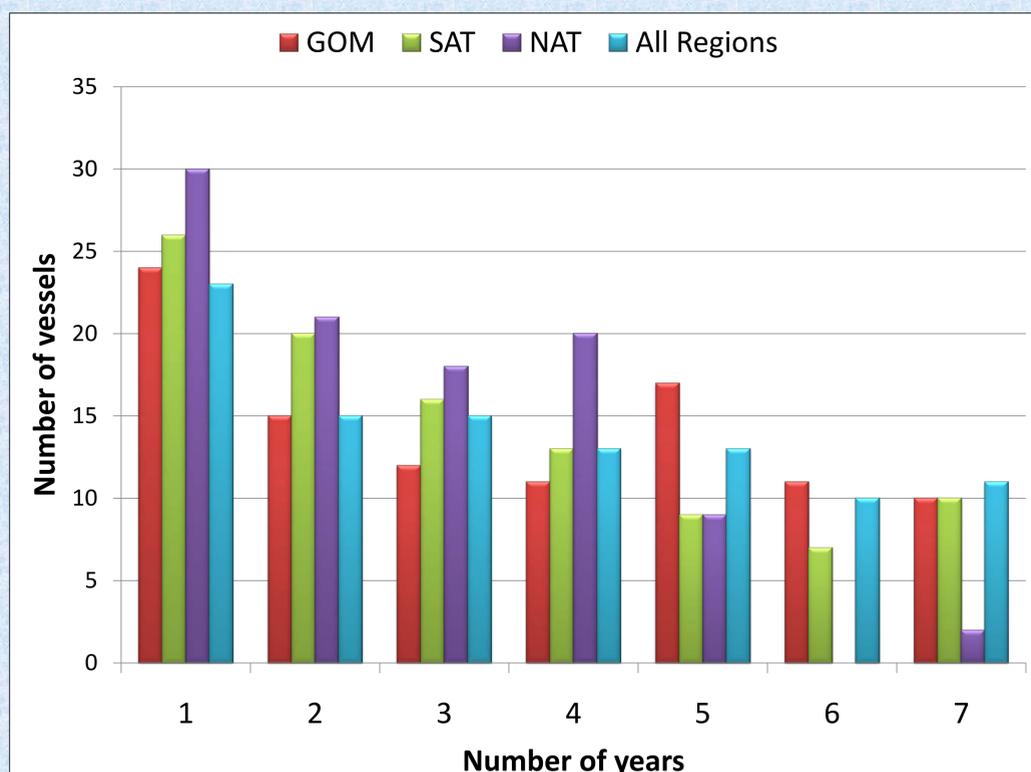


Figure 2: Number of years each Federal shark directed vessel reported landing sharks from 2003 to 2009, overall and by region (South Atlantic-SAT; Gulf of Mexico,GOM). (Data Source: Coastal Fisheries and HMS Logbooks)

III. Relative distributions of directed large coastal shark (LCS) landings as percentages of total annual regional quotas over time (2003-2009) in the Gulf of Mexico.

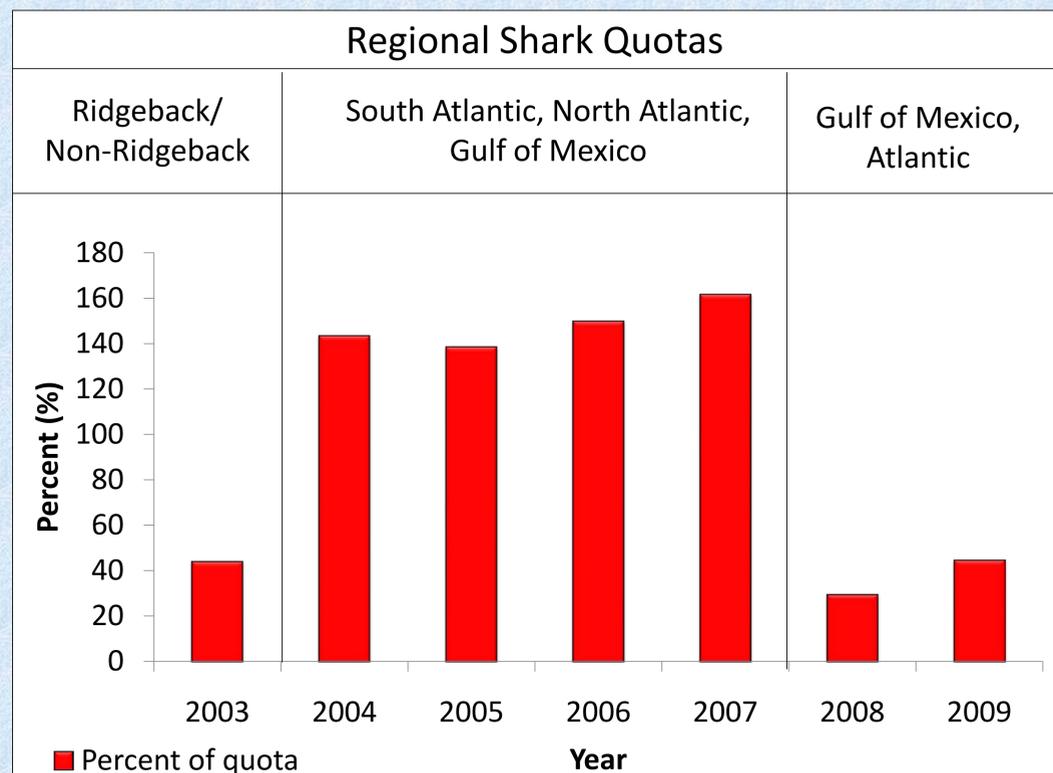


Figure 3. Federal shark directed LCS logbook landings as a percent of regional shark quotas in the Gulf of Mexico over time (2003-2009). (Data Source: Coastal Fisheries and HMS Logbook; Atlantic and State shark landings data are not included)

IV. Relative distributions of incidental large coastal shark (LCS) landings, as percentages of total annual quotas over time (2003-2009) in the Gulf of Mexico.

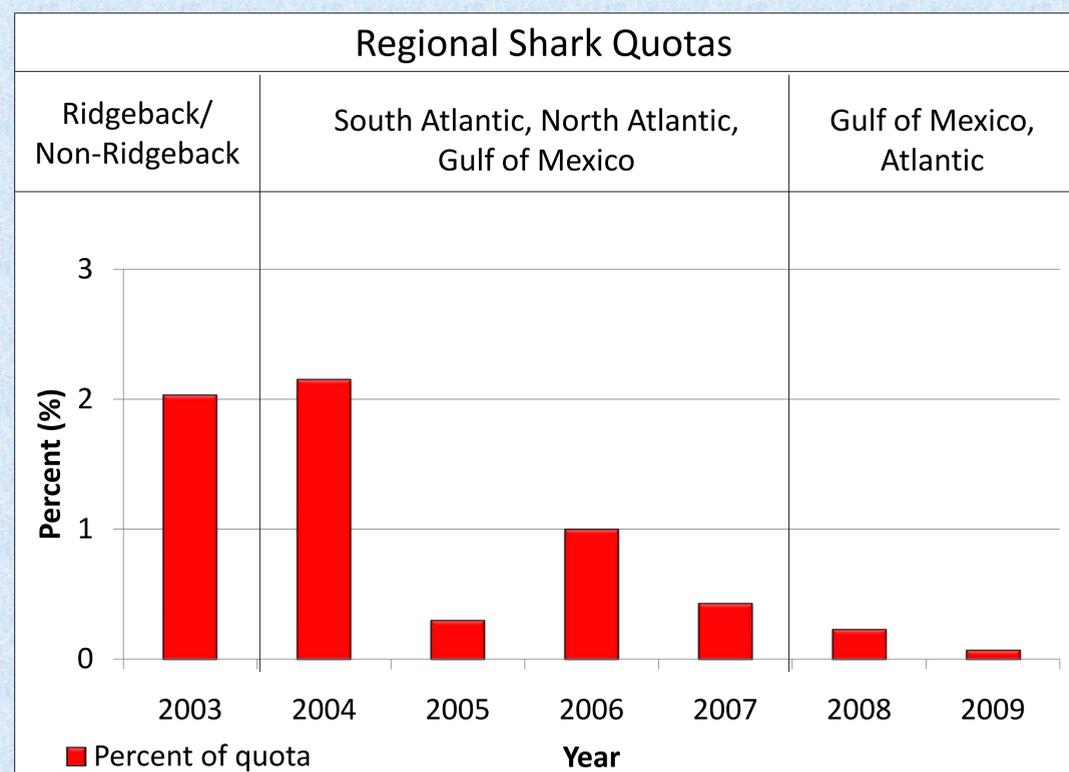


Figure 4. Federal shark incidental LCS logbook landings as a percent of regional quota in the Gulf of Mexico over time (2003-2009). (Data Source: Coastal Fisheries and HMS Logbook ; Atlantic and State shark landings data are not included)



Atlantic Shark Fisheries: Catch Shares Workshop

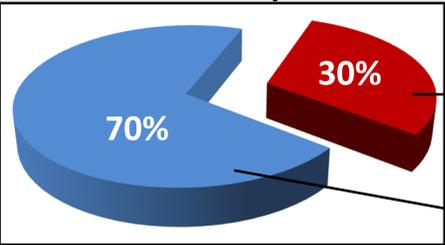
Sample Methods of Allocation

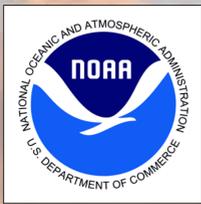


Highly Migratory Species (HMS) Management Division

Introduction

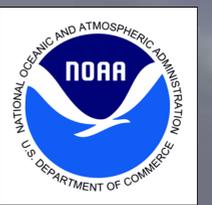
- NMFS is considering implementing a catch share program for the Atlantic Shark Fisheries (76 FR 57709; September 16, 2011)
- NMFS would like the process of initial allocation to be administratively simple, equitable, transparent based on readily available data, and consider all eligible participants while adhering to the objectives of the potential Atlantic Shark Fisheries Catch Share Program.
- There are a variety of ways in which initial allocations can be determined, including, but not limited to: equal allocation, catch history, and a combination of these methods to mention a few. Below is a list of a few types of formulas used for the initial allocation available as well as some advantages and disadvantages for each. *Examples provided are just examples and not an indication of any decisions or preferences made by NMFS.
- Additional information on allocation, including the Allocation Criteria, can be found in the Atlantic shark fisheries catch shares white paper.

Type	Equal Allocation	Catch History	Combination
Criteria	<ul style="list-style-type: none"> • Shares are divided <u>equally</u> among eligible participants. 	<ul style="list-style-type: none"> • An individual's share is based on each <u>individuals landings history</u> determined within a <u>set of qualifying years</u>. 	<ul style="list-style-type: none"> • An individual's share can be distributed using a <u>combination</u> of formulas (e.g., equal allocation, catch history).
Example*	<ul style="list-style-type: none"> • If there were 250 directed shark permit holders eligible to receive a quota share and 100% (677.8 mt dw) of the adjusted baseline for non- sandbar large coastal shark (LCS) quota, each participant  <p>2.7 mt dw (5,952.4 lbs dw) per eligible participant</p>	<ul style="list-style-type: none"> • Qualifying years include, but not limited to: <ul style="list-style-type: none"> - 2002 to 2010 (range of years) - 2006 to 2010 (recent years) - Best 4 yrs out of 2002 to 2010 (best fishing years) - Level of Participation (number of years in the fishery) 	<ul style="list-style-type: none"> • Example: 30 percent of the quota could be divided equally amongst 250 eligible directed shark permit holders while the remaining 70 percent of the quota could be assigned to each participant based on their catch history over a range of qualifying years.  <p>Commercial quota</p> <p>70% → Catch History</p> <p>30% → Equal Allocation</p>
Pros	<ul style="list-style-type: none"> • Provides equal fishing opportunities to all eligible participants. 	<ul style="list-style-type: none"> • Selective (e.g., may be used to include all or the most active participants). • Allows considering of unavoidable circumstances affecting fishing opportunities. • Allows factoring how active participants have behaved in the fishery. 	<ul style="list-style-type: none"> • Provides at least a base-amount of quota that would provide for incidental landings of sharks while distributing additional shares based on catch history, thereby providing greater shares to the most active participants in the fishery.
Cons	<ul style="list-style-type: none"> • Maintains some access for inactive permits / vessel owners back to the fishery. • May decrease shares for active participants. • Provides shares that may not be economically viable to remain active in the fishery. 	<ul style="list-style-type: none"> • May decrease shares for active participants . • May reward opportunistic fishermen as oppose to directed shark fishermen. 	<ul style="list-style-type: none"> • Provides base shares that may not be economically viable to remain active in the fishery. • Decreased shares for the most active participants.



Atlantic Shark Fisheries: Catch Share Workshop

Sample Methods of Allocation: Level of Participation



Highly Migratory Species (HMS) Management Division

Introduction

- NMFS could potentially allocate initial shark quota shares based on the level of participation in the Atlantic shark fisheries.
- Under this option, eligible participants would receive an initial allocation based on their total landings or number of trips, ranked from highest to lowest level. Differentiation among levels of performance could be based on catch history, number of years in the fishery, frequency of trips and / or landings to mention a few over a range of qualifying years. Below are two approaches on how NMFS could differentiate among levels of performance of the participants in the shark fisheries to distribute initial allocations. *Examples provided are just examples and not an indication of any decisions or preferences made by NMFS.

*Example I

- NMFS could determine level of performance based on the rankings of their landings per year in weight (Table 1 includes weight in both metric tons (mt) and pounds (lbs), number of trips per year and number of years in the fishery. Table 1 reflects the potential criteria that could be used to categorize individuals having a directed shark permit by level of performance in the fishery over 2003 to 2009 fishing season years.

(Data Source: 2003-2009 Pooled Coastal Fisheries and HMS Logbook, numbers rounded to nearest hundred)

Table 1: Criteria used for Differentiating Levels of Participation

Level of Participation	Number of years in the fishery	Landings per year [mt dw (lbs dw)]	Number of trips per year
Low	≤ 3	≤ 3.9 (< 8,000)	< 9
Medium	4	>3.9 & < 10.1 (> 8,000 & < 22,300)	9-13
High	≥5	≥ 10.1 (22,300)	≥ 14

- NMFS could then use this criteria to determine how to allocate quota to all eligible participant based on the number of individuals within each level of performance, the percentage of total quota assigned to each level of performance, and the commercial quota available for the initial allocation (see diagram below).

Level of Participation (no of participants)	Share (percent of total quota in mt dw)	Allocation mt dw / participant
High (62)	70% (474.4 mt dw)	7.7 mt dw
Medium (62)	20% (135.5 mt dw)	2.2 mt dw
Low (122)	10% (67.8 mt dw)	0.6 mt dw

- For example, if the commercial shark quota consisted of 677.8 mt dw, and there were 62 high performing shark directed permit holders, with the high level of performance receiving 70% of the total commercial quota (474.4 mt dw), this would result in 7.7 mt dw for each high level shark directed permit holder (474.4 mt dw / 62 participants = 7.7 mt dw per high level participant).

*Example II

- NMFS could determine level of performance of the participants in the shark fishery based on those participants whose cumulative landings account for 50 % of the total landings (highliners) from 2003 to 2009.

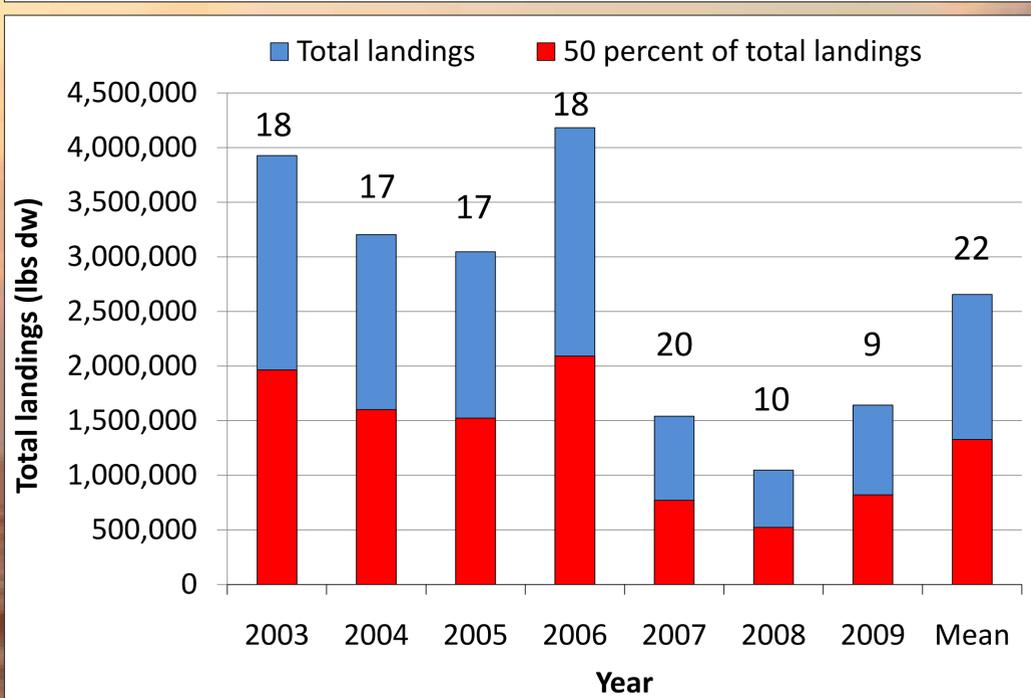


Figure 1. Total annual and 2003-2009 mean landings and 50% of landings, with number of highliners (those highest ranked vessels accounting for 50% of landings), for all regions, based on 249 directed shark vessels.

(Data Source: 2003-2009 Pooled Coastal Fisheries and HMS Logbook, numbers rounded to nearest hundred)

- NMFS could then use this potential criteria to determine how to allocate quota all eligible participant based on their level of performance in the fishery (see diagram below).

Level of Participation (average no of participants)	Share (percent of total quota in mt dw)	Allocation mt dw / participant
Highliners (22)	50% (338.9 mt dw)	15.4 mt dw
Non-highliners (226)	50% (338.9 mt dw)	1.5 mt dw

- For example, if the commercial shark quota consisted of 677.8 mt dw, and, using the average number of highliners, there were 22 highliners, with both the highiners and non-highliners receiving 50% of the total commercial quota (338.9 mt dw), this would result in 15.4 mt dw (33,905 lbs dw) for each highliner and 1.5 mt dw (3,306 lbs dw) for each non-highliner.



Atlantic Shark Fisheries: Catch Share Workshop

Catch Share Program (CSP) Examples



Highly Migratory Species (HMS) Management Division

Introduction

- There is no “one size fits all” catch share program. We can learn from other programs and design a unique program that meets the needs of the Atlantic Shark Fisheries.
- There are a variety of formulas that can be used to approach initial allocation when designing a catch share program.

Fishery Goal	CSP Example
Eliminate overfishing	GOM Red Snapper IFQ
Stop derby fishing	Alaska Sablefish and Halibut IFQ
Reduce bycatch	BSAI Non-pollock Cooperatives
Improve socio-economic conditions for communities	Western Alaska CDQ Program

CSP	Allocation Formula	Examples:* Atlantic Shark CSP
Wreckfish	50% catch history and 50% equal allocation	50% determined from landings over a range of years and 50% divided equally
Snapper / Grouper	50% older catch history and 50% newer catch history over a range of years	50% from pre-2006 landings and 50% from post-2006 landings
Bering Sea and Aleutian Islands, AFA Pollock Cooperatives	50% inshore (catcher vessels), 40% offshore (catcher/processors, and some limited catcher vessels), and 10% motherships (catcher vessels)	Use the following criteria: landings, vessels size, types of gear, level of participation in the fishery
Pacific Sablefish	Catch history associated with the limited entry permit	Only landings history considered after 2002
Surf Clam and Ocean Quahog	80% historical catches and 20% vessel size	Percentage could be allotted based on catch history and remainders on vessels size or other characteristic
Bering Sea and Aleutian Islands (BSAI) Non-Pollock Cooperatives	Catch history (best 5 yrs), including combination of allocated species and fishing areas (e.g., 11 quota categories)	Use a combination of catch history and/or equal allocation and different categories : level of effort (number of trips, number of permits, number of gears, number of years in the fishery etc.)
GOM Grouper and Tilefish	Average annual landings from logbooks associated with their permit from 1999 -2004 (can drop 1 year), with 3% of total shares reserved to resolve disputes	Average landings history from either Coastal Fisheries Logbook , HMS logbook, dealer or a combination of all of them from 2003-2011, with 3% of shares reserved to resolve issues with initial allocation

Concerns	Design Feature	CSP Example	Flexible Measures
Loss of small boat fleets and communities	Allocation, Transferability	GOM Red Snapper IFQ	Limit transferability in first two years to only allow leases (not sales) to preserve distribution of privileges
Leaves small vessel owners/new entrants out	Financial measures	Bering Sea Crab IFQ; Halibut / Sablefish IFQ	Low interest 25-year federal assistance program loans to small vessels and first time purchasers to acquire quota shares
Fishing community sustainability	Sectors	Northeast sector	Special community provisions in MSA, including preservation of working fishery infrastructure

*Many of the examples presented here are just examples and are not an indication of any decisions or preferences made by NMFS.