

Science, Service, Stewardship



Swordfish Fishery Revitalization and Increasing Fishery Flexibility through Further Reduction of Bycatch

Putting the Pieces Together

**HMS Advisory Panel Meeting
September 21-23, 2010**

**NOAA
FISHERIES
SERVICE**



Morning Session Outline

Swordfish Fishery Revitalization

- Investigate potential options that may facilitate additional opportunities to harvest swordfish

Increasing Fishery Flexibility through Further Reduction of Bycatch

- Investigate ways to utilize incentives and performance objectives/standards for bycatch reduction



Swordfish Fishery Revitalization – Presentation Outline

- Swordfish fishery - recent history, accomplishments, and challenges (re-cap spring AP meeting presentation)
- SWO marketing
- Permit renewal and re-issuing expired permits
- Relieving upgrade restrictions
- Permit leasing
- Permitting for SWO retention in squid trawls



Regulatory Background Summary

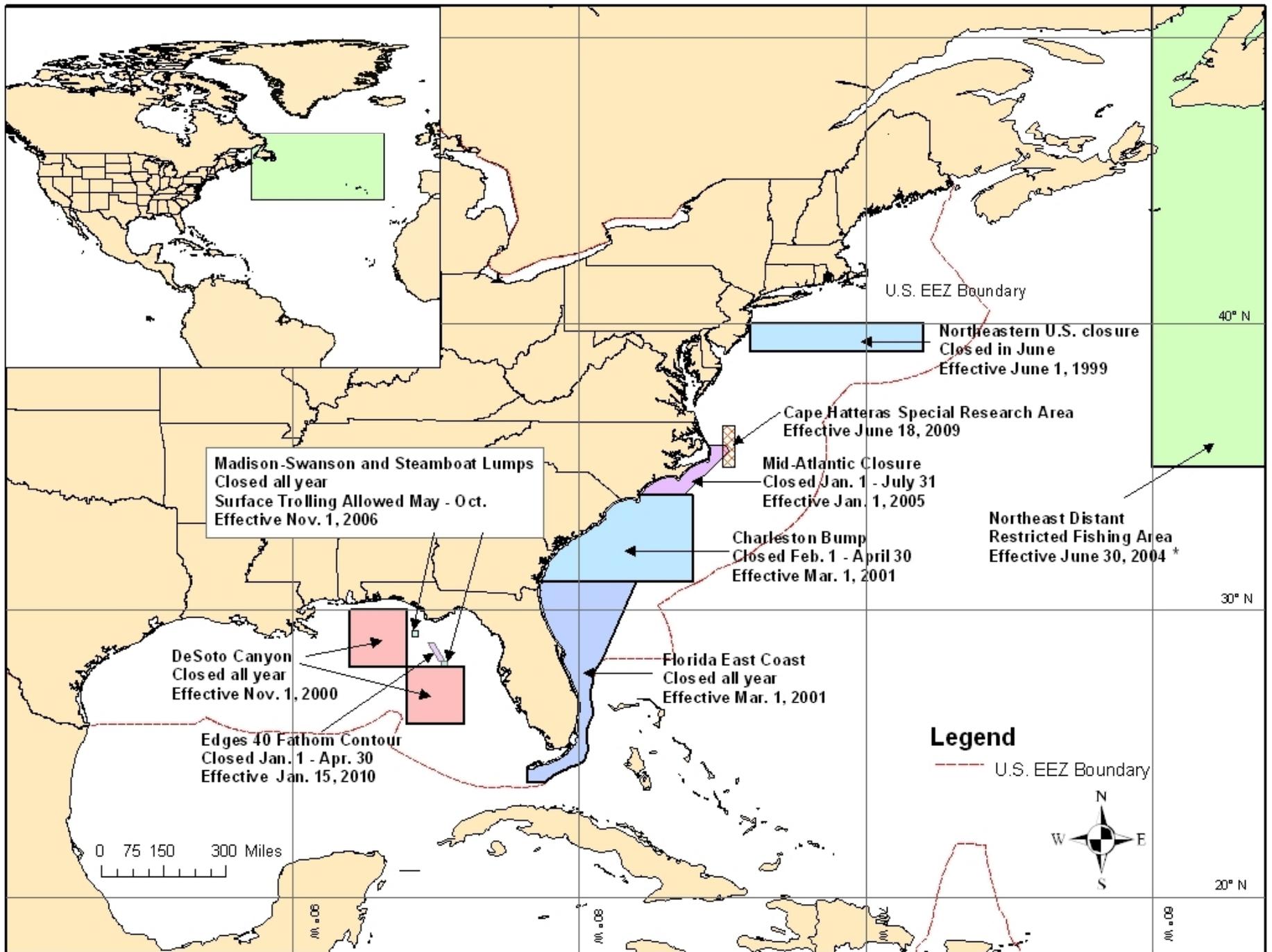
1985: First SWO FMP Developed (joint Council effort)

1999: HMS FMP Developed

- Limited access permits
- VMS & Dealer reporting
- Northeast June PLL area closure

2000 - 2001: Regulatory Amendment to 1999 HMS FMP

- Live bait prohibition in GOM to reduce billfish bycatch
- Three PLL area closures to reduce bycatch of billfish and undersized swordfish (Desoto Canyon (Nov. 2000); Charleston Bump & East Florida Coast (March 2001))





Sea Turtle Bycatch Issues

2002: Portion of NED closed to PLL vessels; dip nets and line cutters become required equipment

2001 – 2003: Joint NOAA/industry NED research conducted to reduce sea turtle interactions and mortalities

June 2004: PLL BiOp concludes that the PLL fishery is not likely to jeopardize loggerheads, but is likely to jeopardize leatherbacks. Current ITS established

July 2004: To avoid jeopardy, NMFS implements PLL circle hooks & bait requirements, requires careful handling and release tools, requires sea turtle placards and adherence to protocols, reopens NED w/ 18⁰ circle hooks & bait requirements (69 FR 40734)



2006 Consolidated HMS FMP

- Implemented mandatory safe handling and release workshops for PLL and BLL vessel owners and operators. These efforts are ongoing and result in certification of the entire PLL fleet since 2006. Keeps fleet operating in accordance with the 2004 PLL BiOp.
- Continued to allow some fishermen to utilize buoy gear by authorizing the gear in the commercial SWO directed fishery for SWO Directed & SWO Handgear permits only



SWO Regulatory and Administrative Actions Since 2006 FMP

- June 2007: Swordfish Revitalization Final Rule (72 FR 31688)
 - Amended vessel upgrading restrictions for PLL vessels
 - One-time upgrade restriction removed for all LAPs
 - Increased incidental and recreational retention limits
- July 2008: Final rule (73 FR 38144) to allow Atlantic tunas longline LAPs that had been expired for more than one year to be renewed by the most recent permit holder
- December 2009: At recommendation of HMS Advisory Panel, the Atlantic Tunas Longline permit was moved to SE Permits Office



Other Swordfish Revitalization Efforts (Non-Regulatory)

- In 2008 and 2009, NMFS featured swordfish at several prominent seafood trade shows and food marketing events (Boston, Brussels, New Orleans)
- In 2008, NMFS developed 1-page swordfish fact sheet
- In 2008, NMFS met with industry representatives to discuss swordfish marketing
- In 2008, NMFS created Fish Watch and Fish Watch Fact Sheet (http://www.nmfs.noaa.gov/fishwatch/species/n_atl_swordfish.htm)
- Industry efforts: brochure and outreach



Accomplishments: Improved N. Atlantic SWO Stock Status

1996: $B/B_{msy} = 0.58$

2002: $B/B_{msy} = 0.94$

2006: $B/B_{msy} = 0.99$ (total TAC of 14,000 mt ww established through 2008)

2009: $B/B_{msy} = 1.05$ (total TAC of 13,700 mt ww established through 2010)



Impacts of SWO Revitalization (Increased Incidental Landings)

Year	Number of records	Number SWO kept (range)	Total number SWO kept (est. pounds)	Number of vessels w/at least 1 SWO kept	Average number of SWO kept per vessel ¹	Percent SFI vessels that kept at least one SWO
2003	670	0-4	139 (13,510)	14	1.08 (129 trips)	14.1
2009 ²	677	0-28	426 (44,529)	20	4.01 (105 trips)	25.3

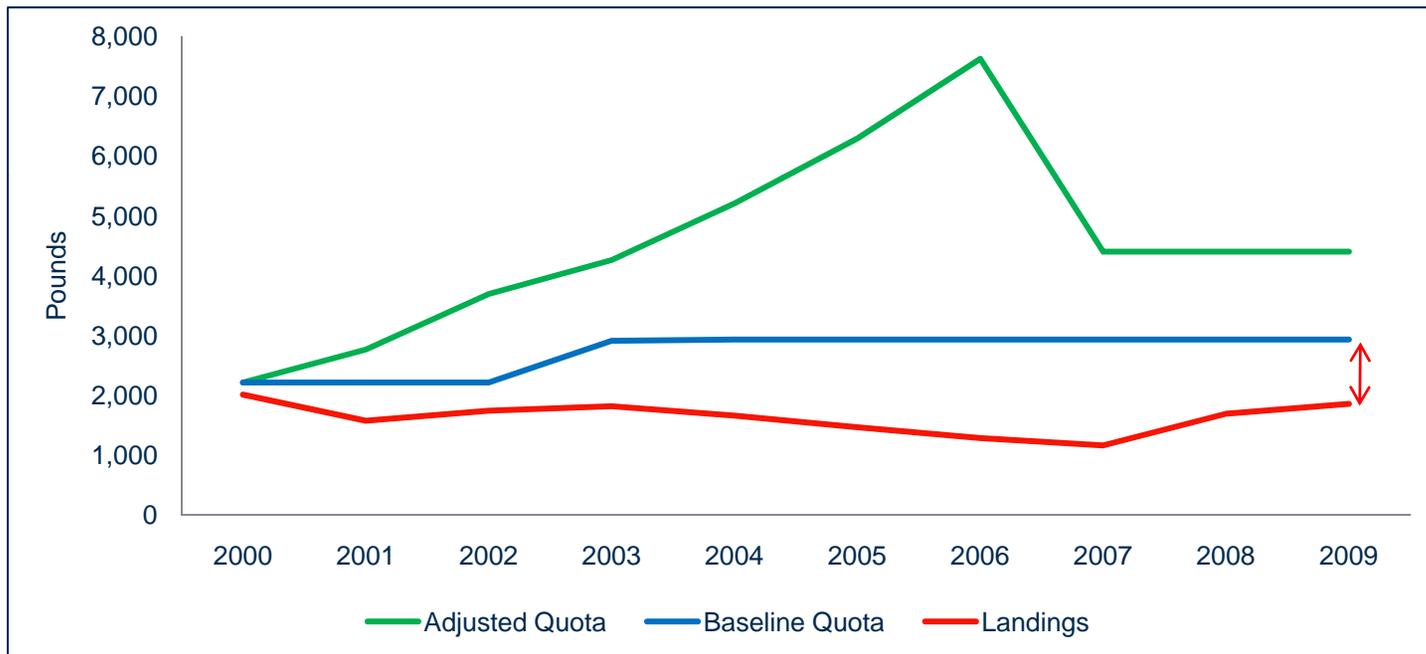
¹ Only trips from those vessels that landed at least one swordfish per year

² Data for 2009 are preliminary

There has been a sizeable increase in the number of SWO landed per trip by Swordfish Incidental permitted vessels



Challenges: Attainment of U.S. Swordfish Quota



2009 = 42% of adjusted quota and 63% of baseline quota.

One of the ongoing challenges is for the U.S. to attain its SWO quota even though 2009 landings were the highest since 2000



Challenges: Ongoing Sea Turtle Bycatch Issues

March 2010: FWS/NMFS proposed to list the Northwest Atlantic loggerhead sea turtle distinct population segment as “endangered.”

“...unlikely that (fishery bycatch) mortality can be significantly reduced”

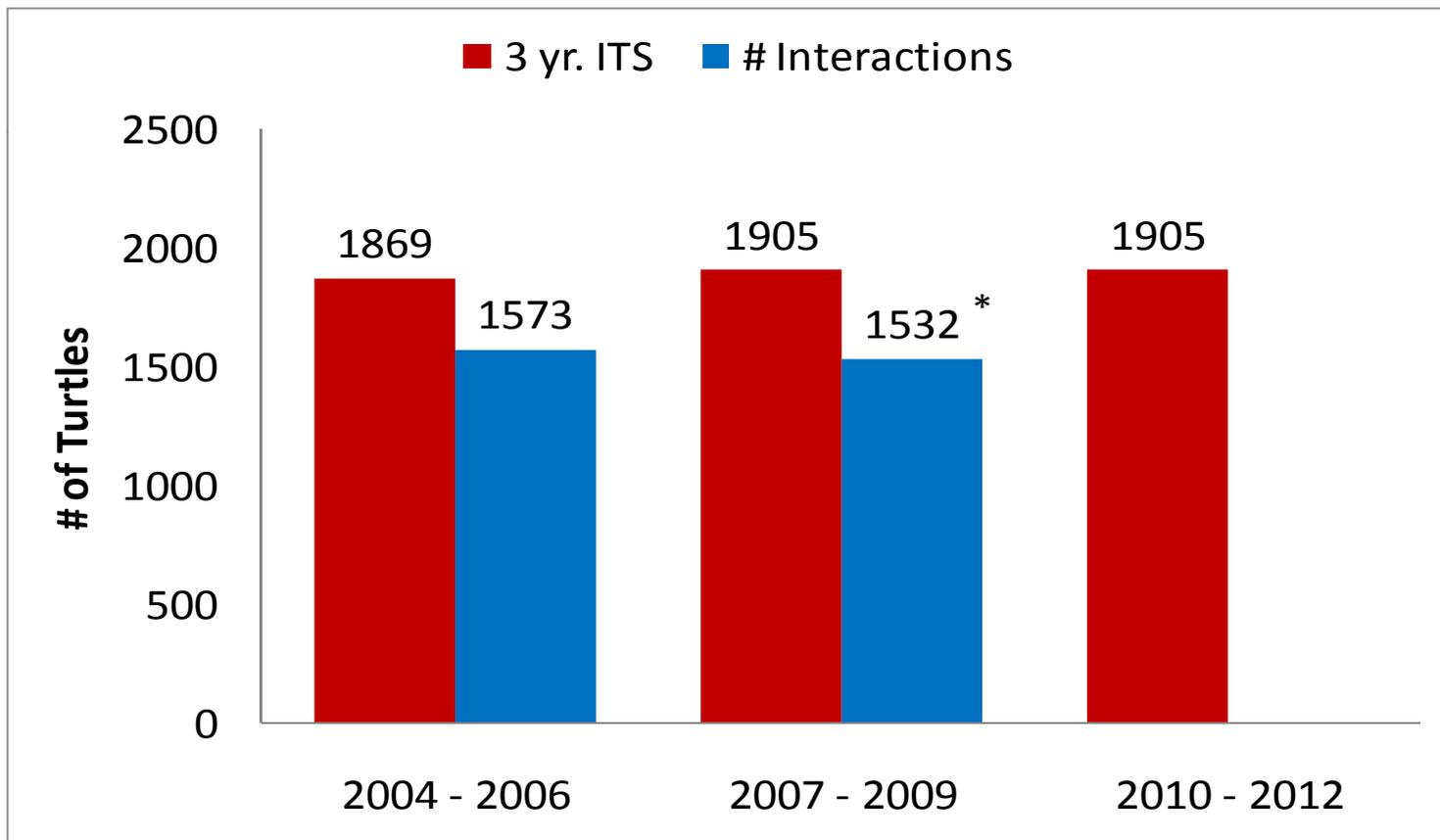
“Although regulatory mechanisms are in place that should address direct and incidental take of NW Atlantic loggerheads these...are insufficient or are not being implemented effectively...”

These statements include all fisheries (domestic and international)

Comment Period Closed – Sept. 13, 2010 (75 FR 12598)



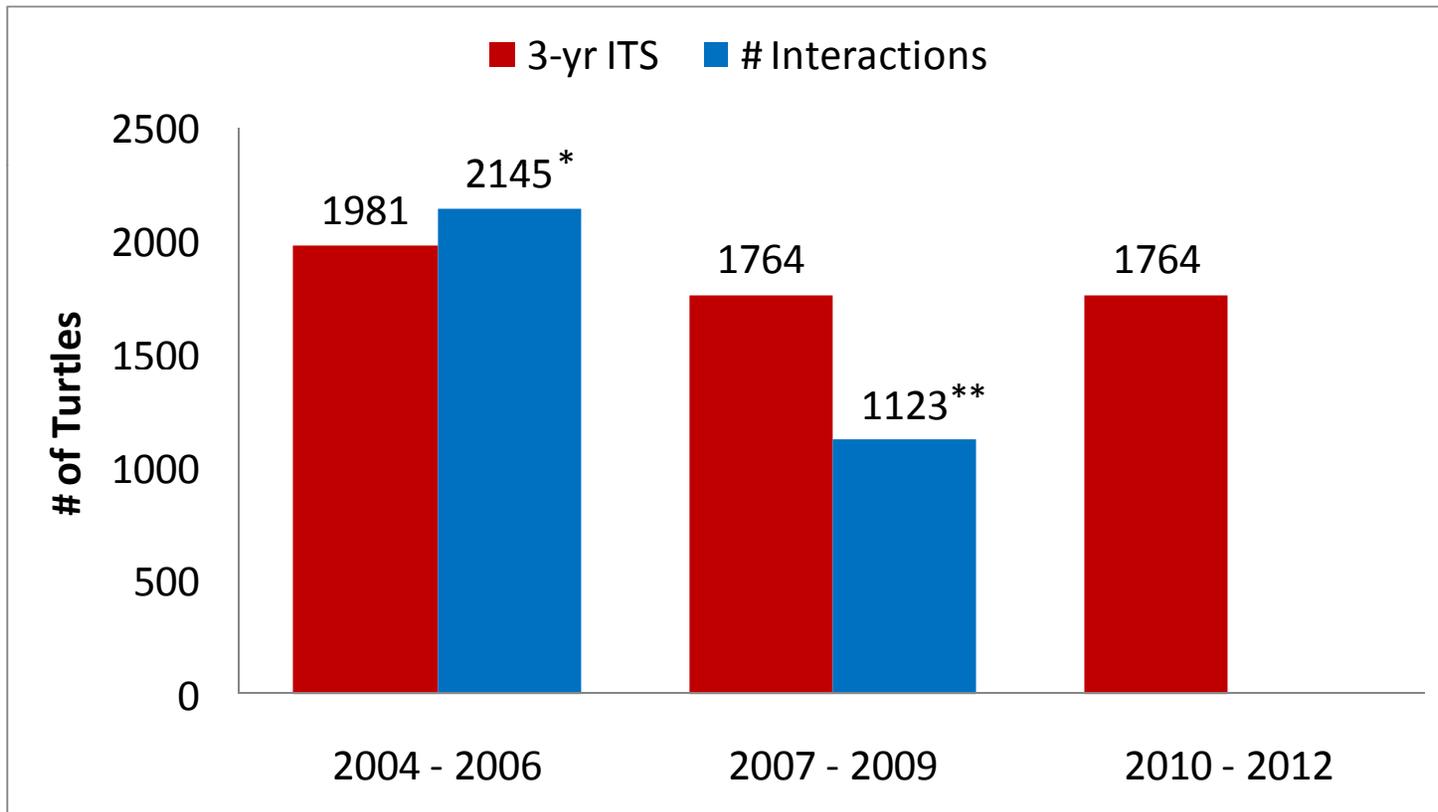
Loggerhead Sea Turtles



* Interactions for 2009 are preliminary



Leatherback Sea Turtles



* Over 47% of interactions during 2004-2006 occurred prior to implementation of circle hooks in Q3 2004

** Interactions for 2009 are preliminary



Challenges: PLL Bluefin Tuna Landings & Quota Allocation

2009 Longline Category Landings*	# of Bluefin Tuna	Weight (lb)	Avg. Weight (lb)	Weight (mt)	Quota (mt)	% Quota Taken
Longline	601	285,682	475.3	129.6	99.3	130.5%
-North	398	167,299	420.3	75.9	54.7	138.7%
-South	203	118,383	583.2	53.7	44.6	120.4%

* Dead discards for 2009 were 160 mt and must be accounted for.



Challenges: Provide Additional Opportunities in U.S. Commercial SWO Fishery

- In summary, the North Atlantic SWO stock is rebuilt but U.S. SWO landings are below the ICCAT quota
- NMFS must consider several important priorities when managing HMS fisheries including:
 - Reduction of bycatch and bycatch mortality
 - Undersized fish
 - Billfish
 - Sea turtles
 - Marine mammals
 - Rebuilding overfished stocks in Atlantic HMS fisheries such as bluefin tuna and billfish



Challenges: Provide Additional Opportunities in U.S. Commercial SWO Fishery (cont.)

A combination of factors have contributed to the U.S. SWO landings being below the quota:

- Conservation and Management measures for various species
- Increased fuel prices
- Low ex-vessel prices
- Competition from less expensive, more available, imports



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U.S. SWO Marketing

What could be done to help increase domestic demand by promoting a change in consumer sentiment?

- Promote SWO as sustainably fished
- Educate U.S. consumers about bycatch reduction efforts in the U.S. pelagic longline fishery
- Increase awareness of health benefits of seafood consumption

NMFS continues to highlight domestic SWO

- Seafood trade shows
- Fish Watch



SWO Marketing

Non-governmental initiative by Day Boat Seafood, Inc.

- Marine Stewardship Council assessments underway
 - SE US North Atlantic bigeye and yellowfin tuna - PLL
 - SE US North Atlantic Swordfish – PLL and Buoy Handgear
 - <http://www.msc.org/>



SWO Marketing

What other marketing/outreach initiatives should be considered?

What funding sources/partnerships are there to assist with marketing/outreach?



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Permit renewal and re-issuing expired permits

Permit termination provisions for SWO and SHK limited access permits have been in place since 1999

- If permits are not renewed within one year of expiration, the permit terminates

One goal of capping fishing fleet capacity was rationalizing fleet capacity commensurate with stock status – North Atlantic SWO stock was overfished

Since 1999, the number of SWO limited access permits has, and continues to, decrease through attrition

North Atlantic SWO stock is now rebuilt



Permit renewal and re-issuing expired permits

From 2000 to 2009, the number of SWO limited access permits has decreased (#s below are approximate)

- SWO Directed – 243 to 187
- SWO Incidental – 208 to 72
- SWO Handgear – 114 to 81

NMFS conducted a capacity analysis in 2008 which indicated that there was not overcapacity in the SWO fishery.

The capacity estimate from that study indicated that fleet harvesting capacity for swordfish was below the commercial quota.

NMFS has received a number of requests to consider reissuing or renewing limited access permits



Considerations for Permit renewal and re-issuing expired permits

- If the termination provision was removed, how many original permit holders or most recent permit holders of record would renew?
- If new permits were issued, how might NMFS decide to whom to issue them and how many to issue?
- Should some shifts be made in the number of vessels authorized to use certain gears?
 - Perhaps consider reissuing terminated permits as another permit authorized with another gear with lower bycatch (SFD to SFH?)
- Potential impacts on existing permit values?
- Should shark limited access permits be reissued as well, although many shark species are overfished and quotas are taken quickly?



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Relieving upgrade restrictions

Potential exists that removing or relaxing either or both gross registered tonnage (GRT) or net tonnage (NT) could more easily allow the transfer and/or upgrading of permits

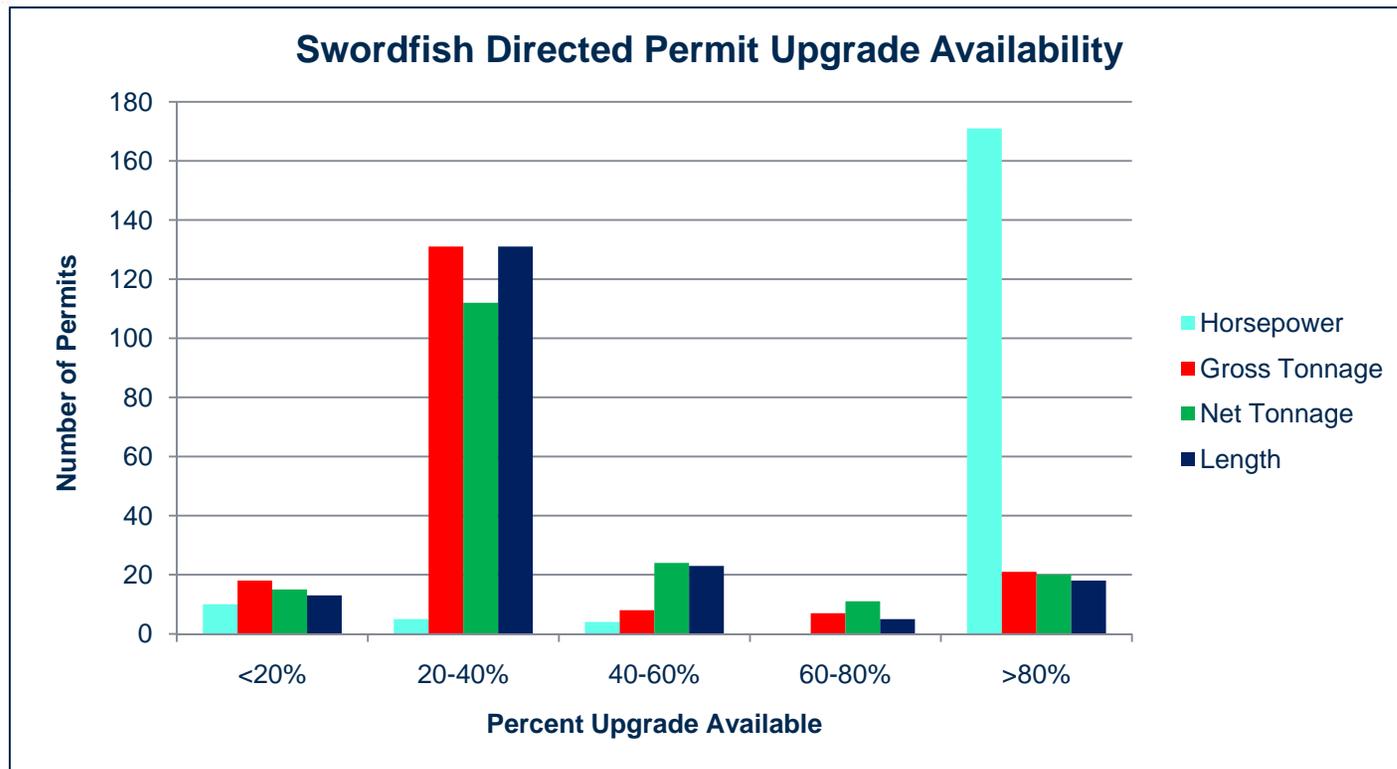
- May allow a few more permits to be actively fished
- May allow permits to be used on larger vessels

Difficult to determine if GRT and NT are limiting to permit transfers

- What permit brokers had to say...
- What SERO Permit Office personnel had to say...
- NMFS' data analysis may help with the discussion...



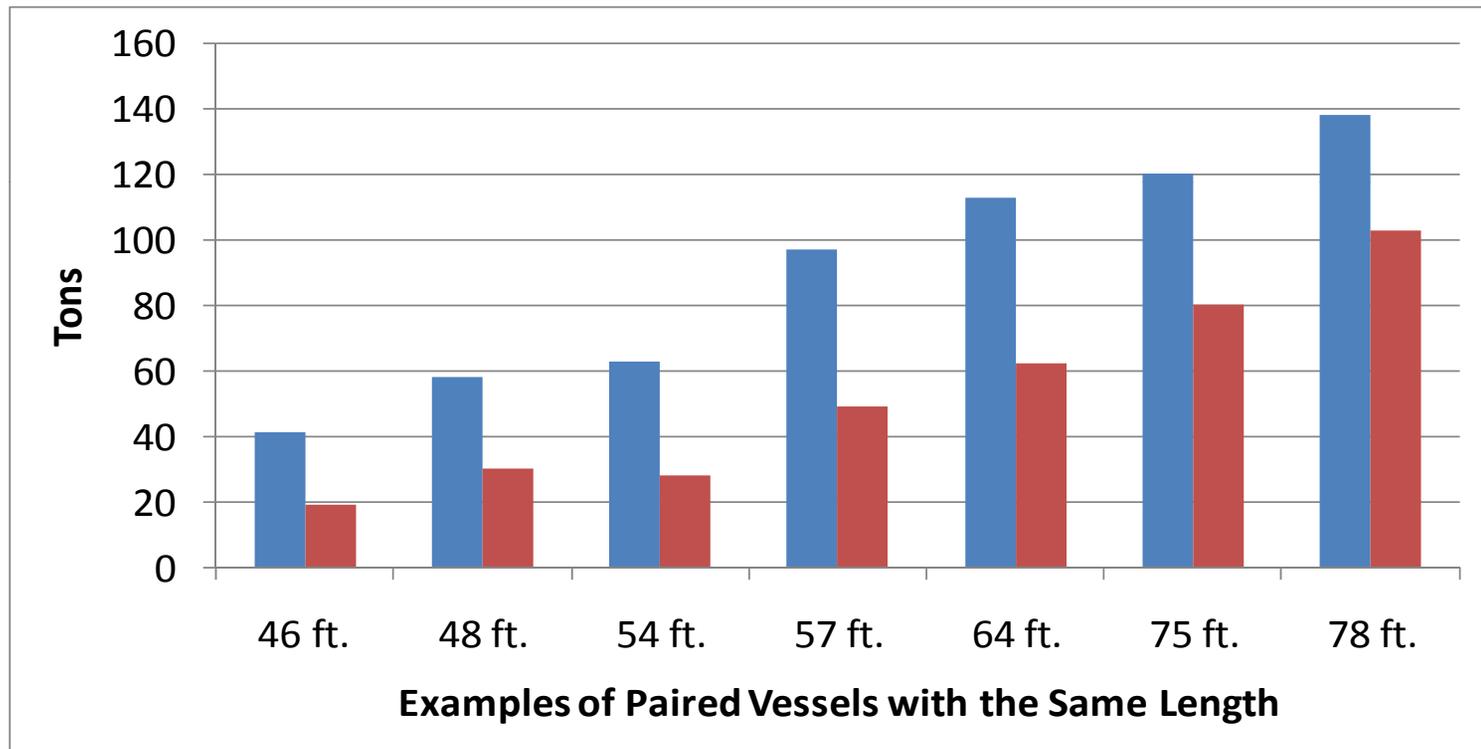
Relieving upgrade restrictions



Most vessels have not taken full advantage of their available upgrades for GRT, NT, and length. Horsepower is not limiting for the fleet.



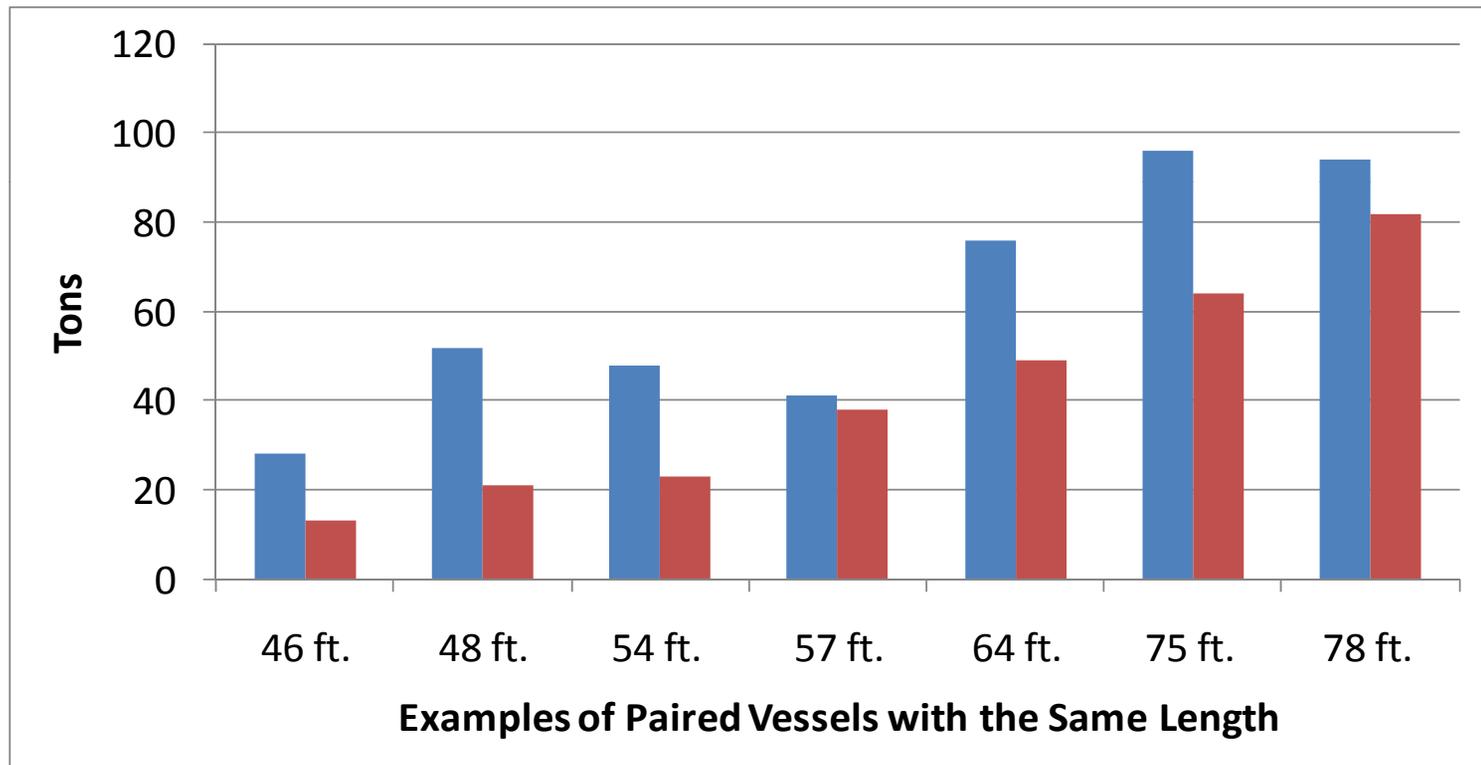
Differences in GRT Between Vessels with Similar Lengths



GRT ranges widely for some vessels of the same length.



Differences in NT Between Vessels With Similar Lengths



NT ranges widely for some vessels of the same length.



Relieving upgrade restrictions

What are your ideas about GRT and NT as a limiting factor to transferring permits and vessel upgrading?

- How limiting are they to the transfer of permits?
- Is GRT and NT an appropriate measure of capacity?
- Would modification of these restrictions likely facilitate swordfish revitalization?
- What level of priority would you place on this compared to other potential SWO revitalization actions?



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Permit Leasing

- Comments requesting permit leasing have been received during ANPR and other public meetings
- Currently, the definition of “owner” at 50 CFR § 600.10 means that permits can be issued only to the owner of a vessel
- Permit transfer can currently be arranged through a private legal agreement between parties. Such an agreement usually specifies that the permits will transfer back to the original owner.
- NMFS has researched this issue further by looking at the leasing of quota shares in IFQ systems
 - IFQ systems lease the shares, but not the permits
- Leasing of permits could affect permit administration, enforcement, and workshop administration



Potential SWO Revitalization Actions

Does the existing system of relying on private legal agreements between parties not work well because of the assumption of risk?

Outside of this existing practice, what does permit leasing mean to you and what advantage would it have?

What priority would you give the various potential SWO revitalization actions?

What provides the biggest bang for the buck?



Swordfish Fishery Revitalization – Presentation Outline

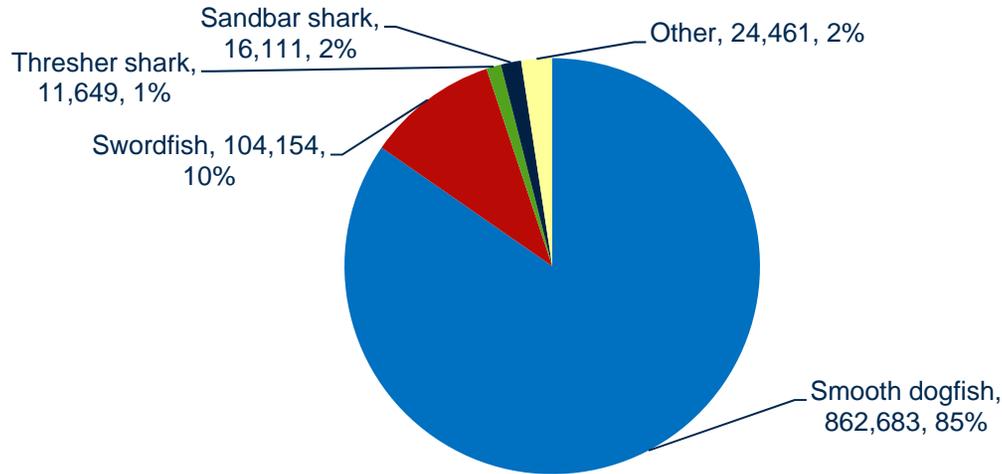
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- **Permitting for SWO retention in squid trawls**



Permitting for HMS Bycatch in Squid Trawls & Other Fisheries

- Currently, three limited access permits are required for squid trawl vessels to retain swordfish caught as bycatch.
- Several other fisheries may occasionally catch HMS as bycatch.
- NMFS has received numerous requests to reconsider the issue of HMS bycatch in other fisheries, particularly the squid trawl fishery.

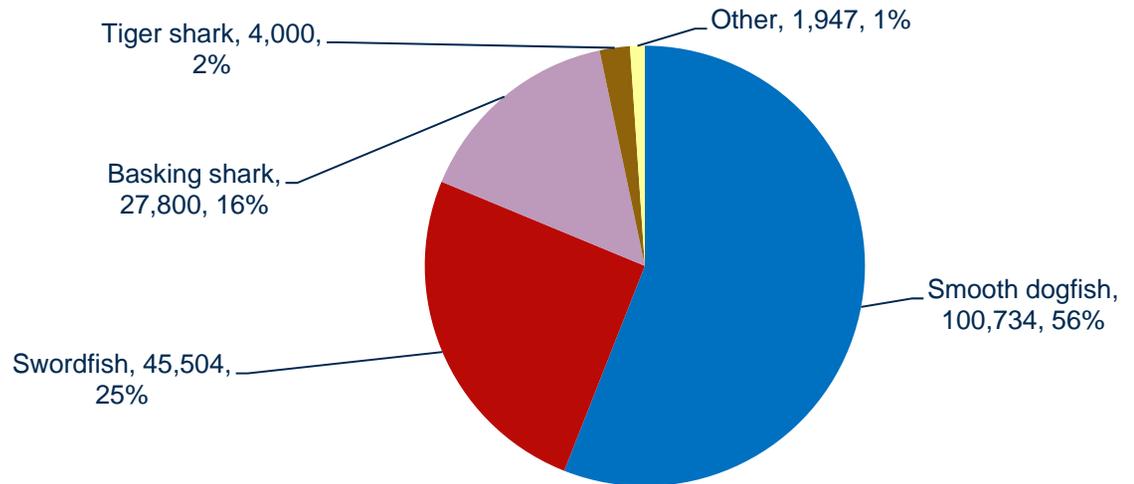
HMS Retained (lbs) on Squid Trawl Trips



HMS in Squid Trawls

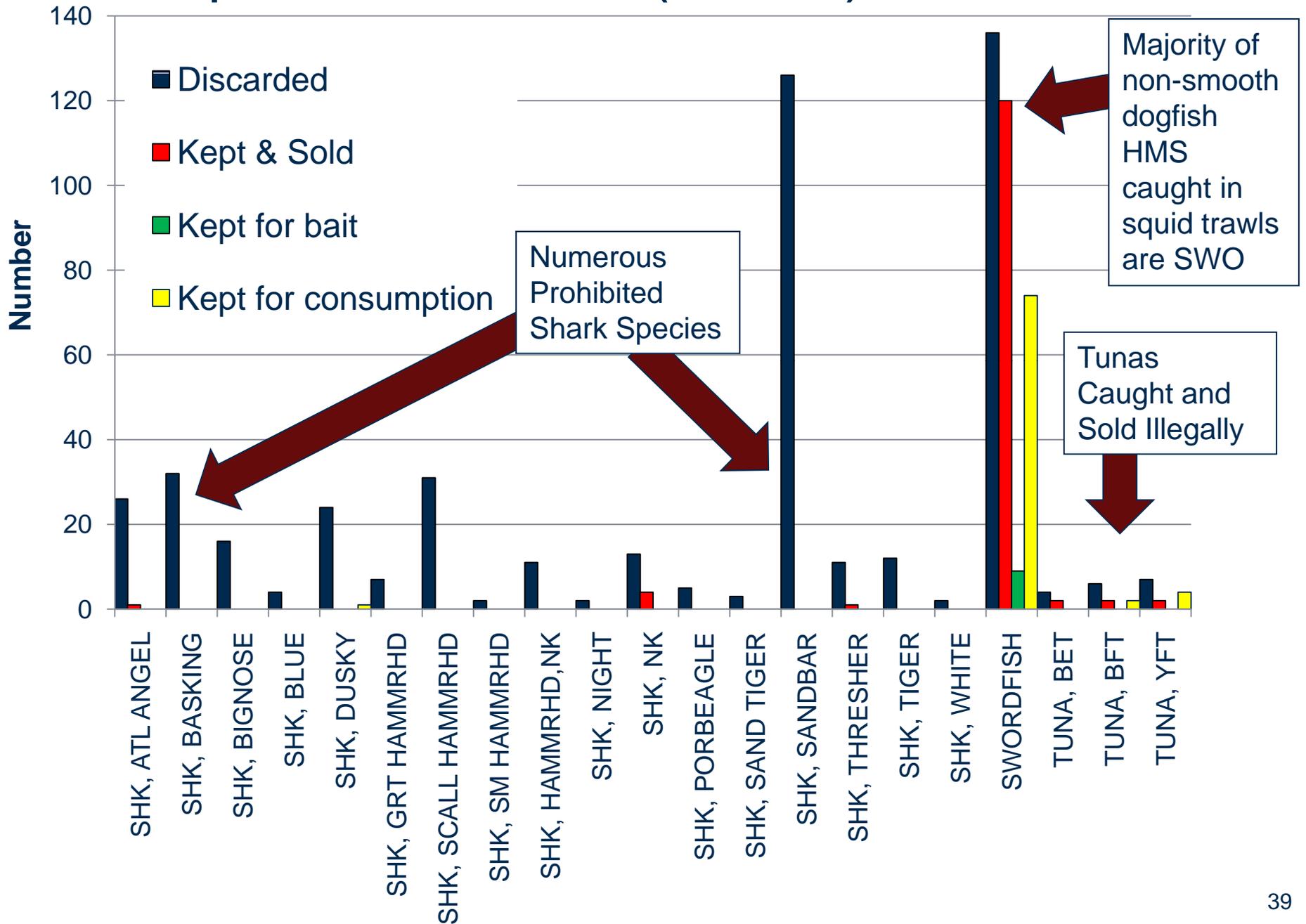
Self reported VTR data shows a large number of HMS are caught in squid trawls. The vast majority are smooth dogfish, which will be addressed in the upcoming rule to allow the retention of smooth dogfish incidentally caught in trawl gear.

HMS Discarded (lbs) on Squid Trawl Trips



VTR data (2000-2009)

Squid Trawl Observer Data (2000-2009)





Options

- 1) HMS Bycatch Permit or Incidental SWO/Squid Trawl Permit?
- 2) Allow the incidental retention of SWO in all squid fisheries, or only the *Illex* fishery?
- 3) How to permit *Illex* vessels to retain incidentally caught SWO?
- 4) Options for existing *Illex* vessel triple-pack holders.

- Create or modify current permits to allow additional squid trawl vessels to retain swordfish caught as bycatch.

- Create HMS bycatch permit to accommodate all fisheries which catch HMS as bycatch.



HMS Bycatch Permit

- 1) HMS Bycatch Permit or Incidental SWO/Squid Trawl Permit?
- 2) Allow the incidental retention of SWO in all squid fisheries, or only the *Illex* fishery?
- 3) How to permit *Illex* vessels to retain incidentally caught SWO?
- 4) Options for existing *Illex* vessel triple-pack holders.

Pros: Could potentially address the issue of HMS bycatch in many fisheries

Cons: 1) Could require the issuance of potentially thousands of new HMS permits

2) A “one size fits all” HMS Bycatch Permit would be complicated and difficult to implement given the variety of potentially affected fisheries

- | | |
|-------------------------------|---------------------------------------|
| ▪ Shrimp trawl | ▪ Deepwater tilefish (BLL) |
| ▪ Menhaden purse seine | ▪ Wreckfish (vertical line) |
| ▪ Menhaden trawl | ▪ Dolphin/wahoo (PLL) |
| ▪ NE and MA groundfish trawl, | ▪ Squid, mackerel, butterfish (trawl) |
| ▪ Snapper-grouper BLL | ▪ Herring (midwater trawl) |
| ▪ Coastal gillnet fisheries | ▪ Monkfish gillnet |
| ▪ Weir fisheries | |



HMS Squid Trawl Permit

- 1) HMS Bycatch Permit or Incidental SWO/Squid Trawl Permit?
- 2) Allow the incidental retention of SWO in all squid fisheries, or only the *Illex* fishery?
- 3) How to permit *Illex* vessels to retain incidentally caught SWO?
- 4) Options for existing *Illex* vessel triple-pack holders.

VTR self-reported data (2000-2009):

- Only 20% of the vessels that caught SWO held the triple-pack of limited access permits and could legally sell SWO
- 73% of the vessels that caught SWO held a *Illex* moratorium permit

NEFSC Observer Data (1997-2006*):

- *Loligo* fishery caught 2,468 lbs of SWO
- *Illex* fishery caught 12,0567 lbs of SWO

* Observer data source: MAFMC FEIS for Amendment 10 to the Squid, Mackerel, Butterfish FMP



Permitting *Illex* Squid Trawl Vessels for HMS

- 1) HMS Bycatch Permit or Incidental SWO/Squid Trawl Permit?
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- 3) How to permit *Illex* vessels to retain incidentally caught SWO?
- 4) Options for existing *Illex* vessel triple-pack holders.

Options:

- 1) Vessels must obtain existing HMS “triple-pack” limited access permits (Status Quo)
- 2) Issue new HMS triple-pack limited access permits
 - Permanently attach to vessel?
 - Transferability and market issues
- 3) Create new HMS Squid Trawl Permit
- 4) Create exemption for squid trawl vessels (*i.e.*, no permit needed)



Options for current *Illex* vessel owners that hold HMS triple-pack permits if new permit or exemption is created

- 1) HMS Bycatch Permit or Incidental SWO/Squid Trawl Permit?
- 2) Allow the incidental retention of SWO in all squid fisheries, or only the *Illex* fishery?
- 3) How to permit *Illex* vessels to retain incidentally caught SWO?
- 4) Options for existing *Illex* vessel triple-pack holders.

Options:

- 1) *Illex* vessel owners could transfer/sell their HMS triple-pack permits
- 2) *Illex* vessels holding a tri-pack must relinquish permits to NMFS



Other Issues to Consider for Potential HMS Squid Trawl Permit

- Allow other species to be retained (*i.e.*, BAYS tunas)?
- Retention limits?
- Eligibility for permit?
- Limited access or open access permit?
- Vessel upgrading and permit transferability requirements?
- Reporting requirements?
- No permit necessary (*i.e.*, exemption)?



A Potential Alternative for Consideration

- Create a new Squid Trawl HMS Bycatch permit
- Issue to any vessel with an *Illex* moratorium permit, upon owners request
- Allow for retention of 15 swordfish per trip (current level)
- Non-transferrable (vessel must already have *Illex* permit)
- No upgrading restrictions (already governed by squid regs)
- Current HMS “tri-pack” permit holders could transfer/sell those permits



Swordfish Fishery Revitalization – Sequence for Discussion

- Permitting for SWO retention in squid trawls
- Relieving upgrade restrictions
- Permit renewal and re-issuing expired permits
- Permit leasing
- SWO marketing

We welcome your input!