

Science, Service, Stewardship



Species Working Group
Recommendations
ICCAT Advisory Committee

Research

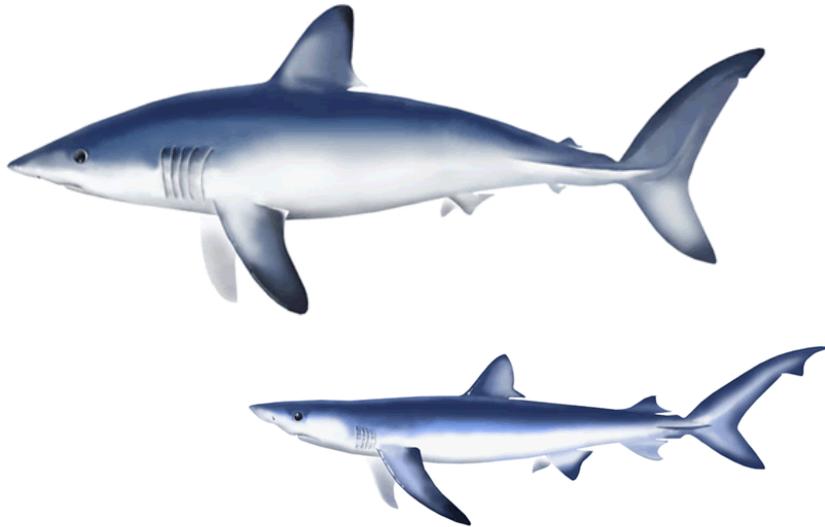
IAC, October 13, 2011

**NOAA
FISHERIES
SERVICE**

NOAA



Swordfish/Shark Working Group





Swordfish/Shark Working Group

- Recommendations:
 - Undertake research on the characterization of the swordfish “deep-drop” fishery, including catch and fishery parameters.
- Actions
 - Some collaborative work is being conducted



Swordfish/Shark Working Group

- Recommendations:
 - Undertake collection of swordfish biological samples in expectation of future retrospective analyses.
- Actions
 - Potential sampling opportunities through the pelagic longline observer program.



Swordfish/Shark Working Group

- **Recommendations:**
 - The Agency should work with Canada to encourage the development of explicit swordfish Limit Reference Points (LRPs), as planned by the SCRS.
- **Actions**
 - U.S. scientists have been conducting research in this area.
 - Research collaborations with Canadian scientists have been increasing in general, and this will be discussed in preparation for the upcoming 2013 Atlantic SWO assessment.



Swordfish/Shark Working Group

- **Recommendations:**

- Gear Modification/Bycatch Mortality

- Continue the development of additional gear technology and modifications to reduce bycatch and bycatch mortality (e.g., weak hook and circle hook studies).
 - Assessment of a relatively “clean” fishery technology (e.g., swordfish buoy gear) in geographic areas other than the Florida straits.
 - Continue cooperative fisheries research programs with CPCs.

- **Actions**

- A study is planned for early 2012 in the Gulf of Mexico which will include weak hook analyses.
 - Collaborative work continues or is planned to expand.



Bigeye, Albacore, Yellowfin and Skipjack (BAYS) Tunas Working Group





BAYS Tunas Working Group

- Recommendations:
 - Tagging programs.*
 - The Working Group members expressed concern over the uncertainty involved in past bigeye and yellowfin assessments, particularly with regard to estimated natural mortality. The Working Group recommends that the United States support an enhanced, Atlantic-wide tagging program for tropical tuna species, using both conventional and electronic tags, as proposed in the 2010 SCRS report.
- Actions
 - U.S. scientists supported the SCRS recommendation.



BAYS Tunas Working Group

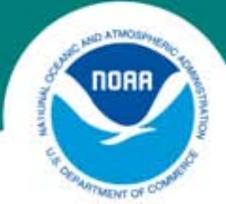
- Recommendations:

- Data Reporting*

- The Working Group expressed concern over the inability to distinguish between juvenile yellowfin and bigeye landings in the Gulf of Guinea and recognized Ghana's commitment to improve data collection and reporting. The Working Group recommends that the United States fully support and participate in the Ghana data improvement program proposed by the SCRS.

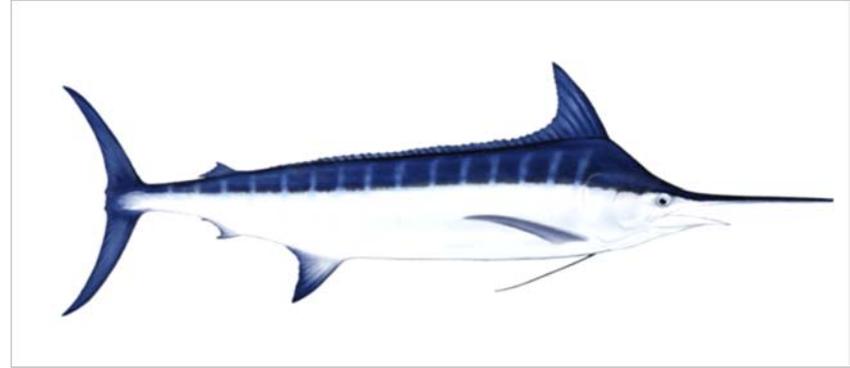
- Actions

- U.S. scientists participated in the data improvement working group.



BAYS Tunas Working Group

- Recommendations:
 - *Albacore Stock Assessment*
 - The Working Group emphasized the importance of U.S. representation at the South Atlantic and Mediterranean albacore assessments and need ensure adequate expertise is involved in the development of those assessments. The Working Groups recommends that NOAA Fisheries scientists participate in the South Atlantic and Mediterranean albacore assessments.
- Actions
 - U.S. scientists, including NOAA fisheries scientists (both present and in supporting roles) participated in the assessments.



Billfish Working Group





Billfish Working Group

- Recommendations:
 - *Increase the emphasis on collection and analysis of life-history data for billfish.* Noting that many of the basic life-history parameters for billfish are still poorly understood, such as age, growth, natural mortality, and population structure, the BSWG encourages continuing basic billfish research. Specifically, this recommendation extends to all life-stages, including increasing research in known and potential billfish spawning areas.
- Actions
 - NOAA scientists identified hardpart samples from many larger BUM specimens, and plan to work collaboratively with Brazilian scientists to develop a growth curve using these important specimens (the current data base is lacking in samples from larger fish).



Billfish Working Group

- Recommendations:

- *Invest more effort in the research of otolith chemistry.*

The BSWG agreed that more research should be directed toward extending the knowledge base in order to determine whether otolith chemistry is stage specific, if more markers can be considered in the analysis, and if regional differences can be detected, in order to differentiate between Gulf and Atlantic stocks.

- Actions

- NOAA and academic scientists collaborated on an otolith chemistry study, which is being published.



Billfish Working Group

- Recommendations:
 - *Conduct additional research regarding the control of the depth distribution of hooks deployed by pelagic longline vessels, emphasizing a greater diversity of gear configurations.*
- Actions
 - Further work being conducted in early 2012.



Billfish Working Group

- **Recommendations:**
 - Encourage NMFS to continue cooperative research programs with CPCs and enhance current information regarding potential differences in the catchability of non-target finfish species on pelagic longline gear when deploying circle hooks versus J-hooks.
- **Actions**
 - Plans with Mexico to collaborate on a study in the Mexican PLL fishery comparing J-hook and circle hook catch rates.



Bluefin Tuna Working Group





Bluefin Tuna Working Group

- Recommendations:
 - The United States should honor its funding commitment to the Grande Bluefin Year Program and promote the involvement of NOAA Fisheries leadership in the implementation of the program.
 - NMFS should establish a process for consistent funding of extramural HMS research.
- Actions
 - The U.S. contributed \$250K to GBYP (\$170K from the SEFSC).
 - The U.S. also made more than \$1.5 million in in-kind contributions for additional research programs.



Bluefin Tuna Working Group

- **Recommendations:**
 - In advance of each stock assessment, NMFS should host a BFT workshop for the sharing of best available science and for prioritizing future research.
- **Actions**
 - The next assessment will be a strict update, but the assessment after that is expected to take advantage of the new data collected during GBYP and U.S. GBYP.



Bluefin Tuna Working Group

- Recommendations:
 - The United States should continue scientific research to obtain a greater understanding of the following:
 - a. Changes in coastal fisheries (e.g., examine hypotheses regarding shifts in bluefin distribution, abundance, and other factors such as prey availability and environment
 - b. stock structure and mixing
- Actions
 - a. SEFSC has requested to host a meeting on this issue in March in Gloucester or thereabouts.
 - b. About 1000 otoliths have been collected so far on both sides of the ocean. Expect to gain fantastic new insights over the next 2-3 years.



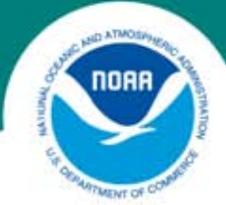
Bluefin Tuna Working Group

- Recommendations:
 - The United States should continue scientific research to obtain a greater understanding of the following:
 - c. early life history, reproductive and maturity schedules, and recruitment processes
 - d. further investigation of spawning grounds
- Actions
 - c. Researchers using reproductive samples collected from GOM expanded observer coverage and elsewhere
 - d. Larval sampling was conducted off Yucatan and S. of Cuba



Bluefin Tuna Working Group

- **Recommendations:**
 - Conduct tagging studies to estimate post-release mortality in recreational and commercial fisheries.
- **Actions**
 - Ongoing. Will be part of early 2012 study.



Bluefin Tuna Working Group

- **Recommendations:**
 - Explore the development of fishery independent estimates of abundance such as aerial and sonar surveys, tagging, and experimental long lining.
- **Actions**
 - Tagging of 1-3 year-old bluefin has been contracted