

Science, Service, Stewardship



2011 SCRS Research Activities and U.S. Participation

**2011 Spring Species Working Groups Meeting
of the Advisory Committee to the U.S. Section to ICCAT
March 8 - 9, 2011, Silver Spring, MD**

**NOAA
FISHERIES
SERVICE**





SCRS Officers

Chairman, SCRS

Convener, Sub-Committee on Ecosystems

Convener, Sub-Committee on Statistics

Convener, Methods Working Group

Ad hoc Tagging Working Group East Coordinator: E. Rodriguez-Marin (EU)

West Coordinator: E. Prince (USA)

Tropical Tunas Coordinator

Bigeye tuna Rapporteur :

Yellowfin tuna Rapporteur :

Skipjack Rapporteur:

Atlantic Albacore Rapporteur :

Mediterranean Albacore Rapporteur :

Bluefin tuna Coordinator:

East Atlantic Rapporteur:

West Atlantic Rapporteur:

Billfishes Rapporteur :

Swordfish Coordinator:

North Atl Swordfish Rapporteur :

South Atl Swordfish Rapporteur :

Mediterranean Swordfish Rapporteur :

Sharks Rapporteur :

Small tunas Rapporteur :

J. Santiago (EU)

S. Calay (USA)

G. Scott (USA) *acting*

P. de Bruyn (EU)

E. Rodriguez-Marin (EU)

E. Prince (USA)

J. Pereira (EU)

D. Die (USA)

C. Brown (USA)

D. Gaertner (EU)

H. Arrizabalaga (EU)

J. Ortiz de Urbina (EU)

J. Powers (USA)

J.M. Fromentin (EU)

C. Porch (USA)

F. Arocha (Venezuela)

J. Neilson (Canada)

J. Neilson (Canada)

P. Travassos (Brazil)

G. Tserpes (EU)

A. Domingo (Uruguay)

J. Ortiz de Urbina (EU)



SPECIES

Last/Next assessment

YFT , Yellowfin Tuna, <i>Thunnus albacares</i>	2008 / 2011
BET , Bigeye Tuna, <i>Thunnus obesus</i>	2010 / 2013?
SKJ , Skipjack Tuna, <i>Katsuwonus pelamis</i>	2008 / 2012?
ALB , Albacore, <i>Thunnus alalunga</i>	2008/ 2011 (S. Atl & Med.)
BFT , Atl. Bluefin Tuna, <i>Thunnus thynnus t.</i>	2010/ 2012
SWO , Swordfish Atl. , <i>Xiphias gladius</i>	2009/ 2012
SWO-Med. , <i>Xiphias gladius</i>	2010/ 2013?
SAI , Sailfish, <i>Istiophorus albicans</i>	2009/ ?
BUM , Blue Marlin, <i>Makaira nigricans</i>	2006 / 2011
WHM , White Marlin, <i>Tetrapturus albidus</i>	2006 / 2012
Small Tunas (various)	N/A
Pelagic sharks , <i>Prionace glauca</i> , <i>Isurus oxyrinchus</i>	2008 / 2012?
Porbeagle , <i>Lamna nasus</i>	2009 / ?



SCRS Meetings Scheduled for 2011

<u>Date</u>	<u>Meeting</u>	<u>Location</u>
February 7-11	Workshop on the use of R tools in the data preparatory work of the ICCAT-SCRS	Madrid, Spain
February 14-18	GBYP working group on the aerial surveys analysis, conventional tagging and biological sampling	Madrid, Spain
March 2-4	Working Group on the Organization of the SCRS	Madrid, Spain
April 25-29	2011 Blue marlin stock assessment session and white marlin data preparatory meeting	Madrid, Spain
May 9-13	Intersessional meeting of the Subcommittee on Ecosystems	Miami, USA
May 23-25	Symposium on G-BFT Trap Fishing and related data sets	Morocco
May 30 - June 3	Tropical tuna species group intersessional meeting on the Ghanaian statistics analysis (Phase I)	Madrid, Spain
June 20-24	Sharks data preparatory meeting to apply Ecological Risk Analysis	Madrid, Spain
June 27- July 1	Joint Meeting of the ICCAT Working Group on Stock Assessment Methods and the bluefin tuna species group to analyze assessment methods developed under the GBYP and electronic tagging	Madrid, Spain
July 25-29	South Atlantic albacore and Mediterranean albacore assessment sessions	Madrid, Spain
September 5-12	2011 Yellowfin stock assessment session	San Sebastián, Spain
September 26-October 1	SCRS Species Groups meetings	Madrid, Spain
October 3-7	2011 Meeting of the Standing Committee on Research and statistics	Madrid, Spain

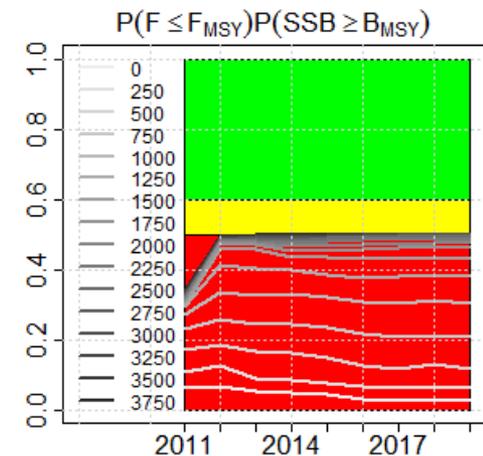
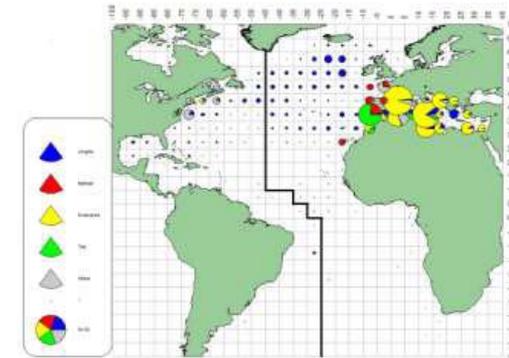
Workshop on the use of R tools in the data preparatory work of the ICCAT-SCRS



Feb 7th to 11th 2011 (*Madrid, Spain*)

- Objectives:

- To facilitate data preparation and *enhance transparency* by developing R scripts that:
 - Allow National Scientists to access, extract, analyze and present ICCAT data including:
 - Catch by flag, fleet, gear ...
 - Effort by flag, fleet, gear ...
 - Catch-at-size
 - Catch-at-age
 - Facilitate common SCRS tasks including:
 - Presentation of model results (e.g. SSB and F trends, projections, diagnostics, K2SM)
 - Construction of CPUE series in R





ICCAT
GBYP



Science for Sustainability

**Aerial Surveys Analysis, Conventional and Electronic Tagging, Biological Sampling
Feb 14th to 18th, 2011 (Madrid, Spain)**

GBYP: No es tan grande como se esperaba

2010-11 budget reduced to 2,500,000 euros (~80% EU)

- Funding for larval surveys eliminated
- Funding for modeling and data mining reduced
- Focus directed primarily in Eastern Atlantic and Mediterranean (where data needs, and funding, are greatest)

Three-pronged approach adopted

- Aerial surveys of *spawners* (Mediterranean Sea)
- Tagging of *juveniles* in East Atlantic and Mediterranean
- Biological Sampling of *all ages* in East Atlantic and Mediterranean



GBYP Workshop on Aerial Surveys

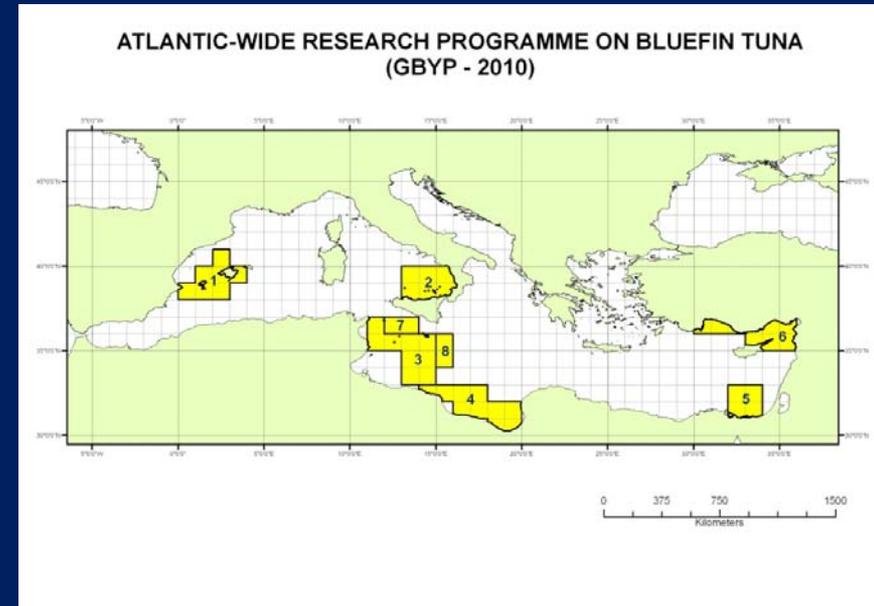
Madrid, February 14-16, 2011

Goals

- Synoptic survey of all Mediterranean spawning grounds
- Statistically powerful index of spawning biomass

Major Challenges

- Fight permits: 23 countries, not all members of ICCAT (may not be possible to survey much of areas 3-5)
- Weather: strong winds during spawning season





GBYP Workshop on Tagging

Madrid, February 18, 2011



Goals

- Conventional and electronic tagging of juvenile bluefin tuna in the Eastern Atlantic and Mediterranean (PIT tags prohibited by Japanese law)
- Estimate movement and mortality rate



Major Challenges

- Tagging in proportion to local abundance of animals across the study area (ensuring tagged fish mix with untagged)
- Multinational cooperation
- Low reporting rate of tags historically (GBYP plans to contract an effective advertising and reward system)
- Funding insufficient for Western Atlantic (GBYP strongly encourages simultaneous tagging of juveniles off the U.S. Coast)





GBYP Workshop on Biological Sampling

Madrid, February 19, 2011



Goals

- Representative sampling of otoliths, gonads and other tissues from all significant fisheries for bluefin tuna in the Atlantic (east and west)
- Combine otolith microconstituent analysis and genetics to determine the age structure and origin of the catch

Major Challenges

- Ensuring sufficient samples are taken in a representative fashion (GBYP is developing TORS for a short term contract to develop sampling plan)
- Data management (much information distributed to many people)
- Multinational cooperation



Meeting of the Working Group on the Organization of the SCRS

March 2nd to 4th, 2011 (*Madrid, Spain*)

- **Increasing demands on Secretariat, such as for compliance monitoring and increased requirements of more sophisticated models.**
- **Declining trend in scientific participation from CPCs, and increasing needs for data and research.**
- **Implementation of Precautionary Approach models for ICCAT species, Management Strategy Evaluation protocols, and incorporation of Ecosystem based models.**
- **The recently approved data confidentiality policy and implications for the Secretariat and SCRS scientific tasks**
- **Review and adoption of standard formats for SCRS reports**
- **Collaboration with other t-RFMOs in terms of training and scientific analysis.**

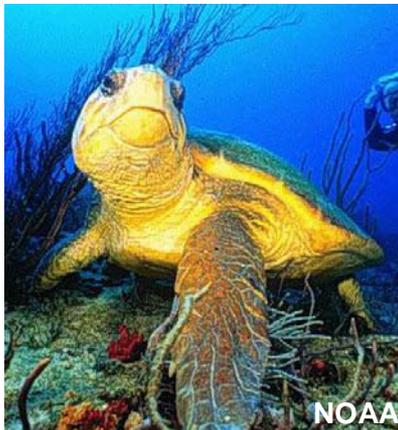
Blue marlin stock assessment session and white marlin data preparatory meeting April 25th to 29th, 2011 (*Madrid, Spain*)

In addition to typical stock assessment activities/responsibilities, SEFSC personnel have been conducting the following research:

- Ongoing retrospective analyses of existing samples (E. Prince, David Die, M. Shivji).
- Exploration of *potential* advantages of advanced stock assessment techniques (e.g. age structured assessments, integrated statistical models).
- Examination and validation of conventional tagging database.
- Exploring CPUE standardization that takes into account the different catchability inside/outside the OMZ.
- Developing models that utilize tagging and environmental data to identify/account for preferred habitat.

ICCAT Subcommittee on Ecosystems

- **May 9th to 13th 2011 (*Miami, Florida, USA*)**
 - Ecosystem Modeling Approaches
 - Integration of Ecosystem Indicators
 - Bycatch Mitigation Measures
 - Conclusions from the 2011 International Circle Hook Symposium (May 4-6, Miami FL)
 - Response to ***Recommendation BYC-10-09***
Sea Turtle Bycatch Mitigation
- Commission has requested an assessment of the impact of incidental catch of sea turtles ***no later than 2013***



Tropical Tuna Species Group Meeting on the Analysis of Ghanaian Statistics

May 30th to June 3rd, 2011 (*Madrid, Spain*)

- Preparatory work will be conducted with existing data reported by Ghana, available for EU fisheries in the area, and the data provided through ISSF (under the new confidentiality agreement).
- Based on the preparatory work results, the working group will consider the best approach for developing detailed Task II data.
- As there will be no data preparatory meeting prior to the Yellowfin Tuna Stock Assessment meeting, the working group will examine existing data issues, work to resolve outstanding data problems, and recommend procedures for the preparation of data for the assessment.

Sharks data preparatory meeting to apply Ecological Risk Analysis

June 20th to June 24th, 2011 (*Madrid, Spain*)

- **Generate the information needed to conduct an Ecological Risk Assessment (ERA) for as many species as possible in 2012.**
- **Information on life history, fishing operations, and on the status, availability and size of the individuals caught (collected from observer programs) is essential to estimate vulnerability and to thus generate a specific ERA for each fleet.**

**Joint Meeting of the ICCAT Working Group on Stock Assessment Methods
and the Bluefin Tuna species group to Analyze Assessment Methods
developed under the GBYP and Electronic Tagging**

June 27th to July 1st, 2011 (*Madrid, Spain*)

Methods

- Conducting Meta-analysis for investigation of key parameters (e.g. steepness, r , K , etc) in order to reduce uncertainty, assess parameter influence on assessment outputs and improve estimates.
- The Group plans to conduct investigation into thresholds, reference points, and the use of HCRs to manage risk of exceeding key reference points.

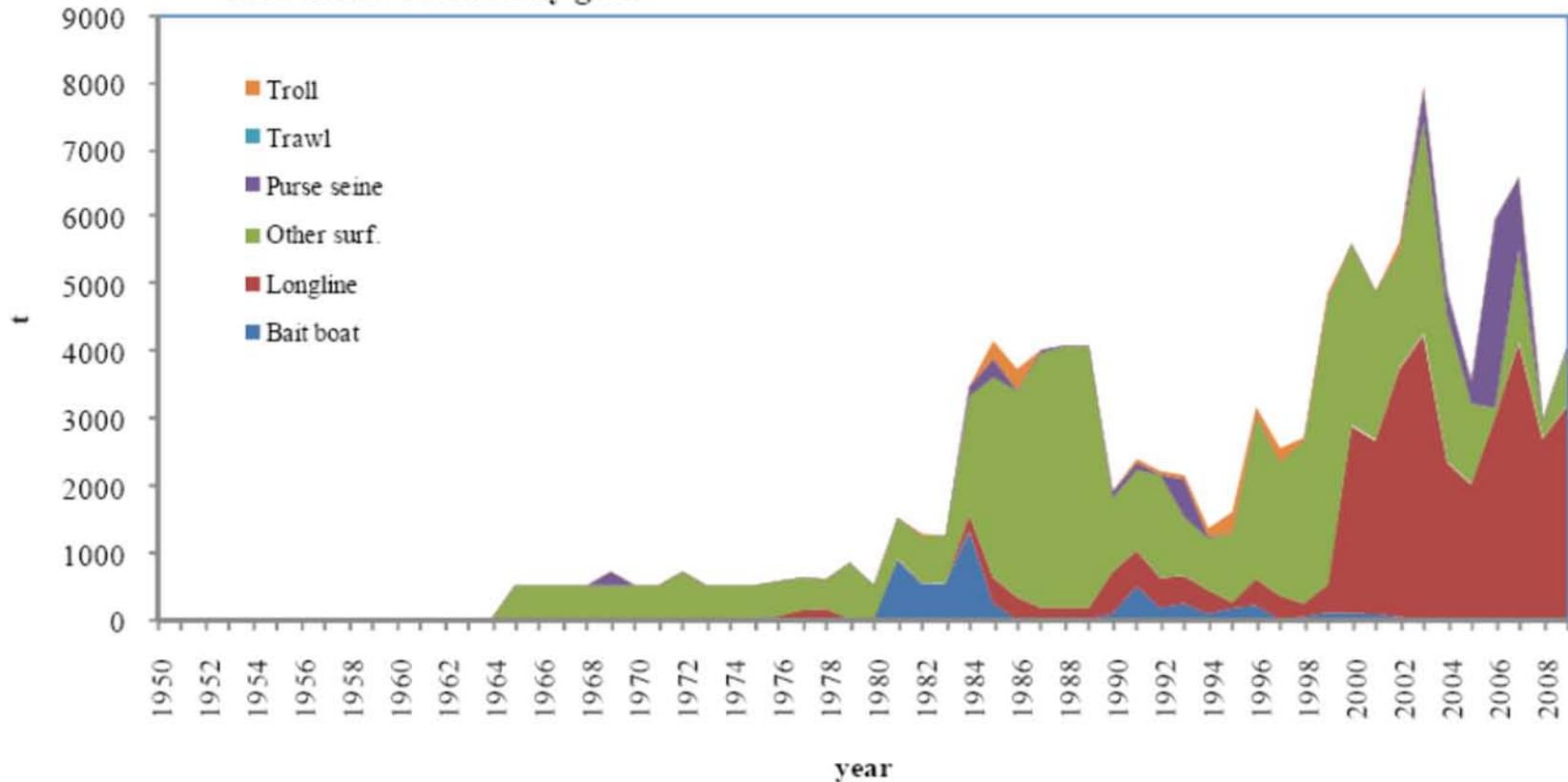
GBYP

- Conduct Modeling workshop to analyze assessment methods

South Atlantic Albacore and Mediterranean Albacore Assessments

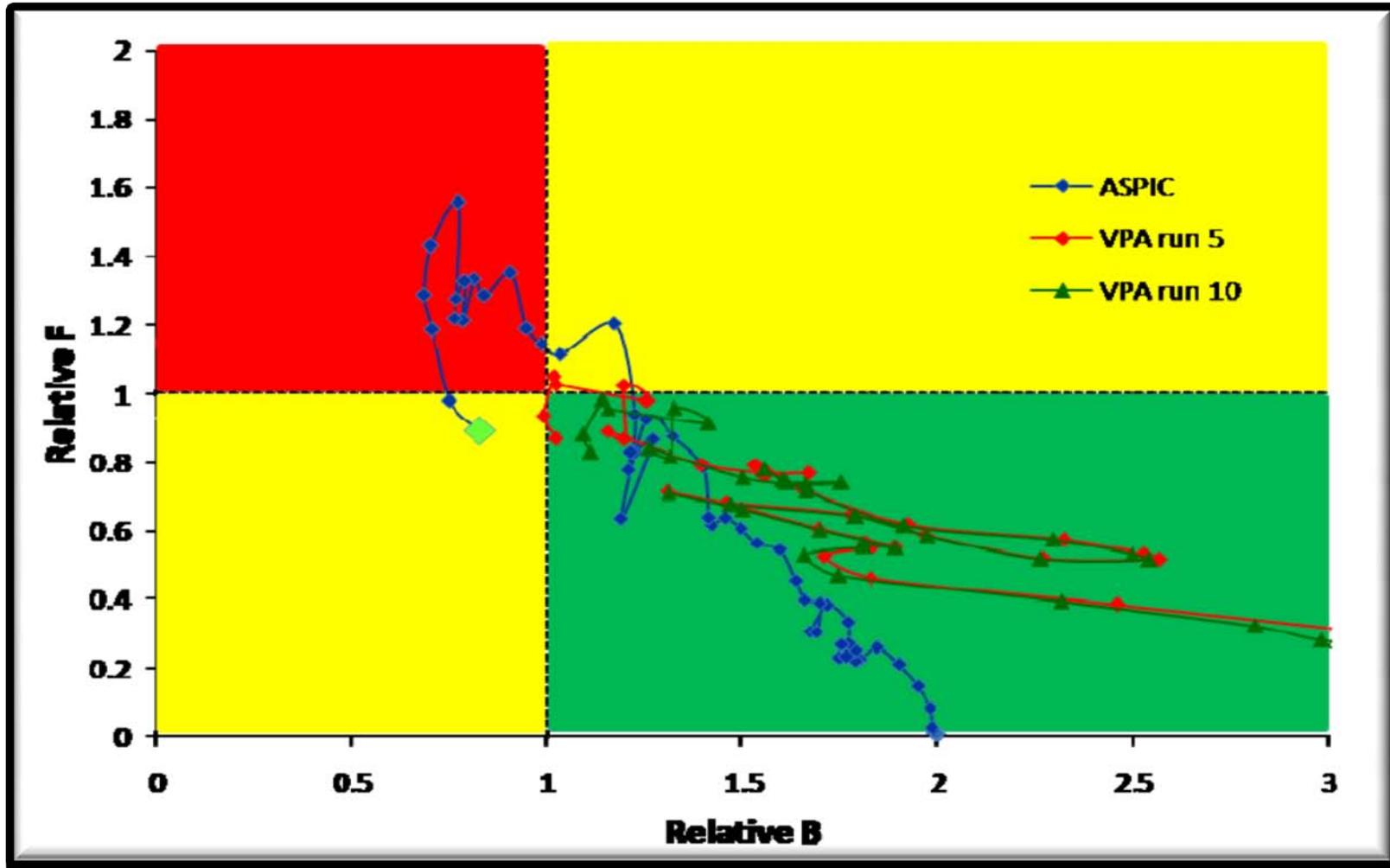
July 25th to 29th, 2011 (*Madrid, Spain*)

ALB-MED : Task I by gear



2011 Yellowfin Tuna Stock Assessment

September 5th to 12th, 2011 (*San Sebastián, Spain*)



2011 SPECIES GROUPS and SCRS PLENARY SESSIONS

September 26th to October 7th, 2011 (*Madrid, Spain*)

- **All species groups/ other working groups**
- **Sub-Committee on Statistics**
- **Draft and Adopt Executive Summaries**

