

Comisión Interamericana del Atún Tropical  
Inter-American Tropical Tuna Commission



SAC-07-07a

Staff activities and research plans

7<sup>a</sup> Reunión del Comité Científico Asesor  
7<sup>th</sup> Meeting of the Scientific Advisory Committee

# CURRENT AND PLANNED ACTIVITIES OF THE IATTC STAFF

## A. Research

1. Stock assessment
2. Fall-CAPAM workshops
3. Tagging studies
4. Life history of tunas
5. Ecosystem studies
6. Bycatch studies

## B. Data

7. Observed trips under the AIDCP
8. Data collection and database program work plan

## C. Capacity Building, Training and Technical Support

9. Training
10. Shark fisheries
11. Longline data collection workshops
12. Technical support and advise to government and outside organizations
13. Precautionary approach, harvest strategies and management strategy evaluation



# Schedule for stock assessments and reviews

Species	Last assessed	2016	2017	2018
<b>IATTC</b>				
Yellowfin	2011 (full); 2014 (update)	Full	Update	Update
Skipjack	2004	Indicators	Indicators	Indicators
Bigeye	2010 (full); 2014 (update)	Full	Update	Full
Striped marlin	2010		Indicators	Indicators
Swordfish (south EPO)	2011		Indicators	
Swordfish (north EPO)	Never as a separate stock		Indicators	Indicators
Sailfish	2013		Indicators	
Black marlin <sup>1</sup>	Never			
Silky shark	Never	Indicators	Indicators	Indicators
Dorado	Never	Full	Indicators	Indicators
Independent review/ Fall workshop		Dolphin assessment review	CAPAM workshop (recruitment)	
<b>COLLABORATIONS</b>				
Bluefin	2012 (full); 2014 (update)	Full		
Albacore	2014		Full	
Blue marlin <sup>1</sup>	2013	Update ISC		
Blue shark	2014		Full	
Swordfish (north Pacific)	2014		Indicators	

<sup>[1]</sup> These assessments will be carried out in collaboration with other organizations, so dates cannot yet be set.

# Stock Assessment

- Preparatory work for the stock assessments in the schedule
- CAPAM<sup>1</sup> stock assessment methodology workshop series
- Post-stratification of purse-seine length composition data
- Integrating tagging data/information into stock assessment models
- Forecasting bigeye catch
- Stock status indicators
- Dolphin assessments
- Pacific-wide bigeye tuna assessment
- Pacific-wide swordfish assessment
- Reference Points for blue, black, and striped marlin, sailfish, and swordfish.
- Management Strategy Evaluation (MSE)
- Evaluation of factors affecting bigeye tuna catch on FADs
- Dorado stock assessment
  - **FALL CAPAM WORKSHOPS**
- A CAPAM workshop on recruitment is contemplated for 2017

<sup>1</sup> Center for the Advancement of Population Assessment Methodology

# Tagging Studies

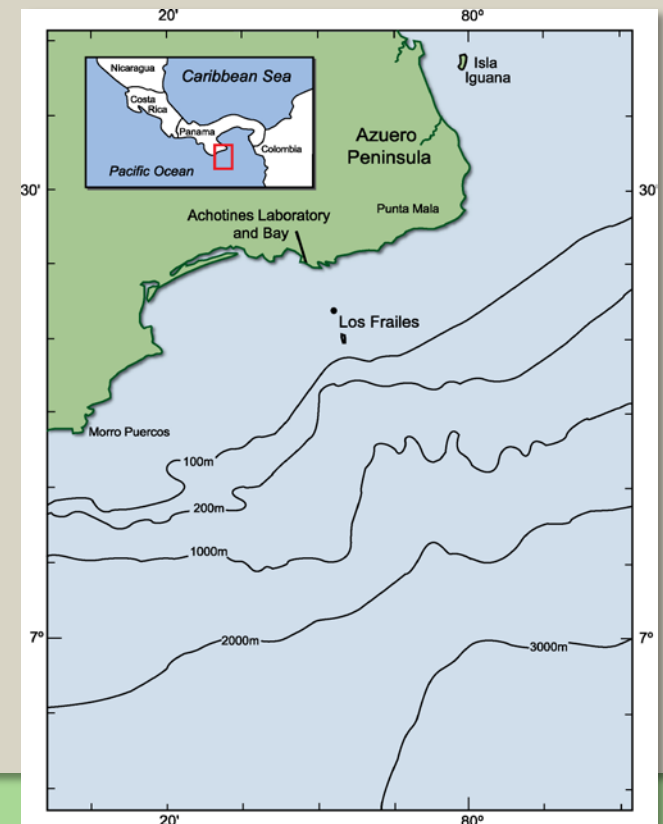
- Continued analyses of conventional and archival tag data for bigeye tuna released in the equatorial central Pacific Ocean (ECPO) during 2008-2015, and collaborations with SPC scientists,
- Archival tag data for yellowfin released at several locations throughout the EPO are continuing to be collected and analyzed,
- Continue to seek funding sources for an IATTC Regional Tuna Tagging Project





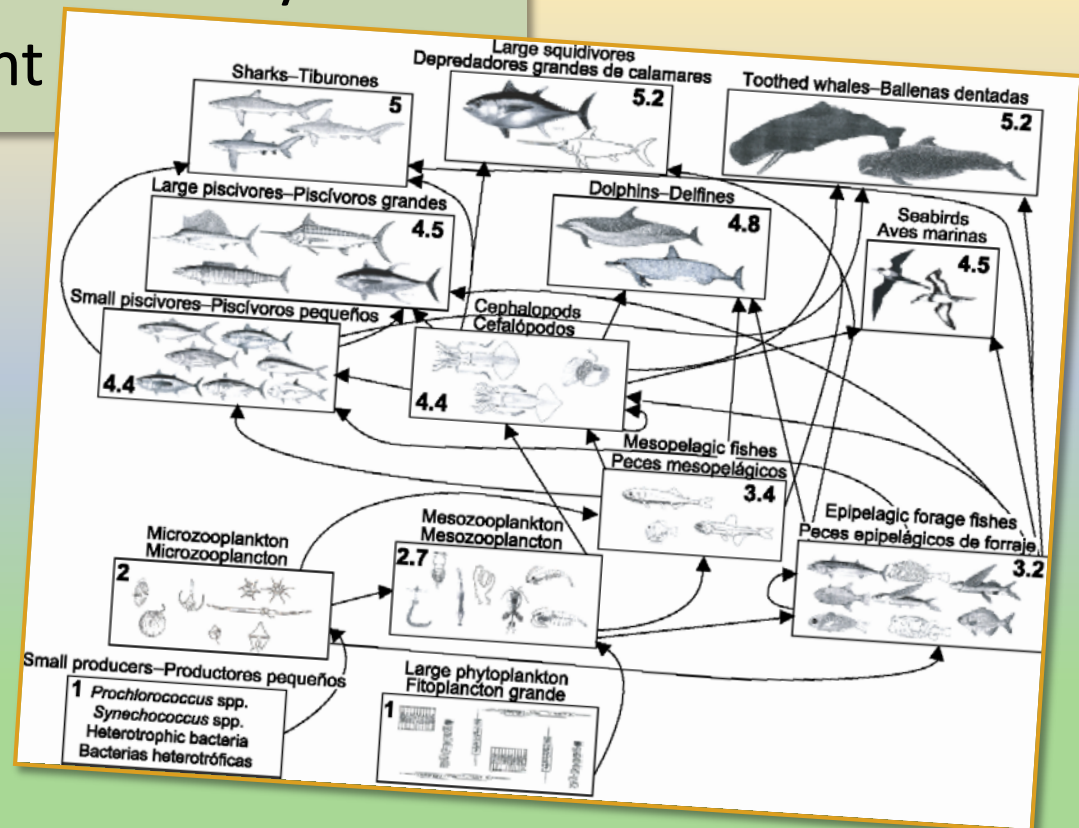
# Life history of tunas

- Early life history (ELH) group will be conducting research on the ecology, physiology, and pre-recruit dynamics of tunas.
- Comparative studies of the early life history of Pacific bluefin tuna and yellowfin tuna. Several joint research activities will be continued during 2016, and a proposal will be developed for a new 5-year project to begin in 2017.
- Ocean acidification impacts on tropical tuna (2011-2015)
- Joint IATTC-University of Miami workshop on yellowfin tuna
- Feasibility study of deploying non-entangling and biodegradable FADs
- Acoustic research study of yellowfin tuna
- Nutrition studies of yellowfin tuna
- Updating life history parameters for yellowfin tuna



# Ecosystem Studies

- Food-web dynamics
- Stable isotopes in ecology
- Diet studies
- Effects of fisheries on the EPO ecosystem
- Ecological Risk Assessment



# Bycatch Studies

- Bycatches on FADs
- Sea turtles
- Sharks and rays
- Dolphins
- Seabirds
- Ecosystem
- Whale Sharks
- Joint ISSF-IATTC research in the equatorial EPO focused on solutions to reduce purse-seine fishing mortality on undesirable sizes of bigeye tuna and sharks





# Data

## – Observed trips under the AIDCP

- The AIDCP requires that 100% of the trips by class-6 vessels (carrying capacity <363 t)
- Fishing in the Convention Area of the IATTC
- Carry an observer onboard and that the IATTC samples at least 50% of the total.
- Observer records are the primary source of data collected from the purse-seine fishery.

## – Data collection and database program work plan

- Plan contains an update of the progress of previously proposed activities, as well as new projects that are planned for the near future.

## – Ongoing activities

- Identification and implementation of improvements to the reporting workflow
- Porting of existing data entry and editing computer programs from VB6 to the Microsoft dot net framework
- Development of the new IATTC website is in progress
- Development of a documentation library is still in progress
- Continuing documentation of all internal data processing
- The IATTC staff completed the data entry and editing of 516 purse seine trips sampled by IATTC observers with departures during 2015.

# Data (cont.)

## – Planned work

- A dedicated Vessel Register database and application redesign
- Development of a data request management application was not initiated due to limited staff resources.
- A front-end user interface for use with the Best Scientific Estimate (BSE) program
- Length Frequency data management database and application improvements



# Capacity Building, Training and Technical Support

## **OBSERVER TRAINING**

- AIDCP observer training
- Cross-endorsed observer training
- AIDCP Seminars for crew, vessel managers and government officials
- Trial sets for alignment of dolphin safety panels in tuna sets

## **SHARK FISHERIES**

- Provide appropriate assistance to developing IATTC members in:
  - Sampling
  - Data reporting
  - Biological parameters
  - Fisheries data studies
  - Workshops on stock assessment of sharks
  - Development of landings database in collaboration with OSPESCA



## **LOGLINE DATA COLLECTION WORKSHOP**

## **TECHNICAL SUPPORT AND ADVICE TO GOVERNMENTAL AND OUTSIDE ORGANIZATIONS**

## **PRECAUTIONARY APPROACH, HARVEST STRATEGIES AND MANAGEMENT STRATEGY EVALUATION**

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Questions