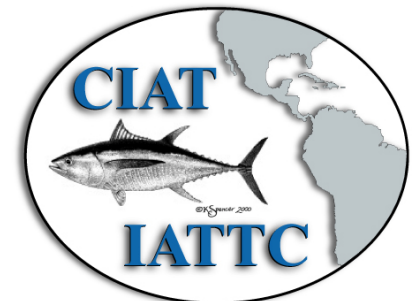
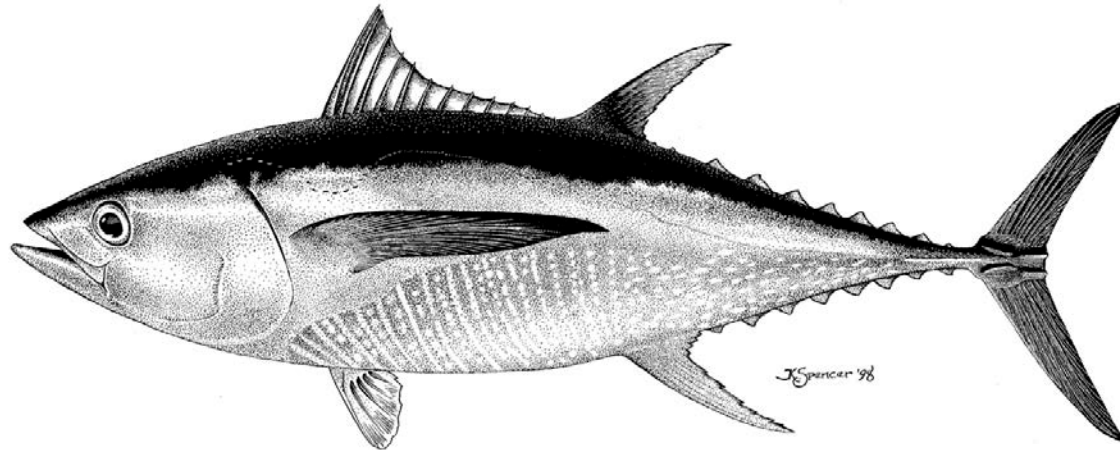


EXTERNAL REVIEW OF IATTC YELLOWFIN TUNA ASSESSMENT

October 15-19, 2012



Panel

- Steven Martell, UBC/IPHC (Chair)
- Paul de Bruyn, ICCAT
- Billy Ernst, Universidad de Concepción
- Nick Davies, SPC

Format

- IATTC staff present
 - Assessment
 - Issues
 - Research
- Panel requests Model runs
- Staff presents results
- Iterate
- Panel writes report and recommendations

Stock-structure

- Break the **assessment into Northern and Southern regions** (using 5°N as a dividing line).
- **Develop CPUE standardization protocol for the Northern dolphin fishery**

Fisheries Structure

- Use the recommendations based on Cleridy Lennert-Cody's (Document YFT-01-02) analysis of the fishery data to partition the datasets by area.

Growth

- *Short-term:*
 - Use results from the integrated growth to **parameterize the mean length at age and the standard deviation in length-at-age**
- Long-term:
 - **Incorporate the new integrated growth model into Stock Synthesis;**

Stock-recruitment

- Continue to provide steepness options ($h=1$, $h=0.75$) and provide likelihood profiles over steepness.

CPUE standardization and data weighting:

- Obtain **operational parameters** for the Japanese longline fleet and use these for standardization of their CPUE series.
- Develop a **CPUE standardization protocol for the Northern dolphin fishery.**

Selectivity curves:

- Explore the use of age-specific coefficients for the floating-object fisheries.
- Explore the use of **time-varying selectivity** and **aggregating** the data from the floating-object fisheries into a single fishery

Natural Mortality

- **Estimate male and female natural mortality** rates based on sex-specific age-composition data (outside the model).
- Examine sex ratio data from other fleets
- If growth is estimated internally, then a re-examination of length-based natural mortality and maturity is necessary within the model

Uncertainty:

- Explore structural uncertainty on a **grid of all the equally plausible** options for the assumptions made
- Present information to managers in a decision table framework that attempts to **integrate over the structural uncertainty**

Shorten the time series

- Starting the model in the year **2000 should be considered**