Stock assessment improvements for the 2015 assessments

Independent reviews

- RECOMMENDATIONS OF THE REVIEW PANEL ON THE IATTC ASSESSMENT OF YELLOWFIN TUNA
- Special Report 20
 - http://iattc.org/PDFFiles2/SpecialReports/IATTC-Special-Report-20.pdf
- EXTERNAL REVIEW OF IATTC BIGEYE TUNA ASSESSMENT
 - Special Report 19
 - http://iattc.org/PDFFiles2/SpecialReports/IATTC-Special-Report-19.pdf

Yellowfin main recommendations

- Conduct two assessments separated at 5°N
- Standardize the dolphin associated CPUE
- Separate fisheries based on the analysis of Lennert-Cody
- Use growth estimates from the integrated aglength and growth increment data
- Model floating object fishery using time varying selectivity

Bigeye main recommendations

- Identify the issues with the Japanese length composition data
- Analyze gear factors for longline CPUE
- Reevaluate the longline fishery definitions
- Consider spatial population dynamics and the inclusion of tag data
- Re-evaluate the length composition sample sizes
- Start the model in 1955
- Consider a more flexible growth curve
- Consider allowing selectivity to change over time
- Consider selectivity as a function age rather than length
- Use sex specific composition data where available
- Re-evaluate fishery definitions

Main areas of focus

- Stock and fishery structure
- Growth
- Selectivity
- Data weighting
- Longline composition data

Work plan

- 2014: develop new models using 2013 data with full sensitivity analysis
- 2015: apply models to updated data with minimal sensitivity runs
- SAC 2015: present sensitivity analysis with 2013 data and updates with 2014 data