



**The 13th Session of the Scientific Committee
Cook Islands, 7-19 August 2017**

**Management Advice for
Bigeye, Yellowfin and Skipjack Tuna**

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SC Chair**

WCPO Bigeye Tuna

General notes:

Though 2017 assessment has a significant improvement, the amount of uncertainty is higher than 2014 assessment due to the inclusion of new information (growth and regional structures).

2017 Assessment outcomes

Noting the level of uncertainties,

- a) Spawning biomass is likely above the biomass LRP ($20\%SB_{F=0}$).
 - the stock is not in an overfished condition (84% probability)

- b) Recent fishing mortality ($F_{2011-2014}$) is likely below F_{MSY} .
 - the stock is not experiencing overfishing (77% probability)

WCPO Bigeye Tuna

Recommendations

1. Fishery impact was higher in the tropical region, particularly on juvenile bigeye tuna. Therefore, SC13 recommends that WCPFC14 could continue to consider measures to reduce F from fisheries that take juveniles, with the goal to increase bigeye fishery yields and reduce any further impacts on the spawning potential for this stock in the tropical regions
2. As a precautionary approach, SC13 recommends that the F on bigeye tuna stock should not be increased from current level to maintain current or increased spawning biomass until the Commission establishes a target reference point
3. For further study, SC13 recommended to concentrate on the two axes of uncertainty, e.g. growth and regional structure

Bigeye Hotspots

1. In preliminary research, two bigeye hotspots were identified:
 - a) a high bigeye catch hotspot within the EEZs of Nauru and the Western part of Kiribati's Gilbert Islands; and
 - b) a high bigeye CPUE hotspot in the tropical North-Eastern area.
2. While several challenges were identified in considering spatial management options for bigeye tuna (SC13-MI-WP-07), the SC recommended that this meeting note the preliminary results contained in the report.

WCPO Yellowfin Tuna

Assessment outcomes

1. Noting the level of uncertainties,
 - a) Spawning biomass is likely above the biomass LRP ($20\%SB_{F=0}$)
 - the stock is not in an overfished condition (92% probability)
 - b) Recent F ($F_{2011-2014}$) is likely below F_{MSY}
 - the stock is not experiencing overfishing (96% probability)
2. Fishing mortality for both juvenile and adult show a steady increase since the 1970s:
 - Adult F has increased continuously; but
 - Juvenile F has stabilized since the late 1990s at a level similar to adult F

WCPO Yellowfin Tuna

Recommendations

1. SC13 recommends that WCPFC could consider measures to reduce F from fisheries that take juveniles, with the goal to increase to maximum fishery yields and reduce any further impacts on the spawning potential for this stock in the tropical regions
2. SC13 recommends that the current spawning biomass levels be maintained until the Commission establishes a target reference point
3. For further research, SC13 encouraged reviewing yellowfin growth through otolith study for future assessment

WCPO Skipjack Tuna

General notes

1. The stock is currently moderately exploited and fishing mortality level is sustainable.
2. Additional purse-seine effort will yield only modest gains in long-term catches, and may result in a corresponding increase in fishing mortality for bigeye and yellowfin tunas.
3. Skipjack spawning biomass is now around the adopted TRP.

Recommendations

1. SC13 reiterated the SC12 recommendation that the Commission take action to keep the spawning biomass near the TRP, and also advocates for the adoption of harvest control rules based on the information provided.

Thank you...

