

WCPO skipjack management procedure

WCPFC20
Agenda Item 10.2.a.i
Implement Management Procedure

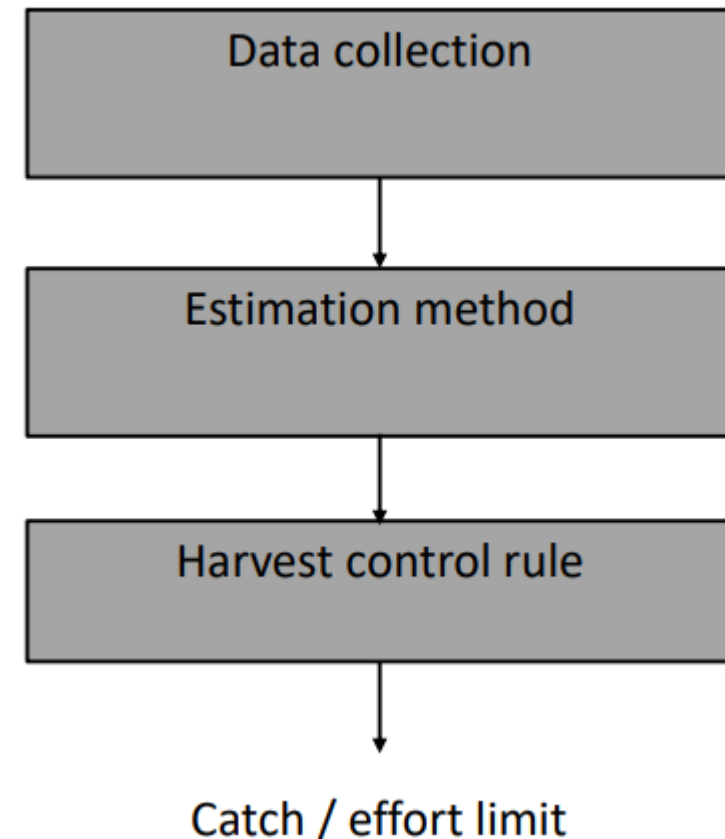
December 2023

Rarotonga, Cook Island

WCPO Skipjack Management Procedure

- WCPFC19 adopted CMM 2022-01 on an Interim Management Procedure for WCPO skipjack tuna
- MP was run this year (2023) with resulting management measures to be implemented in 2024-26
- Summarize here the running of the MP, resulting management advice and identify potential issues
- Then examine the monitoring aspect

A pre-agreed and tested procedure that determines the management action for a fishery given the status of the resource.



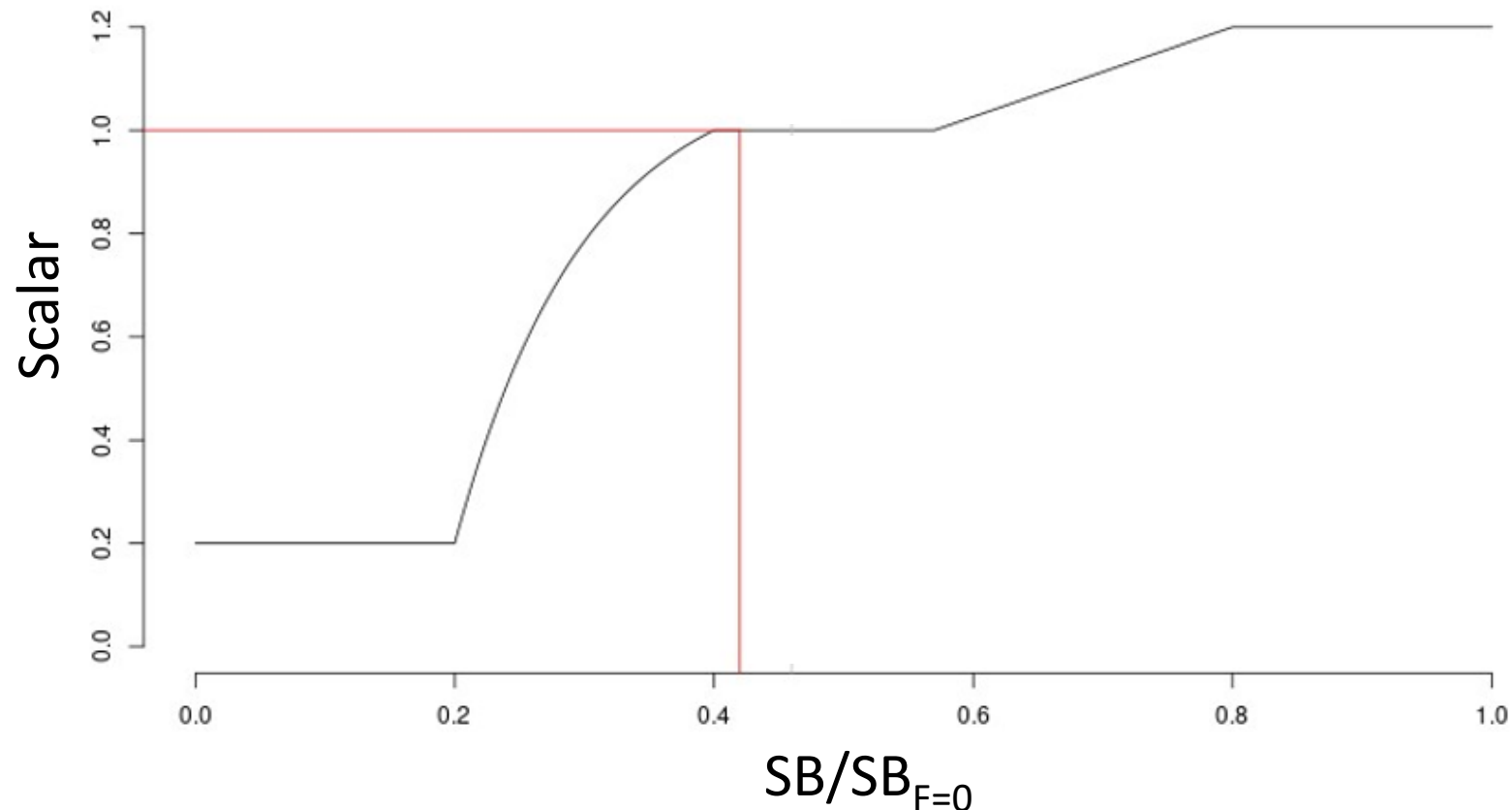
Estimation Model

- Overall, the data collection programme was consistent with expectations and all data to run EM are available
 - Aggregated catch and effort data to 2022
 - Size composition data to 2022
 - Updated CPUE standardizations
 - Tag release and recovery info up to 2022
- Data revisions relatively minor (ID/PH PS catch, PL CPUE)
- However, an ongoing/increasing issue
 - Spatial/temporal coverage of Pole-and-line fleet (esp. in tropics)
 - May necessitate new indices and/or development/testing of new EM

Applying the agreed HCR

Estimate of stock status ($SB_{\text{latest}}/SB_{F=0}$) determines fishing levels

Depletion estimate of 0.42



For 2024-2016 period

- PS effort set at 2012 level
- PL effort set at 2001-04 level
- Reg. 5 domestic fisheries set at 2016-18 catches

(all set at baseline levels as depletion is on flat part of HCR)

Mismatch between the MP and the limits of the TT-CMM

Recommendations

- The Commission is invited to note the successful running of the skipjack MP as outlined in SC19-MI-WP-01, which indicates that maximum effort in the purse seine and pole-and-line fisheries and maximum catches in all other fisheries should be set to their respective baseline levels (specified in CMM 2022-01) for the period 2024-2026, when implementing CMM 2022-01.
- The Commission is also invited to note that a re-evaluation of the skipjack estimation method needs to be undertaken prior to the next implementation of the MP.

Monitoring the WCPO skipjack management procedure

WCPFC20
Agenda Item 10.2.a.ii
Monitoring Strategy

December 2023

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Monitoring Strategy for skipjack MP

- The monitoring strategy routinely evaluates all aspects of the Management Procedure to see that it is performing as expected
 - Consider aspects of overall harvest strategy
 - Consider scenarios to add to Operating Model grid
 - Running of the Estimation Model
 - Performance of the Management Procedure
 - Also consider changes in dynamics of fishery (environ., econ, social) that might impact objectives and testing of alternative MPs
- Outline key considerations of the monitoring strategy and consider time frames for various elements
- Draft Monitoring Strategy submitted to SC19 and TCC19
 - SC19 recommendations

Outline of SKJ MP monitoring report

Table 2: Monitoring report summary for the WCPO SKJ management procedure.

item	MP Element	Status & Comments	Priority
1	Review MP performance		
1.1	Comparison with stock assessment	Good - terminal estimates within prediction bounds - historical uncertainty	low
1.2	Data availability & quality	Pole and line CPUE in tropical regions	high
1.3	Other sources of data	No new information	
1.4	EM performance	Acceptable performance - longer term concerns	
2	Review of the MP		
2.1	Management objectives	No new information	
2.2	Scope of the MP	No new information	
2.2	Exceptional circumstances	None identified	
3	Review MSE Framework		
3.1	Operating model grid	Climate change scenarios	medium
3.2	Calculation of PIs	No new information	
3.3	Modelling assumptions	Pole and line CPUE for tropical regions	high
3.4	Data availability & quality	Generally good	

- Example monitoring report using 2023 skipjack as example
- Table up front, then followed by additional details
- Should allow for additional information to be added as different groups and Commission bodies as elements of the MP are reviewed
- **Idea is to simplify and streamline the monitoring process as much as possible to make it useful and timely**

Operationalising the monitoring strategy

- Full annual review of every element would be substantial work
- Proposal to have a summary monitoring report that progressively passes to relevant working groups
- Some work programmes may need to be modified to ensure consideration of necessary elements
- Foresee most information feeding into monitoring report would come from SSP and submitted to SC/TCC/IWGs as needed, but also voluntary info from CCMs can be added on ad-hoc basis

Operationalising the monitoring strategy

- TCC considerations
 - Compliance issues – consideration of limits - catch/effort reporting; observer coverage; ...
 - WP14 table 6 outlines data collection and monitoring tools currently in place to support CMMs.
- WP14 attachment B – Additional detail to support discussions
 - Identifies relevant Commission bodies and the information they may be able to provide.

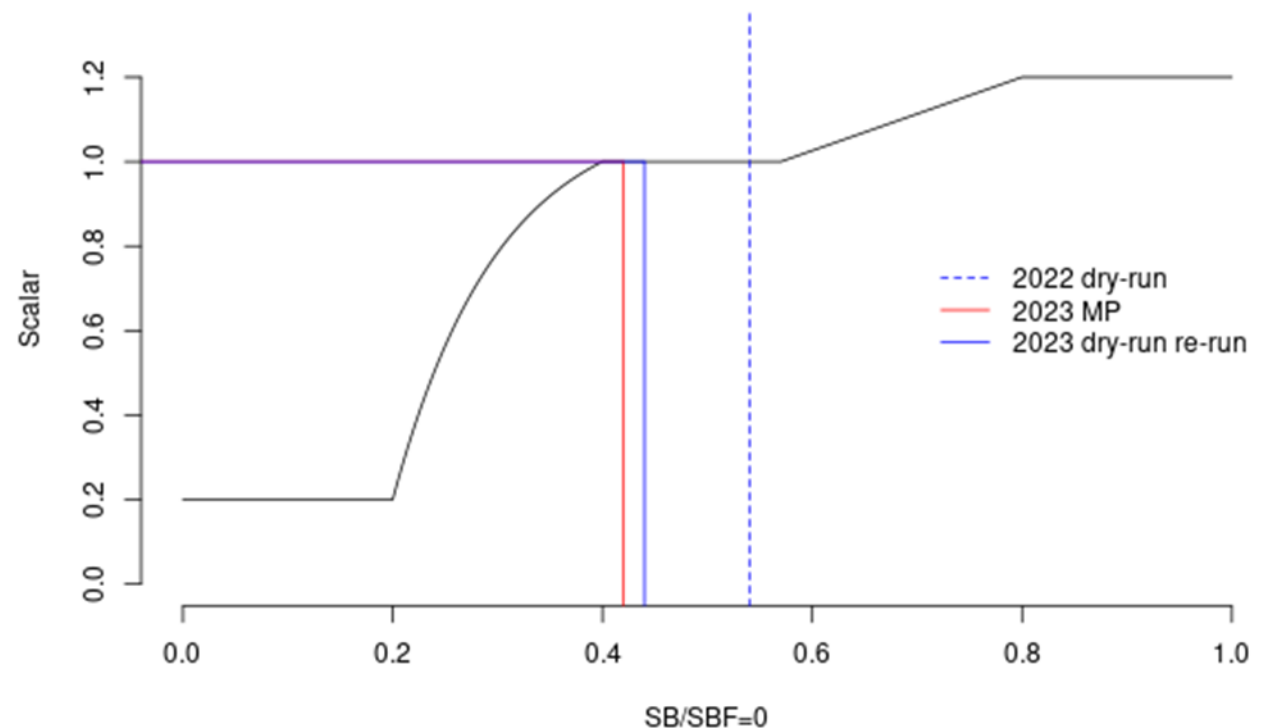
Recommendations

The Commission is invited to consider the adoption of the proposed monitoring strategy for skipjack tuna as outlined in Attachment A.

If a monitoring strategy is not adopted by WCPFC20 and noting that the SSP will need to evaluate the 2024 implementation of the skipjack MP in 2025 together with the skipjack stock assessment, the Commission may wish to consider tasking the SC and TCC Chairs to jointly lead intersessional work in 2024 to facilitate the development of a monitoring strategy for adoption at WCPFC21, using the information in Attachment B as a reference.

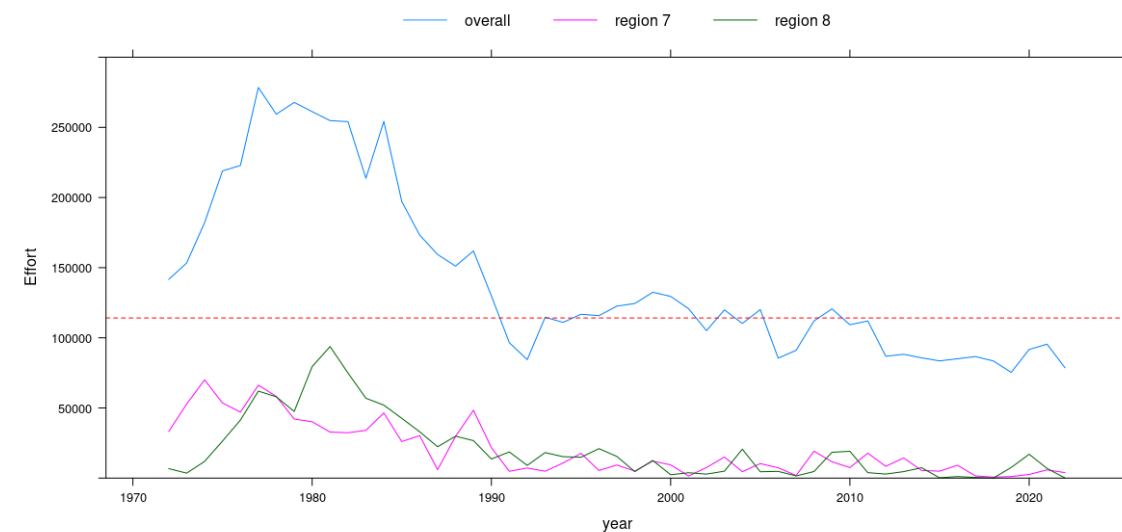
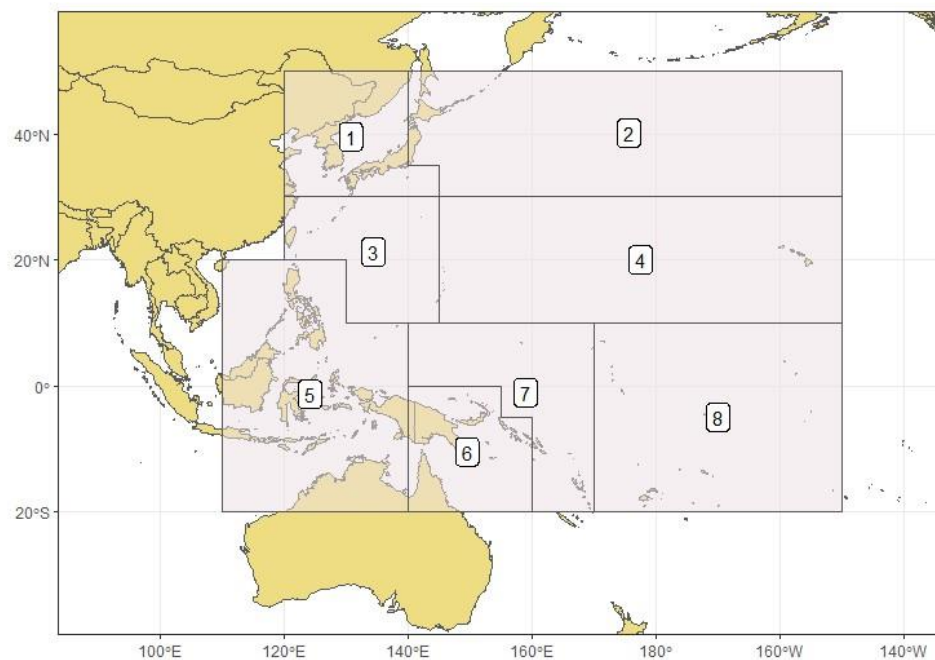
EM results

- Depletion estimate of 0.42
- This value differs from estimate from 2022 dry-run (0.54)
 - Difference appears to be mostly due to updates in standardized PL indices, both the historical and terminal values.
 - Terminal values were unavailable for dry-run and the historical values that were used differ from recent values used this year



MP performance

Pole and line effort

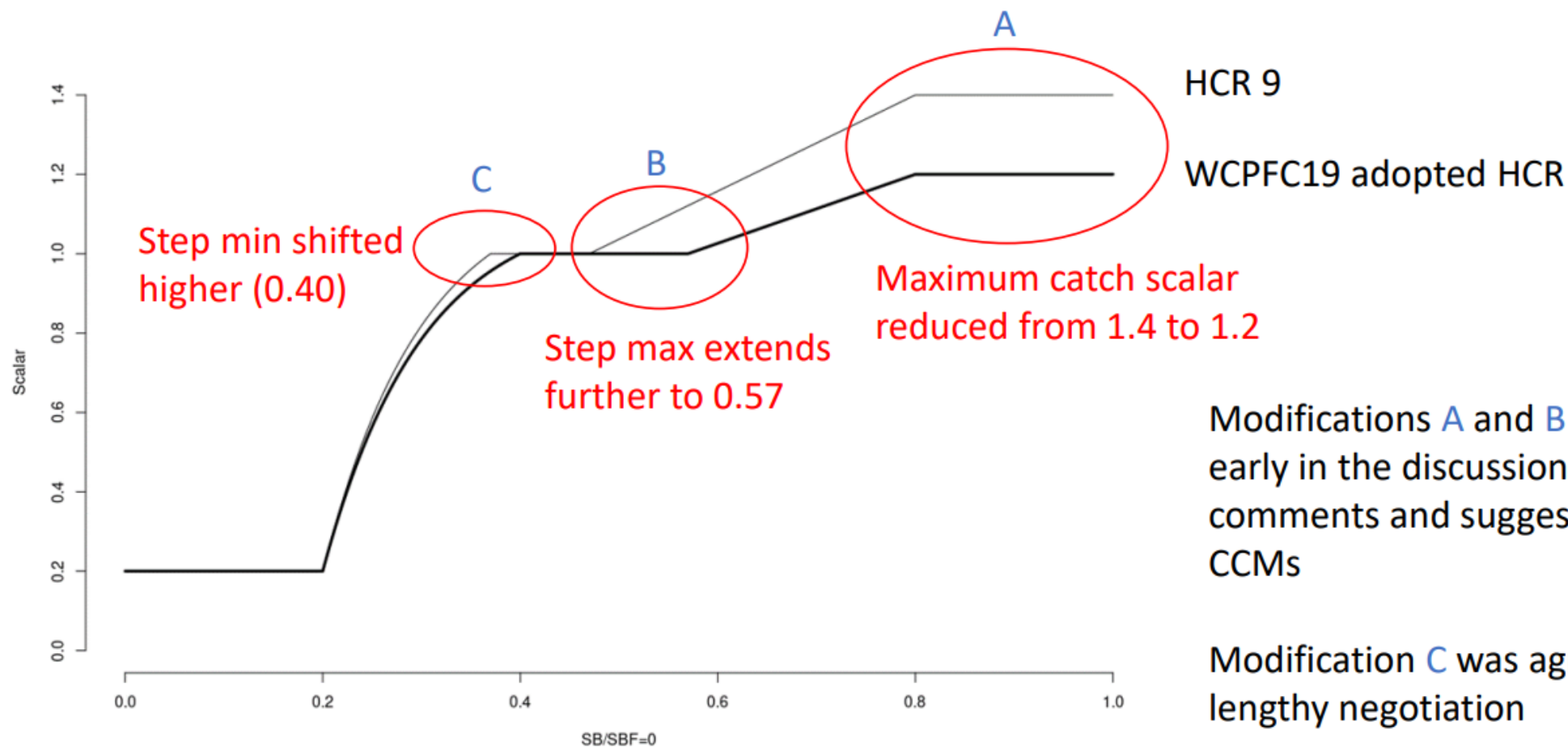


SKJ MP baselines

- Purse seine 2012
- Pole and line 2001-04
- ID-PH domestic 2016-18

- These baselines are not consistent with the TT-CMM
 - Revise the TT-CMM purse seine effort levels to be in line with 2012
 - Revise the SKJ MP to be in line with purse seine effort levels in Tables 1 and 2
 - Add text to TT-CMM to describe implementation in accordance with the MP

The adopted HCR



HCR 9

WCPFC19 adopted HCR

Step min shifted higher (0.40)

Step max extends further to 0.57

Maximum catch scalar reduced from 1.4 to 1.2

Modifications A and B were made early in the discussions based on comments and suggestions of several CCMs

Modification C was agreed after lengthy negotiation