

Impacts of changes to the FAD closure period on the expected performance of the WCPO skipjack tuna MP

WCPFC-SC21-2025/MI-WP-02

Agenda item 5.1.1.1 skipjack tuna management procedure

Nuku'alofa, Tonga 13-21 August 2025

Background

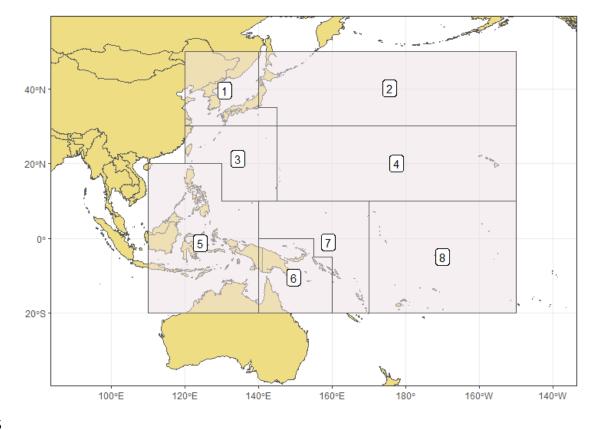
WCPO Skipjack MP adopted in 2022 (CMM 2022-01)

Assumed FAD closure

3 months in EEZs and high seas + 2 months high seas

2024 FAD closure reduced to

• 1.5 months in EEZs and high seas + 1 months high seas



SC20 requested an evaluation of whether changes in the FAD closure duration would impact performance of the MP (SC20 summary report, para 452)

Previous analyses



Previous analyses conducted in 2014 indicated that catches of skipjack (and yellowfin) were insensitive to the relative distribution of FAD and free-school fishing (MOW3-WP/05)

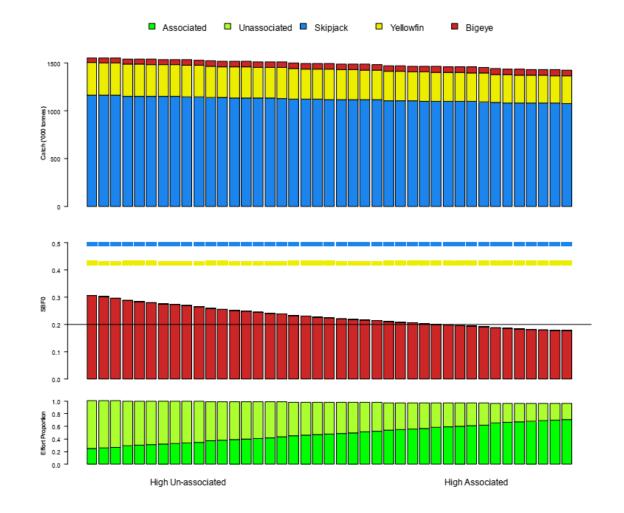
Using a similar approach, analyses were conducted to test the expected performance of the skipjack MP under varying FAD closure conditions.



WCPFC THIRD MANAGEMENT OBJECTIVES WORKSHOP

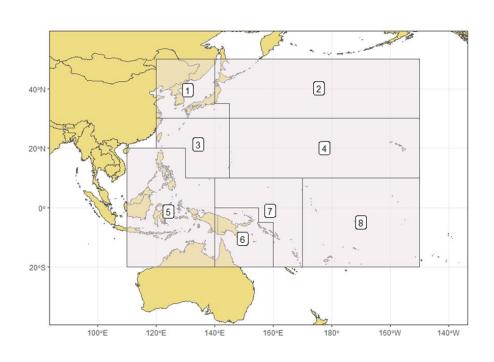
Faleata Sports Complex, Apia, Samoa 28th November 2014

Multi-species implications of reference points: what might a target reference point of 50%SBF=0 for skipjack tuna mean for bigeve and yellowfin tuna



Skipjack MP analyses – fishery definitions





Gear	number	category	Code	Flag	Region
Pole and line	1		P-ALL-1	ALL	1
Purse seine	2	combined	PS-ALL-1	ALL	1
Longline	3		LL-ALL-1	ALL	1
Pole and line	4		P-ALL-2	ALL	2
Purse seine	5	combined	PS-ALL-2	ALL	2
Longline	6		LL-ALL-2	ALL	2
Pole and line	7		P-ALL-3	ALL	3
Purse seine	8	combined	PS-ALL-3	ALL	3
Longline	9		LL-ALL-3	ALL	3
Domestic	10		Z-PH-5	PH	5
Domestic	11		Z-ID-5	ID	5
Purse seine	12	combined	S-ID-PH-5	ID-PH	5
Pole and line	13		P-ALL-5	ALL	5
Purse seine	14	associated	PS-ASS-5	DW	5
Purse seine	15	unassociated	PS-UNASS-5	DW	5
Domestic	16		Z-VN-5	VN	5
Longline	17		LL-ALL-5	ALL	5
Pole and line	18		P-ALL-6	ALL	6
Purse seine	19	associated	PS-ASS-6	ALL	6
Purse seine	20	unassociated	PS-UNASS-6	ALL	6
Longline	21		LL-ALL-6	ALL	6
Pole and line	22		P-ALL-4	ALL	4
Longline	23		LL-ALL-4	ALL	4
Pole and line	24		P-ALL-7	ALL	7
Purse seine	25	associated	PS-ASS-7	ALL	7
Purse seine	26	unassociated	PS-UNASS-7	ALL	7
Longline	27		LL-ALL-7	ALL	7
Pole and line	28		P-ALL-8	ALL	8
Purse seine	29	associated	PS-ASS-8	ALL	8
Purse seine	30	unassociated	PS-UNASS-8	ALL	8
Longline	31		LL-ALL-8	ALL	8

Skipjack MP analyses – fishery scalars



	ASS			UNA		
	scenario 0	scenario 1	scenario 2	scenario 0	scenario 1	scenario 2
EEZ + HS	3	1.5	0	3	1.5	0
HS	2	1	0	2	1	0
PS-5	1.0	1.2	1.38	1.0	0.72	0.47
PS-6	1.0	1.2	1.38	1.0	0.89	0.79
PS-7	1.0	1.2	1.38	1.0	0.87	0.75
PS-8	1.0	1.2	1.38	1.0	0.90	0.81
Combined	1.0	1.2	1.38	1.0	0.89	0.78

Three alternative FAD closure scenarios:

- 1. 3 months EEZs and high seas + additional 2 months high seas
- 2. I.5 months EEZs and high seas + additional I months high seas
- 3. No FAD closure

Scalars determined using the same approach as for recent evaluation of the TT-CMM (combined scalar)

Increases in FAD fishing resulting from reductions in the FAD closure period are offset by reductions in free-school fishing such that overall purse seine effort remains the same (number of sets)

Impact of the FAD closure reduction



Very small impact of FAD closure on expected performance of the management procedure.

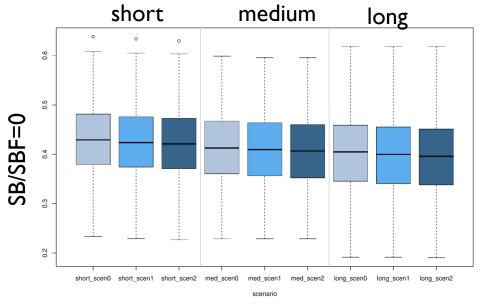
Long-term SB/SBF=0

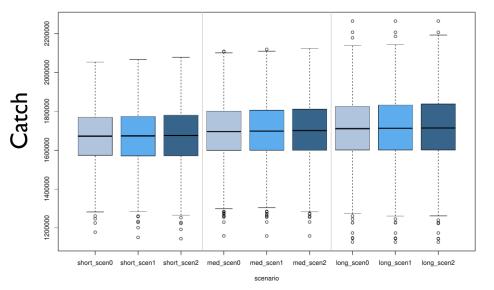
~ 1.5% reduction under scenario I

< 2.5% reduction under scenario 2

Long-term catches

No discernible change





Impact of the FAD closure reduction



Very little change in MP output

Where changes from base scenario occur they are typically within ± 5% range

Results are consistent with previous analyses to investigate the impact of the FAD closure period on the skipjack fishery.

We invite WCPFC-SC21 to:

- note that changes to the FAD closure period are expected to have very little impact on the performance of the skipjack MP.
- to take the results of this analysis into account when considering the skipjack MP monitoring strategy

