

Status of Stocks and Fisheries

Oceanic Fisheries Programme, SPC

Agenda Item 8

WCPFC20, Rarotonga, Cook Islands, 4 – 8 December 2023

Outline

- Recent information on the fisheries, focusing on purse seine and longline
- Status of stocks of 'key' tuna species assessed by SPC – skipjack, yellowfin, bigeye and South Pacific albacore
- Summary slides for billfish and key sharks (no new assessments completed in 2023)

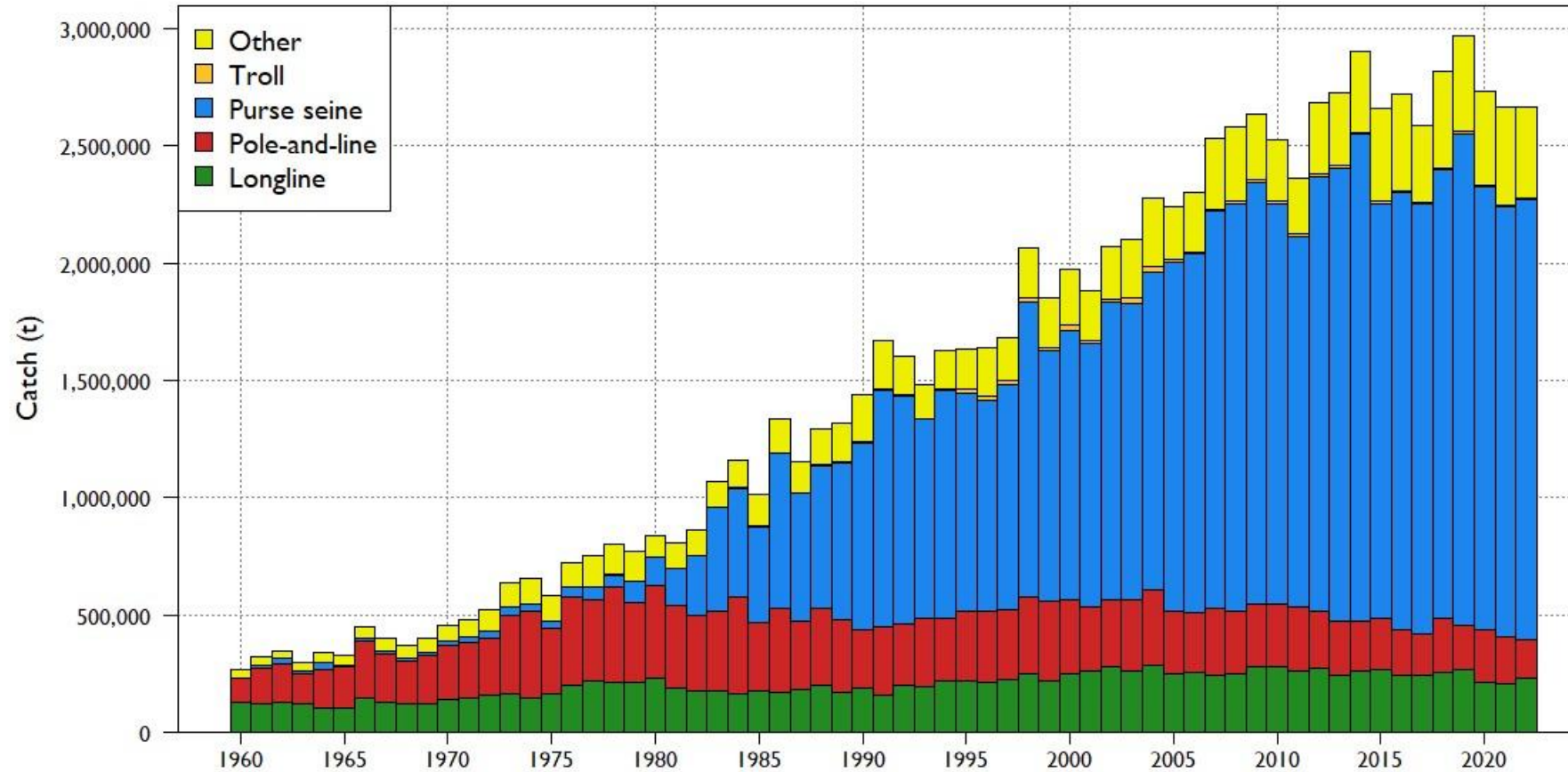
Sources

The Western and Central Pacific Tuna Fishery: 2022 Overview and Status of Stocks. Tuna Fishery Assessment Report no. 23. WCPFC20-2023-IP02.

<https://meetings.wcpfc.int/node/21445>

WCPFC Tuna Fishery Yearbook 2022. <https://www.wcpfc.int/statistical-bulletins>

WCPFC-CA Tuna Catch by Gear



2022 total catch – 2.67 million mt, no change from 2021

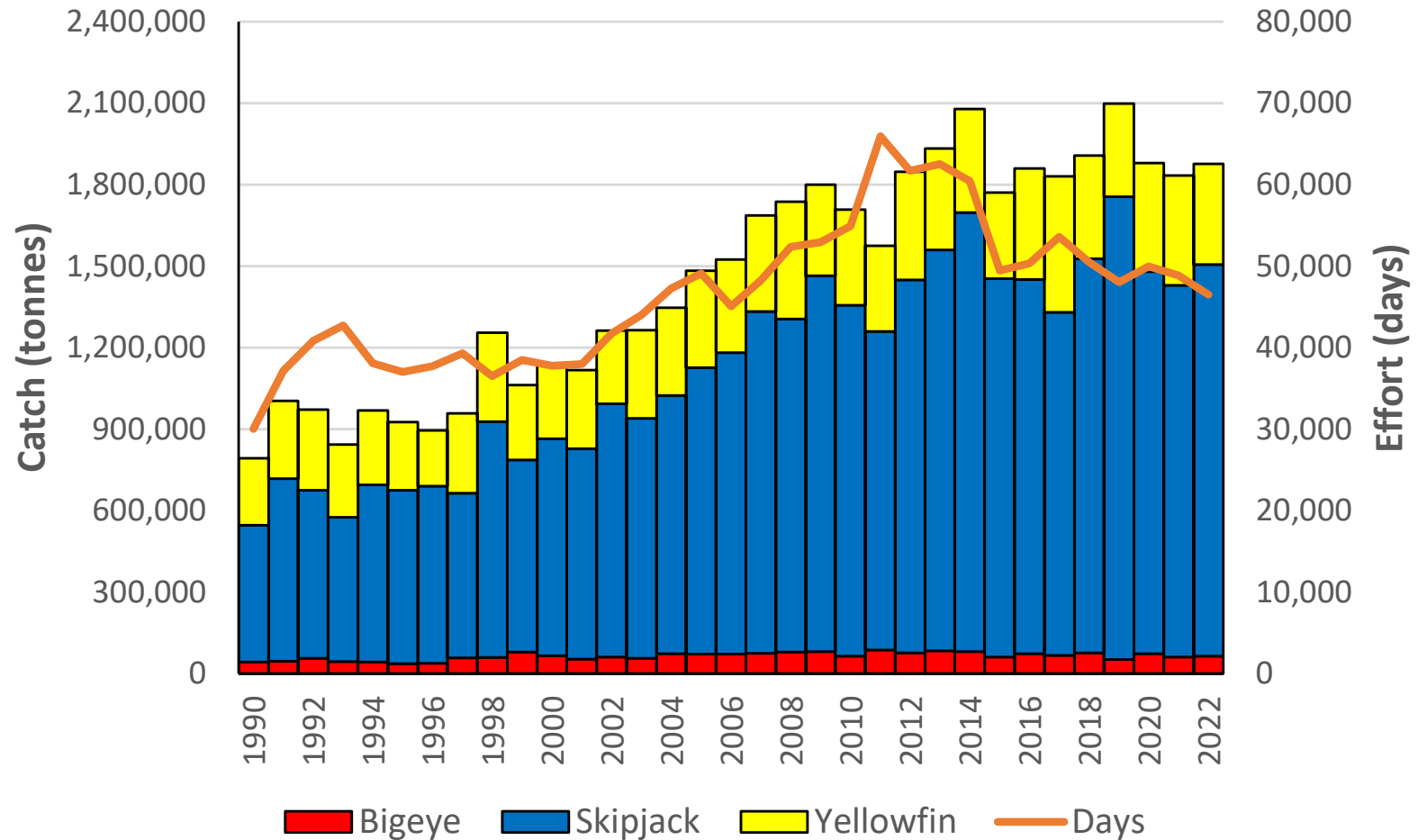
2022 purse seine catch – 1.88 million mt, about average for past decade

2022 longline catch – 233,000 mt, slightly less than average for past decade

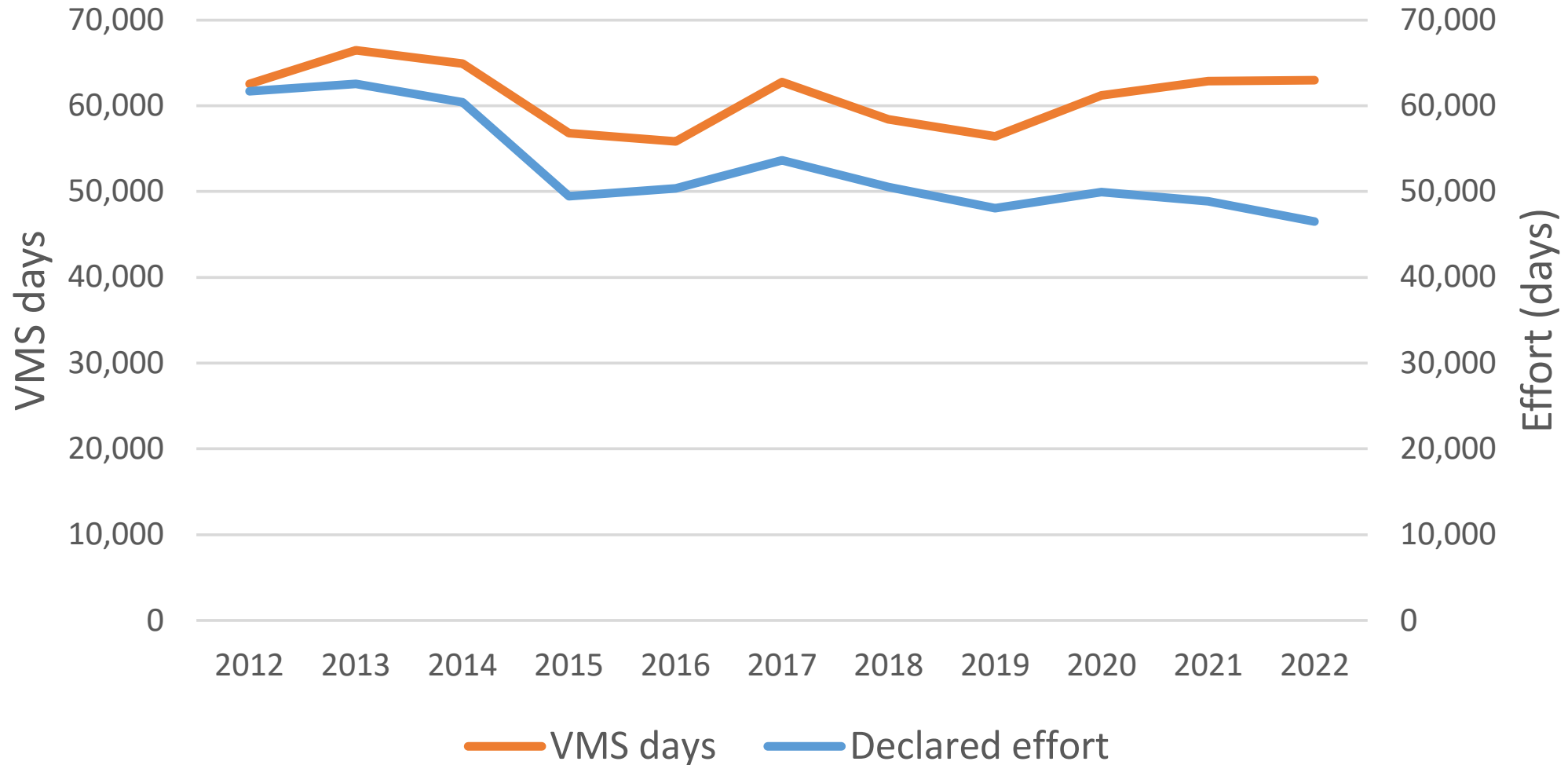
WCPFC-CA Purse Seine Fishery

Annual catch (mt) by species and effort

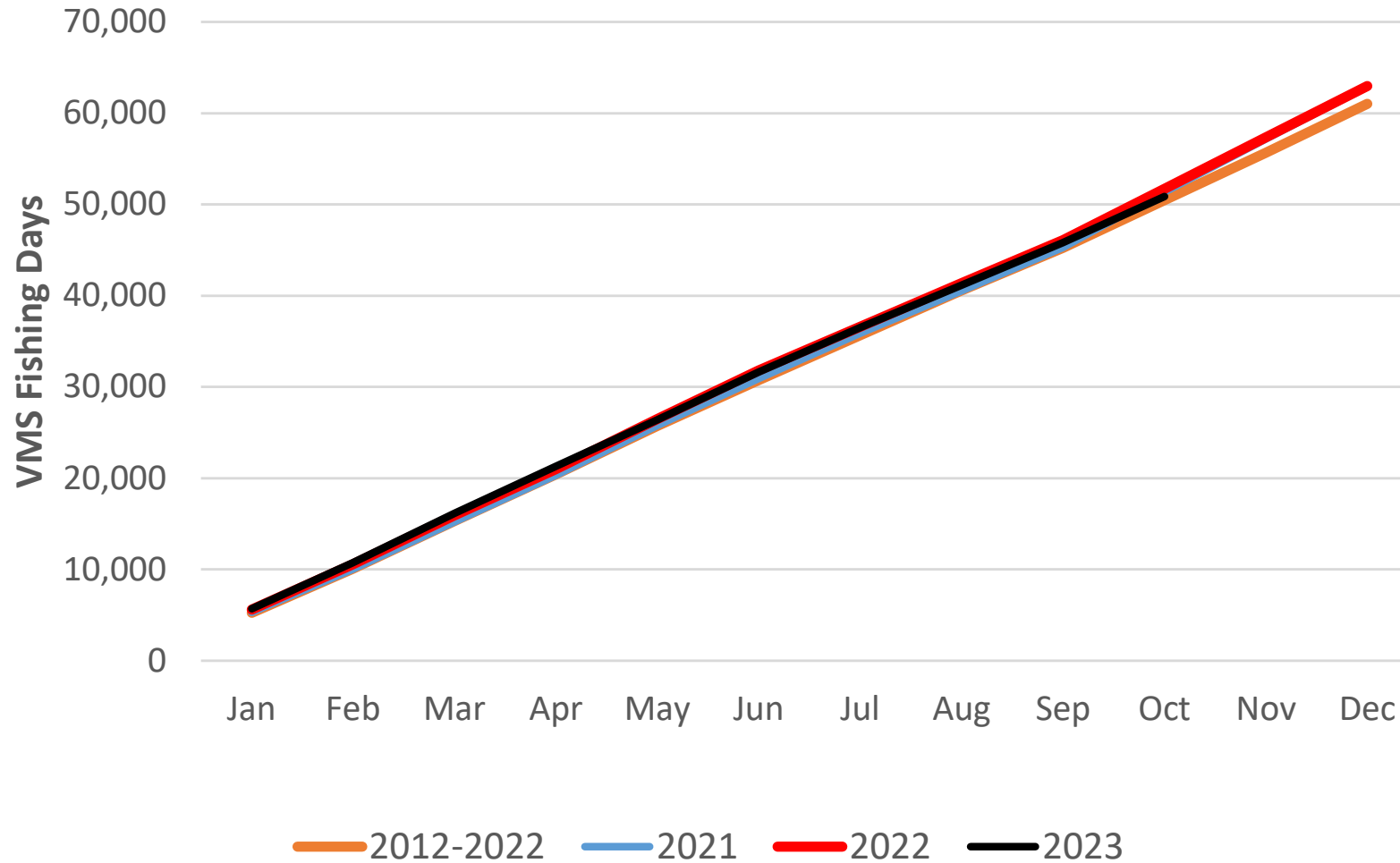
(Catch is WCPFC-CA total; effort excludes PH, ID, VN and JP small coastal PS)



VMS PS “Fishing” Days vs Declared Effort

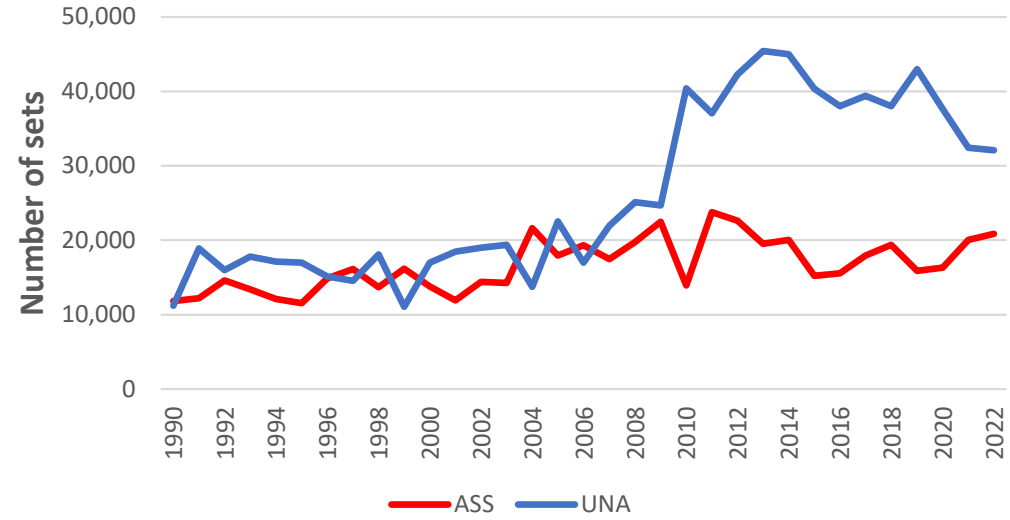


VMS PS “Fishing” Days – Tropical WCPFC-CA

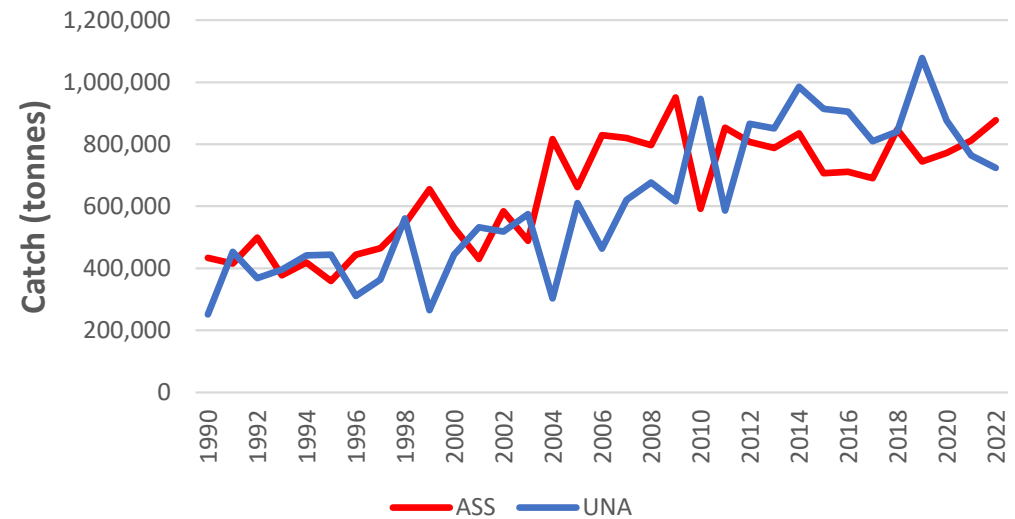


WCPFC-CA Purse Seine Fishery

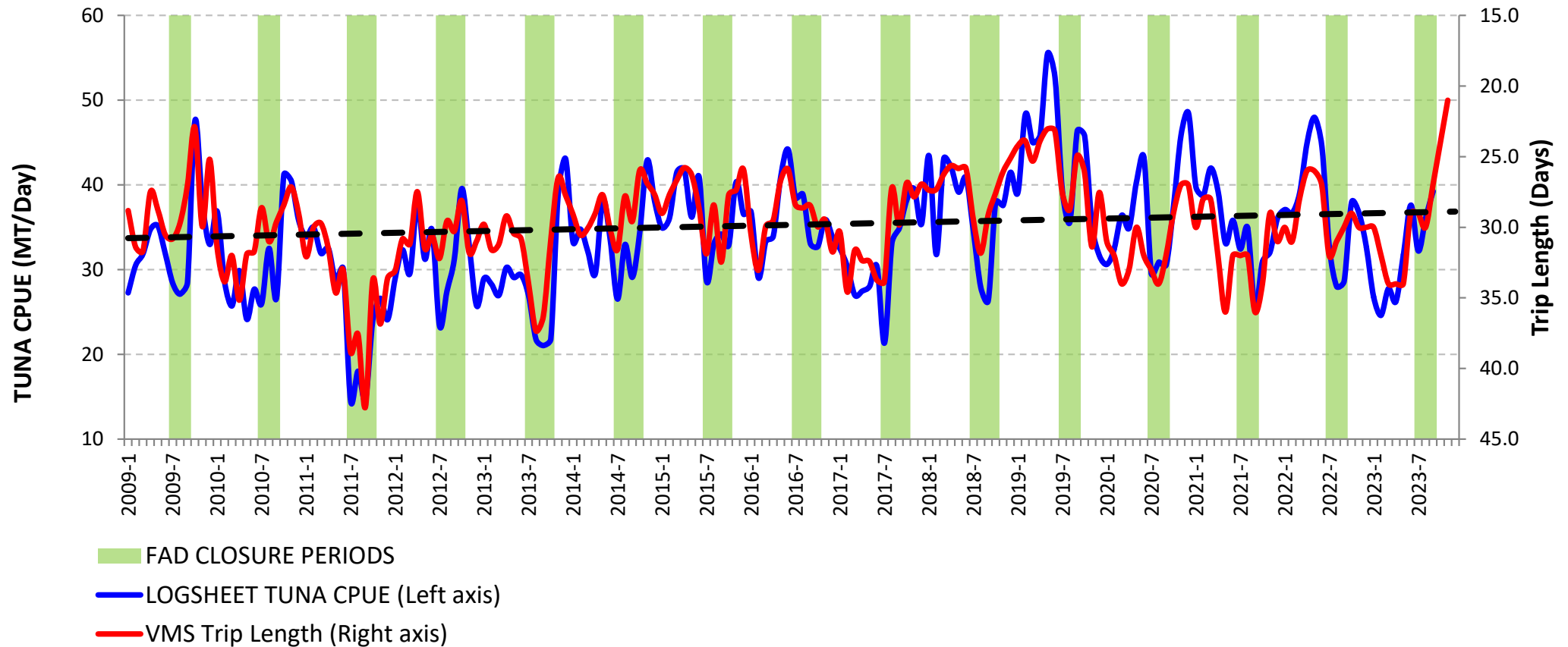
Sets by Set Type



Catch by Set Type

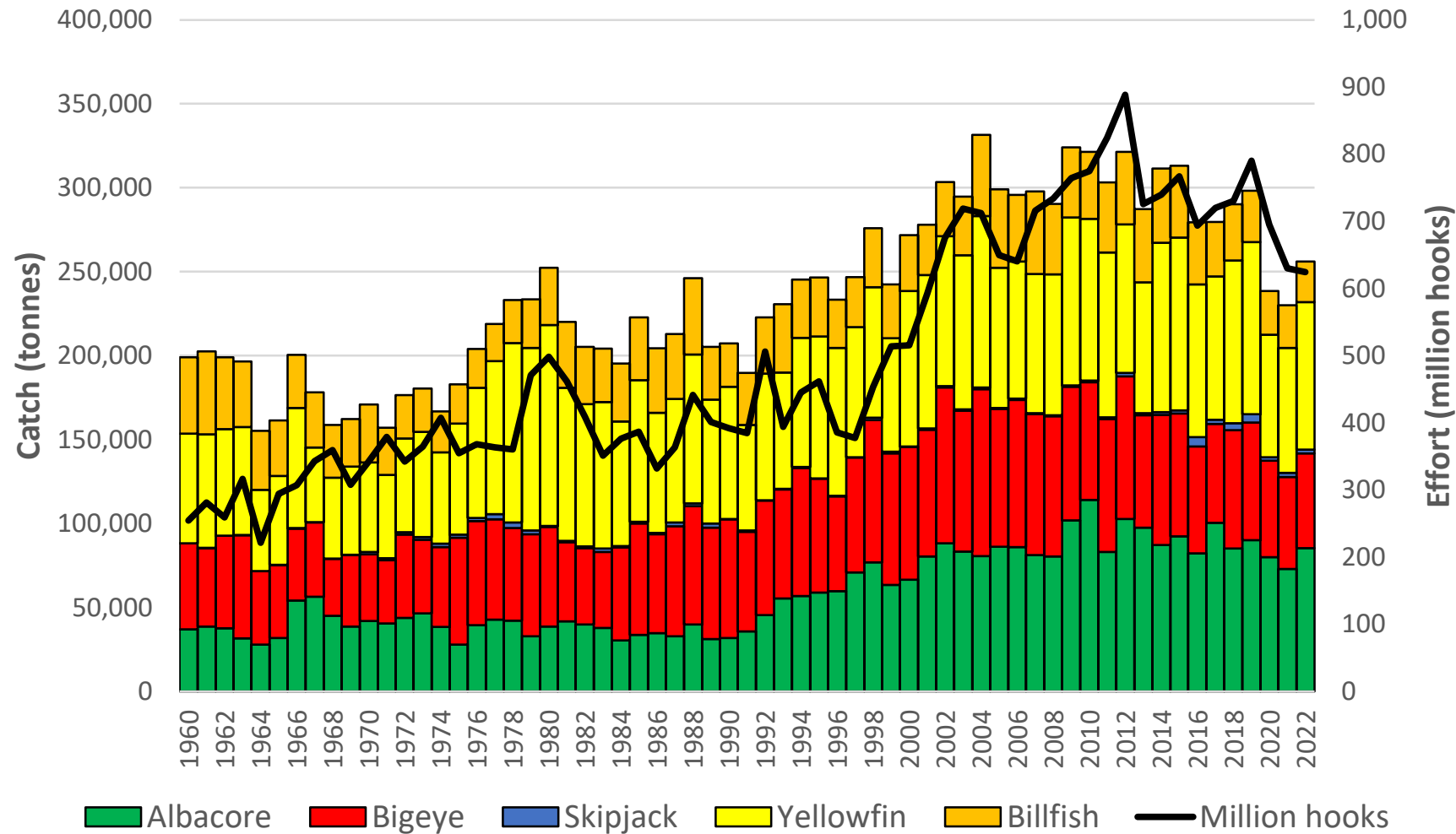


Tropical Purse Seine CPUE

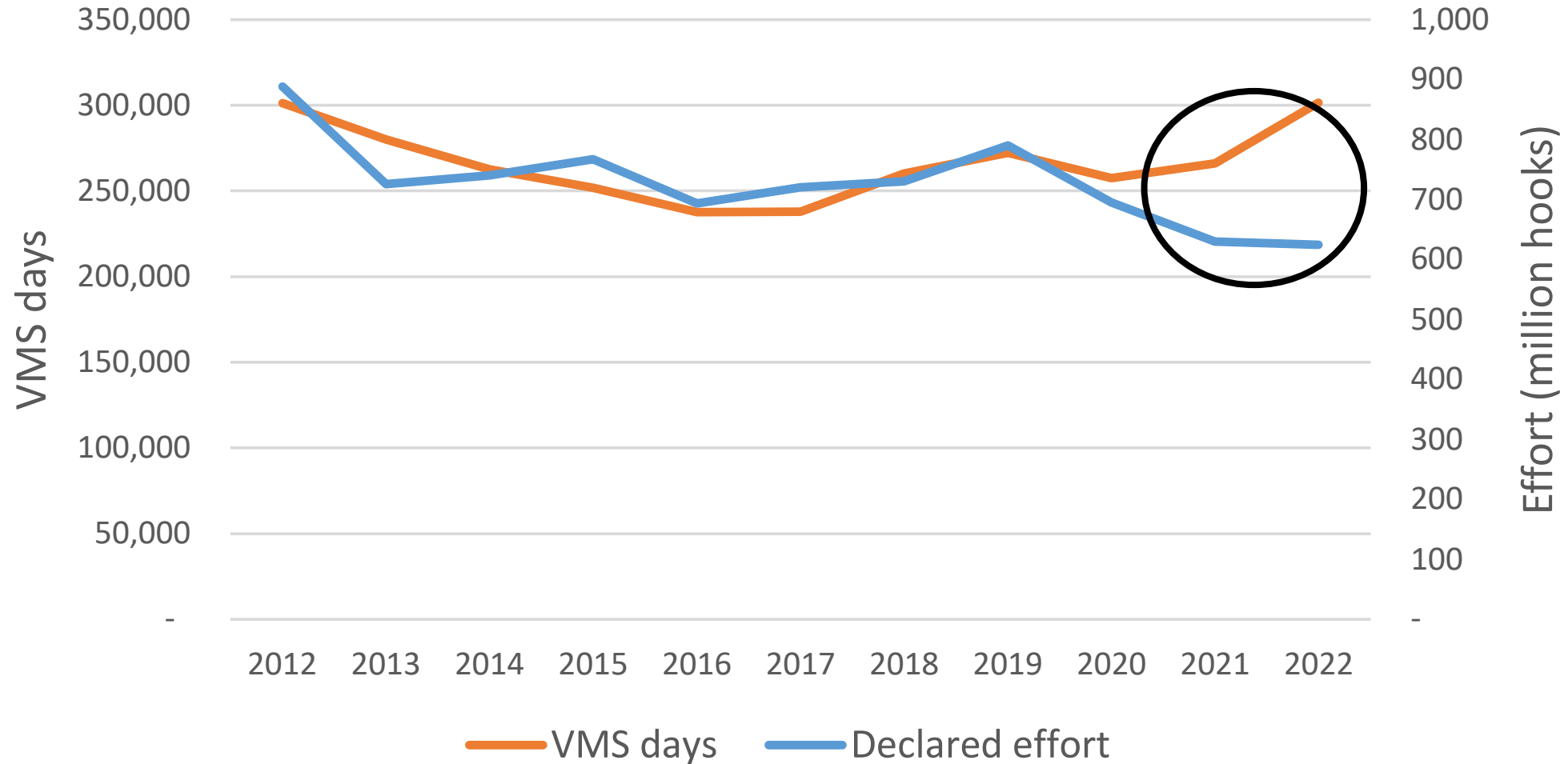


WCPFC-CA Longline Catch and Effort

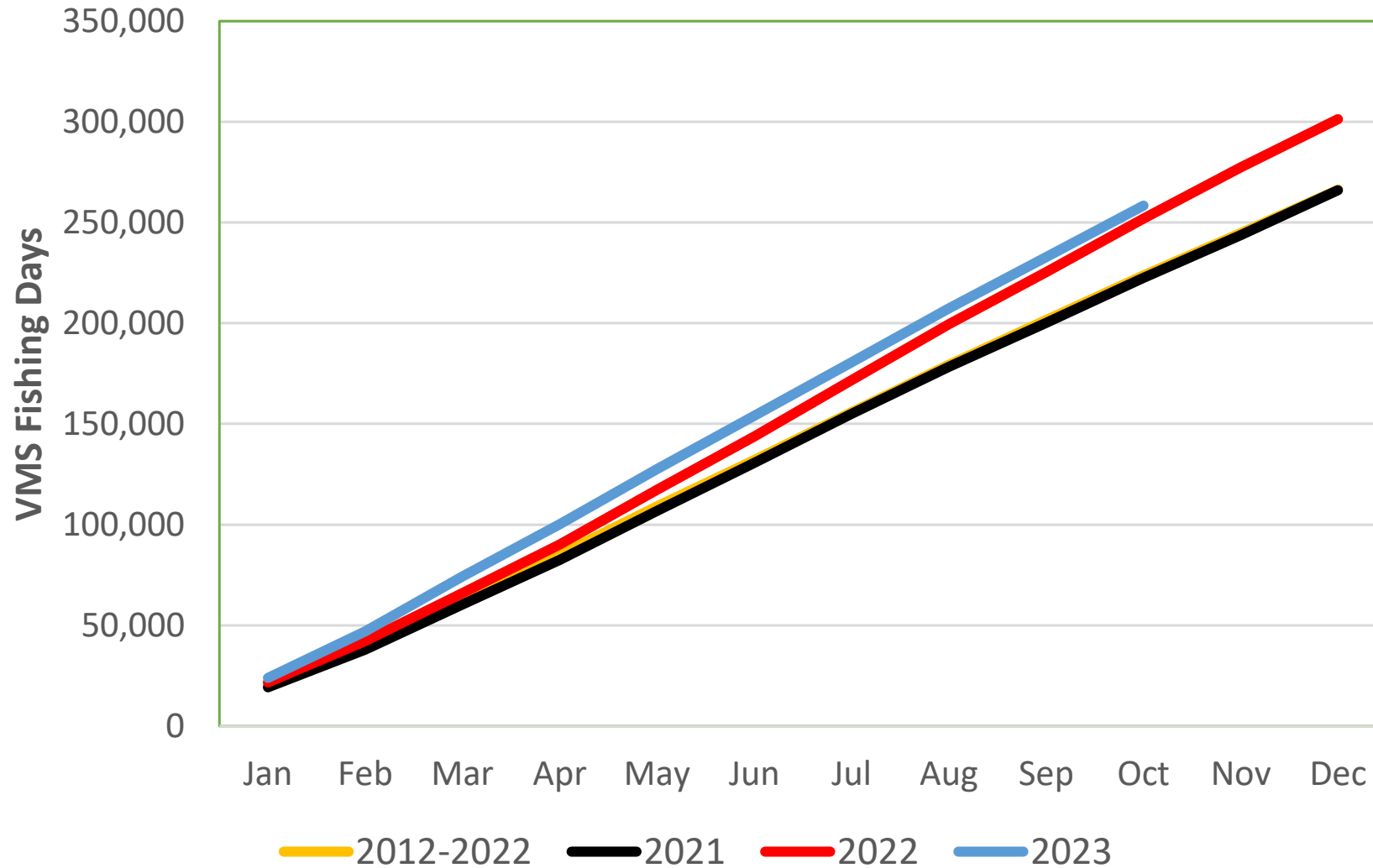
(Catch is WCPFC-CA, effort excludes ID, PH, VN and JP small coastal LL)



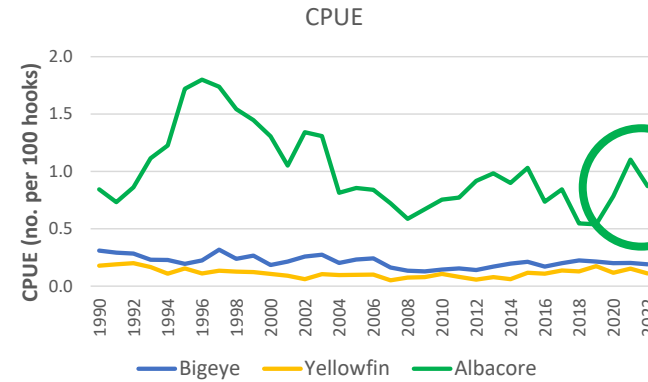
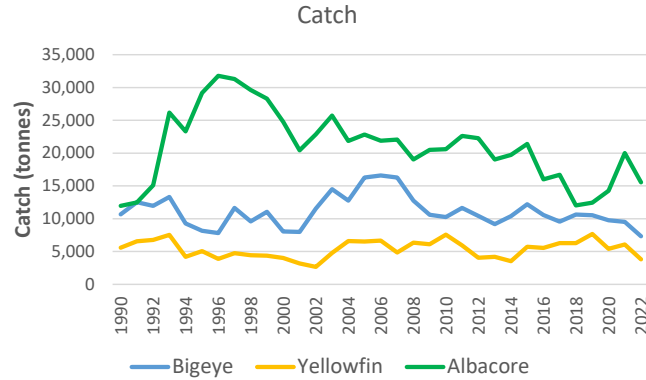
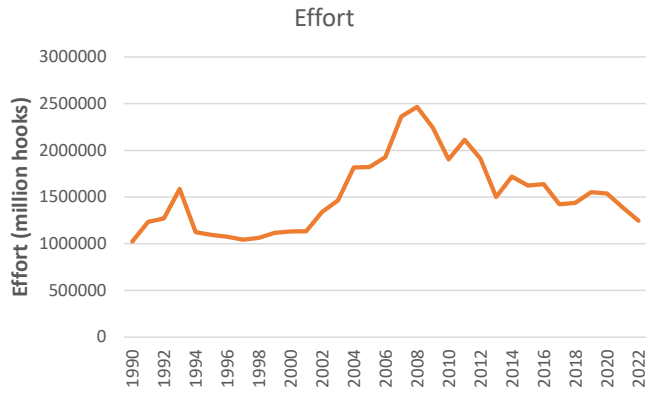
VMS LL “Fishing” Days vs Declared Effort



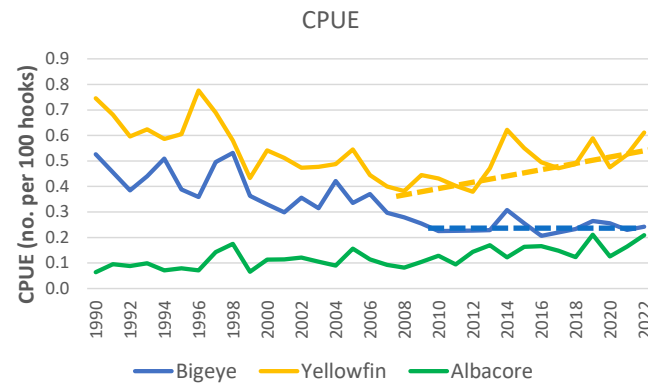
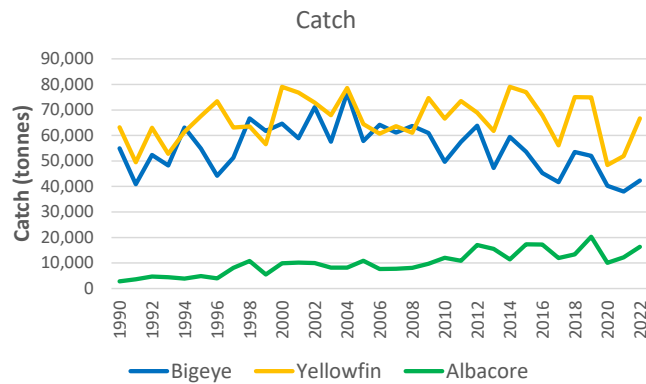
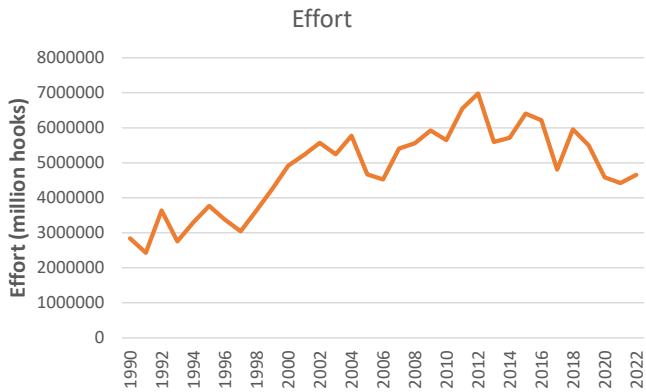
VMS LL “Fishing” Days – WCPFC-CA



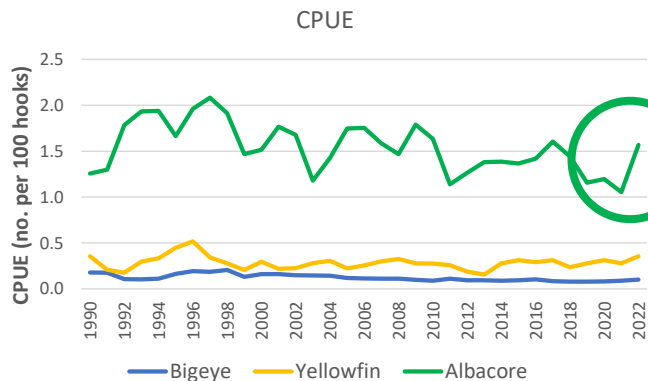
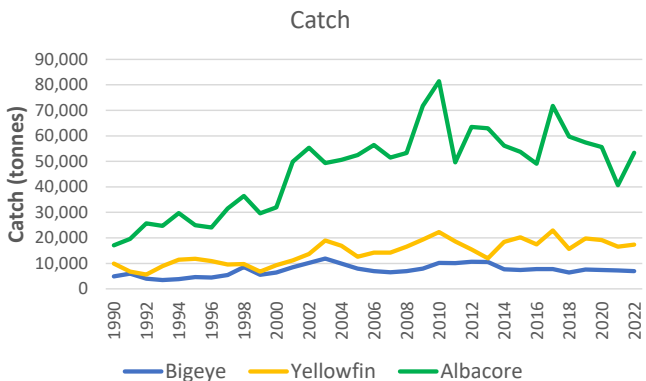
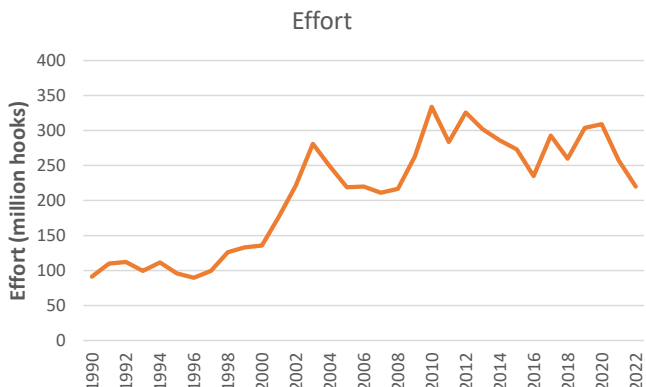
WCPO Longline



North Pacific
20-50N



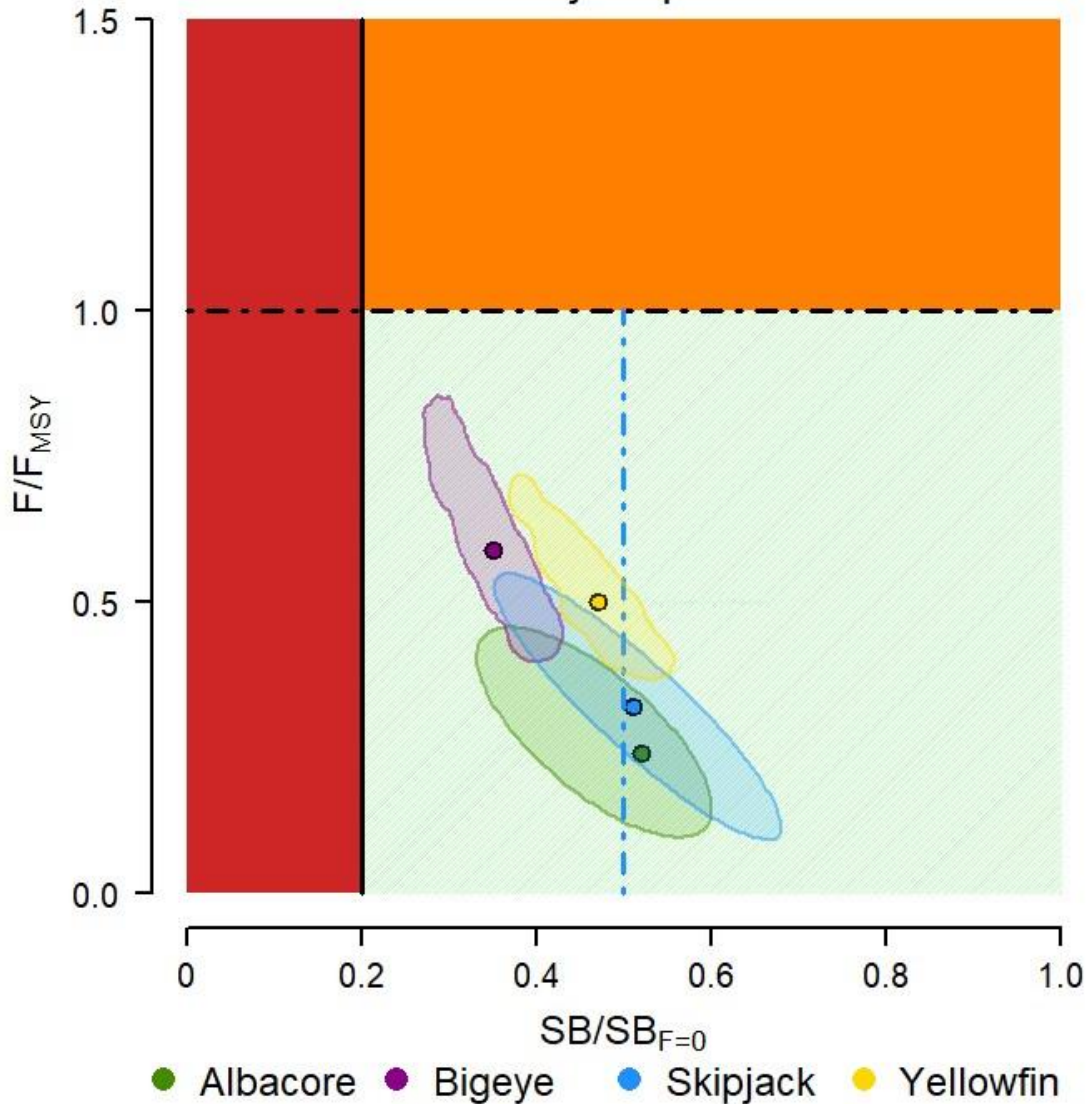
Tropical Pacific
20N-10S



South Pacific
10-50S

Status of Tuna Stocks – Multi-Species Summary

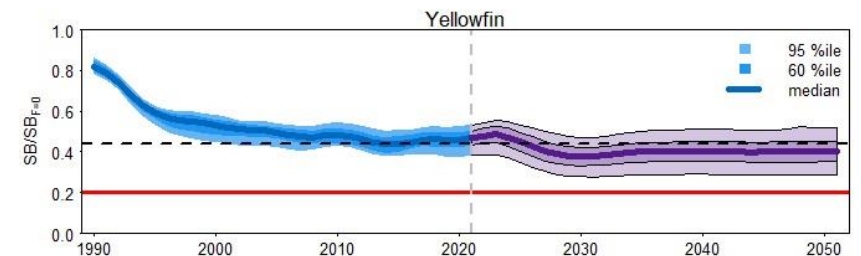
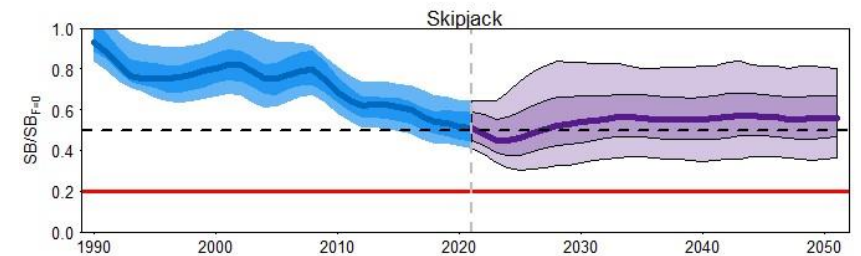
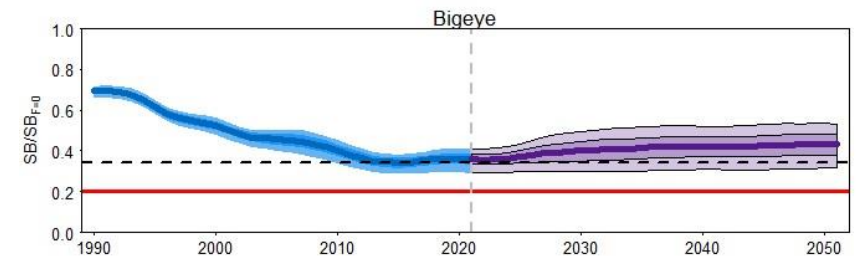
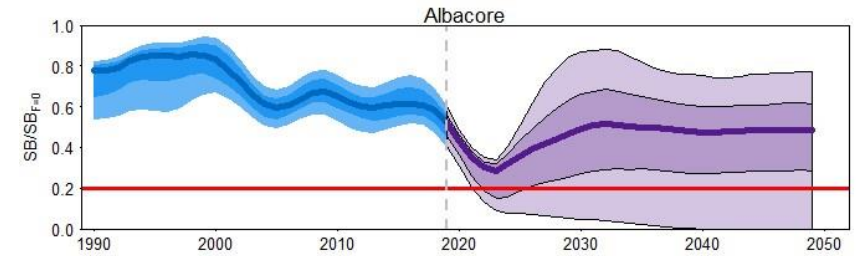
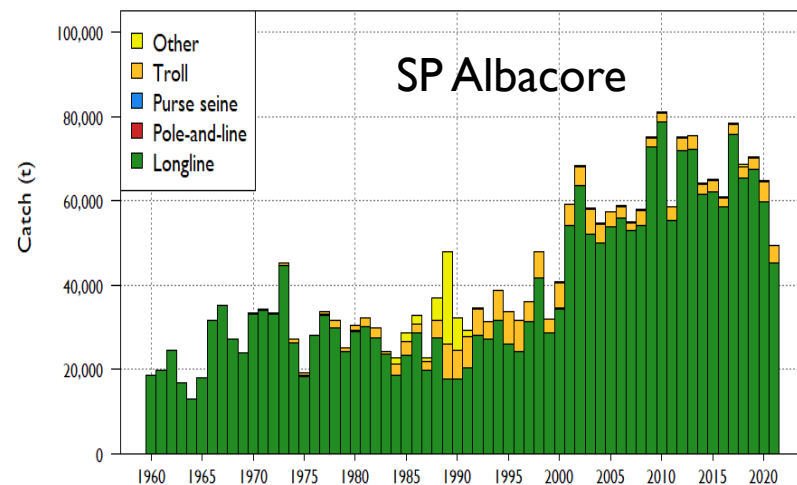
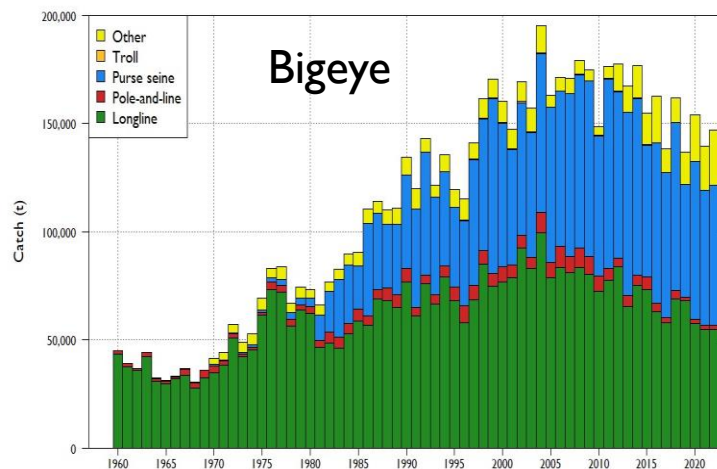
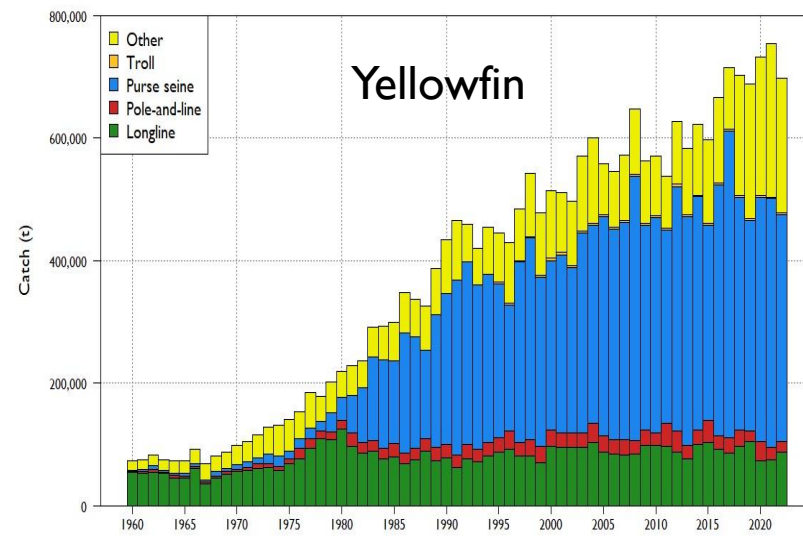
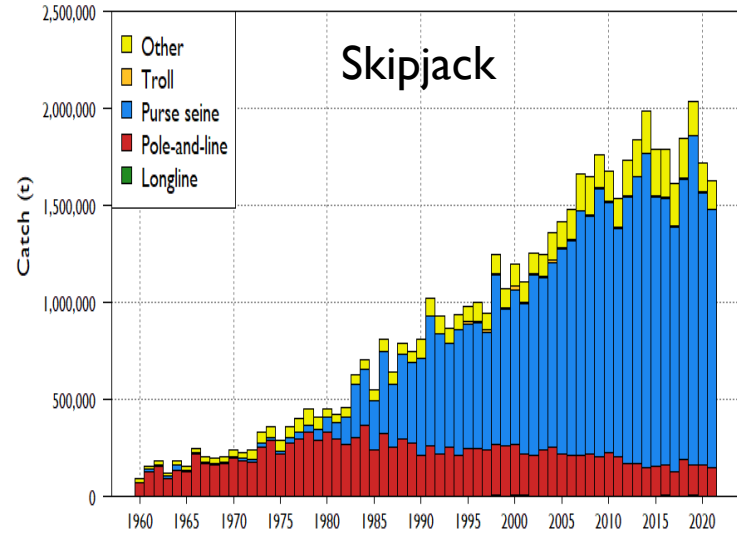
Majuro plot



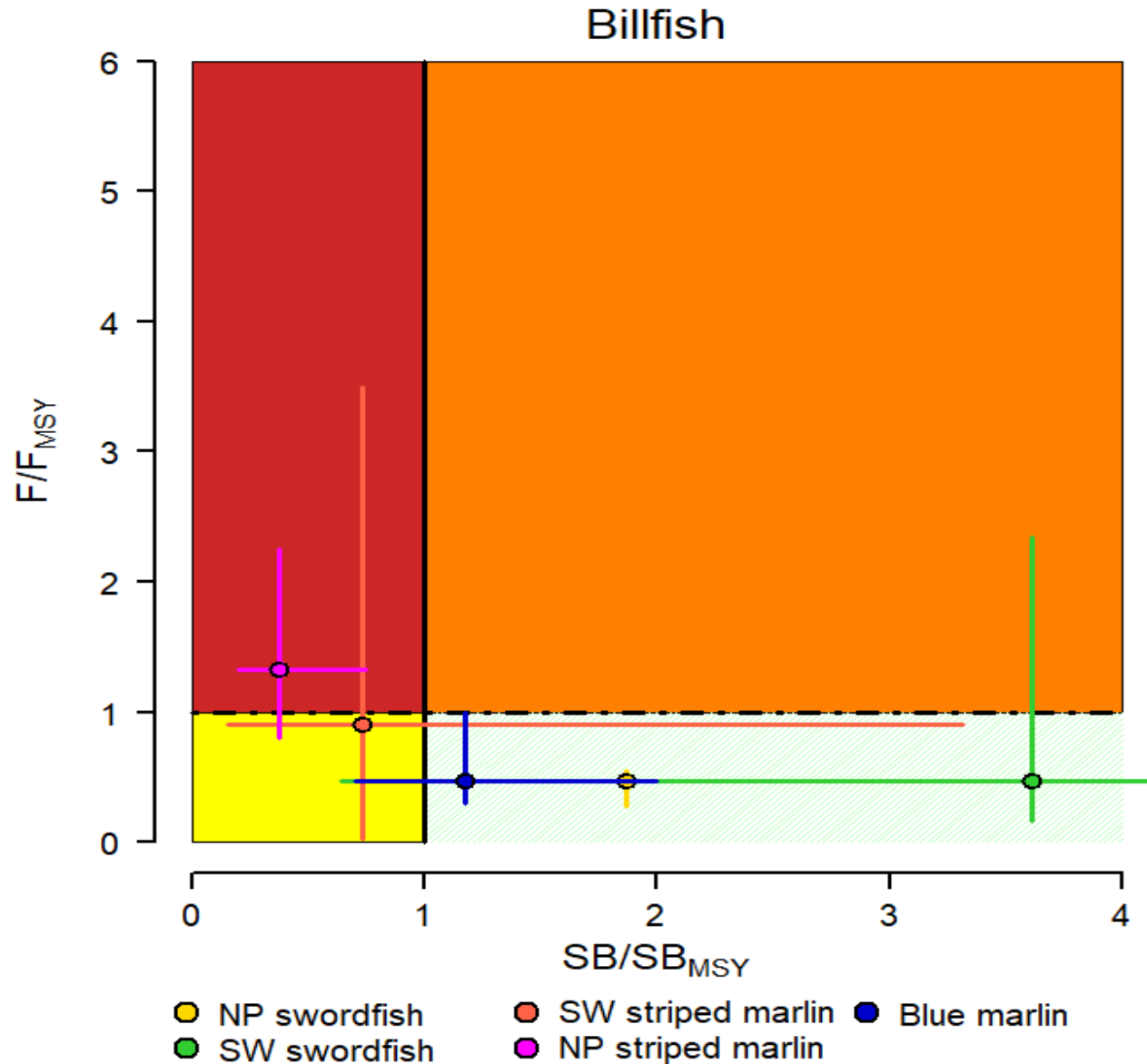
Key metrics

Species	$SB_{\text{recent}} / SB_{F=0}$ median	10-90 %iles	$F_{\text{recent}} / F_{\text{MSY}}$ median	10-90 %iles	Prob breaching LRP
SP albacore	0.52	0.41-0.57	0.24	0.15-0.37	0.00
Bigeye	0.35	0.31-0.40	0.60	0.46-0.74	0.00
Skipjack	0.51	0.43-0.64	0.32	0.18-0.45	0.00
Yellowfin	0.47	0.42-0.52	0.50	0.42-0.61	0.00

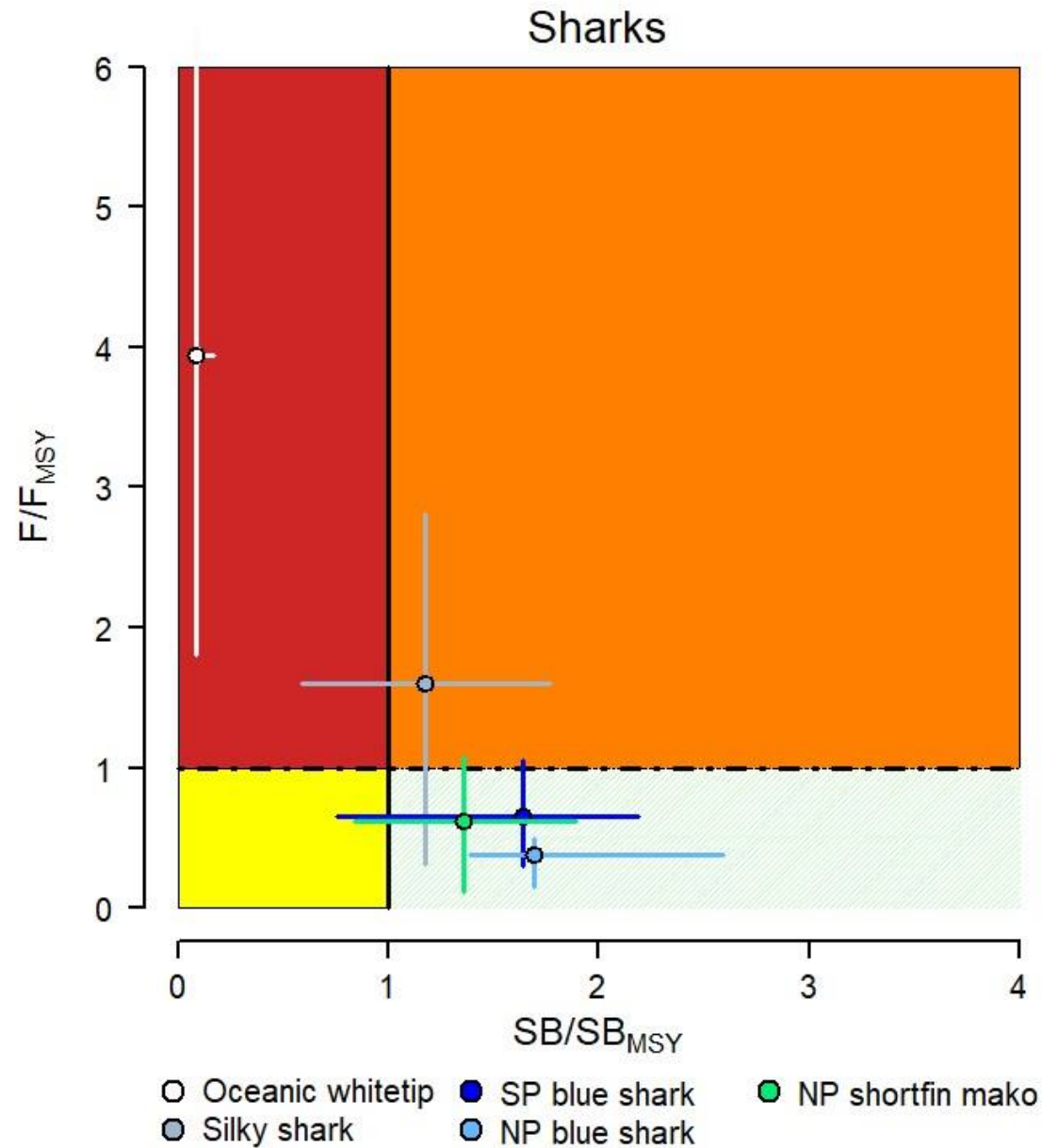
Status of Tuna Stocks



Status of Billfish Stocks – Multi-Species Summary



Status of Key Shark Stocks – Multi-Species Summary



Stock status summary of key shark species relevant to WCPFC



Stock	Region	Assessment method	Overfished?	Overfishing?	Conservation status IUCN/CITES appendix
Southwest Pacific shortfin mako (2022)	South west WCPO	Integrated assessment	Inconclusive	Inconclusive	Vulnerable / .ii
Southwest Pacific blue shark (2016, 2021/22)	South west WCPO	Integrated assessment	No	No	Near threatened / .ii
Oceanic whitetip (2012, 2019)	WCPO	Integrated assessment	Yes	Yes	Critically endangered / .ii
Pacific silky shark (WCPO 2012/13, EPO 2014, 2018)	Pacific wide and WCPO only	Integrated assessment	WCPO	Yes	Vulnerable / .ii
Pacific bigeye thresher shark (2017)	Pacific wide	Sustainability risk assessment	NA	No clear statement on risk	Vulnerable / .ii
Porbeagle shark (2017)	Southern hemisphere	Sustainability risk assessment	NA	Low risk in southern WCPO	Vulnerable / .ii
Whale shark (2018)	Indo-Pacific	Sustainability risk assessment	NA	Moderate/Low risk from purse seine in WCPO	Endangered / .ii
Hammerhead sharks	Not assessed	Not assessed	Unknown	Unknown	Critically endangered x2 Endangered x 1 Vulnerable x 1 .ii (except winghead)
North Pacific shortfin mako (ISC 2018)	North Pacific	Integrated assessment	No	No	Near threatened / .ii
North Pacific blue shark (ISC 2017, 2022)	North Pacific	Integrated assessment	No	No	Near threatened / .ii

Thanks for your attention

Questions?

