

Stock status and fisheries update

**Oceanic Fisheries Programme
Pacific Community (SPC)**

WCPFC
22nd Regular Session
Manila, Philippines

1-5 December, 2025

WCPFC22-2025-07

Presented by Paul Hamer

Background

- Recent information on the fisheries: catch and effort
- Status of stocks of 'key' tuna species **assessed by SPC** – skipjack, yellowfin, bigeye and South Pacific albacore
- Summary slides for billfish and key shark stock status

Sources

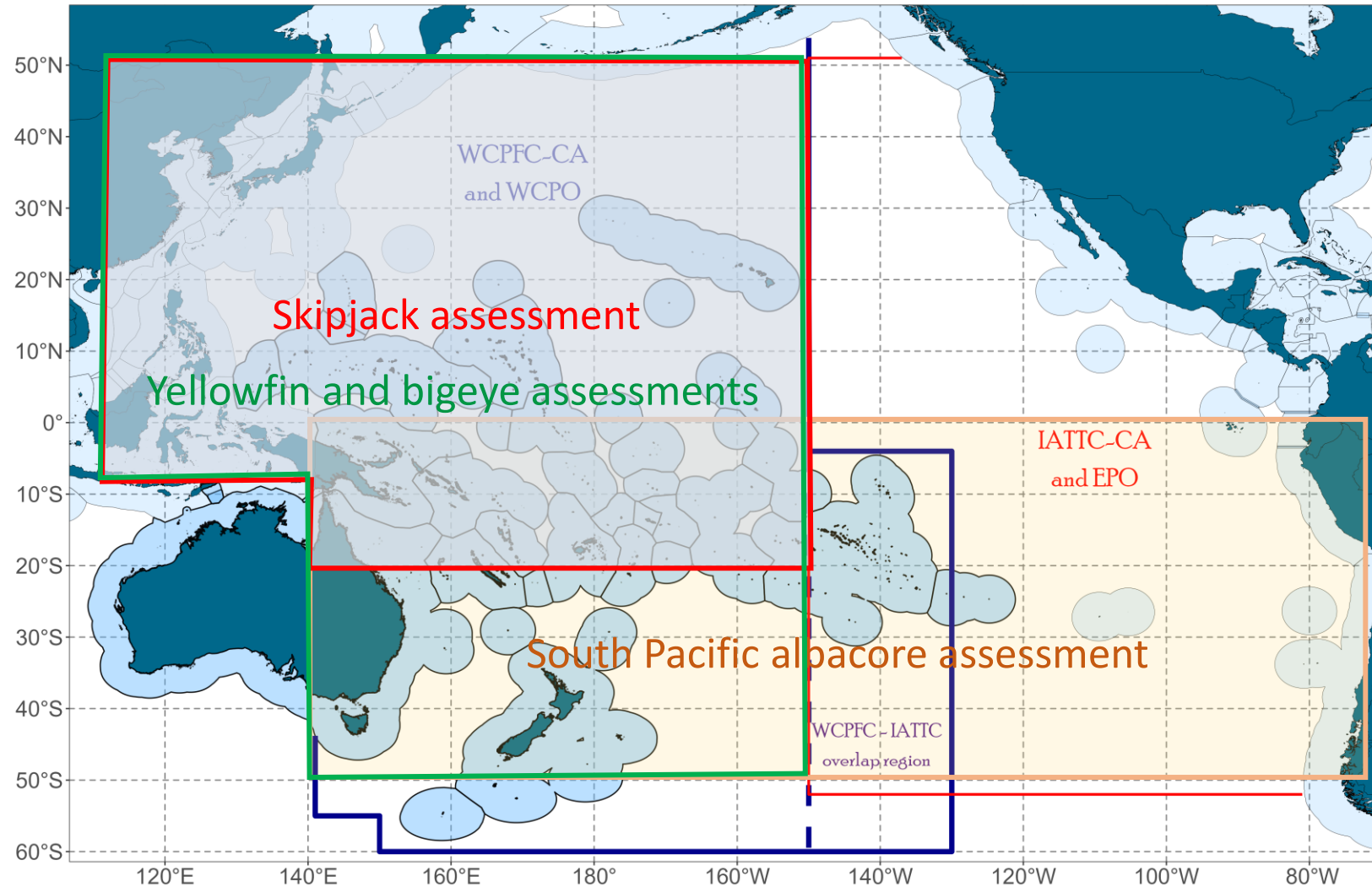
The Western and Central Pacific Tuna Fishery: 2024 Overview and Status of Stocks (TFAR no. 25).

'Draft' version – [WCPFC22-2025-IP16](#)

Overview of Tuna Fisheries in the Western and Central Pacific Ocean, Including Economic Conditions – 2024

<https://meetings.wcpfc.int/node/26697>

WCPFC-CA and tuna stock assessment regions



Catch and effort summaries



Total WCPFC-CA catch by gear

Key facts

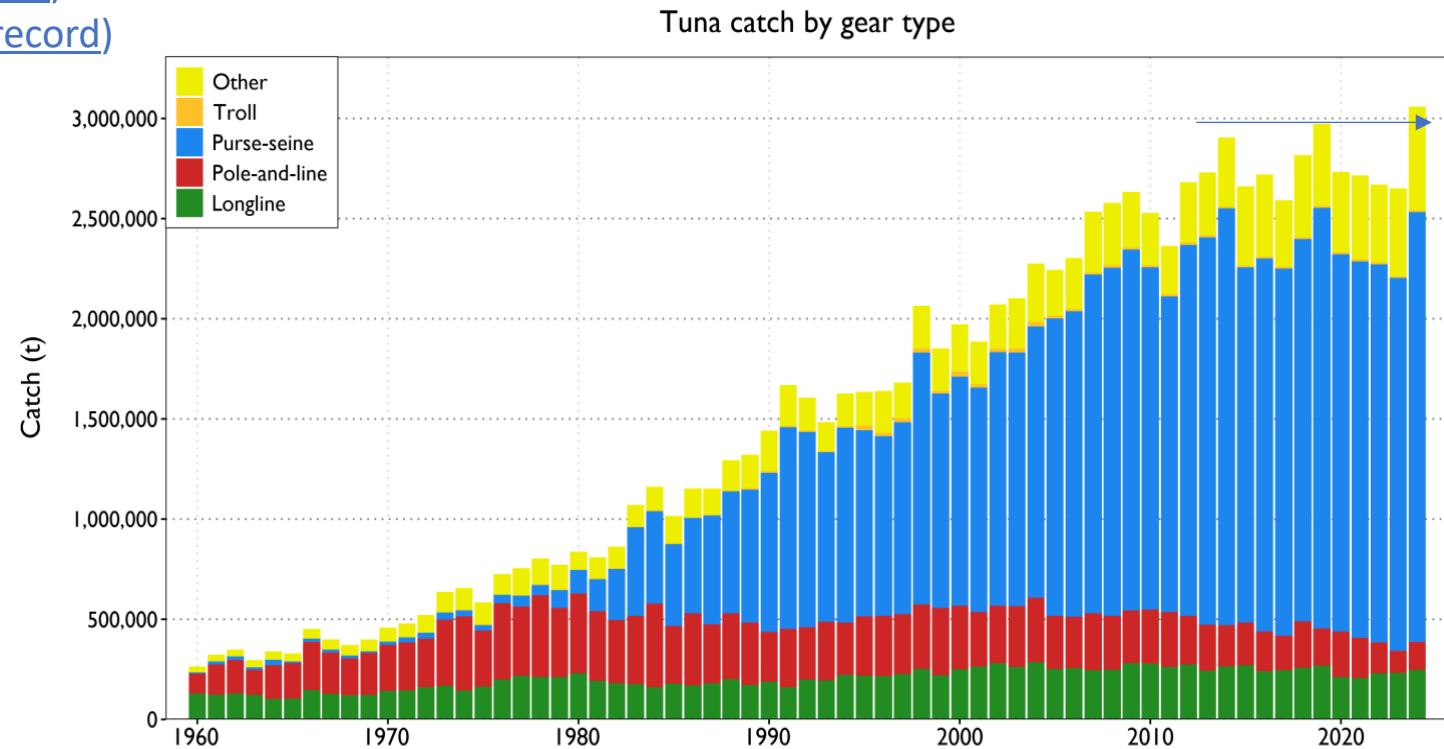
Record total catch in 2024: 3.059 million mt ([record](#), 15% increase on 2023)

- **Purse seine:** 70% (of total), 2.146 million mt ([record](#))
- **Other gears (Indo/Phil/Viet):** 17%, 518,840 mt ([record](#))
- **Longline:** 8%, 247,350 mt
- **Pole and line:** 5%, 139,405 mt
- **Troll:** < 1%, 7,272 mt
- **All show increases from 2023**

Trends since 2010

- **Purse seine:** stable with periodic (5/6 – year) spikes
- **Pole and line:** decreasing trend
- **Longline:** stable
- **Other gears:** increasing catches

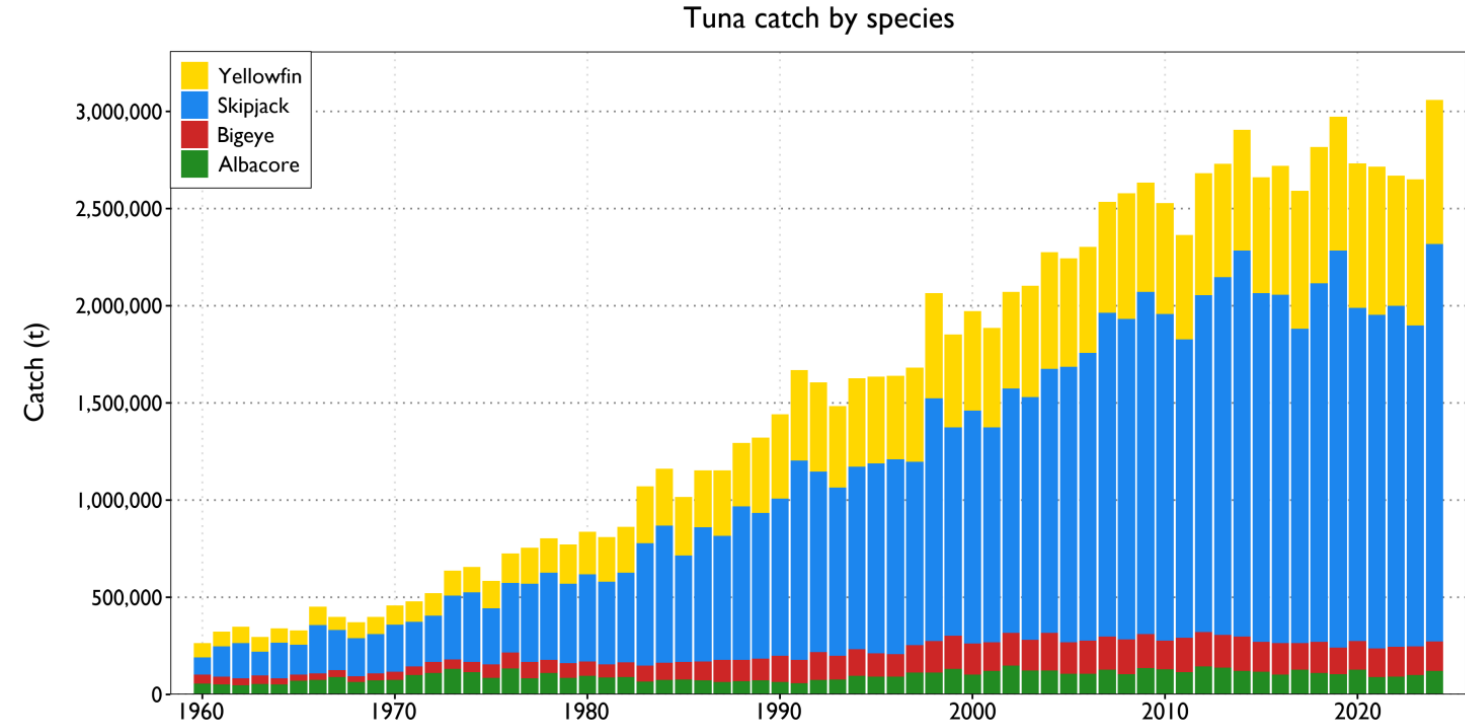
2024 provisional total catch value of approx. \$5.6 billion USD,
6% drop from 2023, \$3.6 billion from purse seine



Total WCPFC-CA catch by species

Key facts

- **Skipjack:** 67% of total, 2.046 million mt,
 - **2024 was a record catch, 24% increase on 2023**
 - 84% PS, 10% other, 5% PL
- **Yellowfin:** 24% of total, 741,473 mt
 - 2024 1.5% lower than 2023
 - 51% PS, 35% other, 12% LL, Pole-line 2%
- **Bigeye:** 5% of total, 151,611 mt
 - 2024 3% higher than 2023
 - 36% LL, 33% PS, 29% other
- **Albacore:** 4% of total, 120,201 mt
(~74,259 mt WCPFC-CA south Pacific)
 - 2024 19% higher than 2023
 - >90% LL



56% of the provisional global tuna catch in 2024 (5.498 million mt), 85% of Pacific Ocean tuna catches.

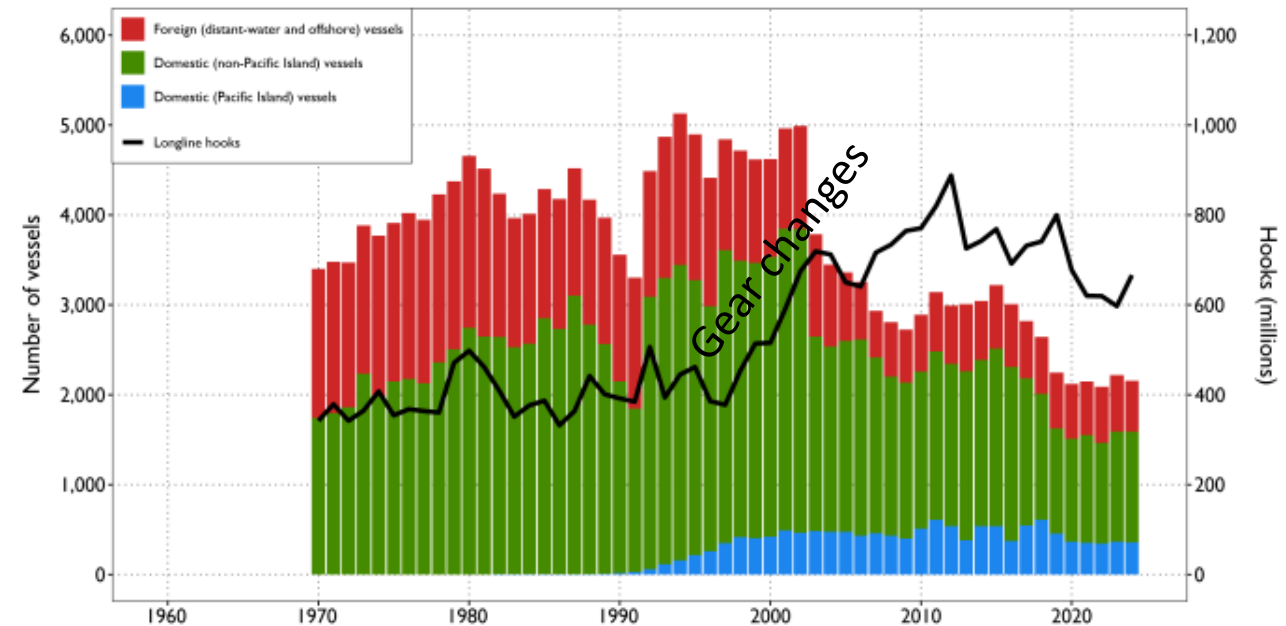
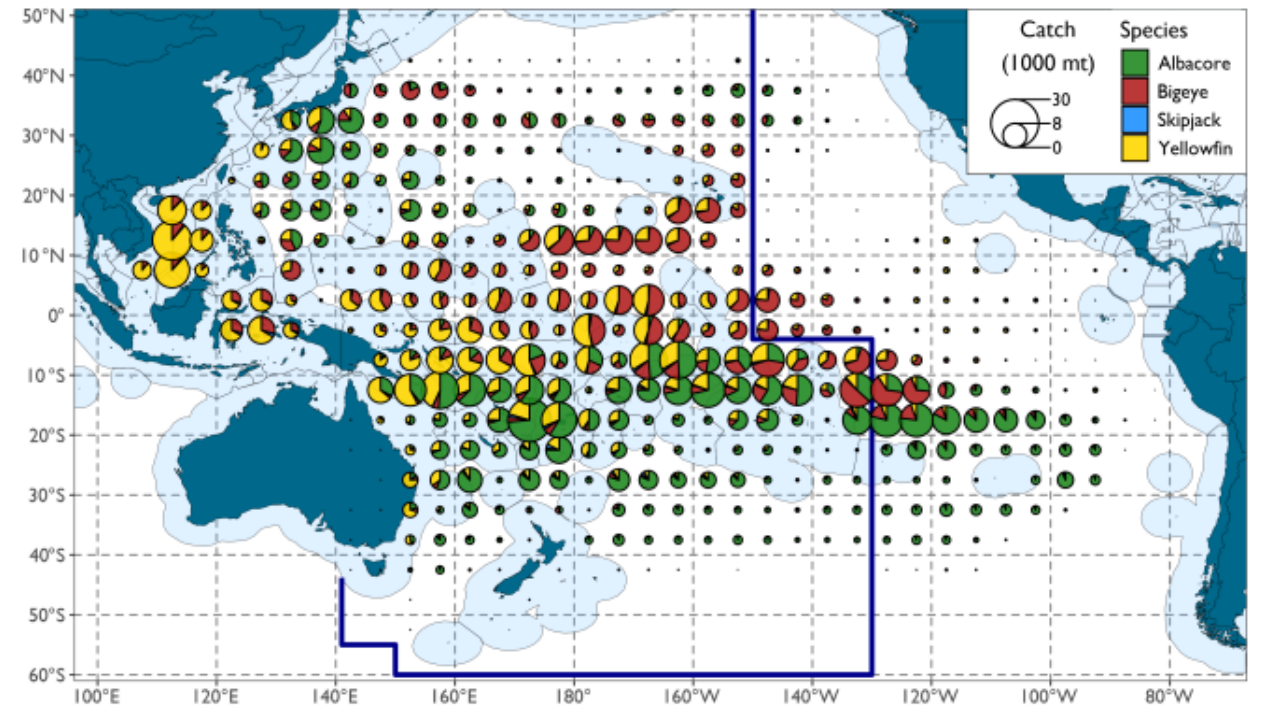
Sustained catches of 2.5 – 3 million mt for 15 years

Longline

Key Facts

2024

- 2,158 vessels
- 666 million hooks (12% inc. on 2023)
- Vessel numbers and proportions by fleet types stable since 2019

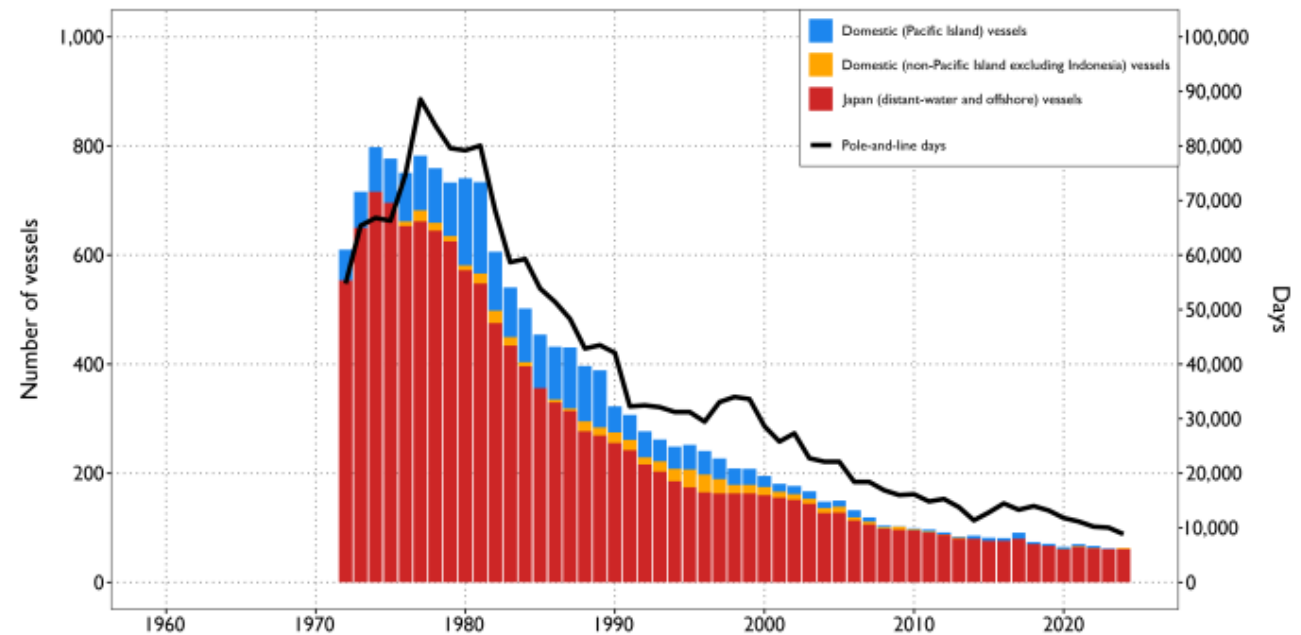
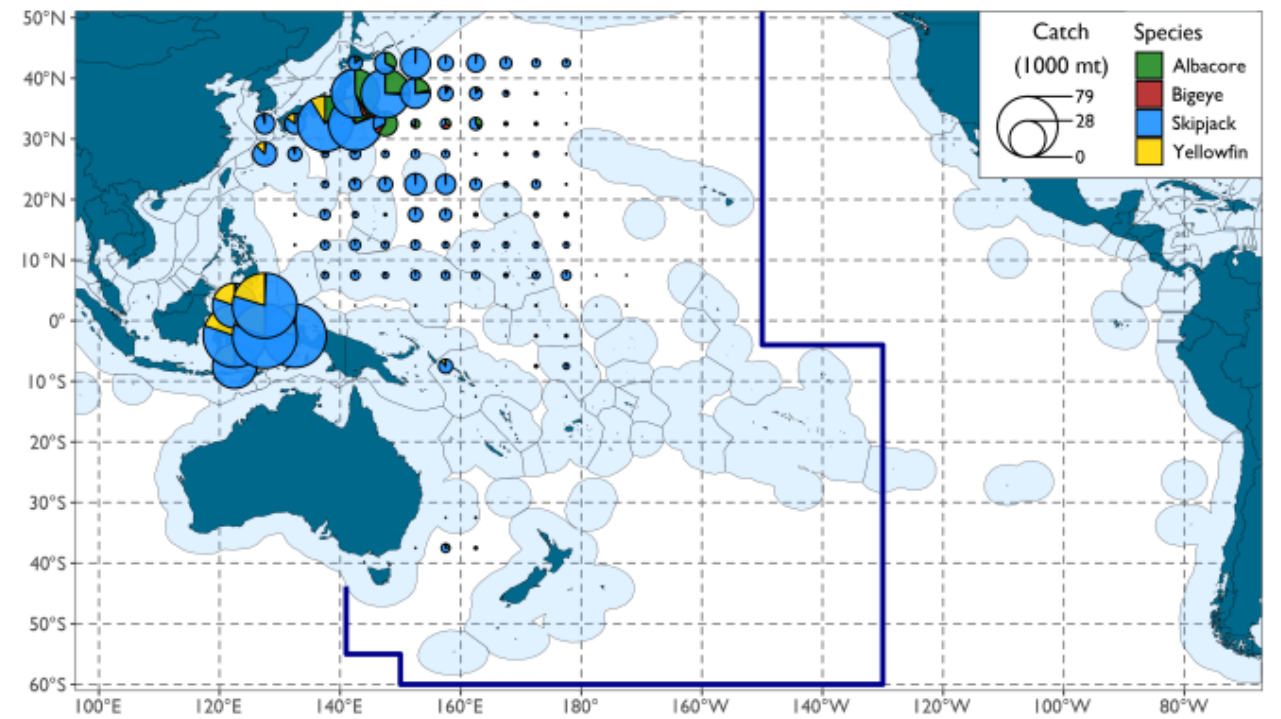


Pole and line

Key Facts

2024

- 8,845 days (12% decrease on 2023)
- 63 vessels
- Some Indonesian vessels, but most now Japanese vessels, targeting skipjack and albacore.

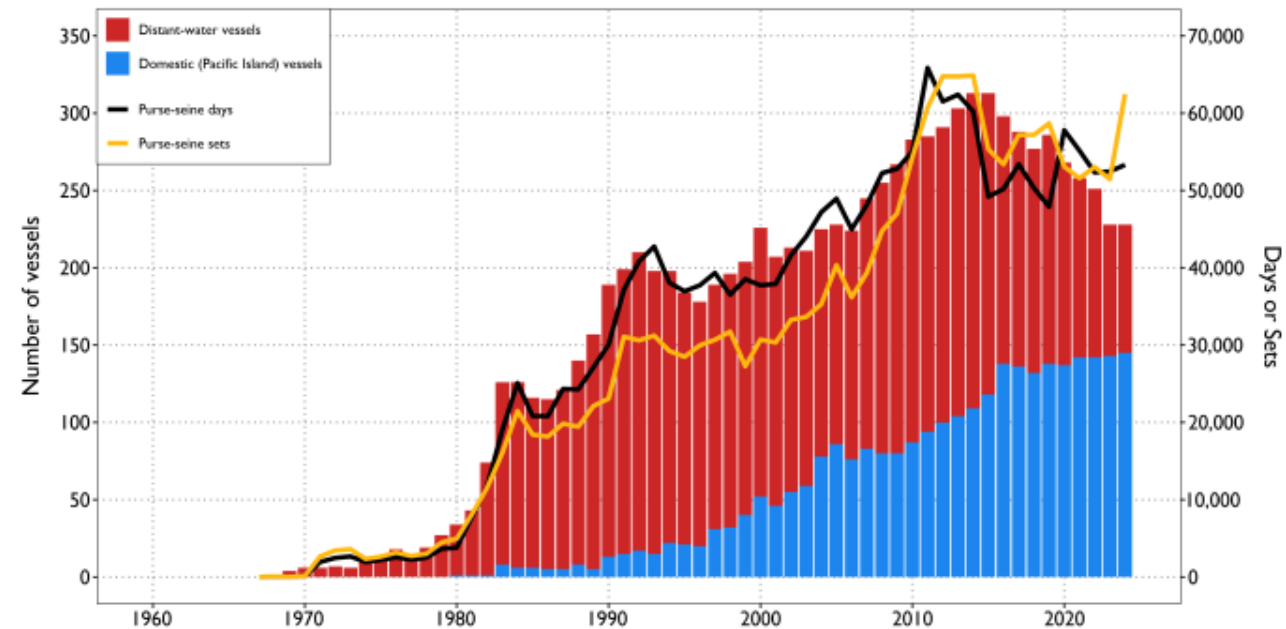
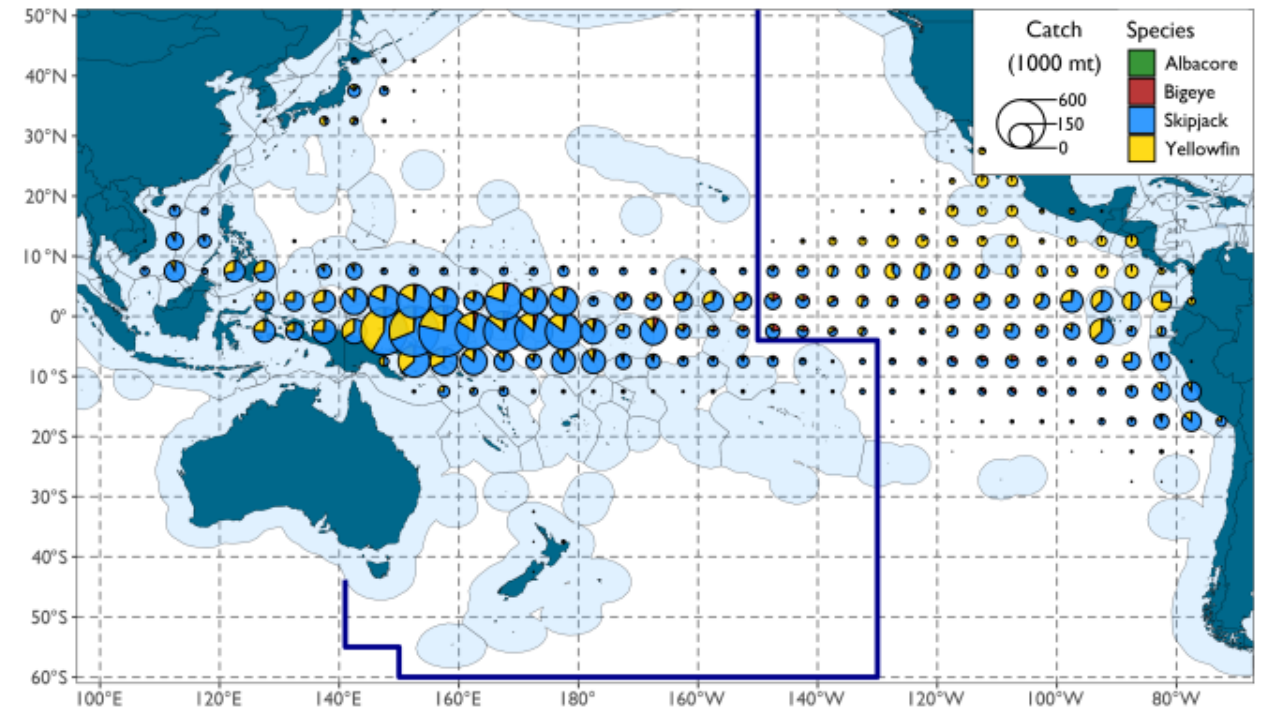


Purse seine

Key Facts

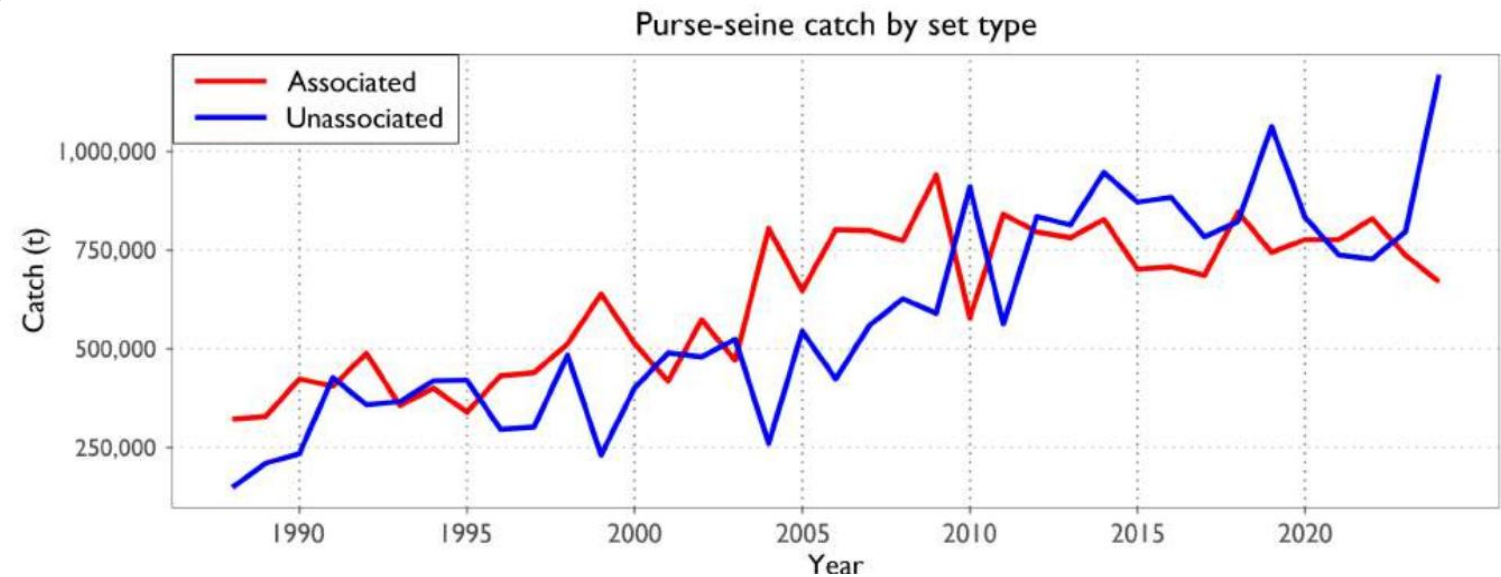
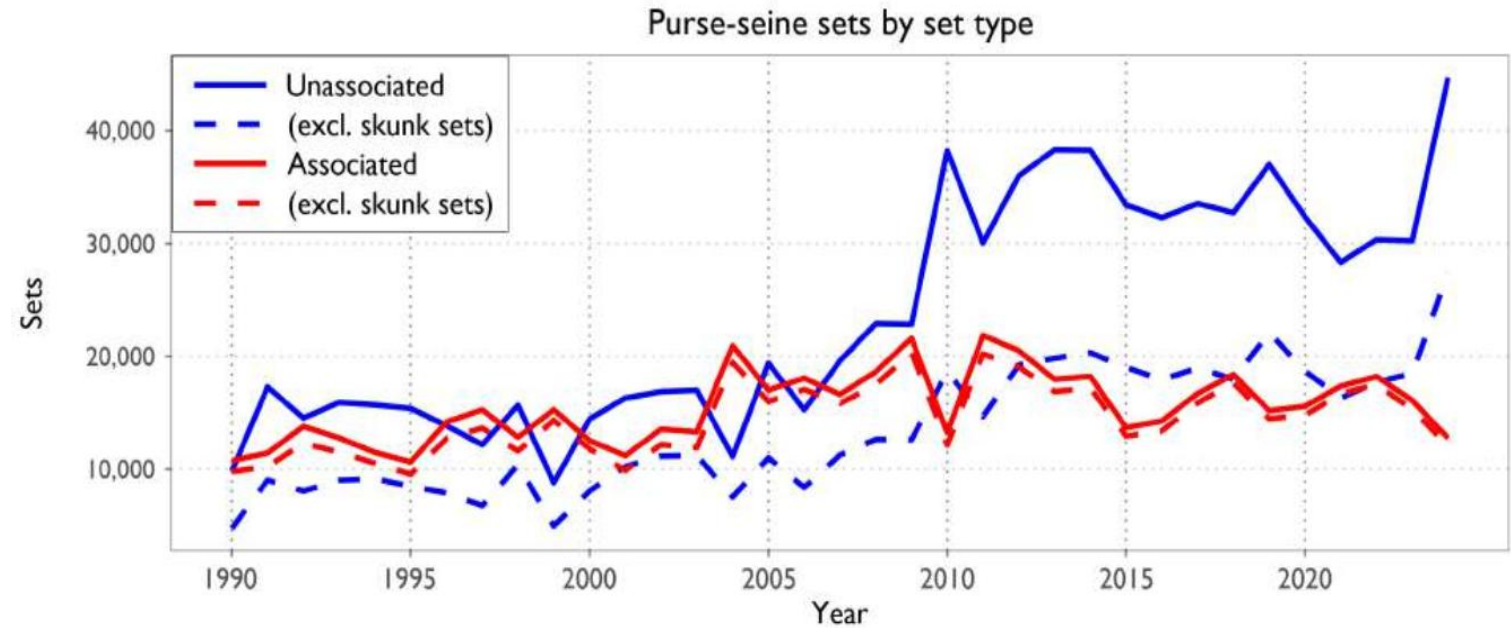
2024

- 53,313 days
- 62,476 sets (21% increase on 2023)
- 247 vessels
- Stable – days over last 10-years
- Increase purse seine sets in 2024 – due to ‘unassociated’ sets (next slide)



Purse seine

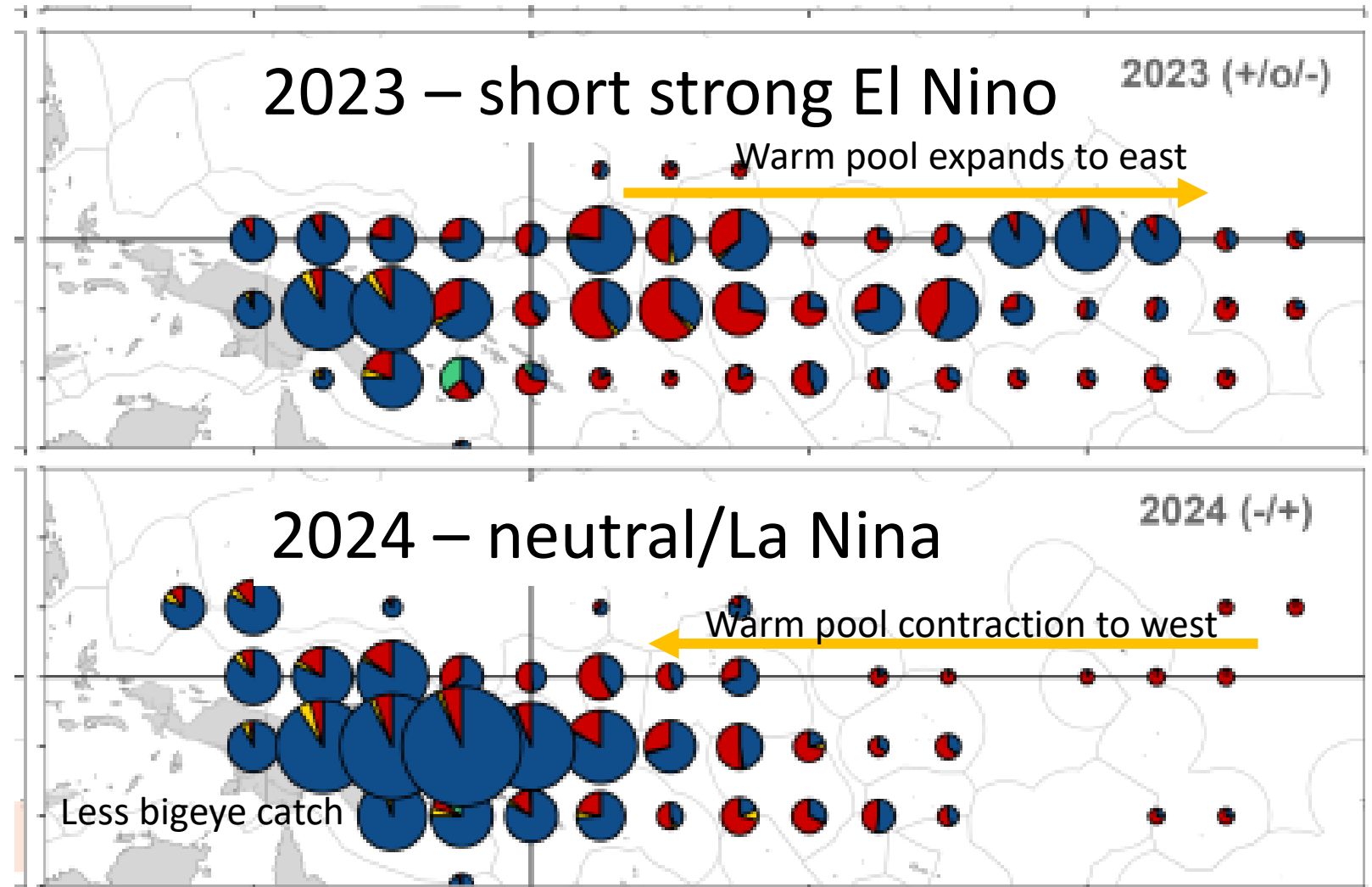
Notable increase in effort and catch by 'unassociated' sets in 2024



Purse seine effort - sets

- Shift of purse seine effort to west in 2024 under neutral/La Nina
- Greater % free school sets in 2024

■ FADs
■ Free school
(unassociated)

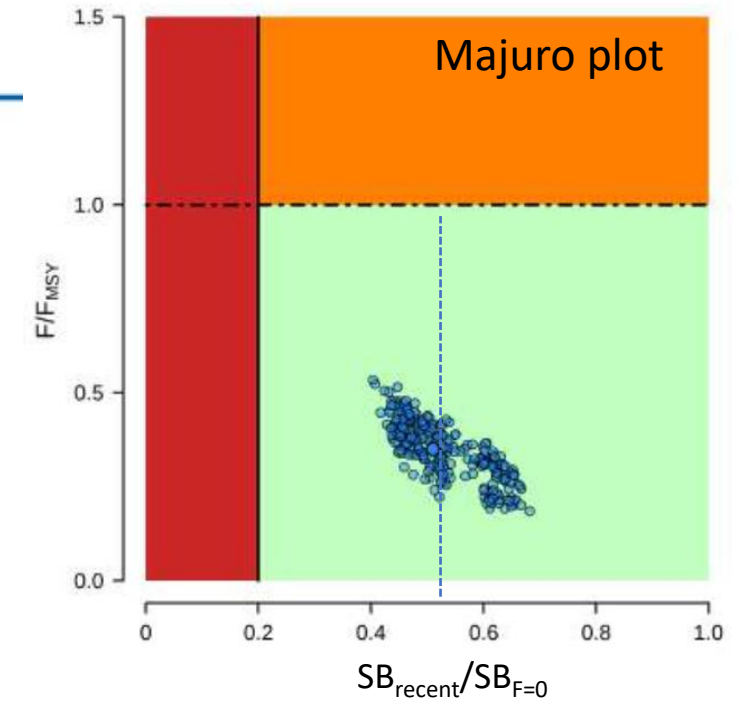
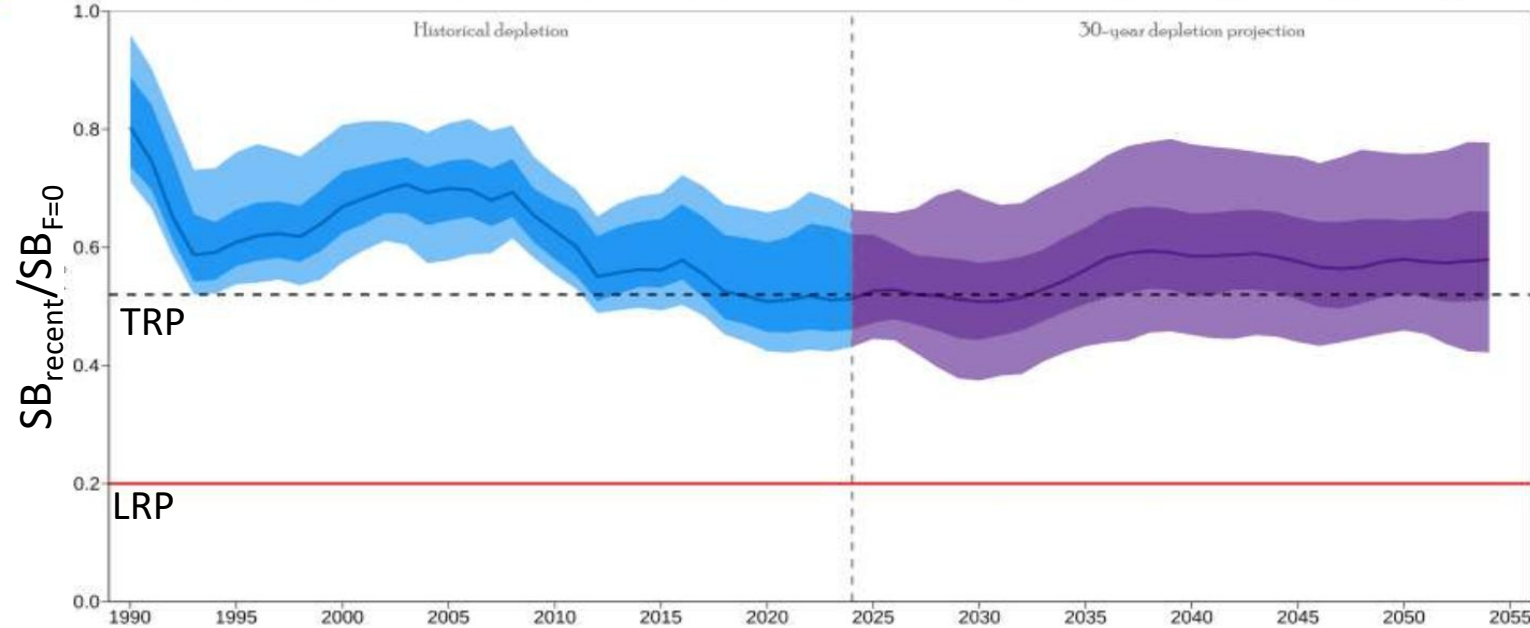


Tuna stock status



Skipjack

- Last assessed 2025, next assessment 2028



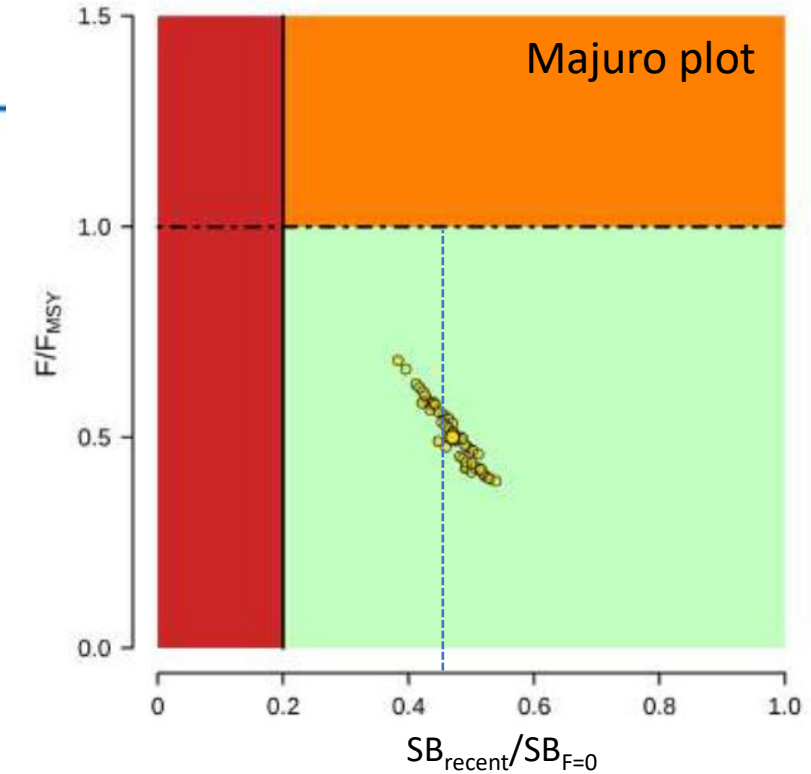
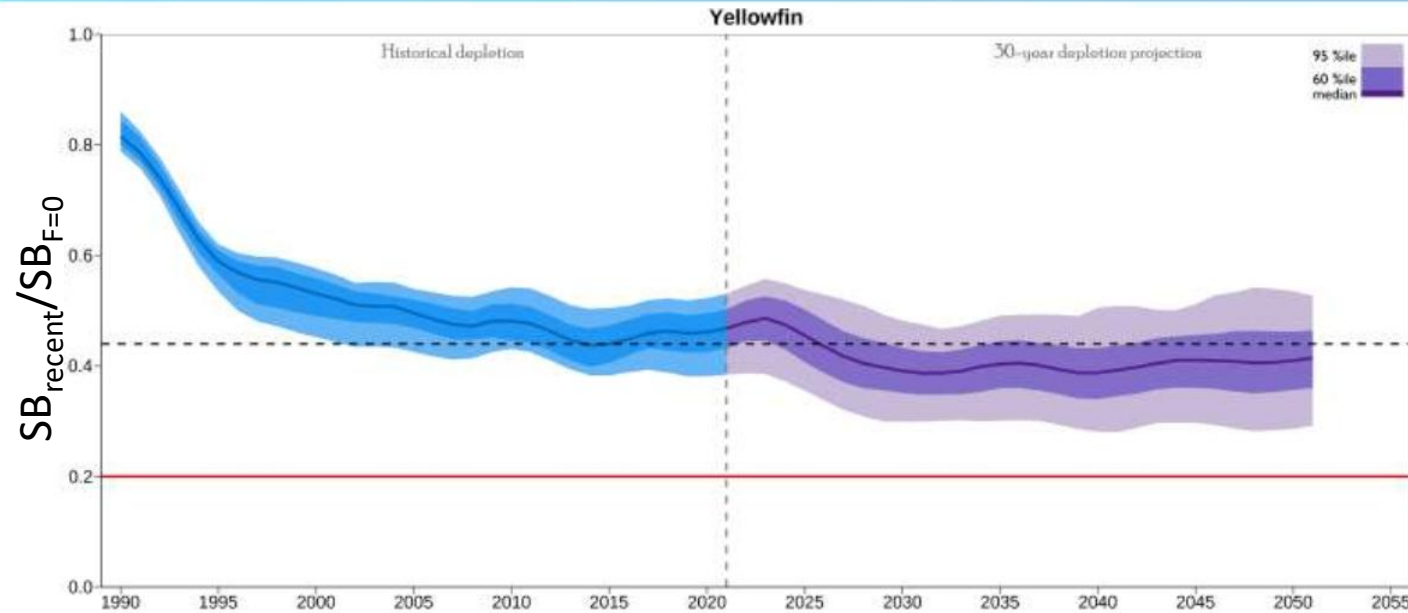
Species	$SB_{recent}/SB_{F=0}$ median	10-90 %iles	F_{recent}/F_{MSY} median	10-90 %iles	“Recent” Probability breaching LRP	“Future” Probability breaching LRP <i>2021 fishing levels</i>
Skipjack	0.51	0.45-0.63	0.35	0.25-0.45	0%	0%

- Not overfished
- Not undergoing overfishing
- Status is consistent with objectives of the MP

Skipjack MP (CMM 2022-01) TRP calibrated based on 2025 assessment = 0.52

Yellowfin

- Last assessed 2023, next assessment 2026



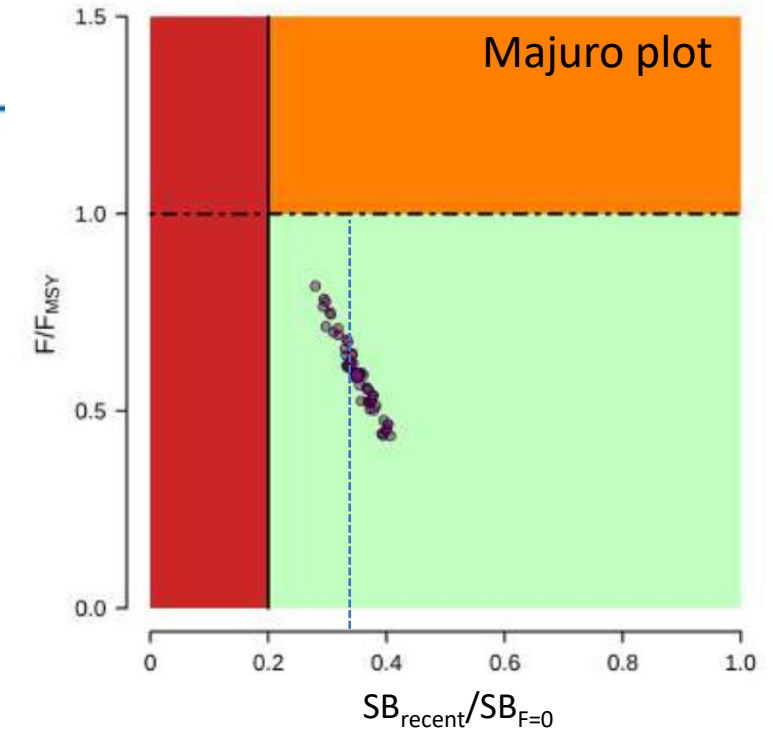
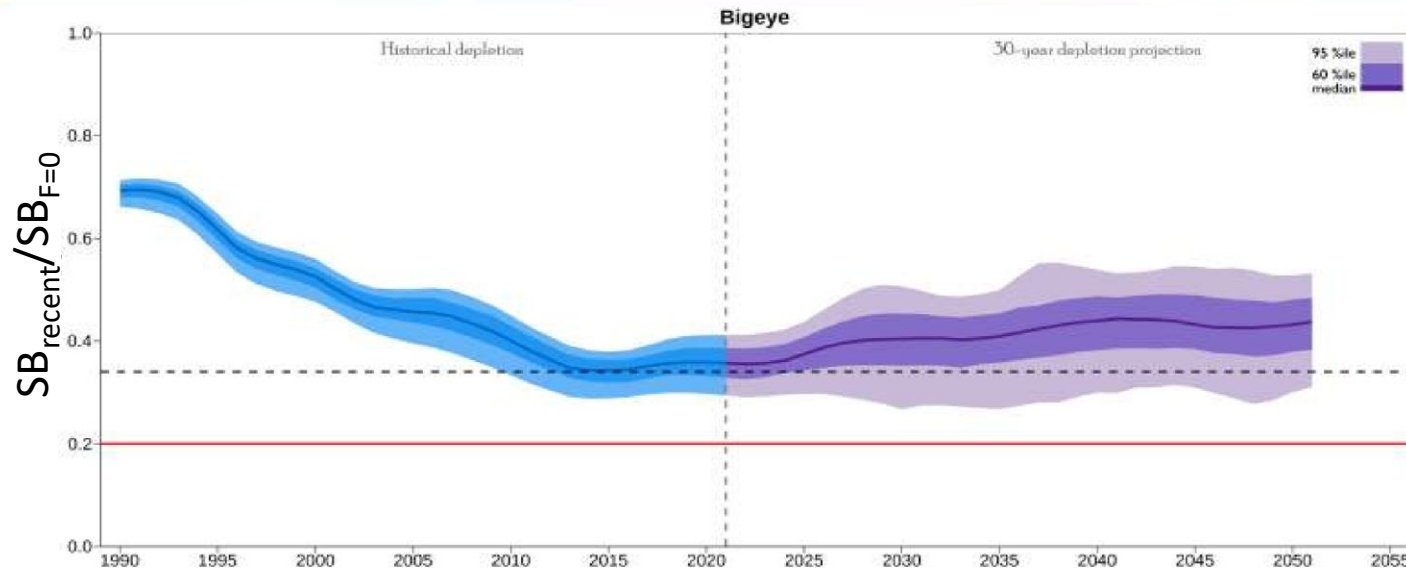
Species	SB _{recent} /SB _{F=0} median	10-90 %iles	F _{recent} /F _{MSY} median	10-90 %iles	“Recent” Probability breaching LRP	“Future” Probability breaching LRP <i>2019-2021 fishing</i>
Yellowfin	0.47	0.42-0.52	0.50	0.41-0.62	0%	0%

- Not overfished
- Not undergoing overfishing

CMM 2023-01 objective (2012-2015) calibrated on 2023 assessment = 0.44

Bigeye

- Last assessed 2023, next assessment 2026



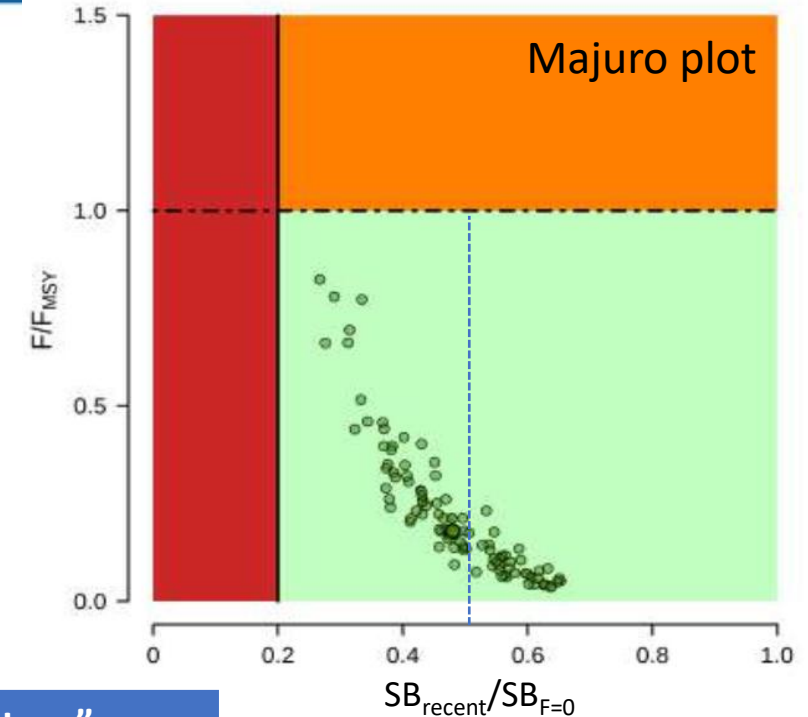
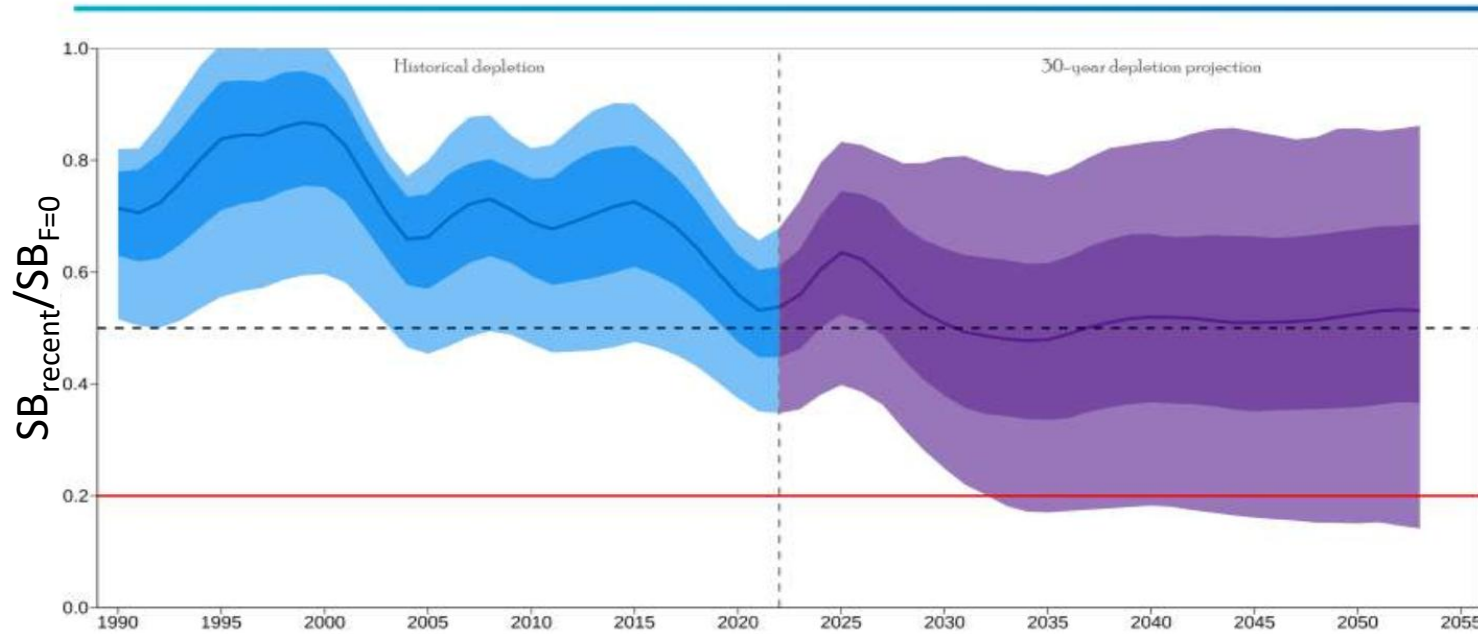
Species	$SB_{recent}/SB_{F=0}$ median	10-90 %iles	F_{recent}/F_{MSY} median	10-90 %iles	“Recent” Probability breaching LRP	“Future” Probability breaching LRP <i>2019-2021 fishing</i>
Bigeye	0.35	0.30-0.40	0.59	0.46-0.74	0%	0%

- Not overfished
- Not undergoing overfishing

CMM 2023-01 objective (2012-2015) calibrated on 2023 assessment = 0.34

South Pacific albacore

- Last assessed 2024, next assessment 2027

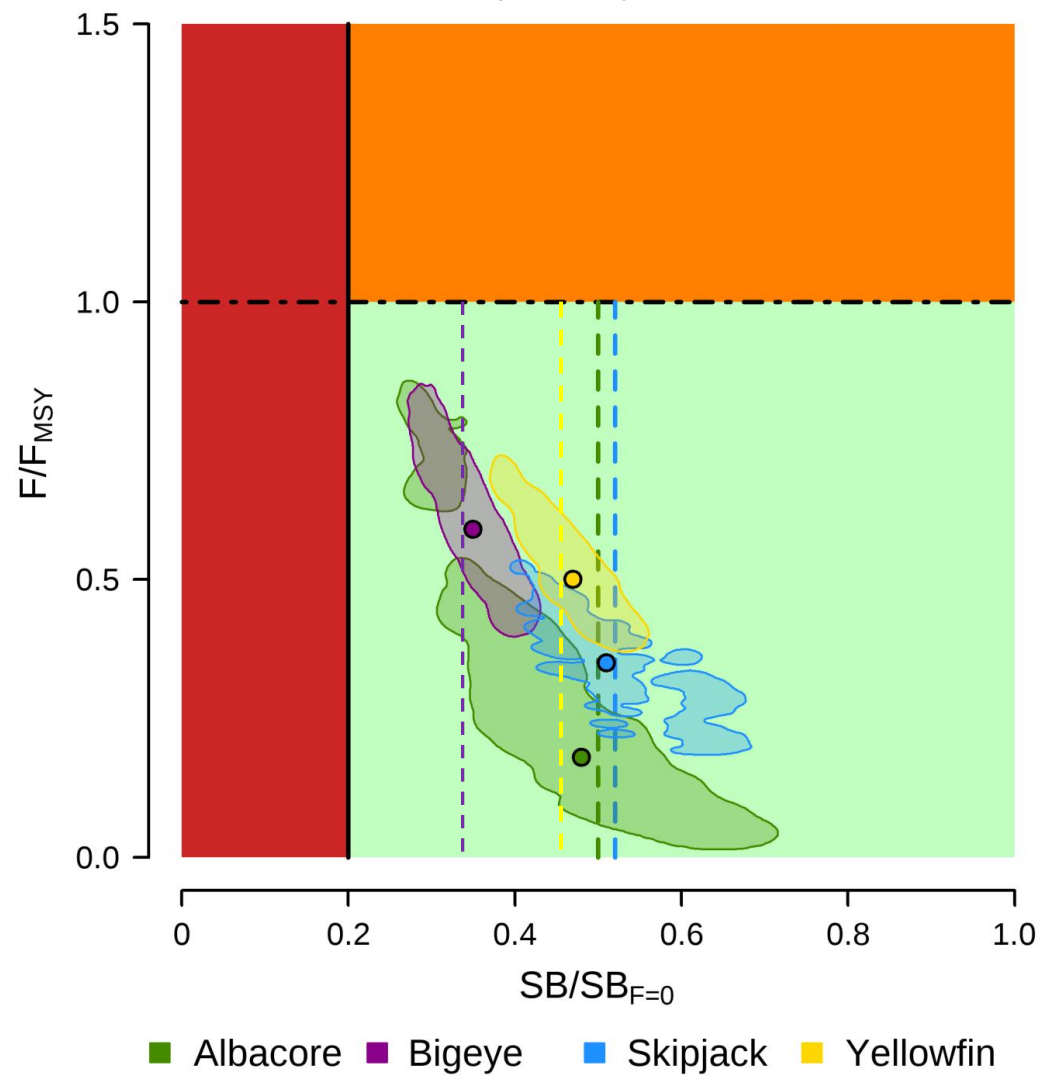


Species	$SB_{\text{recent}}/SB_{F=0}$ median	10-90 %iles	$F_{\text{recent}}/F_{MSY}$ median	10-90 %iles	“Recent” Probability breaching LRP	“Future” Probability breaching LRP 2020-2022 fishing
SP albacore	0.48	0.36-0.62	0.18	0.06-0.44	0%	14%

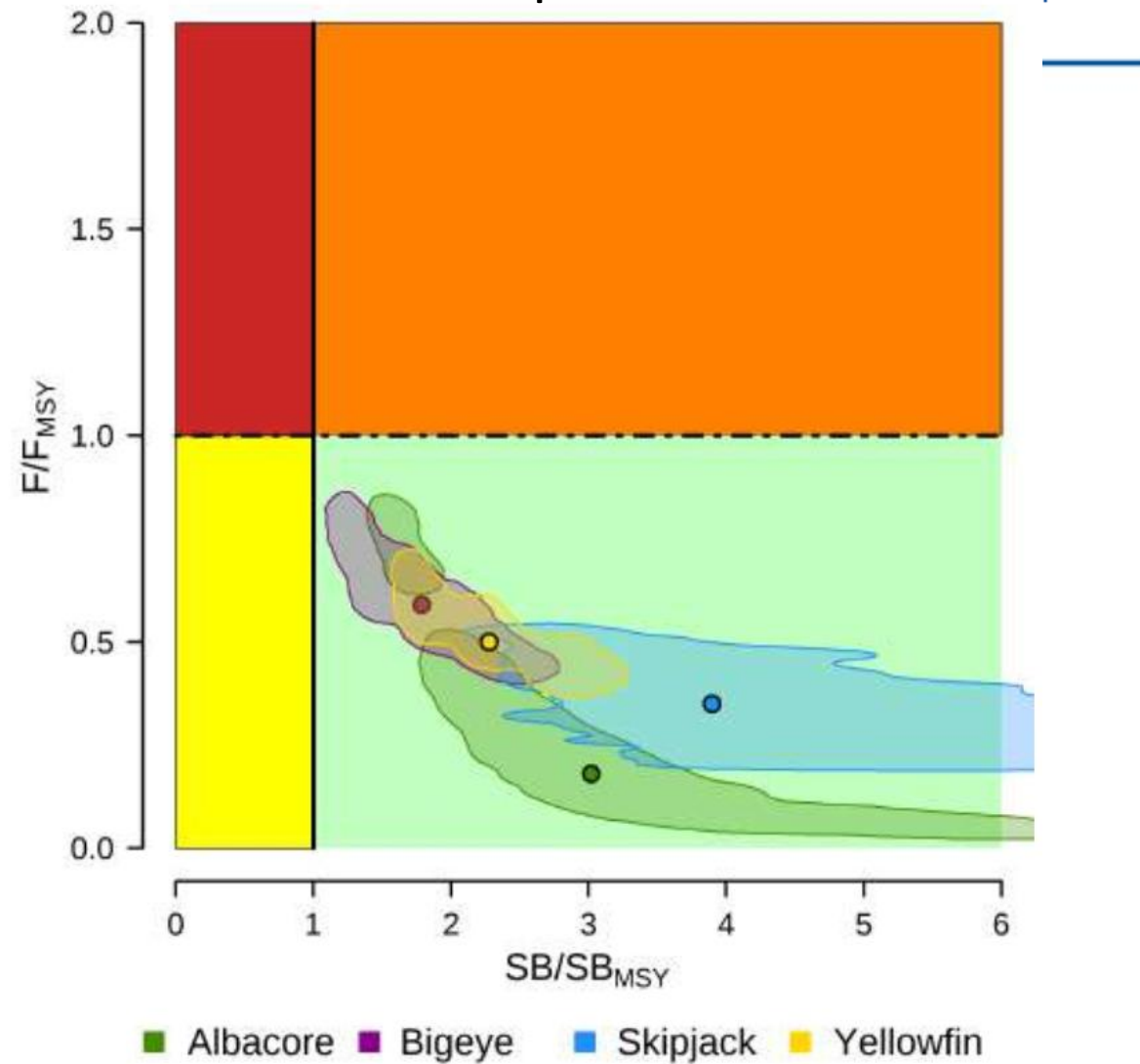
- Not overfished
- Not undergoing overfishing

Interim TRP calibrated on 2024 assessment = 0.50

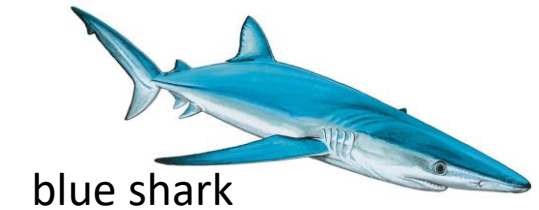
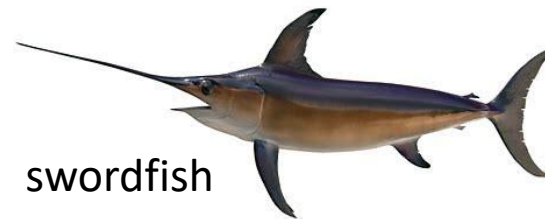
Majuro plot



Kobe plot



Billfish and sharks stock status



Billfish (MSY default reference points)

SPC assessments

Southwest Pacific striped marlin

- Assessed 2024, revision in 2025 (last data year 2022).
2024 assessment not accepted for management advice, more technical work conducted in 2025 – Stock Synthesis and Bayesian Surplus production models (NOAA Hawai'i collaboration)
- Assessment has high uncertainty.
- Management advice per 2025 assessments: *likely overfished unlikely to be undergoing overfishing*

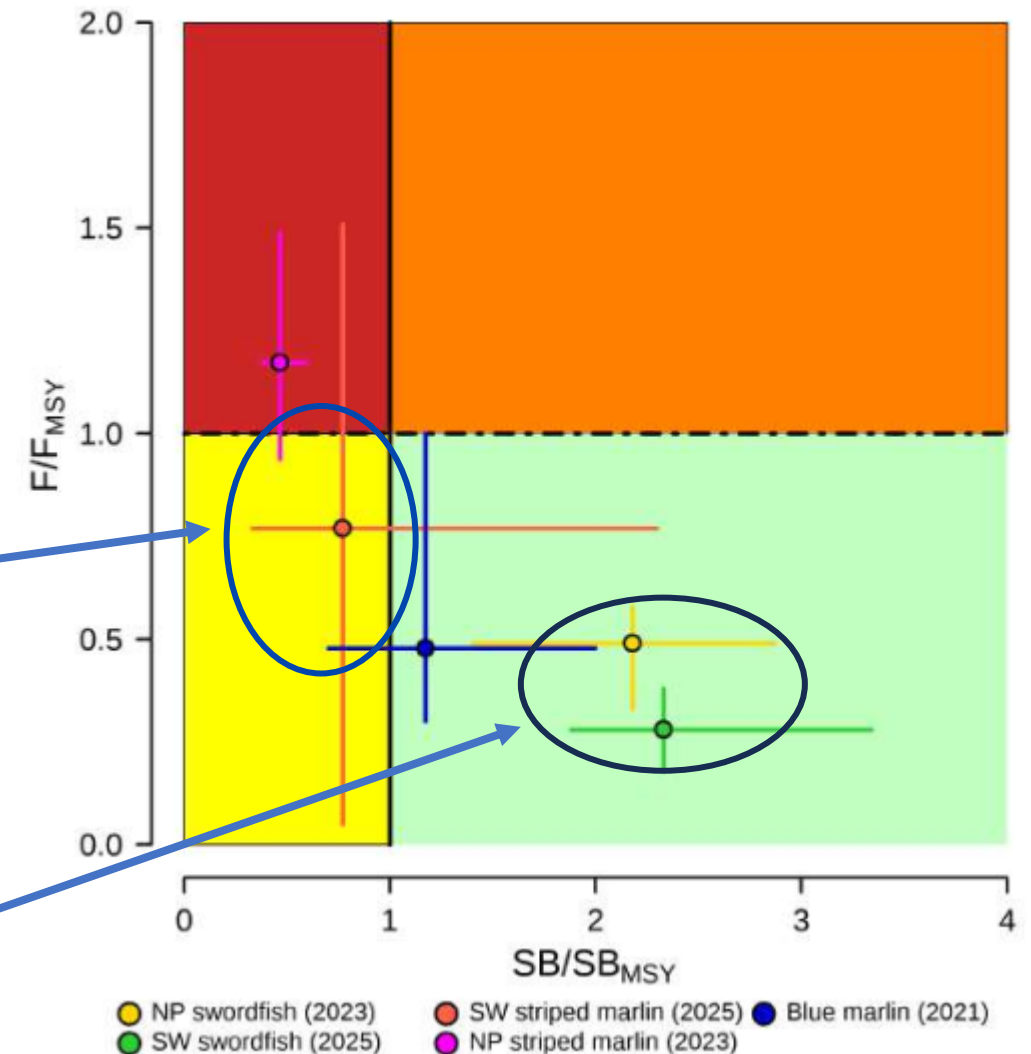


Southwest Pacific swordfish

- Assessed 2025 (last data year 2023), switched from MFCL to Stock Synthesis
- Management advice: *not overfished not undergoing overfishing*



Kobe plot



Sharks (MSY default reference points)

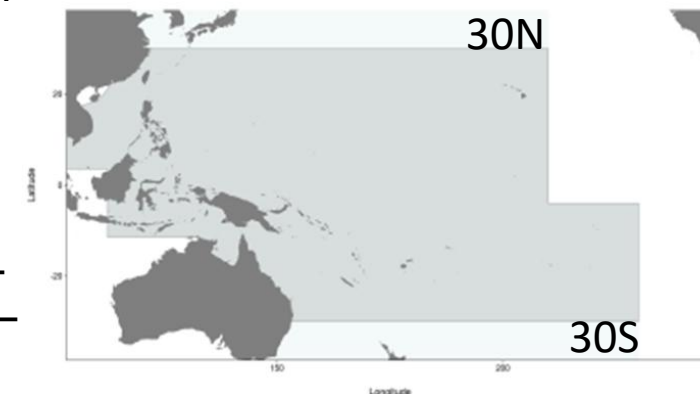
Oceanic whitetip assessment for the Western and Central Pacific conducted in 2025

- Third assessment of WCPO oceanic whitetip
- No adopted specific reference points for non-target shark species
- **Multi-model analysis:** Stock Synthesis (SS3) and dynamic surplus production models, due to conflict between CPUE and size data
- Both approaches indicate: stock **remains in a severely depleted state**, showing signs of recovery. SS3 model ensemble used for management advice.
- F below both F_{lim} and F_{crash} (i.e. the fishing mortality that would lead to extinction in the long-term), and the **probability of exceeding these limits was near zero**. F is as likely as not to be above F_{msy}
- High confidence that recent fishing mortality (F) is below levels that would preclude stock rebuilding.
- Recent biomass estimated to have shown a subtle increase from a low-point in 2013–14 near 4% of unfished biomass, to 6% of unfished biomass in recent years (2022–23). Median SB/SB_{msy} estimated at about 0.14.



“Critically Endangered” on IUCN Red List

**Overfished
status remains**



Sharks (MSY default reference points)

SPC* assessments

Southwest Pacific blue shark

- Assessed 2021-2022
- Management advice : *unlikely overfished, unlikely undergoing overfishing*
- Next assessment 2026-2027

Southwest Pacific mako shark

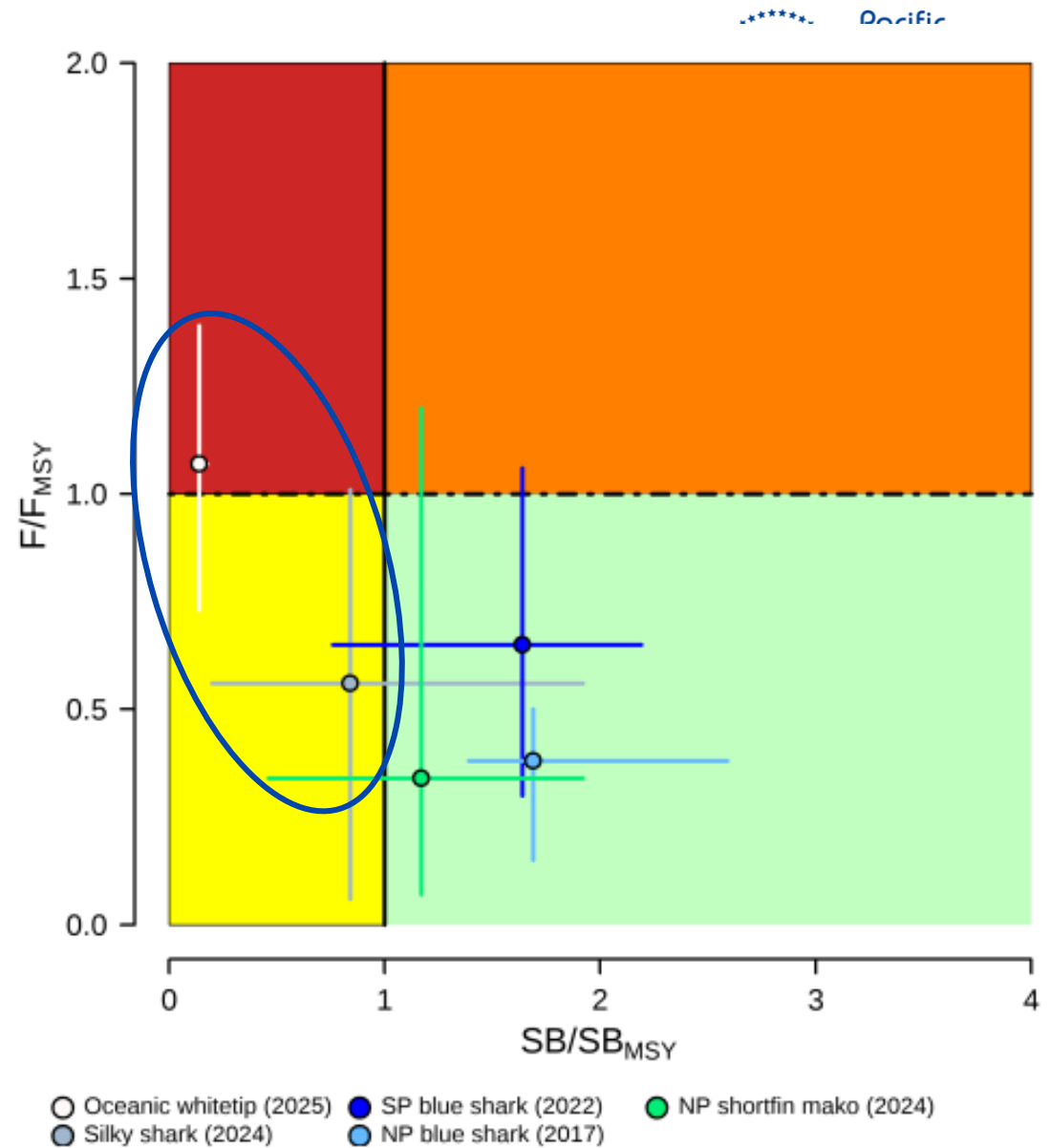
- Assessed 2021 (first assessment)
- Management advice: *none, assessment not used*
- Next assessment 2026-2027

WCPO silky shark

- Assessed 2023-2024
- Management advice: *unlikely to be undergoing overfishing, stock biomass level uncertain*
- Next assessment 2028-2029

WCPO oceanic whitetip

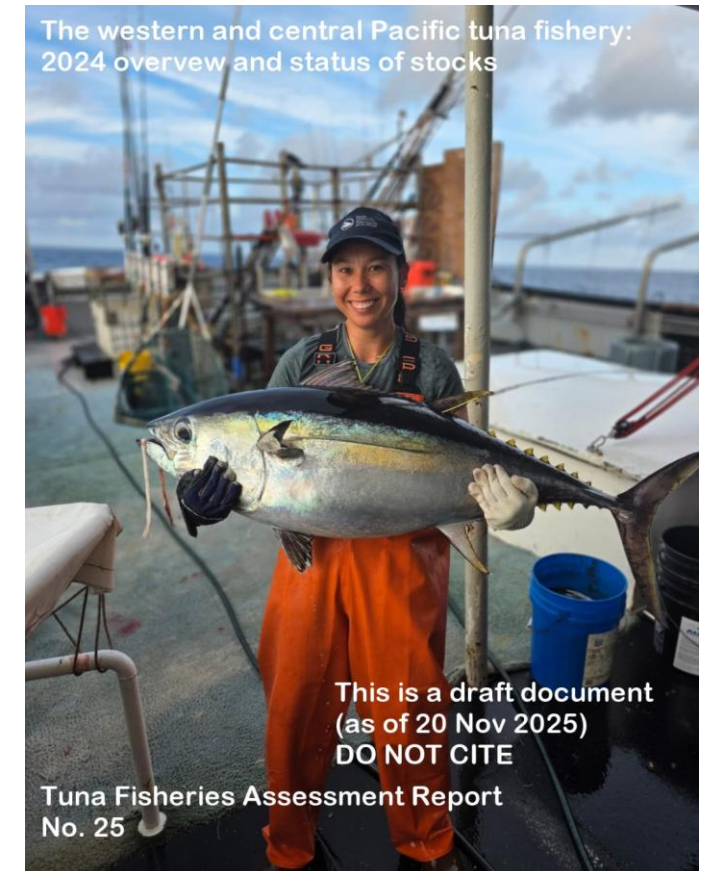
- Assessed 2025
- Management advice: *overfished, fishing mortality below 'critical' levels, but F around F_{msy}*
- Next assessment ??



* All recent assessments done by Dragonfly Data Science in collaboration with SPC

Summary

- 2024 record total tuna catch, record skipjack catch
- Minor changes in yellowfin and bigeye catches, albacore higher than 2023
- Purse seine activity contracted to the west, more sets due to more free school sets in 2024 compared to 2023, slightly lower purse seine bigeye catch
- Recent effort stability
- **New assessments for skipjack, SW Pacific swordfish, SW Pacific striped marlin** (following 2024), and oceanic whitetip shark
- **Tuna stock status:** in the green and close to TRPs for all four target species
- **SW Pacific striped marlin** – still overfished (biomass has high uncertainty), unlikely undergoing overfishing
- **SW Swordfish** – not overfished, not undergoing overfishing
- **Oceanic whitetip shark** – severely depleted, but reduced fishing mortality, some signs of recovery...



TFAR No. 25

Draft available:

[WCPFC22-2025-IP16](#)

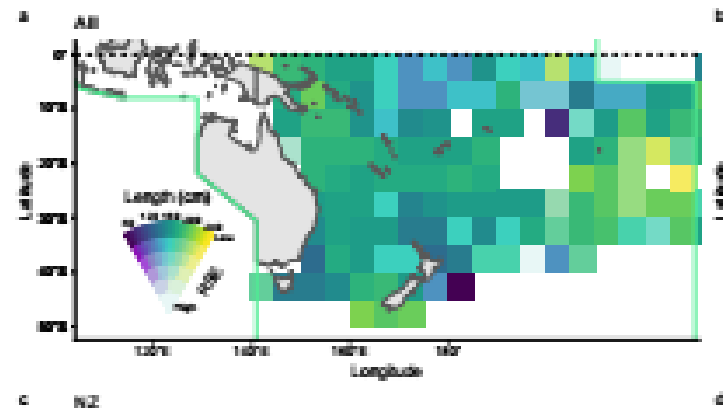
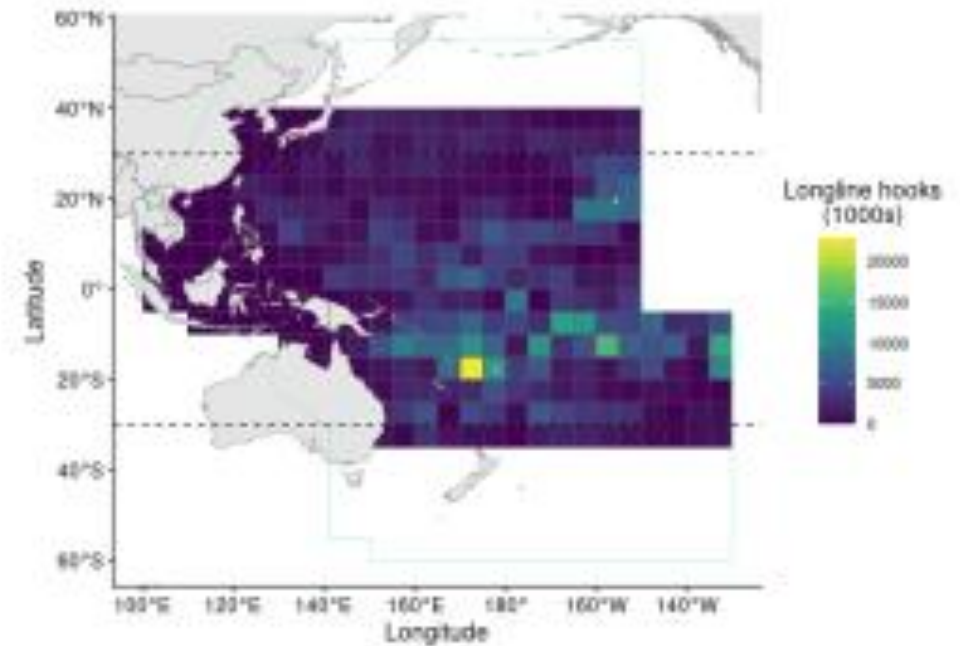
Shark assessment regions

Oceanic whitetip shark



Figure 20: Western and Central Pacific Fisheries Commission convention area (light grey), including the stock assessment area for oceanic whitetip shark (dark grey), bounded by the 30°N and 30°S parallels.

Silky shark



SW Blue shark and mako

