



Overview of fisheries and stock status of tuna, billfish and sharks in the North Pacific Ocean

ISC

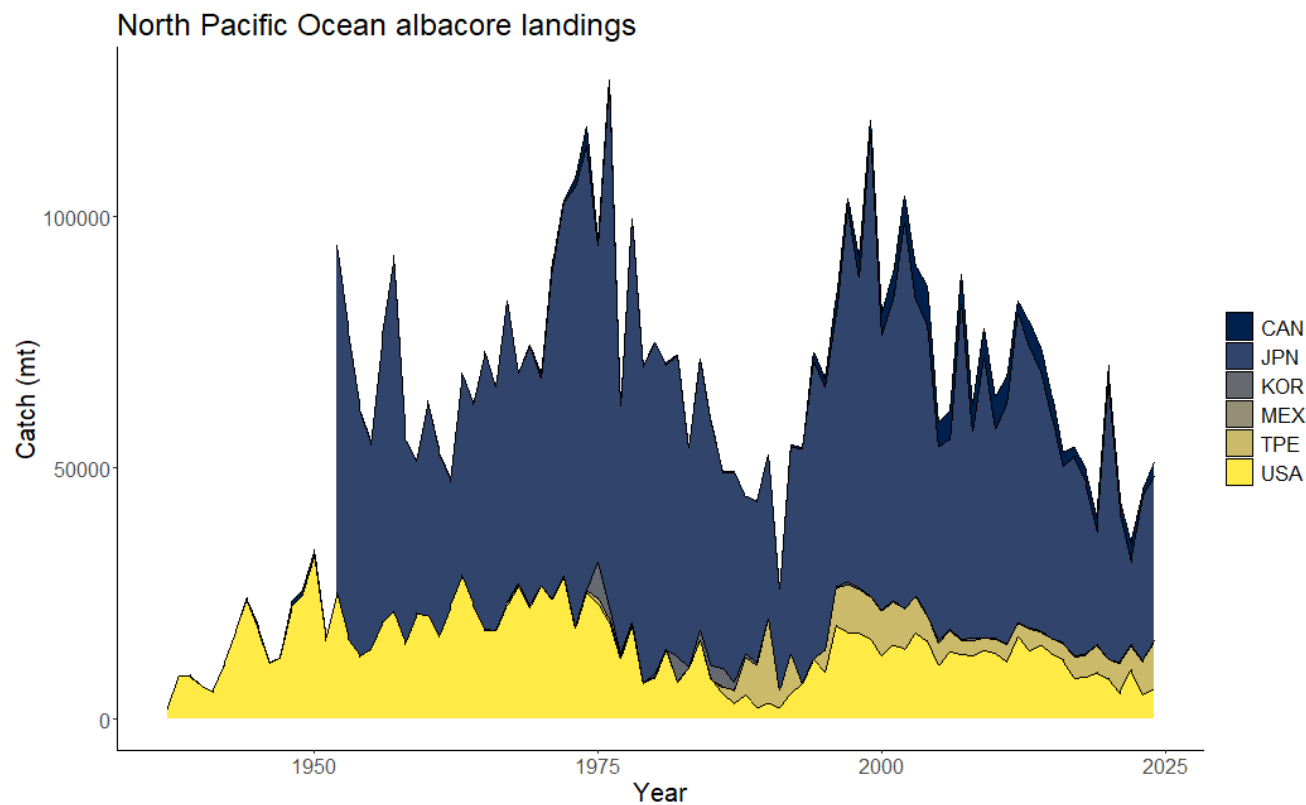
21st Regular Session of the WCPFC Scientific Committee
Nuku'alofa, Tonga
August 13-21, 2025

Landings summaries

https://isc.fra.go.jp/fisheries_statistics/index.html

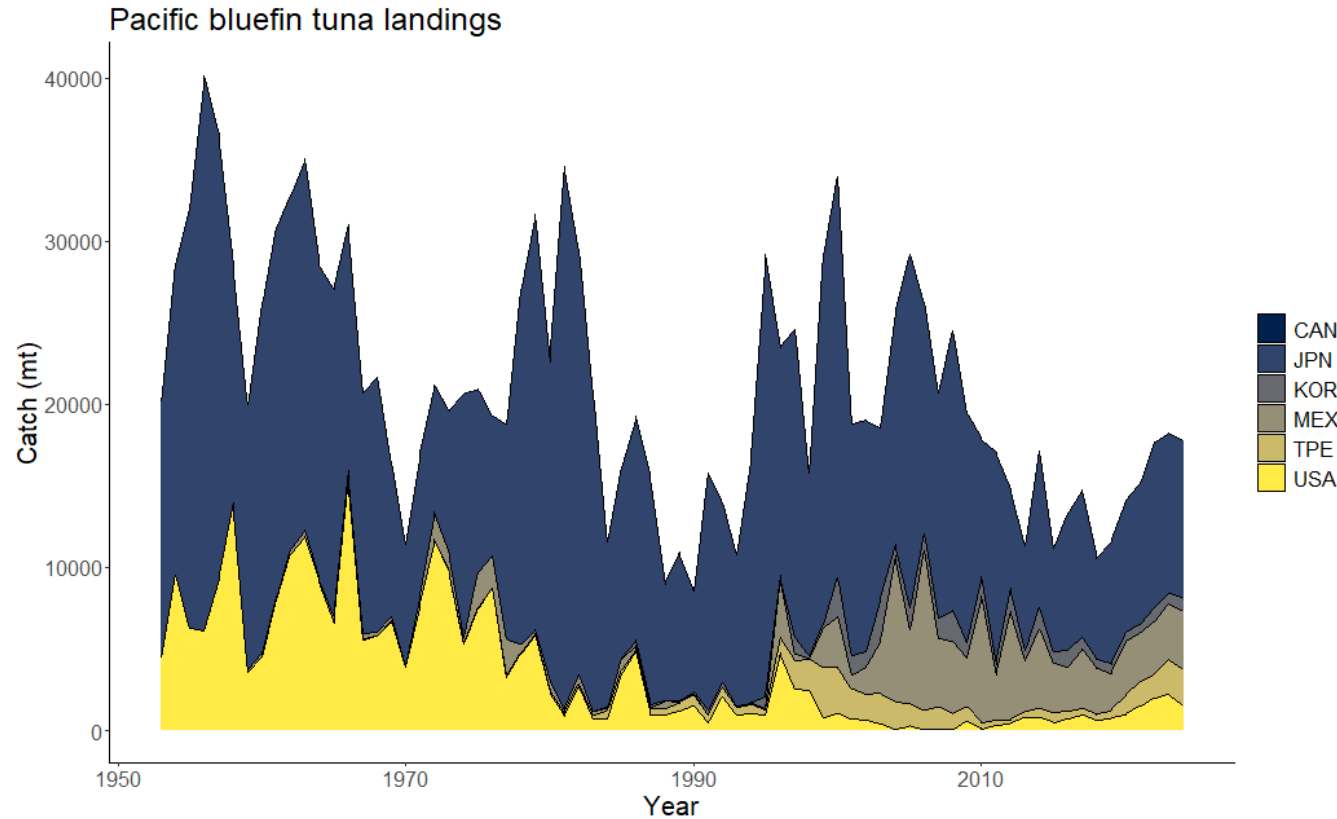


Landings summaries

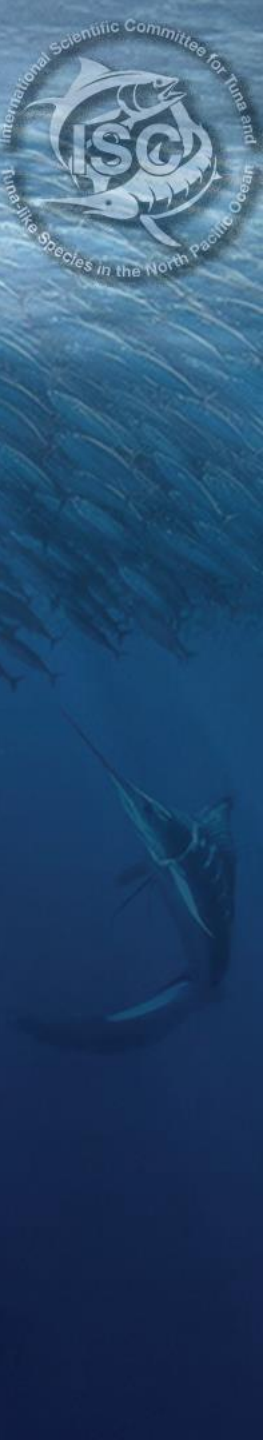


- 51,052 mt in 2024
- Landings were higher in 2024 by 12.8% over the previous year.
- Landings in 2024 were 0.8% above the 10-year average

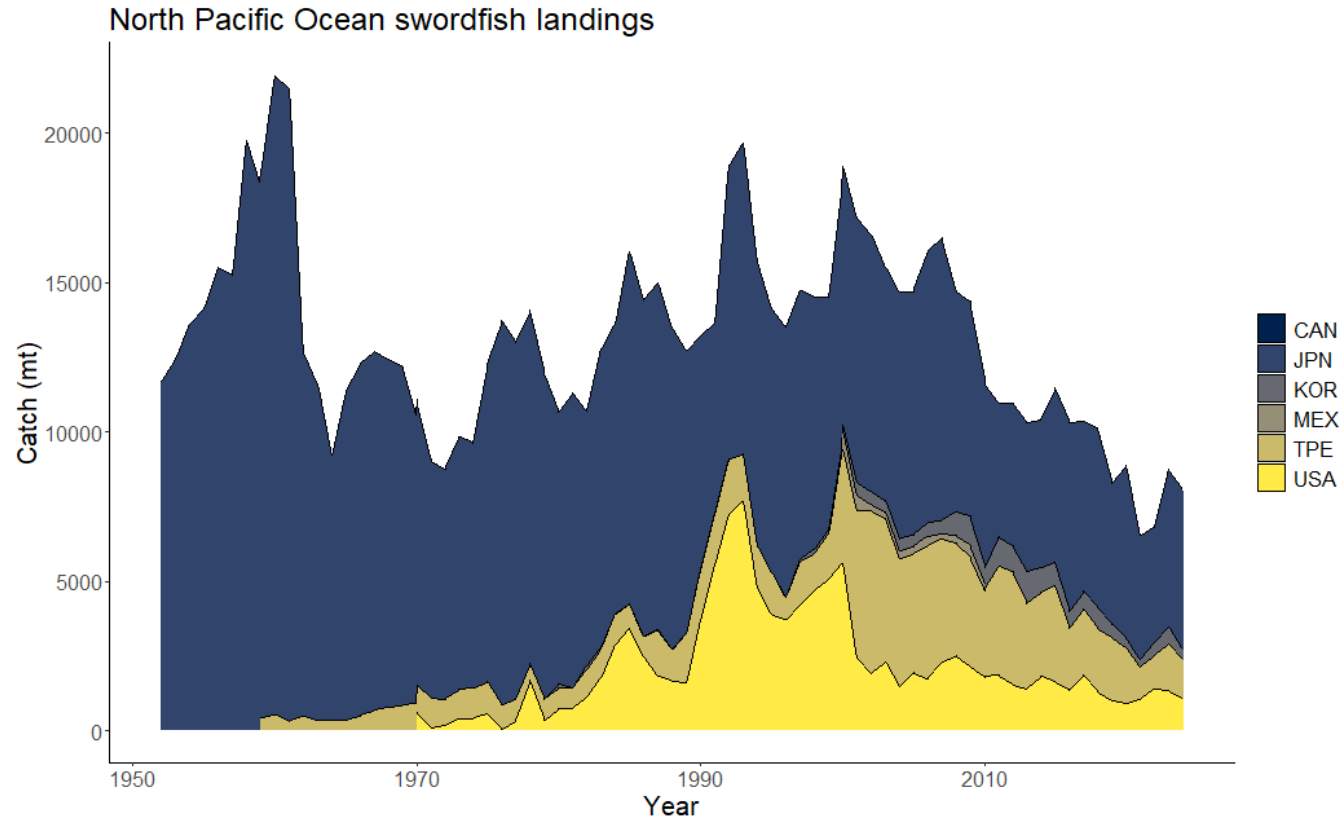
Landings summaries



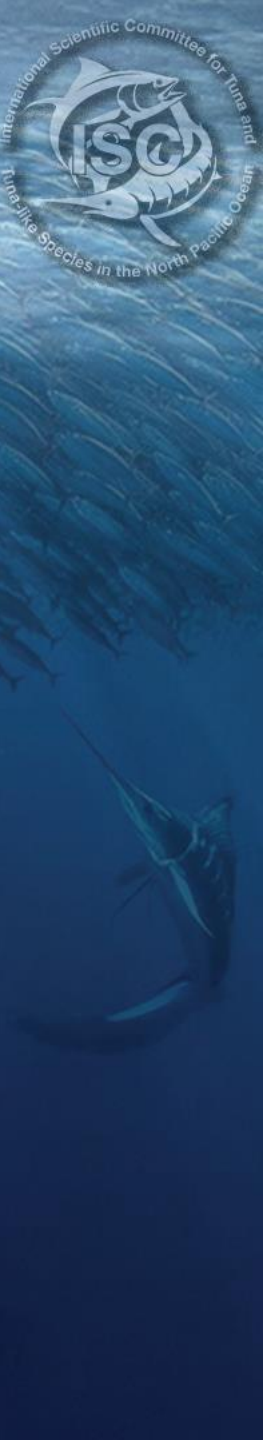
- 17,843 mt in 2024
- Landings were higher in 2024 by -2.1% over the previous year.
- Landings in 2024 were 23.7% above the 10-year average



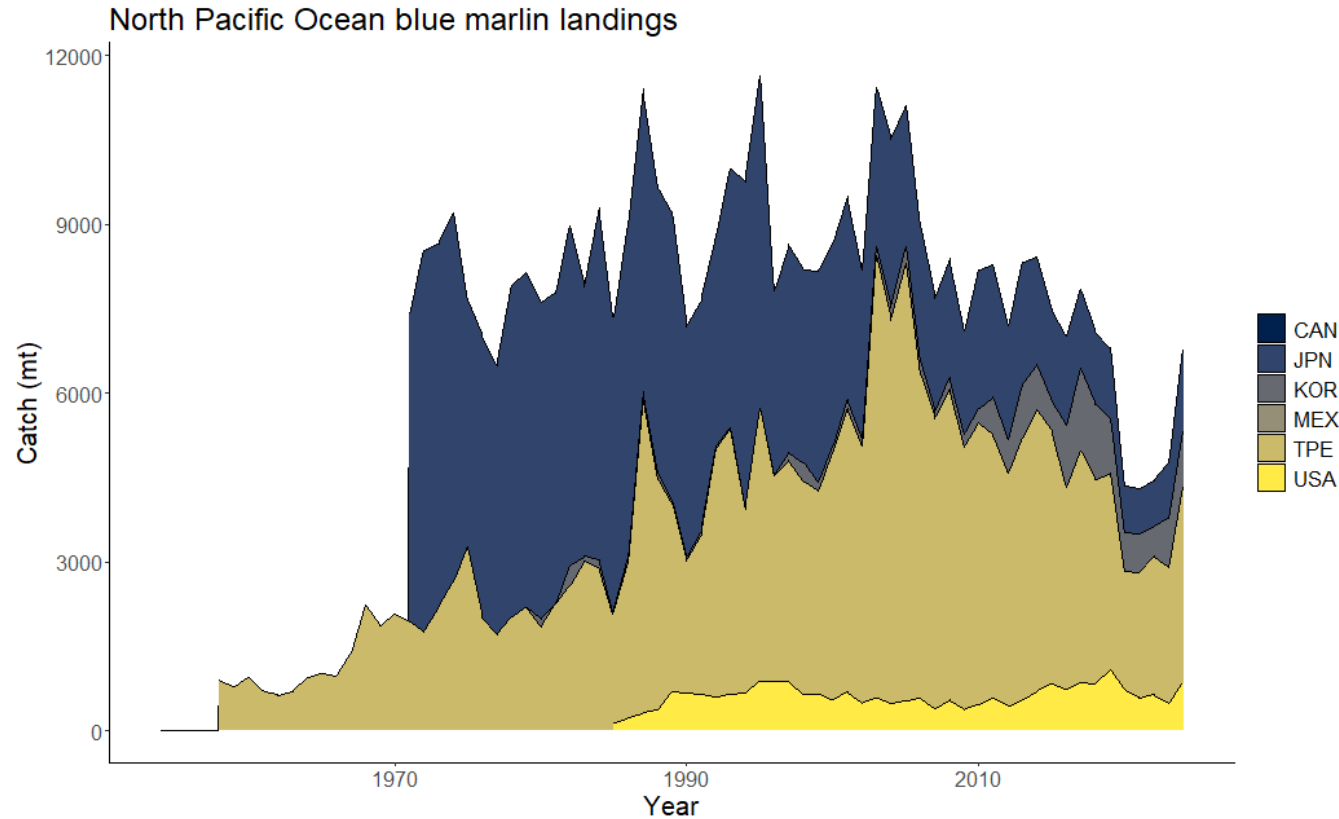
Landings summaries



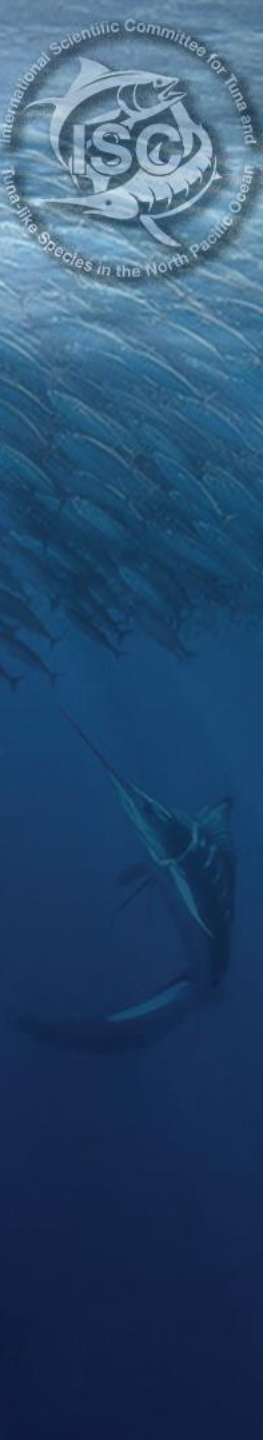
- 8,073 mt in 2024
- Landings were higher in 2024 by -7.5% over the previous year.
- Landings in 2024 were -10.9% above the 10-year average



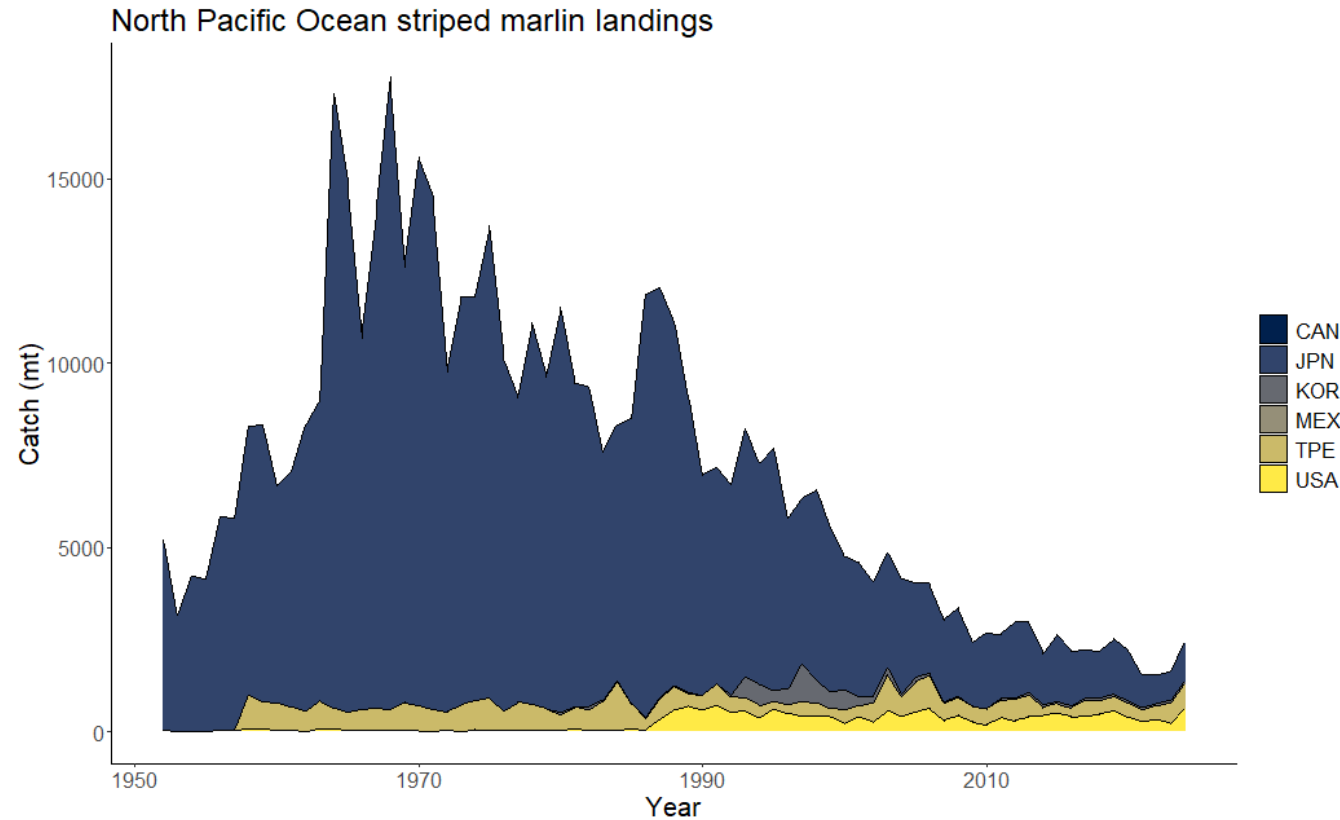
Landings summaries



- 6,756 mt in 2024
- Landings were higher in 2024 by 42.0% over the previous year.
- Landings in 2024 were 10.0% above the 10-year average

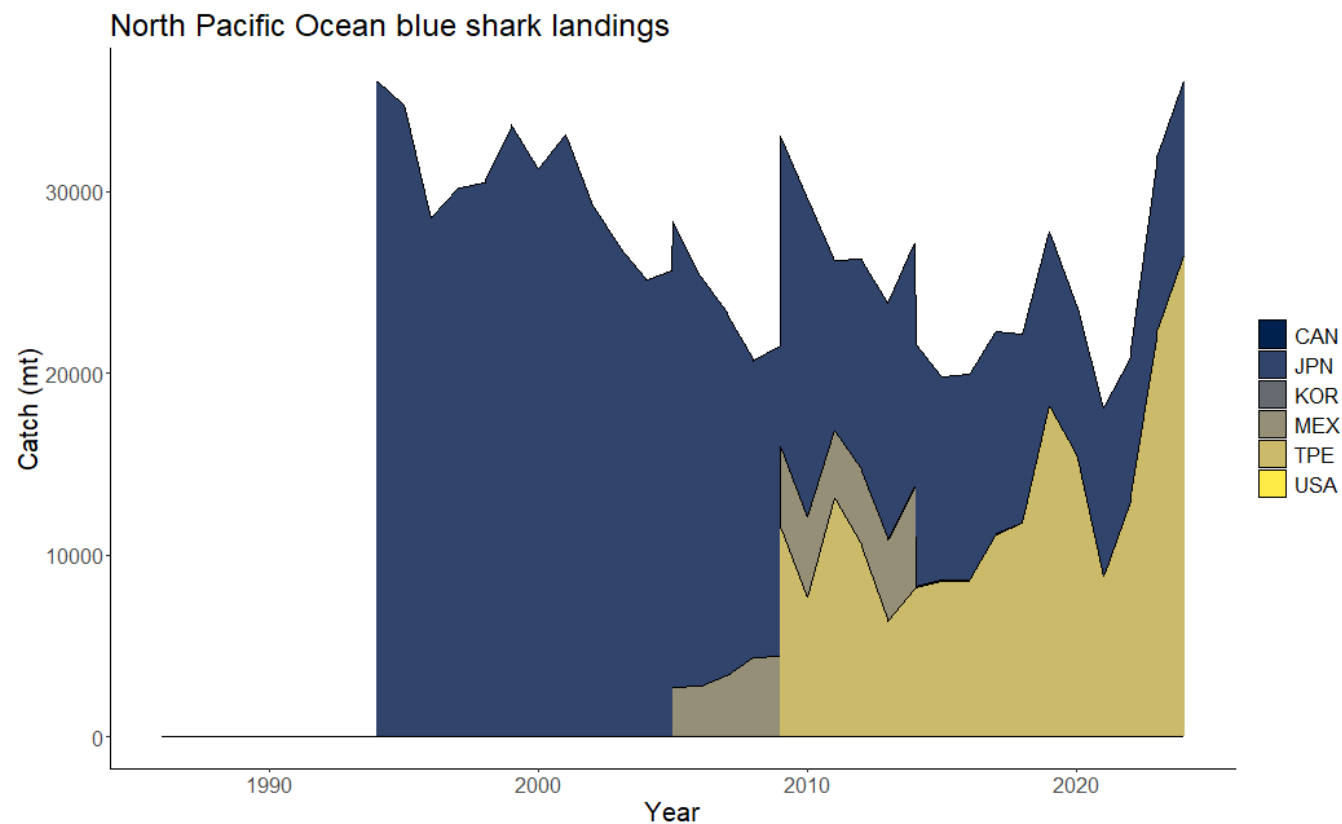


Landings summaries



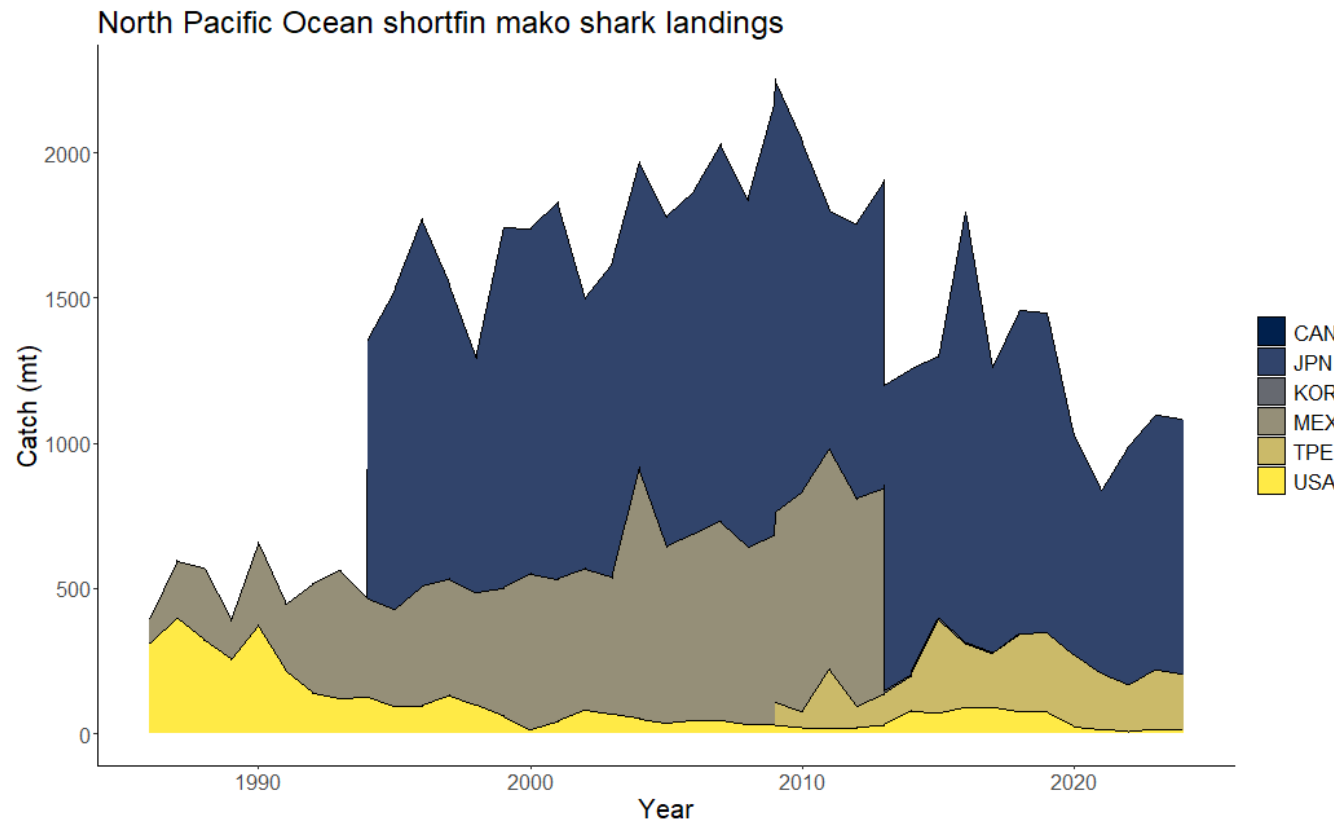
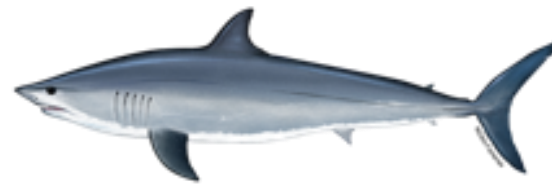
- 2433 mt in 2024
- Landings were higher in 2024 by 48.7% over the previous year.
- Landings in 2024 were 13.4% above the 10-year average

Landings summaries










- 36,039 mt in 2024
- Landings were higher in 2024 by 13.0% over the previous year.
- Landings in 2024 were 32.6% above the 10-year average

Landings summaries



- 1,082 mt in 2024
- Landings were higher in 2024 by -1.3% over the previous year.
- Landings in 2024 were -13.5% above the 10-year average

Landings summaries

	Species	2024 (mt)	% Δ 2024	% Δ 10-year
	Albacore tuna (<i>Thunnus alalunga</i>)	51,052	12.8%	0.8%
	Pacific bluefin tuna (<i>Thunnus orientalis</i>)	17,843	-2.1%	19.1%
	Swordfish (<i>Xiphias gladius</i>)	8,073	-7.5%	-10.9%
	Blue marlin (<i>Makaira mazara</i>)	6,756	42.0%	10.0%
	Striped marlin (<i>Kajikia audax</i>)	2,433	48.7%	13.4%
	Blue shark (<i>Prionace glauca</i>)	36,039	13.0%	32.6%
	Shortfin Mako Shark (<i>Isurus oxyrinchus</i>)	1,082	-1.3%	-13.5

Stock status

<https://isc.fra.go.jp/recommendation/index.html>



NPO
Albacore tuna
(*Thunnus alalunga*)
2023 (2026)

Species

Stock Status and Conservation Information

The stock is likely not overfished relative to the threshold (30%SSB_{current}, F=0) and limit (14%SSB_{current}, F=0) reference points adopted by the WCPFC and IATTC. The stock is likely not experiencing overfishing relative to the adopted target reference point (F45%SPR). Current fishing is not anticipated to cause changes in status.



NPO
Pacific bluefin tuna
(*Thunnus orientalis*)
2024 (2027)

No adopted reference points. The PBF stock is recovering from the historically low biomass in 2010 and has exceeded the second rebuilding target (20%SSB_{F=0}). The risk of SSB falling below 7.7%SSB_{F=0} (interim LRP for tropical tunas in IATTC) at least once in 10 years is negligible.



Species

Stock Status and Conservation Information



NPO
Swordfish
(*Xiphias gladius*)
2023 (2028)

Limit reference point for $F=F_{MSY}$ established. Relative to MSY-based reference points, overfishing is very likely not occurring (>99% probability). 2019-2021 average F is about 49% below F_{MSY} . The NPO SWO stock is very likely not overfished (>99% probability). 2021 SSB of 35,778 mt is 220% of SSB_{MSY} .



PO
Blue marlin
(*Makaira mazara*)
2021 (2026)

No adopted reference points. Stock is likely not overfished (81%) and overfishing is likely not occurring (>90%) relative to MSY-based RPs. There is a low probability that stock status will change by 2029 under the harvest scenarios tested.



WCNPO
Striped marlin
(*Kajikia audax*)
2023 (2027)

Relative to dynamic 20%SSBF=0 based reference points, the WCNPO MLS stock is very likely to be overfished (>99% probability) and is likely to be subject to overfishing (>66% probability). Reducing annual catch below 2,400 t is expected to promote recovery of the stock by 2040 or sooner, depending on the catch reduction.



NPO
Blue shark
(*Prionace glauca*)
2022 (2027)

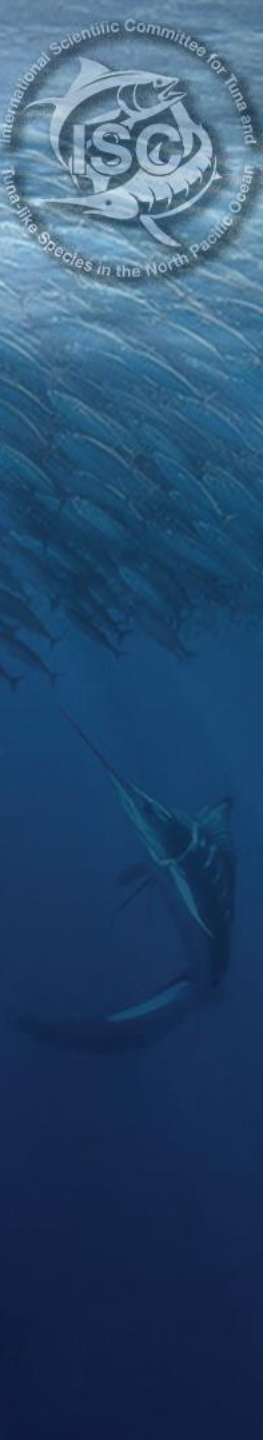
Stock Status and Conservation Information

No adopted reference points. Stock SSB is 1.17 SSB_{MSY} (63.5%). Recent annual F is below F_{MSY} (91.9%). The stock is expected to remain above SSB_{MSY} for the next 10 years under F_{current} (2017-2019), F_{current}+20%, and F_{current}-20% projection scenarios.



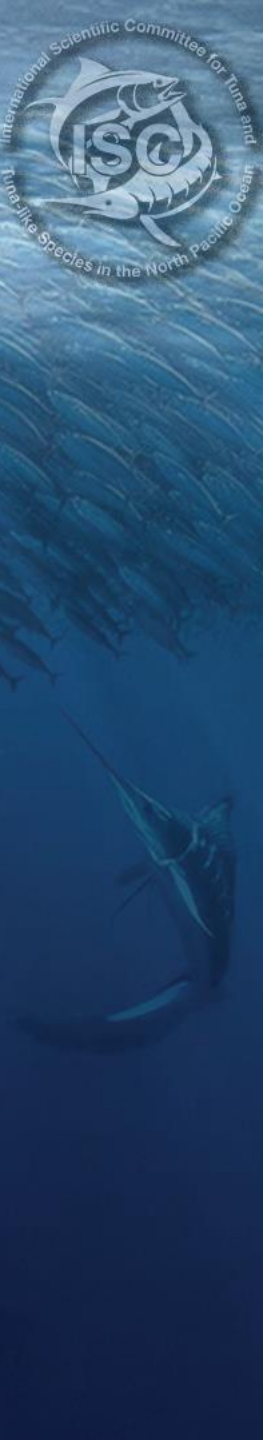
NPO
Shortfin mako shark
(*Isurus oxyrinchus*)
2024 (2029)

No adopted reference points. Recent median depletion (2019-2022) is estimated from the model ensemble to be 0.60 (95% CI = 0.23-1.00). The recent median depletion is 1.17 times depletion at MSY (95% CI = 0.46-1.92) and the stock is likely (66% probability) not in an overfished condition relative to MSY-based reference points. Recent U (U₍₂₀₁₈₋₂₀₂₁₎) is estimated from the model ensemble to be 0.018 (95% CI = 0.004-0.07). U₍₂₀₁₈₋₂₀₂₁₎ is 0.34 times (95% CI = 0.07-1.20) U_{MSY}.



WCPFC Northern Committee ISC Tasks

- ISC was requested to conduct further analyses building on work related WCPFC Harvest Strategy 2023-01 and IATTC Resolution C-23-02. The ISC ALB Working Group explored the relationships between fleet-specific spawning potential ratios (SPRs) and effort for the portions of the Japanese longline (JPLL) fishery that targets NPO ALB.
- The results showed that catch and effort metrics (number of days, vessels and hooks) were negatively correlated and showed a relationship with the fleet-specific SPRs. This suggests that these two NPO ALB-targeting JPLL fleets may be able to be managed using effort or catch controls.
- Additional details on this analysis can be found in [ISC/25/ALBWG 01/09](#)
- The ISC ALB Working Group also issues an erratum to the 2023 NPO ALB stock assessment report for Table ES1 and Table 5.5. The corrected values did not result in any qualitative change in the reported stock status of NPO ALB.



WCPFC Northern Committee ISC Tasks

- The ISC was tasked by the Joint Working Group (JWG) of WCPFC and IATTC to complete the MSE of PBF in 2025 and the PBFWG completed the task, which will be reported in detail under the later agenda (5.2 Pacific bluefin tuna management strategy evaluation)
- The PBFWG also addressed tasks requested by the JWG, 1) additional projections to reflect the newly adopted management measures in 2024. The detailed results are contained in [ISC/24/PBFWG-2/08](#) in November-December 2024 WG meeting. 2) calculate conversion factors between WPO small to WPO large and WPO large to EPO. For details, see [ISC/25/PBFWG-1/02](#) of 2025 April PBFWG.
- The BILLWG also provided updated projection runs for the WCNPO MLS rebuilding analysis to reflect the catch distribution by country from the CMM 2024-06, which was adopted at the WCPFC Commission meeting in December, 2024. The results will be reported in detail under a later agenda item (5.4 North Pacific striped marlin projections)



ISC future work

- ALBWG to conduct an assessment of NPO-ALB to be presented at ISC 26
- BILLWG will conduct an assessment of BUM to be presented at ISC 26
- A review of the PBFWG 2024 PBF stock assessment will be conducted March 20-27, 2026 Sapporo, Japan. TORs are being finalized and reviewer selection will commence once TORs are finalized.
- ISC will continue to develop Open Science workflows for assessments.
- ISC will develop TORs for a review of ISC function that needs to be completed in the near future.
- Continue to progress International Billfish Biological Sampling (IBBS) Program
- SHARKWG to develop a conceptual model for blue shark



ISC Review Process

- ISC assessment review process (adopted ISC 23 [link](#)) is based on the WCPFC SC12-adopted peer review protocol.
 - Working group develops TORs which are reviewed and approved by ISC members.
 - ISC members can recommend up to 2 potential reviewers, this list is reduced to a short list by the ISC Chair, Vice-Chair, and WG heads. Members then rank the short list and the top three are contacted. Three independent experts conduct the review two of which must not be involved in ISC assessments.
 - expected outcome: peer-reviewed report(s) with recommendations to improve future assessments.
 - The results of the review are presented at the following ISC plenary and the working group responds to the recommendation at a subsequent ISC plenary.
- In 2024, a review ([link](#)) of the 2023 WCNPO-MLS was and the Billfish WG responded at ISC 25 (Appendix 4 [ISC/25/ANNEX/06](#)).



ISC future work

Species	Region	2025	2026	2027	2028	2029	2030	2031
Albacore Tuna (<i>Thunnus alalunga</i>) ALB	NPO		B			B		
Swordfish (<i>Xiphias gladius</i>) SWO	NPO				B			
Striped marlin (<i>Kajikia audax</i>) MLS	WCNPO			B				
Blue marlin (<i>Makaira nigricans</i>) MLS	PO		B					B
Pacific bluefin tuna (<i>Thunnus orientalis</i>) PBF	NPO			U/B			U/B	
Blue shark (<i>Prionace glauca</i>) BSH	NPO	I		B				
Shortfin mako shark (<i>Isurus oxyrinchus</i>) SMA	NPO					B		

B – benchmark, U – update, I – indicator



ISC 25 was hosted by the Republic of Korea June 17-20 in Busan, Republic of Korea. The ISC is very grateful to the Republic of Korea and the National Institute of Fisheries Science for being such gracious hosts.



The next Plenary meeting will be hosted by Chinese Taipei and is tentatively planned for June 22-29, 2026, at a location and venue to be determined in Chinese Taipei.