



REVIEW OF THE STATISTICAL DATA AVAILABLE FOR YELLOWFIN TUNA (1950-2022)

26TH IOTC WORKING PARTY ON TROPICAL TUNAS - 12-14 JUNE 2024

IOTC SECRETARIAT







Purpose

To provide participants at the 26th Session of the data preparatory meeting of the IOTC Working Party on Tropical Tunas (<u>WPTT26</u>) with a review of the status of the information of yellowfin tuna (*Thunnus albacares*) for the years 1950-2022 available to the IOTC Secretariat as of June 2024, with a focus on the year 2022.

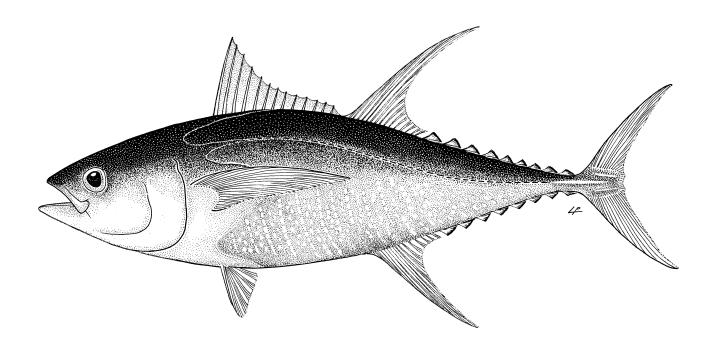






FISHERIES OVERVIEW

Statistical year 2022 16 IOTC species: ~2,020,000 t 3 tropical tunas: ~1,180,000 t (~59%) Yellowfin tuna: ~414,000 t (~20%) Stock overfished and subject to overfishing Rebuilding plan (Res. <u>18/01</u>, <u>19/01</u>, <u>21/01</u>)







UPDATES SINCE THE WPTT25 (OCTOBER 2023)

Retained catches in 2022:

- India: +3,602 t late submission
- Tanzania: -3,344 t comprehensive review
- Pakistan: -706 t late submission
- Japan: +539 t improved logbook coverage
- EU, Italy: -275 t full review covering 2015-2022







UPDATES SINCE THE WPTT25 (OCTOBER 2023)

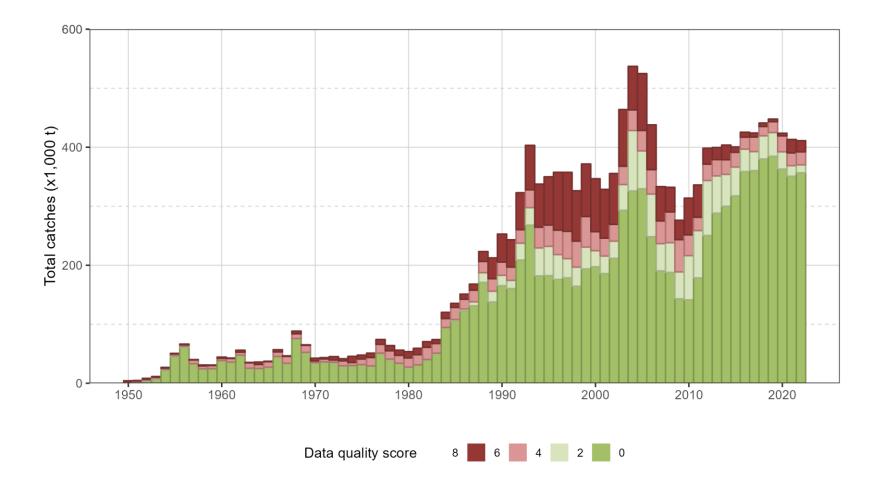
- Geo-referenced catches and efforts: Availability for EU, Italy (2015-2022) and some improvements for Korea (2022), Japan (2021-2022), and EU, Spain (2018)
- Geo-referenced size-frequencies: Improvements for Tanzania (2021), Korea (2022), and Sri Lanka (2022)







GOOD REPORTING QUALITY FOR YELLOWFIN TUNA

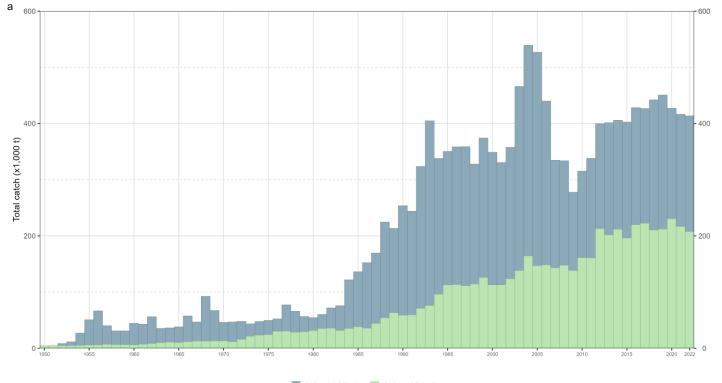








HALF THE CATCH FROM COASTAL FISHERIES IN 2022



Industrial fisheries 📃 Artisanal fisheries

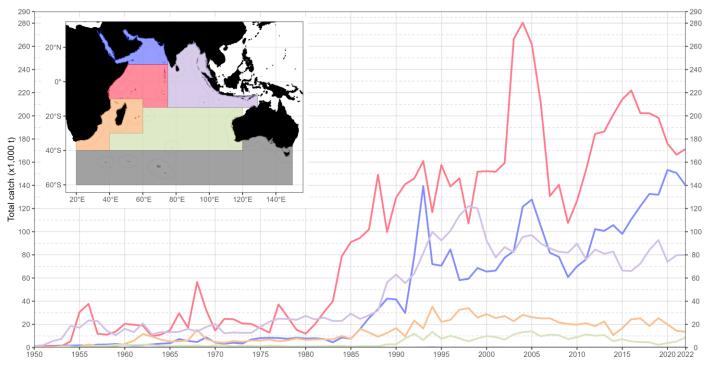
Annual time series of cumulative retained catches (t) of yellowfin tuna by fishery type, 1950-2022







MOST CATCHES FROM WESTERN INDIAN OCEAN



- R1a - Arabian sea - R1b - Western tropical - R2 - Mozambique - R3 - Southern - R4 - Eastern tropical - R0 - All other areas

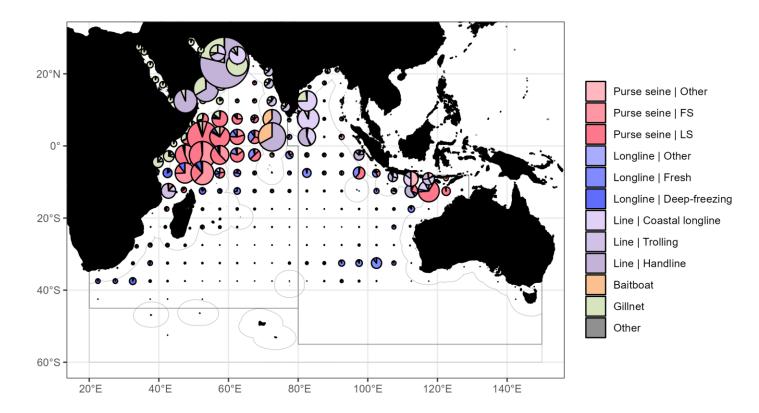
Annual time series of cumulative retained catches (t) of yellowfin tuna by stock assessment area, 1950-2022







MARKED SPATIAL SEGREGATION IN FISHERIES



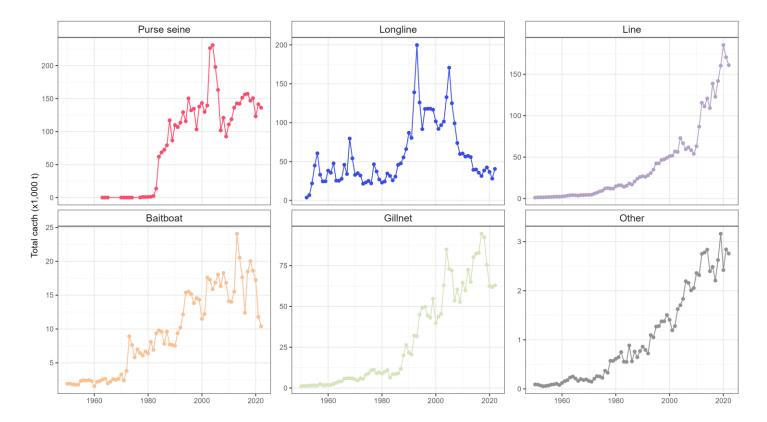
Distribution of the raised catches (t) of yellowfin tuna by fishery in 2022







DIVERGENT TRENDS BETWEEN FISHERY GROUP



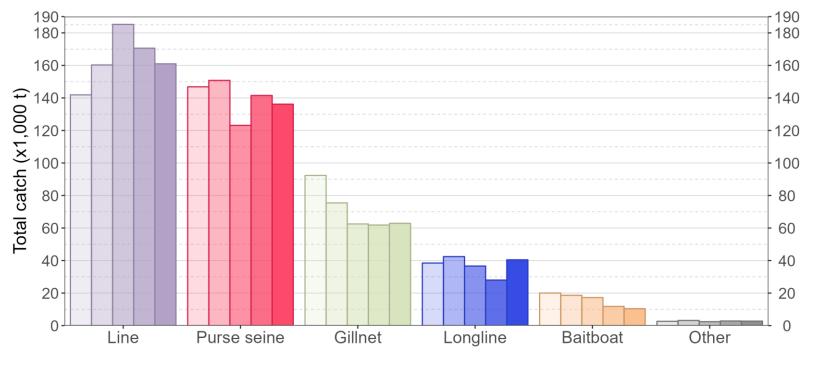
Annual time series of retained catches (t) of yellowfin tuna by fishery group, 1950-2022







8% DECREASE IN TOTAL CATCH SINCE 2019



Year 2018 2019 2020 2021 2022

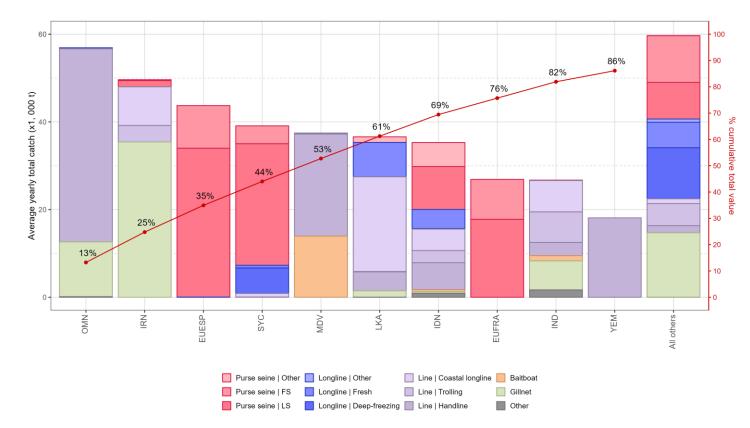
Recent annual catch trends (t) of yellowfin tuna by fishery group, 2018-2022







SIGNIFICANT CATCHES BY MULTIPLE COUNTRIES



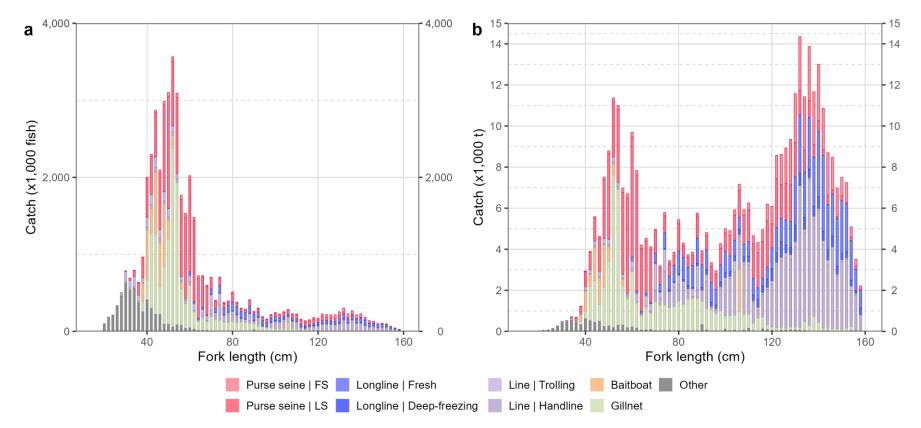
Mean annual catches (t) of yellowfin tuna by fleet and fishery, 2018-2022







SIMILAR SIZE CLASSES CAUGHT WITH DIFFERENT GEARS



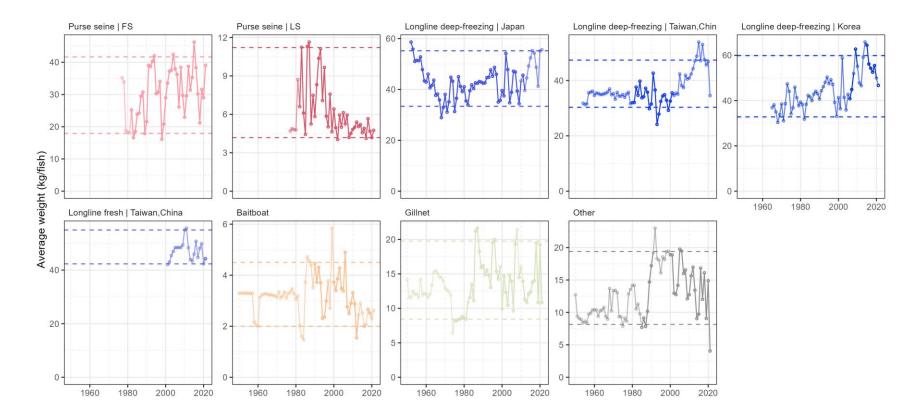
Estimates of catch-at-size of yellowfin tuna in (a) numbers and (b) weights in 2022







DIVERGENT TRENDS IN AVERAGE WEIGHTS



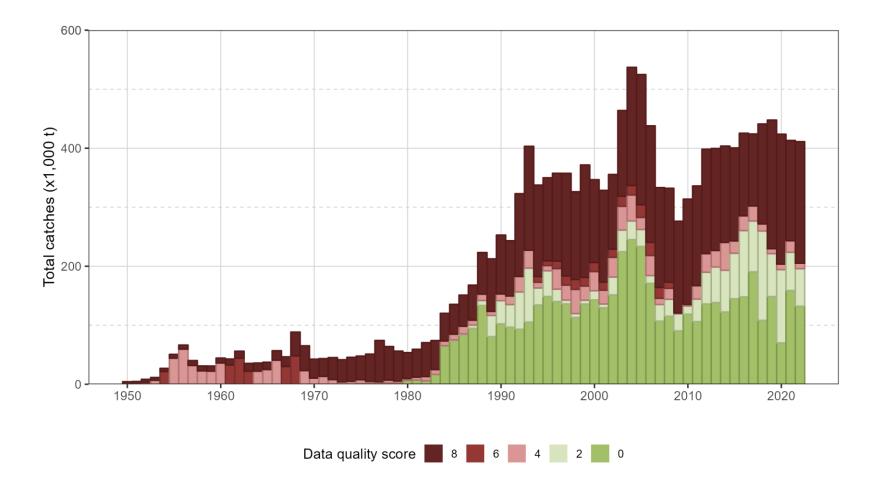
Annual time series of average weights (kg/fish) of yellowfin tuna by fishery, 1950-2022







LACK OF SIZE DATA FOR MANY COASTAL FISHERIES









CONCLUSIONS

- 2022: ~90% reported by IOTC standards, 5% repeated from 2021
- Little change in time series of catch since last WPTT overall
- Some uncertainties for Yemen, Tanzania, Kenya, and Indonesia
- Lack of estimates of IUU and project of review of data on discards
- Little information on fishing effort in coastal fisheries
- Need to explore catch and effort data from I.R. Iran, Sri Lanka, and Pakistan for deriving CPUE for gillnet fisheries