

ISC Albacore Working Group

Response to Request for Science Advice



Background

- Adopted harvest strategies for NPALB requires reductions in total fishing intensity ($F\%SPR$) if spawning stock biomass declines below agreed reference points



Western and
Central Pacific
Fisheries
Commission

HARVEST STRATEGY FOR NORTH PACIFIC ALBACORE FISHERY

Harvest Strategy 2023-01

Introduction and scope

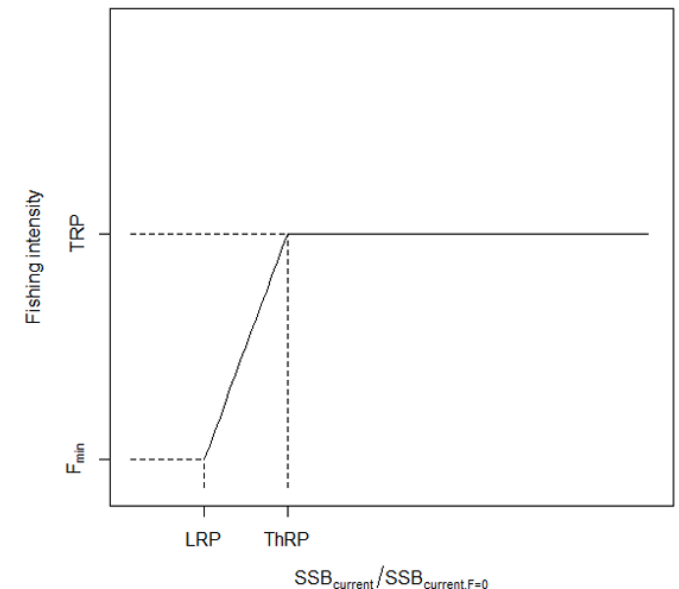
This Harvest Strategy, applicable to all fisheries that harvest North Pacific albacore, was developed based on the results of the Management Strategy Evaluation (MSE) completed by the International Scientific Committee for Tuna and Tuna-Like Species in the North Pacific Ocean (ISC) in 2021.

INTER-AMERICAN TROPICAL TUNA COMMISSION
101st MEETING
Victoria, B.C., Canada
7-11 August 2023

RESOLUTION C-23-02
AMENDMENT TO HARVEST STRATEGY FOR NORTH PACIFIC
ALBACORE IN THE EASTERN PACIFIC OCEAN

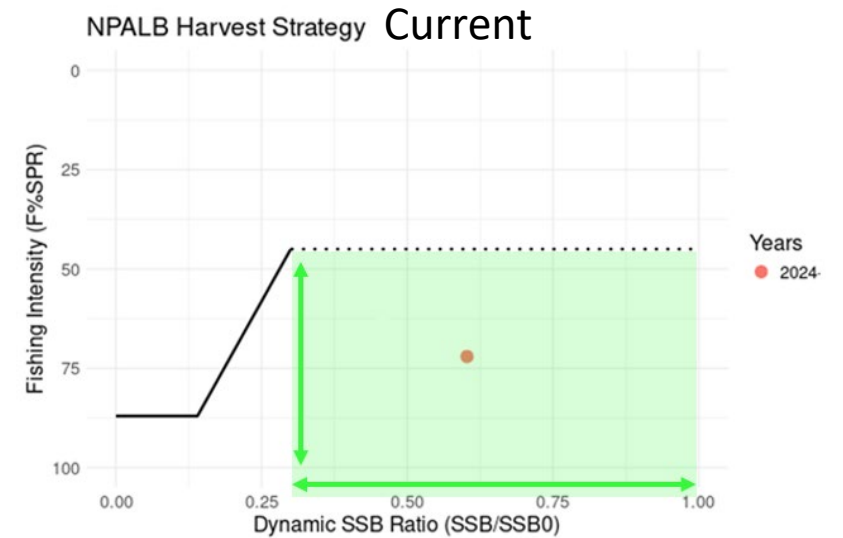
The Inter-American Tropical Tuna Commission (IATTC), gathered in Victoria, Canada, on the occasion of its 101st Meeting:

Recalling Resolutions C-05-02, C-13-03, and C-18-03 on North Pacific albacore tuna;

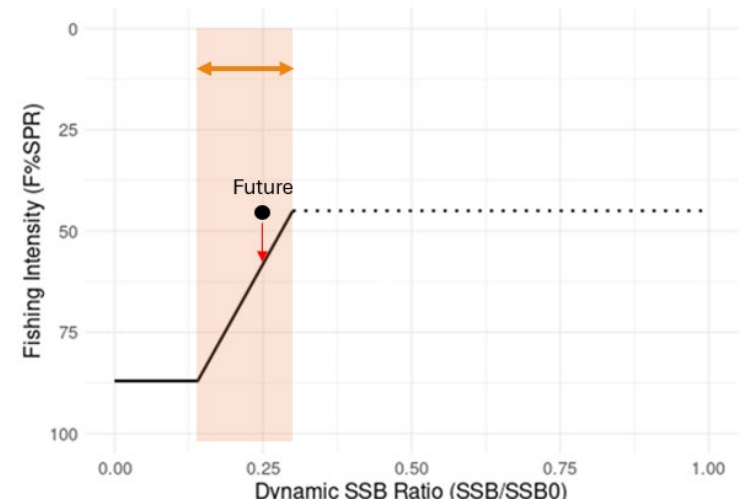


Background

- Adopted harvest strategies for NPALB requires reductions in total fishing intensity (F%SPR) if spawning stock biomass declines below agreed reference points
- To implement these harvest strategies, rules are needed to distribute the reduction in total fishing intensity among fleets or countries, but these rules have not yet been defined



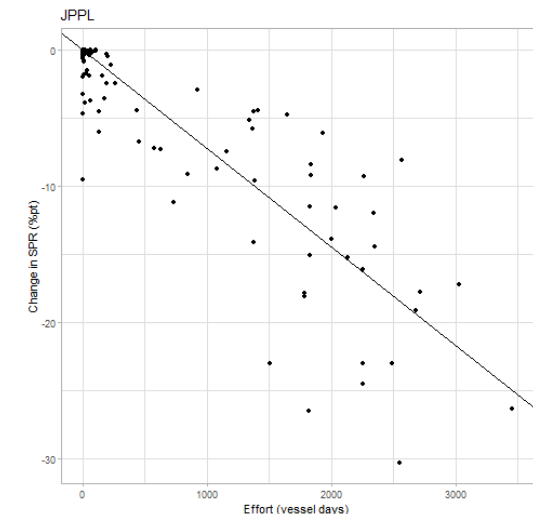
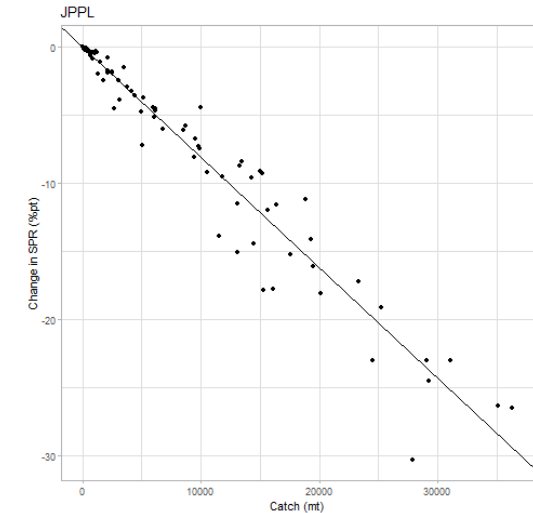
For example: stock status falls **below** the ThRP



Background

- Adopted harvest strategies for NPALB requires reductions in total fishing intensity (F%SPR) if spawning stock biomass declines below agreed reference points
- To implement these harvest strategies, rules are needed to distribute the reduction in total fishing intensity among fleets or countries, but these rules have not yet been defined
- Previous advice showed that F%SPR can be translated into traditional management measures (catch and effort for some fleets), however the ALBWG noted that allocation rules were still needed to be provided by the WCPFC and IATTC if the stock status falls below the threshold reference point and management actions are required
- In 2025, **WCPFC NC requested ISC provide estimates of historical fleet-specific impacts on the stock in terms of fishing intensity, for 2002-2004 & 1999-2015 periods, using updated fleet groups**

For example:



Request for science advice – ISC Response

- ALBWG prepared
 - science advice ([WCPFC-NC22-2026-IP03](#)), and
 - shiny app (https://connect.fisheries.noaa.gov/NPALB_harvest_strategy_tool/)

North Pacific Albacore Harvest Strategy Tool

Select Fleet Group Structure:

☒ Base Fleet Group Structure

☐ Alternative Fleet Group Structure

Select View:

☐ Introduction

☐ Background

☐ Fig 1: Harvest Strategy with historical dynamic SSB ratio and fishing intensity estimates during user-specified year ranges.

☐ Table 1: Compare Fleet Group Structures

☒ Table 2: Historical Fleet Specific Averages of estimated SPR, share of SPR (%), proportion of impact, catch (mt), and effort (vessel days) during user-specified year ranges.

☐ Table 3: Potential Catch or Effort Limits for fleets, based on user-specified SSB scenarios and allocation reference years under the harvest strategy.

☐ Table 4: Historical Fleet Specific Annual Estimates of SPR, share of SPR (%), proportion of impact, catch (mt), or effort (vessel days) from the 2026 stock assessment.

Select Year Range 1:

1994 1997 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2021 2024

Select Year Range 2:

1994 1997 2000 2003 2006 2009 2012 2015 2018 2021 2024

Fleet Group	Year Range 1	Avg Approx. SPR	Avg Approx. Share of SPR (%)	Avg Catch (mt)	Avg Vessel Days	Year Range 2	Avg Approx. SPR	Avg Approx. Share of SPR (%)	Avg Catch (mt)	Avg Vessel Days
1 JPLLalbtgt	2002-2004	0.839	16.3	14,417	16,253	1999-2015	0.827	19.8	14,243	16,994
2 JPLLnontgt	2002-2004	0.917	8.1	7,060		1999-2015	0.892	12.0	8,983	
3 JPPL	2002-2004	0.657	38.1	38,856	3,085	1999-2015	0.729	32.6	29,456	2,780
4 USLL	2002-2004	0.996	0.4	470		1999-2015	0.995	0.6	586	
5 TWLL	2002-2004	0.917	8.1	6,705		1999-2015	0.938	6.8	4,832	
6 KRLL	2002-2004	0.999	0.1	111		1999-2015	0.998	0.2	139	
7 CNLL	2002-2004	0.990	0.9	684		1999-2015	0.982	1.9	1,194	
8 VULL	2002-2004	0.964	3.5	2,630		1999-2015	0.965	3.8	2,316	
9 OTHLL	2002-2004	0.997	0.3	215		1999-2015	0.998	0.2	160	
10 EPOSF	2002-2004	0.801	20.5	21,843	24,147	1999-2015	0.830	19.4	18,494	21,582
11 PSDNMisc	2002-2004	0.961	3.8	4,852		1999-2015	0.975	2.7	3,343	
12 TOTAL	2002-2004	0.337	100.0	97,843	43,485	1999-2015	0.383	100.0	83,746	41,357

Request for science advice

Summary of 2026 Science Advice:

- **F%SPR provides a robust measure of fishing impact:** Fleet-specific fishing intensity expressed as spawning potential ratio (F%SPR) accounts for biological differences (e.g., selectivity, age structure, and contribution to spawning biomass), allowing consistent comparisons across fleets
- **Estimates are conditional and should be interpreted carefully:** Results depend on historical stock and fishery conditions (e.g., recruitment, availability, selectivity) and fleet groupings, so they are context-dependent and not fixed
- **Updates are possible but should be limited:** The proportional values may change slightly with new stock assessment models or different fleet groupings, therefore routine recalculation is not recommended for these rules unless exceptional circumstances arise; current estimates are from the 2026 assessment and requested fleet groups and historical periods (i.e., 2002-2004 and 1999-2015)

Request for science advice

Summary of 2026 Science Advice:

- **Allocation decisions are outside the science advice:** While the ISC analysis provides quantitative estimates of historical fleet impacts, defining allocation rules and implementation still needs to be done
- **Supports implementation of harvest strategies:** Once rules are established, the estimates can be used alongside existing ISC advice to translate fleet specific fishing intensity targets (or reductions) into traditional management measures (catch and effort, for some fleets)

Thank you

Questions