



Pacific
Community
Communauté
du Pacifique

Data Gaps in the WCPFC Tuna Fisheries

STATISTICS WORKING GROUP

“SCIENTIFIC DATA AVAILABLE TO THE WCPFC”
(WCPFC-SC14-2018 / ST WP-01)

Fourteenth Regular Session of the Scientific Committee (SC 14)
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Presentation Outline



Recent provisions of data and main data gaps...

- Annual catch estimates
- Aggregate catch/effort data
- Operational catch/effort data
- Size data
- ROP (Observer) Data (SC14 ST IP-02)

Recent developments in data dissemination...

SC14 to consider...

1. Conversion Factors (SC13 recommendations; SC14 ST WP-05)
2. Charter notifications
3. Estimates of Discards/Releases
4. Cannery Data (SC14 ST IP-03)

Recent provisions of
data...

ANNUAL CATCH ESTIMATES

(see Tables 1 and 2 in ST WP-1)

2017 Annual catch estimates

- o All (31 CCMs = 100%) had provided 2017 estimates by deadline 
- o Some CCMs provided provisional estimates, now updated (e.g. Indo, Vietnam, Philippines)
- o No major (binding) gaps listed for 2017 catch estimates
- o Estimates of discards – mandatory for 2017 and have been provided... (no evaluation of quality/coverage ...)

Aggregate Catch/Effort data

(see Tables 3 and 4 in ST WP-1)

2017 provisions resolved a number of recently-reported gaps

- Catch in number now provided for EU LL fleet
- Landings and logbook data provisions from Indonesia and Vietnam contribute to more representative aggregate data

Data gaps (some non-binding)...

- One data gap for 2017 (US SPAC Troll) - resolved as at 3rd August
- 2017 LONGLINE data : low coverage for latter months by some fleets ?
- Reporting of shark catch in aggregate data by Indonesia (only major gap)

Please refer to the GENERAL Notes column in Tables 3 and 4

COUNTRY / ENTITY	GEAR TYPE	Date Submitted	DATA-GAP Notes	General NOTE	SCORING EVALUATION LEVEL
Australia	LL, PL, PS, TR	28 Apr 2016		C,I	III
Belize	LL	30 Apr 2016		E	III
Canada	TR	29 Apr 2016			III
China	LL (DWFN)	30 Apr 2016		P	III
	PS	30 Apr 2016		P	III
Cook Islands	LL, TR	30 Apr 2016		J, I, O	III
Ecuador	PS	09 Jun 2016		C	III
El Salvador	PS	26 Apr 2016		C	III
Federated States of Micronesia	LL, PS	30 Apr 2016		J, O	III

Operational CATCH/EFFORT Data

(see Tables 5 and 6)

Significant progress over recent year ...



- Provision of full **2017 operational data** for Chinese Taipei LL and PS fleets (first time)
- Continued provisions of **operational data** for 2017 from Japan, Korea, China, Indonesia, Vietnam

Main data gaps ...

- 2017 - data gap for 2017 (US SPAC Troll) - **resolved as at 3rd August**
- 2017 - Some required fields are missing from Indonesia (binding)
- 2017 - Shark species catch not provided by Indonesia (binding)
- Lack of historical operational data for Asian fleets
- Low coverage of operational data for some fleets
- Reliability of key shark species reporting (non-binding)

Please refer to the Notes and COVERAGE column in Table 5 ...

FLAG STATE / ENTITY	GEAR(s)	Date Submitted	DATA-GAP Notes	General NOTES	TIER-SCORING EVALUATION LEVEL	
					KEY ATTRIBUTES	COVERAGE
Australia	LL, PL, PS, TR	28 Apr 2016		E	III	100%
Belize	LL	30 Apr 2016		A	III	N/A

Size Data

(see Table 7)

Generally, now well covered ...



Gaps in Table 7 refer to FLAG-STATE reporting obligations

2017 Size data were not provided for

- EU LL fleet -- resolved as at 7th August
- US south Pacific albacore troll fleet

ROP (observer) data



Refer to SC14 ST IP-02 – Status of Observer data management

Recent developments with OBSERVER DATA SUBMISSIONS include...

- Increase in observer data from E-Monitoring (Table 4)
- Continued provision of observer data for distant-water LL fleets
- Significant lags in provision of 2017 PS data ? (Figure 2; next slide)
- Challenges loading non-standard observer data – significant work
- CCMs notifying of 2017 observer coverage, but data yet to be provided..

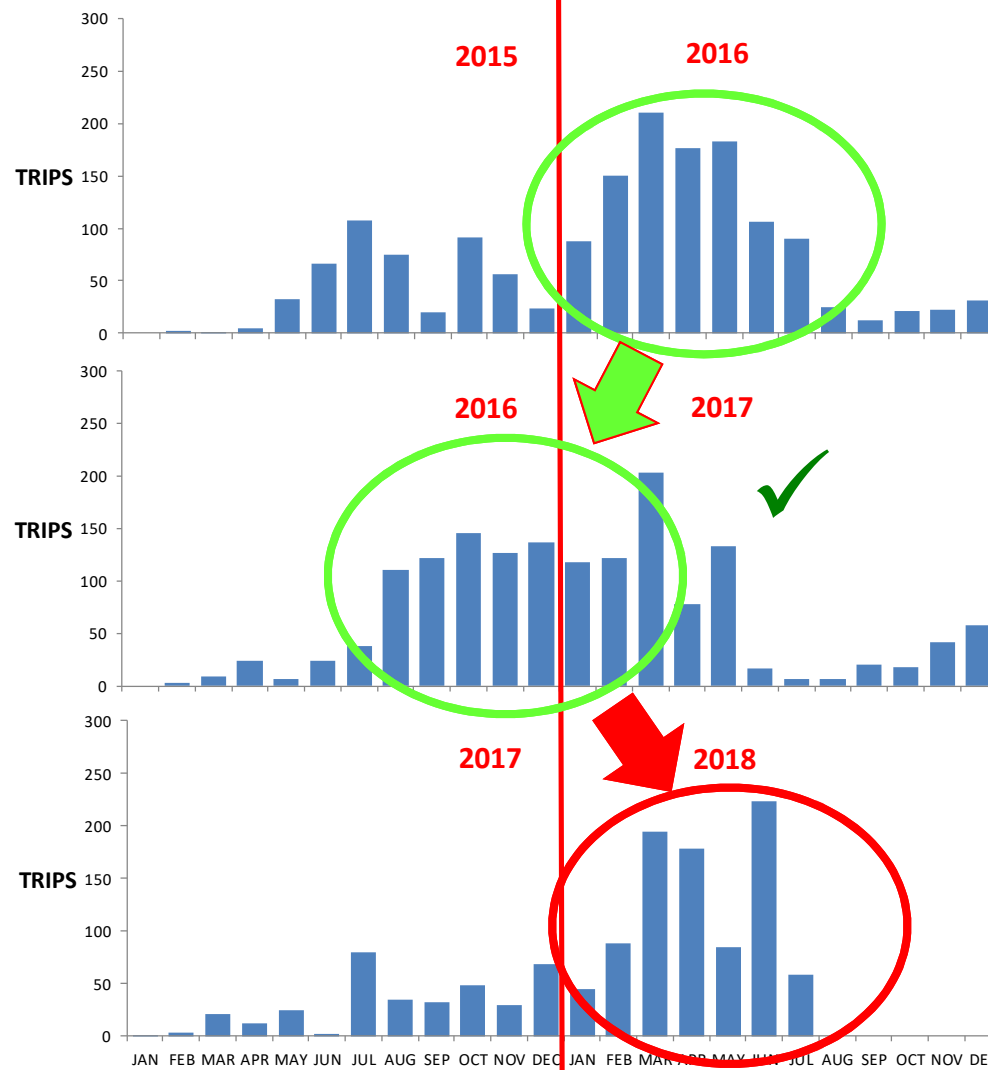
Loading “non-standard” longline observer data --

- Can CCMs consider using the [WCPFC ER Observer Data Standards](#) as the basis for providing their data ... [SPC can assist where possible]

ROP (observer) data

ISSUE : Monthly provision of PS observer data

Timely provision ← → Increasing Lags



SPC ready to assist in any areas where this can be resolved

ROP (observer) data



ROP Longline coverage by CCM

based on (i) reporting from CCMs and (ii) data submissions

[SC14 ST IP-02 -- Tables 3 & 4]

CCM Fleet	Fishery	Metric selected for Coverage	OBSERVER COVERAGE								See NOTES
			Total estimated effort	As reported by flag state		Total estimated effort	As per data submission		E-Monitoring Trips / Sets		
				Observer	%		Observer	%	Observer	%	
AUSTRALIA	Domestic	No. of Hooks	8,668,853	889,196	10.2%	8,668,853	0	0.0%			2
		Sets	5,234					0	0.0%		17, 19, 22
CHINA	Ice/Fresh	No. of Trips	1,188	44	3.7%	1,188	44	3.7%			3, 10, 11
	Frozen	No. of Trips									
COOK ISLANDS	Pacific Islands	Days at Sea	3,368	256	7.6%	4,595	231	5.2%			8, 9
EUROPEAN UNION	Distant-water	No. of Trips	3	1	33.3%	3	1	33.3%			4, 10, 19
FSM	Pacific Islands	No. of Trips	253	0	0.0%	253	2	0.8%	4	1.6%	7
FIJI	Pacific Islands	No. of Trips	686	205	29.9%	686	160	23.3%	139	20.3%	8, 9, 22
FRENCH POLYNESIA	Pacific Islands	Days at Sea	14,594	860	5.9%	14,594	860	5.9%			2, 9
INDONESIA	Domestic	No. of Trips	2,500	4	0.2%	2,500	4	0.2%			2, 19, 23
	Distant-water	No. of Trips	0	-	-	0	-	-			1, 5, 10
JAPAN	Ice/Fresh, short-trip	Days fished	24,298	919	3.8%	24,298	0	0.0%	2	N/A	10, 18
	Frozen, long-trip	Days fished	8,371	669	8.0%	8,371	0	0.0%			10,18

Check the status of your Scientific data provisions

SC14 ST WP-1 paper – Data Gaps

- Tables 1 and 2** – Annual catch estimates for 2016 and 2017
- Tables 3 and 4** – Aggregated catch/effort data for 2016 and 2017
- Tables 5 and 6** – Operational catch/effort data for 2016 and 2017
- Table 7** – Size data for 2017

- SC14 ST IP-02** – ROP (observer) data not yet provided

Review the DATA-GAP Notes in each table for your fleets

Please see me if there are any issues.

Bycatch Data Exchange Protocol (BDEP) (Section 4.1)

- Most recent update of BDEP data (up to 2017 inclusive) available
- BDEP data download -- <https://www.wcpfc.int/node/29966>
- Higher coverage for years 2015-2017 – more data provided/loaded
- Refer to [SC14 EB-IP-10](#) Fitzsimmons et al. (2018) for latest developments

WCPFC public domain data (Section 4.2)

- New data sets available at <https://www.wcpfc.int/node/464>
 - Aggregated catch/effort data, stratified by year, quarter, 5°x5° latitude/longitude cells and flag, with the WCPFC three-vessel rule applied;
 - Aggregated catch/effort data, stratified by year, 5°x5° latitude/longitude cells and flag, with the WCPFC three-vessel rule applied.

SC14 to consider ...

SC14 to consider ...

Enhancing Conversion Factor data



Covered in [SC14 ST WP-05 – Requirements to enhance Conversion Factor data](#)

- Responds to four SC13 recommendations (Section 1 - this a Data Gap !)
- Provides indication of SOURCES of Conversion Factor data (Section 2)
- Provides summary of Conversion Factor data, highlighting the gaps (ANNEX 2)
 - ... but acknowledges tables yet to be updated, e.g. recent key shark conv. factors listed in Clarke et al. (2015)
- Provides a list of proposed work under Project 90 (Section 3 and ANNEX 3)

Seeks feedback from SC14 (Section 4)

- Is the list of proposed work complete and appropriate ?
- What order of priority should be assigned to items in the list ?
- ~~Suggests an SC14 small working group (ISG)~~
- Please see authors for any revisions/ further information
- Aims to recommend Project 90 (review and enhance ANNEX 3)



SC14 to consider ...



1. Enhancing Conversion Factor data (SC14 ST WP-05)
2. Charter Notification issue (SC13 ST WP-01 -- Section 2.3)
3. Estimates of Discards/Release (SC13 ST WP-01 -- Section 2.4)
 - [Suggestions, not recommendations...]
 - Differentiation between live and dead releases on logbooks to assist in responding to CMM reporting obligations (key shark species)
 - 3. CCMs shall estimate, through data collected from observer programs and other means, the number of releases of silky shark caught in the Convention Area, including the status upon release (dead or alive) ...
 - Annual estimates of discards in number for longline fishery (key shark species)
 - Reconciliation of discards between annual catch estimates and aggregate/operational data
4. Update on Cannery data (SC14 ST IP-03)
 - Recognise the potential value of cannery data
 - Future consideration of minimum data fields for expanding coverage to other processors