



**SCIENTIFIC COMMITTEE
EIGHTEENTH REGULAR SESSION**

ELECTRONIC MEETING
10-18 August 2022

**ANNUAL REPORT TO THE COMMISSION
PART 1: INFORMATION ON FISHERIES, RESEARCH AND STATISTICS**

WCPFC-SC18-AR/CCM-32

ECUADOR

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Scientific Committee
Fourth Regular Session**

**Port Moresby, Papua New Guinea
11–22 August 2008**

**ANNUAL REPORT TO THE COMMISSION
PART 1: INFORMATION ON FISHERIES, RESEARCH AND STATISTICS**

Purpose: To provide relevant information to the Commission on fishing activities of CCMs and cooperating non-CCMs, including management and compliance issues. The report should include all fishing activities for highly migratory species being undertaken within the Convention Area as required by the Convention and decisions by the Commission.

PART 1. INFORMATION ON FISHERIES, RESEARCH AND STATISTICS
(Summary information for the previous year, complementary to data submitted¹)

Part 1 of the Annual Report is due one-month prior to the annual regular session of the Scientific Committee.

Part 1 of the Annual Report shall include the following, completed box at the front of the report.

Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by 30 April 2022	[YES]
If no, please indicate the reason(s) and intended actions:	

ANNUAL FISHERIES INFORMATION

Essential information

I	Annual catch and effort by primary species and gear in the WCPFC Convention Area	<p>2018 – purse seiners</p> <p>SKJ 15 721 t YFT 1 592 t BET 5 133 t</p> <p style="padding-left: 40px;">TOTAL: 22 446 t</p> <p>2019 – purse seiners</p> <p>SKJ 17 319 t YFT 2 094 BET 5 519</p> <p style="padding-left: 40px;">TOTAL: 24 932</p> <p>2020 – purse seiners</p> <p>SKJ 8 988 t YFT 1 045 t BET 4 122 t</p> <p style="padding-left: 40px;">TOTAL: 14 155 t</p> <p>2021 – purse seiners</p> <p>SKJ 10 511 t YFT 1 268 t BET 4 449 t</p> <p style="padding-left: 40px;">TOTAL: 16 228 t</p>
II	Number of vessels by gear type and size (fleet structure)	<p>2018: 7 purse seiners vessels 1500+ (5 active)</p> <p>2019 : 7 purse seiners vessels 1500+ (5 active)</p> <p>2020 : 7 purse seiners vessels 1500+ (4 active)</p> <p>2021 : 7 purse seiners vessels 1500+ (5 active)</p>

III	Fishing patterns (catch by time/area)	The fishing zones of Ecuadorian vessels fluctuated between 00o 19' N and 00o 49' S of Latitude, and 80o1' W and 158o 40' W of Longitude.																										
IV	Estimated total catches of non-target, associated and dependent species (if available)	<p>2019: About 0.935 tons of non-target species and 642 individuals (released)</p> <p>2020: About 2.525 tons of non-target species and 353 individuals released (55 alive)</p> <p>2021: About 3.463 tons of non-target species and 617 individuals released (203 alive)</p> <p>Tons</p> <table border="1" data-bbox="847 699 1218 982"> <thead> <tr> <th>CODE</th> <th>WEIGHT</th> </tr> </thead> <tbody> <tr> <td>BLM</td> <td>0.37 t</td> </tr> <tr> <td>RRU</td> <td>0.477 t</td> </tr> <tr> <td>WAH</td> <td>1.582 t</td> </tr> <tr> <td>BUM</td> <td>0.75 t</td> </tr> <tr> <td>DOX</td> <td>0.22 t</td> </tr> <tr> <td>CNT</td> <td>0.064 t</td> </tr> </tbody> </table> <p>Individuals</p> <p>The individuals incidentally captured were discarded. No retentions were identified in compliance with CMM and National Regulations:</p> <table border="1" data-bbox="847 1213 1227 1459"> <thead> <tr> <th>CODE</th> <th>INDIVIDUALS</th> </tr> </thead> <tbody> <tr> <td>FAL</td> <td>210 (202 alive)</td> </tr> <tr> <td>WAH</td> <td>190 (discard)</td> </tr> <tr> <td>DOX</td> <td>213 (discard)</td> </tr> <tr> <td>MLS</td> <td>3 (discard)</td> </tr> <tr> <td>OCS</td> <td>1 (alive)</td> </tr> </tbody> </table>	CODE	WEIGHT	BLM	0.37 t	RRU	0.477 t	WAH	1.582 t	BUM	0.75 t	DOX	0.22 t	CNT	0.064 t	CODE	INDIVIDUALS	FAL	210 (202 alive)	WAH	190 (discard)	DOX	213 (discard)	MLS	3 (discard)	OCS	1 (alive)
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¹ Catch/effort and scientific data in un-aggregated form supplied separately to the Commission in accordance with Scientific Data to be provided to the Commission.

Useful information

V	Developments/trends in the fishery (changes in fishing patterns, fleet operations, target species, level of transshipment, etc.)
VI	Associated socioeconomic factors (which may influence or explain the above trends)
VII	Disposal of catch (fresh/frozen/other)/market destination (export/domestic)
VIII	Onshore developments (processing plants, support facilities, etc.)
IX	Future prospects of the fishery (long term viability, expansion/contraction, etc.)

RESEARCH AND STATISTICS

X	Summary of observer and port sampling programmes (scientific data)
XI	Research activities (tunas, other species, species of special interest, oceanographic influences, etc.)
XII	Statistical data collection systems in use (describe)
XIII	Data coverage of catch, effort and size data for all species

Section	Sections in Annual Report
1*	ABSTRACT/SUMMARY ... for inclusion in the SC summary report
2*	Tabular Annual Fisheries Information (see below)
3	Background ...for example, a brief historical description of national fisheries in the WCPFC Convention Area
4*	Flag State Reporting ...describe recent activities by national fleets (by gear type) in the Convention Area, including development/trends in each fishery (e.g. changes in fishing patterns, fleet operations, target species, trends in size composition, etc.)
5	Coastal State Reporting ...describe recent activities by foreign and domestic fleets in the waters of national jurisdiction, including development/trends in each fishery (e.g. changes in fishing patterns, fleet operations, target species, trends in size composition, etc.)
6	Socio-economic factors Associated socioeconomic factors (which may influence or explain the above trends)
7	Disposal of catch Disposal of catch (fresh/frozen/other)/market destination (export/domestic)
8	Onshore developments Onshore developments (processing plants, support facilities etc)
9	Future Prospects of the fishery Future prospects of the fishery (long-term viability, expansion/contraction, etc.)
10	Status of tuna fishery data collection systems <ol style="list-style-type: none"> a. Logsheet data collection and verification b. Observer programme c. Port sampling programme d. Unloading/Transshipment e. Other
11	Research activities covering target and non-target species ...for example, biological studies supporting stock assessments; composition of the catch according to length, weight and sex; research on environmental factors, abundance/biomass surveys, oceanographic and ecological studies, etc.

* Essential information

Tabular Annual Fisheries Information - [national fleet], for years [x-5] to [x-1]

The following table shows the suggested captions for the tables and figures required in Annual Report Part 1 covering Annual Fisheries Information.

Suggested Table / Figure caption	
Table 1.	Annual catch and effort estimates for the [National fleet], by gear and primary species, for the WCPFC Convention Area and [other broad ocean area], for years [x-5] to [x-1].
Figure 1	Historical annual catch for the [National fleet], by gear and primary species, for the WCPFC Convention Area presented as a line graph.
Figure 2	Historical annual vessel numbers for the [National fleet], by gear for the WCPFC Convention Area presented as a line graph
Table 2.	Number of [National fleet] vessels, by gear and size category, active in the WCPFC Convention Area, for years [x-5] to [x-1].
Figure 3	Annual distribution of target species catch and effort by the [National fleet] active in the WCPFC Convention Area, for years [x-5] to [x-1].
Table 3.	Observed annual estimated catches of species of special interest (seabird, turtle and marine mammals) by gear for the [National fleet], in the WCPFC Convention Area, for years [x-5] to [x-1] to the extent available.
Table 4.	Annual estimated catches of non-target, associated and dependent species, including sharks, by the [National fleet], by gear and species, in the WCPFC Convention Area, for years [x-5] to [x-1] to the extent available.
Table 5.	Estimated annual coverage of operational catch/ effort, port sampling and observer data for the [National fleet], by gear, active in the WCPFC Convention Area, by gear, for years [x-5] to [x-1].

Notes

1. The [national fleet] data must be broken down by gear. Gear includes, but is not limited to, longline, purse seine, pole-and-line, troll, handline, ringnet and driftnet, where relevant. Tables and Figures can be labelled with (a), (b), (c), etc. for each gear.

2. The “primary species” catch covered in Table 1 should include, but not limited to, the following species, by gear type:

longline	albacore, yellowfin, bigeye, pacific bluefin and skipjack tuna. black, blue and striped marlin. swordfish
purse seine	skipjack, yellowfin, bigeye, albacore and pacific bluefin tuna
pole-and-line	skipjack, yellowfin, bigeye, albacore and pacific bluefin tuna
troll	albacore, skipjack, yellowfin, bigeye and pacific bluefin tuna
handline	yellowfin, bigeye, skipjack and albacore tuna
[others]	albacore, skipjack, yellowfin and bigeye tuna

3. The catch estimates in Table 1 should be broken down by WCPFC Convention Area, depending on species, according to the section on “Annual Catch Estimates” contained in the document “Scientific Data to be provided to the Commission”.

4. The vessel size classes by gear to be reported in Table 2 are defined in the section on “Number of vessels active” contained in the document “Scientific Data to be provided to the Commission”.

5. Table 4 should cover all species not included in Tables 1 and 3.



ADDENDUM TO ANNUAL REPORT PART 1

15 February 2021¹

SECTION A: SPECIFIC INFORMATION TO BE PROVIDED IN ANNUAL REPORT PART 1 AS REQUIRED BY CMMS AND OTHER DECISIONS OF THE COMMISSION.

<p>CMM 2009-03 [Swordfish], Para 8</p>	<p>CCMs shall report to the Commission the total number of vessels that fished for swordfish and the total catch of swordfish for the following:</p> <ul style="list-style-type: none"> a. vessels flying their flag anywhere in the Convention Area south of 20°S other than vessels operating under charter, lease or other similar mechanism as part of the domestic fishery of another CCM; b. vessels operating under charter, lease or other similar mechanism as part of their domestic fishery south of 20°S; and c. any other vessels fishing within their waters south of 20°S. <p>This information shall be provided in Part 1 of each CCM’s annual report. Initially, this information will be provided in the template provided at Annex 2 for the period 2000-2009 and then updated annually.</p> <p><i>*Note: WCPFC11 confirmed a common understanding that “total catch” in this reporting requirement refers to both targeted and bycatch catches of swordfish.</i></p>																																										
<p>Observer coverage (WCPFC 11 decision – para 484(b))</p>	<p>CCMs are to compile and include in Annual Report Part 1 to be submitted from 2015 onwards, observer coverage for their longline fleet activity in the previous calendar year, noting that revisions can be provided at the annual TCC meeting.</p> <p>A sample report format is provided as guidance to assist CCMs with reporting (WCPFC11 Summary Report Attachment L Table 4)</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">CCM Fleet</th> <th rowspan="2">Fishery</th> <th colspan="3">No. of Hooks</th> <th colspan="3">Days Fished</th> <th colspan="3">Days at Sea</th> <th colspan="3">No. of Trips</th> <th rowspan="2">See NOTES</th> </tr> <tr> <th>Total estimated</th> <th>Observer</th> <th>%</th> <th>Total estimated</th> <th>Observer</th> <th>%</th> <th>Total estimated</th> <th>Observer</th> <th>%</th> <th>Total estimated</th> <th>Observer</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>REPUBLIC OF KOREA</td> <td>Distant-water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>23,632</td> <td>1,575</td> <td>6.6%</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	CCM Fleet	Fishery	No. of Hooks			Days Fished			Days at Sea			No. of Trips			See NOTES	Total estimated	Observer	%	Total estimated	Observer	%	Total estimated	Observer	%	Total estimated	Observer	%	REPUBLIC OF KOREA	Distant-water							23,632	1,575	6.6%				
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<p>CMM 2009-06 [Transshipment], Para 11 (ANNEX II)</p>	<p>CCMs shall report on all transshipment activities covered by this Measure (including transshipment activities that occur in ports or EEZs) as part of their Annual Report in accordance with the guidelines at Annex II. In doing so, CCMs shall take all reasonable steps to validate and where possible, correct information received from vessels undertaking transshipment using all available information such as catch and effort data, position data, observer reports and port monitoring data.</p>																																										

¹ Reporting requirements requested by CMMs and decisions of the Commission, as of WCPFC17 (Dec 2020). First issued on 15 February 2021. Changes made from Addendum for 2020, include separating the annual reporting requirements that specify needing to be included in Annual Report Part 1 (Section A) from those that may be included in Annual Report Part 1 if they are not otherwise provided to WCPFC (Section B). The entry into force of CMM 2019-04 *Conservation and Management Measure for Sharks* for most CCMs in late 2020 and the specified reporting in Section VII, has removed a few annual reporting requirements from this Addendum.

WCPFC15 Outcome document para 48: The Commission agreed to the TCC14 recommendation that the template provided in TCC14-2018-RP03 Annex 3 be used by all applicable CCMs for their future reporting in Annual Report Part 1, as per CMM 2009-06 paragraph 11 (Attachment O of WCPFC15). **Annex 3 of RP03: Transshipment information to be provided annually by CCMs as required by CMM 2009-06 paragraph 11 in accordance with the guidelines in Annex II of the measure.** Each CCM shall include in Part 1 of its Annual Report to the Commission:

(1) the **total quantities, by weight**, of highly migratory fish stocks covered by this measure that were transhipped by fishing vessels the CCM is responsible for reporting against, with those quantities broken down by:

a) offloaded and received;	b) transhipped in port, transhipped at sea in areas of national jurisdiction, and transhipped beyond areas of national jurisdiction	c) transhipped inside the Convention Area and transhipped outside the Convention Area;	d) caught inside the Convention Area and caught outside the Convention Area;	e) Species	f) Product Form	g) Fishing gear
offloaded						
received						

(2) the **number of transhipments** involving highly migratory fish stocks covered by this measure by fishing vessels that is responsible for reporting against, broken down by:

a) offloaded and received	b) transhipped in port, transhipped at sea in areas of national jurisdiction, and transhipped beyond areas of national jurisdiction	c) transhipped inside the Convention Area and transhipped outside the Convention Area	d) caught inside the Convention Area and caught outside the Convention Area	e) fishing gear
offloaded				
received				

**ANNEX II
TRANSHIPMENT INFORMATION TO BE REPORTED ANNUALLY BY CCMs**

Each CCM shall include in Part 1 of its Annual Report to the Commission:

- (1) the total quantities, by weight, of highly migratory fish stocks covered by this measure that were transhipped by fishing vessels the CCM is responsible for reporting against, with those quantities broken down by:
- a. offloaded and received;
 - b. transhipped in port, transhipped at sea in areas of national jurisdiction, and transhipped beyond areas of national jurisdiction;
 - c. transhipped inside the Convention Area and transhipped outside the Convention Area;
 - d. caught inside the Convention Area and caught outside the Convention Area;
 - e. species;

	<ul style="list-style-type: none"> f. product form; and g. fishing gear used <p>(2) the number of transhipments involving highly migratory fish stocks covered by this measure by fishing vessels that is responsible for reporting against, broken down by:</p> <ul style="list-style-type: none"> a. offloaded and received; b. transhipped in port, transhipped at sea in areas of national jurisdiction, and transhipped beyond areas of national jurisdiction; c. transhipped inside the Convention Area and transhipped outside the Convention Area; d. caught inside the Convention Area and caught outside the Convention Area; and e. fishing gear.
CMM 2011-03 [Impact of PS fishing on cetaceans], Para 5	CCMs shall include in their Part 1 Annual Report any instances in which cetaceans have been encircled by the purse seine nets of their flagged vessels, reported under paragraph 2(b).
CMM 2018-03 [Seabirds] Para 13	CCMs shall annually provide to the Commission, in Part 1 of their annual reports, all available information on interactions with seabirds reported or collected by observers to enable the estimation of seabird mortality in all fisheries to which the Convention applies. (see below for Part 1 reporting template guideline). These reports shall include information on: <ul style="list-style-type: none"> 1. the proportion of observed effort with specific mitigation measures used; and 2. observed and reported species specific seabird bycatch rates and numbers or statistically rigorous estimates of species- specific seabird interaction rates (for longline, interactions per 1,000 hooks) and total numbers.

CMM 2018-03: [Seabirds] Annex 2. Guidelines for reporting templates for Part 1 report

The following tables should be included in the annual Part 1 country reports, summarising the most recent five years.

Table x: Effort, observed and estimated seabird captures by fishing year for [CCM] [South of 30°S; 25°S-30°S; North of 23°N; or 23°N – 25°S¹]. For each year, the table gives the total number of hooks; the number of observed hooks; observer coverage (the percentage of hooks that were observed); the number of observed captures (both dead and alive); and the capture rate (captures per thousand hooks).

Year	Fishing effort				Observed seabird captures	
	Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate ²
[year]						
[year]						
[year]						
[previous year e.g. 2017]						
[current year e.g. 2018]						

¹ Insert ‘North of 23oN’, ‘South of 30oS’, ‘25oS-30oS’ or ‘23oN – 25oS’. For CCMs fishing in all areas, provide separate tables for each area.

² Provide data as captures per one thousand hooks.

Table y: Proportion of mitigation types¹ used by the fleet in [year].

	Combination of Mitigation Measures	Proportion of observed effort using mitigation measures				
		South of 30°S	25°S-30°S	25°S to 23°N	North of 23°N	
	No mitigation measures					
Options required south of 25°S	TL + NS					
	TL + WB					
	NS + WB					
	TL + WB + NS					
	HS					
Other options 25°S-30°S	WB					
	TL					
Other options north of 23°N	SS/BC/WB/DSLS					
	SS/BC/WB/(MOD or BDB)					
Provide any other combination of mitigation measures here						
	Totals (must equal 100%)					

¹ TL = tori line, NS = night setting, WB = weighted branch lines, SS = side setting, BC = bird curtain, BDB = blue dyed bait, DSLS = deep setting line shooter, MOD = management of offal discharge, HS = hook-shielding device.

Table z: Number of observed seabird captures in [CCM] longline fisheries, 2012, by species and area.

Species	South of 30°S	25°S-30°S	North of 23°N	23°N –25°S	Total
E.g. Antipodean albatross					
[species name]					
[species name]					
[species name]					
[species name]					
[species name]					
[species name]					
Total					

SECTION B: ADDITIONAL ANNUAL REPORTING REQUIREMENTS THAT COULD BE INCLUDED IN ANNUAL REPORT PART 1, IF NOT OTHERWISE REPORTED ANNUALLY TO WCPFC

<p>CMM 2006-04 [South West striped Marlin], Para 4</p>	<p>In accordance with paragraph 1, CCMs shall provide information to the Commission, by 1 July 2007, on the number of their vessels that have fished for striped marlin in the Convention area south of 15°S, during the period 2000 – 2004, and in doing so, nominate the maximum number of vessels that shall continue to be permitted to fish for striped marlin in the area south of 15°S. CCMs shall report annually to the Commission the catch levels of their fishing vessels that have taken striped marlin as a bycatch as well as the number and catch levels of vessels fishing for striped marlin in the Convention Area south of 15°S.</p>																																																									
<p>CMM 2015-02 [South Pacific Albacore] Para 4</p>	<p>CCMs shall report annually to the Commission the annual catch levels taken by each of their fishing vessels that has taken South Pacific albacore, as well as the number of vessels actively fishing for South Pacific albacore, in the Convention area south of 20°S. Catch by vessel shall be reported according to the following species groups: albacore tuna, bigeye tuna, yellowfin tuna, swordfish, other billfish, and sharks. Initially this information will be provided for the period 2006-2014 and then updated annually. CCMs are encouraged to provide data from periods prior to these dates.</p>																																																									
<p>CMM 2019-03 [North Pacific Albacore], Para 3</p>	<p>All CCMs shall report annually to the WCPFC Commission all catches of albacore north of the equator and all fishing effort north of the equator in fisheries directed at albacore. The reports for both catch and fishing effort shall be made by gear type. Catches shall be reported in terms of weight. Fishing effort shall be reported in terms of the most relevant measures for a given gear type, including at a minimum for all gear types, the number of vessel-days fished using the template provided in Annex 1.</p> <p>Annex 1: <small>Annex I: Average annual fishing effort for 2002-2004 and annual fishing effort for subsequent years for fisheries directed at North Pacific albacore in the North Pacific Ocean</small></p> <table border="1" data-bbox="407 1524 1370 1633"> <thead> <tr> <th rowspan="2">CCM</th> <th rowspan="2">Area¹</th> <th rowspan="2">Fishery</th> <th colspan="2">2002-04 Average</th> <th colspan="2">Year</th> <th colspan="2">Year</th> <th colspan="2">Year</th> <th colspan="2">Year</th> <th colspan="2">Year</th> </tr> <tr> <th>No. of vessels</th> <th>Vessel days</th> <th>No. of vessels</th> <th>Vessel days</th> <th>No. of vessels</th> <th>Vessel days</th> <th>No. of vessels</th> <th>Vessel days</th> <th>No. of vessels</th> <th>Vessel days</th> <th>No. of vessels</th> <th>Vessel days</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>* Note: WCPFC10 clarified that this reporting responsibility lies with the flag State</p>	CCM	Area ¹	Fishery	2002-04 Average		Year		Year		Year		Year		Year		No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days	No. of vessels	Vessel days																														
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