



SCIENTIFIC COMMITTEE THIRD REGULAR SESSION

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WCPFC DATA STANDARDS FOR REGIONAL OBSERVER PROGRAMME

WCPFC-SC3/GN WP-6

Introduction

1. Standards for data collection and reporting have been in place in the Pacific Island SPC/FFA member countries since 1996. The standards are flexible and discussion on changes and new data fields occurs on a bi-annual basis at the FFA/SPC Tuna Fishery Data Collection Committee (DCC). The DCC has put in place data format standards for all SPC/FFA Pacific Island Observer programmes operating in the FFA and SPC region. The bi-annual meeting reviews all the data collection formats and makes adjustments where they are required. Wherever practical all coding in the formats have been standardised using global standards such as the FAO species identifiers. Where no practical code system is in place codes have been developed. Discussion on formats at DCC involves the current needs of scientists, compliance, mitigation measures and any other current priorities. Vessel trip monitoring standards will be same as standards for the Trip Monitoring and ROP Incident Forms.
2. The Commission ROP will monitor the outcomes of the DCC to ensure that minimum ROP observer data collection standards are maintained. National observer programmes with different observer collection formats to the ROP should not be affected by the ROP requirements on standardised data collection, providing the data that are collected by their programme is able to satisfy the requirements for minimum ROP standards.

Sampling Protocols

3. Sampling protocols for observers depend on the objective of the sampling programme. The current protocols widely used in the WCPFC region for sampling the species composition and the size composition of the catch are as follows.
 - a) offshore longline, the species and the length are recorded for all of the catch, for all sets during a trip;
 - b) distant-water longline, the species and the length are recorded for all of the catch, for two out of every three sets during a trip;
 - c) purse seine, the species and the length are recorded for five fish randomly collected from every brail for every set."

Minimum Standards for ROP Data

4. Regional Observer Programme Minimum Data Standards required to be collected by ROP observers, when performing duties on a vessel chosen to take a ROP observer for Commission coverage purposes.

Table 1. Vessel and trip information

VESSEL IDENTIFICATION	
Name of vessel	Name of vessel includes any number
Flag	Country where vessel is flagged
Flag state registration number	Registration number issued by flag State of vessel
International radio call sign	Call sign used by vessel & painted on vessel
TRIP INFORMATION	
Date and time of departure from port	
Port of departure	Port name vessel departs from for start of trip
Date and time of return to port	
Port of return	Port name vessel returns to end trip
OBSERVER INFORMATION	
Observer name	First name first - last name last
Observer's ROP certification number	Number given to observer when certified for ROP
Date, time and location of embarkation	When and where observer boards the vessel
Date, time and location of disembarkation	When and where observer leaves the vessel
CREW INFORMATION	
Name of captain	First name first - Last name last
Nationality of captain	Passport nationality
Name of fishing master	First name first - Last name last
Nationality of fishing master	Passport nationality
Other crew	Number of crew, by nationality from passports
VESSEL ATTRIBUTES	
[to be determined by TCC and SC]	TBD
VESSEL ELECTRONICS	
Radars	Presence or absence, and usage for all equipment recorded. Usage codes. ALL - used all the time TRA - used only in transit OIF - used often but only in fishing SIF - used - sometimes only in fishing
Depth sounder	
Global positioning system (GPS)	
Track plotter	
Weather facsimile	

Sea surface temperature (SST) gauge	RAR - rarely used BRO - broken now but used normally NOL - no longer ever used
Sonar	
Radio/ Satellite buoys	
Doppler current meter	
Expendable bathythermograph (XBT)	
Satellite communications services	
Fishery information services	
Vessel monitoring system	Presence or absence? Security seals in tact?

Table 2. Longline information and data

VESSEL ATTRIBUTES	
Refrigeration Method	Ice, chilled sea water, refrigerated sea water, blast freezer, or other
GEAR ATTRIBUTES	
Mainline material	Monofilament or kuralon [further types]
Mainline length	Nautical miles
Mainline diameter	Millimeters
Branch line material(s)	Monofilament [further types]
Wire trace	Presence or absence
Mainline hauler	Presence or absence, and usage
Branch line hauler	
Line shooter	
Automatic bait thrower	
Automatic branch line attacher	
Hook type	J, square, circle [other types]
Hook size	size numbers for hooks
Tori pole	Presence/absence/usage code
Bird curtain	Presence/absence/usage code
Weighted branch lines	Presence/absence/usage code
Blue dyed bait	Presence/absence/usage code
Underwater setting shoot	Presence/absence/usage code
Disposal method for offal management	Retained/mass dispersal/ad hoc dispersal
SET AND HAUL INFORMATION	
Date and time of start of set	Ship's date and time, and UTC date and time

Latitude and longitude of start of set	dd°mm' .mmm N/S - ddd°mm' .mmm E/W
Date and time of end of set	Ship's date and time
Latitude and longitude of end of set	dd°mm' .mmm N/S - ddd°mm' .mmm E/W
Total number of baskets or floats	Count buoys set to determine baskets used
Number of hooks per basket or number of hooks between floats	Count hooks , if varied indicate
Total number of hooks used in a set	Number of hooks used
Length of float-line	metres
Distance between branch-lines	metres
Length of branch-lines	metres
Time-depth recorders (TDRs)	Presence or absence
Number of light-sticks	# branch-lines with light-stick
Target species	Tuna, swordfish, marlins or shark
Bait species	Name(s) of species
Date and time of start of haul	Ship's date and time
Date and time of end of haul	Ship's date and time
Total number of baskets or floats observed	How many did observer watch out of a set
INFORMATION ON CATCH OF INDIVIDUAL FISH FOR EACH SET	
Hook number between floats	Number of hooks set between each float, Do not record hooks attached directly to floats, these are accounted for elsewhere
Species code	FAO 3-alpha code
Length of fish	Centimetres
Length measurement code	<u>Length codes</u> TL - tip of snout to end of tail UF - upper jaw to fork in tail LF - lower jaw to fork in tail PF - pectoral fin to fork in tail TW - total width (tips of wings - rays) CL - carapace length (turtles) NM - not measured
Gender	<u>Gender codes</u> Male (M), female (F), indeterminate (I) unknown (U).
Condition when caught	<u>Condition codes</u> A0 – Alive unable to further categorise condition. A1 - Alive and healthy. A2 – Alive injured or distressed probably will survive. A3 - Alive, unlikely to live. D - Dead

	U - Condition unknown
Fate	<p><u>Retained Fate codes</u></p> <p>RGG - Retained - gilled and gutted RGT Retained - gilled gutted and tailed RWW Retained - whole RPT Retained - partial (e.g. fillet, loin, trunk) RFR Retained - both fins and trunk (sharks) RHG Retained - headed and gutted (billfish) RSD Retained - shark damaged RCC Retained - crew consumption RGO Retained - gutted only ROR Retained - other reason (specify)</p> <p><u>Discard Fate codes</u></p> <p>DFR Discarded trunk - fins retained (sharks) DGD Discarded - gear damage (target species only) DSD Discarded - shark damage DWD Discarded - whale damage DUS Discarded - uneconomic species DDL Discarded - too difficult to land DSO Discarded - struck off before landing DTS Discarded - too small (target species only) DPQ Discarded - poor quality (target species only) DPA Discarded - species of special interest Alive DPD Discarded - species of special interest Dead DPU Discarded in an unknown condition DOR Discarded for other reasons (specify reason) ESC Escaped</p>
Condition when discarded	Condition codes same as when caught
Tag recovery information	Number of tags recorded, Tag number, species code, length and gender, for each tag

Table 3. Pole-and-line information and data

GEAR ATTRIBUTES	
Automatic poling devices	Presence or absence, and usage
INFORMATION ON DAILY ACTIVITIES	
Date and time of start of daily activities	Ship's date and time, and UTC date and time
Time of activity	Ship's time
Latitude and longitude of activity	dd°mm' .mmm N/S - ddd°mm' .mmm E/W
Type of activity	<p><u>Activity codes</u></p> <p>1 Spraying, chumming or poling 2 Searching 3 Transit 4 No fishing - breakdown 5 No fishing - bad weather 6 In port - please specify</p>
Numbers of school sighted per day	Numbers of schools, by type of association

BAITFISHING INFORMATION	
Bait species caught	Names of main species caught
Number of buckets of bait caught	
SCHOOL INFORMATION	
Method of detection of school	<u>Detection codes</u> 1 Seen from vessel 2 Seen from helicopter 3 Marked with beacon 4 Bird radar 5 Sonar / depth sounder 6 Info. from other vessel 7 Anchored FAD / payao }
Type of school association	<u>School Association (tuna)</u> 1 Unassociated 2 Feeding on Baitfish 3 Drifting log, debris or dead animal 4 Drifting raft, FAD or payao 5 Anchored raft, FAD or payao 6 Live whale 7 Live whale shark 8 Other (please specify)
INFORMATION ON CATCH PER SCHOOL FISHED	
Number of crew poling	How many crew used for each set
Time of start of spraying, chumming and poling	Ship's time
Time of end of spraying, chumming and poling	Ship's time
Retained catch, by species	FAO 3-alpha species code; catch in number of fish or tonnes
Discards, by species	FAO 3-alpha species code; discards in number of fish or tonnes
Tag recovery information	Tag number, species code, length and gender, for each tag
SAMPLING DATA	
Species code	FAO 3-alpha code
Length measurement code	As per 'Length Measurement codes' for longline
Length	Centimetres

Table 4. Purse seine information and data

VESSEL AND RELATED ATTRIBUTES	
Vessel cruising speed	Knots

Helicopter	Presence or absence
GEAR ATTRIBUTES	
Maximum depth of net	Metres
Maximum length of net	Metres
Net mesh size	Centimetres
INFORMATION ON DAILY ACTIVITIES	
Date and time of start of daily activities	Ship's date and time, and UTC date and time
Time of activity	Ship's time
Latitude and longitude of activity	dd°mm' .mmm N/S - ddd°mm' .mmm E/W
	<u>Activity and Helicopter codes</u> 1 Set 2 Searching 3 Transit 4 No fishing - Breakdown 5 No fishing - Bad weather 6 In port - please specify 8 Investigate free school 9 Investigate floating object 10D Deploy - raft, FAD or payao 10R Retrieve - raft, FAD or payao 11 No fishing - Drifting at day's end 13 No fishing - Other reason (specify) 16 Transshipping or bunkering
Numbers of school sighted per day	Numbers of schools, by type of association
SCHOOL INFORMATION	
Method of detection of school	<u>How Detected</u> 1 Seen from vessel 2 Seen from helicopter 3 Marked with beacon 4 Bird radar 5 Sonar / depth sounder 6 Info. from other vessel 7 Anchored FAD / payao (recorded)
Type of school association	<u>School Association (tuna)</u> 1 Unassociated 2 Feeding on Baitfish 3 Drifting log, debris or dead animal 4 Drifting raft, FAD or payao 5 Anchored raft, FAD or payao 6 Live whale 7 Live whale shark 8 Other (please specify) 9 No tuna associated
SET INFORMATION	
Observer's record of date and time of start of set	Skiff launched. Ship's date and time

Observers record of date and time of end of set	Skiff on board, ships date and time
Vessel's record of date and time of start of set	Ship's date and time
Retained catch, by species	FAO 3-alpha species code; catch in number of fish or tones
Discards, by species	FAO 3-alpha species code; discards in number of fish or tones
Tag recovery information	Amount of Tags Recovered -Tag number, species code, length and gender, for each tag
SAMPLING DATA	
Species code	FAO 3-alpha code
Length measurement code	<u>Length codes</u> TL - tip of snout to end of tail UF - upper jaw to fork in tail LF - lower jaw to fork in tail PF - pectoral fin to fork in tail TW - total width (tips of wings - rays) CL - carapace length (turtles) NM - not measured
Length	Centimetres

Table 5. Species of special interest

GENERAL INFORMATION	
Type of interaction	Landed on deck, interacted with vessel or gear only, or sighted only
Date and time of interaction	Ship's date and time
Latitude and longitude of interaction	dd°mm'.mmm N/S - ddd°mm'.mmm E/W
Species code of marine reptile, marine mammal or seabird	FAO 3-alpha code
LANDED ON DECK	
Length	Centimetres
Length measurement code	<u>Length codes</u> TL - tip of snout to end of tail UF - upper jaw to fork in tail LF - lower jaw to fork in tail PF - pectoral fin to fork in tail TW - total width (tips of wings - rays) CL - carapace length (turtles) NM - not measured
Gender	Male, female, indeterminate, unknown
Condition when landed on deck	<u>Condition codes for Species of Special Interest</u> A0 – Alive unable to further categorise condition. A1 - Alive and healthy.

	A2 – Alive injured or distressed probably will survive. A3 - Alive, unlikely to live. D - Dead U - Condition unknown.
Condition when released	Same as condition codes for landed on deck
Tag recovery information	Type (dart, archival or pop-up, acoustic, leg band, wing, flipper) and tag number
Tag release information	Type (dart, archival or pop-up, acoustic, leg band, wing, flipper) and tag number
INTERACTION WITH VESSEL OR GEAR ONLY	
Vessel's activity during interaction	Setting, hauling, transiting, other
Condition observed at start of interaction	Same as condition codes for landed on deck
Condition observed at end of interaction	Same as condition codes for landed on deck
Description of interaction	For example, "dolphin trapped in net and then released"
SIGHTING ONLY	
Number of animals sighted	How many sighted away from vessel and including any interactions

Table 6 Vessels & Aircraft sightings

Date & Time of sighting	UTC Date and time only
Observers Vessel position	dd°mm'.mmm N/S - ddd°mm'.mmm E/W
Sighted Vessel or Aircraft Name / Callsign	Vessel full or part name & full or part callsign
Flag of Vessel	International abbreviation codes for countries
Type of Vessel	<u>Vessel Type codes</u> 1 Single purse seine 2 Longline 3 Pole and Line 4 Mother-ship 5 Troll 6 Net boat 7 Bunker 8 Search, Anchor, or Light boat 9 Fish Carrier 10 Trawler 21 Light aircraft 22 Helicopter 31 Other- please specify
Compass bearing to sighted vessel	Bearing in degrees
Distance to sighted vessel	Distance in nautical miles
Activity of sighted vessel	<u>Action codes of sighted vessel</u> FI Fishing PF Possibly fishing NF Not fishing SR Set Sharing (Vessel receiving fish)

	SG Set Sharing (Vessel giving fish) TR Transshipping fish (Vessel receiving fish) TG Transshipping fish (Vessel giving fish) BR Bunkering (Vessel receiving fuel) BG Bunkering (Vessel giving fuel) DF Dumping of fish OR Other (Vessels receiving please specify item/s) OG Other (Vessel Giving please specify item/s)
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Table 7 Vessel Trip Monitoring record

Vessel trip monitoring	Vessel trip monitoring standards will be same as standards for the ROP incident form.
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